Prepared for:

U.S. Fish and Wildlife Service
911 NE 11th Avenue
Portland, Oregon 97232

2017 ANNUAL AND PROJECT SUMMARY REPORT CERCLA NON-TIME CRITICAL REMOVAL ACTION

MIDWAY ATOLL NATIONAL WILDLIFE REFUGE MIDWAY ISLAND Contract No. F11PC00327

Prepared by:

NW Demolition and Environmental
A Joint Venture

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April 25, 2018

2017 Annual and Project Summary Report
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1.0 INTRODUCTION

NW Demolition and Environmental (NWDE) has prepared this 2017 Annual and Project Summary Report for the U.S. Fish and Wildlife Service (FWS) as part of its contract to complete a non-time critical removal action (NTCRA) relating to the removal of lead-based paint (LBP) from structures and lead-contaminated soil at Sand Island, Midway Atoll National Wildlife Refuge (Refuge or Site) (Figure 1). The removal action was performed by the FWS under the Comprehensive Environmental Response, Compensation, and Liability Act, (CERCLA) clean up authorities [42 United States Code (USC) 9604, 10 USC 2705], Federal Executive Order 12580 and the July 7, 2011 "*Action Memorandum for a Non-Time Critical Removal Action at Midway Atoll National Wildlife Refuge*" (FWS, 2011).

The 2017 field event concluded NWDE's work under this contract. As such, this report documents the activities executed on island as part of this contract between July 25 and October 26, 2017 as well as a summary of all the work completed as part of this contract from 2011 through 2016.

The work was conducted in general accordance with the CERCLA Guidelines (USEPA, 1993), NWDE's Removal Action Work Plan (RAWP) dated February 29, 2012; Geosyntec Consultants Inc. (Geosyntec) Soil Sampling Work Plan dated August 2013; and the revised Health and Safety Plan (HASP) (NWDE, 2012).

2.0 BACKGROUND

A January 2011 Engineering Evaluation/Cost Analysis (EE/CA) (GeoEngineers, 2011) evaluated CERCLA NTCRA alternatives based on a cleanup goal of 75 milligrams per kilogram (mg/kg) for lead in soil. Of the alternatives evaluated, the EE/CA identified Alternative 3 as the chosen method to complete the removal action in each of nine Decision Units (DU). Alternative 3 varied between each DU and included the abatement of lead from structures, excavation of soils above the cleanup goal of 75 mg/kg, and on-site disposal in the R-2 unit. Figure 2 shows the location of each DU on Midway Island.

In general, the scope of work involved: 1) LBP removal from existing structures and re-painting using encapsulation paint; 2) the removal/treatment and off-site disposal of asbestos-containing materials (ACM); 3) excavation and on-site treatment and consolidation of lead-contaminated soil; and 4) demolition of numerous structures and aboveground oil storage tanks (AST).

The Removal Action was conducted over multiple years during the months outside the albatross breeding season; generally, July through October of each year. Work elements by year are summarized in the following section.

3.0 SUMMARY OF PREVIOUS WORK YEARS

The following sections provide a summary of the work performed from 2011 to 2016.

3.1 2011

The following activities were completed during the 2011 construction year:

- LBP was abated from exterior surfaces of Structures 349, 357, and 363, and each building was painted during the 2011 field season. Abated surfaces were primed with one coat of Lead Stop® primer, then painted with one top coat.
- SunBlocker Premium 70% and 80% shade cloth was installed at DU6, DU1, and DU2. Following an inspection of burrows for petrels or shearwater birds, the areas surrounding each building in the DUs were covered with shade cloth. Roads or other hard surfaces surrounding each building were not covered with shade cloth.
- The existing R-2 unit and surrounding topography were surveyed for design considerations.
- The proposed sand borrow source area located between the cargo and fuel piers was sampled to verify its suitability as future backfill. Multi-increment sampling (MIS) techniques were used to collect one composite soil sample from the borrow source area. MIS sampling is designed to obtain a single sample that has all constituents in the sample composition as the sampling area (Hawaii Department of Health, 2010). The sample was analyzed for: 1) polyaromatic hydrocarbons (PAHs) by EPA Method 8270 SIM; 2) pesticides by EPA Methods 8081 and 8081A; 3) polychlorinated Biphenyls (PCBs) by EPA Method 8082; and 4) total metals by EPA Methods 6010B, 6020 and 7471A. No PAHs, pesticides, or PCBs were detected, and the concentrations of metals detected were below the Hawaii Department of Health Environmental Action Levels (Hawaii Department of Health, 2010).
- A soil sample was collected for treatability testing to optimize the MAECTITE® solution mix ratio specific to typical soils on the island. MAECTITE® is a proprietary reagent that can be used to treat heavy metals by reducing leachability. One five-part composite soil sample was collected from locations surrounding Structure 643 (DU1). The sample was analyzed for total lead, then treated with MAECTITE® reagent, and, following a three-hour contact period, analyzed using the Multiple Extraction Procedure (MEP) by EPA Method 1320. The MEP method is designed to understand leachability from solid waste caused by infiltration of acid rain and is intended to simulate 1,000 years of soil exposure to a leaching medium. The treatment of lead-contaminated soil with 0.5% solution of MAECTITE® resulted in low leachable lead levels, indicating

that it is highly unlikely that the treated soil will leach lead. An application rate was established at 0.75 gallons of MAECTITE® per cubic yard (gal/cy) of soil.

A complete summary of the 2011 field activities is included in the 2011 Annual Report (NWDE, 2011). In addition, select tables and figures from the 2011 report have been included in Appendix A for reference.

3.2 2012

The following activities were completed during the 2012 construction year:

- The design and technical specifications for the R-2 unit were finalized and submitted to the FWS for approval (Geosyntec, 2012).
- Modifications were made to the R-2 unit to prepare for the placement of treated soils and demolition debris. 2012 work included: 1) removal of residual water from the bottom of the R-2 unit and the pre-existing sumps; 2) sealing of pre-existing drain pipes with hydraulic cement plugs and capping with a compression type cap; 3) creating new penetrations through the base slab; 4) construction of the entry and exit ramp; and 5) the removal of the concrete structure in the southwest corner of R-2.
- Project work in DU1 included:
  - Abatement of LBP from Structure 643. Abated surfaces were primed with one coat of Lead Stop® primer, then painted with one top coat.
  - Demolition of Structures 619, 623, 626, and 628. During the demolition process, debris was separated into five categories: 1) painted concrete; 2) clean concrete; 3) scrap metal; 4) clean wood; and 5) polyvinyl chloride (PVC) piping. The debris consisted of 77 loads of demolition debris that were transported to the R-2 unit for disposal. The debris was treated with MAECTITE® before consolidation in the R-2 unit.
  - Soil was treated with MAECTITE®, excavated to a depth of one foot below ground surface (bgs), and transported to the R-2 unit. Soil below the prescribed excavation depth (1 foot) was treated with MAECTITE®, mixed in-place with an excavator, covered with a geotextile, and backfilled with clean beach sand from the borrow area. In total, approximately 6,900 cubic yards (cy) of soil was removed from DU1.
  - 17 loads of clean concrete, 20 loads of scrap metal, six loads of clean wood, and one load of PVC pipe were stockpiled at the designated staging area on the former Sea Plane Hangar Apron (apron).

- Project work in DU6 included:
  - Abatement of LBP from Structure 356 and subsequent painting of the structure with one coat of Lead Stop® primer, then painted with one top coat.
  - Building 393 was demolished. Material generated during the demolition included 29 loads of demolition debris that was transported to the R-2 unit for disposal, 114 loads of clean concrete, and four loads of metal that were stockpiled on the apron.
  - Soil within the designated excavation areas was treated with MAECTITE®, excavated to a depth of one foot, and transported to the R-2 unit. Soil below the prescribed excavation depth was treated with MAECTITE®, mixed in-place with an excavator, covered with a geotextile, and backfilled with clean beach sand from the borrow area. In total, approximately 3,300 cy of soil was removed from DU6.
- An additional potential borrow source sample was collected from an area west of the former cable buildings (DU1). The sample was analyzed for the same parameters as the 2011 borrow source sample from the cargo pier area. The results indicated that the sample contained concentrations of pesticides at levels that precluded the use of the material as backfill. Based on these results, it was determined that the initial borrow source area (cargo pier) would be used for the duration of the project.

A complete summary of the 2012 field activities is included in the 2012 Annual Report (NWDE, 2012). In addition, select tables and figures from the 2012 report have been included in Appendix B for reference.

3.3 2013

The following activities were completed during the 2013 construction year:

- In August 2013, the project team prepared and submitted a Work Plan to document the collection of additional soil samples from DU2 and DU4 (Geosyntec, 2013). The purpose of sampling was to refine excavation limits. In total, 178 samples (including duplicates) were collected and analyzed. This included 136 soil samples from DU2 and 42 soil samples from DU4. The additional data were evaluated using various statistical and sampling programs (Visual Sampling Plan [VSP]), and excavation limits were refined.

- Project work in DU2 included:
  - Asbestos was abated from the outside of Structures 578 and 579, and the two structures were subsequently demolished. 180 loads of treated demolition debris and 23 loads of concrete with paint residue were transported to the R-2 unit for disposal.
  - Four loads of clean concrete and 91 loads of scrap metal were stockpiled at the staging area on the apron.
  - Soil within the designated excavation areas in DU2 was treated and transported to the R-2 unit. In total, approximately 3,810 cy of soil was placed in the R-2 unit. Upon completion of the excavation, the area was backfilled with clean soil.
- LBP was abated from the exterior of each structure in DU4. Abated surfaces were primed with one coat of Lead Stop® primer, then painted with one top coat.

A complete summary of the 2013 field activities is included in the 2013 Annual Report (NWDE, 2013). In addition, select tables and figures from the 2013 report have been included in Appendix C for reference.

3.4 2014

The following activities were completed during the 2014 construction year:

- At the onset of the 2014 field season, 33 soil samples (including quality control samples) were collected from DU5 and 11 soil samples were collected from DU7. The purpose of sampling was to refine excavation limits.
- Approximately 2,110 cy of soil from DU4 was treated, excavated and placed in the R-2 unit. Upon completion, the excavations were backfilled with clean soil.
- LBP was abated from the exterior of all structures in DU7, primed with one coat of Lead Stop® primer, then painted with one top coat.
- Approximately 3,060 cy of soil from DU7 was treated, excavated and placed in the R-2 unit. Upon completion, the excavations were backfilled with clean soil.
- Shade cloth was placed in DU3 and DU7 to minimize bird contact in areas of visible paint chips. Additional removal within these areas was completed in subsequent field events.

A complete summary of the 2014 field activities is included in the 2014 Annual Report (NWDE, 2014). In addition, select tables and figures from the 2014 report have been included in Appendix D for reference.

3.5 2015

The following activities were completed during the 2015 construction year:

- LBP abatement was completed for structures in DU3 and DU5. The only DU3 building abated in 2015 was Structure 4203, as the remainder of buildings in this DU had already been abated by the FWS in 2009. The structures abated from DU5 included Structures 5309, 5339, and 5341.
- MAECTITE® was applied to the exterior walls of Structure 5303 and the north and south end walls of the Naval Air Facility (NAF) Hangar. All but the NAF structure (which was only sprayed with MAECTITE®) were primed with one coat of Lead Stop® primer, then painted with one top coat.
- Approximately 3,450 cy of soil was treated and excavated from DU3, DU5, and DU8. Upon completion, the areas were backfilled with clean soil.
- Five ASTs and associated piping were demolished and removed from DU8. Material was downsized and transported to the apron for storage. Blind flanges and gaskets were installed, as required, for securing the remaining pipe ends. ASTs included:
  - S28 and S30 – Both S28 and S30 were approximately 100 feet in diameter and stored up to 2.1 million gallons of fuel (each);
  - 404 – 17,000-gallon AST
  - 406– 26,500-gallon AST; and
  - 407– 24,000-gallon AST.
- Twenty-three soil samples (including quality control samples) were collected from DU8 and 51 soil samples collected from DU9 to refine excavation limits.

A complete summary of the 2015 field activities is included in the 2015 Annual Report (NWDE, 2015). In addition, select tables and figures from the 2015 report have been included in Appendix E for reference.

3.6 2016

The following activities were completed during the 2016 construction year:

- ACM was abated from the interior and exterior of 19 structures.
- LBP was abated from the exterior of 63 features, including 15 buildings and structures, 43 manhole covers (also referred to as pedestals), three ASTs, and two raised platforms. In addition, Structure 144 was treated with MAECTITE®. Abated surfaces, except for Structure 144, were primed with one coat of Lead Stop® primer and painted with one top coat.
- Thirty-six structures were demolished during the 2016 field season. Materials recovered during the demolition included: 42 loads of scrap metal stockpiled in the designated staging area on the apron; 55 loads of clean concrete stockpiled on the apron for crushing; and 109 truckloads of MAECTITE®-treated demolition debris that were transported to the R-2 unit for disposal.
- Approximately 2,050 cy of soil was treated and excavated from 27 locations and the areas backfilled with clean soil.
- 153 soil samples (including quality control samples) were collected from 17 locations to further refine excavation limits.
- Clean concrete was downsized for future use as the final erosion protection layer for the R-2 unit. Excavators equipped with hydraulic concrete processors and crusher buckets were used to size clean concrete from large blocks down to the required 3-inch minus specification. Approximately 4,000 cy (~8,000 tons) of clean concrete was crushed and staged in windrows on the apron.
- 150 truckloads (2,250 cy) of clean sand were stockpiled at the R-2 area, for future use as buttress material.
- The R-2 unit drainage vault was modified by: 1) the removal of non-essential piping and sediment in the bottom of the vault; 2) the installation of a Rainstore3 (RS3) stormwater management system between the inlet and the outlet; and 3) backfilling the remaining portions of the drainage vault with clean sand. In general, the installation included the removal of the existing pumps and pipes, the placement of a geogrid within the vault for sedimentation control, and the placement of RS3 stacks into the open stormwater conveyance area of the vault. The entire system was then covered with a filter geotextile fabric to minimize future sediment accumulation. Those portions of the vault that were open to the surface were then covered with a ¼-inch thick steel plate. Ports were installed for future inspection and maintenance of the drainage system. A discussion of the R-2 unit modifications is included as Appendix G of the 2016 Annual Report (NWDE, 2016).

A complete summary of the 2016 field activities is included in the 2016 Annual Report (NWDE, 2016). In addition, select tables and figures from the 2016 report have been included in Appendix F for reference.

4.0 2017 FIELD ACTIVITIES

The following sections document activities completed during the 2017 construction year. Copies of the Daily Field Reports for the 2017 field season are provided in Appendix G. Due to its volume, Appendix G is provided in a separate binder. Appendix H contains printed copies of select Site photographs and a DVD that contains electronic versions of project-related photographs taken during the 2017 field season.

4.1 Demolition Services

During the 2017 field season, NWDE performed the demolition of a variety of structures, as well as the water tower. The following sections summarize these activities.

4.1.1 Tree Removal and Foundation Demolition

The bulk of the 2017 field work was focused on the removal of concrete footings from structures that were demolished during the 2016 field season. In total, three truckloads of painted concrete (45 cy) were removed and transported to the R-2 unit, and eight loads (120 cy) of clean concrete were stockpiled on the apron. The painted concrete was generated from Structure 502, and the clean concrete was generated from Structures 5342, S464, and 4201.

In preparation for the soil excavation work (See Section 4.1.2), NWDE assisted island staff in the removal of numerous trees in proposed excavation areas. In total, four loads (60 cy) of trees were transported to the burn pile.

4.1.2 Water Tower Demolition

The demolition of the water tower included the following activities:

- Removal of avian wildlife from the demolition area.
- Placement of shade cloth to minimize birds reentering the drop zone.
- Removal of ironwood trees to provide a clear drop zone.
- Placement of Dura-Skrim® reinforced polyethylene sheeting. The Dura-Skrim® was installed to contain any paint chips that may come off the tower during demolition. As the Dura-Skrim® was placed, the shade cloth that had been previously used to minimize bird entry was removed.
- The FWS disconnected the water tower from the active water delivery system, as well as all electrical lines.

- The legs and center columns of the steel tower structure were cut to fatigue the metal. The cuts were placed in a predetermined pattern that retained vertical strength during pre-fall tasks yet fatigued the material to assist in having the tower fall to the south.
- Two excavators were used to pull the water tower to the ground using cables connected to the water tower legs. The tower tank landed within the Dura-Skrim® lined landing zone.
- The tower and all ancillary steel were downsized using shears and transported directly onto a barge. In total, 12 truckloads of scrap metal were generated.

4.2 Soil Treatment and Removal

Soil was treated and excavated from 148 locations during the 2017 field season. This included 44 structure/building locations, 31 pedestals/monuments, and 73 fire hydrants. Tables 1 and 2 provide a summary of the removal action locations. Figures 4 through 33 illustrate the dimensions for the structures, as well as confirmation soil sample locations and results.

The lateral and vertical extent of the soil removed around each structure was based either on historical sampling results or on a prescriptive excavation plan. In areas where existing analytical results were available, the extent of excavation was based on the presence of lead in soil above 75 mg/kg. In areas where lead results in soil were not available, soils were excavated to a depth of 1 foot and to a distance from the base of the structure equal to the structure's height. For example, if a structure was 10 feet high, the removal area would extend horizontally 10 feet from the foundation. In general, this prescriptive approach was used on smaller structures and features (monuments, memorials, etc.).

Prior to removal, liquid MAECTITE® solution was applied to soil planned for excavation. As in years past, the majority of the MAECTITE® treatment was performed in place, prior to excavation. However, during the 2017 field year, some small excavations of untreated soil were completed in areas of dense underground utilities. In these instances, soil was transported to the R-2 unit and then treated with MAECTITE®.

For soil that was treated in place, MAECTITE® was applied in the planned dimensional excavation plots (such as 10'x 10'). Based on the 2012 treatment study completed by Geosyntec and Sevenson, the minimum application rate was established at 0.75 gal/cy.

Per Sevenson (MAECTITE® manufacturer), the required volume of treatment reagent was pumped from a 275-gallon poly tank. After the correct amount of reagent had been determined, it was applied to the treatment grid via a one-inch diameter chemical hose using a double-diaphragm pump. The liquid reagent was evenly distributed across the surface area by the operator manually moving the hose. A controlled application of hydrant water was added to the treatment area to enhance the dispersion of the reagent

into the soil. The active chemicals in the MAECTITE® liquid reagent are then dispersed via the water medium to contact and react with leachable metals. The soil, reagent, and water were then mechanically mixed to homogeneity with a flat-edged excavator bucket.

Several areas required re-excavation during the 2017 field event in cases where initial confirmation results exceeded 75 mg/kg.

Table 4 provides a summary of the quantity of MAECTITE® applied to soils, the quantity of treated soil, and the total volume of soil excavated and transported to the R-2 unit during the 2017 field season.

4.3 Confirmation Soil Sampling

Following the completion of any single excavation (i.e., that associated with a single structure), 5-point composite confirmation soil samples were collected to document the remaining concentration of lead in the soil. The confirmation samples were collected from the base of the excavation (shown in the attached figures). In addition, replicate confirmation samples were collected to assess sampling variability. Please see Appendix I for a discussion of the replicate samples.

All soil samples were submitted for laboratory analysis of total lead by EPA Method 6010. Table 5 provides a summary of the confirmation sampling results, and Figures 4 through 34 show the locations of all confirmation soil samples. Appendix I contains a copy of Test America's laboratory report, which also includes a quality assurance/quality control (QA/QC) evaluation of the analytical data, a data review checklist, and a discussion of data usability for each laboratory analytical packet. Based on the data quality review, all results are considered valid and usable.

4.3.1 Confirmation Soil Sampling Results

In total, 424 confirmation soil samples (including quality control samples) were collected from 148 excavations. Lead was detected at concentrations ranging from 0.34 to 720 mg/kg. Table 5 provides a summary of the lead results.

In those excavations where the confirmation results exceeded 75 mg/kg, and within all fire hydrant excavation areas, shade cloth was placed at the bottom of the excavation before backfilling (See Section 4.4).

4.4 Excavation Backfill

Most excavated areas were backfilled with clean sand from the borrow area between the fuel pier and the cargo pier. Clean sand was transported in an off-road truck to each excavation. The sand was dumped and spread to match the existing grade.

Shade cloth was installed at the base of excavations where confirmation samples exceeded 75 mg/kg. The shade cloth was covered with a minimum 1 foot of clean sand and serves as both notification of the presence of potentially contaminated soil to future inhabitants and workers and as a barrier to burrowing birds. In all, shade cloth was installed in excavations associated with Structures S3126, 347, 309, 354, S28, and S30. Shade cloth was installed around portions of Structure 5303 simply as a precaution; confirmation sampling results were not available before site activities ceased for the season. Additionally, shade cloth was installed at the base of each excavated fire hydrant and pedestal and covered with a minimum 1 foot of clean coral sand.

Excavation areas that were not completely backfilled to grade due to a lack of available clean sand included S28 (AST), S30 (AST), S3126 (Reservoir), and S3127 (Reservoir.)

4.5 R-2 Construction

The R-2 unit was modified for the permanent internment of treated waste materials generated during abatement and demolition. During the 2017 year, approximately 5,610 cy of soil and debris were transported and placed in the R-2 unit. Over the course of the entire project, approximately 32,450 cy of waste materials were placed in the R-2 unit, including 6,510 cy of demolition debris and 25,940 cy of soil

At the conclusion of the project, the surface of the waste soil in the R-2 was graded to a 2 percent slope in accordance with the design specifications (Appendix K). During grading, surface materials were inspected to verify that the final grade was free of demolition debris, sharp objects, concrete rubble, and rebar. In addition, clean sand was placed along the exterior walls of the R-2 unit to create the required buttress. Approximately 525 cy of clean sand was deposited along the exterior wall to ensure that the design specifications were met.

Once the waste material was graded, a 20-millimeter thick linear low-density polyethylene (LLDPE) geomembrane (HU20 B Hydraflex Ultra Black) was installed as a hydraulic barrier. After the geomembrane overlap distances were verified, the entire geomembrane was covered with at least 12 inches of clean sand and compacted using the wheels of a loaded off-road dump truck.

For the slope sides, sand was placed in lifts and compacted with tracked equipment. As the slope began to take shape, an excavator bucket was used to tamp the sand at the slope (3:1) angle. Water was sprayed onto the sandy slope to achieve compaction.

Section 3.05 of the Technical Specifications (Geosyntec, 2015) required that "the Contractor shall compact the final cover soil in one 12-inch thick compacted lift with a minimum of one pass of a wheel loader or loaded off-road dump truck". NWDE attempted to measure cover compaction using a readily available Agri-Tronix soil compaction tester. The tester measures the compaction of soil (in pound per square inch [psi]) based on the American Society of Agricultural and Biological Engineers (ASABE) S313.3 standard.

Tests readings of nearly zero (0-2) psi were measure for the unconsolidated soils used for the soil cap and readings of 200 to 300 psi were recorded after compaction. Based on the field readings and in the opinion of the project engineer, the R-2 cover was successfully compacted to a dense, non-yielding state.

After the clean sand was compacted and graded, a witness layer of TenCate Mirafi® orange permeable geotextile fabric was installed to provide a visual indication in the event that the erosion protection layer fails.

The erosion protection layer consists of at least 1 foot of crushed (3-inch minus) concrete placed on top of the witness layer. The erosion layer was inspected, and any small pieces of steel rebar were removed. In total, approximately 3,100 cy of crushed concrete were placed during the construction of the final cover. Upon completion of the erosion protection layer, the final grade was surveyed. A copy of the technical specifications and as-built drawings for the R-2 unit are included in Appendix K.

4.5.1 Treatment Confirmation Sampling

An end-of-project composite sample (R2 Cell 1-2-3-4) was collected and analyzed using MEP by EPA Method 1320. The MEP testing was conducted on treated soils and subjects the samples to successive leaches of an acidic solution. The MEP method is designed to understand leachability from solid waste caused by infiltration of acid rain and is intended to simulate 1,000 years of soil exposure to a leaching medium. The method, by subjecting the same solid matrix to successive leaches, effectively subjects the sample to increasing acidity. Therefore, the procedure provides a long-term estimate of metal mobility to groundwater from buried waste.

The MEP analytical results are included in Table 6. The leachate samples did not contain lead concentrations above the method reporting limit of 0.014 milligrams per liter (mg/L). These results are consistent with MAECTITE® performance expectations, and are well below the toxicity characteristic leaching procedure (TCLP) limit for lead of 5 mg/L.

4.6 Waste Disposal, Management, and Demobilization

During the 2017 construction year, three ocean-going barges were used to remove waste and equipment from the Site. The first barge was used to transport the stockpiled scrap steel (183 truckloads) on the apron, Iniki's equipment, as well as LBP chips from building abatement and ACM waste off island. In total, nine 20-foot intermodal shipping containers containing ACM and LBP were transported off island.

A second barge was used to ship scrap steel from the water tower demolition, heavy equipment, and four 20-foot shipping containers with supplies off site.

The final barge was used to demobilize all remaining heavy equipment, trucks, support vehicles, any remaining storage containers, and a limited volume of recyclable materials.

The final volume of material removed included:

- 883.92 tons of scrap steel;
- 520 pounds of non-ferrous material;
- 45.2 tons of ACM; and
- 12.12 tons of non-hazardous mixed waste associated with the LBP abatement work. This included LBP chips, poly sheeting, and PPE.

Appendix L contains copies of the available waste disposal manifests.

5.0 PROJECT HIGHLIGHTS

The 2017 field season completed seven years of project work at the Site. During that time, many significant accomplishments were achieved. Highlights include:

- Excavation, treatment, and internment of 32,450 cy of lead-contaminated soil and building debris in the R-2 unit;
- Abatement of LBP from nearly 50 structures, with subsequent painting of most of these structures with Lead Stop® primer and one top coat;
- The demolition of nearly 40 buildings/structures;
- The removal and recycling/disposal of nearly 950 tons of building debris;
- Demolition and scrapping of two large (2.1 million gallon) ASTs;
- Abatement of one of the historical cable house buildings (Structure 643);
- Reuse of building demolition debris (concrete); and
- Made available over 1,000,000 square feet of land for future nesting habitat.

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TABLES

Table 1
Summary of Fire Hydrant-Related Work
Midway Atoll NWR

Fire Hydrant Identification	Excavation Date	Sample Collection Date	Backfill Date	Sample Identification	Lead[1] (mg/kg)
1	9/26/2017	10/3/2017	10/3/2017	FH 1 0-2"	9.9
2	9/27/2017	10/3/2017	10/3/2017	FH 2 0-2"	2.7
3	9/26/2017	9/26/2017	10/3/2017	FH 3 0-2"	19
4	9/26/2017	9/26/2017	10/3/2017	FH 4 0-2"	36
5	9/27/2017	10/3/2017	10/3/2017	FH 5 0-2"	9
6	9/27/2017	10/3/2017	10/3/2017	FH 6 0-2"	14
7	9/26/2017	9/26/2017	10/3/2017	FH 7 0-2"	6.4
8	9/25/2017	10/3/2017	10/3/2017	FH 8 0-2"	16
9	9/25/2017	10/3/2017	10/3/2017	FH 9 0-2"	0.85
10	9/25/2017	10/3/2017	10/3/2017	FH 10 0-2"	4.3
11	8/31/2017	9/4/2017	9/30/2017	FH 11 0-2"	23
				FH 11 0-2" Dup	24
12	DU-6	N/A	N/A	Prior excavation	--
13	DU-6	N/A	N/A	Prior excavation	--
14	DU-6	N/A	N/A	Prior excavation	--
15	DU-6	N/A	N/A	Prior excavation	--
16	9/23/2017	9/28/2017	9/29/2017	FH 16 0-2"	40
17	9/23/2017	9/23/2017	9/23/2017	FH 17 0-2"	7
18	9/23/2017	9/23/2017	9/23/2017	FH 18 0-2"	9.9
19*	9/23/2017	9/29/2017	10/2/2017	FH 19 0-2"	720
20	9/23/2017	9/28/2017	9/29/2017	FH 20 0-2"	9.9
21	9/26/2017	9/27/2017	9/30/2017	FH 21 0-2"	24
22	9/25/2017	9/26/2017	9/26/2017	FH 22 0-2"	1.4
23	9/26/2017	9/26/2017	9/26/2017	FH 23 0-2"	5.2
24	9/26/2017	9/26/2017	9/29/2017	FH 24 0-2"	13
25	9/26/2017	9/26/2017	9/29/2017	FH 25 0-2"	17
26	9/26/2017	9/26/2017	9/29/2017	FH 26 0-2"	51
27	9/23/2017	9/23/2017	9/30/2017	FH 27 0-2"	6.9
28	9/23/2017	9/23/2017	9/30/2017	FH 28 0-2"	14
29	9/26/2017	9/26/2017	10/2/2017	FH 29 0-2"	12
30	9/26/2017	9/26/2017	9/26/2017	FH 30 0-2"	18
31	9/26/2017	9/26/2017	9/26/2017	FH 31 0-2"	4.4
32	9/26/2017	9/26/2017	9/26/2017	FH 32 0-2"	4.2
33	9/26/2017	9/26/2017	9/26/2017	FH 33 0-2"	7.4
34	9/26/2017	9/29/2017	9/30/2017	FH 34 0-2"	21
35	9/26/2017	10/4/2017	10/4/2017	FH 35 0-2"	5.9
36	9/26/2017	10/4/2017	10/4/2017	FH 36 0-2"	10
37	9/25/2017	9/26/2017	10/2/2017	FH 37 0-2"	59
38	9/26/2017	10/2/2017	10/2/2017	FH 38 0-2"	16
39	DU-1	N/A	N/A	Prior excavation	--
40	9/26/2017	9/27/2017	10/2/2017	FH 40 0-2"	11

Table 1
Summary of Fire Hydrant-Related Work
Midway Atoll NWR

Fire Hydrant Identification	Excavation Date	Sample Collection Date	Backfill Date	Sample Identification	Lead[1] (mg/kg)
41	DU-1	N/A	N/A	Prior excavation	--
42	9/25/2017	9/27/2017	10/2/2017	FH 42 0-2"	6.1
43	9/26/2017	10/2/2017	10/3/2017	FH 43 0-2"	1.2
44	9/26/2017	9/29/2017	10/2/2017	FH 44 0-2"	5
45	9/23/2017	9/28/2017	10/4/2017	FH 45 0-2"	12
46	9/25/2017	10/3/2017	10/4/2017	FH 46 0-2"	18
47	9/25/2017	10/4/2017	10/4/2017	FH 47 0-2"	6.4
48	9/25/2017	10/3/2017	10/4/2017	FH 48 0-2"	6.6
49*	9/26/2017	9/26/2017	10/4/2017	FH 49 0-2"	210
50*	9/28/2017	10/3/2017	10/4/2017	FH 50 0-2"	85
51	9/11/2017	9/11/2017	9/30/2017	FH 51 0-2"	12
				FH 51 0-2" DUP	11
52	9/11/2017	9/11/2017	9/30/2017	FH 52 0-2"	20
				FH 52 0-2" DUP	6
53	8/23/2017	8/23/2017	10/6/2017	FH 53 0-2" DUP	13
				FH 53 0-2"	8.8
54	9/11/2017	9/11/2017	10/6/2017	FH 54 0-2"re-ex	19
				FH 54 0-2"re-ex DUP	26
54A	8/23/2017	8/23/2017	10/6/2017	FH 54A 0-2"	76
				FH 54A 0-2" DUP	82
55*	8/26/2017	8/26/2017	9/29/2017	FH 55 0-2"	68
				FH 55 0-2" DUP	130
56	8/26/2017	8/30/2017	10/2/2017	FH 56 0-2" DUP	14
				FH 56 0-2"	9.5
57	8/26/2017	8/26/2017	9/29/2017	FH 57 0-2"	2.1
				FH 57 0-2" DUP	1.5
58	9/11/2017	9/11/2017	9/29/2017	FH 58 0-2"	11
				FH 58 0-2" DUP	11
59	9/26/2017	9/27/2017	9/29/2017	FH 59 0-2"	8.2
60	10/11/2017	10/11/2017	10/11/2017	FH 60 0-2"	8.4
61	9/28/2017	9/29/2017	10/3/2017	FH 61 0-2"	37
62	9/25/2017	9/27/2017	10/3/2017	FH 62 0-2"	0.53
63	9/28/2017	9/29/2017	10/3/2017	FH 63 0-2"	15
64	9/11/2017	9/11/2017	10/30/2017	FH 64 0-2"	1.4
				FH 64 0-2" DUP	1.2
65	8/29/2017	8/30/2017	10/30/2017	FH 65 0-2"	11
				FH 65 0-2" DUP	15
66	8/26/2017	8/26/2017	10/3/2017	FH 66 0-2"	23
				FH 66 0-2" DUP	18
67	8/25/2017	8/30/2017	9/29/2017	FH 67 0-2"	51
				FH 67 0-2" DUP	41

Table 1
Summary of Fire Hydrant-Related Work
Midway Atoll NWR

Fire Hydrant Identification	Excavation Date	Sample Collection Date	Backfill Date	Sample Identification	Lead[1] (mg/kg)
68	8/25/2017	8/30/2017	9/29/2017	FH 68 0-2"	19
				FH 68 0-2" DUP	16
69	9/25/2017	9/27/2017	9/29/2017	FH 69 0-2"	35
70	9/25/2017	9/27/2017	9/29/2017	FH 69 0-2"	8.1
71	9/25/2017	9/27/2017	9/29/2017	FH 71 0-2"	0.57
72	8/29/2017	9/27/2017	10/3/2017	FH 72 0-2"	3.3
73	8/29/2017	9/11/2017	10/2/2017	FH 73 0-2"	3.7
				FH 73 0-2" DUP	3.3
74	8/29/2017	8/29/2017	10/2/2017	FH 74 0-2"	13
				FH 74 0-2" DUP	10
75	8/28/2017	8/29/2017	10/2/2017	FH 75 0-2"	57
				FH 75 0-2" DUP	46
76	9/25/2017	9/29/2017	10/2/2017	FH 76 0-2"	11
77*	8/28/2017	8/29/2017	10/3/2017	FH 77 0-2"	98
				FH 77 0-2" DUP	280

Notes

1. Lead was analyzed by Environmental Protection Agency Method 6010B.

mg/kg = milligram per kilogram

* Confirmation Results exceed 75 mg/kg. Shading also indicates results exceed 75 mg/kg

Samples labeled as “DUP” are considered replicate samples. Please see Appendix I for a discussion.

Table 2
Summary of Monument-Related Work
Midway Atoll NWR

Feature Identification	Excavation Date	Sample Collection Date	Backfill Date	Sample Identification	Lead[1] (mg/kg)
1*	8/29/2017	9/4/2017	9/30/2017	1-08 P100 0-2"	150
				1-08 P100 0-2" DUP	120
2*	8/29/2017	9/4/2017	9/30/2017	2-08 P100 0-2"	130
				2-08 P100 0-2" DUP	74
3*	8/29/2017	9/4/2017	9/30/2017	3-10 P100 0-2"	150
				3-10 P100 0-2" DUP	85
4	8/29/2017	9/4/2017	9/30/2017	4-10 P100 0-2"	54
				4-10 P100 0-2" DUP	49
5	8/29/2017	9/4/2017	9/30/2017	5-11 P100 0-2"	27
				5-11 P100 0-2" DUP	42
6	9/11/2017	9/11/2017	9/30/2017	6-51 P100 0-2"	16
				6-51 P100 0-2" DUP	18
7	9/11/2017	9/11/2017	9/30/2017	7-32 P100 0-2"	53
				7-32 P100 0-2" DUP	58
8	9/05/2017	9/18/2017	10/3/2017	8-20 P100 0-2"	14
				8-20 P100 0-2" DUP	25
9	9/26/2017	9/28/2017	9/30/2017	9-33 P100 0-2"	60
10	9/26/2017	9/28/2017	9/30/2017	10-23 P100 0-2"	67
11	9/26/2017	9/28/2017	9/29/2017	11-20 P100 0-2"	6.1
12	9/26/2017	9/28/2017	9/29/2017	12-28 P100 0-2"	4.5
13	9/26/2017	9/28/2017	9/29/2017	13-27 P100 0-2"	1.8
14	9/26/2017	9/28/2017	9/30/2017	14-08 P100 0-2"	7.1
15	9/27/2017	9/29/2017	9/30/2017	15-24 P100 0-2"	4.9
16	9/27/2017	9/29/2017	9/30/2017	16-25 P100 0-2"	35
17	9/27/2017	9/29/2017	9/30/2017	17-25 P100 0-2"	5.3
18	9/28/2017	9/29/2017	9/29/2017	18-13 P100 0-2"	37
19	9/26/2017	9/29/2017	10/2/2017	19-44 P100 0-2"	12
20	9/26/2017	9/29/2017	10/2/2017	20-44 P100 0-2"	26
21	9/26/2017	9/29/2017	9/30/2017	21-52 P100 0-2"	12
22	9/26/2017	10/2/2017	10/4/2017	22-49 P100 0-2"	29
Anchor-Kahana	10/2/2017	10/2/2017	10/5/2017	Anchor-Kahana	15
Anchor-170	10/2/2017	10/2/2017	10/2/2017	Anchor-170	19
23	9/29/2017	10/2/2017	10/2/2017	23-44 P100 0-2"	28
24	9/29/2017	10/2/2017	10/2/2017	24-42 P100 0-2"	21
25	9/29/2017	10/2/2017	10/2/2017	25-38 P100 0-2"	290
26	9/25/2017	10/3/2017	10/3/2017	26-07 P100 0-2"	0.34
27	10/26/2017	10/3/2017	10/3/2017	27-03 P100 0-2"	32
28	9/26/2017	10/4/2017	10/4/2017	28-30 P100 0-2"	5.8
29	10/5/2017	10/5/2017	10/5/2017	29-R1 P100 0-2"	5.3
30	10/5/2017	10/5/2017	10/5/2017	30-20 P100 0-2"	34
31	10/5/2017	10/5/2017	10/5/2017	31-15 P100 0-2"	52

Table 2
Summary of Monument-Related Work
Midway Atoll NWR

Feature Identification	Excavation Date	Sample Collection Date	Backfill Date	Sample Identification	Lead[1] (mg/kg)
32-71	DU-6	N/A	N/A	Prior excavation	--
33-12	DU-6	N/A	N/A	Prior excavation	--
34-15	DU-6	N/A	N/A	Prior excavation	--
35-15	DU-6	N/A	N/A	Prior excavation	--
36-14	DU-6	N/A	N/A	Prior excavation	--
37-Cross	Abated	N/A	N/A	Maintained	--
38-58	DU-8	N/A	N/A	Prior excavation	--
39-58	DU-8	N/A	N/A	Prior excavation	--
40-Ave Maria	Abated	N/A	N/A	Maintained	--
41-Golf	Sprayed	N/A	N/A	Spray	--
42-R1	Abated	N/A	N/A	Concrete apron	--
43-R1	Abated	N/A	N/A	Concrete apron	--
Anchor-3502	10/4/2017	10/4/2017	10/5/2017	Anchor-3502	6.4
Anchor-3514	10/4/2017	10/4/2017	10/5/2017	Anchor-3514	<0.18
Anchor-1126*	10/5/2017	10/5/2017	10/5/2017	Anchor-1126	83

Notes

1. Lead was analyzed by Environmental Protection Agency Method 6010B.

mg/kg = milligram per kilogram

* Confirmation Results exceed 75 mg/kg. Shading also indicates results exceed 75 mg/kg

Samples labeled as “DUP” are considered replicate samples. Please see Appendix I for a discussion.
Pedestal sampling identification is a designated number followed by a dash and double digit number relative to the closest fire hydrant location.

Table 3
Summary of Demolition and Backfill Load Counts - 2017
Midway Atoll NWR

Date [1]	Treated Demolition Debris to R-2 Unit (Loads)	Clean Concrete to Crusher (Loads)	Clean Wood to Burn Area (Loads)	Metal Debris Load onto Barge (Loads)	R2 Waste Layer Toe Adjustment Sand (Loads) [2]	R2 Final Cover Concrete (Loads)
08/17/2017	0	0	0	38	0	0
08/18/2017	0	0	0	145	0	0
08/23/2017	3	0	4	0	0	0
09/13/2017	0	0	0	12 [3]	0	0
10/05/2017	0	0	0	0	12	0
10/06/2017	0	0	0	0	10	0
10/07/2017	0	0	0	0	13	0
10/14/2017	0	0	0	0	0	14
10/15/2017	0	0	0	0	0	28
10/16/2017	0	0	0	0	0	46
10/17/2017	0	0	0	0	0	52
10/18/2017	0	0	0	0	0	54
10/19/2017	0	0	0	0	0	13
Total Load Count	3	8	4	195	35	207
Total CY Estimate [4]	45	120	60	2,925	525	3,105

Notes

1. Field work was completed between 7/25/17 and 10/26/17. Only dates when materials were transported are shown.
2. Consists of clean sand necessary to obtain the proper slope in the R-2 Unit before placement of geomembrane.
3. Scrap metal generated during the demolition of the water tower.
4. Estimates are based on an assumed 15 CY per truck load.

CY = cubic yard

Table 4
Summary of Maectite Usage and Volumes of Soil Transported to R2 Unit - 2017
Midway Atoll NWR

Date[1]	Maectite Totals (gallons)				Soil Totals to R-2 Unit			
	Applied to Soils (DU9)	Applied to Soils (DU8)	Applied to Soils (DU7)	Cumulative Total	Treated Soil (Loads)[2]	Treated Soil Volume (LCY)	Untreated Soil (Loads)	Untreated Soil Volume (LCY)
08/05/2017	26	0	0	26	0	0	0	0
08/06/2017	0	0	0	0	2	25	0	0
08/07/2017	51	0	0	51	0	0	0	0
08/08/2017	35	0	0	35	6	75	3	39
08/09/2017	0	0	0	0	4	50	0	0
08/10/2017	27	0	0	27	0	0	2	26
08/11/2017	0	0	0	0	1	12	7	91
08/12/2017	0	0	0	0	1	12	3	39
08/14/2017	150	17	153	320	0	0	0	0
08/15/2017	199	0	0	199	39	479	0	0
08/16/2017	190	0	0	190	16	199	0	0
08/17/2017	0	0	0	0	8	100	0	0
08/18/2017	0	0	0	0	14	171	0	0
08/23/2017	153	188	0	341	0	0	0	0
08/24/2017	177	0	0	177	49	604	0	0
08/25/2017	0	0	0	0	1	12	0	0
08/26/2017	0	0	0	0	15	187	0	0
09/08/2017	0	0	0	0	0	0	3	39
09/09/2017	0	0	0	0	0	0	7	91
09/10/2017	0	0	0	0	0	0	1	13
09/11/2017	581	0	0	581	0	0	0	0
09/12/2017	129	0	0	129	55	685	0	0
09/13/2017	0	0	0	0	13	157	0	0
09/15/2017	169	0	0	169	0	0	0	0
09/16/2017	126	0	0	126	0	0	6	78
09/17/2017	0	0	0	0	0	0	18	234
09/18/2017	220	0	0	220	0	0	0	0
09/19/2017	0	0	0	0	0	0	27	351
09/20/2017	0	0	0	0	35	436	10	130
09/21/2017	95	0	0	95	13	162	2	26
09/22/2017	0	0	0	0	30	374	0	0
09/24/2017	0	0	0	0	0	0	3	39
09/26/2017	0	0	0	0	0	0	2	26
09/27/2017	0	0	0	0	0	0	4	52
09/28/2017	0	0	0	0	0	0	4	46
09/29/2017	200	0	0	200	0	0	0	0
09/30/2017	0	0	0	0	19	237	0	0
10/04/2017	0	0	0	0	0	0	2	26
10/05/2017	95	0	0	95	0	0	0	0
10/06/2017	0	0	0	0	9	112	4	52
10/07/2017	0	0	0	0	0	0	6	78
Totals	2,623	205	153	2,981	328	4,088	114	1,476

Notes

1. Field work was completed between 7/25/17 and 10/26/17. Only dates when materials were transported are shown.
2. Estimates are based on MAECTITE volume usage with an application rate rate of 0.75 gallons per cubic yard.

LCY = loose cubic yard

Table 5
Summary Confirmation Soil Sampling Analytical Results - 2017
Midway Atoll NWR

Structure	Sample ID	Date	Lead (mg/kg)	Relative Percent Difference (%)
S28 (Figure 4)	S28 P100 RE-EX 0-2"	9/19/2017	7	143%
	S28 P100 RE-EX DUP 0-2"	9/19/2017	42	
	S28 P101 RE-EX 0-2"	9/19/2017	11	24%
	S28 P101 RE-EX DUP 0-2"	9/19/2017	14	
	S28 P102 RE-EX 0-2"	9/19/2017	7.5	38%
	S28 P102 RE-EX DUP 0-2"	9/19/2017	11	
	S28 P103 RE-EX 0-2"	9/19/2017	10	26%
	S28 P103 RE-EX DUP 0-2"	9/19/2017	13	
	S28 P104 RE-EX 0-2"	9/19/2017	20	35%
	S28 P104 RE-EX DUP 0-2"	9/19/2017	14	
	S28 P105 RE-EX 0-2"	9/19/2017	110	0%
	S28 P105 RE-EX DUP 0-2"	9/19/2017	110	
S30 (Figure 4)	S30 P100 RE-EX 0-2"	9/19/2017	63	17%
	S30 P100 RE-EX DUP 0-2"	9/19/2017	53	
	S30 P101 RE-EX 0-2"	9/19/2017	45	84%
	S30 P101 RE-EX DUP 0-2"	9/19/2017	110	
	S30 P102 RE-EX 0-2"	9/19/2017	48	68%
	S30 P102 RE-EX DUP 0-2"	9/19/2017	98	
	S30 P103 RE-EX 0-2"	9/19/2017	110	31%
	S30 P103 RE-EX DUP 0-2"	9/19/2017	150	
	S30 P104 RE-EX 0-2"	9/19/2017	140	25%
	S30 P104 RE-EX DUP 0-2"	9/19/2017	180	
	S30 P105 RE-EX 0-2"	9/19/2017	20	106%
	S30 P105 RE-EX DUP 0-2"	9/19/2017	65	
	S30 P106 RE-EX 0-2"	9/19/2017	12	22%
	S30 P106 RE-EX DUP 0-2"	9/19/2017	15	
	S30 P107 RE-EX 0-2"	9/19/2017	18	40%
	S30 P107 RE-EX DUP 0-2"	9/19/2017	27	
144 (Figure 5)	144 P100 0-2"	8/29/2017	25	8%
	144 P100 0-2" Dup	8/29/2017	23	
	144 P101 0-2"	8/29/2017	11	53%
	144 P101 0-2" Dup	8/29/2017	19	
	144 P102 0-2"	8/29/2017	34	27%
	144 P102 0-2" Dup	8/29/2017	26	
	144 P103 0-2"	8/29/2017	29	3%
	144 P103 0-2" Dup	8/29/2017	30	
	144 P104 0-2"	8/29/2017	1.7	64%
	144 P104 0-2" Dup	8/29/2017	3.3	
	144 P105 0-2"	8/29/2017	7.1	33%
	144 P105 0-2" Dup	8/29/2017	5.1	

Table 5
Summary Confirmation Soil Sampling Analytical Results - 2017
Midway Atoll NWR

Structure	Sample ID	Date	Lead (mg/kg)	Relative Percent Difference (%)
225A (Figure 6)	225A P100 0-2"	8/13/2017	30	11%
	225A P100 0-2" Dup	8/13/2017	27	
	225A P101 0-2"	8/13/2017	40	52%
	225A P101 0-2" Dup	8/13/2017	68	
232 (Figure 7)	232 P100 0-2"	8/13/2017	<0.17	
	232 P100 0-2" Dup	8/13/2017	<0.15	
269 (Figure 6)	269 P100 0-2"	8/13/2017	46	7%
	269 P100 0-2" Dup	8/13/2017	43	
	269 P101 0-2"	8/13/2017	63	39%
	269 P101 0-2" Dup	8/13/2017	94	
	269 P101 RE-EX 0-2"	9/17/2017	70	26%
	269 P101 RE-EX DUP 0-2"	9/17/2017	54	
309 (Figure 8)	309 P100 0-2"	9/4/2017	120	22%
	309 P100 0-2" Dup	9/4/2017	96	
	309 P101 0-2"	9/4/2017	37	24%
	309 P101 0-2" Dup	9/4/2017	47	
	309 P102 0-2"	9/4/2017	56	7%
	309 P102 0-2" Dup	9/4/2017	60	
	309 P103 0-2"	9/4/2017	63	45%
	309 P103 0-2" Dup	9/4/2017	100	
	309 P104 0-2"	9/4/2017	77	51%
	309 P104 0-2" Dup	9/4/2017	130	
	309 P105 0-2"	9/19/2017	28	13%
	309 P105 DUP 0-2"	9/19/2017	32	
	309 P106 0-2"	10/2/2017	110	124%
	309 P106 0-2" Dup	10/2/2017	470	
	309 P107 0-2"	10/2/2017	41	38%
	309 P107 0-2" Dup	10/2/2017	28	
	309 P108 0-2"	10/2/2017	68	3%
	309 P108 0-2" Dup	10/2/2017	70	
347 (Figure 9)	347 P100 0-2"	9/17/2017	130	28%
	347 P100 DUP 0-2"	9/17/2017	98	
	347 P101 0-2"	9/17/2017	100	6%
	347 P101 DUP 0-2"	9/17/2017	94	
	347 P102 0-2"	9/17/2017	51	79%
	347 P102 DUP 0-2"	9/17/2017	22	
354 (Figure 8)	354 P100 0-2"	10/2/2017	54	35%
	354 P100 0-2" Dup	10/2/2017	38	
	354 P101 0-2"	10/2/2017	24	119%
	354 P101 0-2" Dup	10/2/2017	94	

Table 5
Summary Confirmation Soil Sampling Analytical Results - 2017
Midway Atoll NWR

Structure	Sample ID	Date	Lead (mg/kg)	Relative Percent Difference (%)
S361 (Figure 10)	S361 P100 0-2"	9/4/2017	12	15%
	S361 P100 0-2" Dup	9/4/2017	14	
417 (Figure 11)	417 P100 0-2"	8/13/2017	6.5	41%
	417 P100 0-2" Dup	8/13/2017	4.3	
418 (Figure 11)	418 P100 0-2"	8/13/2017	<0.18	
	418 P100 0-2" Dup	8/13/2017	<0.17	
	418 P101 0-2"	8/13/2017	<0.18	
	418 P101 0-2" Dup	8/13/2017	<0.19	
419 (Figure 11)	419 P100 0-2"	8/13/2017	2.9	19%
	419 P100 0-2" Dup	8/13/2017	3.5	
502 (Figure 12)	502 P100 0-2"	8/13/2017	12	22%
	502 P100 0-2" Dup	8/13/2017	15	
503 (Figure 13)	503 P101 RE-EX 0-2"	9/17/2017	9.9	80%
	503 P101 RE-EX DUP 0-2"	9/17/2017	23	
520 (Figure 14)	520 P100 0-2"	8/13/2017	<0.17	
	520 P100 0-2" Dup	8/13/2017	<0.19	
	520 P101 0-2"	8/13/2017	39	20%
	520 P101 0-2" Dup	8/13/2017	32	
521 (Figure 15)	521 P100 0-2"	8/13/2017	1.9	19%
	521 P100 0-2" Dup	8/13/2017	2.3	
	521 P101 0-2"	8/13/2017	4.2	62%
	521 P101 0-2" Dup	8/13/2017	8	
	521 P102 0-2"	8/13/2017	2.2	15%
	521 P102 0-2" Dup	8/13/2017	1.9	
	521 P103 0-2"	8/13/2017	14	42%
	521 P103 0-2" Dup	8/13/2017	9.1	
	521 P104 0-2"	8/21/2017	7.8	56%
	521 P104 0-2" DUP	8/21/2017	4.4	
	521 P105 0-2"	8/21/2017	7.3	49%
	521 P105 0-2" DUP	8/21/2017	12	
	521 P106 0-2"	8/21/2017	23	16%
	521 P106 0-2" DUP	8/21/2017	27	
	521 P107 0-2"	8/21/2017	68	16%
	521 P107 0-2" DUP	8/21/2017	58	
1124 (Figure 16)	1124 P100 0-2"	8/22/2017	<0.2	
	1124 P100 0-2" DUP	8/22/2017	<0.2	
1126 (Figure 17)	1126 P100 0-2"	8/23/2017	<0.2	
	1126 P100 0-2" DUP	8/23/2017	<0.19	
	1126 P101 0-2"	8/23/2017	1.6	0%
	1126 P101 0-2" DUP	8/23/2017	1.6	

Table 5
Summary Confirmation Soil Sampling Analytical Results - 2017
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Structure	Sample ID	Date	Lead (mg/kg)	Relative Percent Difference (%)
3126 (Figure 9)	3126 P100 0-2"	9/17/2017	87	7%
	3126 P100 DUP 0-2"	9/17/2017	93	
	3126 P101 0-2"	9/17/2017	96	5%
	3126 P101 DUP 0-2"	9/17/2017	91	
	3126 P102 0-2"	9/17/2017	71	29%
	3126 P102 DUP 0-2"	9/17/2017	53	
	3126 P103 0-2"	9/17/2017	53	4%
	3126 P103 DUP 0-2"	9/17/2017	55	
	3126 P104 0-2"	9/17/2017	9.2	81%
	3126 P104 DUP 0-2"	9/17/2017	3.9	
	3126 P105 0-2"	9/17/2017	0.3	98%
	3126 P105 DUP 0-2"	9/17/2017	0.88	
3127 (Figure 9)	3127 P100 0-2"	9/17/2017	37	20%
	3127 P100 DUP 0-2"	9/17/2017	45	
	3127 P101 0-2"	9/17/2017	15	42%
	3127 P101 DUP 0-2"	9/17/2017	23	
	3127 P102 0-2"	9/17/2017	23	61%
	3127 P102 DUP 0-2"	9/17/2017	43	
	3127 P103 0-2"	9/17/2017	29	19%
	3127 P103 DUP 0-2"	9/17/2017	35	
3501 (Figure 9)	3501 P100 0-2"	9/17/2017	41	13%
	3501 P100 DUP 0-2"	9/17/2017	36	
	3501 P101 0-2"	9/17/2017	4.1	74%
	3501 P101 DUP 0-2"	9/17/2017	8.9	
	3501 P102 0-2"	9/17/2017	12	55%
	3501 P102 DUP 0-2"	9/17/2017	21	
	3501 P103 0-2"	9/17/2017	9.2	18%
	3501 P103 DUP 0-2"	9/17/2017	11	
3514 (Figure 18)	3514 P100 0-2"	8/13/2017	52	18%
	3514 P100 0-2" Dup	8/13/2017	62	
	3514 P101 0-2"	8/13/2017	520	177%
	3514 P101 0-2" Dup	8/13/2017	31	
	3514 P100 0-2" Re-Ex	9/17/2017	42	11%
	3514 P100 DUP 0-2" Re-Ex Dup	9/17/2017	47	
3521 (Figure 19)	3521 P100 0-2"	9/17/2017	<0.2	
	3521 P100 DUP 0-2"	9/17/2017	<0.19	
	3521 P101 0-2"	9/17/2017	43	57%
	3521 P101 DUP 0-2"	9/17/2017	24	
3524 (Figure 20)	3524 P100 0-2"	8/13/2017	15	0%
	3524 P100 0-2" Dup	8/13/2017	15	
	3524 P101 0-2"	8/13/2017	25	22%
	3524 P101 0-2" Dup	8/13/2017	20	

Table 5
Summary Confirmation Soil Sampling Analytical Results - 2017
Midway Atoll NWR

Structure	Sample ID	Date	Lead (mg/kg)	Relative Percent Difference (%)
3529 (Figure 21)	3529 P100 0-2"	8/13/2017	4.6	151%
	3529 P100 0-2" Dup	8/13/2017	33	
	3529 P101 0-2"	8/13/2017	24	22%
	3529 P101 0-2" Dup	8/13/2017	30	
	3529 P102 0-2"	8/13/2017	6.5	42%
	3529 P102 0-2" Dup	8/13/2017	10	
	3529 P103 0-2"	8/13/2017	6.9	10%
	3529 P103 0-2" Dup	8/13/2017	7.6	
4210 (Figure 22)	4210 P100 0-2"	8/13/2017	<0.2	
	4210 P100 0-2" Dup	8/13/2017	1.6	
	4210 P101 0-2"	8/13/2017	23	114%
	4210 P101 0-2" Dup	8/13/2017	6.3	
4213 (Figure 23)	4213 P100 0-2"	8/13/2017	2.4	59%
	4213 P100 0-2" Dup	8/13/2017	1.3	
5126 (Figure 24)	5126 P100 0-2"	10/2/2017	17	34%
	5126 P100 0-2" Dup	10/2/2017	24	
5303 (Figure 25)	5303 NW A Re-Ex 0-2"	10/4/2017	9.8	102%
	5303 NW A Re-Ex 0-2" Dup	10/4/2017	3.2	
	5303 Ramp 0-2"	10/4/2017	2.8	20%
	5303 Ramp 0-2" Dup	10/4/2017	2.3	
5304 (Figure 26)	5304 P100 0-2"	10/1/2017	2.1	71%
	5304 P100 0-2" Dup	10/1/2017	1	
	5304 P101 0-2"	10/1/2017	0.77	73%
	5304 P101 0-2" Dup	10/1/2017	0.36	
	5304 P102 0-2"	10/1/2017	0.36	191%
	5304 P102 0-2" Dup	10/1/2017	15	
	5304 P103 0-2"	10/1/2017	<0.14	
	5304 P103 0-2" Dup	10/1/2017	<0.16	
	5304 P104 0-2"	10/1/2017	<0.14	
	5304 P104 0-2" Dup	10/1/2017	<0.18	
	5304 P105 0-2"	10/1/2017	1.1	9%
	5304 P105 0-2" Dup	10/1/2017	1.2	
	5304 P106 0-2"	10/1/2017	0.52	42%
	5304 P106 0-2" Dup	10/1/2017	0.8	
	5304 P107 0-2"	10/1/2017	<0.17	
	5304 P107 0-2" Dup	10/1/2017	<0.17	
	5304 P108 0-2"	10/1/2017	16	40%
	5304 P108 0-2" Dup	10/1/2017	24	
	5304 P109 0-2"	9/19/2017	5.2	86%
	5304 P109 DUP 0-2"	9/19/2017	13	

Table 5
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Structure	Sample ID	Date	Lead (mg/kg)	Relative Percent Difference (%)
5304 (Figure 26)	5304 P110 0-2"	9/19/2017	3.8	34%
	5304 P110 DUP 0-2"	9/19/2017	2.7	
	5304 P111 0-2"	9/19/2017	5.4	4%
	5304 P111 DUP 0-2"	9/19/2017	5.6	
	5304 P112 0-2"	9/19/2017	7	1%
	5304 P112 DUP 0-2"	9/19/2017	6.9	
5305 (Figure 27)	5305 P100 0-2"	8/18/2017	15	7%
	5305 P100 0-2" DUP	8/18/2017	14	
	5305 P101 0-2"	8/18/2017	22	82%
	5305 P101 0-2" DUP	8/18/2017	9.2	
	5305 P102 0-2"	8/18/2017	47	7%
	5305 P102 0-2" DUP	8/18/2017	44	
	5305 P103 0-2"	8/18/2017	53	59%
	5305 P103 0-2" DUP	8/18/2017	29	
	5305 P104 0-2"	8/18/2017	84	60%
	5305 P104 0-2" DUP	8/18/2017	45	
	5305 P105 0-2"	8/18/2017	10	82%
	5305 P105 0-2" DUP	8/18/2017	24	
	5305 P106 0-2"	8/18/2017	89	47%
	5305 P106 0-2" DUP	8/18/2017	55	
	5305 P107 0-2"	8/18/2017	59	7%
	5305 P107 0-2" DUP	8/18/2017	63	
	5305 P104 RE-EX A 0-2"	9/12/2017	<0.2	
	5305 P104 RE-EX A DUP 0-2"	9/12/2017	11	
	5305 P104 RE-EX B 0-2"	9/12/2017	<0.21	
	5305 P104 RE-EX B DUP 0-2"	9/12/2017	<0.19	
	5305 P106 RE-EX A 0-2"	9/12/2017	0.45	
	5305 P106 RE-EX A DUP 0-2"	9/12/2017	<0.2	
	5305 P106 RE-EX B 0-2"	9/12/2017	10	52%
	5305 P106 RE-EX B DUP 0-2"	9/12/2017	17	
5339 (Figure 25)	5339 E A Re-Ex 0-2"	10/4/2017	2.2	20%
	5339 E A 0-2" Dup	10/5/2017	2.7	
5342 (Figure 28)	5342 P100 0-2"	8/13/2017	20	11%
	5342 P100 0-2" Dup	8/13/2017	18	
5378 (Figure 29)	5378 P100 0-2"	9/17/2017	1	
	5378 P100 DUP 0-2"	9/17/2017	<0.19	
Anchors (Figure 33)	Anchor - 170	10/2/2017	19	
	Anchor - Kahana	10/2/2017	15	
	Anchor-1126 0-2"	10/5/2017	83	
	Anchor-3502 0-2"	10/4/2017	6.4	
	Anchor-3514 0-2"	10/4/2017	<0.18	

Table 5
Summary Confirmation Soil Sampling Analytical Results - 2017
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Structure	Sample ID	Date	Lead (mg/kg)	Relative Percent Difference (%)
Boat House 1 (Figure 30)	BH 1 P100 0-2"	9/1/2017	94	16%
	BH 1 P100 0-2" Dup	9/1/2017	110	
	BH 1 P101 0-2"	9/1/2017	56	31%
	BH 1 P101 0-2" Dup	9/1/2017	41	
	BH 1 P102 0-2"	9/1/2017	<0.19	
	BH 1 P102 0-2" Dup	9/1/2017	<0.19	
Boat House 2 (Figure 30)	BH 2 P100 0-2"	9/1/2017	<0.19	
	BH 2 P100 0-2" Dup	9/1/2017	<0.2	
Bollards (Figure 31)	Bollard P100 0-2"	8/23/2017	96	23%
	Bollard P100 0-2" DUP	8/23/2017	76	
	BOLLARD P100 RE-EX 0-2"	9/17/2017	15	69%
	BOLLARD P100 RE-EX DUP 0-2	9/17/2017	7.3	
	Bollard P101 0-2"	8/23/2017	16	61%
	Bollard P101 0-2" DUP	8/23/2017	30	
	Bollard P102 0-2"	8/23/2017	22	5%
	Bollard P102 0-2" DUP	8/23/2017	21	
Fire Hydrants (Figures 31, 33)	FH 1 0-2"	10/3/2017	9.9	
	FH 2 0-2"	10/3/2017	2.7	
	FH 3 0-2"	10/3/2017	19	
	FH 4 0-2"	10/3/2017	36	
	FH 5 0-2"	10/3/2017	9	
	FH 6 0-2"	10/3/2017	14	
	FH 7 0-2"	9/26/2017	6.4	
	FH 8 0-2"	10/3/2017	16	
	FH 9 0-2"	10/3/2017	0.85	
	FH 10 0-2"	10/3/2017	4.3	
	FH 11 0-2"	9/4/2017	23	4%
	FH 11 0-2" Dup	9/4/2017	24	
	FH 16 0-2"	9/28/2017	40	
	FH 17 0-2"	9/23/2017	7	
	FH 18 0-2"	9/23/2017	9.9	
	FH 19 0-2"	9/29/2017	720	
	FH 20 0-2"	9/28/2017	9.9	
	FH 21 0-2"	9/27/2017	24	
	FH 22 0-2"	9/26/2017	1.4	
	FH 23 0-2"	9/26/2017	5.2	
	FH 24 0-2"	9/26/2017	13	
	FH 25 0-2"	9/26/2017	17	
	FH 26 0-2"	9/26/2017	51	
	FH 27 0-2"	9/23/2017	6.9	
	FH 28 0-2"	9/23/2017	14	
	FH 29 0-2"	9/26/2017	12	

Table 5
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Structure	Sample ID	Date	Lead (mg/kg)	Relative Percent Difference (%)
Fire Hydrants (Figures 31, 33)	FH 30 0-2"	9/26/2017	18	
	FH 31 0-2"	9/26/2017	4.4	
	FH 32 0-2"	9/26/2017	4.2	
	FH 33 0-2"	9/26/2017	7.4	
	FH 34 0-2"	9/29/2017	21	
	FH 35 0-2"	10/4/2017	5.9	
	FH 36 0-2"	10/4/2017	10	
	FH 37 0-2"	9/26/2017	59	
	FH 38 0-2"	10/2/2017	16	
	FH 40 0-2"	9/27/2017	11	
	FH 42 0-2"	9/27/2017	6.1	
	FH 43 0-2"	10/2/2017	1.2	
	FH 44 0-2"	9/29/2017	5	
	FH 45 0-2"	9/28/2017	12	
	FH 46 0-2"	10/3/2017	18	
	FH 47 0-2"	10/4/2017	6.4	
	FH 48 0-2"	10/3/2017	6.6	
	FH 49 0-2"	9/26/2017	210	
	FH 50 0-2"	10/3/2017	85	
	FH 51 0-2"	9/11/2017	12	9%
	FH 51 DUP 0-2"	9/11/2017	11	
	FH 52 0-2"	9/11/2017	20	108%
	FH 52 DUP 0-2"	9/11/2017	6	
	FH 53 0-2"	8/23/2017	13	39%
	FH 53 0-2" DUP	8/23/2017	8.8	
	FH 54 0-2"	8/23/2017	76	8%
	FH 54 0-2" DUP	8/23/2017	82	
	FH 54 0-2"	9/11/2017	24	25%
	FH 54 DUP 0-2"	9/11/2017	31	
	FH 54A 0-2"	8/23/2017	19	31%
	FH 54A 0-2" DUP	8/23/2017	26	
	FH 55 0-2"	8/26/2017	68	63%
	FH 55 0-2" Dup	8/26/2017	130	
	FH 56 0-2"	8/30/2017	14	38%
	FH 56 0-2" Dup	8/30/2017	9.5	
	FH 57 0-2"	8/26/2017	2.1	33%
	FH 57 0-2" Dup	8/26/2017	1.5	
	FH 58 0-2"	9/11/2017	11	0%
	FH 58 DUP 0-2"	9/11/2017	11	
	FH 59 0-2"	9/27/2017	8.2	
	FH 60 0-2"	10/11/2017	8.4	
	FH 61 0-2"	9/29/2017	37	

Table 5
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Structure	Sample ID	Date	Lead (mg/kg)	Relative Percent Difference (%)
Fire Hydrants (Figures 31, 33)	FH 62 0-2"	9/27/2017	0.53	
	FH 63 0-2"	9/29/2017	15	
	FH 64 0-2"	9/11/2017	1.4	15%
	FH 64 DUP 0-2"	9/11/2017	1.2	
	FH 65 0-2"	8/30/2017	11	31%
	FH 65 0-2" Dup	8/30/2017	15	
	FH 66 0-2"	8/26/2017	23	24%
	FH 66 0-2" Dup	8/26/2017	18	
	FH 67 0-2"	8/30/2017	51	22%
	FH 67 0-2" Dup	8/30/2017	41	
	FH 68 0-2"	8/30/2017	19	17%
	FH 68 0-2" Dup	8/30/2017	16	
	FH 69 0-2"	9/27/2017	35	
	FH 70 0-2"	9/27/2017	8.1	
	FH 71 0-2"	9/27/2017	0.57	
	FH 72 0-2"	9/27/2017	3.3	
	FH 73 0-2"	9/11/2017	3.7	11%
	FH 73 DUP 0-2"	9/11/2017	3.3	
	FH 74 0-2"	8/29/2017	13	26%
	FH 74 0-2" Dup	8/29/2017	10	
	FH 75 0-2"	8/29/2017	57	21%
	FH 75 0-2" Dup	8/29/2017	46	
	FH 76 0-2"	10/2/2017	11	
	FH 77 0-2"	8/29/2017	98	96%
	FH 77 0-2" Dup	8/29/2017	280	
Pedestals/Monuments (Figure 33)	1-08 P100 0-2"	9/4/2017	150	22%
	1-08 P100 0-2" Dup	9/4/2017	120	
	2-08 P100 0-2"	9/4/2017	130	55%
	2-08 P100 0-2" Dup	9/4/2017	74	
	3-10 P100 0-2"	9/4/2017	150	55%
	3-10 P100 0-2" Dup	9/4/2017	85	
	4-10 P100 0-2"	9/4/2017	54	10%
	4-10 P100 0-2" Dup	9/4/2017	49	
	5-11 P100 0-2"	9/4/2017	27	43%
	5-11 P100 0-2" Dup	9/4/2017	42	
	6-51 P100 0-2"	9/11/2017	16	12%
	6-51 P100 DUP 0-2"	9/11/2017	18	
	7-32 P100 0-2"	9/11/2017	53	9%
	7-32 P100 DUP 0-2"	9/11/2017	58	
	8-20 P100 0-2"	9/18/2017	14	56%
	8-20 P100 DUP 0-2"	9/18/2017	25	
	9-33 P100 0-2"	9/28/2017	60	
	10-23 P100 0-2"	9/28/2017	67	

Table 5
Summary Confirmation Soil Sampling Analytical Results - 2017
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Structure	Sample ID	Date	Lead (mg/kg)	Relative Percent Difference (%)
Pedestals/Monuments (Figure 33)	11-20 P100 0-2"	9/28/2017	6.1	
	12-28 P100 0-2"	9/28/2017	4.5	
	13-27 P100 0-2"	9/28/2017	1.8	
	14-08 P100 0-2"	9/28/2017	7.1	
	15-24 P100 0-2"	9/29/2017	4.9	
	16-25 P100 0-2"	9/29/2017	35	
	17-25 P100 0-2"	9/29/2017	5.3	
	18-13 P100 0-2"	9/29/2017	37	
	19-44 P100 0-2"	9/29/2017	12	
	20-44 P100 0-2"	9/29/2017	26	
	21-52 P100 0-2"	9/29/2017	12	
	22-49 P100 0-2"	10/2/2017	29	
	23-44 P100 0-2"	10/2/2017	28	
	24-42 P100 0-2"	10/2/2017	21	
	25-38 P100 0-2"	10/2/2017	290	
	26-07 P100 0-2"	10/3/2017	0.34	
	27-03 P100 0-2"	10/3/2017	32	
	28-30 P100 0-2"	10/4/2017	5.8	
	29-R1 P100 0-2"	10/5/2017	5.3	
	30-20 P100 0-2"	10/5/2017	34	
	31-15 P100 0-2"	10/5/2017	52	
Piping (Figure 32)	Pipe P100 0-2"	8/22/2017	17	45%
	Pipe P100 0-2" DUP	8/22/2017	27	
	Pipe P101 0-2"	8/22/2017	12	32%
	Pipe P101 0-2" DUP	8/22/2017	8.7	
	Pipe P102 0-2"	8/22/2017	2.7	25%
	Pipe P102 0-2" DUP	8/22/2017	2.1	
	Pipe P103 0-2"	8/22/2017	15	46%
	Pipe P103 0-2" DUP	8/22/2017	24	
	Pipe P104 0-2"	8/22/2017	64	75%
	Pipe P104 0-2" DUP	8/22/2017	29	
	Pipe P105 0-2"	8/22/2017	35	44%
	Pipe P105 0-2" DUP	8/22/2017	55	
	Pipe P106 0-2"	8/22/2017	210	10%
	Pipe P106 0-2" DUP	8/22/2017	190	
	PIPE P106 RE-EX A 0-2"	9/17/2017	2.6	48%
	PIPE P106 RE-EX A DUP 0-2"	9/17/2017	1.6	

Table 5
Summary Confirmation Soil Sampling Analytical Results - 2017
Midway Atoll NWR

Structure	Sample ID	Date	Lead (mg/kg)	Relative Percent Difference (%)
Piping (Figure 32)	PIPE P106 RE-EX B 0-2"	9/17/2017	4.1	79%
	PIPE P106 RE-EX B DUP 0-2"	9/17/2017	9.5	
	Pipe P107 0-2"	8/22/2017	200	22%
	Pipe P107 0-2" DUP	8/22/2017	160	
	PIPE P107 RE-EX A 0-2"	9/17/2017	12	15%
	PIPE P107 RE-EX A DUP 0-2"	9/17/2017	14	
	PIPE P107 RE-EX B 0-2"	9/17/2017	18	32%
	PIPE P107 RE-EX B DUP 0-2"	9/17/2017	13	
Water Treatment (Figure 9)	WTS P100 0-2"	9/18/2017	0.41	129%
	WTS P100 0-2"	9/18/2017	1.9	
	WTS P101 0-2"	9/18/2017	16	81%
	WTS P101 DUP 0-2"	9/18/2017	38	
	WTS P102 0-2"	9/18/2017	13	8%
	WTS P102 DUP 0-2"	9/18/2017	12	
	WTS P103 0-2"	9/18/2017	39	5%
	WTS P103 DUP 0-2"	9/18/2017	41	
	WTS P104 0-2"	9/18/2017	19	53%
	WTS P104 DUP 0-2"	9/18/2017	11	

Notes
1. Lead was analyzed by Environmental Protection Agency Method 6010B.
mg/kg = milligram per kilogram
Samples labeled as “DUP” are considered replicate samples. Please see Appendix I for a discussion.
Shading indicates result exceeds 75 mg/kg

Table 6
Multi-Extraction Procedure Analytical Results - 2017
Midway Atoll NWR

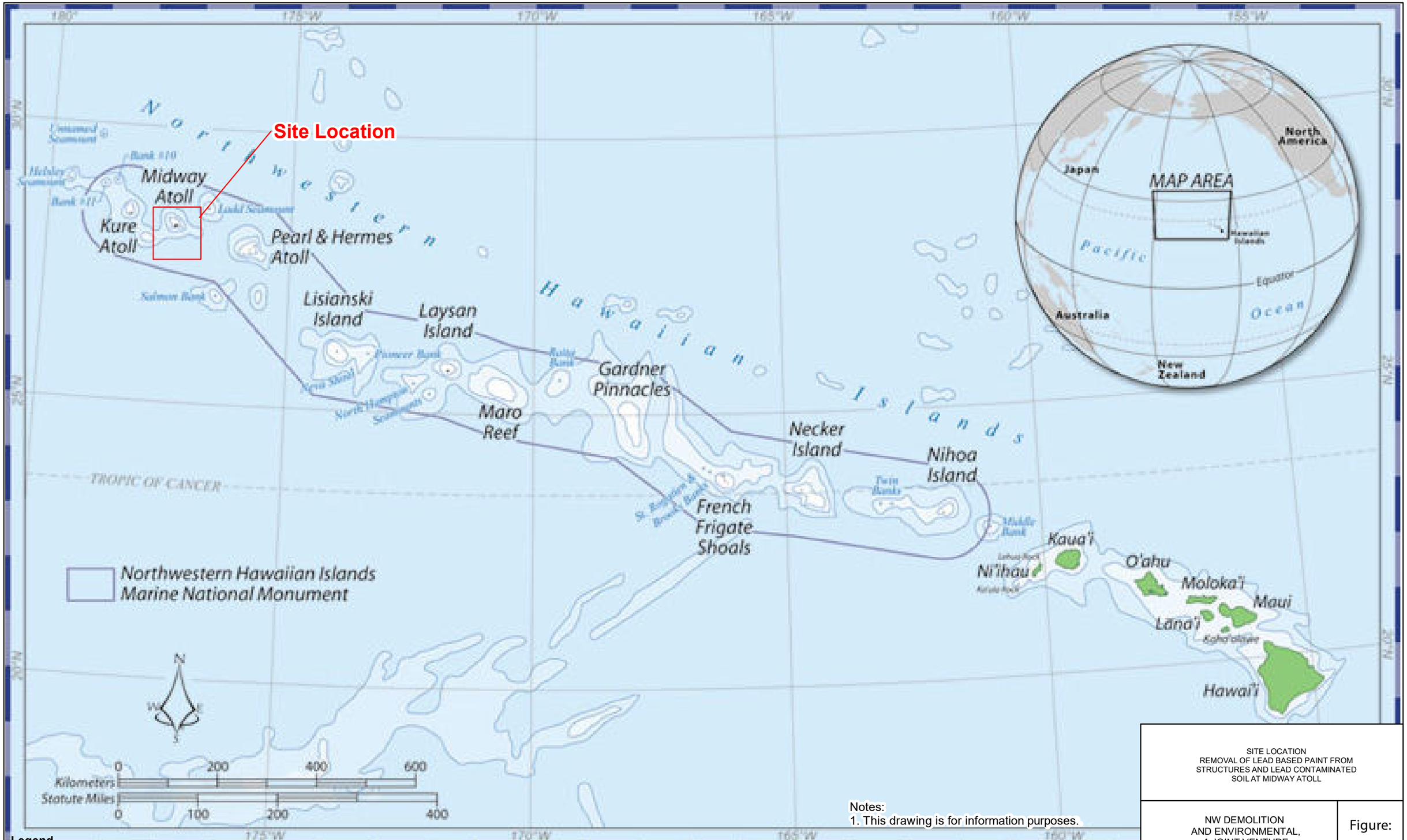
Sample Identification	Date	Lead Concentration (mg/l)
R2 Cell 1-2-3-4	10/11/2017	<0.014
		<0.014
		<0.014
		<0.014
		<0.014
		<0.014
		<0.014
		<0.014
		<0.014

Notes

1. Lead was analyzed by Environmental Protection Agency Method 6010C-Leachability

2. The Toxicity Characteristic Leaching Procedure (TCLP) threshhold for lead is 5 milligrams per liter (mg/l)

FIGURES



Notes:
1. This drawing is for information purposes.

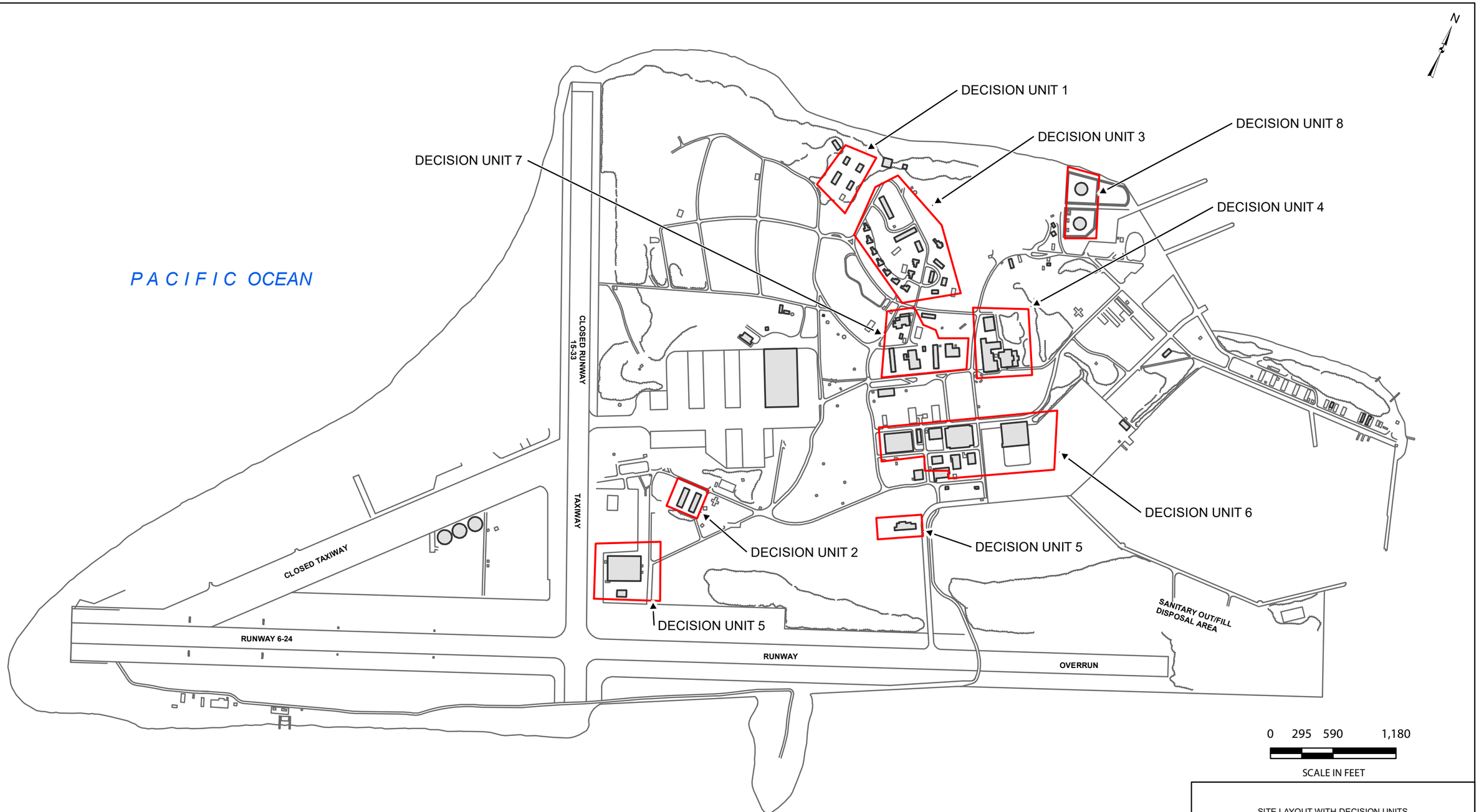
SITE LOCATION
REMOVAL OF LEAD BASED PAINT FROM STRUCTURES AND LEAD CONTAMINATED SOIL AT MIDWAY ATOLL

NW DEMOLITION AND ENVIRONMENTAL, A JOINT VENTURE

February 2018

Figure: 1

Path: P:\CAD_GIS\Projects\PNG0759_2017 Removal Action\GIS Files\Midway Atoll\Revisions 120517\Fig01.mxd



SITE LAYOUT WITH DECISION UNITS
REMOVAL OF LEAD BASED PAINT FROM
STRUCTURES AND LEAD CONTAMINATED
SOIL AT MIDWAY ATOLL

NW DEMOLITION
AND ENVIRONMENTAL,
A JOINT VENTURE

February 2018

Figure:
2

LEGEND

Decision Units
Structures

Notes:
1. The location of all features shown are approximate.
2. This drawing is for information purposes.
3. Decision Unit 9 covers all remaining structures.

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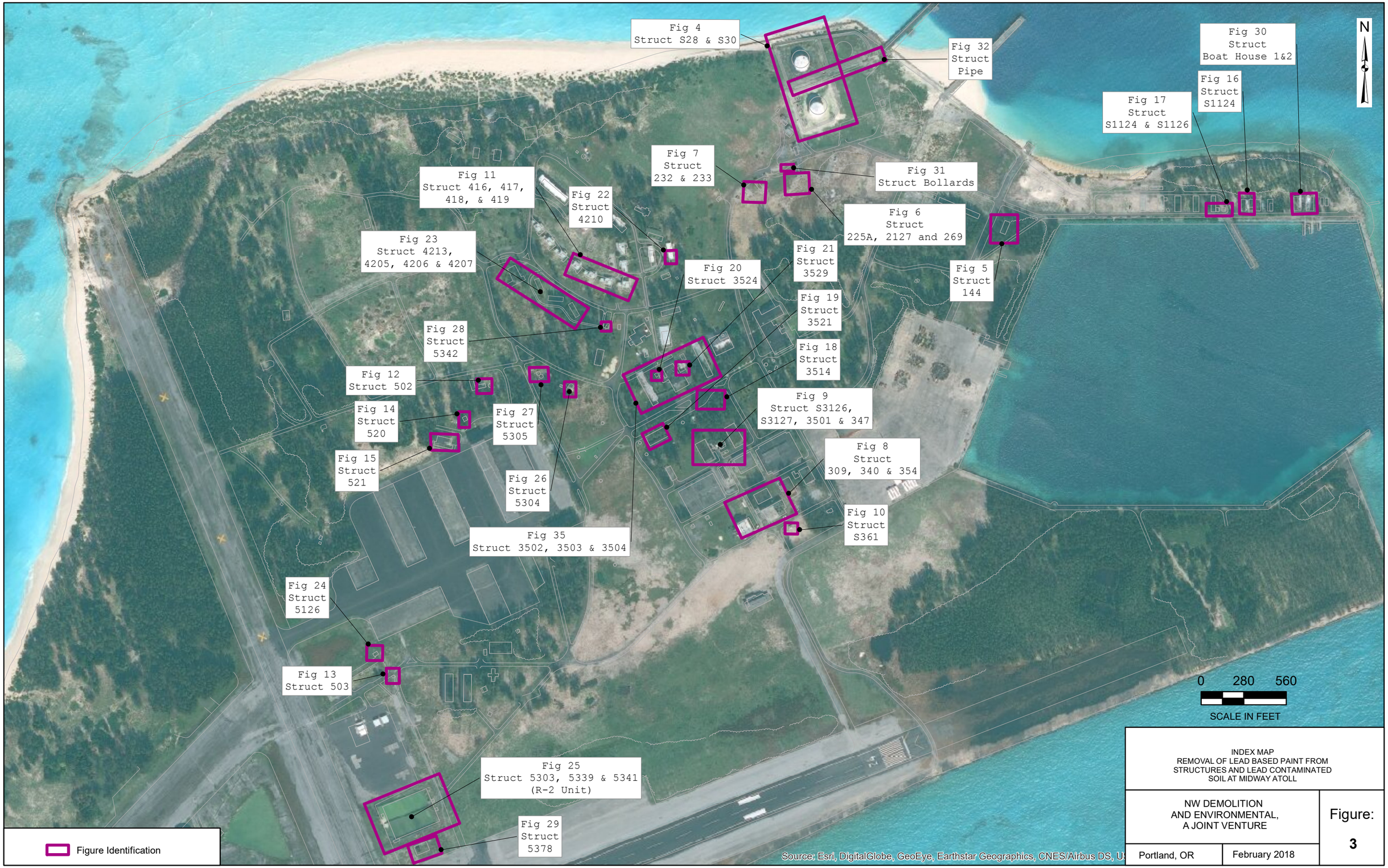
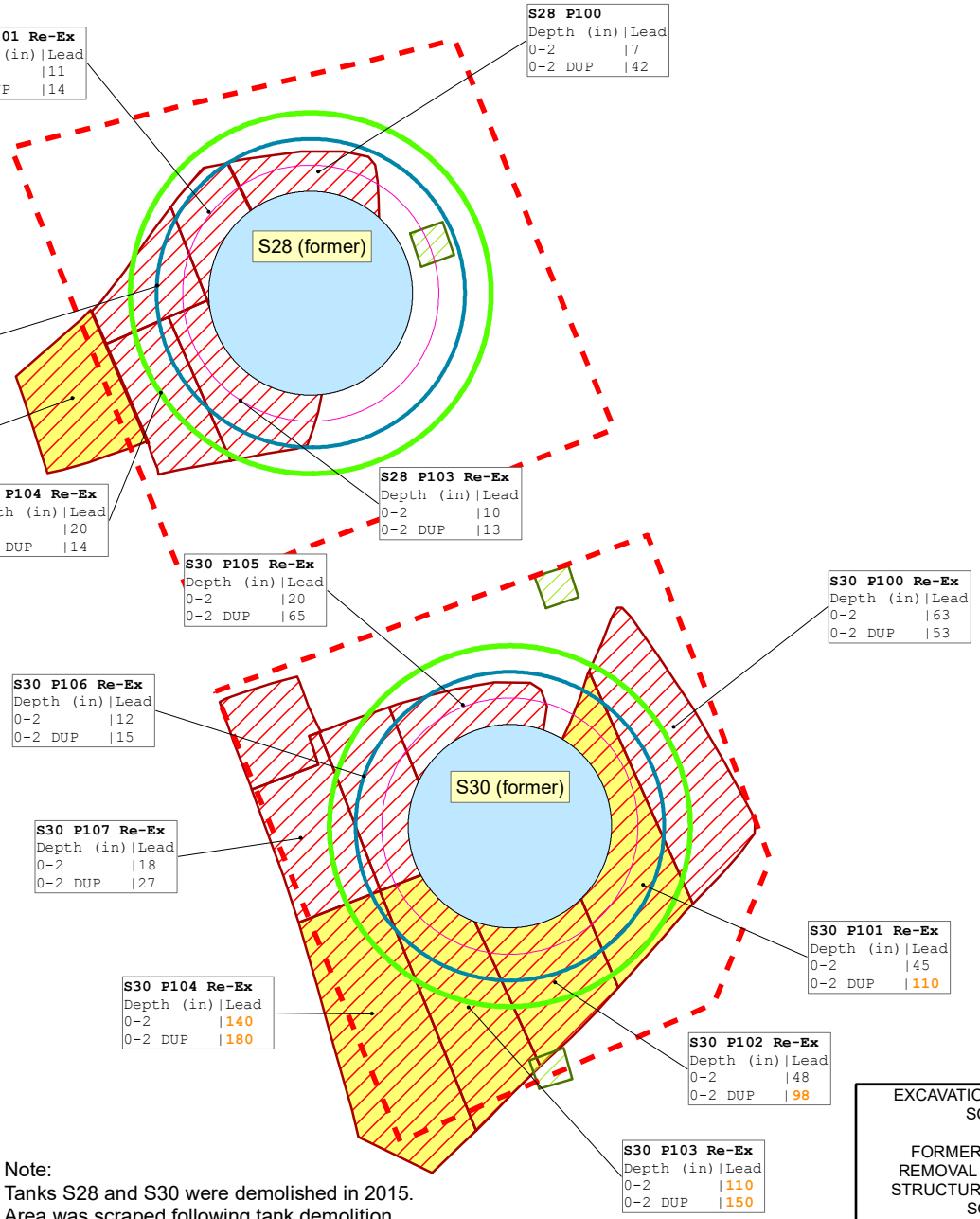


INDEX MAP
REMOVAL OF LEAD BASED PAINT FROM
STRUCTURES AND LEAD CONTAMINATED
SOIL AT MIDWAY ATOLL

NW DEMOLITION
AND ENVIRONMENTAL,
A JOINT VENTURE

Portland, OR | February 2018

Figure:
3



N

0 60 120

SCALE IN FEET

Legend

- 15' Buffer
- 30' Buffer
- 45' Buffer
- Former Structure
- HDPE Liner Extent
- 1' Excavation
- 6" Excavation (Scrape)
- Shade Cloth

Note:
Tanks S28 and S30 were demolished in 2015.
Area was scraped following tank demolition.
Scrape area was treated, placed in R-2 Unit, and clean sand placed.
Lead results reported in milligrams per kilogram.
Soil samples consisted of a 5-point composite sample from excavation area shown.
Samples labeled as "DUP" are considered replicate samples.
Please see Appendix I for a discussion.

EXCAVATION LIMITS AND CONFIRMATION SOIL SAMPLE RESULTS
DECISION UNIT 8
FORMER STRUCTURES S28 AND S30
REMOVAL OF LEAD BASED PAINT FROM STRUCTURES AND LEAD CONTAMINATED SOIL AT MIDWAY ATOLL

NW DEMOLITION AND ENVIRONMENTAL, A JOINT VENTURE

Portland, OR | February 2018

Figure 4

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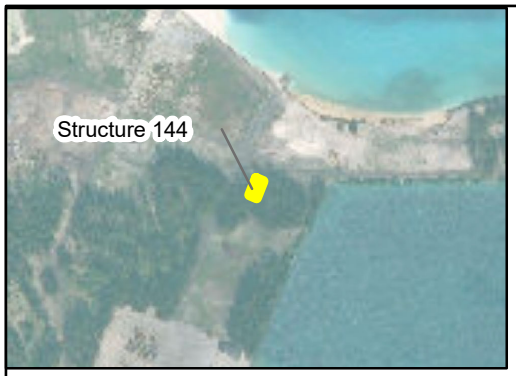

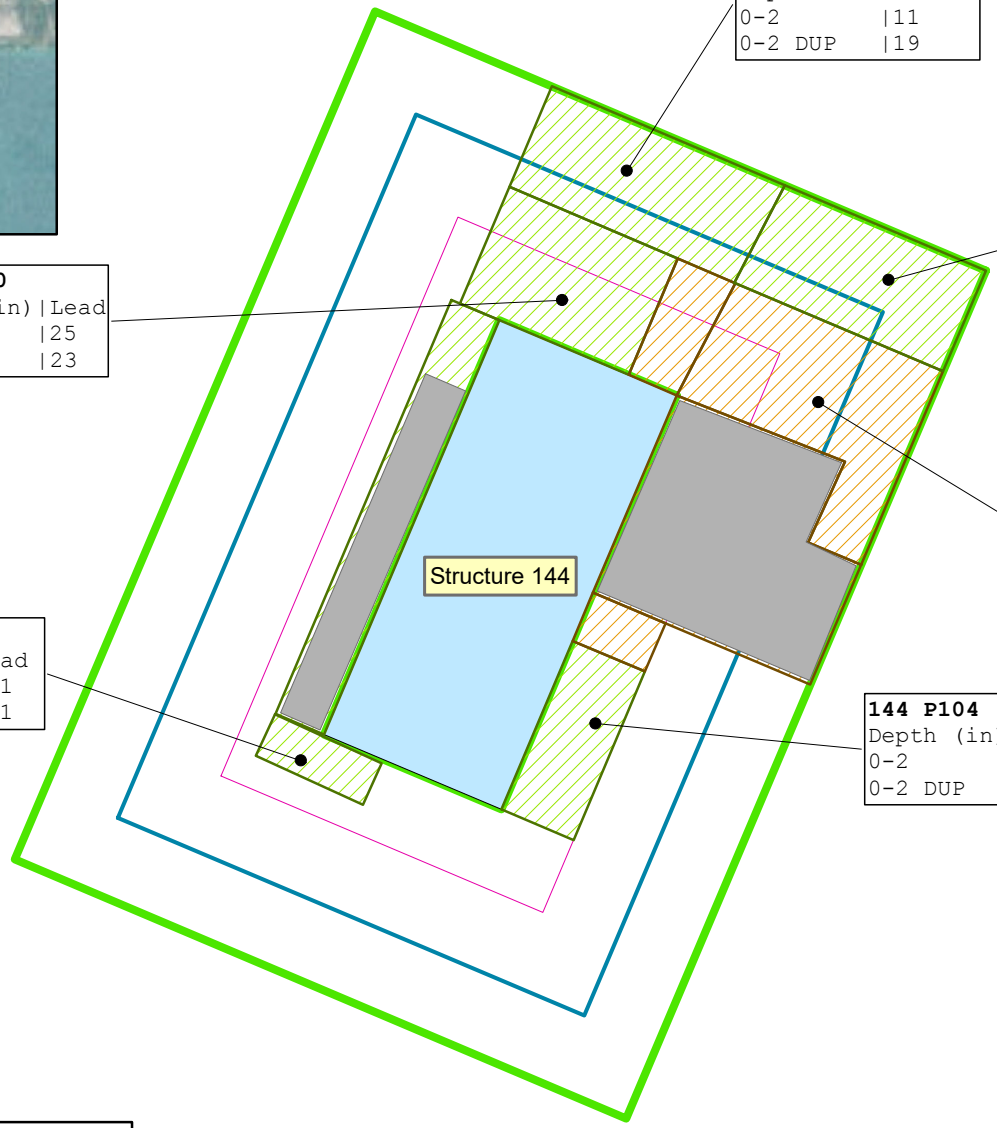

144 P101

Depth (in)	Lead
0-2	11
0-2 DUP	19

144 P102

Depth (in)	Lead
0-2	34
0-2 DUP	26

144 P100

Depth (in)	Lead
0-2	25
0-2 DUP	23

144 P103

Depth (in)	Lead
0-2	29
0-2 DUP	30

144 P105

Depth (in)	Lead
0-2	7.1
0-2 DUP	5.1

144 P104

Depth (in)	Lead
0-2	1.7
0-2 DUP	3.3

N

0 20 40

SCALE IN FEET

Legend

- 15' Buffer
- 30' Buffer
- 45' Buffer
- 1' Excavation
- 2' Excavation
- Concrete
- Existing Structure

Note:
Lead results reported in milligrams per kilogram.
Soil samples consisted of a 5-point composite sample from excavation area shown.
Samples labeled as "DUP" are considered replicate samples.
Please see Appendix I for a discussion.

EXCAVATION LIMITS AND CONFIRMATION
SOIL SAMPLE RESULTS
DECISION UNIT 9
STRUCTURE 144
REMOVAL OF LEAD BASED PAINT FROM
STRUCTURES AND LEAD
CONTAMINATED SOIL AT MIDWAY ATOLL

NW DEMOLITION
AND ENVIRONMENTAL,
A JOINT VENTURE

Portland, OR | February 2018

Figure
5

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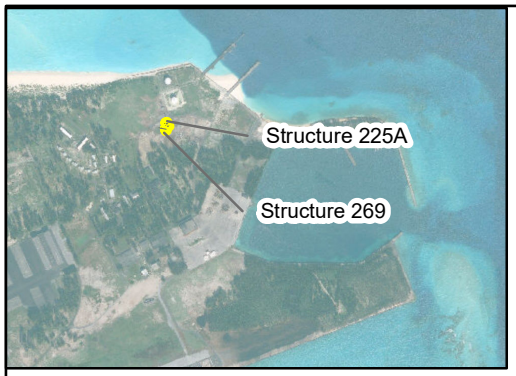

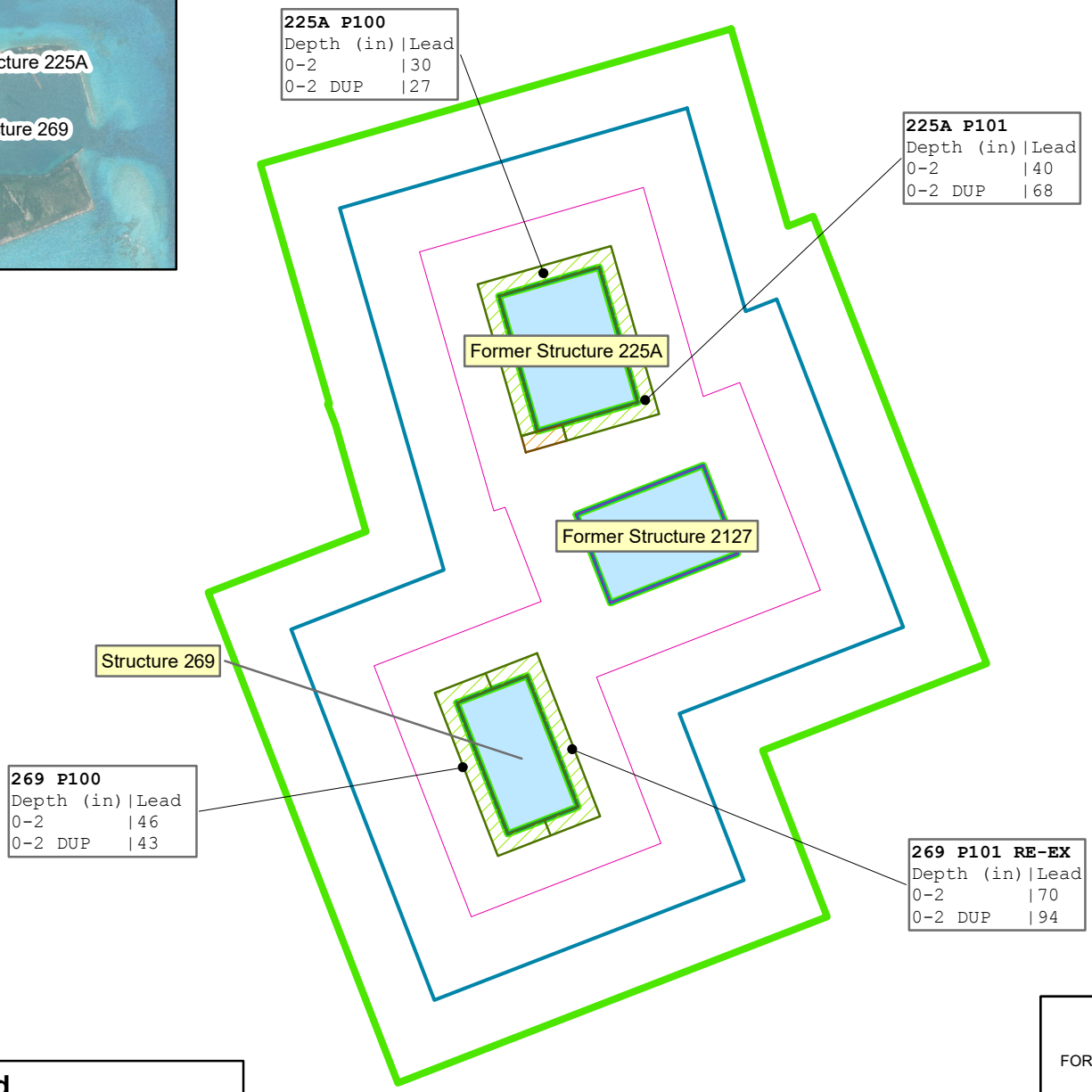

Legend

- 15' Buffer
- 30' Buffer
- 45' Buffer
- 1' Excavation
- 2' Excavation
- Existing and/or Former Structure

Note:
Lead results reported in milligrams per kilogram.
Soil samples consisted of a 5-point composite sample from excavation area shown.
Samples labeled as "DUP" are considered replicate samples.
Please see Appendix I for a discussion.

EXCAVATION LIMITS AND CONFIRMATION
SOIL SAMPLE RESULTS
DECISION UNIT 9
FORMER STRUCTURE 225A AND STRUCTURE 269
REMOVAL OF LEAD BASED
PAINT FROM STRUCTURES AND LEAD
CONTAMINATED SOIL AT MIDWAY ATOLL

NW DEMOLITION
AND ENVIRONMENTAL,
A JOINT VENTURE

Portland, OR | February 2018

Figure
6

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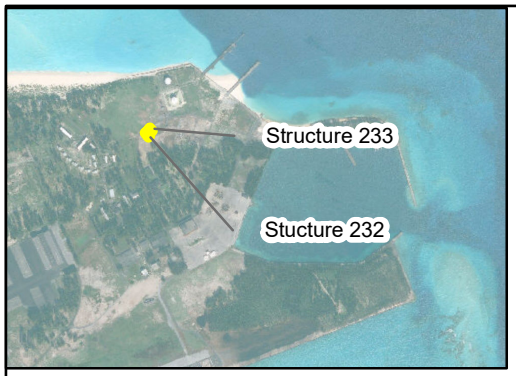

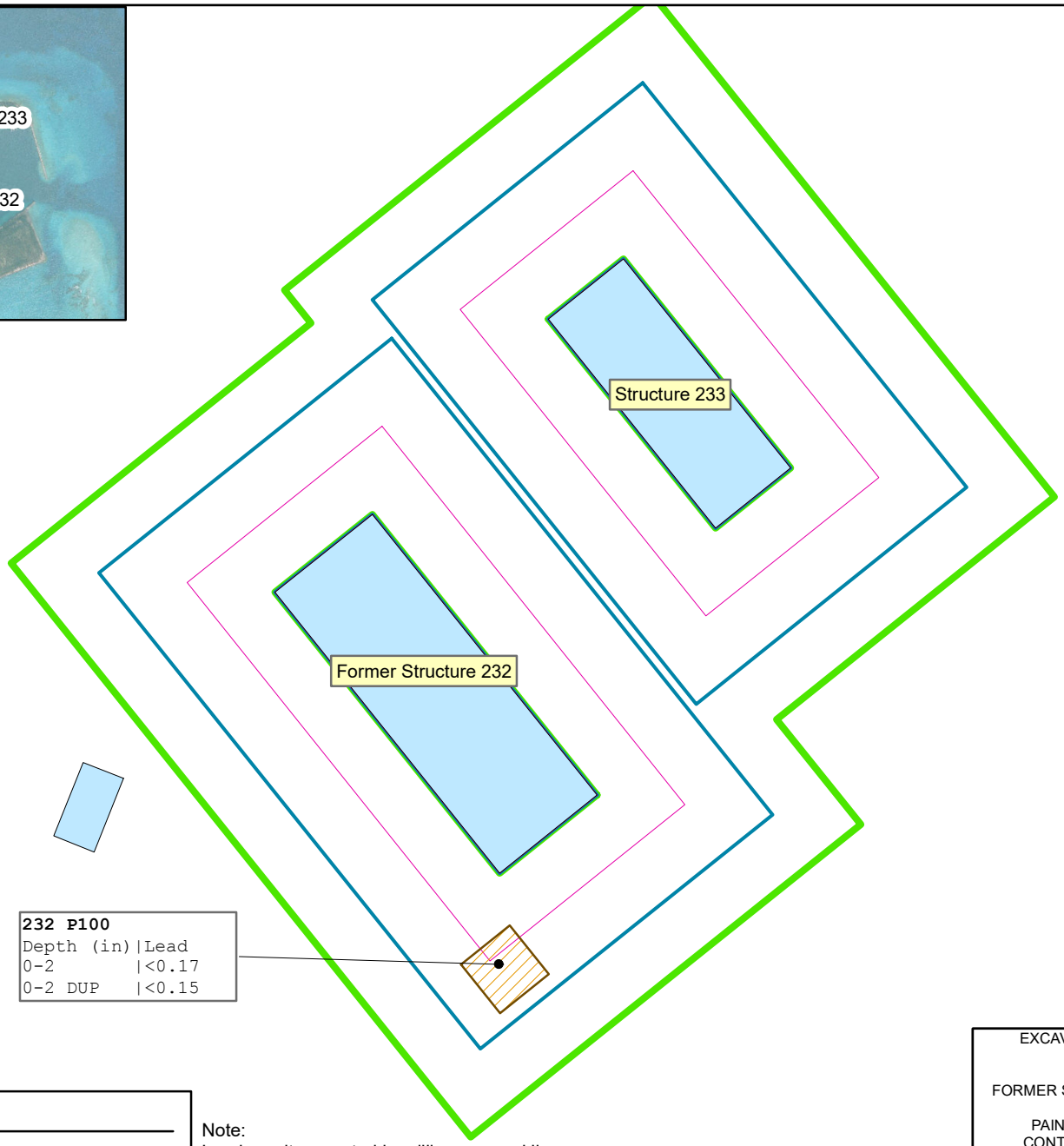

N

0 20 40

SCALE IN FEET

Legend

- 15' Buffer
- 30' Buffer
- 45' Buffer
- Existing and/or Former Structure
- 2' Excavation

Note:
Lead results reported in milligrams per kilogram.
Soil samples consisted of a 5-point composite sample from excavation area shown.
"<" indicates lead was not detected at or above the method detection limit.
Samples labeled as "DUP" are considered replicate samples.
Please see Appendix I for a discussion.

EXCAVATION LIMITS AND CONFIRMATION SOIL SAMPLE RESULTS
DECISION UNIT 9
FORMER STRUCTURE 232 AND STRUCTURE 233
REMOVAL OF LEAD BASED PAINT FROM STRUCTURES AND LEAD CONTAMINATED SOIL AT MIDWAY ATOLL

NW DEMOLITION AND ENVIRONMENTAL, A JOINT VENTURE

Portland, OR | February 2018

Figure 7

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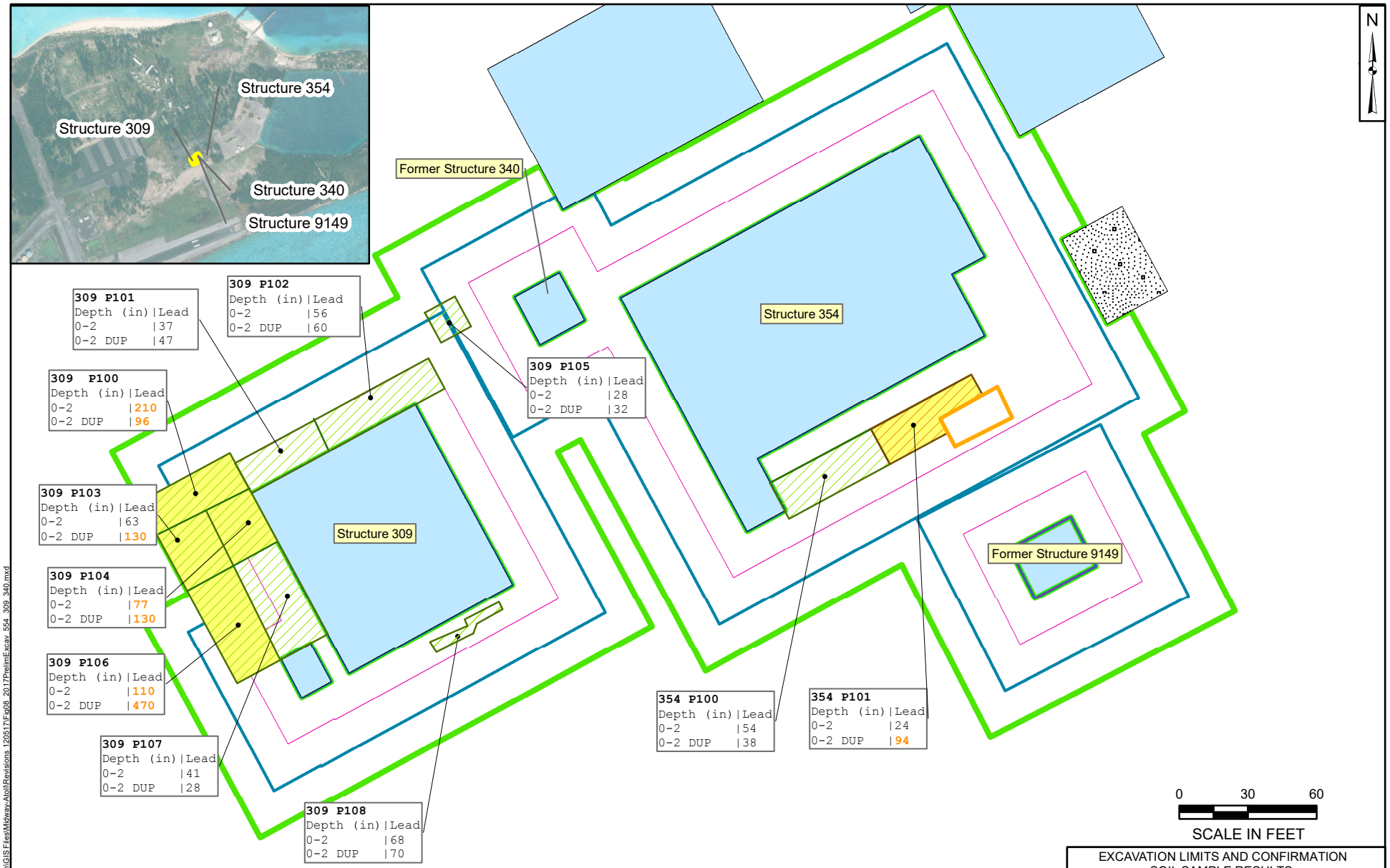

Legend

- 15' Buffer
- 30' Buffer
- 45' Buffer
- 1' Excavation
- 2' Excavation
- Existing and/or Former Structure
- Concrete Pad
- AST
- Shade Cloth

Note:
Lead results reported in milligrams per kilogram.
Soil samples consisted of a 5-point composite sample from excavation area shown.
Shade cloth placed at bottom of excavation and backfilled in plots 354 P101, 309 P100, 309 P103, 309 P104, and 309 P106.
Samples labeled as "DUP" are considered replicate samples.
Please see Appendix I for a discussion.

EXCAVATION LIMITS AND CONFIRMATION SOIL SAMPLE RESULTS
DECISION UNIT 9
STRUCTURES 309, 340, AND 354
REMOVAL OF LEAD BASED PAINT FROM STRUCTURES AND LEAD CONTAMINATED SOIL AT MIDWAY ATOLL

NW DEMOLITION AND ENVIRONMENTAL, A JOINT VENTURE

Portland, OR | February 2018

Figure 8

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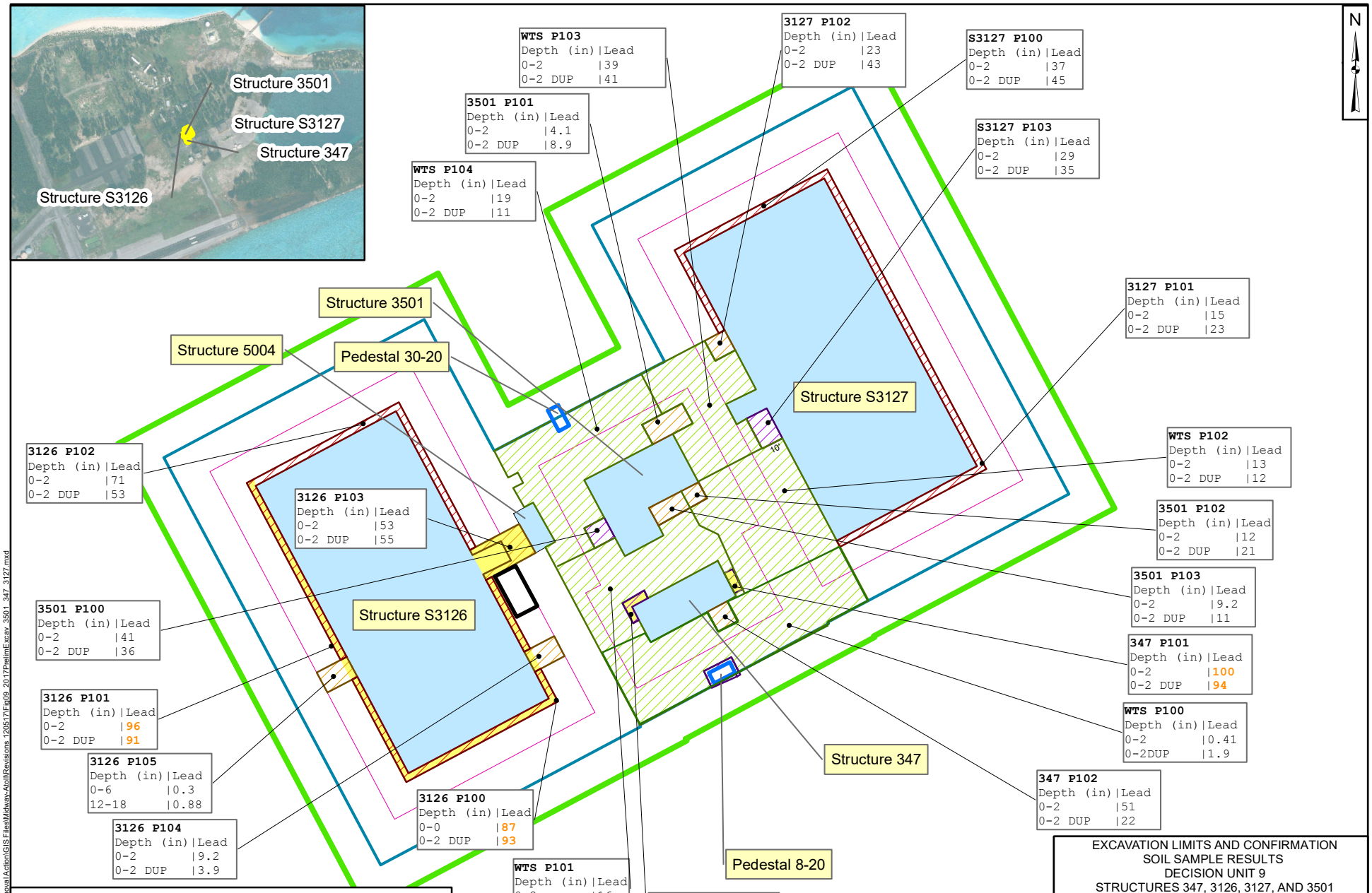

Legend

- 15' Buffer
- 30' Buffer
- 45' Buffer
- 6" Excavation
- 1' Excavation
- 2' Excavation
- 3' Excavation
- Conex
- Pedestal
- Shade Cloth
- Existing and/or Former Structure

Note:
Lead results reported in milligrams per kilogram.
Soil samples consisted of a 5-point composite sample from excavation area shown.
Samples labeled as "DUP" are considered replicate samples.
Please see Appendix I for a discussion.

0 30 60
SCALE IN FEET

EXCAVATION LIMITS AND CONFIRMATION SOIL SAMPLE RESULTS
DECISION UNIT 9
STRUCTURES 347, 3126, 3127, AND 3501
REMOVAL OF LEAD BASED PAINT FROM STRUCTURES AND LEAD CONTAMINATED SOIL AT MIDWAY ATOLL

NW DEMOLITION AND ENVIRONMENTAL, A JOINT VENTURE

Portland, OR | February 2018

Figure 9

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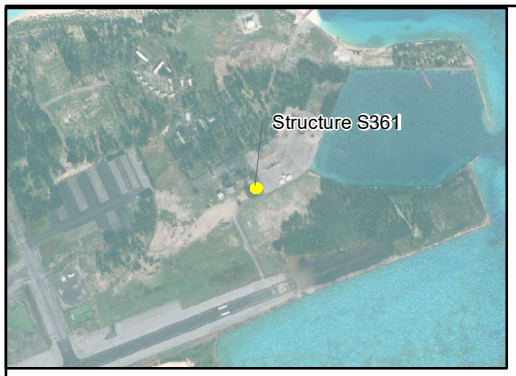
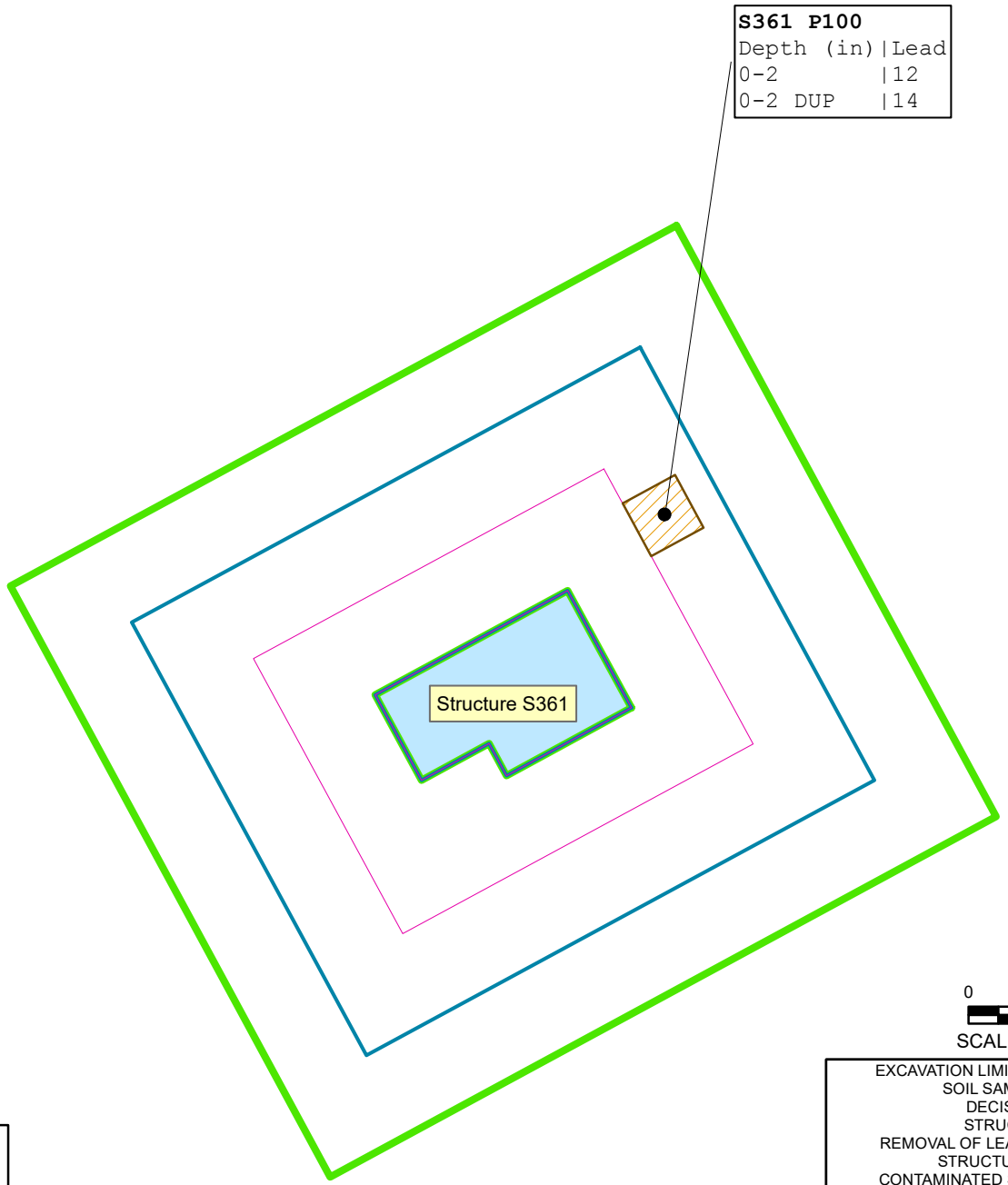




Legend

- 15' Buffer
- 30' Buffer
- 45' Buffer
- 2' Excavation
- Existing Structure

Note:
Lead results reported in milligrams per kilogram.
Soil samples consisted of a 5-point composite sample from excavation area shown.
Samples labeled as "DUP" are considered replicate samples.
Please see Appendix I for a discussion.

EXCAVATION LIMITS AND CONFIRMATION SOIL SAMPLE RESULTS
DECISION UNIT 9
STRUCTURE S361
REMOVAL OF LEAD BASED PAINT FROM STRUCTURES AND LEAD CONTAMINATED SOIL AT MIDWAY ATOLL

NW DEMOLITION AND ENVIRONMENTAL, A JOINT VENTURE

Portland, OR | February 2018

Figure 10

Path: P:\CAD_GIS\Projects\PNG0759_2017 Removal Action\GIS Files\Midway-Atoll\Revisions 120517\Fig10_2017PrelimExcav_S361.mxd

Legend

- 15' Buffer
- 30' Buffer
- 45' Buffer
- Existing Structure
- 2' Excavation
- 3' Excavation
- Concrete

Note:
Lead results reported in milligrams per kilogram.
Soil samples consisted of a 5-point composite sample from excavation area shown.
Clean sand was removed then an additional 0.5' was excavated.
"<" indicates lead was not detected at or above the method detection limit.
Samples labeled as "DUP" are considered replicate samples.
Please see Appendix I for a discussion.

0 20 40
SCALE IN FEET

EXCAVATION LIMITS AND CONFIRMATION SOIL SAMPLE RESULTS
DECISION UNIT 9
STRUCTURES 416, 417, 418, AND 419
REMOVAL OF LEAD BASED PAINT FROM STRUCTURES AND LEAD CONTAMINATED SOIL AT MIDWAY ATOLL

NW DEMOLITION AND ENVIRONMENTAL, A JOINT VENTURE

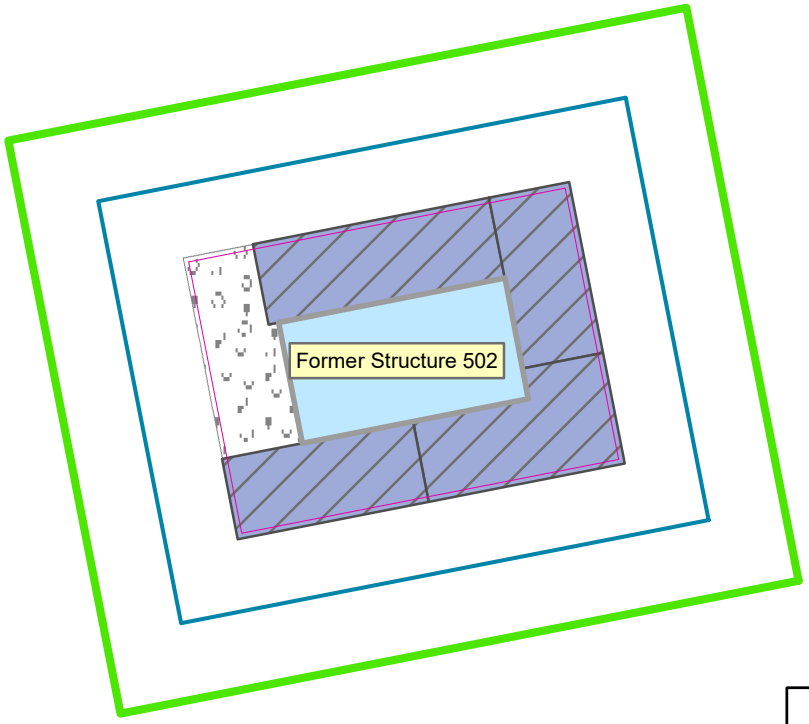
Portland, OR | February 2018

Figure 11

Path: P:\CAD_GIS\Projects\PNG0759_2017 Removal Action\GIS Files\Midway-Atoll\Revisions 120517\Fig11_2017PrelimExcav_417_418_419.mxd

N

502 P100	
Depth (in)	Lead
0-2	12
0-2 DUP	15



0 20 40

SCALE IN FEET

Legend

- 15' Buffer
- 30' Buffer
- 45' Buffer
- 1' Excavation (2017)
- 1' Excavation (2016)
- Former Structure
- Concrete Slab
- Concrete Footings Removed

Note:
2017 excavation conducted in area outside of 45-foot buffer that was not excavated in 2016.
Lead results reported in milligrams per kilogram.
Soil samples consisted of a 5-point composite sample from excavation area shown.
Break out concrete footings for Structure 502 and non-painted concrete to be crushed.
Backfill areas with clean coral sand.
Samples labeled as “DUP” are considered replicate samples.
Please see Appendix I for a discussion.

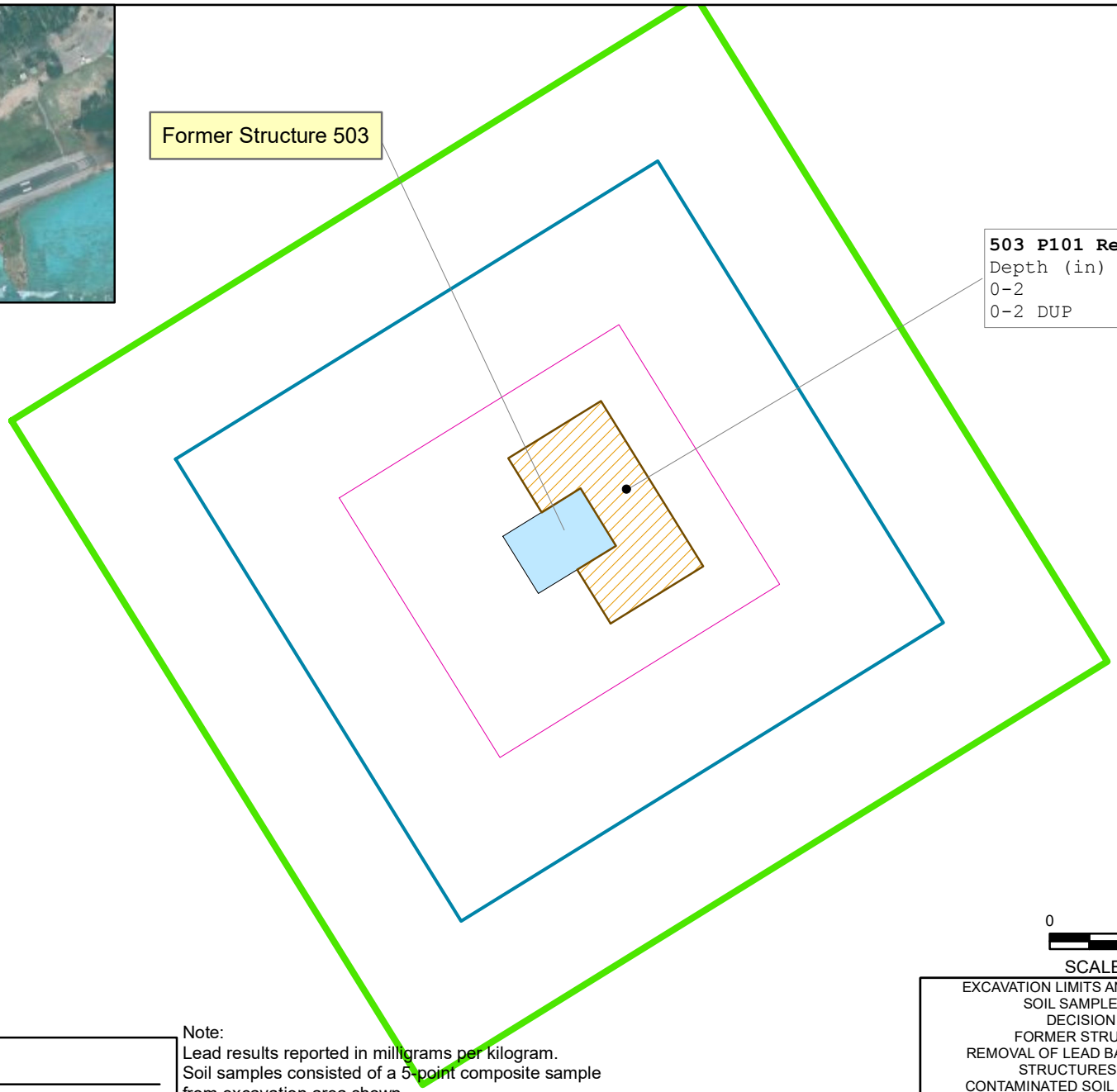
EXCAVATION LIMITS AND CONFIRMATION SOIL SAMPLE RESULTS
DECISION UNIT 9
FORMER STRUCTURE 502
REMOVAL OF LEAD BASED PAINT FROM STRUCTURES AND LEAD CONTAMINATED SOIL AT MIDWAY ATOLL

NW DEMOLITION AND ENVIRONMENTAL, A JOINT VENTURE

Portland, OR | February 2018

Figure 12

Path: P:\CAD_GIS\Projects\PNG0759_2017 Removal Action\GIS Files\Midway Atoll\Revisions 120517\Fig12_2017PrelimExcav_502.mxd



Legend

- 15' Buffer
- 30' Buffer
- 45' Buffer
- 2' Excavation
- Former Structure

Note:
Lead results reported in milligrams per kilogram.
Soil samples consisted of a 5-point composite sample from excavation area shown.
Soil excavated in 2016, plot confirmation sampling then indicated one plot failed (P101).
2017-Reexcavated the 503 P101 an additional 0.5', follow up confirmation passes as indicated above at 9.9 & 23 mg/kg.
Samples labeled as "DUP" are considered replicate samples.
Please see Appendix I for a discussion.

EXCAVATION LIMITS AND CONFIRMATION
SOIL SAMPLE RESULTS
DECISION UNIT 9
FORMER STRUCTURE 503
REMOVAL OF LEAD BASED PAINT FROM STRUCTURES AND LEAD CONTAMINATED SOIL AT MIDWAY ATOLL

NW DEMOLITION AND ENVIRONMENTAL, A JOINT VENTURE

Portland, OR | February 2018

Figure 13

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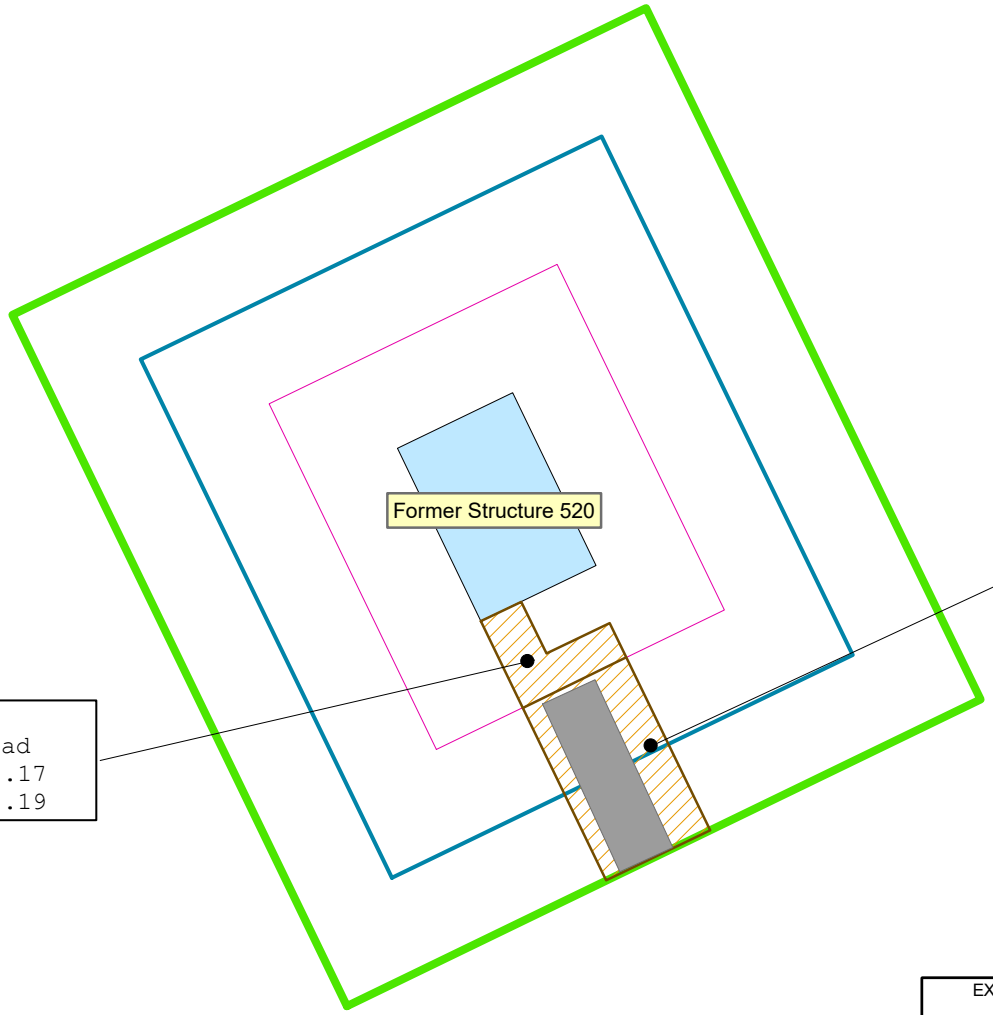

520 P101

Depth (in)	Lead
0-2	39
0-2 DUP	32

520 P100

Depth (in)	Lead
0-2	<0.17
0-2 DUP	<0.19

N

0 10 20 30

SCALE IN FEET

Legend

- 15' Buffer
- 30' Buffer
- 45' Buffer
- Former Structure
- Asphalt
- 2' Excavation

Note:
Lead results reported in milligrams per kilogram.
Soil samples consisted of a 5-point composite sample from excavation area shown.
Remove top clean sand from 2016 backfill.
Excavate an additional 0.5' to 2.5' bgs.
"<" indicates lead was not detected at or above the method detection limit.
Samples labeled as "DUP" are considered replicate samples.
Please see Appendix I for a discussion.

EXCAVATION LIMITS AND CONFIRMATION
SOIL SAMPLE RESULTS
DECISION UNIT 9
FORMER STRUCTURE 520
REMOVAL OF LEAD BASED PAINT FROM STRUCTURES AND LEAD CONTAMINATED SOIL AT MIDWAY ATOLL

NW DEMOLITION AND ENVIRONMENTAL, A JOINT VENTURE

Portland, OR | February 2018

Figure 14

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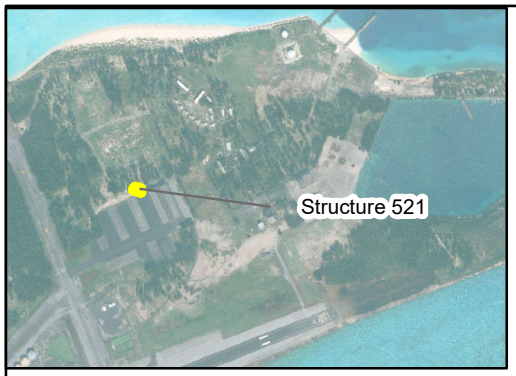
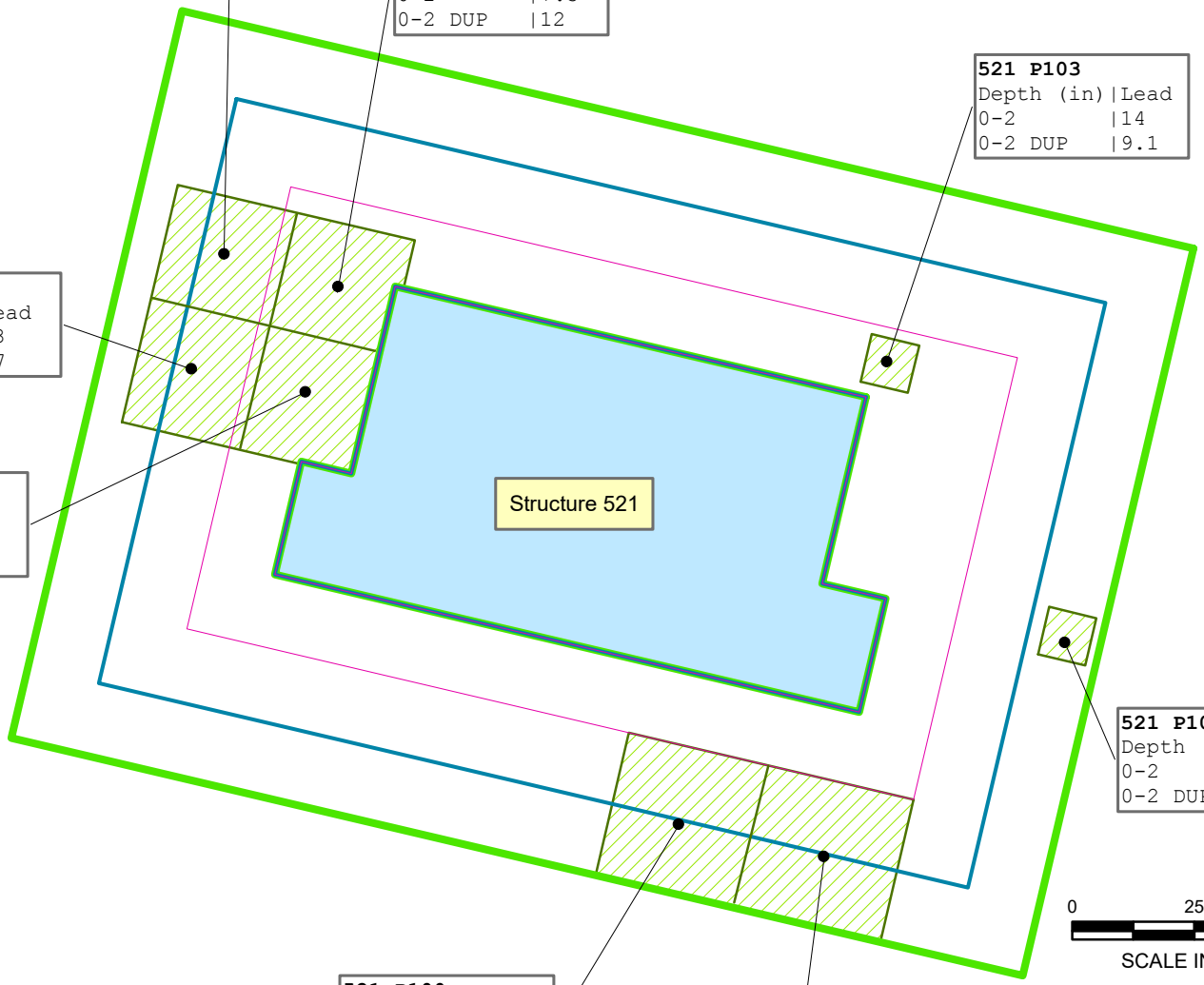




521 P104

Depth (in)	Lead
0-2	7.8
0-2 DUP	4.4

521 P105

Depth (in)	Lead
0-2	7.3
0-2 DUP	12

521 P103

Depth (in)	Lead
0-2	14
0-2 DUP	9.1

521 P106

Depth (in)	Lead
0-2	23
0-2 DUP	27

521 P107

Depth (in)	Lead
0-2	68
0-2 DUP	58

521 P102

Depth (in)	Lead
0-2	2.2
0-2 DUP	1.9

521 P100

Depth (in)	Lead
0-2	1.9
0-2 DUP	2.3

521 P101

Depth (in)	Lead
0-2	4.2
0-2 DUP	8

N

0 25 50

SCALE IN FEET

Legend

- 15' Buffer
- 30' Buffer
- 45' Buffer
- 1' Excavation
- Existing Structure

Note:
Lead results reported in milligrams per kilogram.
Soil samples consisted of a 5-point composite sample from excavation area shown.
Samples labeled as "DUP" are considered replicate samples.
Please see Appendix I for a discussion.

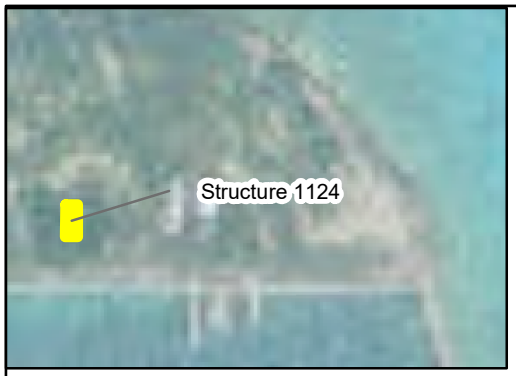
EXCAVATION LIMITS AND CONFIRMATION SOIL SAMPLE RESULTS
DECISION UNIT 9
STRUCTURE 521
REMOVAL OF LEAD BASED PAINT FROM STRUCTURES AND LEAD CONTAMINATED SOIL AT MIDWAY ATOLL

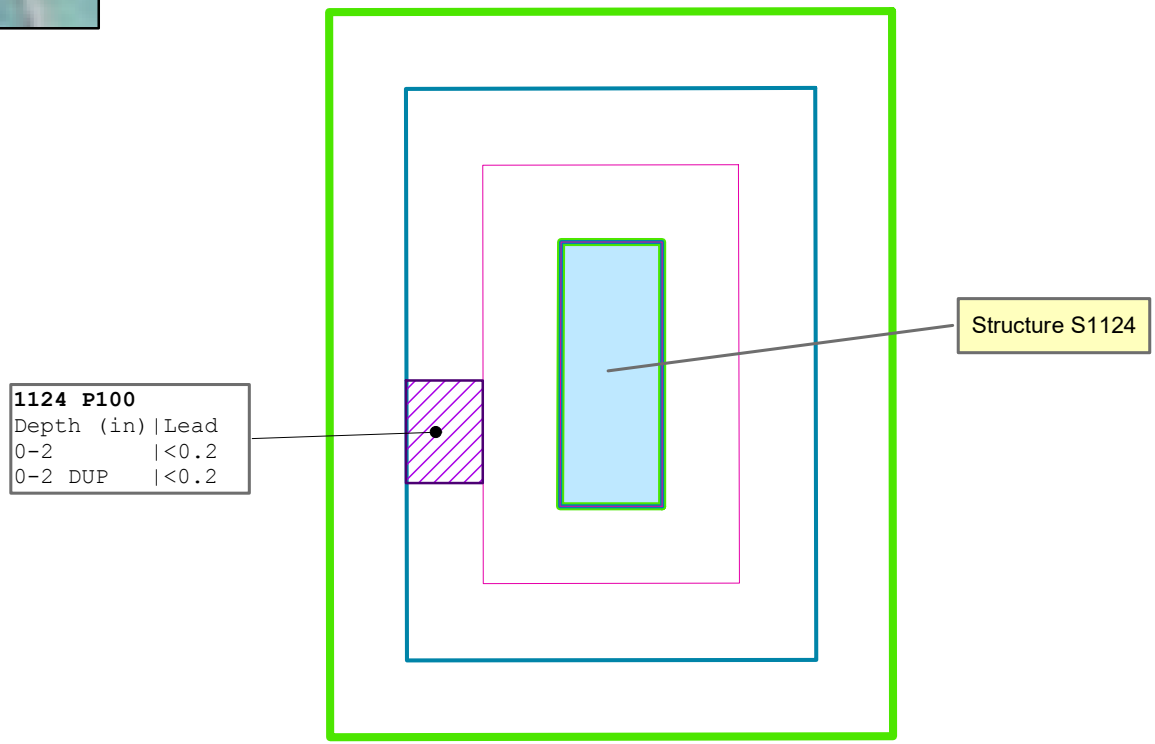
NW DEMOLITION AND ENVIRONMENTAL, A JOINT VENTURE

Portland, OR | February 2018

Figure 15

Path: P:\CAD_GIS\Projects\PNG0759_2017 Removal Action\GIS Files\Midway-Atoll\Revisions 120517\Fig15_2017PrelimExcav_521.mxd





N

0 20 40
SCALE IN FEET

Legend

- 15' Buffer
- 30' Buffer
- 45' Buffer
- 3' Excavation
- Existing Structure

Note:
Lead results reported in milligrams per kilogram.
Soil samples consisted of a 5-point composite sample from excavation area shown.
"<" indicates lead was not detected at or above the method detection limit.
Samples labeled as "DUP" are considered replicate samples.
Please see Appendix I for a discussion.

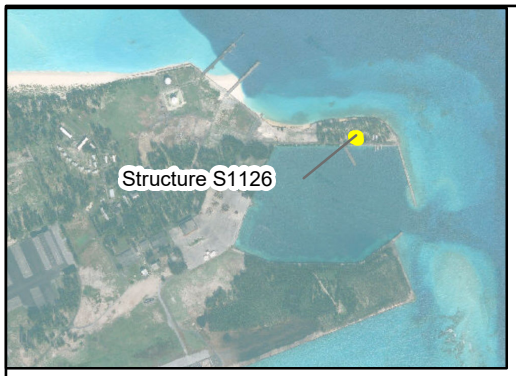
EXCAVATION LIMITS AND CONFIRMATION
SOIL SAMPLE RESULTS
DECISION UNIT 9
STRUCTURE 1124
REMOVAL OF LEAD BASED PAINT FROM
STRUCTURES AND LEAD
CONTAMINATED SOIL AT MIDWAY ATOLL

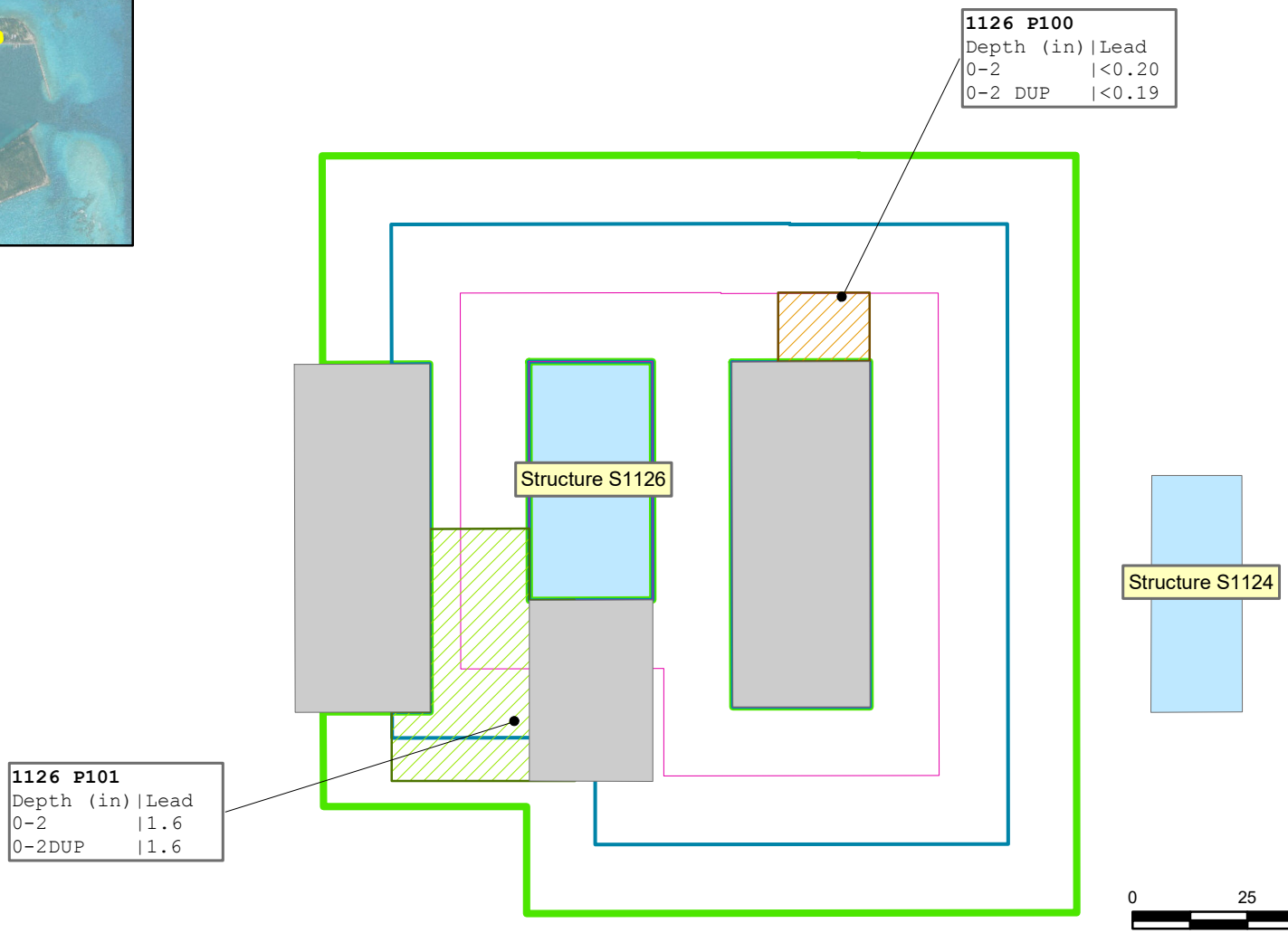
NW DEMOLITION
AND ENVIRONMENTAL,
A JOINT VENTURE

Portland, OR | February 2018

Figure
16

Path: P:\CAD_GIS\Projects\PNG0759_2017 Removal Action\GIS Files\Midway-Atoll\Revisions 120517\Fig16_2017PrelimExcav_1124.mxd





Legend

- 15' Buffer
- 30' Buffer
- 45' Buffer
- Existing Structure
- Concrete slab
- 1' Excavation
- 2' Excavation

Note:
Lead results reported in milligrams per kilogram.
Soil samples consisted of a 5-point composite sample from excavation area shown.
"<" indicates lead was not detected at or above the method detection limit.
Samples labeled as "DUP" are considered replicate samples.
Please see Appendix I for a discussion.

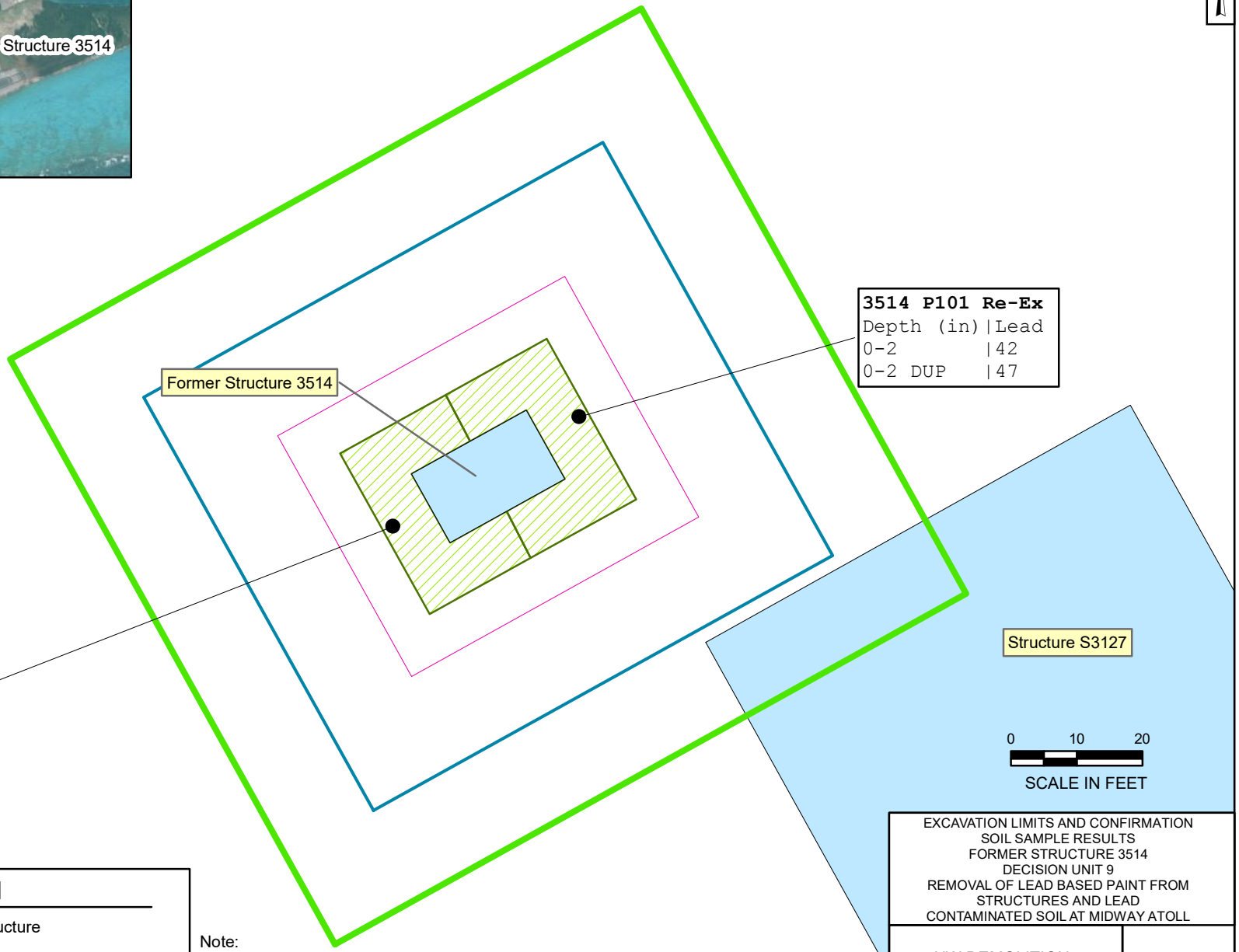
EXCAVATION LIMITS AND CONFIRMATION SOIL SAMPLE RESULTS
DECISION UNIT 9
STRUCTURE S1124 AND S1126
REMOVAL OF LEAD BASED PAINT FROM STRUCTURES AND LEAD CONTAMINATED SOIL AT MIDWAY ATOLL

NW DEMOLITION AND ENVIRONMENTAL, A JOINT VENTURE

Portland, OR | February 2018

Figure 17

Path: P:\CAD_GIS\Projects\PNG0759_2017 Removal Action\GIS Files\Midway-Atoll\Revisions 120517\Fig17_2017PrelimExcav_1125_1126.mxd



3514 P101 Re-Ex

Depth (in)	Lead
0-2	42
0-2 DUP	47

3514 P100

Depth (in)	Lead
0-2	52
0-2 DUP	62

Legend

- Existing and/or Former Structure
- 15' Buffer
- 30' Buffer
- 45' Buffer
- 1' Preliminary Excavation

Note:
Lead results reported in milligrams per kilogram.
Soil samples consisted of a 5-point composite sample from excavation area shown.
Samples labeled as "DUP" are considered replicate samples.
Please see Appendix I for a discussion.

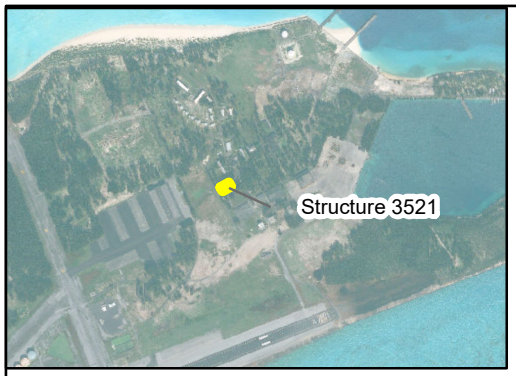
EXCAVATION LIMITS AND CONFIRMATION SOIL SAMPLE RESULTS
FORMER STRUCTURE 3514
DECISION UNIT 9
REMOVAL OF LEAD BASED PAINT FROM STRUCTURES AND LEAD CONTAMINATED SOIL AT MIDWAY ATOLL

NW DEMOLITION AND ENVIRONMENTAL, A JOINT VENTURE

Portland, OR | February 2018

Figure 18

Path: P:\CAD_GIS\Projects\PNG0759_2017 Removal Action\GIS Files\Midway-Atoll\Revisions 120517\Fig18_2017PrelimExcav_3514.mxd



N

0 20 40

SCALE IN FEET

Legend

- 45' Buffer
- Existing Structure
- 2' Excavation
- 3' Excavation

Note:
Lead results reported in milligrams per kilogram.
Soil samples consisted of a 5-point composite sample from excavation area shown.
"<" indicates lead was not detected at or above the method detection limit.
Samples labeled as "DUP" are considered replicate samples.
Please see Appendix I for a discussion.

EXCAVATION LIMITS AND CONFIRMATION
SOIL SAMPLE RESULTS
DECISION UNIT 9
STRUCTURE 3521
REMOVAL OF LEAD BASED PAINT FROM
STRUCTURES AND LEAD
CONTAMINATED SOIL AT MIDWAY ATOLL

NW DEMOLITION
AND ENVIRONMENTAL,
A JOINT VENTURE

Portland, OR | February 2018

Figure
19

Path: P:\CAD_GIS\Projects\PNG0759_2017 Removal Action\GIS Files\Midway-Atoll\Revisions 120517\Fig19_2017PrelimExcav_3521.mxd

Structure 3502

Structure 3504

Former Structure 3524

3524 P100

Depth (in)	Lead
0-2	15
0-2 DUP	15

3524 P101

Depth (in)	Lead
0-2	25
0-2 DUP	20

N

0 10 20

SCALE IN FEET

Legend

- 15' Buffer
- 30' Buffer
- 45' Buffer
- 1' Excavation
- Existing and/or Former Structure

Note:
Lead results reported in milligrams per kilogram.
Soil samples consisted of a 5-point composite sample from excavation area shown.
Samples labeled as "DUP" are considered replicate samples.
Please see Appendix I for a discussion.

EXCAVATION LIMITS AND CONFIRMATION SOIL SAMPLE RESULTS
DECISION UNIT 9
FORMER STRUCTURE 3524
REMOVAL OF LEAD BASED PAINT FROM STRUCTURES AND LEAD CONTAMINATED SOIL AT MIDWAY ATOLL

NW DEMOLITION AND ENVIRONMENTAL, A JOINT VENTURE

Portland, OR | February 2018

Figure 20

Path: P:\CAD_GIS\Projects\PNG0759_2017 Removal Action\GIS Files\Midway-Atoll\Revisions 120517\Feb20_2017PrelimExcav_3524.mxd

Former Structure 3517

Structure 3503

3529 P100

Depth (in)	Lead
0-2	4.6
0-2 DUP	33

3529 P101

Depth (in)	Lead
0-2	24
0-2 DUP	30

Former Structure 3529

3529 P103

Depth (in)	Lead
0-2	6.9
0-2 DUP	7.6

Structure 3502

3529 P102

Depth (in)	Lead
0-2	6.5
0-2 DUP	10

N

0 15 30

SCALE IN FEET

Legend

- Existing and/or Former Structure
- 15' Buffer
- 30' Buffer
- 45' Buffer
- 1' Excavation
- Concrete

Note:
Lead results reported in milligrams per kilogram.
Soil samples consisted of a 5-point composite sample from excavation area shown.
Samples labeled as "DUP" are considered replicate samples.
Please see Appendix I for a discussion.

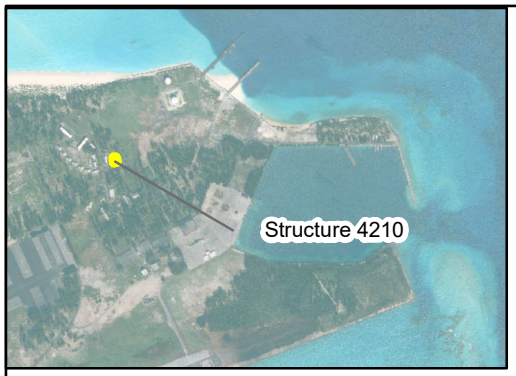
EXCAVATION LIMITS AND CONFIRMATION SOIL SAMPLE RESULTS
DECISION UNIT 9
FORMER STRUCTURE 3529
REMOVAL OF LEAD BASED PAINT FROM STRUCTURES AND LEAD CONTAMINATED SOIL AT MIDWAY ATOLL

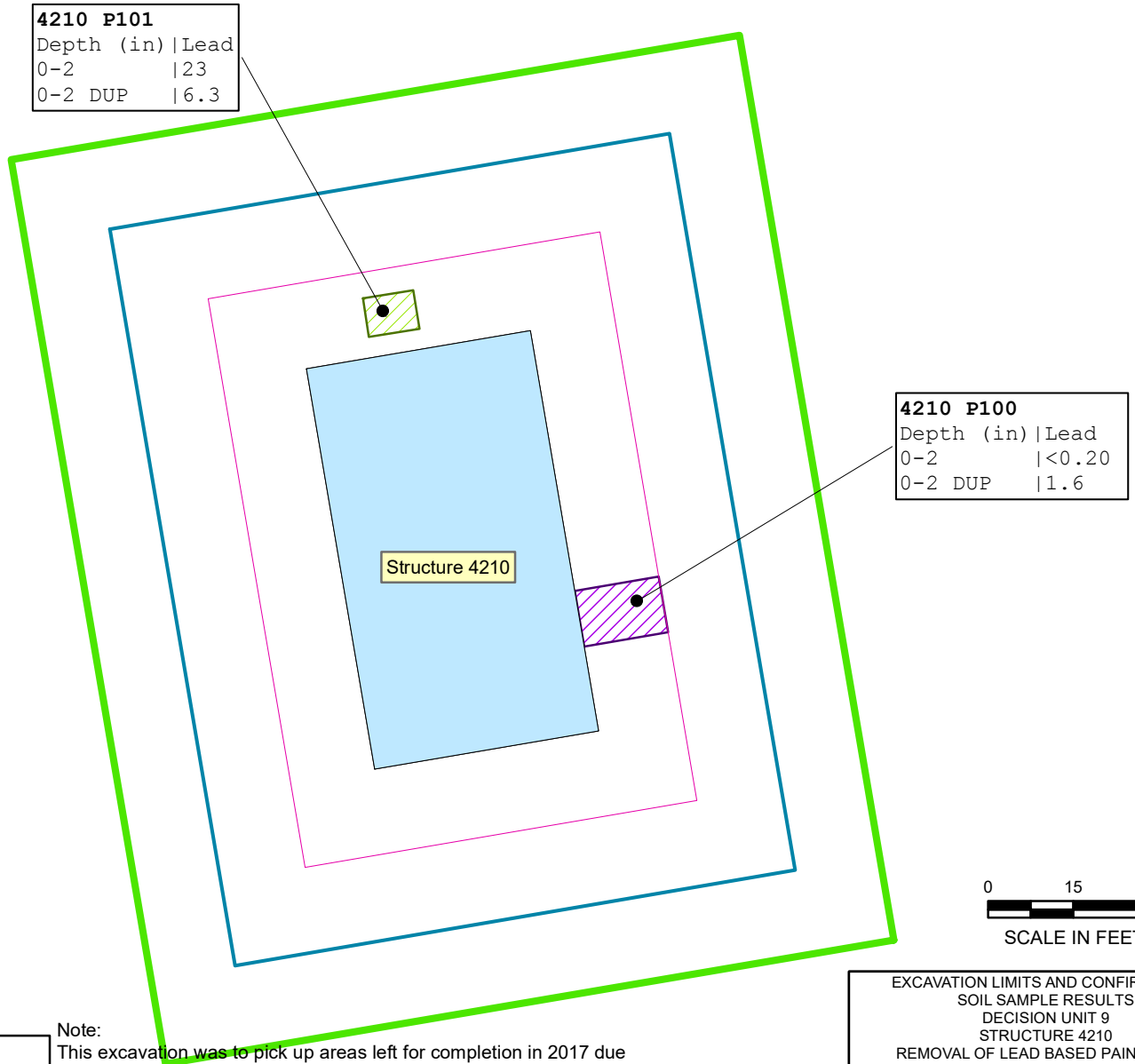
NW DEMOLITION AND ENVIRONMENTAL, A JOINT VENTURE

Portland, OR | February 2018

Figure 21

Path: P:\CAD_GIS\Projects\PNG0759_2017 Removal Action\GIS Files\Midway-Atoll\Revisions 120517\Fig21_2017PrelimExcav_3529.mxd





Legend

- 15' Buffer
- 30' Buffer
- 45' Buffer
- 1' Excavation
- 3' Excavation
- Existing Structure

Note:
This excavation was to pick up areas left for completion in 2017 due to the logistics of getting into the areas.
Lead results reported in milligrams per kilogram.
Soil samples consisted of a 5-point composite sample from excavation area shown.
"<" indicates lead was not detected at or above the method detection limit.
Samples labeled as "DUP" are considered replicate samples.
Please see Appendix I for a discussion.

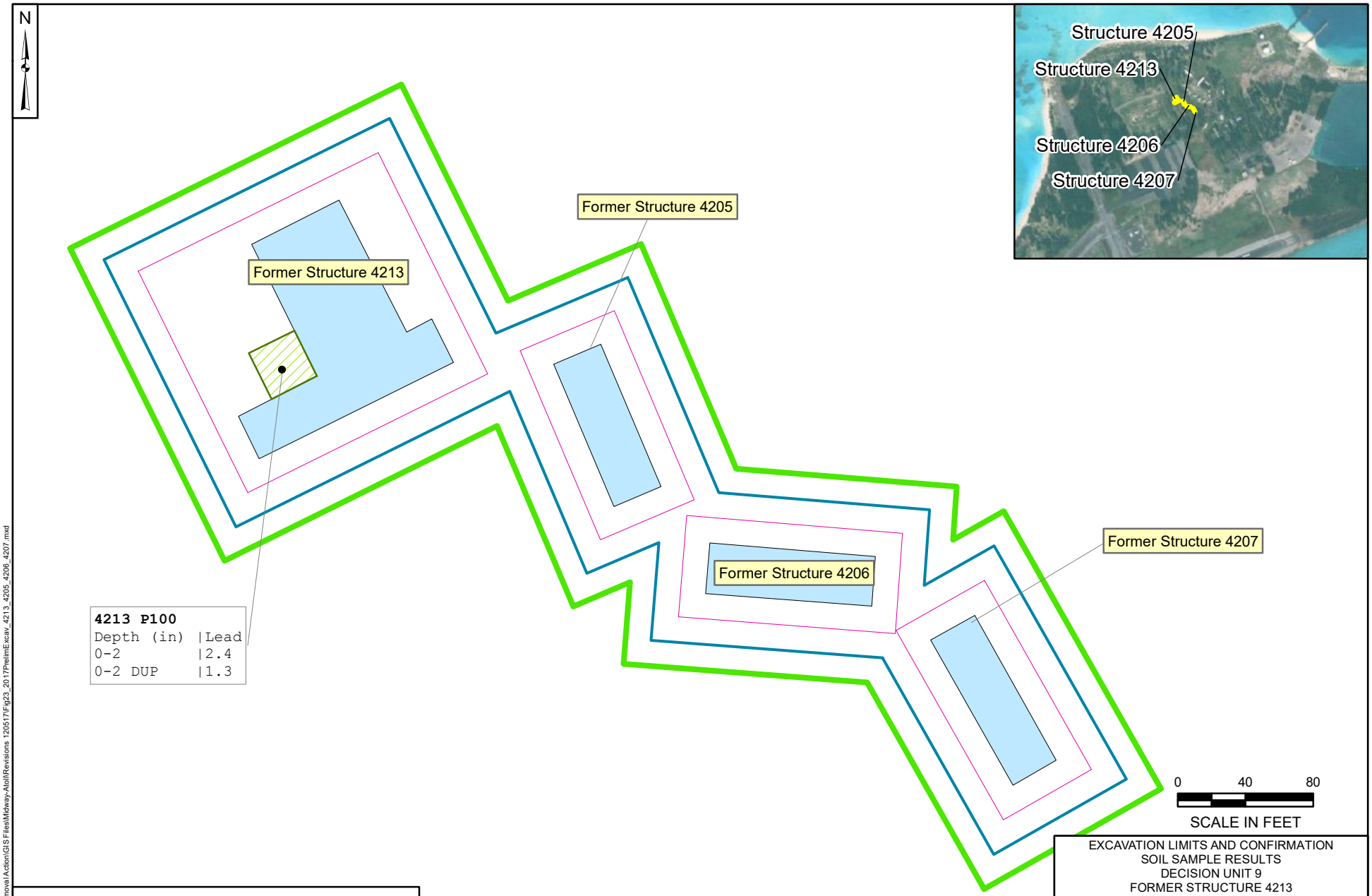
EXCAVATION LIMITS AND CONFIRMATION SOIL SAMPLE RESULTS
DECISION UNIT 9
STRUCTURE 4210
REMOVAL OF LEAD BASED PAINT FROM STRUCTURES AND LEAD CONTAMINATED SOIL AT MIDWAY ATOLL

NW DEMOLITION AND ENVIRONMENTAL, A JOINT VENTURE

Portland, OR | February 2018

Figure 22

Path: P:\CAD_GIS\Projects\PNG0759_2017 Removal Action\GIS Files\Midway-Atoll\Revisions 120517\Fig22_2017PrelimExcav_4210.mxd



Legend

- 15' Buffer
- 30' Buffer
- 45' Buffer
- 1' Preliminary Excavation
- Former Building

Note:
Lead results reported in milligrams per kilogram.
Soil samples consisted of a 5-point composite sample from excavation area shown.
Samples labeled as "DUP" are considered replicate samples.
Please see Appendix I for a discussion.

EXCAVATION LIMITS AND CONFIRMATION SOIL SAMPLE RESULTS
DECISION UNIT 9
FORMER STRUCTURE 4213
REMOVAL OF LEAD BASED PAINT FROM STRUCTURES AND LEAD CONTAMINATED SOIL AT MIDWAY ATOLL

NW DEMOLITION AND ENVIRONMENTAL, A JOINT VENTURE

Portland, OR | February 2018

Figure 23

Path: P:\CAD_GIS\Projects\PNG0759_2017 Removal Action\GIS Files\Midway-Atoll\Revisions 120517\Fig23_2017PrelimExcav_4213_4205_4206_4207.mxd

Legend

- Former Structure
- 15' Buffer
- 30' Buffer
- 45' Buffer
- 1' Excavation
- Concrete

Note:
Lead results reported in milligrams per kilogram.
Soil samples consisted of a 5-point composite sample from excavation area shown.
Removed concrete 2' bgs.
Backfilled 15' deep vault with clean sand.
Samples labeled as "DUP" are considered replicate samples.
Please see Appendix I for a discussion.

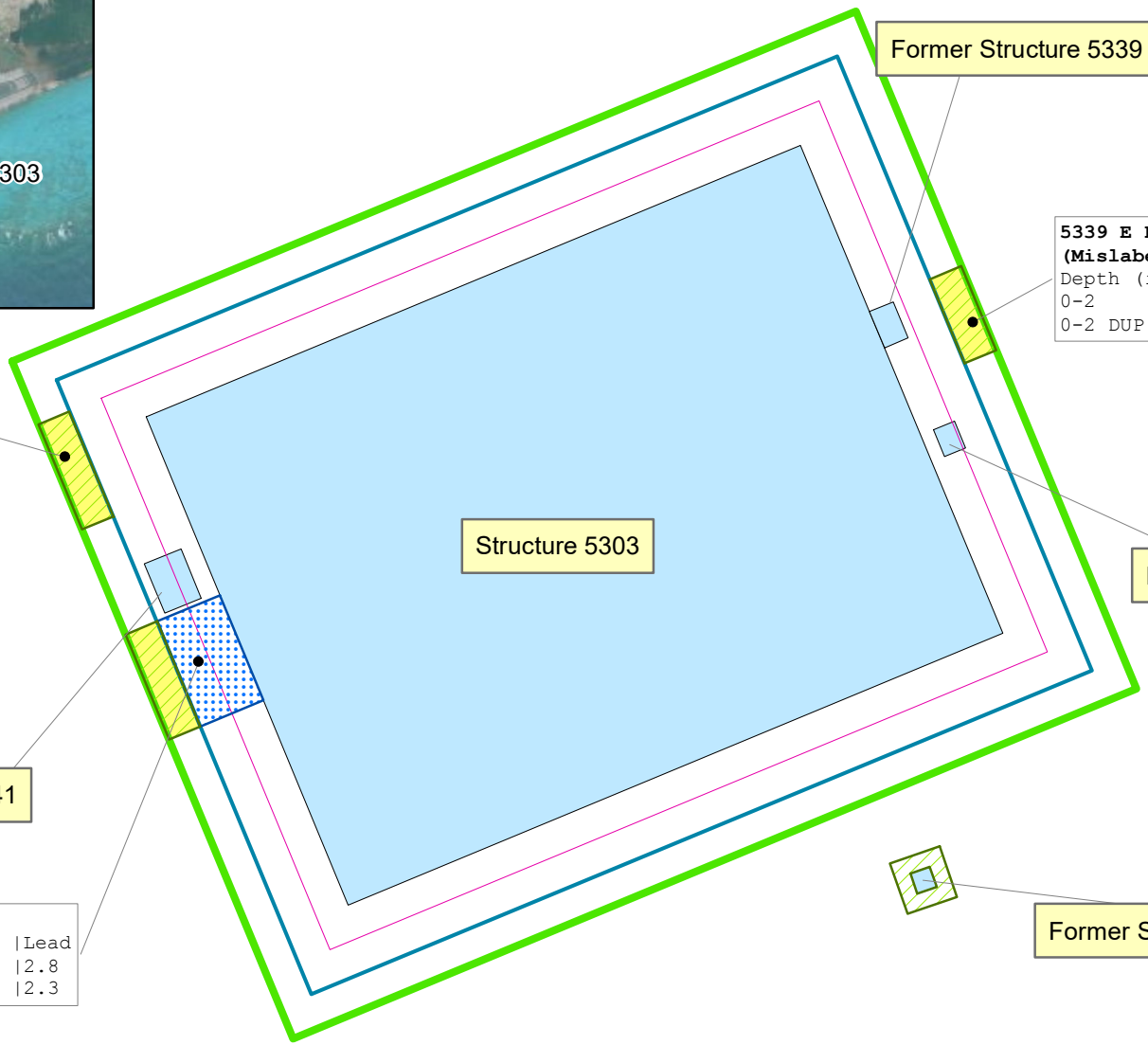
EXCAVATION LIMITS AND CONFIRMATION SOIL SAMPLE RESULTS
DECISION UNIT 9
FORMER STRUCTURE 5126
REMOVAL OF LEAD BASED PAINT FROM STRUCTURES AND LEAD CONTAMINATED SOIL AT MIDWAY ATOLL

NW DEMOLITION AND ENVIRONMENTAL, A JOINT VENTURE

Portland, OR | February 2018

Figure 24

Path: P:\CAD_GIS\Projects\PNG0769_2017 Removal Action\GIS Files\Midway-Atoll\Revisions 120517\Fig24_2017PrelimExcav_5126.mxd



5339 E B Re-Ex
(Mislabeled as 5339 E A Re-Ex)

Depth (in)	Lead
0-2	2.7
0-2 DUP	2.2

5303 NW A Re-Ex

Depth (in)	Lead
0-2	9.8
0-2 DUP	3.2

5303 Ramp

Depth (in)	Lead
0-2	2.8
0-2 DUP	2.3

N

0 40 80

SCALE IN FEET

Legend

- 15' Buffer
- 30' Buffer
- 45' Buffer
- Treat and Leave
- 1' Excavation
- Shade Cloth
- Existing and/or Former Structure

Note:
5339 E B at 30-45' is dug, confirmations collected and demarcation placed. The sample at this location (E-B) was mislabeled as E-A. Therefore lab results E-A address location E-B.
Lead results reported in milligrams per kilogram.
Soil samples consisted of a 5-point composite sample from excavation area shown.
Samples labeled as "DUP" are considered replicate samples.
Please see Appendix I for a discussion.

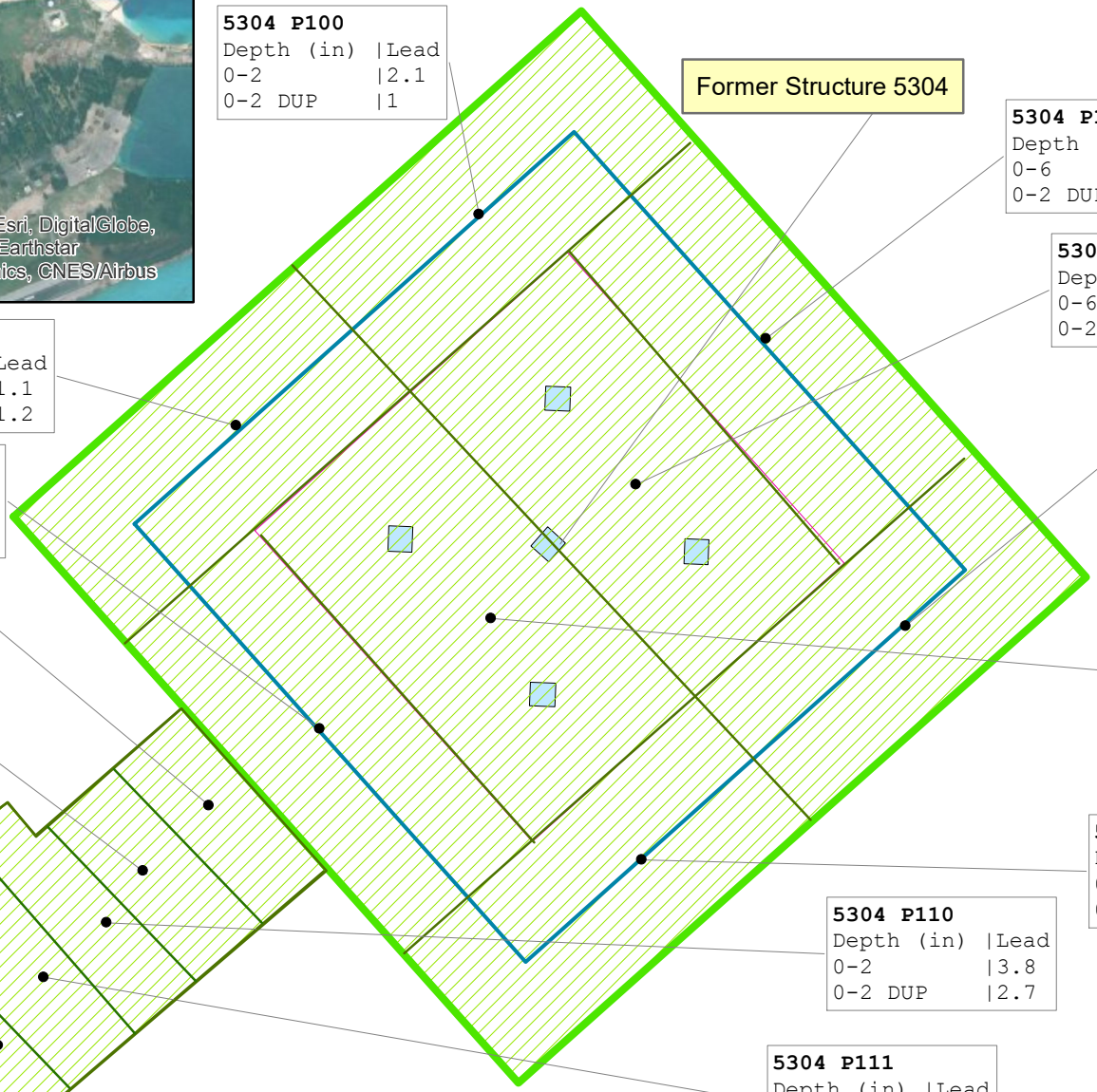
EXCAVATION LIMITS AND CONFIRMATION
SOIL SAMPLE RESULTS
DECISION UNIT 2
STRUCTURES 5303, 5339 AND 5341
REMOVAL OF LEAD BASED PAINT FROM
STRUCTURES AND LEAD
CONTAMINATED SOIL AT MIDWAY ATOLL

NW DEMOLITION
AND ENVIRONMENTAL,
A JOINT VENTURE

Portland, OR | February 2018

Figure
25

Path: P:\CAD_GIS\Projects\PNG0759_2017 Removal Action\GIS Files\Midway Atoll\Revisions 120517\Fig25_2017PrelimExcav_5303_r2.mxd



5304 P100

Depth (in)	Lead
0-2	2.1
0-2 DUP	1

5304 P101

Depth (in)	Lead
0-6	0.77
0-2 DUP	0.36

5304 P106

Depth (in)	Lead
0-6	0.52
0-2 DUP	0.8

5304 P105

Depth (in)	Lead
0-2	1.1
0-2 DUP	1.2

5304 P102

Depth (in)	Lead
0-2	0.36
0-2 DUP	15

5304 P104

Depth (in)	Lead
0-2	<0.14
0-2 DUP	<0.18

5304 P108

Depth (in)	Lead
0-2	16
0-2 DUP	24

5304 P107

Depth (in)	Lead
0-2	<0.17
0-2 DUP	<0.17

5304 P109

Depth (in)	Lead
0-2	5.2
0-2 DUP	13

5304 P112

Depth (in)	Lead
0-2	7
0-2 DUP	6.9

5304 P103

Depth (in)	Lead
0-2	<0.14
0-2 DUP	<0.16

5304 P110

Depth (in)	Lead
0-2	3.8
0-2 DUP	2.7

5304 P111

Depth (in)	Lead
0-2	5.4
0-2 DUP	5.6

N

0 10 20

SCALE IN FEET

Legend/Notes

- 15' Buffer
- 30' Buffer
- 45' Buffer
- 1' Excavation
- Existing Structure

Note:
Lead results reported in milligrams per kilogram.
Soil samples consisted of a 5-point composite sample from excavation area shown.
"<" indicates lead was not detected at or above the method detection limit.
Water tower has been removed. Only the concrete footings remain.
Samples labeled as "DUP" are considered replicate samples.
Please see Appendix I for a discussion.

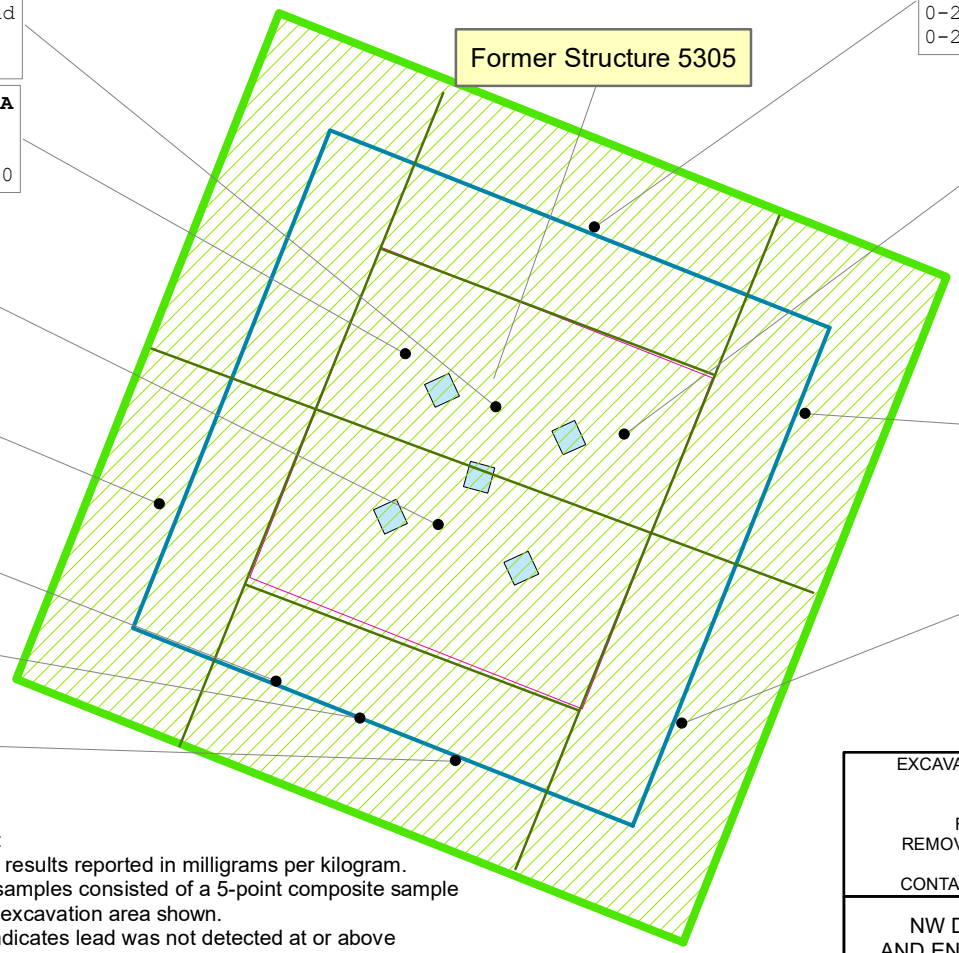
EXCAVATION LIMITS AND CONFIRMATION SOIL SAMPLE RESULTS
DECISION UNIT 9
FORMER STRUCTURE 5304
REMOVAL OF LEAD BASED PAINT FROM STRUCTURES AND LEAD CONTAMINATED SOIL AT MIDWAY ATOLL

NW DEMOLITION AND ENVIRONMENTAL, A JOINT VENTURE

Portland, OR | February 2018

Figure 26

Path: P:\CAD_GIS\Projects\PNG0759_2017 Removal Action\GIS Files\Midway-Atoll\Revisions 120517\Fig26_2017PrelimExcav_5305_5304.mxd



5305 P106

Depth (in)	Lead
0-2	89
0-2 DUP	55

5305 P106 Re-Ex A

Depth (in)	Lead
0-2	0.45
0-2 DUP	<0.20

5305 P107

Depth (in)	Lead
0-2	59
0-2 DUP	63

5305 P105

Depth (in)	Lead
0-6	10
0-2 DUP	24

5305 P104 Re-Ex A

Depth (in)	Lead
0-2	<0.20
0-2 DUP	11

5305 P104

Depth (in)	Lead
0-2	84
0-2 DUP	45

5305 P104 Re-Ex B

Depth (in)	Lead
0-2	<0.21
0-2 DUP	<0.19

5305 P101

Depth (in)	Lead
0-2	22
0-2 DUP	9.2

5305 P106 Re-Ex B

Depth (in)	Lead
0-2	10
0-2 DUP	17

5305 P102

Depth (in)	Lead
0-2	47
0-2 DUP	44

5305 P103

Depth (in)	Lead
0-2	53
0-2 DUP	29

N

0 10 20

SCALE IN FEET

Legend

- 15' Buffer
- 30' Buffer
- 45' Buffer
- 1' Excavation
- Existing Structure

Note:
Lead results reported in milligrams per kilogram.
Soil samples consisted of a 5-point composite sample from excavation area shown.
"<" indicates lead was not detected at or above the method detection limit.
Water tower has been removed. Only the concrete footings remain.
Samples labeled as "DUP" are considered replicate samples.
Please see Appendix I for a discussion.

EXCAVATION LIMITS AND CONFIRMATION SOIL SAMPLE RESULTS
DECISION UNIT 9
FORMER STRUCTURE 5305
REMOVAL OF LEAD BASED PAINT FROM STRUCTURES AND LEAD CONTAMINATED SOIL AT MIDWAY ATOLL

NW DEMOLITION AND ENVIRONMENTAL, A JOINT VENTURE

Portland, OR | February 2018

Figure 27

Path: P:\CAD_GIS\Projects\PNG0759_2017 Removal Action\GIS Files\Midway-Atoll\Revisions 120517\Fig27_2017PrelimExcav_5305_5304.mxd

N

5342 P100	
Depth (in)	Lead
0-2	20
0-2 DUP	18

0 10 20 30

SCALE IN FEET

Legend

- 15' Buffer
- 30' Buffer
- 45' Buffer
- 1' Excavation
- Former Structure
- Concrete Footings Removed
- Concrete

Note:
Lead results reported in milligrams per kilogram.
Soil samples consisted of a 5-point composite sample from excavation area shown.
Break out concrete footings for Structure 5342 and non-painted concrete to be crushed.
Backfill areas with clean coral sand.
Samples labeled as “DUP” are considered replicate samples.
Please see Appendix I for a discussion.

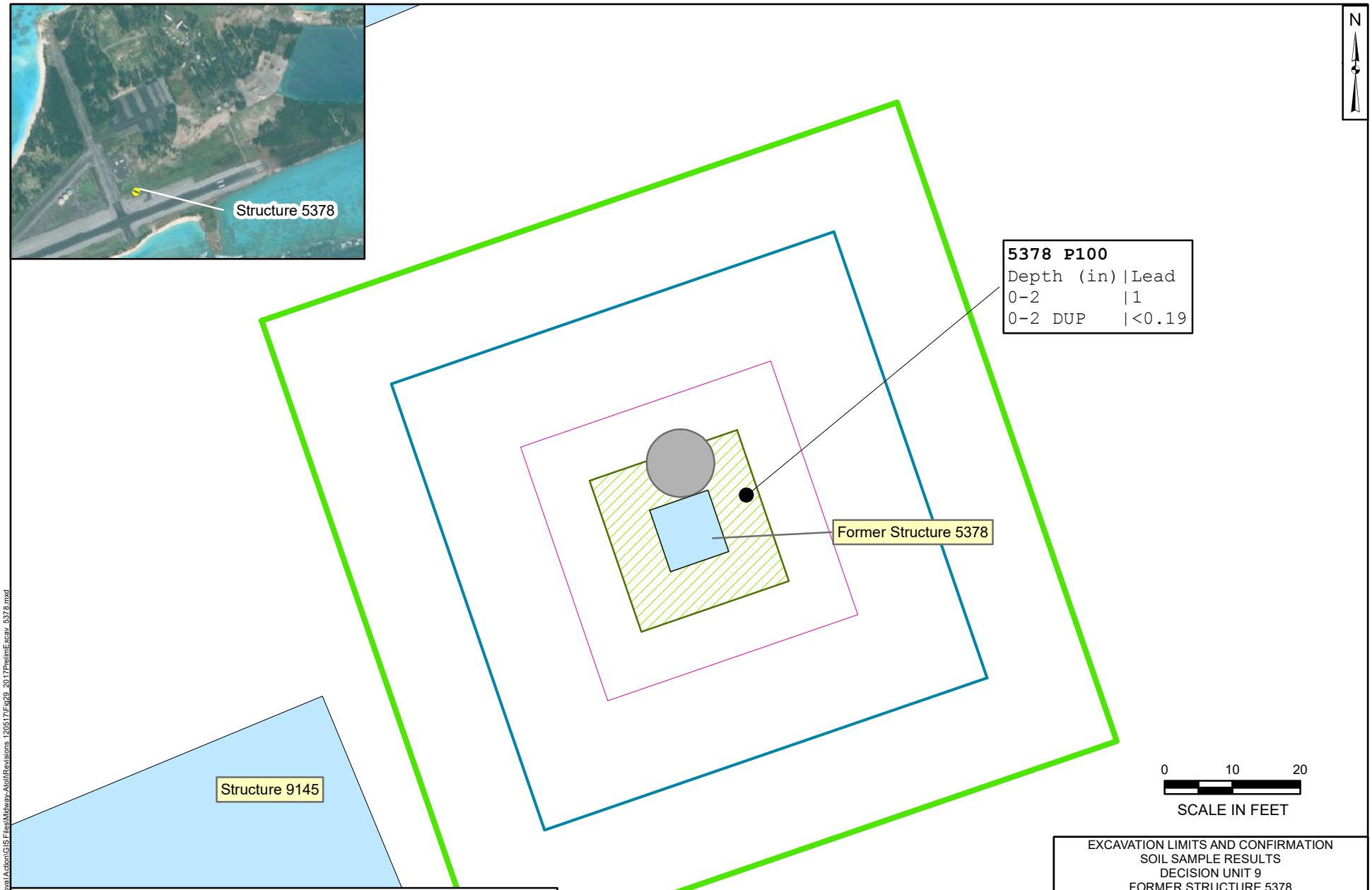
EXCAVATION LIMITS AND CONFIRMATION
SOIL SAMPLE RESULTS
DECISION UNIT 9
FORMER STRUCTURE 5342
REMOVAL OF LEAD BASED PAINT FROM
STRUCTURES AND LEAD
CONTAMINATED SOIL AT MIDWAY ATOLL

NW DEMOLITION
AND ENVIRONMENTAL,
A JOINT VENTURE

Portland, OR | February 2018

Figure
28

Path: P:\CAD_GIS\Projects\PNG0759_2017 Removal Action\GIS Files\Midway-Atoll\Revisions 120517\Fig28_2017PrelimExcav_5342.mxd



Legend

- Existing and/or Former Structure
- 15' Buffer
- 30' Buffer
- 45' Buffer
- 1' Excavation
- Electrical Vault with Steel Lid

Note:
Lead results reported in milligrams per kilogram.
Soil samples consisted of a 5-point composite sample from excavation area shown.
"<" indicates lead was not detected at or above the method detection limit.
Samples labeled as "DUP" are considered replicate samples.
Please see Appendix I for a discussion.

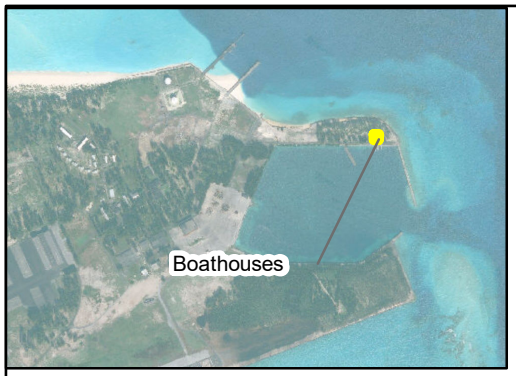
EXCAVATION LIMITS AND CONFIRMATION SOIL SAMPLE RESULTS
DECISION UNIT 9
FORMER STRUCTURE 5378
REMOVAL OF LEAD BASED PAINT FROM STRUCTURES AND LEAD CONTAMINATED SOIL AT MIDWAY ATOLL

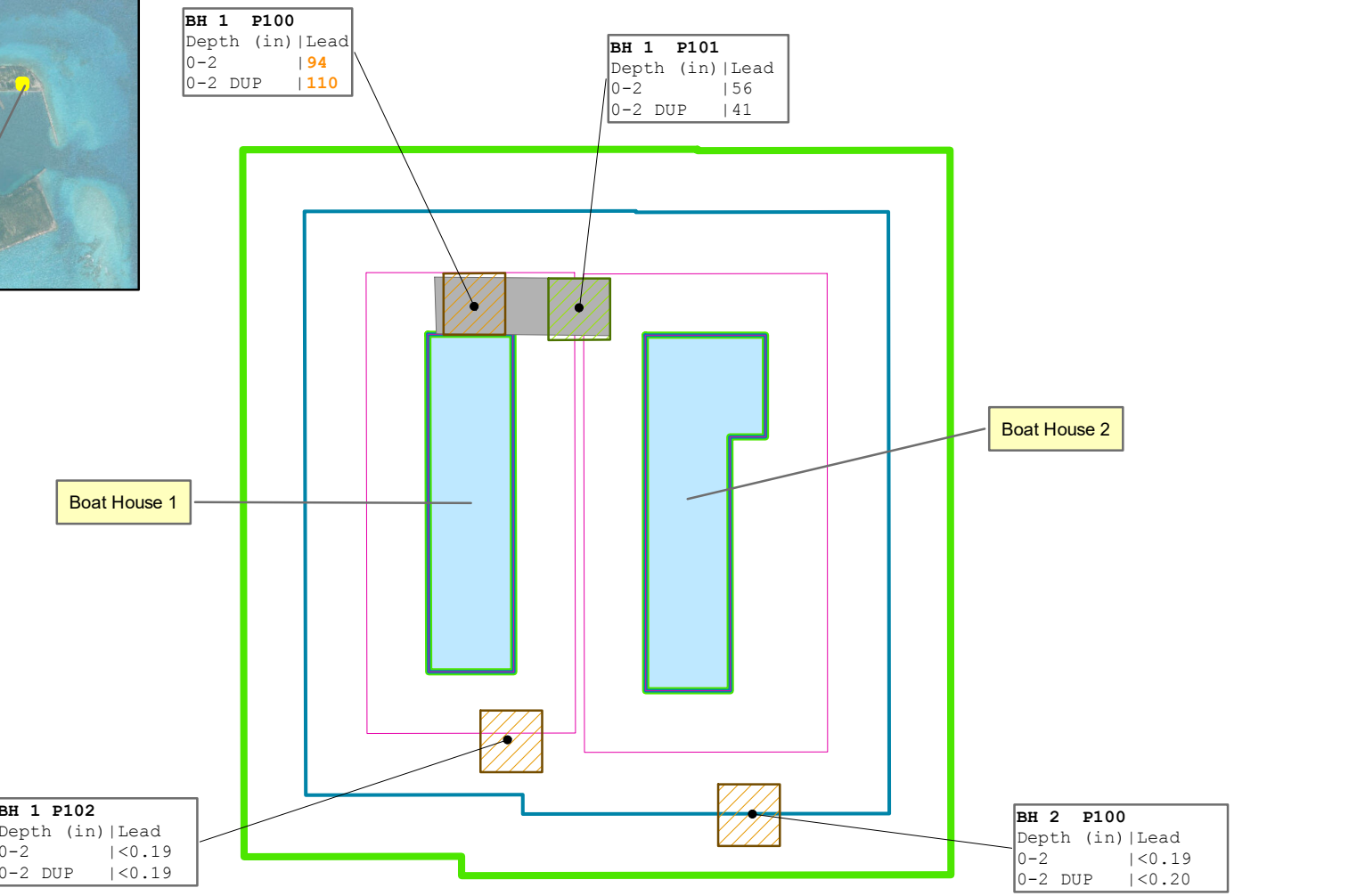
NW DEMOLITION AND ENVIRONMENTAL, A JOINT VENTURE

Portland, OR | February 2018

Figure 29

Path: P:\CAD_GIS\Projects\PNG0759_2017 Removal Action\GIS Files\Midway-Atoll\Revisions 120517\Feb29_2017PrelimExcav_5378.mxd





Legend

- 15' Buffer
- 30' Buffer
- 45' Buffer
- 1' Excavation
- 2' Excavation
- Existing Structure
- Concrete

Note:
Plots BH 1 P100 and BH 1 P101 are cut into hillside slope.
Original excavation was two separate plots.
One failed and one passed as noted above.
Followup excavation found concrete slab at grade.
Removed soil from top of slab as depicted above.
No follow up confirmation sample since it is a concrete slab at grade.
No backfill over slab.
Lead results reported in milligrams per kilogram.
Soil samples consisted of a 5-point composite sample from excavation area shown.
"<" indicates lead was not detected at or above the method detection limit.
Samples labeled as "DUP" are considered replicate samples.
Please see Appendix I for a discussion.

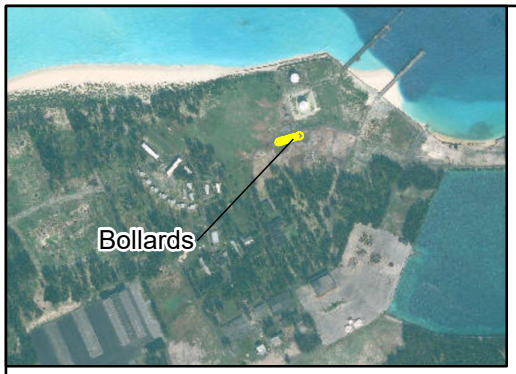
EXCAVATION LIMITS AND CONFIRMATION SOIL SAMPLE RESULTS
DECISION UNIT 9
BOAT HOUSES
REMOVAL OF LEAD BASED PAINT FROM STRUCTURES AND LEAD CONTAMINATED SOIL AT MIDWAY ATOLL

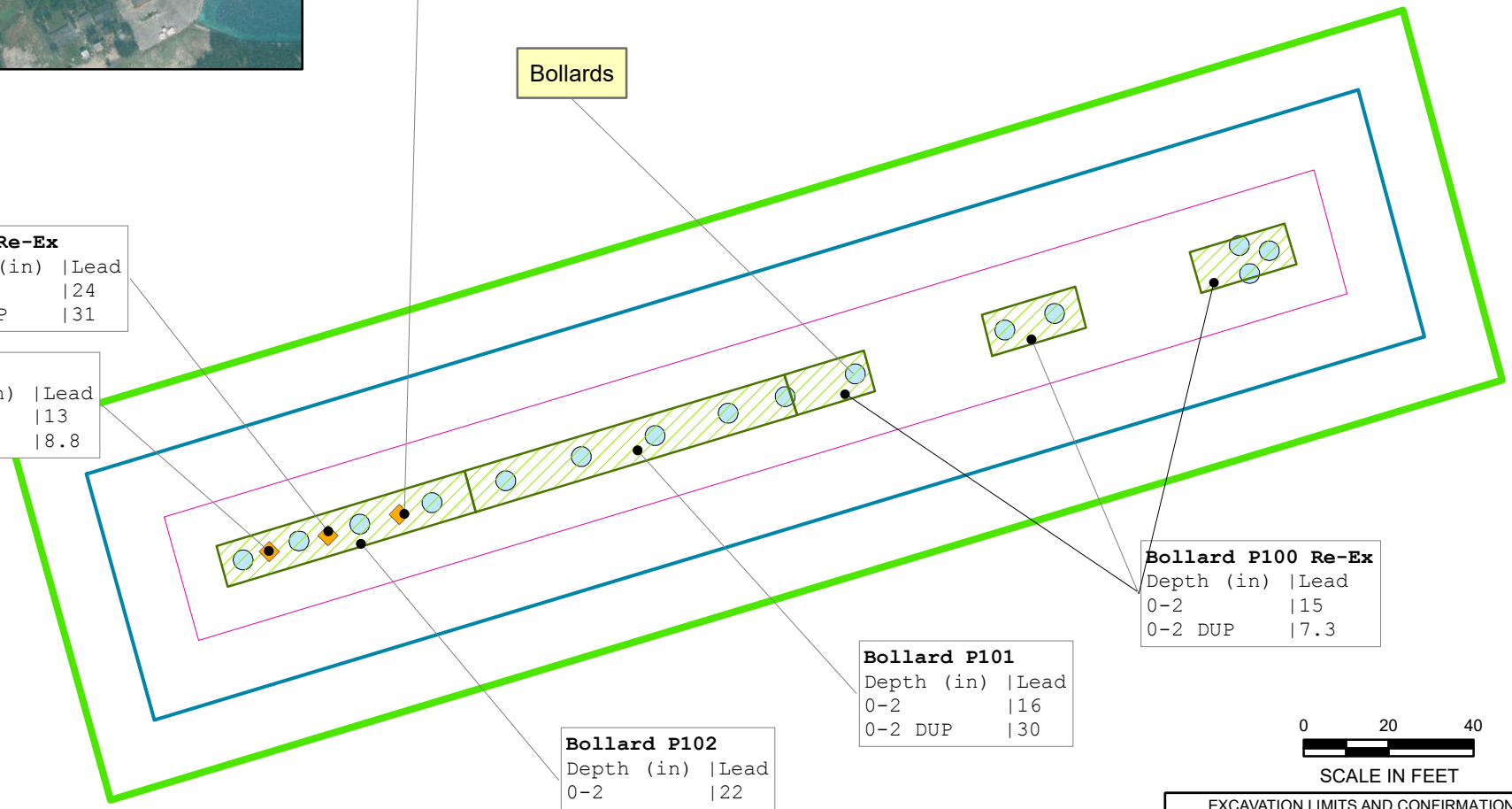
NW DEMOLITION AND ENVIRONMENTAL, A JOINT VENTURE

Portland, OR | February 2018

Figure 30

Path: P:\CAD_GIS\Projects\PNG0759_2017 Removal\Action\GIS Files\Midway-Atoll\Revisions 120517\Fig30_2017PrelimExcav_Boathouse.mxd





FH 54A

Depth (in)	Lead
0-2	19
0-2 DUP	26

FH 54 Re-Ex

Depth (in)	Lead
0-2	24
0-2 DUP	31

FH 53

Depth (in)	Lead
0-2	13
0-2 DUP	8.8

Bollard P100 Re-Ex

Depth (in)	Lead
0-2	15
0-2 DUP	7.3

Bollard P101

Depth (in)	Lead
0-2	16
0-2 DUP	30

Bollard P102

Depth (in)	Lead
0-2	22
0-2 DUP	21

N

0 20 40

SCALE IN FEET

Legend

- 15' Buffer
- 30' Buffer
- 45' Buffer
- 1' Excavation
- Bollards
- Fire Hydrant

Note:
FH 54 and Bollard P100 exceeded 75 mg/kg. Both locations re-excavated and additional confirmation samples passed.
Lead results reported in milligrams per kilogram.
Soil samples consisted of a 5-point composite sample from excavation area shown.
Samples labeled as “DUP” are considered replicate samples.
Please see Appendix I for a discussion.

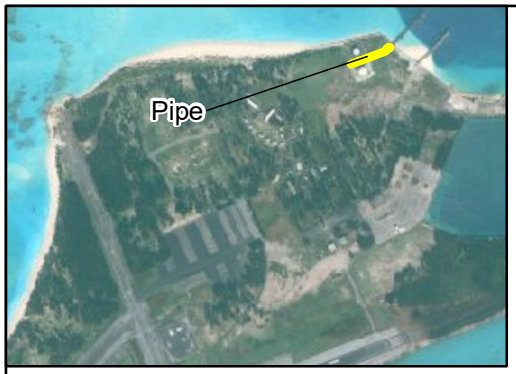
EXCAVATION LIMITS AND CONFIRMATION SOIL SAMPLE RESULTS
DECISION UNIT 9
BOLLARDS
REMOVAL OF LEAD BASED PAINT FROM STRUCTURES AND LEAD CONTAMINATED SOIL AT MIDWAY ATOLL

NW DEMOLITION AND ENVIRONMENTAL, A JOINT VENTURE

Portland, OR | February 2018

Figure 31

Path: P:\CAD_GIS\Projects\PNG0759_2017 Removal Action\GIS Files\Midway Atoll\Revisions 120517\Fig31_2017PrelimExcav_Bollards.mxd



Legend

- 15' Buffer
- 30' Buffer
- 45' Buffer
- 1' Excavation
- Former fuel pipe

Note:
Lead results reported in milligrams per kilogram.
Soil samples consisted of a 5-point composite sample from excavation area shown.
Samples labeled as "DUP" are considered replicate samples.
Please see Appendix I for a discussion.

N

Former Fuel Pipe

Pipe P107 Re-Ex A

Depth (in)	Lead
0-2	12
0-2 DUP	14

Pipe P105

Depth (in)	Lead
0-2	35
0-2 DUP	55

Pipe P107 Re-Ex B

Depth (in)	Lead
0-2	18
0-2 DUP	13

Pipe P104

Depth (in)	Lead
0-2	64
0-2 DUP	29

Pipe P101

Depth (in)	Lead
0-2	12
0-2 DUP	8.7

Pipe P106 Re-Ex B

Depth (in)	Lead
0-2	4.1
0-2 DUP	9.5

Pipe P103

Depth (in)	Lead
0-2	15
0-2 DUP	24

Pipe P106 Re-Ex A

Depth (in)	Lead
0-2	2.6
0-2 DUP	1.6

Pipe P102

Depth (in)	Lead
0-2	2.7
0-2 DUP	2.1

Pipe P100

Depth (in)	Lead
0-2	17
0-2 DUP	27

0 40 80

SCALE IN FEET

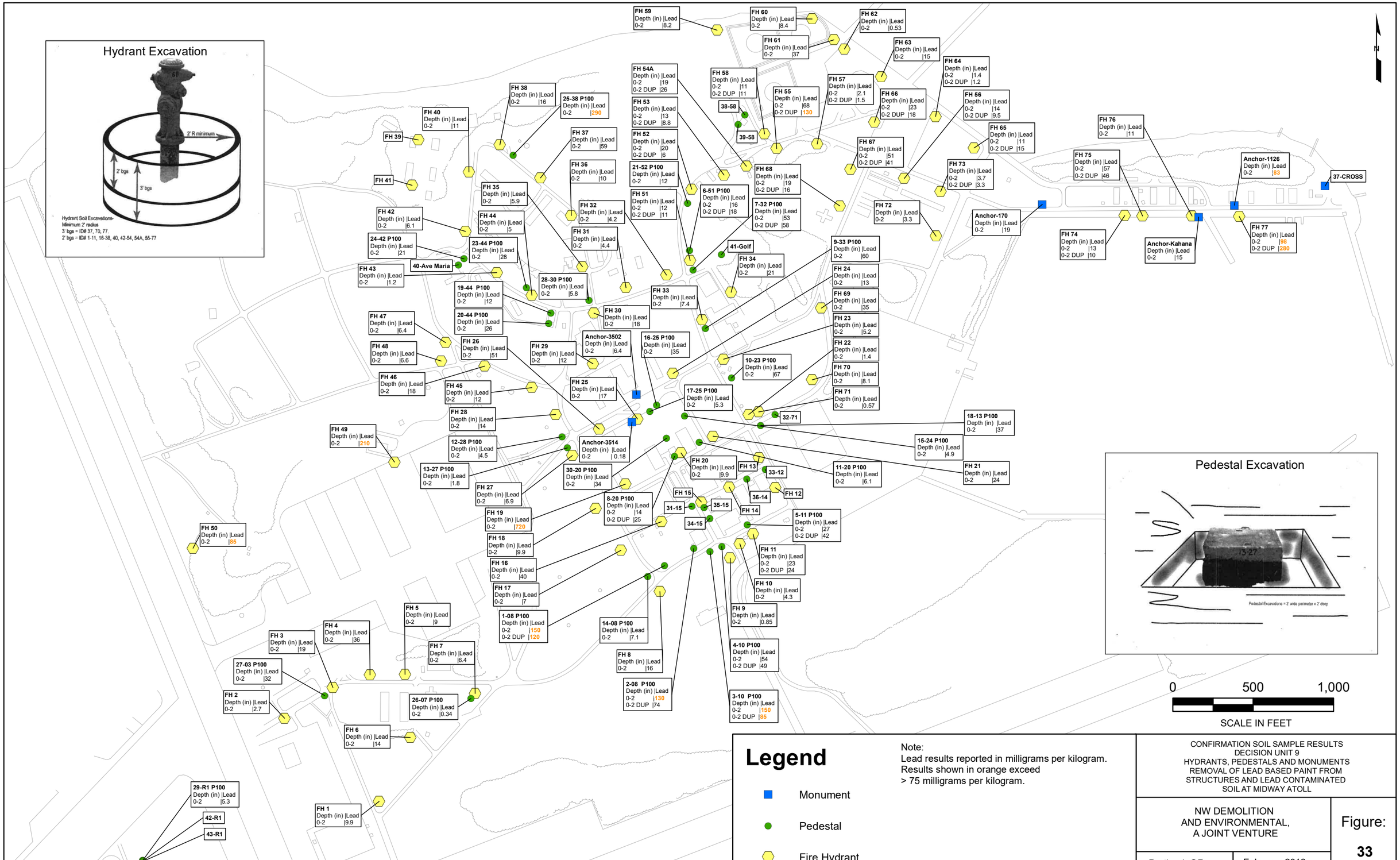
EXCAVATION LIMITS AND CONFIRMATION SOIL SAMPLE RESULTS
DECISION UNIT 9
FORMER FUEL PIPE
REMOVAL OF LEAD BASED PAINT FROM STRUCTURES AND LEAD CONTAMINATED SOIL AT MIDWAY ATOLL

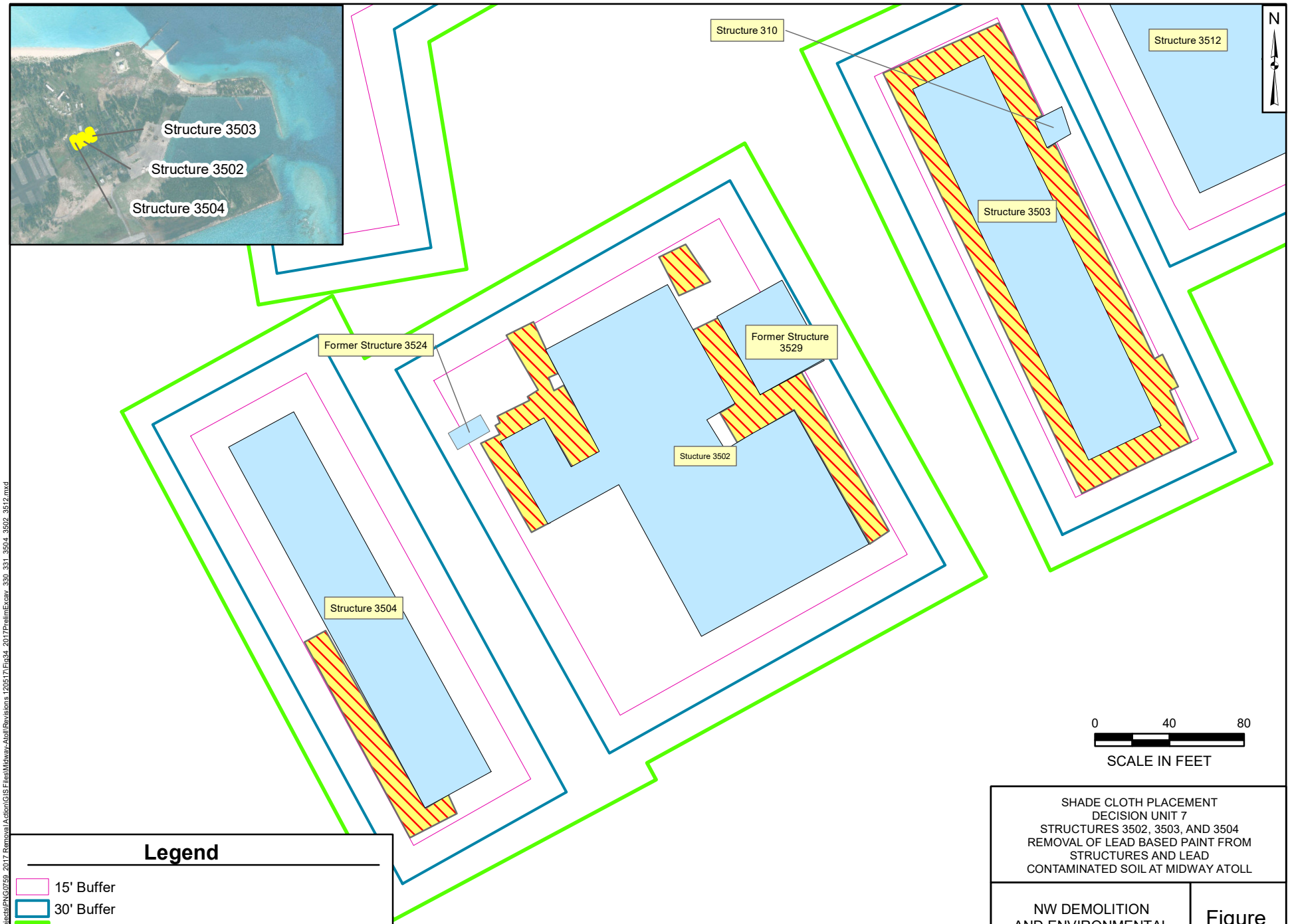
NW DEMOLITION AND ENVIRONMENTAL, A JOINT VENTURE

Portland, OR | February 2018

Figure 32

Path: P:\CAD_GIS\Projects\PNG0759_2017 Removal Action\GIS Files\Midway-Atoll\Revisions 120517\Fig32_2017PrelimExcav_Pipe.mxd


Hydrant Excavation
2' R minimum
2' bgs
3' bgs
Hydrant Soil Excavations-
Minimum 2' radius
3' bgs = ID# 37, 70, 77.
2' bgs = ID# 1-11, 16-38, 40, 42-54, 54A, 55-77
FH 59 Depth (in) |Lead 0-2 |8.2
FH 60 Depth (in) |Lead 0-2 |8.4
FH 62 Depth (in) |Lead 0-2 |0.53
FH 61 Depth (in) |Lead 0-2 |37
FH 63 Depth (in) |Lead 0-2 |15
FH 64 Depth (in) |Lead 0-2 |1.4 0-2 DUP |1.2
FH 54A Depth (in) |Lead 0-2 |19 0-2 DUP |26
FH 58 Depth (in) |Lead 0-2 |11 0-2 DUP |11
FH 57 Depth (in) |Lead 0-2 |2.1 0-2 DUP |1.5
FH 55 Depth (in) |Lead 0-2 |68 0-2 DUP |130
FH 66 Depth (in) |Lead 0-2 |23 0-2 DUP |18
FH 56 Depth (in) |Lead 0-2 |14 0-2 DUP |9.5
FH 38 Depth (in) |Lead 0-2 |16
25-38 P100 Depth (in) |Lead 0-2 |290
FH 53 Depth (in) |Lead 0-2 |13 0-2 DUP |8.8
38-58
39-58
FH 40 Depth (in) |Lead 0-2 |11
FH 39
FH 37 Depth (in) |Lead 0-2 |59
FH 52 Depth (in) |Lead 0-2 |20 0-2 DUP |6
FH 65 Depth (in) |Lead 0-2 |11 0-2 DUP |15
FH 67 Depth (in) |Lead 0-2 |51 0-2 DUP |41
FH 76 Depth (in) |Lead 0-2 |11
FH 75 Depth (in) |Lead 0-2 |57 0-2 DUP |46
Anchor-1126 Depth (in) |Lead 0-2 |83
37-CROSS
FH 36 Depth (in) |Lead 0-2 |10
21-52 P100 Depth (in) |Lead 0-2 |12
FH 68 Depth (in) |Lead 0-2 |19 0-2 DUP |16
FH 73 Depth (in) |Lead 0-2 |3.7 0-2 DUP |3.3
FH 41
FH 35 Depth (in) |Lead 0-2 |5.9
FH 51 Depth (in) |Lead 0-2 |12 0-2 DUP |11
6-51 P100 Depth (in) |Lead 0-2 |16 0-2 DUP |18
7-32 P100 Depth (in) |Lead 0-2 |53 0-2 DUP |58
FH 72 Depth (in) |Lead 0-2 |3.3
Anchor-170 Depth (in) |Lead 0-2 |19
FH 42 Depth (in) |Lead 0-2 |6.1
FH 44 Depth (in) |Lead 0-2 |5
FH 32 Depth (in) |Lead 0-2 |4.2
FH 31 Depth (in) |Lead 0-2 |4.4
FH 74 Depth (in) |Lead 0-2 |13 0-2 DUP |10
Anchor-Kahana Depth (in) |Lead 0-2 |15
FH 77 Depth (in) |Lead 0-2 |98 0-2 DUP |280
24-42 P100 Depth (in) |Lead 0-2 |21
23-44 P100 Depth (in) |Lead 0-2 |28
41-Golf
9-33 P100 Depth (in) |Lead 0-2 |60
40-Ave Maria
FH 34 Depth (in) |Lead 0-2 |21
FH 43 Depth (in) |Lead 0-2 |1.2
28-30 P100 Depth (in) |Lead 0-2 |5.8
FH 24 Depth (in) |Lead 0-2 |13
19-44 P100 Depth (in) |Lead 0-2 |12
FH 33 Depth (in) |Lead 0-2 |7.4
FH 69 Depth (in) |Lead 0-2 |35
FH 47 Depth (in) |Lead 0-2 |6.4
20-44 P100 Depth (in) |Lead 0-2 |26
FH 30 Depth (in) |Lead 0-2 |18
FH 23 Depth (in) |Lead 0-2 |5.2
FH 48 Depth (in) |Lead 0-2 |6.6
FH 26 Depth (in) |Lead 0-2 |51
FH 29 Depth (in) |Lead 0-2 |12
Anchor-3502 Depth (in) |Lead 0-2 |6.4
16-25 P100 Depth (in) |Lead 0-2 |35
FH 22 Depth (in) |Lead 0-2 |1.4
10-23 P100 Depth (in) |Lead 0-2 |67
FH 70 Depth (in) |Lead 0-2 |8.1
FH 46 Depth (in) |Lead 0-2 |18
FH 45 Depth (in) |Lead 0-2 |12
FH 25 Depth (in) |Lead 0-2 |17
17-25 P100 Depth (in) |Lead 0-2 |5.3
FH 71 Depth (in) |Lead 0-2 |0.57
32-71
18-13 P100 Depth (in) |Lead 0-2 |37
FH 28 Depth (in) |Lead 0-2 |14
FH 49 Depth (in) |Lead 0-2 |210
12-28 P100 Depth (in) |Lead 0-2 |4.5
Anchor-3514 Depth (in) |Lead 0-2 | 0.18
15-24 P100 Depth (in) |Lead 0-2 |4.9
13-27 P100 Depth (in) |Lead 0-2 |1.8
30-20 P100 Depth (in) |Lead 0-2 |34
FH 20 Depth (in) |Lead 0-2 |9.9
FH 13
33-12
11-20 P100 Depth (in) |Lead 0-2 |6.1
FH 21 Depth (in) |Lead 0-2 |24
FH 27 Depth (in) |Lead 0-2 |6.9
FH 15
FH 12
36-14
8-20 P100 Depth (in) |Lead 0-2 |14 0-2 DUP |25
31-15
35-15
FH 14
FH 19 Depth (in) |Lead 0-2 |720
34-15
5-11 P100 Depth (in) |Lead 0-2 |27 0-2 DUP |42
FH 50 Depth (in) |Lead 0-2 |85
FH 18 Depth (in) |Lead 0-2 |9.9
FH 11 Depth (in) |Lead 0-2 |23 0-2 DUP |24
FH 16 Depth (in) |Lead 0-2 |40
FH 10 Depth (in) |Lead 0-2 |4.3
FH 17 Depth (in) |Lead 0-2 |7
FH 5 Depth (in) |Lead 0-2 |9
FH 9 Depth (in) |Lead 0-2 |0.85
1-08 P100 Depth (in) |Lead 0-2 |150 0-2 DUP |120
14-08 P100 Depth (in) |Lead 0-2 |7.1
FH 4 Depth (in) |Lead 0-2 |36
FH 3 Depth (in) |Lead 0-2 |19
FH 7 Depth (in) |Lead 0-2 |6.4
4-10 P100 Depth (in) |Lead 0-2 |54 0-2 DUP |49
FH 8 Depth (in) |Lead 0-2 |16
27-03 P100 Depth (in) |Lead 0-2 |32
2-08 P100 Depth (in) |Lead 0-2 |130 0-2 DUP |74
FH 2 Depth (in) |Lead 0-2 |2.7
26-07 P100 Depth (in) |Lead 0-2 |0.34
3-10 P100 Depth (in) |Lead 0-2 |150 0-2 DUP |85
FH 6 Depth (in) |Lead 0-2 |14
29-R1 P100 Depth (in) |Lead 0-2 |5.3
42-R1
43-R1
FH 1 Depth (in) |Lead 0-2 |9.9
Pedestal Excavation
13-27
Pedestal Excavations = 2' wide perimeter x 2' deep
0 500 1,000
SCALE IN FEET
Legend
Monument
Pedestal
Fire Hydrant
Note:
Lead results reported in milligrams per kilogram.
Results shown in orange exceed
> 75 milligrams per kilogram.
CONFIRMATION SOIL SAMPLE RESULTS
DECISION UNIT 9
HYDRANTS, PEDESTALS AND MONUMENTS
REMOVAL OF LEAD BASED PAINT FROM
STRUCTURES AND LEAD CONTAMINATED
SOIL AT MIDWAY ATOLL
NW DEMOLITION
AND ENVIRONMENTAL,
A JOINT VENTURE
Portland, OR
February 2018
Figure:
33



Legend

- 15' Buffer
- 30' Buffer
- 45' Buffer
- Existing and/or Former Structure
- 2017 Shade Cloth Placement Area

Note:
The removal areas were excavated with a 5' perimeter around the structures and the materials hauled to the R-2 Unit for direct internment.
Areas were then backfilled to grade with clean sand.

SHADE CLOTH PLACEMENT
DECISION UNIT 7
STRUCTURES 3502, 3503, AND 3504
REMOVAL OF LEAD BASED PAINT FROM STRUCTURES AND LEAD CONTAMINATED SOIL AT MIDWAY ATOLL

NW DEMOLITION AND ENVIRONMENTAL, A JOINT VENTURE

Portland, OR | February 2018

Figure 34

Path: P:\CAD_GIS\Projects\PNG0769_2017 Removal Action\GIS Files\Midway-Atoll\Revisions 120517\Fig34_2017PrelimExcav_330_331_3504_3502_3512.mxd

APPENDIX A

2011 FIELD YEAR SUPPORTING DOCUMENTATION

Table 1
AIR MONITORING RESULTS
MIDWAY ATOLL NWR
Contract No. F11PC00327

Sample ID	Sample Date	Location	Descriptor	Result (µg/m^3)
349-L1	10/14/2011	Bldg 349	Inside Work Area	<3.3
349-L2			Boundary, Upwind	<3.3
349-L3			Boundary, Downwind	<3.3
349-L4			Personal	8.4
349-L5			Inside Work Area	<3.3
349-L6	10/15/2011	Bldg 349	Inside Work Area	<3.0
349-L7			Inside Work Area	<3.0
349-L8			Boundary, Upwind	<3.0
349-L9			Boundary, Downwind	<3.0
349-L10			Personal	<3.0
349-L11	10/17/2011	Bldg 349	Inside Work Area	<5.3
349-L12			Inside Work Area	<5.3
349-L13			Boundary, Upwind	<5.3
349-L14			Boundary, Downwind	<5.3
349-L15			Personal	<5.3
63-L1	10/18/2011	Bldg 363	Inside Work Area	<18
63-L2			Inside Work Area	<18
63-L3			Boundary, Upwind	<18
63-L4			Boundary, Downwind	<18
63-L5			Personal	<18
63-L6	10/19/2011	Bldg 363	Inside Work Area	<2.9
63-L7			Inside Work Area	<2.9
63-L8			Boundary, Upwind	<2.9
63-L9			Boundary, Downwind	<2.9
63-L10			Personal	<2.9

Table 2
BORROW / BACKFILL SAMPLE ANALYTICAL RESULTS
MIDWAY ATOLL NWR
Contract No. F11PC00327

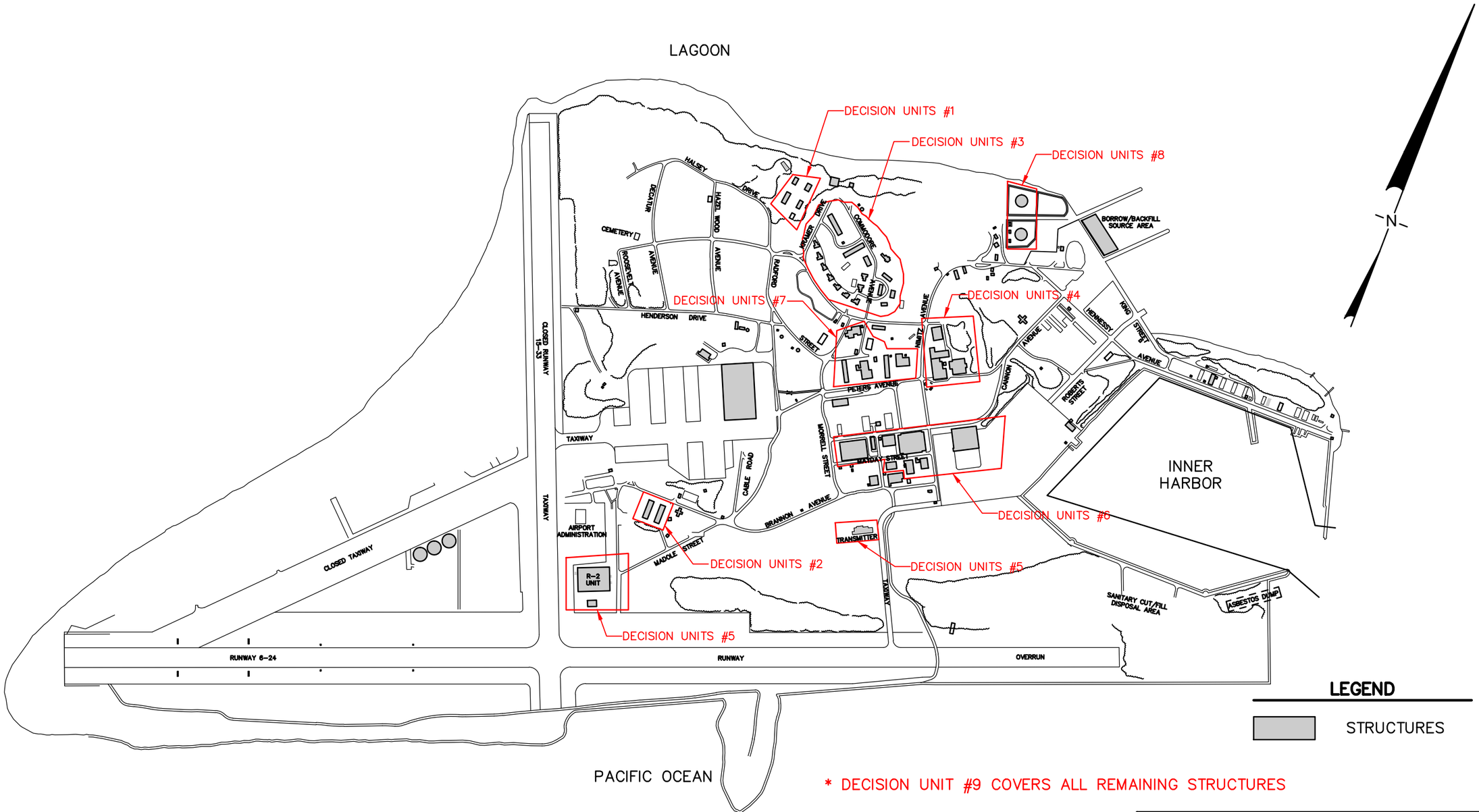
Analysis Method	Sample ID	MDW-BORROW
	Date Sampled	10/19/2011
	Analyte	Result
Metals - EPA Method 6010B, 6020, & 7474A (mg/kg)	Arsenic	<5.9
	Barium	4.7
	Cadmium	<0.98
	Chromium	4.4
	Lead	0.51
	Selenium	<9.8
	Silver	<2.0
	Mercury	<0.019
PAHs - EPA Method 8270 SIM (mg/kg)	1-Methylnaphthalene	<0.00650
	2-Methylnaphthalene	<0.00650
	Acenaphthene	<0.00649
	Acenaphthylene	<0.00650
	Anthracene	<0.00650
	Benzo(a)anthracene	<0.00650
	Benzo(a)pyrene	<0.00650
	Benzo(b)flouranthene	<0.00650
	Benzo(g,h,i)perylene	<0.0136
	Benzo(k)fluoranthene	<0.00650
	Chrysene	<0.00650
	Dibenzo(a,h)anthracene	<0.00650
	Fluoranthene	<0.00649
	Fluorene	<0.00650
	Indeno(1,2,3-cd)pyrene	<0.00650
	Naphthalene	<0.00649
	Phenanthrene	<0.00650
	Pyrene	<0.00650
Pesticides - EPA Method 8081 & 8081A (mg/kg)	4,4'-DDD	<0.00391
	4,4'-DDE	<0.00391
	4,4'-DDT	<0.00391
	Aldrin	<0.00391
	alpha-BHC	<0.00391
	beta-BHC	<0.00391
	delta-BHC	<0.00391
	Chlordane	<0.322
	Dieldrin	<0.00391
	Endosulfan I	<0.00391
	Endosulfan II	<0.00391
	Endosulfan sulfate	<0.00391
	Endrin	<0.00391
	Endrin aldehyde	<0.00391

Table 2
BORROW / BACKFILL SAMPLE ANALYTICAL RESULTS
MIDWAY ATOLL NWR
Contract No. F11PC00327

Analysis Method	Sample ID	MDW-BORROW
	Date Sampled	10/19/2011
	Analyte	Result
	Endrin ketone	<0.00391
	gamma-BHC (Lindane)	<0.00391
	Heptachlor	<0.00391
	Heptachlor epoxide	<0.00391
	Methoxychlor	<0.005
	Toxaphene	<0.0489
	alpha-Chlordane	<0.00391
	gamma-Chlordane	<0.00391
PCBs - EPA Method 8082 (mg/kg)	Aroclor 1016	<0.0311
	Aroclor 1221	<0.0621
	Aroclor 1232	<0.0311
	Aroclor 1242	<0.0311
	Aroclor 1248	<0.0311
	Aroclor 1254	<0.0311
	Aroclor 1260	<0.0311

Notes

1. "<#" is interpreted as not detected above the Reporting Limit concentration



* DECISION UNIT #9 COVERS ALL REMAINING STRUCTURES

NOTES:

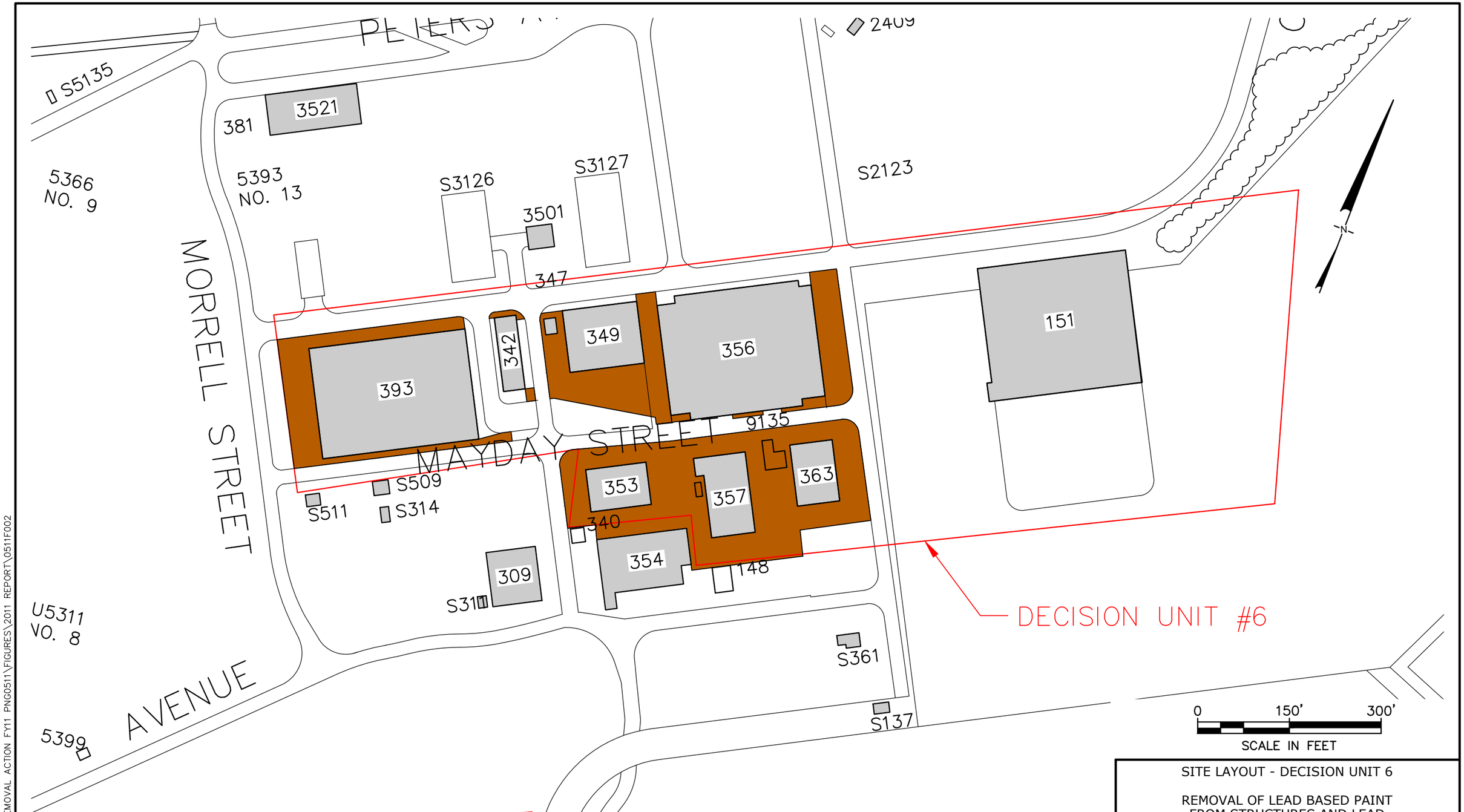
1. THE LOCATION OF ALL FEATURES SHOWN ARE APPROXIMATE.
2. THIS DRAWING IS FOR INFORMATION PURPOSES.

0 1000' 2000'

SCALE IN FEET

SITE LAYOUT WITH DECISION UNITS REMOVAL OF LEAD BASED PAINT FROM STRUCTURES AND LEAD CONTAMINATED SOIL AT MIDWAY ATOLL	
NORTH WEST DEMOLITION AND ENVIRONMENTAL, A JOINT VENTURE	Figure: 1
DECEMBER 2011	

L:\CADD\M\MIDWAY REMOVAL ACTION FY11 PNG0511\FIGURES\2011 REPORT\0511F001



NOTES:

1. THE LOCATION OF ALL FEATURES SHOWN ARE APPROXIMATE.
2. THIS DRAWING IS FOR INFORMATION PURPOSES.
3. A TOTAL OF 119,500 SF OF SHADECLOTH WAS DEPLOYED IN DECISION UNIT #6.

LEGEND

SHADECLOTH DEPLOYED

SITE LAYOUT - DECISION UNIT 6

REMOVAL OF LEAD BASED PAINT FROM STRUCTURES AND LEAD CONTAMINATED SOIL AT MIDWAY ATOLL

NORTH WEST DEMOLITION AND ENVIRONMENTAL, A JOINT VENTURE

DECEMBER 2011

Figure: 2

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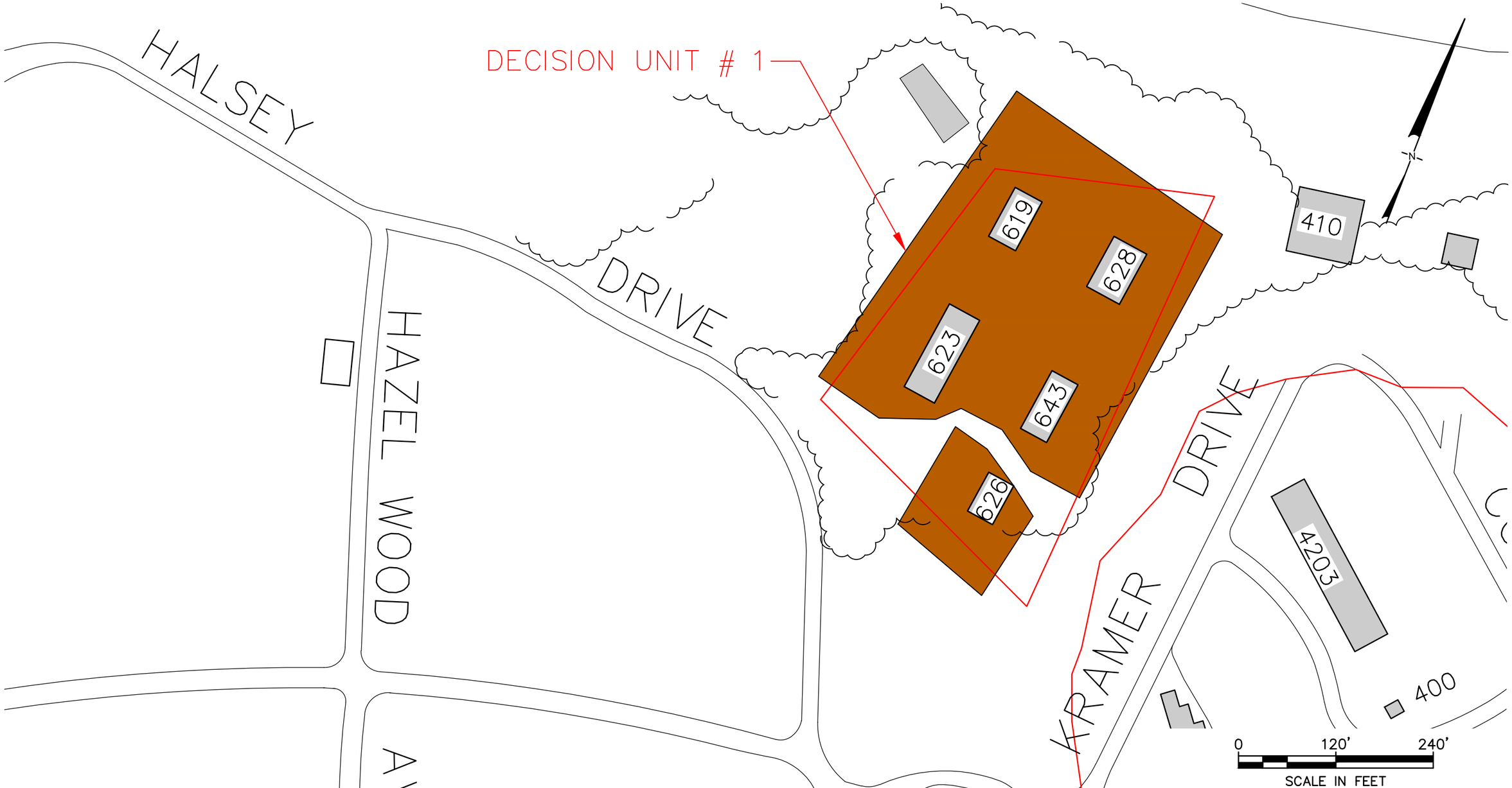


NOTES:

1. THE LOCATION OF ALL FEATURES SHOWN ARE APPROXIMATE.
2. THIS DRAWING IS FOR INFORMATION PURPOSES.
3. A TOTAL OF 89,900 SF OF SHADECLOTH WAS DEPLOYED IN DECISION UNIT #1.

LEGEND

SHADECLOTH DEPLOYED

SITE LAYOUT - DECISION UNIT 1

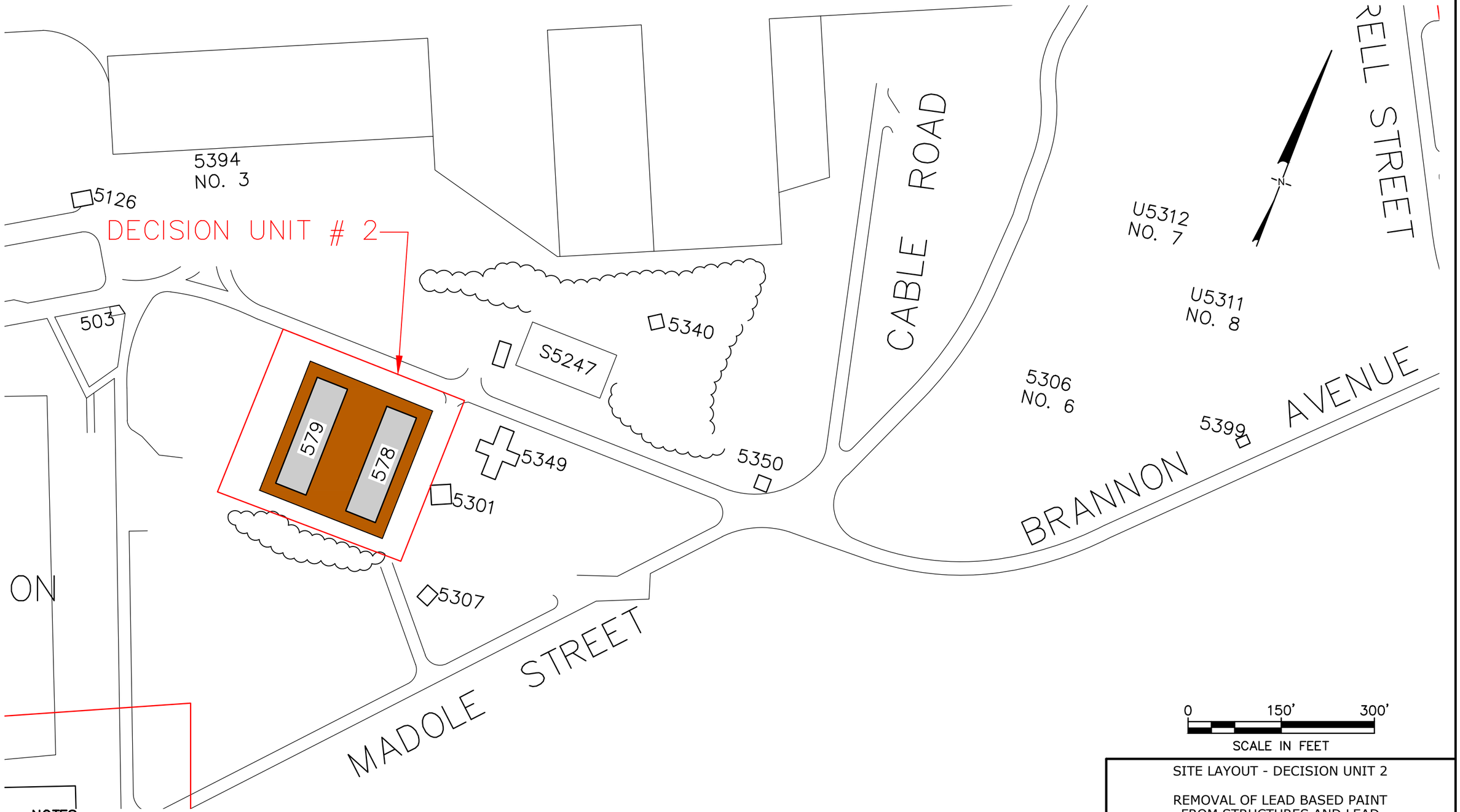
REMOVAL OF LEAD BASED PAINT FROM STRUCTURES AND LEAD CONTAMINATED SOIL AT MIDWAY ATOLL

NORTH WEST DEMOLITION AND ENVIRONMENTAL, A JOINT VENTURE

DECEMBER 2011

Figure: 3

L:\CADD\M\MIDWAY REMOVAL ACTION FY11 PNG0511\FIGURES\2011 REPORT\0511F003



NOTES:

1. THE LOCATION OF ALL FEATURES SHOWN ARE APPROXIMATE.
2. THIS DRAWING IS FOR INFORMATION PURPOSES.
3. A TOTAL OF 38,600 SF OF SHADECLOTH WAS DEPLOYED IN DECISION UNIT #2.

LEGEND

SHADECLOTH DEPLOYED

SITE LAYOUT - DECISION UNIT 2

REMOVAL OF LEAD BASED PAINT FROM STRUCTURES AND LEAD CONTAMINATED SOIL AT MIDWAY ATOLL

NORTH WEST DEMOLITION AND ENVIRONMENTAL, A JOINT VENTURE

DECEMBER 2011

Figure: 4

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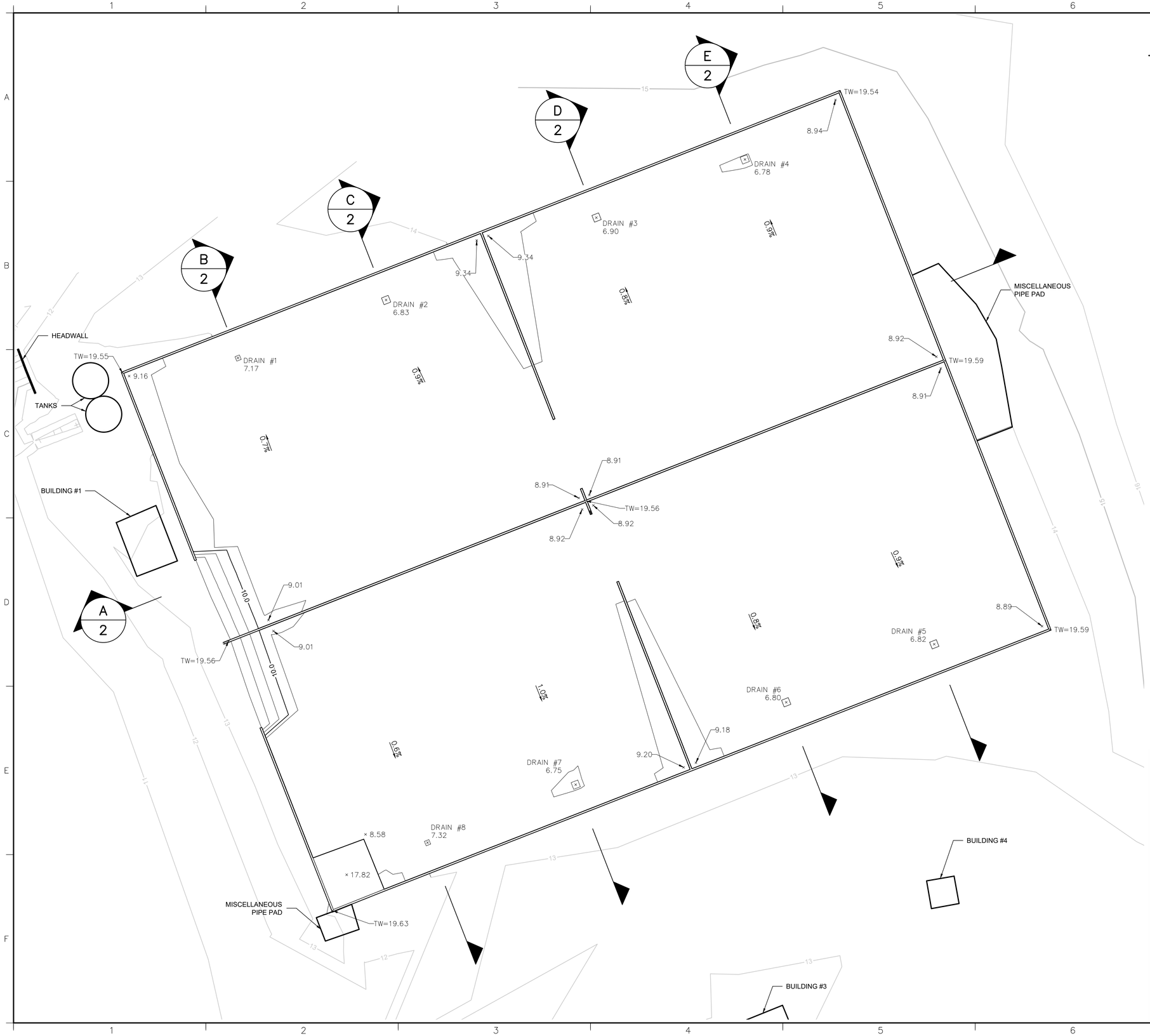

SITE LOCATION

0 800' 1600'
AERIAL SCALE IN FEET

LEGEND

730	EXISTING GROUND MAJOR CONTOUR (5')
	EXISTING GROUND MINOR CONTOUR (1')
730	UNIT R2 AS-BUILT MAJOR CONTOURS (2.5')
	UNIT R2 AS-BUILT MINOR CONTOURS (0.5')
× 8.71	AS-BUILT SPOT ELEVATION (FEET)

N

0 30' 60'
SCALE IN FEET

NOTES:

1. COORDINATE SYSTEM BASED UPON NAD83 (1993), UTM (ZONE 01).
2. AERIAL PHOTOGRAPHY PROVIDED BY DIGITALGLOBE-GEOEYE, 2011

REV	DATE	DESCRIPTION	DRN	APP

Geosyntec consultants
10875 RANCHO BERNARDO RD, SUTE 200
SAN DIEGO, CA 92127
PHONE: 858.674.6559

TITLE:
UNIT R2 AS-BUILT SURVEY

PROJECT:
UNIT R2 CAP DESIGN

SITE:
MIDWAY ATOLL NATIONAL WILDLIFE REFUGE

THIS DRAWING MAY NOT BE ISSUED FOR PROJECT TENDER OR CONSTRUCTION, UNLESS SEALED.

SIGNATURE

DATE

DESIGN BY:	GTC	DATE:	DECEMBER 2011
DRAWN BY:	MMC	PROJECT NO.:	PNG0511
CHECKED BY:	GTC	FILE:	SITE R2 UNIT SURVEY-11-14-11
REVIEWED BY:	GTC	FIGURE NO.:	5
APPROVED BY:	GTC		

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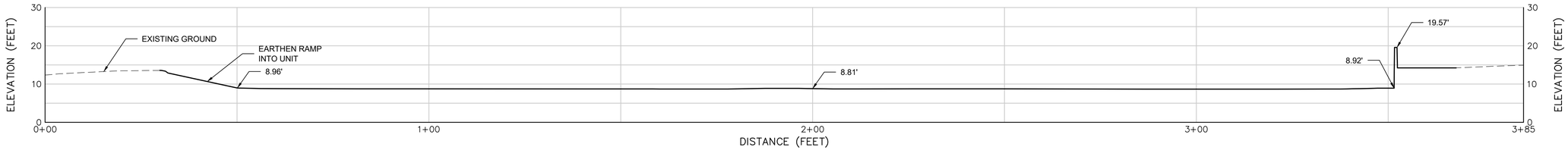
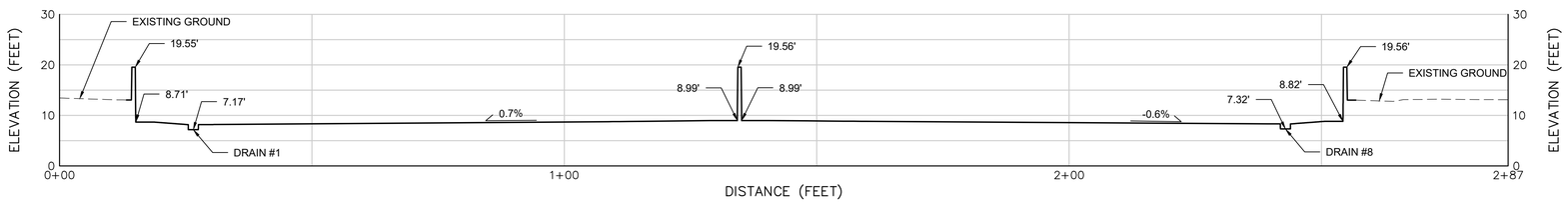


PROFILE A



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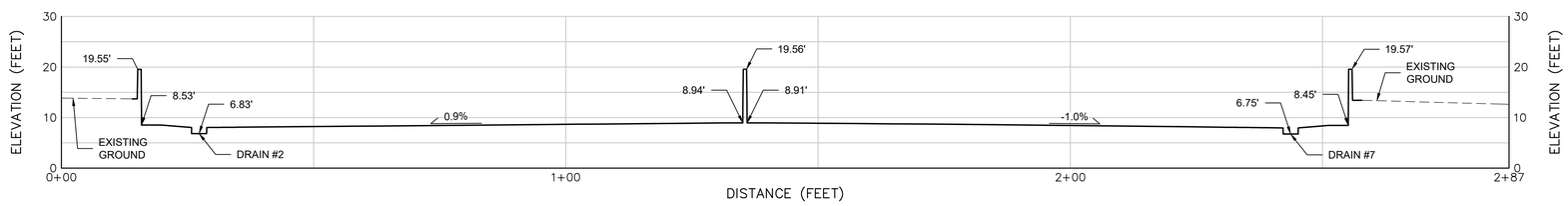

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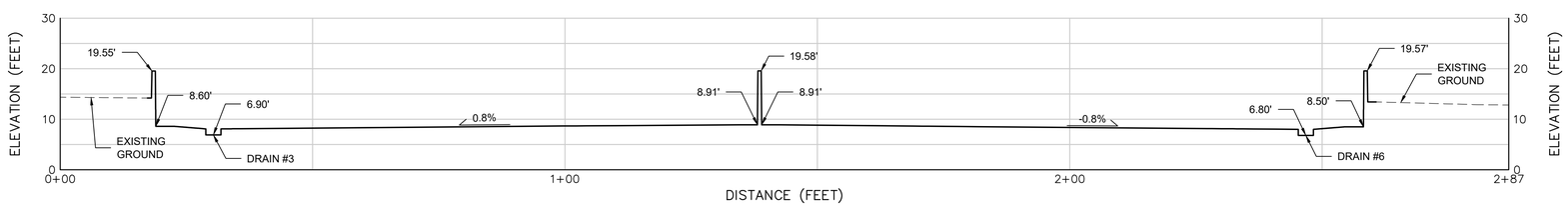
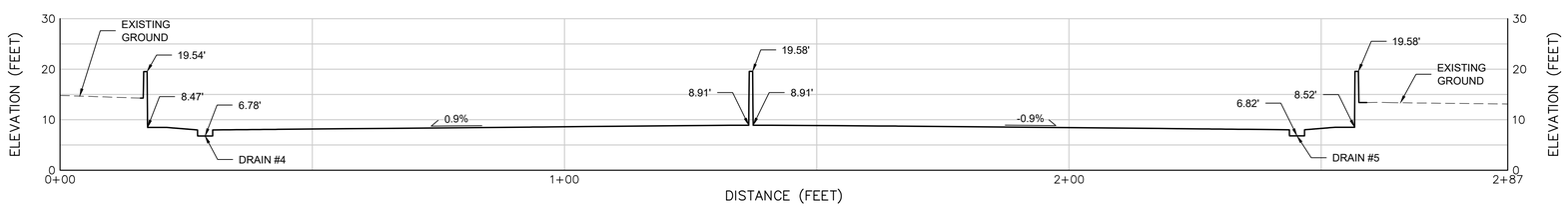


PROFILE D



PROFILE E

0 15' 30'

SCALE IN FEET
(HORIZONTAL = VERTICAL)

REV	DATE	DESCRIPTION	DRN	APP

Geosyntec consultants
10875 RANCHO BERNARDO RD, SUITE 200
SAN DIEGO, CA 92127
PHONE: 858.674.6559

TITLE: PROFILES

PROJECT: UNIT R2 CAP DESIGN

SITE: MIDWAY ATOLL NATIONAL WILDLIFE REFUGE

THIS DRAWING MAY NOT BE ISSUED FOR PROJECT TENDER OR CONSTRUCTION, UNLESS SEALED.

SIGNATURE

DATE

DESIGN BY:	GTC	DATE:	DECEMBER 2011
DRAWN BY:	MMC	PROJECT NO.:	PNG0511
CHECKED BY:	GTC	FILE:	SITE R2 UNIT SURVEY-11-14-11
REVIEWED BY:	GTC	FIGURE NO.:	6
APPROVED BY:	GTC		

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APPENDIX B

2012 FIELD YEAR SUPORTING DOCUMENTATION

TABLE 1
DAILY SUMMARY
MIDWAY ATOLL NWR

Date	Maectite Totals (gal)				Treated Soil Totals[1]			DU6 Clean Backfill Totals[1]		DU1 Clean Backfill Totals[1]			Demolition Load Count				
	Applied to Soils (DU6)	Applied to Soils (DU1)	Applied to Demolition Debris (DU1)	Cumulative Total	Treated Soil (Loads)[2]	Excavated / Hauled to R-2 Unit (CY)	Excavated / Hauled to R-2 Unit Cumulative Total (CY)	Excavated / Placed from Cargo Pier Borrow Area (CY)	Cumulative Total (CY)	Excavated / Placed from Cargo Pier Borrow Area (CY)	Excavated / Placed from DU6 (CY)	Cumulative Total (CY)	Treated Concrete (Loads)[2]	Clean Concrete (Loads)[3]	Metal Debris (Loads)[3]	Clean Wood (Loads)[3]	PVC Pipe (Loads)[3]
6/29/2012	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6/30/2012	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7/2/2012	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7/3/2012	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7/5/2012	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7/6/2012	NR	0	0	NR	0	0	0	0	0	0	0	0	0	0	0	0	0
7/7/2012	NR	0	0	NR	0	0	0	0	0	0	0	0	0	0	0	0	0
7/9/2012	NR	0	0	1,750	0	0	0	0	0	0	0	0	0	0	0	0	0
7/10/2012	500	0	0	2,250	0	0	0	0	0	0	0	0	0	0	0	0	0
7/11/2012	250	0	0	2,500	0	0	0	0	0	0	0	0	0	0	0	0	0
7/12/2012	0	0	0	2,500	20	300	300	0	0	0	0	0	0	0	0	0	0
7/13/2012	250	0	0	2,750	16	240	540	0	0	0	0	0	0	0	0	0	0
7/14/2012	500	0	0	3,250	20	300	840	0	0	0	0	0	0	0	0	0	0
7/16/2012	0	0	0	3,250	20	300	1,140	0	0	0	0	0	0	0	0	0	0
7/17/2012	NR	0	0	NR	20	300	1,440	0	0	0	0	0	0	0	0	0	0
7/18/2012	250	0	0	3,500	24	360	1,800	0	0	0	0	0	0	0	0	0	0
7/19/2020	250	0	0	3,750	19	285	2,085	0	0	0	0	0	0	0	0	0	0
7/20/2012	0	0	7	3,757	17	255	2,340	0	0	0	0	0	5	1	1	0	0
7/21/2012	0	0	9	3,766	26	390	2,730	0	0	0	0	0	0	0	3	0	0
7/22/2012	0	0	0	3,766	0	0	2,730	0	0	0	0	0	0	0	0	0	0
7/23/2012	0	0	28	3,794	17	255	2,985	0	0	0	0	0	12	0	0	1	0
7/24/2012	21	0	0	3,815	10	150	3,135	0	0	0	0	0	14	2	1	1	0
7/25/2012	264 [4]	0	8	4,087	0	0	3,135	0	0	0	0	0	0	1	3	1	0
7/26/2012	532 [4]	0	10	4,629	0	0	3,135	0	0	0	0	0	17	0	2	1	0
7/27/2012	352 [4]	0	8	4,989	0	0	3,135	255	255	0	0	0	5	1	1	0	0
7/28/2012	37	0	18	5,044	3	45	3,180	0	255	0	0	0	13	0	1	0	0
7/30/2012	63	0	0	5,107	6	90	3,270	540	795	0	0	0	5	0	2	0	0
7/31/2012	40	0	0	5,147	1	15	3,285	1,095	1,890	0	0	0	6	2	0	2	0
8/1/2012	0	0	0	5,147	0	0	3,285	1,050	2,940	0	0	0	0	0	1	0	0
8/2/2012	0	0	0	5,147	0	0	3,285	900	3,840	0	0	0	0	1	1	0	0
8/3/2012	0	0	0	5,147	0	0	3,285	1,335	5,175	0	0	0	0	0	0	0	0
8/4/2012	0	0	0	5,147	0	0	3,285	45	5,220	0	0	0	0	0	0	0	0
8/6/2012	0	0	0	5,147	0	0	3,285	0	5,220	0	0	0	0	0	0	0	0
8/7/2012	0	394	0	5,541	0	0	3,285	0	5,220	0	0	0	0	0	0	0	0
8/8/2012	0	606	0	6,147	0	0	3,285	0	5,220	0	0	0	0	0	0	0	0
8/9/2012	0	584	0	6,731	0	0	3,285	390	5,610	0	0	0	0	0	0	0	0
8/10/2012	0	477	0	7,208	0	0	3,285	780	6,390	0	0	0	0	0	0	0	0
8/11/2012	0	0	0	7,208	0	0	3,285	450	6,840	0	0	0	0	0	0	0	0
8/13/2012	0	0	0	7,208	0	0	3,285	1,170	8,010	0	0	0	0	0	0	0	0
8/14/2012	0	0	0	7,208	0	0	3,285	0	8,010	0	0	0	0	0	0	0	0
8/15/2012	0	0	0	7,208	0	0	3,285	0	8,010	0	0	0	0	6	0	0	0
8/16/2012	0	0	0	7,208	35	525	3,810	0	8,010	0	0	0	0	0	0	0	0
8/17/2012	0	0	0	7,208	41	615	4,425	0	8,010	0	0	0	0	0	0	0	0
8/18/2012	0	0	0	7,208	41	615	5,040	0	8,010	0	0	0	0	0	1	0	0
8/20/2012	0	856	0	8,064	18	270	5,310	0	8,010	0	0	0	0	0	0	0	0
8/21/2012	0	527	0	8,591	28	420	5,730	0	8,010	0	0	0	0	1	0	0	0
8/22/2012	0	293	0	8,884	44	660	6,390	0	8,010	0	0	0	0	0	0	0	0
8/23/2012	0	539	0	9,423	28	420	6,810	0	8,010	0	0	0	0	0	2	0	0
8/24/2012	0	617 [4]	0	10,040	8	120	6,930	0	8,010	0	0	0	0	0	0	0	0
8/25/2012	0	0	0	10,040	0	0	6,930	0	8,010	0	0	0	0	0	0	0	1
8/27/2012	0	365 [4]	0	10,405	0	0	6,930	0	8,010	0	0	0	0	0	1	0	0

TABLE 1
DAILY SUMMARY
MIDWAY ATOLL NWR

Date	Maectite Totals (gal)				Treated Soil Totals[1]			DU6 Clean Backfill Totals[1]		DU1 Clean Backfill Totals[1]			Demolition Load Count				
	Applied to Soils (DU6)	Applied to Soils (DU1)	Applied to Demolition Debris (DU1)	Cumulative Total	Treated Soil (Loads)[2]	Excavated / Hauled to R-2 Unit (CY)	Excavated / Hauled to R-2 Unit Cumulative Total (CY)	Excavated / Placed from Cargo Pier Borrow Area (CY)	Cumulative Total (CY)	Excavated / Placed from Cargo Pier Borrow Area (CY)	Excavated / Placed from DU6 (CY)	Cumulative Total (CY)	Treated Concrete (Loads)[2]	Clean Concrete (Loads)[3]	Metal Debris (Loads)[3]	Clean Wood (Loads)[3]	PVC Pipe (Loads)[3]
8/28/2012	0	0	0	10,405	0	0	6,930	0	8,010	615	0	615	0	0	0	0	0
8/29/2012	0	0	0	10,405	0	0	6,930	0	8,010	735	0	1,350	0	0	0	0	0
8/30/2012	0	0	0	10,405	0	0	6,930	0	8,010	0	825	2,175	0	0	0	0	0
8/31/2012	0	0	0	10,405	0	0	6,930	0	8,010	0	825	3,000	0	0	0	0	0
9/1/2012	0	0	0	10,405	0	0	6,930	0	8,010	0	630	3,630	0	0	0	0	0
9/4/2012	0	0	0	10,405	0	0	6,930	0	8,010	0	885	4,515	0	0	0	0	0
9/5/2012	0	51 [4]	0	10,456	0	0	6,930	0	8,010	0	225	4,740	0	0	0	0	0
9/6/2012	332	0	0	10,788	8	120	7,050	0	8,010	0	165	4,905	0	0	0	0	0
9/7/2012	0	0	0	10,788	17	255	7,305	0	8,010	0	120	5,025	0	0	0	0	0
9/8/2012	325	0	0	11,113	8	120	7,425	0	8,010	0	30	5,055	0	1	0	0	0
9/10/2012	0	0	0	11,113	0	0	7,425	225	8,235	690	0	5,745	0	0	0	0	0
9/11/2012	0	0	0	11,113	0	0	7,425	150	8,385	0	0	5,745	0	0	0	0	0
9/12/2012	0	0	0	11,113	0	0	7,425	0	8,385	30	0	5,775	0	1	0	0	0
9/13/2012	355	0	0	11,468	17	255	7,680	0	8,385	0	0	5,775	0	0	0	0	0
9/14/2012	0	0	0	11,468	11	165	7,845	0	8,385	0	0	5,775	0	0	0	0	0
9/15/2012	358 [4]	0	0	11,826	0	0	7,845	0	8,385	0	0	5,775	0	0	0	0	0
9/17/2012	149	0	0	11,617	11	165	8,010	0	8,385	0	0	5,775	0	0	0	0	0
9/18/2012	181 [4]	0	0	11,798	0	0	8,010	810	9,195	0	0	5,775	0	0	0	0	0
9/19/2012	0	0	0	11,798	0	0	8,010	0	9,195	0	0	5,775	0	0	0	0	0
9/20/2012	0	0	0	11,798	0	0	8,010	270	9,465	0	0	5,775	0	0	0	0	0
9/21/2012	0	0	0	11,798	0	0	8,010	195	9,660	0	0	5,775	0	0	0	0	0
9/22/2012	0	0	0	11,798	0	0	8,010	0	9,660	0	0	5,775	0	0	0	0	0
9/24/2012	0	0	0	11,798	0	0	8,010	0	9,660	0	0	5,775	0	0	0	0	0
9/25/2012	0	0	0	11,798	0	0	8,010	0	9,660	0	0	5,775	0	0	0	0	0

Notes
1. Estimates are based on an estimated 2.5 CY excavator bucket and 15 CY per truck load.
2. Treated soil and concrete loads were hauled to and deposited in the R-2 Unit.
3. Clean concrete, clean metal, clean wood and clean PVC pipe loads were hauled and deposited in separate project stockpiles located near Bldg 151 (Sea Plane Hanger).
4. MAECTITE® applied to soils remaining beneath the excavation.
CY - cubic yard
PVC - polyvinyl chloride
gal - gallon
NR - not recorded

TABLE 2
DU1 CONFIRMATION SAMPLING ANALYTICAL RESULTS
MIDWAY ATOLL NWR

Sample Identification	Date	Lead Concentration (mg/kg)	Note
619	8/20/2012	59 B	Bldg 619
Dup-13	8/20/2012	59 B	Duplicate of Sample ID 619
Dup-14	8/20/2012	54 B	Duplicate of Sample ID 619
628	8/18/2012	56 B	Bldg 628
Dup-15	8/18/2012	91 B	Duplicate of Sample ID 628
Dup-16	8/18/2012	74 B	Duplicate of Sample ID 628
643	8/22/2012	230 B	Bldg 643
Dup -17	8/22/2012	280 B	Duplicate of Sample ID 643
Dup -18	8/22/2012	300 B	Duplicate of Sample ID 643
623	8/23/2012	190 B	Bldg 623
Dup -19	8/23/2012	140 B	Duplicate of Sample ID 643
Dup - 20	8/23/2012	190 B	Duplicate of Sample ID 643
626	8/24/2012	300 B	Bldg 626
Dup - 21	8/24/2012	180 B	Duplicate of Sample ID 626
Dup - 22	8/24/2012	180 B	Duplicate of Sample ID 626

Notes

Lead was analyzed by EPA Method 6010B following MIS / ICS preparation.

A field rinsate blank sample was collected (Sample ID: FB-072512) and analyzed by EPA Method 6010B for lead only. Result was < 0.03 mg/l.

MIS - multi-incremental sampling

EPA - Environmental Protection Agency

B - Blank contamination. Lead was detected in the laboratory method blank. Detected concentrations were slighly above the method reporting limit. As such, the blank contamination does not affect the usability of the data.

mg/kg - milligram per kilogram

mg/l - milligram per liter

TABLE 3
DU6 CONFIRMATION SAMPLING ANALYTICAL RESULTS
MIDWAY ATOLL NWR

Sample Identification	Date	Lead Concentration (mg/kg)	Note
353	7/16/2012	71	Bldg 353
Dup-1	7/16/2012	69	Duplicate of Sample ID 353
Dup-2	7/16/2012	72	Duplicate of Sample ID 353
357	7/18/2012	97	Bldg 357
Dup-3	7/18/2012	81	Duplicate of Sample ID 357
Dup-4	7/18/2012	110	Duplicate of Sample ID 357
363	7/21/2012	62	Bldg 363
Dup-5	7/21/2012	120	Duplicate of Sample ID 363
Dup-6	7/21/2012	81	Duplicate of Sample ID 363
349	7/24/2012	59	Bldg 349
Dup-7	7/24/2012	64	Duplicate of Sample ID 349
Dup-8	7/24/2012	49	Duplicate of Sample ID 349
356	7/25/2012	57	Bldg 356
Dup-9	7/25/2012	89	Duplicate of Sample ID 356
Dup-10	7/25/2012	94	Duplicate of Sample ID 356
342	7/31/2012	620	Bldg 342
Dup-11	7/31/2012	460	Duplicate of Sample ID 342
Dup-12	7/31/2012	380	Duplicate of Sample ID 343
151	9/8/2012	81	Bldg 151
Dup - 23	9/8/2012	170	Duplicate of Sample ID 151
Dup - 24	9/8/2012	160	Duplicate of Sample ID 151
393	9/18/2012	110	Bldg 393
Dup - 25	9/18/2012	110	Duplicate of Sample ID 393
Dup - 26	9/18/2012	200	Duplicate of Sample ID 393

Notes

Lead was analyzed by EPA Method 6010B following MIS/ICS preparation.

A field rinsate blank sample was collected (Sample ID: FB-072512) and analyzed by EPA Method 6010B for lead only. Result was < 0.03 mg/l.

MIS - multi-incremental sampling

EPA - Environmental Protection Agency

mg/kg - milligram per kilogram

mg/l - milligram per liter

TABLE 4
MEP SAMPLING ANALYTICAL RESULTS
MIDWAY ATOLL NWR

Sample Identification	Date	Lead Concentration (µg/l)
MEP 2012	10/17/2012	5.6
		12
		15
		25
		21
		20
		20
		19
		22

Notes
Lead was analyzed by EPA Method 6010C-Leach
EPA - Environmental Protection Agency
µg/l - milligram per liter
The Toxicity Characteristic Leaching Procedure (TCLP) value for lead is 5 milligrams per liter (mg/l)

TABLE 5
ALTERNATIVE BORROW SOURCE ANALYTICAL RESULTS
MIDWAY ATOLL NWR

Analysis Method	Sample ID	B2080912	B3082212	State of Hawaii Environmental Action Levels
	Date Sampled	8/9/2012	8/22/2012	
	Analyte	Result		
Metals - EPA Method 6010B & 7474A (mg/kg)	Arsenic	0.71	<5.9	24
	Barium	10	5.4	1,000
	Cadmium	<0.99	<0.98	14
	Chromium	4.8	4.8	1,145
	Lead	28	<3.0	200
	Selenium	<9.9	<9.8	78
	Silver	<2.0	<2.0	78
	Mercury	0.029	<0.017	4.7
PAHs - EPA Method 8270 SIM (mg/kg)	1-Methylnaphthalene	<0.0015	<0.0016	0.79
	2-Methylnaphthalene	<0.0015	<0.0016	0.87
	Acenaphthene	1.2	<0.0016	118
	Acenaphthylene	<0.0015	<0.0016	12.7
	Anthracene	0.97	<0.0016	4.3
	Benzo(a)anthracene	6.5	<0.0016	1.4
	Benzo(a)pyrene	7.8	<0.0016	10.15
	Benzo(b)flouranthene	11	<0.0016	1.5
	Benzo(g,h,i)perylene	5.7	<0.0016	26.6
	Benzo(k)fluoranthene	4.1	<0.0016	14.8
	Chrysene	9.8	<0.0016	10.5
	Dibenzo(a,h)anthracene	1.5	<0.0016	0.15
	Fluoranthene	<0.0015	<0.0016	86.5
	Fluorene	14	<0.0016	104
	Indeno(1,2,3-cd)pyrene	7.4	<0.0016	1.5
	Naphthalene	<0.0015	<0.0016	4.4
	Phenanthrene	5.2	<0.0016	68.6
	Pyrene	14	<0.0016	44

TABLE 5
ALTERNATIVE BORROW SOURCE ANALYTICAL RESULTS
MIDWAY ATOLL NWR

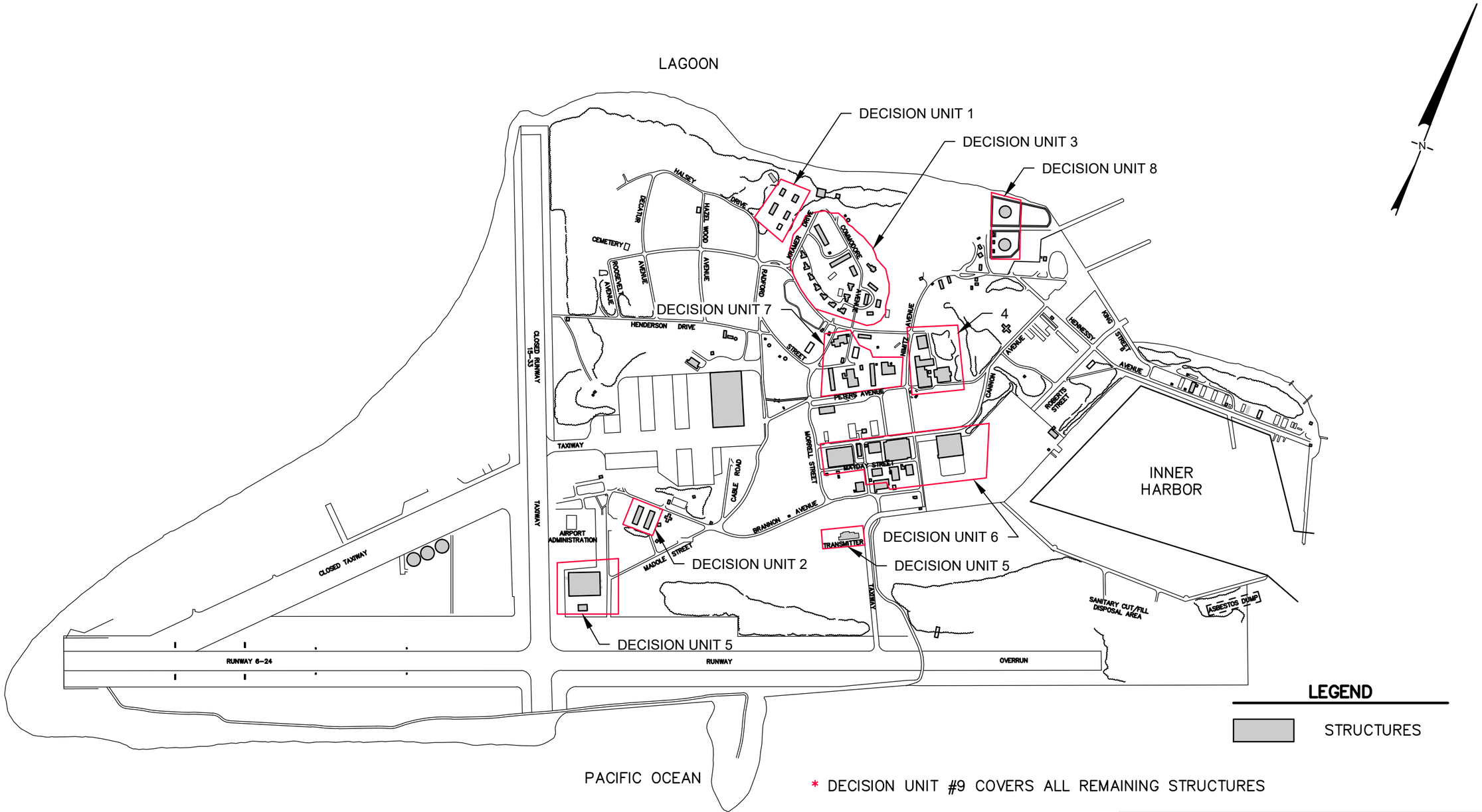
Analysis Method	Sample ID	B2080912	B3082212	State of Hawaii Environmental Action Levels
	Date Sampled	8/9/2012	8/22/2012	
	Analyte	Result		
Pesticides - EPA Method 8081 & 8081A (mg/kg)	4,4'-DDD	0.0035	<0.00066	2
	4,4'-DDE	0.53	0.000064 J	1.4
	4,4'-DDT	0.1	<0.00066	1.7
	Aldrin	<0.0016	<0.00033	0.92
	alpha-BHC	<0.0016	<0.00033	--
	beta-BHC	<0.0016	<0.00033	--
	delta-BHC	<0.0016	<0.00033	--
	Chlordane	<0.0016	0.00074	16
	Dieldrin	<0.0016	<0.00066	1.5
	Endosulfan I	0.00097	<0.00033	18
	Endosulfan II	<0.0016	<0.00066	18
	Endosulfan sulfate	<0.0033	<0.00066	--
	Endrin	<0.0033	<0.00066	3.7
	Endrin aldehyde	<0.0033	<0.00066	--
	Endrin ketone	<0.0016	<0.00066	--
	gamma-BHC (Lindane)	<0.0016	<0.00033	0.037
	Heptachlor	<0.0033	<0.00066	0.11
	Heptachlor epoxide	<0.0016	<0.00033	0.053
	Methoxychlor	<0.016	<0.0033	16
	Toxaphene	<0.160	<0.033	0.44
	alpha-Chlordane	0.0035	0.00025 J	16
	gamma-Chlordane	0.0024	0.00049	16
PCBs - EPA Method 8082 (mg/kg)	Aroclor 1016	<0.0016	<0.0030	1.1
	Aroclor 1221	<0.0016	<0.0033	1.1
	Aroclor 1232	<0.0016	<0.0033	1.1
	Aroclor 1242	<0.0016	<0.0030	1.1
	Aroclor 1248	<0.0016	<0.0030	1.1
	Aroclor 1254	<0.0016	<0.0030	1.1
	Aroclor 1260	<0.0016	<0.0030	1.1

Notes

"<#" is interpreted as not detected above the Reporting Limit concentration

"J:" indicates the value was less than the Reporting Limit but greater than the Method Detection Limit. Value is considered an estimate.

Shading indicates value exceeds State of Hawaii Enviornmental Action Level



NOTES:

1. THE LOCATION OF ALL FEATURES SHOWN ARE APPROXIMATE.
2. THIS DRAWING IS FOR INFORMATION PURPOSES.

SITE LAYOUT WITH DECISION UNITS

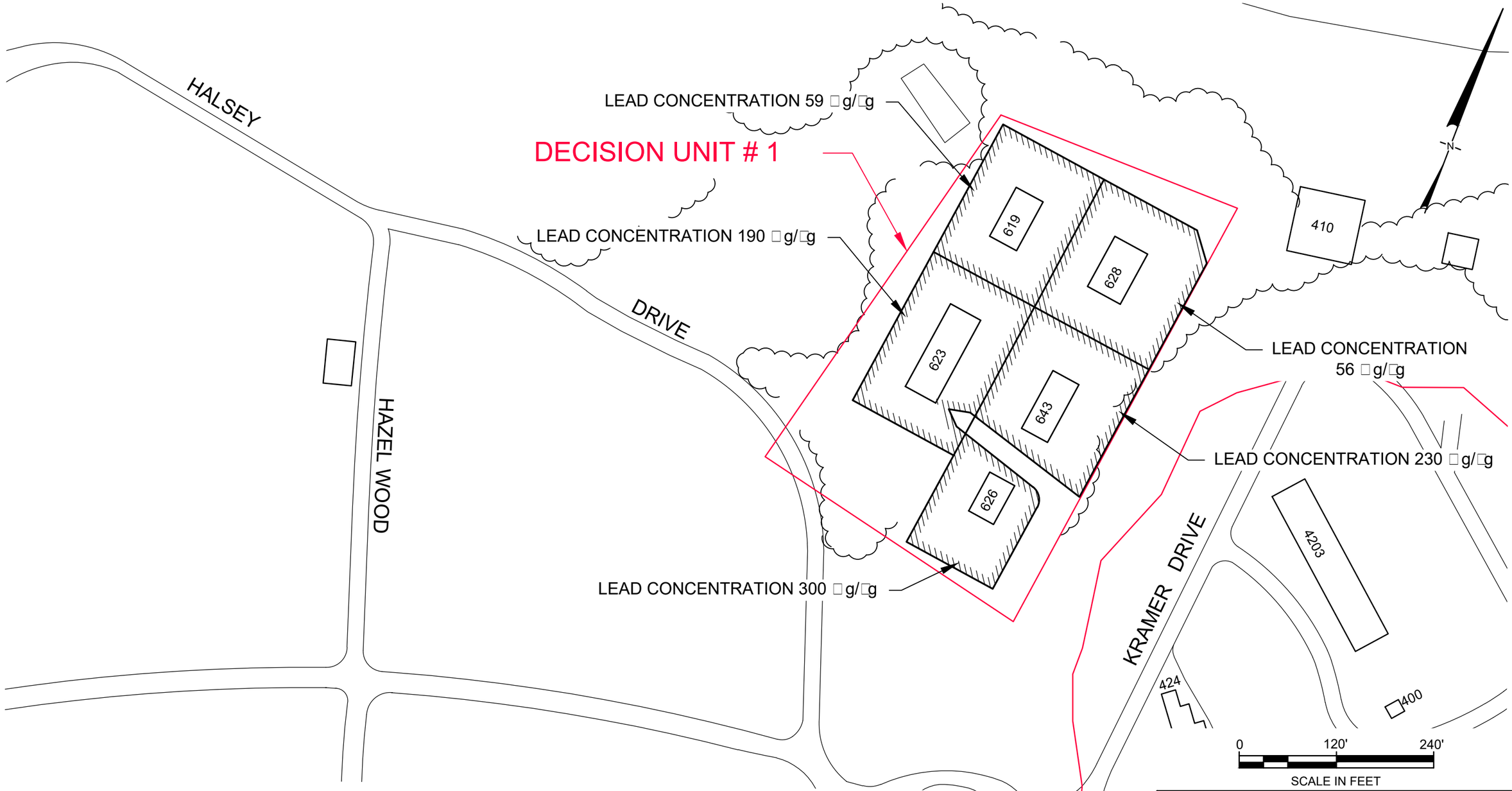
REMOVAL OF LEAD BASED PAINT FROM STRUCTURES AND LEAD CONTAMINATED SOIL AT MIDWAY ATOLL

NORTH WEST DEMOLITION AND ENVIRONMENTAL, A JOINT VENTURE

NOVEMBER 2012

Figure: 1

C:\PDRIVE\PRJ\SDCADD\CADD\PNG0515 MIDWAY\PNG0515-01-04\FIGURES\PNG0515 F001



LEGEND

▨	EXTENT OF EXCAVATION
□g/□g	MILLIGRAM PER KILOGRAM

NOTES:

1. THE LOCATION OF ALL FEATURES SHOWN ARE APPROXIMATE.
2. THIS DRAWING IS FOR INFORMATION PURPOSES.

CONFIRMATION SAMPLE RESULTS
DECISION UNIT 1
REMOVAL OF LEAD BASED PAINT
FROM STRUCTURES AND LEAD
CONTAMINATED SOIL AT MIDWAY ATOLL

NORTH WEST DEMOLITION
AND ENVIRONMENTAL,
A JOINT VENTURE

NOVEMBER 2012

Figure:
2

P:\PRJ\SDC\ADD\CADD\PNG0515 MIDWAY\PNG0515-01-04\FIGURES\PNG0515 F002-3

PETERS AVENUE

3521

2409

S3126

S3127

3501

LEAD CONCENTRATION 59 □g/□g

LEAD CONCENTRATION 620B □g/□g

LEAD CONCENTRATION 110 □g/□g

LEAD CONCENTRATION 57 □g/□g

LEAD CONCENTRATION 81 □g/□g

N

MORRELL STREET

342

349

356

151

393

9135

MAYDAY STREET

LEAD CONCENTRATION 62 □g/□g

S509

S511

S314

353

357

363

LEAD CONCENTRATION 71 □g/□g

340

554

148

309

S311

LEAD CONCENTRATION 97 □g/□g

DECISION UNIT #6

S361

BRANNON AVENUE

S137

0 150' 300'

SCALE IN FEET

LEGEND

EXTENT OF EXCAVATION

□g/□g MILLIGRAM PER KILOGRAM

NOTES:

1. THE LOCATION OF ALL FEATURES SHOWN ARE APPROXIMATE.
2. THIS DRAWING IS FOR INFORMATION PURPOSES.

CONFIRMATION SAMPLE RESULTS
DECISION UNIT 6
REMOVAL OF LEAD BASED PAINT
FROM STRUCTURES AND LEAD
CONTAMINATED SOIL AT MIDWAY ATOLL

NORTH WEST DEMOLITION
AND ENVIRONMENTAL,
A JOINT VENTURE

NOVEMBER 2012

Figure:
3

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APPENDIX A
DAILY FIELD REPORTS
(See separate binder for Appendix A)

APPENDIX B
SELECT SITE PHOTOGRAPHS AND SITE PHOTOGRAPH SUMMARY DVD

Items of Potential Historical Significance
Part 1. Recovered during Demolition of Cable Buildings in DU1

Project: Removal of Lead Based Paint from Structures and Lead Contaminated Soil
Location: Midway Atoll National Wildlife Refuge
Prepared for: US Fish and Wildlife Service
Last Revised: 08/08/12

As per the project Removal Action Work Plan (RAWP), Section 3.2.5 Preservation and Protection of Historical, Archeological, and Cultural Resources, the items listed below were recovered during normal activities associated with the demolition of the cable buildings in Decision Unit 1 (DU1) and are submitted on behalf of NW Demolition and Environmental (NWDE) for significance review by a third party archeologist chosen by the US FWS.

The items are categorized and labeled according to the nearest building associated with said item, and numbered in the order that they were recovered in the field, for example, the item labeled A626-1 was found near Building 626 and was the first item recovered at this location. All items listed below have been turned over to the US FWS project manager and are accounted for in their entirety.

Items Recovered near Building 626:

Photo 01 – A626-1

Item No: A626-1
Date and time recovered: 7/20/12 14:30
Recovered by: C. Nelson, NWDE
Location: N28.21538, W177.37871, see attached map
Description: 10 clear and blue-green glass bottles exposed when floor slab / footings were removed. Found 2 feet south of the building corner at a depth of approximately 1 foot below grade. Field location marked with lath and flagging.

Photo 02: Item A626-2.

Item No: A626-2
Date and time recovered: 7/20/12 time not recorded
Recovered by: C. Nelson, NWDE
Location: N28.21533, W177.37872, see attached map
Description: An item, best described as some kind of small shell button, was found while cleaning up demolition debris on the ground surface. Field location marked with lath and flagging.

Items Recovered near Building 623:

Photo 03 - A623-1

Item No: A623-1
Date and time recovered: 7/21/12 16:00
Recovered by: C. Nelson, NWDE
Location: N28.21560, W177.37903 (based on aerial photograph), see attached map
Description: The item, a blue pencil fragment, was found while sorting the building demolition debris at the building corner. Field location marked with lath and flagging.

Photo 04: Item A623-2.

Item No: A623-2
Date and time recovered: 7/21/12 time not recorded
Recovered by: U.S. FWS personnel
Location: N28.21564, W177.37921, see attached map
Description: The item, a clear glass jar, had apparently fallen out of the root ball of a banyan tree that was removed prior to demolition and was found on the ground surface. The location marked on the attached map and flagged in the field indicates the approximate location of the banyan tree before it was removed.

Photo 05: Item A623-3.

Item No: A623-3
Date and time recovered: 7/31/12 15:00
Recovered by: Found by C. Nelson, NWDE
Location: N28.21573, W177.38962 (based on aerial photograph), see attached map
Description: The item, comprised of several broken green glass bottle fragments, was found in during cleaning in the building pad area at a depth of approximately 2 inches below grade. The location marked on the attached map and flagged in the field indicates the approximate location where the item was found, prior to removal.

Items Recovered near Building 619:

Photo 06: Item A619-1.

Item No: A619-1
Date and time recovered: 7/24/12 10:19
Recovered by: Found by D. Liebelt, NWDE
Location N28.21610, W177.37908 (based on aerial photograph), see attached map
Description: The item, a pearl colored piece of plastic, was exposed when removing shadecloth in preparation for demolition activities related to Bldg 619. The item was laying on the ground surface. The location marked on the attached map and flagged in the field indicates the approximate location where the item was found, prior to removal.

Items Recovered near Building 628:

Item No: N/A – No items recovered in this area
Date and time recovered: N/A
Recovered by: N/A
Location: N/A
Description: C. Tyrrell, Geosyntec, on site for building pad removal on 07/31/12. No items recovered from this location.

Additional Notes:

Ceramic pipe around perimeter (approximately 6.5-inch O.D.) at a depth of 2 feet below ground surface, 2 pieces collected and stored with foundation footings (photo below).

Photo 07: Photo of piece of ceramic pipe found around all building perimeters.

Items of Potential Historical Significance
Part 2. Recovered during the Soil Treatment in areas Surrounding the Cable Buildings in DU1

Project: Removal of Lead Based Paint from Structures and Lead Contaminated Soil
Location: Midway Atoll National Wildlife Refuge
Prepared for: US Fish and Wildlife Service
Last Revised: 08/13/12

As per the project Removal Action Work Plan (RAWP), Section 3.2.5 Preservation and Protection of Historical, Archeological, and Cultural Resources, the items listed below were recovered during normal activities associated with the Maectite soil treatment, mixing, and excavation of the cable buildings in Decision Unit 1 (DU1) and are submitted on behalf of NW Demolition and Environmental (NWDE) for significance review by a third party archeologist chosen by the US FWS.

The items are categorized and labeled according to the nearest building associated with said item, and numbered in the order that they were recovered in the field, for example, the item labeled A626-1 was found near Building 626 and was the first item recovered at this location. All items listed below have been turned over to the US FWS project manager and are accounted for in their entirety.

Items Recovered near footprint of Building 626:

Item No: N/A – No items recovered in this area
Date and time recovered: N/A
Recovered by: N/A
Location: N/A
Description: No items recovered from this location.

Items Recovered near footprint of Building 623:

Item No: N/A – No items recovered in this area
Date and time recovered: N/A
Recovered by: N/A
Location: N/A
Description: No items recovered from this location.

Items Recovered near footprint of Building 619:

Item No: A619-2

Photo 01: Item A619-2.

Item No: A619-2
Date and time recovered: 8/8/12 13:00
Recovered by: A. Phillips, NWDE
Location: N28.21234, W177.37910, see attached map
Description: 3 clear glass bottles exposed when 1st application of Maectite was being mixed in to soil. Found approximately 27 feet north and 25 feet west of the southwest building corner at a depth of approximately 1 foot below grade. Field location marked with lath and flagging.

Item No: A619-3

Photo 01: Item A619-3.

Date and time recovered: 8/10/12 11:10

Recovered by: C. Nelson, NWDE
Location: N 28.21619°, W 177.37895°, see attached map
Description: Selby lead balance weight exposed during a heavy storm event. Item found on surface in southwest quarter of building pad. Field location marked with lath and flagging.

Items Recovered near Building 628:

Item No: N/A – No items recovered in this area
Date and time recovered: N/A
Recovered by: N/A
Location: N/A
Description: No items recovered from this location.

Additional Notes:

Figure 1. Location Map of Items Recovered in DU1.

APPENDIX C

2013 FIELD YEAR SUPORTING DOCUMENTATION

TABLE 1
2013 ADDITIONAL SOIL SAMPLING RESULTS
MIDWAY ATOLL NATIONAL WILDLIFE REFUGE

Sample Identification	Sample Date	Lead Concentration (mg/kg)
Building 578		
578-P6 (0-6)	8/24/2013	140
578-P6 (12-18)	8/24/2013	8.4
578-P6 (24-30)	8/24/2013	51
578-P7 (0-6)	8/26/2013	180
578-P7 (12-18)	8/26/2013	36
578-P7 (24-30)	8/26/2013	6.3
578-P9 (0-6)	8/26/2013	37
578-P9 (12-18)	8/26/2013	6.1
578-P9 (24-30)	8/26/2013	2.1
578-P10 (0-6)	8/26/2013	140
578-P10 (12-18)	8/26/2013	47
578-P10 (24-30)	8/26/2013	6.5
578-P10 (30-36)	8/26/2013	15
578-P11 (0-6)	8/26/2013	29
578-P11 (12-18)	8/26/2013	27
578-P11 (24-30)	8/26/2013	34
578-P12 (0-6)	8/26/2013	980
578-P12 (0-6) DUP		610
578-P12 (12-18)	8/26/2013	85
578-P12 (12-18) DUP		120
578-P12 (24-30)	8/26/2013	4.4
578-P12 (24-30) DUP		5.2
578-P13 (0-6)	9/2/2013	31
578-P13 (12-18)	9/2/2013	38
578-P13 (24-30)	9/2/2013	8.8
578-P14 (0-6)	9/2/2013	95
578-P14 (12-18)	9/2/2013	11
578-P14 (24-30)	9/2/2013	3.3 J
578-P15 (0-6)	9/2/2013	28
578-P15 (12-18)	9/2/2013	21
578-P15 (24-30)	9/2/2013	2.2 J
578-P16 (0-6)	9/2/2013	29
578-P16 (12-18)	9/2/2013	1.5 J
578-P16 (24-30)	9/2/2013	1.5 J
578-P17 (0-6)	9/2/2013	62
578-P17 (12-18)	9/2/2013	51
578-P17 (24-30)	9/2/2013	4.1
578-P18 (0-6)	9/2/2013	34
578-P18 (12-18)	9/2/2013	2.9
578-P18 (24-30)	9/2/2013	<3.6

TABLE 1
2013 ADDITIONAL SOIL SAMPLING RESULTS
MIDWAY ATOLL NATIONAL WILDLIFE REFUGE

Sample Identification	Sample Date	Lead Concentration (mg/kg)
578-P19 (0-6)	8/31/2013	23
578-P19 (12-18)	8/31/2013	16
578-P19 (24-30)	8/31/2013	25
578-P20 (0-6)	8/31/2013	100
578-P20 (12-18)	8/31/2013	41
578-P20 (24-30)	8/31/2013	0.99 J
578-P20 (24-30)	8/31/2013	423
Building 579		
579-P1 (0-6)	8/28/2013	27
579-P1 (12-18)	8/28/2013	37
579-P1 (24-30)	8/28/2013	<6.2
579-P2 (0-6)	8/28/2013	53
579-P2 (12-18)	8/28/2013	11
579-P2 (24-30)	8/28/2013	2 J
579-P3 (0-6)	8/29/2013	37
579-P3 (12-18)	8/29/2013	2.1 J
579-P3 (24-30)	8/29/2013	0.99 J
579-P4 (0-6)	8/29/2013	43
579-P4 (12-18)	8/29/2013	16
579-P4 (24-30)	8/29/2013	6.1
579-P5 (0-6)	8/29/2013	29
579-P5 (12-18)	8/29/2013	19
579-P5 (24-30)	8/29/2013	9.3
579-P6 (0-6)	8/29/2013	410
579-P6 (12-18)	8/29/2013	370
579-P6 (24-30)	8/29/2013	21
579-P7 (0-6)	8/29/2013	200
579-P7 (0-6) DUP		180
579-P7 (12-18)	8/29/2013	84
579-P7 (12-18) DUP		120
579-P7 (24-30)	8/29/2013	0.84 J
579-P7 (24-30) DUP		2.5 J
579-P8 (0-6)	8/29/2013	83
579-P8 (12-18)	8/29/2013	3.1 J
579-P8 (24-30)	8/29/2013	2 J
579-P9 (0-6)	8/29/2013	150
579-P9 (12-18)	8/29/2013	160
579-P9 (24-30)	8/29/2013	10
579-P10 (0-6)	8/29/2013	160
579-P10 (12-18)	8/29/2013	72
579-P10 (24-30)	8/29/2013	130

TABLE 1
2013 ADDITIONAL SOIL SAMPLING RESULTS
MIDWAY ATOLL NATIONAL WILDLIFE REFUGE

Sample Identification	Sample Date	Lead Concentration (mg/kg)
579-P10 (30-36)	8/29/2013	230
579-P11 (0-6)	8/29/2013	230
579-P11 (12-18)	8/29/2013	11
579-P11 (24-30)	8/29/2013	4.6
579-P12 (0-6)	8/29/2013	210
579-P12 (12-18)	8/29/2013	140
579-P12 (24-30)	8/29/2013	110
579-P13 (12-18)	8/29/2013	350
579-P13 (24-30)	8/29/2013	34
579-P14 (0-6)	8/30/2013	220
579-P14 (12-18)	8/30/2013	78
579-P14 (24-30)	8/30/2013	83
579-P15 (0-6)	8/30/2013	37
579-P15 (12-18)	8/30/2013	14
579-P15 (24-30)	8/30/2013	3.3 J
579-P16 (0-6)	8/31/2013	83
579-P16 (12-18)	8/31/2013	25
579-P16 (24-30)	8/31/2013	1 J
579-P17 (0-6)	8/30/2013	150
579-P17 (12-18)	8/30/2013	41
579-P17 (24-30)	8/30/2013	8.1
579-P18 (0-6)	8/30/2013	27
579-P18 (12-18)	8/30/2013	35
579-P18 (24-30)	8/30/2013	1.8 J
579-P19 (0-6)	8/30/2013	36
579-P19 (12-18)	8/30/2013	38
579-P19 (24-30)	8/30/2013	1.9 J
579-P19 (30-36)	8/30/2013	3
579-P20 (0-6)	8/30/2013	63
579-P20 (12-18)	8/30/2013	18
579-P20 (24-30)	8/30/2013	1.5 J
579-P21 (0-6)	8/30/2013	250
579-P21 (12-18)	8/30/2013	41
579-P21 (24-30)	8/30/2013	23
579-P22 (0-6)	8/30/2013	85
579-P22 (0-6) DUP		160
579-P22 (12-18)	8/30/2013	25
579-P22 (12-18) DUP		22
579-P22 (24-30)	8/30/2013	2.4 J
579-P22 (24-30) DUP		2.8
579-P23 (0-6)	8/30/2013	380

TABLE 1
2013 ADDITIONAL SOIL SAMPLING RESULTS
MIDWAY ATOLL NATIONAL WILDLIFE REFUGE

Sample Identification	Sample Date	Lead Concentration (mg/kg)
579-P23 (12-18)	8/30/2013	300
579-P23 (24-30)	8/30/2013	120
579-P24 (0-6)	8/31/2013	64
579-P24 (12-18)	8/31/2013	33
579-P24 (24-30)	8/31/2013	31
579-P25 (0-6)	8/31/2013	20
579-P25 (12-18)	8/31/2013	26
579-P25 (24-30)	8/31/2013	15
579-P26 (0-6)	8/31/2013	320
579-P26 (12-18)	8/31/2013	120
579-P26 (24-30)	8/31/2013	2.7 J
579-P27 (0-6)	8/31/2013	230
579-P27 (12-18)	8/31/2013	11
579-P27 (24-30)	8/31/2013	2.3 J
579-P27 (30-36)	8/31/2013	1.9 J
Building 2404		
2404-P1 (0-6)	8/27/2013	69
2404-P1 (12-18)	8/27/2013	2.6 J
2404-P1 (24-30)	8/27/2013	1.1 J
2404-P2 (0-6)	8/27/2013	230
2404-P2 (12-18)	8/27/2013	190
2404-P2 (24-30)	8/27/2013	80
2404-P3 (0-6)	8/27/2013	270
2404-P3 (12-18)	8/27/2013	4.2
2404-P3 (24-30)	8/27/2013	21
2404-P3 (30-36)	8/27/2013	6.7
2404-P4 (0-6)	8/28/2013	54
2404-P4 (12-18)	8/28/2013	110
2404-P4 (24-30)	8/28/2013	34
2404-P5 (0-6)	8/28/2013	93
2404-P5 (0-6) DUP		99
2404-P5 (12-18)	8/28/2013	72
2404-P5 (12-18) DUP		83
2404-P5 (24-30)	8/28/2013	18
2404-P5 (24-30) DUP		17
2404-P6 (0-6)	8/27/2013	17
2404-P6 (12-18)	8/27/2013	6.5
2404-P6 (24-30)	8/27/2013	6.5
2404-P7 (0-6)	8/27/2013	55
2404-P7 (12-18)	8/27/2013	25
2404-P7 (24-30)	8/27/2013	1.2 J

TABLE 1
2013 ADDITIONAL SOIL SAMPLING RESULTS
MIDWAY ATOLL NATIONAL WILDLIFE REFUGE

Sample Identification	Sample Date	Lead Concentration (mg/kg)
2404-P8 (0-6)	8/27/2013	9.1
2404-P8 (12-18)	8/27/2013	12
2404-P8 (24-30)	8/27/2013	11
2404-P9 (0-6)	8/28/2013	23
2404-P9 (12-18)	8/28/2013	8.8
2404-P10 (0-6)	8/27/2013	25
2404-P10 (12-18)	8/27/2013	19
2404-P10 (24-30)	8/27/2013	12
2404-P11 (0-6)	8/27/2013	17
2404-P11 (12-18)	8/27/2013	3.6
2404-P11 (24-30)	8/27/2013	2.4 J
2404 -P12 (0-6)	10/3/2013	24
2405 -P12 (12-18)	10/3/2013	3.7
2406 -P12 (24-30)	10/3/2013	<1.2
2404-P13 (0-6)	10/3/2013	22
2404-P13 (12-18)	10/3/2013	<1.0
2404-P13 (24-30)	10/3/2013	<1.0
QA/QC Results*		
EQUIPMENT BLANK	9/2/2013	<0.001
EQUIPMENT BLANK	9/2/2013	<0.001

Notes
Lead was analyzed by EPA Method 6010B using ICP methods. Results based on wet weight. Shading indicates concentration exceeds the cleanup value of 75 mg/kg.
EPA - Environmental Protection Agency
mg/kg - milligram per kilogram

TABLE 2
DAILY SUMMARY
MIDWAY ATOLL NWR

Date	Maectite Totals (gal)					Treated Soil Totals[1]			DU4 Clean Backfill Totals[1]		Demolition Load Count				
	Applied to Soils (DU2)	Applied to Demo Debris (DU2)	Applied to Walls (DU4)	Applied to Walls (DU6)	Cumulative Total	Treated Soil (Loads)[2]	Excavated / Hauled to R-2 Unit (LCY)	Excavated / Hauled to R-2 Unit Cumulative Total (LCY)	Excavated / Placed from Cargo Pier Borrow Area (LCY)	Cumulative Total (LCY)	Treated Concrete (Loads)[2]	Clean Concrete (Loads)[3]	Metal Debris (Loads)[3]	Clean Wood (Loads)[3]	DU2 Wood Into R2
8/22/2013	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8/23/2013	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8/24/2013	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8/26/2013	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8/27/2013	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8/28/2013	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8/29/2013	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8/30/2013	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8/31/2013	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9/2/2013	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9/3/2013	0	10	0	0	10	0	0	0	0	0	0	0	0	0	0
9/4/2013	0	0	0	0	10	0	0	0	0	0	0	0	0	0	0
9/5/2013	0	0	0	3	13	0	0	0	0	0	0	0	0	0	0
9/6/2013	0	0	10	0	23	0	0	0	0	0	0	0	8	0	0
9/7/2013	0	0	10	0	33	0	0	0	0	0	0	0	10	0	0
9/9/2013	0	0	10	0	43	0	0	0	0	0	0	0	17	0	0
9/10/2013	0	25	10	0	78	0	0	0	0	0	0	0	4	0	15
9/11/2013	0	30	15	0	123	0	0	0	0	0	0	0	0	0	32
9/12/2013	0	30	15	1	169	0	0	0	0	0	0	0	0	0	31
9/13/2013	0	5	15	0	189	0	0	0	0	0	0	0	5	0	9
9/14/2013	0	0	10	0	199	0	0	0	0	0	0	0	25	0	0
9/16/2013	0	30	15	0	244	0	0	0	0	0	0	0	2	0	23
9/17/2013	0	20	0	0	264	0	0	0	0	0	0	0	3	0	21
9/18/2013	0	50	0	0	314	0	0	0	0	0	0	0	4	0	26
9/19/2013	0	20	5	0	339	0	0	0	0	0	0	0	6	0	20
9/20/2013	0	0	0	0	339	0	0	0	0	0	4	0	2	0	3
9/21/2013	397	0	0	0	736	0	0	0	0	0	0	0	0	0	0
9/23/2013	566	0	0	0	1,302	21	315	315	0	0	0	0	0	0	0
9/24/2013	111	0	0	0	1,413	35	525	840	0	0	0	0	1	0	0
9/25/2013	194	0	0	0	1,607	30	450	1,290	0	0	0	0	0	0	0
9/26/2013	350	0	0	0	1,957	27	405	1,695	0	0	0	0	0	0	0
9/27/2013	303	0	0	0	2,260	24	360	2,055	0	0	3	0	1	0	0
9/28/2013	77	0	0	0	2,337	0	0	2,055	0	0	7	0	0	0	0
9/29/2013	266	0	0	0	2,603	22	330	2,385	0	0	1	1	1	0	0
9/30/2013	0	0	0	0	2,603	0	0	2,385	0	0	0	1	0	0	0
10/1/2013[5]	0	0	0	0	2,728	12	180	2,565	0	0	1	0	0	0	0
10/2/2013	0	0	0	0	2,728	36	540	3,105	0	0	7	0	0	0	0
10/3/2013	60	0	0	0	2,788	28	420	3,525	0	0	0	2	1	0	0
10/4/2013	96	0	0	0	2,884	10	150	3,675	0	0	0	0	0	0	0
10/5/2013	0	0	0	0	2,884	0	0	3,675	765	765	0	0	0	0	0
10/6/2013	0	0	0	0	2,884	0	0	3,675	1,215	1,980	0	0	0	0	0
10/7/2013	0	0	0	0	2,884	0	0	3,675	870	2,850	0	0	0	0	0
10/8/2013	126	0	0	0	3,010	9	135	3,810	300	3,150	0	0	0	0	0
10/9/2013	0	0	0	0	3,010	0	0	3,810	30	3,180	0	0	1	0	0

Notes
1. Estimates are based on an estimated 2.5 CY excavator bucket and 15 CY per truck load
2. Treated soil and concrete loads were hauled to and deposited in the R-2 Unit
3. Clean concrete, clean metal and clean wood loads were hauled and deposited in separate project stockpiles located near Bldg 151 (Sea Plane Hanger)
4. MAECTITE® applied to base of excavation.
5. On 10/1/2013, 125 gallons of MAECTITE® was applied to ash within the R2 Unit.
LCY - loose cubic yard
gal - gallon

TABLE 3
DU2 CONFIRMATION SAMPLING ANALYTICAL RESULTS
MIDWAY ATOLL NWR

Sample Identification	Date	Lead Concentration (mg/kg)	Note
Bldg 578	10/8/2013	10	Bldg 578
Dup-1	10/8/2013	9.3	Duplicate of Sample ID 578
Dup-2	10/8/2013	17	Duplicate of Sample ID 578
Bldg 579	10/8/2013	9.9	Bldg 579
Dup-3	10/8/2013	14	Duplicate of Sample ID 357
Dup-4	10/8/2013	29	Duplicate of Sample ID 357

Notes
1. Lead was analyzed by EPA Method 6010B following MIS/ICS preparation.
MIS - multi-incremental sampling
EPA - Environmental Protection Agency
mg/kg - milligram per kilogram

TABLE 4
MEP SAMPLING ANALYTICAL RESULTS
MIDWAY ATOLL NWR

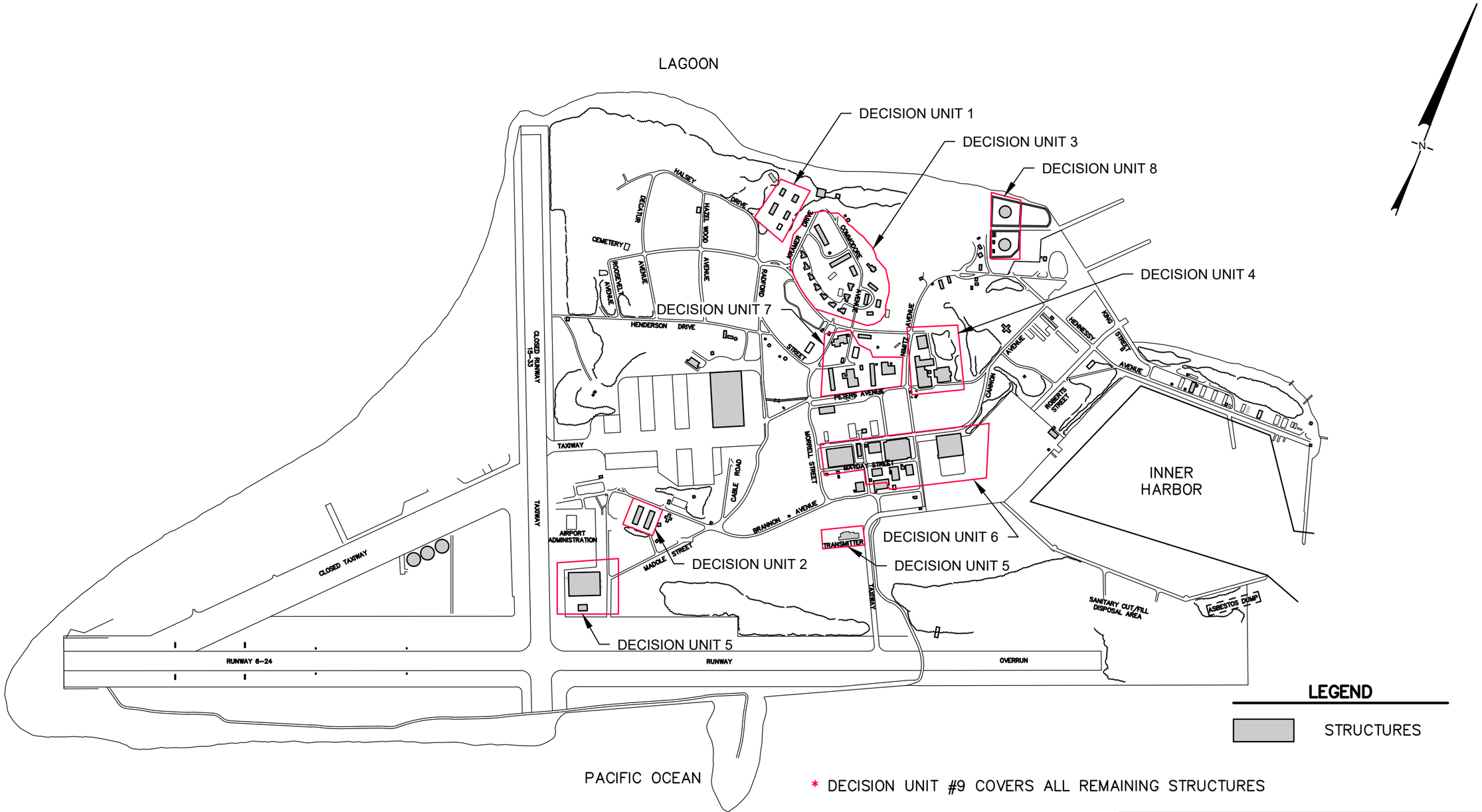
Sample Identification	Date	Lead Concentration (mg/l)
MEP 2013	10/8/2013	<10
		<10
		<10
		<10
		<10
		<10
		10
		<10
		<10

Notes
Lead was analyzed by EPA Method 6010C-Leach
EPA - Environmental Protection Agency
mg/l - milligram per liter
The Toxicity Characteristic Leaching Procedure (TCLP) threshhold for lead is 5 mg/l

TABLE D-1
2013 ADDITIONAL SOIL SAMPLING
RELATIVE PERCENT DIFFERENCES
MIDWAY ATOLL NWR

Sample Identification	Sample Date	Lead Concentration (mg/kg)	Relative Percent Difference
578-P12 (0-6)	8/26/2013	980	47%
578-P12 (0-6) DUP		610	
578-P12 (12-18)	8/26/2013	85	34%
578-P12 (12-18) DUP		120	
578-P12 (24-30)	8/26/2013	4.4	17%
578-P12 (24-30) DUP		5.2	
579-P7 (0-6)	8/29/2013	200	11%
579-P7 (0-6) DUP		180	
579-P7 (12-18)	8/29/2013	84	35%
579-P7 (12-18) DUP		120	
579-P7 (24-30)	8/29/2013	0.84	99%
579-P7 (24-30) DUP		2.5	
579-P22 (0-6)	8/30/2013	85	61%
579-P22 (0-6) DUP		160	
579-P22 (12-18)	8/30/2013	25	13%
579-P22 (12-18) DUP		22	
579-P22 (24-30)	8/30/2013	2.4	15%
579-P22 (24-30) DUP		2.8	
2404-P5 (0-6)	8/28/2013	93	6%
2404-P5 (0-6) DUP		99	
2404-P5 (12-18)	8/28/2013	72	14%
2404-P5 (12-18) DUP		83	
2404-P5 (24-30)	8/28/2013	18	6%
2404-P5 (24-30) DUP		17	

Notes
Lead was analyzed by EPA Method 6010B using ICP methods. Results based on wet weight.
EPA - Environmental Protection Agency
mg/kg - milligram per kilogram



NOTES:

1. THE LOCATION OF ALL FEATURES SHOWN ARE APPROXIMATE.
2. THIS DRAWING IS FOR INFORMATION PURPOSES.

SITE LAYOUT WITH DECISION UNITS

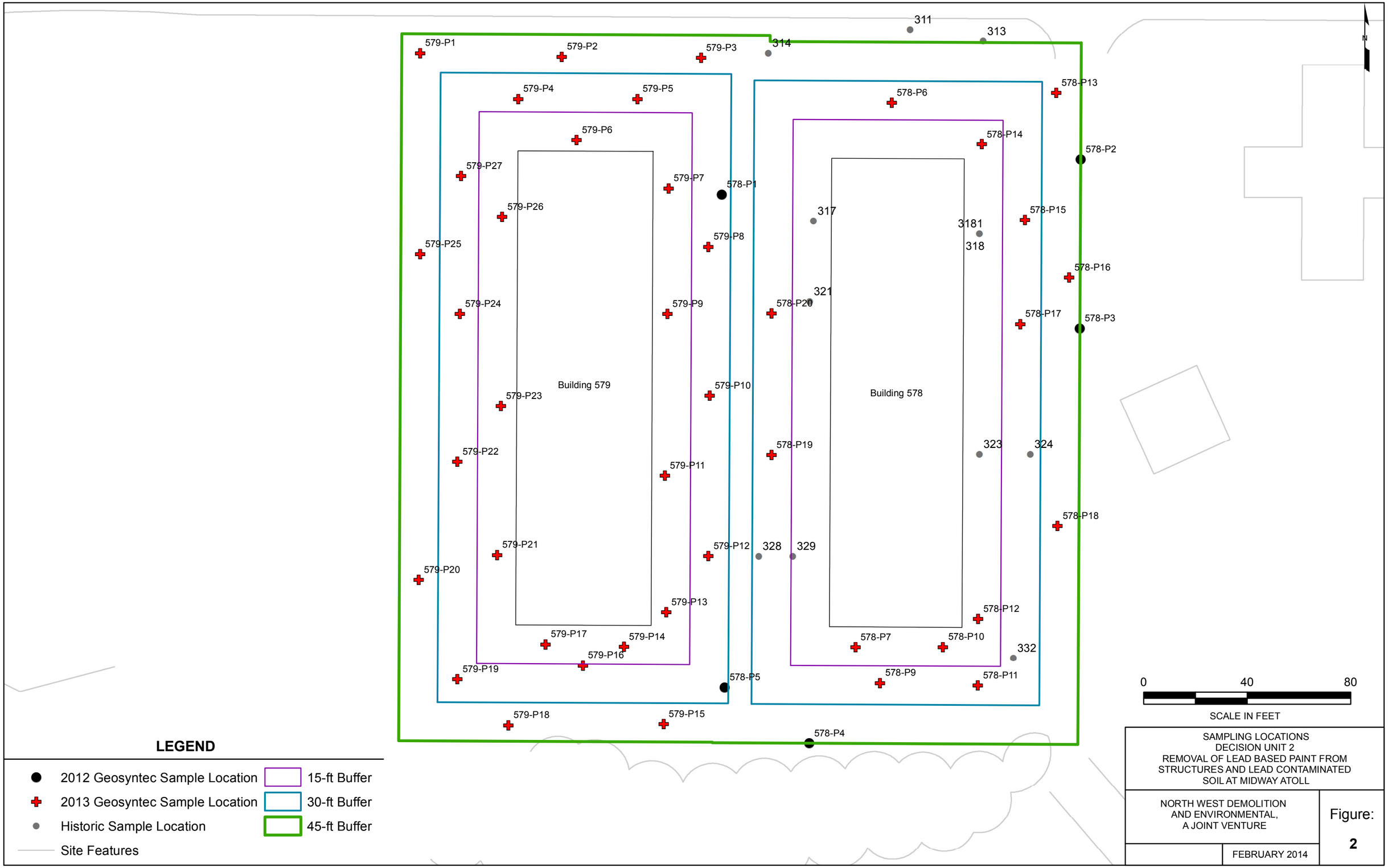
REMOVAL OF LEAD BASED PAINT FROM STRUCTURES AND LEAD CONTAMINATED SOIL AT MIDWAY ATOLL

NORTH WEST DEMOLITION AND ENVIRONMENTAL, A JOINT VENTURE

FEBRUARY 2014

Figure: 1

P:\PRJ\SDCADD\CADD\PNG0515 MIDWAY\PNG0515-01-04\FIGURES\PNG0515 F001



SAMPLING LOCATIONS
DECISION UNIT 2
REMOVAL OF LEAD BASED PAINT FROM STRUCTURES AND LEAD CONTAMINATED SOIL AT MIDWAY ATOLL

NORTH WEST DEMOLITION AND ENVIRONMENTAL, A JOINT VENTURE

FEBRUARY 2014

Figure: 2

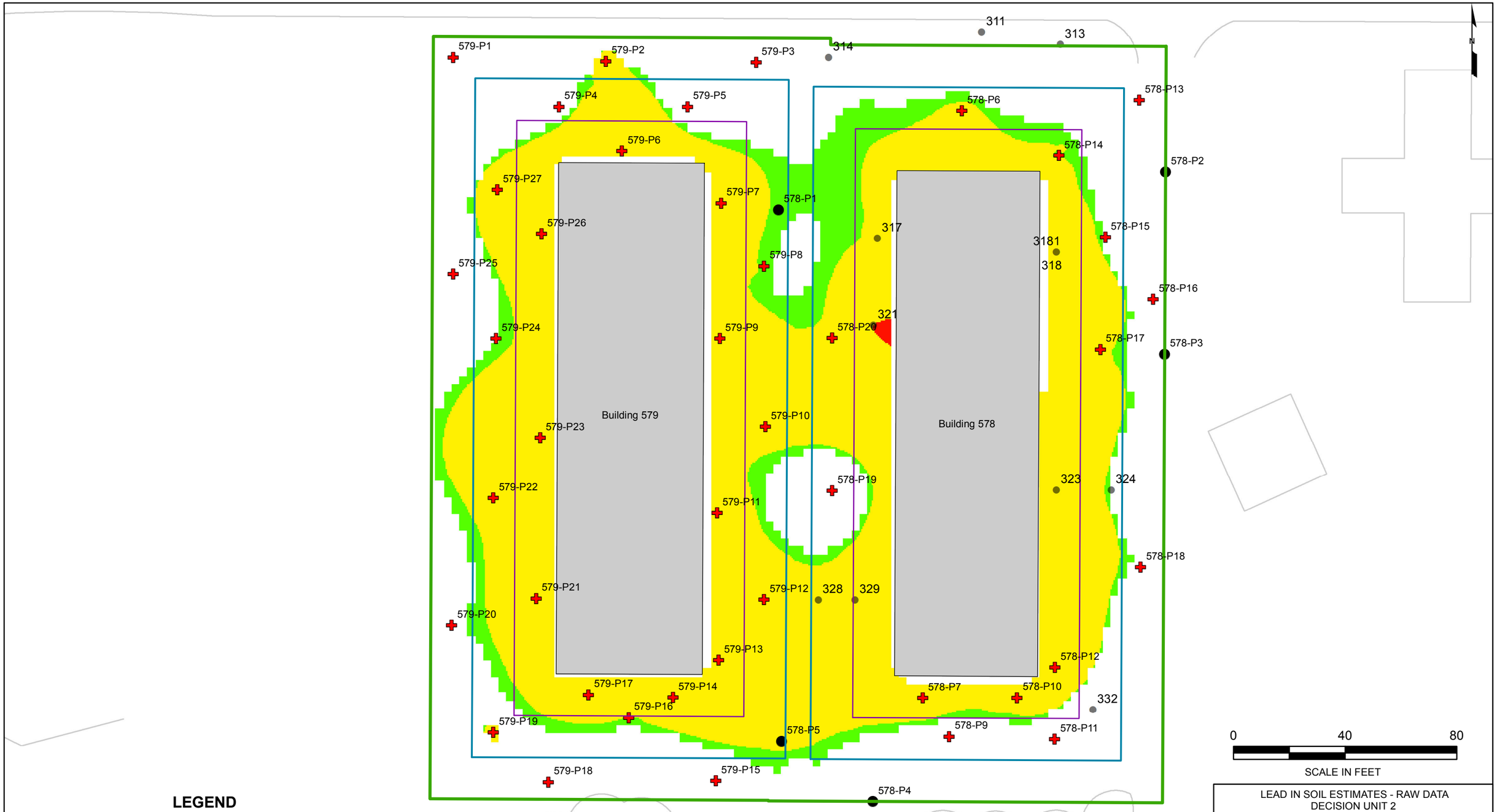
SAMPLING LOCATIONS
DECISION UNIT 4
REMOVAL OF LEAD BASED PAINT FROM STRUCTURES AND LEAD CONTAMINATED SOIL AT MIDWAY ATOLL

NORTH WEST DEMOLITION AND ENVIRONMENTAL, A JOINT VENTURE

FEBRUARY 2014

Figure: 3

Path: P:\GIS\Projects\Midway\Maps\2013_Joint format_3.mxd



LEGEND

- 2012 Geosyntec Sample Location
- 2013 Geosyntec Sample Location
- Historic Sample Location
- Site Features
- 15-ft Buffer
- 30-ft Buffer
- 45-ft Buffer
- 75 - 300 mg/kg
- 300 - 1000 mg/kg
- 1000 - 3000 mg/kg

LEAD IN SOIL ESTIMATES - RAW DATA
DECISION UNIT 2
REMOVAL OF LEAD BASED PAINT FROM STRUCTURES AND LEAD CONTAMINATED SOIL AT MIDWAY ATOLL

NORTH WEST DEMOLITION AND ENVIRONMENTAL, A JOINT VENTURE

FEBRUARY 2014

Figure: 4

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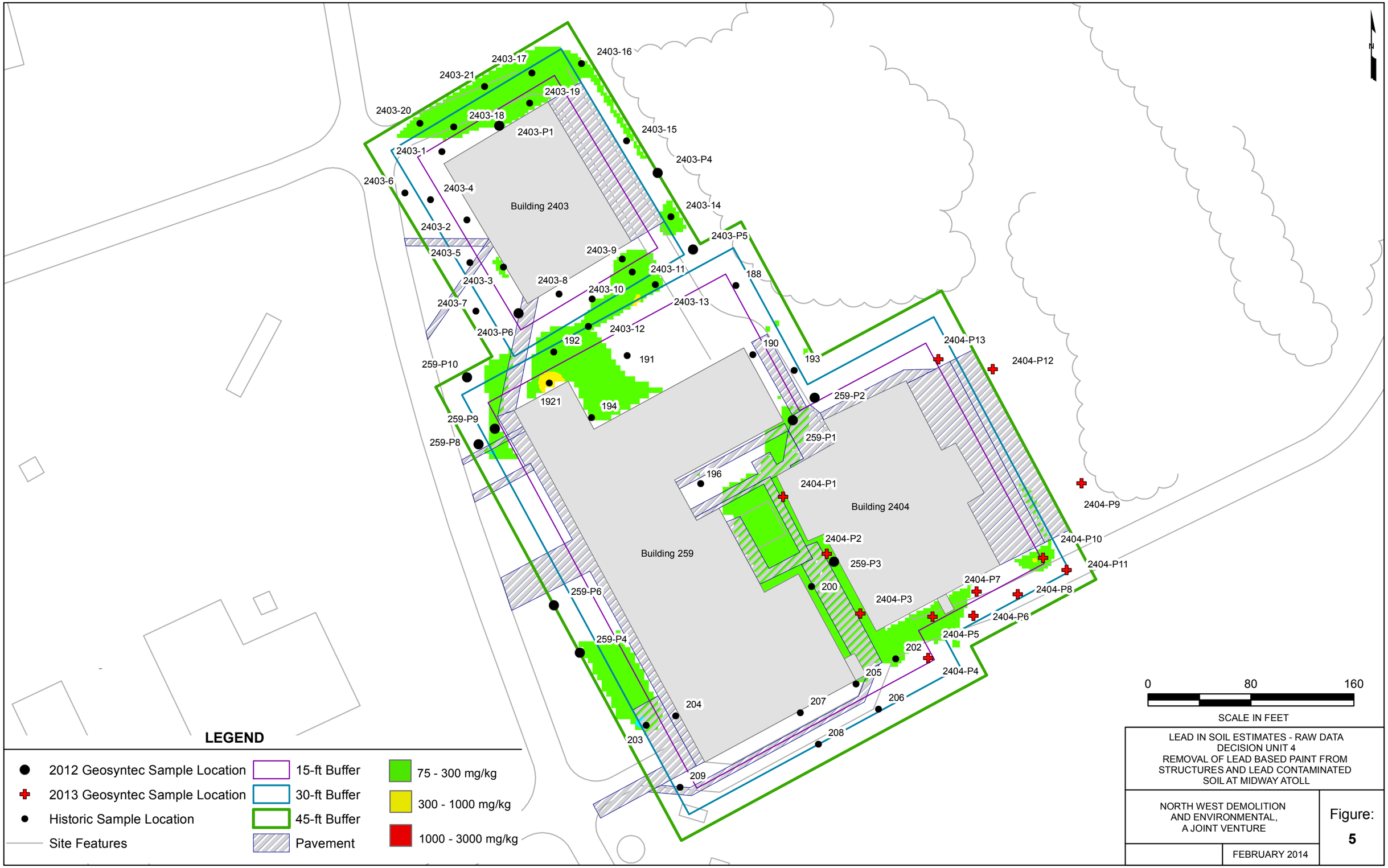
2403-16
2403-17
2403-21
2403-19
2403-20
2403-18
2403-P1
2403-15
2403-1
2403-P4
2403-6
2403-4
Building 2403
2403-14
2403-2
2403-P5
2403-5
2403-9
2403-11
188
2403-3
2403-8
2403-10
2403-7
2403-13
2403-P6
2403-12
192
190
2404-P13
191
193
2404-P12
259-P10
1921
194
259-P2
259-P9
259-P1
259-P8
196
2404-P1
Building 2404
2404-P9
2404-P2
2404-P10
Building 259
259-P3
2404-P11
2404-P7
200
259-P6
2404-P3
2404-P8
2404-P6
259-P4
2404-P5
202
205
2404-P4
204
207
206
208
203
209
0
80
160
SCALE IN FEET
LEGEND
2012 Geosyntec Sample Location
2013 Geosyntec Sample Location
Historic Sample Location
Site Features
15-ft Buffer
30-ft Buffer
45-ft Buffer
Pavement
75 - 300 mg/kg
300 - 1000 mg/kg
1000 - 3000 mg/kg
LEAD IN SOIL ESTIMATES - RAW DATA
DECISION UNIT 4
REMOVAL OF LEAD BASED PAINT FROM
STRUCTURES AND LEAD CONTAMINATED
SOIL AT MIDWAY ATOLL
NORTH WEST DEMOLITION
AND ENVIRONMENTAL,
A JOINT VENTURE
FEBRUARY 2014
Figure:
5
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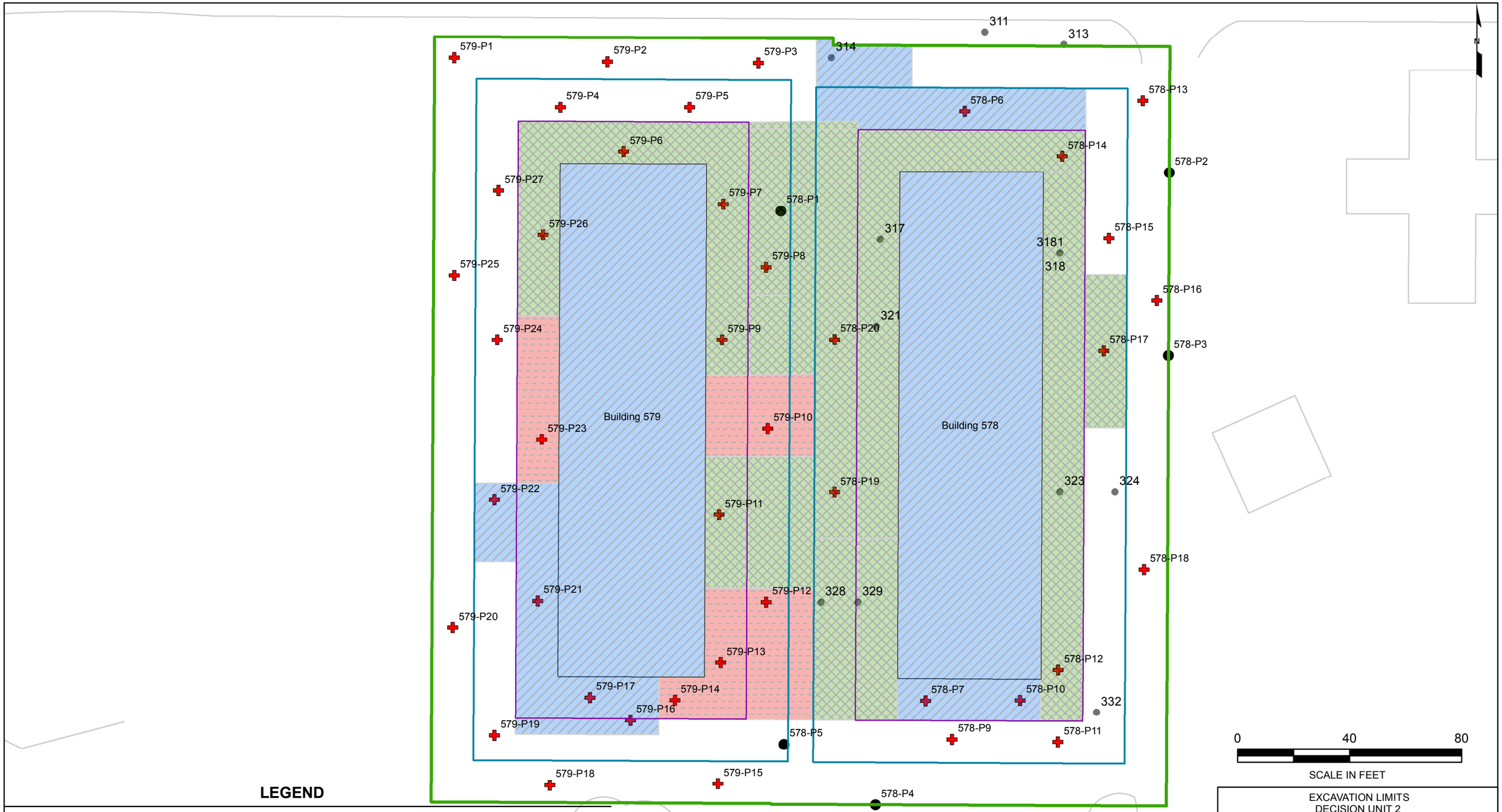

LEGEND

- 2012 Geosyntec Sample Location
- 2013 Geosyntec Sample Location
- Historic Sample Location
- Site Features

Excavation Depth (feet)

- 1.0
- 2.0
- 3.0

- 15-ft Buffer
- 30-ft Buffer
- 45-ft Buffer

Note: Total estimated excavation volume with 20% safety factor = 3,250 bulk cubic yards

EXCAVATION LIMITS
DECISION UNIT 2
REMOVAL OF LEAD BASED PAINT FROM STRUCTURES AND LEAD CONTAMINATED SOIL AT MIDWAY ATOLL

NORTH WEST DEMOLITION AND ENVIRONMENTAL, A JOINT VENTURE

FEBRUARY 2014

Figure: 6

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2403-16
2403-17
2403-21
2403-19
2403-20
2403-18
2403-P1
2403-15
2403-1
2403-P4
2403-6
2403-4
Building 2403
2403-14
2403-2
2403-P5
2403-5
2403-9
2403-11
188
2403-3
2403-8
2403-10
2403-7
2403-13
2403-P6
2403-12
192
190
2404-P13
191
193
2404-P12
259-P10
259-P2
1921
194
259-P9
259-P1
259-P8
196
2404-P1
Building 2404
2404-P9
2404-P2
2404-P10
Building 259
259-P3
2404-P11
200
2404-P7
259-P6
2404-P3
2404-P8
2404-P6
259-P4
2404-P5
202
2404-P4
205
204
207
206
208
203
209
0
80
160
SCALE IN FEET
LEGEND
2012 Geosyntec Sample Location
2013 Geosyntec Sample Location
Historic Sample Location
Site Features
Excavation Depth (feet)
1.0
2.0
3.0
15-ft Buffer
30-ft Buffer
45-ft Buffer
Pavement
Note: Total estimated excavation volume with 20% safety factor = 3,470 bulk cubic yards
EXCAVATION LIMITS
DECISION UNIT 4
REMOVAL OF LEAD BASED PAINT FROM
STRUCTURES AND LEAD CONTAMINATED
SOIL AT MIDWAY ATOLL
NORTH WEST DEMOLITION
AND ENVIRONMENTAL,
A JOINT VENTURE
FEBRUARY 2014
Figure:
7
Path: P:\GIS\Projects\Midway\Maps\2013 Joint format_4.mxd

APPENDIX D

2014 FIELD YEAR SUPORTING DOCUMENTATION

TABLE 1
2014 ADDITIONAL SOIL SAMPLING RESULTS - DU5 AND DU7
MIDWAY ATOLL NWR

Sample Identification	Sample Date	Lead Concentration (mg/kg)
Building 5309 (Transmitter) - DU5		
5309-P16 0-6	10/1/2014	33
5309-P16 12-18	10/1/2014	6.9
5309-P16 24-30	10/1/2014	<1.1
5309-P18 0-6	10/1/2014	100
5309-P18 12-18	10/1/2014	0.31
5309-P18 24-30	10/1/2014	<1.3
5309-P19 0-6	10/1/2014	170
5309-P19 12-18	10/1/2014	<1.2
5309-P19 24-30	10/1/2014	<1.3
5309-P20 0-6	10/1/2014	35
5309-P20 12-18	10/1/2014	15
5309-P20 24-30	10/1/2014	4.2
5309-P21 0-6	10/1/2014	73
5309-P21 12-18	10/1/2014	42
5309-P21 24-30	10/1/2014	1.4
5309-P22 0-6	10/1/2014	44
5309-P22 12-18	10/1/2014	7.8
5309-P22 24-30	10/1/2014	<1.3
5309-P23 0-6	10/2/2014	170
5309-P23 0-6 DUP		150
5309-P23 12-18	10/2/2014	12
5309-P23 12-18 DUP		10
5309-P23 24-30	10/2/2014	2.1
5309-P23 24-30 DUP		1.5
5309-P24 0-6	10/2/2014	190
5309-P24 12-18	10/2/2014	7
5309-P24 24-30	10/2/2014	9
5309-P25 0-6	10/3/2014	66
5309-P25 12-18	10/3/2014	14
5309-P25 24-30	10/3/2014	13
5309-P26 0-6	10/3/2014	87
5309-P26 12-18	10/3/2014	6.4
5309-P26 24-30	10/3/2014	2.2

TABLE 1
2014 ADDITIONAL SOIL SAMPLING RESULTS - DU5 AND DU7
MIDWAY ATOLL NWR

Sample Identification	Sample Date	Lead Concentration (mg/kg)
Building 3529 (Laundry) - DU7		
3529-P1 0-6	9/15/2014	21
3529-P1 12-18	9/15/2014	4.9
3529-P1 24-30	9/15/2014	3.2
3529-P2 0-6	9/15/2014	17
3529-P2 12-18	9/15/2014	30
3529-P2 24-30	9/15/2014	69
3529-P3 0-6	9/15/2014	19
3529-P3 12-18	9/15/2014	3.3
3529-P4 0-6	9/15/2014	24
3529-P4 12-18	9/15/2014	86
3529-P4 24-30	9/15/2014	19
Chip Samples -DU4		
3503-Chip A	10/16/2014	64
3503-Chip C	10/16/2014	800
QA/QC Results*		
EQUIPMENT BLANK	10/18/2014	<0.03

Notes

1. Lead was analyzed by Environmental Protection Agency Method 6010B.
2. Results based on wet weight.
3. Shading indicates concentration exceeds the cleanup value of 75 mg/kg.
4. "*" = QA/QC samples are reporting in miligrams per liter (mg/l)

mg/kg - milligram per kilogram

TABLE 2
DAILY SUMMARY
MIDWAY ATOLL NWR

Date	Maectite Totals (gal)				Treated Soil Totals[1]		
	Applied to Soils (DU4)	Applied to Soils (DU7)	Applied to Walls (DU7)	Cumulative Total	Treated Soil (Loads)[2]	Excavated / Hauled to R-2 Unit (LCY)	Excavated / Hauled to R-2 Unit Cumulative Total (LCY)
9/9/2014	0	0	0	0	0	0	0
9/10/2014	53	0	20	73	3	37	37
9/11/2014	204	0	5	282	22	271	308
9/12/2014	117	0	5	404	15	185	493
9/13/2014	240	0	10	654	19	234	727
9/15/2014	260	0	10	924	34	419	1,147
9/16/2014	175	0	15	1,114	12	148	1,295
9/17/2014	314	0	10	1,437	22	271	1,566
9/18/2014	111	0	0	1,548	25	308	1,874
9/19/2014	38	0	1	1,587	12	148	2,022
9/20/2014	71	0	10	1,668	7	86	2,108
9/22/2014	0	398	10	2,076	24	362	2,471
9/23/2014	0	341	0	2,417	28	423	2,894
9/24/2014	0	332	0	2,749	31	468	3,362
9/25/2014	0	69	0	2,818	10	151	3,513
9/26/2014	0	126	0	2,944	6	91	3,603
9/27/2014	0	225	0	3,169	23	347	3,951
9/29/2014	0	381	0	3,549	22	332	4,283
9/30/2014	0	257	0	3,806	36	544	4,826
10/1/2014	0	130	0	3,936	11	166	4,993
10/2/2014	0	6	0	3,942	1	15	5,008
10/3/2014	0	0	0	3,942	0	0	5,008
10/4/2014	0	0	0	3,942	0	0	5,008
10/6/2014	0	0	0	3,942	0	0	5,008
10/7/2014	0	0	0	3,942	0	0	5,008
10/8/2014	0	0	0	3,942	0	0	5,008
10/9/2014	0	9	0	3,951	1	15	5,023
10/10/2014	0	22	0	3,973	3	45	5,068
10/11/2014	0	0	0	3,973	0	0	5,068
10/13/2014	0	0	0	3,973	0	0	5,068
10/14/2014	0	0	0	3,973	0	0	5,068
10/15/2014	0	0	0	3,973	0	0	5,068
10/16/2014	0	0	0	3,973	0	0	5,068
10/17/2014	0	0	0	3,973	0	0	5,068
10/18/2014	0	0	0	3,973	0	0	5,068
10/20/2014	0	0	0	3,973	0	0	5,068
10/21/2014	0	0	0	3,973	0	0	5,068
Totals	1,582	2,295	96	3,973	367	5,068	5,068

Notes
1. Estimates are based on MAECTITE volume usage with an application rate rate of 0.75 gallons per cubic yard.
2. Treated soil and concrete loads were hauled to and deposited in the R-2 Unit.
LCY - loose cubic yard
gal - gallon

TABLE 3
DU4 AND DU7 CONFIRMATION SAMPLING ANALYTICAL RESULTS
MIDWAY ATOLL NWR

Sample Identification	Date	Lead Concentration (mg/kg)	Relative Percent Difference
DU-4 MIS (1) 0-2	9/27/2014	13	35%
DU-4 MIS (1) 0-2 DUP	9/27/2014	9.1	
DU-4 MIS (2) 0-2	9/26/2014	12	67%
DU-4 MIS (2) 0-2 DUP	9/26/2014	24	
DU-4 MIS (3) 0-2	9/26/2014	15	62%
DU-4 MIS (3) 0-2 DUP	9/26/2014	7.9	
DU-4 MIS (4) 0-2	9/24/2014	12	8%
DU-4 MIS (4) 0-2 DUP	9/24/2014	13	
DU-4 MIS (5) 0-2	9/26/2014	6.5	8%
DU-4 MIS (5) 0-2 DUP	9/26/2014	6	
DU-4 MIS (5) 0-2 TRIPLICATE	9/26/2014	18	94%
DU-7 MIS (1) 0-2	10/3/2014	5.6	54%
DU-7 MIS (1) 0-2 DUP	10/3/2014	9.7	
DU-7 MIS (2) 0-2	10/4/2014	2.2	40%
DU-7 MIS (2) 0-2 DUP	10/4/2014	3.3	
DU-7 MIS (3) 0-2	10/6/2014	26	40%
DU-7 MIS (3) 0-2 DUP	10/6/2014	39	
DU-7 MIS (4) 0-2	10/2/2014	26	78%
DU-7 MIS (4) 0-2 DUP	10/2/2014	59	
DU-7 MIS (5) 0-2	10/2/2014	1.3	55%
DU-7 MIS (5) 0-2 DUP	10/2/2014	0.74	
DU-7 MIS (5) 0-2 TRIPLICATE	10/2/2014	1.6	21%

Notes
1. Lead was analyzed by Environmental Protection Agency Method 6010B following multi-incremental sample preparation.

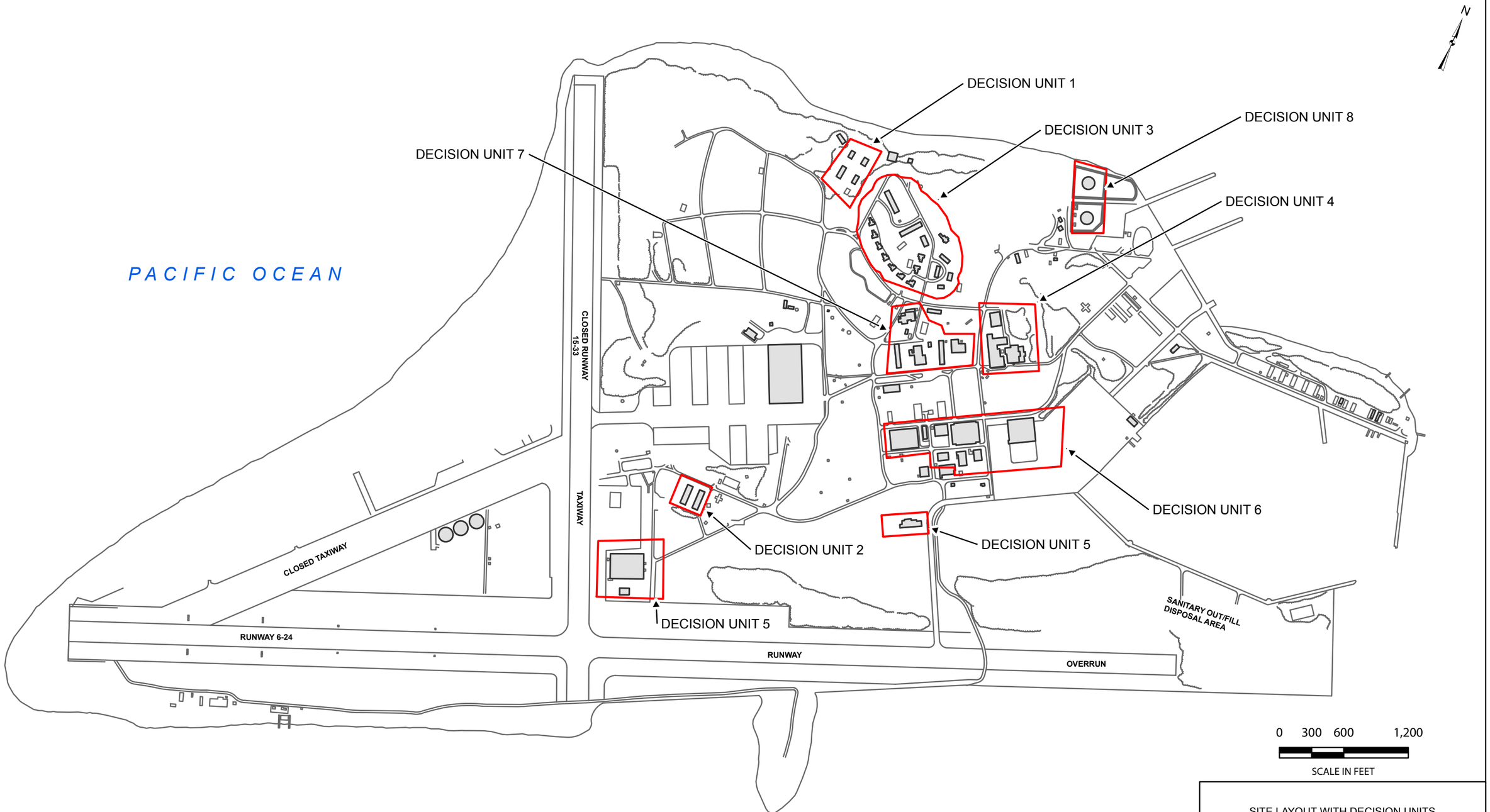
TABLE 4
MEP SAMPLING ANALYTICAL RESULTS
MIDWAY ATOLL NWR

Sample Identification	Date	Lead Concentration (µg/l)
R2/Cell 3 0-6"	10/15/2014	<10
		<10
		<10
		<10
		<10
		<10
		<10
		<10
		<10

Notes

1. Lead was analyzed by Environmental Protection Agency Method 6010C-Leachability
2. The Toxicity Characteristic Leaching Procedure (TCLP) threshhold for lead is 5 milligrams per liter (mg/l)
3. "J" - Results is less than the report limit but greater or equal to the method detection limit and the concentration is an approximate value.

µg/l - micrograms per liter



LEGEND

Decision Units Structures

Notes:
1. The location of all features shown are approximate.
2. This drawing is for information purposes.
3. Decision Unit 9 covers all remaining structures.

SITE LAYOUT WITH DECISION UNITS
REMOVAL OF LEAD BASED PAINT FROM STRUCTURES AND LEAD CONTAMINATED SOIL AT MIDWAY ATOLL

NW DEMOLITION AND ENVIRONMENTAL, A JOINT VENTURE

JANUARY 2015

Figure: 1

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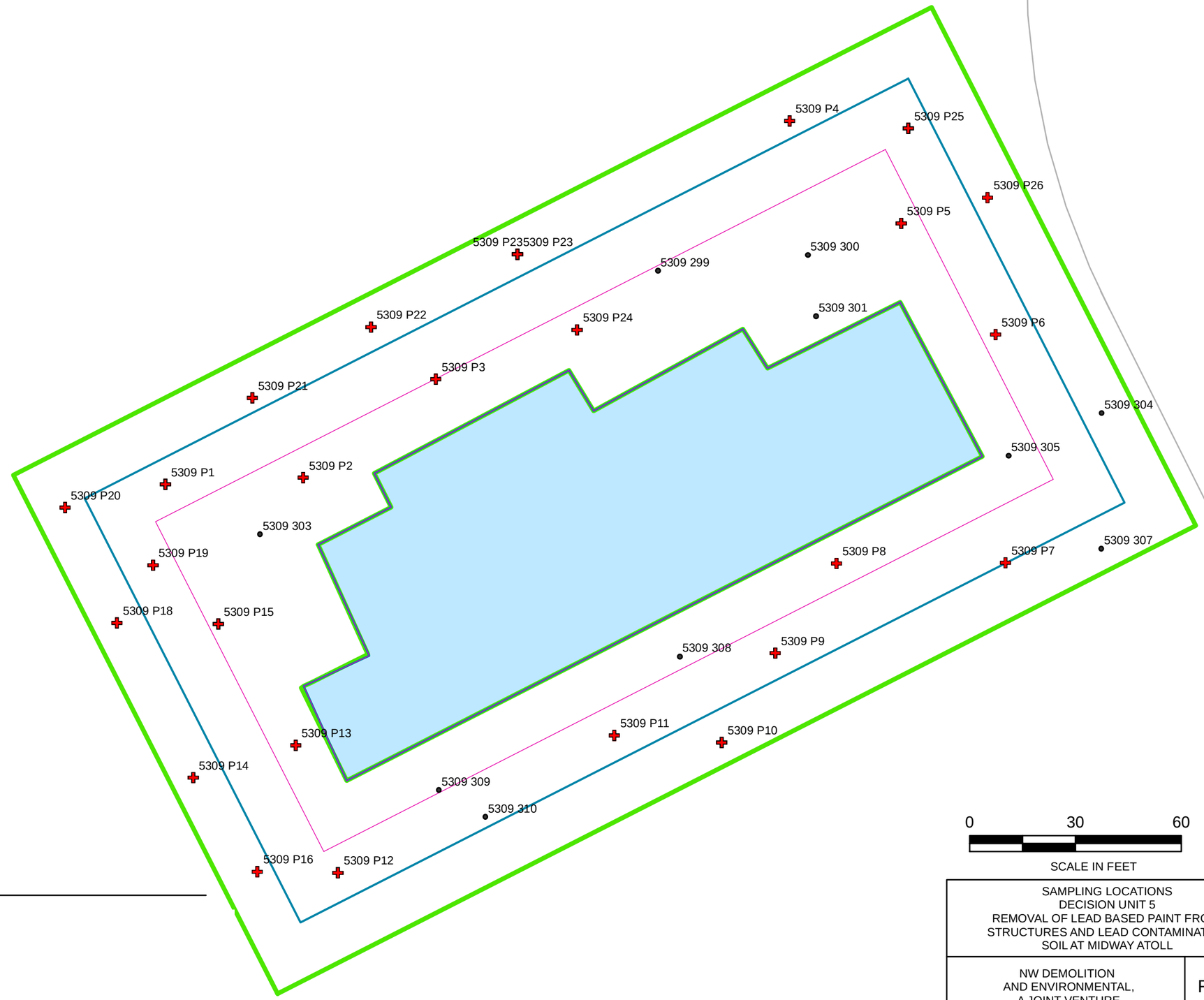


0 30 60

SCALE IN FEET

LEGEND

Sampling Locations

- 2014
- 2013
- 2012
- <2012

- 15' Buffer
- 30' Buffer
- 45 ft Building Buffer
- Site Features

SAMPLING LOCATIONS
DECISION UNIT 5
REMOVAL OF LEAD BASED PAINT FROM
STRUCTURES AND LEAD CONTAMINATED
SOIL AT MIDWAY ATOLL

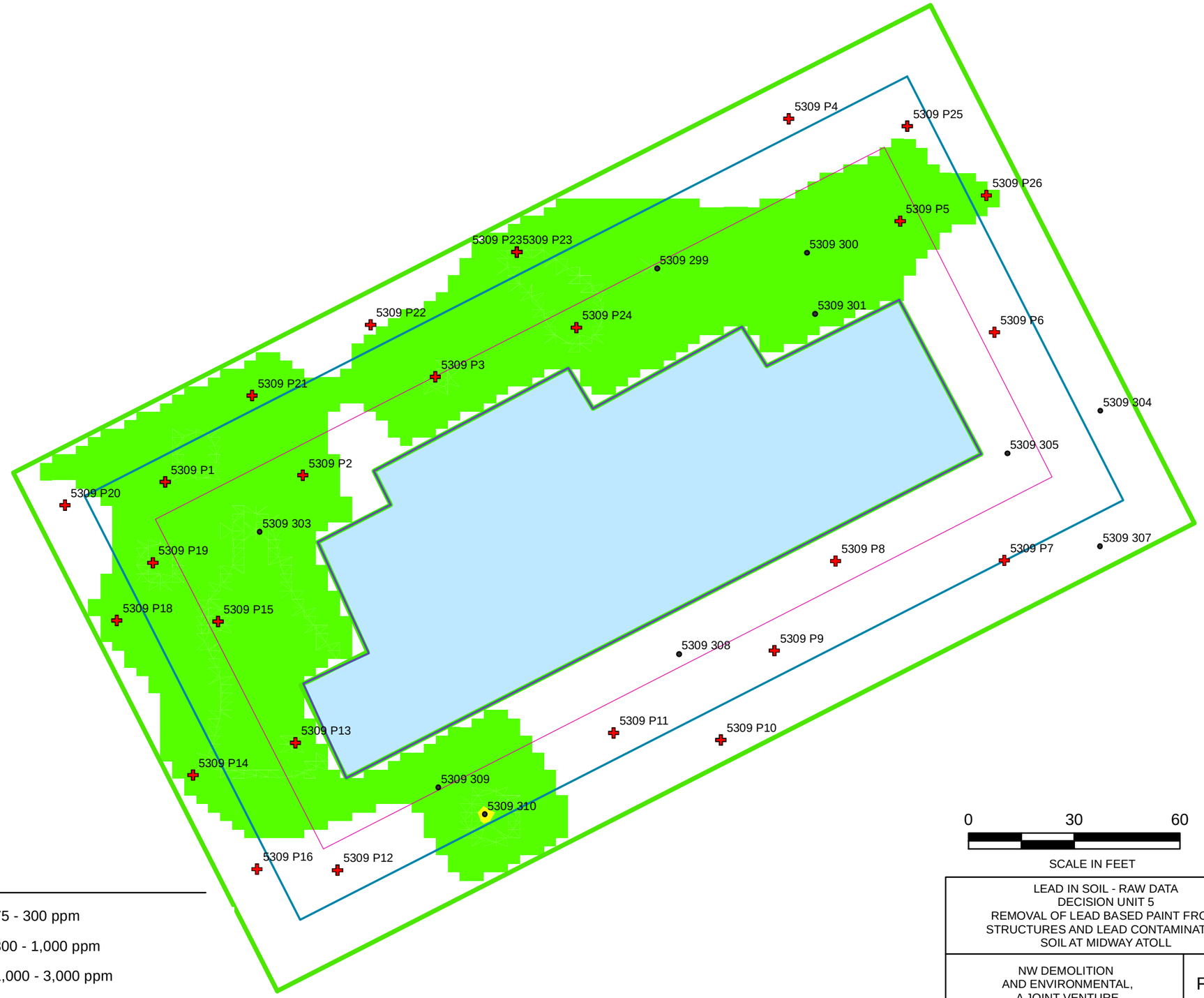
NW DEMOLITION
AND ENVIRONMENTAL,
A JOINT VENTURE

Figure:
2

JANUARY 2015

Path: N:\MMdway\GIS\End_2014_Report\Figure2_SamplingLocations_DU5.mxd

Building 330
Building 3512
Building 53142
Building 310
Building 3503
Building 3517
Building 3529
Building 3524
Building 3502
Building 3504
FH 24
LEGEND
Sampling Locations
2014
2013
2012
<2012
15' Buffer
30' Buffer
45 ft Building Buffer
Site Features
0
80
160
SCALE IN FEET
SAMPLING LOCATIONS
DECISION UNIT 7
REMOVAL OF LEAD BASED PAINT FROM
STRUCTURES AND LEAD CONTAMINATED
SOIL AT MIDWAY ATOLL
NW DEMOLITION
AND ENVIRONMENTAL,
A JOINT VENTURE
JANUARY 2015
Figure:
3



LEGEND

Sampling Locations

- 2014
- 2013
- 2012
- <2012

- 15' Buffer
- 30' Buffer
- 45 ft Building Buffer

- 75 - 300 ppm
- 300 - 1,000 ppm
- 1,000 - 3,000 ppm

0 30 60

SCALE IN FEET

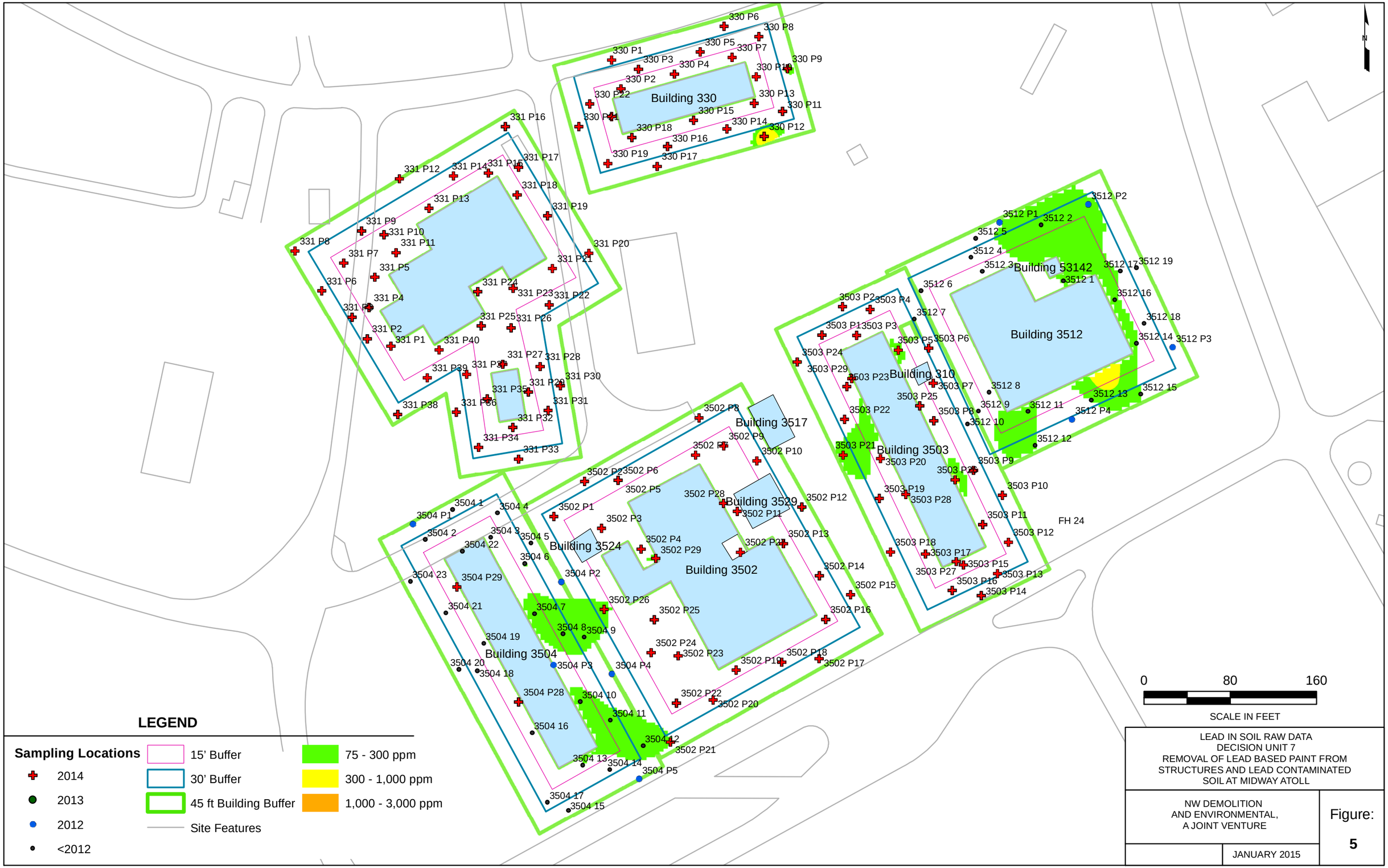
LEAD IN SOIL - RAW DATA
DECISION UNIT 5
REMOVAL OF LEAD BASED PAINT FROM STRUCTURES AND LEAD CONTAMINATED SOIL AT MIDWAY ATOLL

NW DEMOLITION AND ENVIRONMENTAL, A JOINT VENTURE

JANUARY 2015

Figure: 4

Path: N:\Midway\GIS\End_2014_Report\Figure4_LeadInSoil_DU5.mxd



LEAD IN SOIL RAW DATA
DECISION UNIT 7
REMOVAL OF LEAD BASED PAINT FROM STRUCTURES AND LEAD CONTAMINATED SOIL AT MIDWAY ATOLL

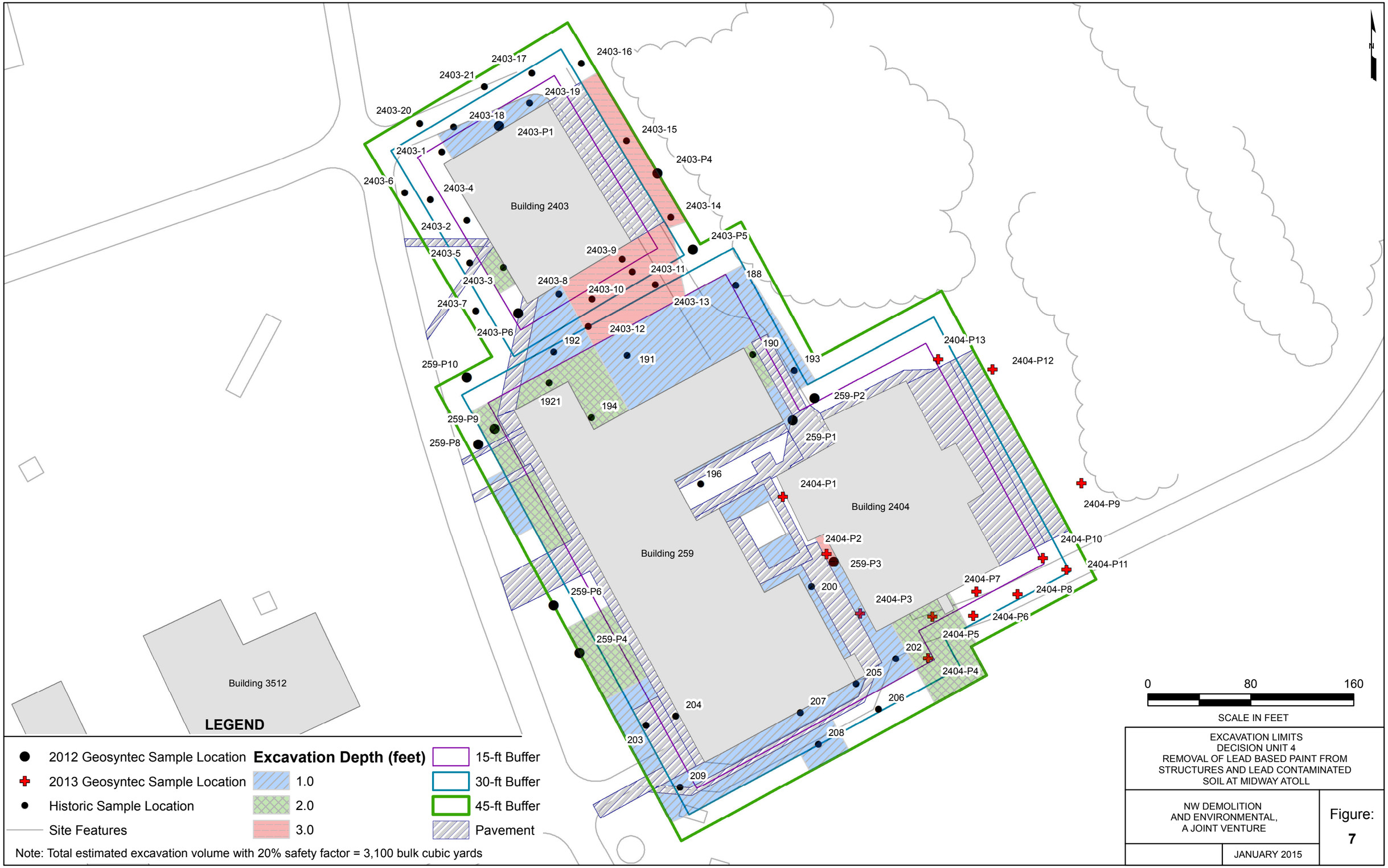
NW DEMOLITION AND ENVIRONMENTAL, A JOINT VENTURE

JANUARY 2015

Figure: 5

Path: N:\MMdway\GIS\End_2014_Report\Figure5_LeadInSoil_DU7.mxd

Building 4203
Soil Removal 813 cu. yd.
Building 4204
Soil Removal 202 cu. yd.
Building 4208
Soil Removal 104 cu. yd.
Building 414
Soil Removal 188 cu. yd.
Building 4209
Soil Removal 0 cu. yd.
Building 4212
Soil Removal 0 cu. yd.
Building 4210
Soil Removal 17 cu. yd.
Building 424
Soil Removal 35 cu. yd.
Building 423
Soil Removal 12 cu. yd.
Building 422
Soil Removal 63 cu. yd.
Building 421
Soil Removal 317 cu. yd.
Building 419
Soil Removal 38 cu. yd.
Building 418
Soil Removal 181 cu. yd.
Building 417
Soil Removal 18 cu. yd.
Building 415
Soil Removal 103 cu. yd.
Building 416
Soil Removal 37 cu. yd.
Building 4211
Soil Removal 0 cu. yd.
Building 400
Building 54123
Building 416a
FH 44
0
120
240
SCALE IN FEET
LEGEND
Sampling Locations
2014
2013
2012
<2012
15' Buffer
30' Buffer
45' Buffer
Proposed Removal Depths
1' Deep
2' Deep
3' Deep
Site Features
PROPOSED EXCAVATION LIMITS
DECISION UNIT 3
REMOVAL OF LEAD BASED PAINT FROM
STRUCTURES AND LEAD CONTAMINATED
SOIL AT MIDWAY ATOLL
NW DEMOLITION
AND ENVIRONMENTAL,
A JOINT VENTURE
JANUARY 2015
Figure:
6


2403-16
2403-17
2403-21
2403-19
2403-20
2403-18
2403-P1
2403-15
2403-1
2403-P4
2403-6
2403-4
Building 2403
2403-14
2403-2
2403-P5
2403-5
2403-9
2403-11
188
2403-3
2403-8
2403-10
2403-7
2403-13
2403-P6
2403-12
192
190
2404-P13
2404-P12
193
191
259-P10
1921
194
259-P2
259-P9
259-P1
259-P8
196
2404-P1
Building 2404
2404-P9
2404-P2
2404-P10
Building 259
259-P3
2404-P11
2404-P7
200
2404-P8
259-P6
2404-P3
2404-P6
2404-P5
259-P4
202
2404-P4
205
Building 3512
206
204
207
208
203
209
0
80
160
SCALE IN FEET
LEGEND
2012 Geosyntec Sample Location
2013 Geosyntec Sample Location
Historic Sample Location
Site Features
Excavation Depth (feet)
1.0
2.0
3.0
15-ft Buffer
30-ft Buffer
45-ft Buffer
Pavement
Note: Total estimated excavation volume with 20% safety factor = 3,100 bulk cubic yards
EXCAVATION LIMITS
DECISION UNIT 4
REMOVAL OF LEAD BASED PAINT FROM
STRUCTURES AND LEAD CONTAMINATED
SOIL AT MIDWAY ATOLL
NW DEMOLITION
AND ENVIRONMENTAL,
A JOINT VENTURE
JANUARY 2015
Figure:
7
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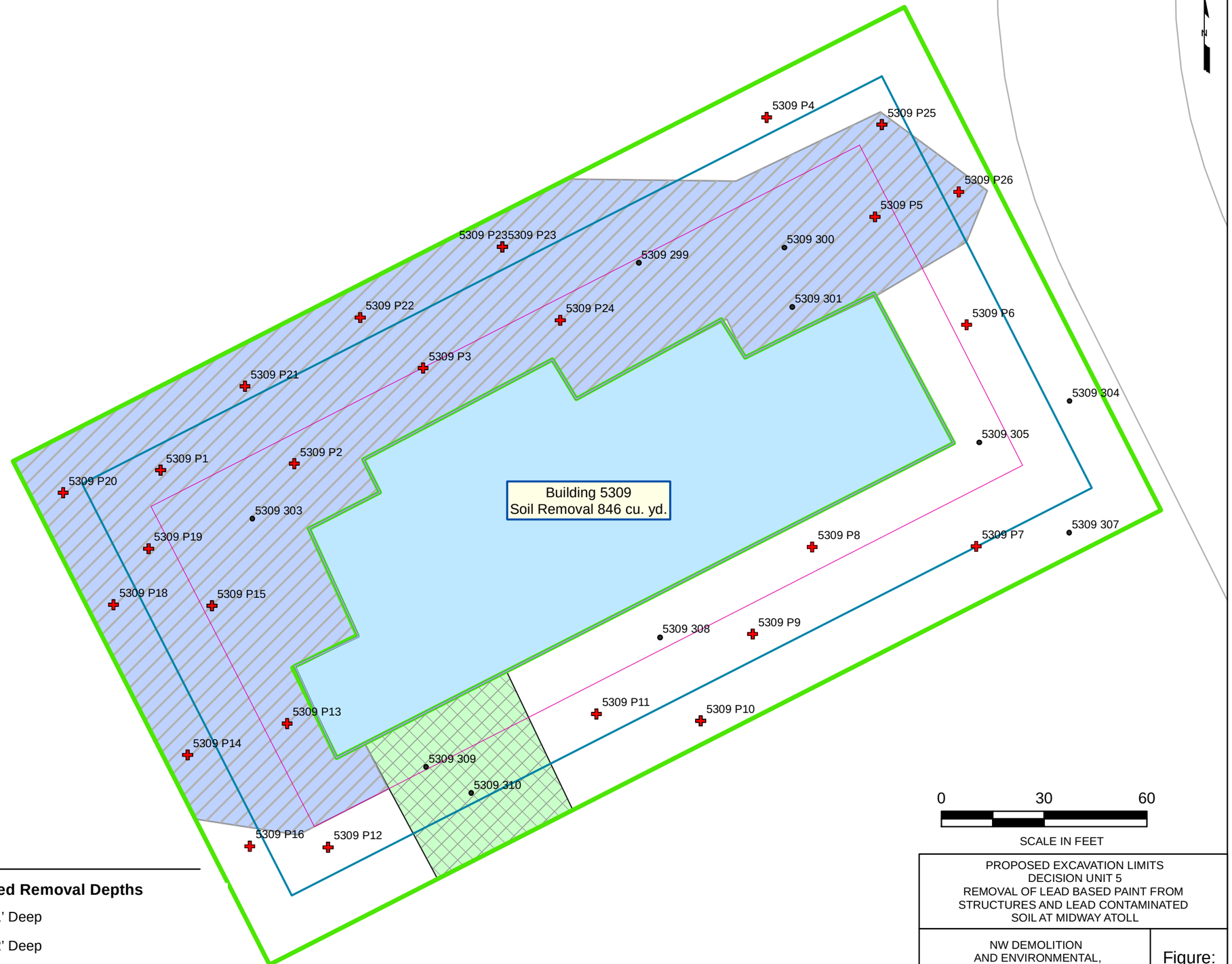


LEGEND

Sampling Locations

- 2014
- 2013
- 2012
- <2012

- 15' Buffer
- 30' Buffer
- 45 ft Building Buffer
- Site Features

Proposed Removal Depths

- 1' Deep
- 2' Deep
- 3' Deep

0 30 60

SCALE IN FEET

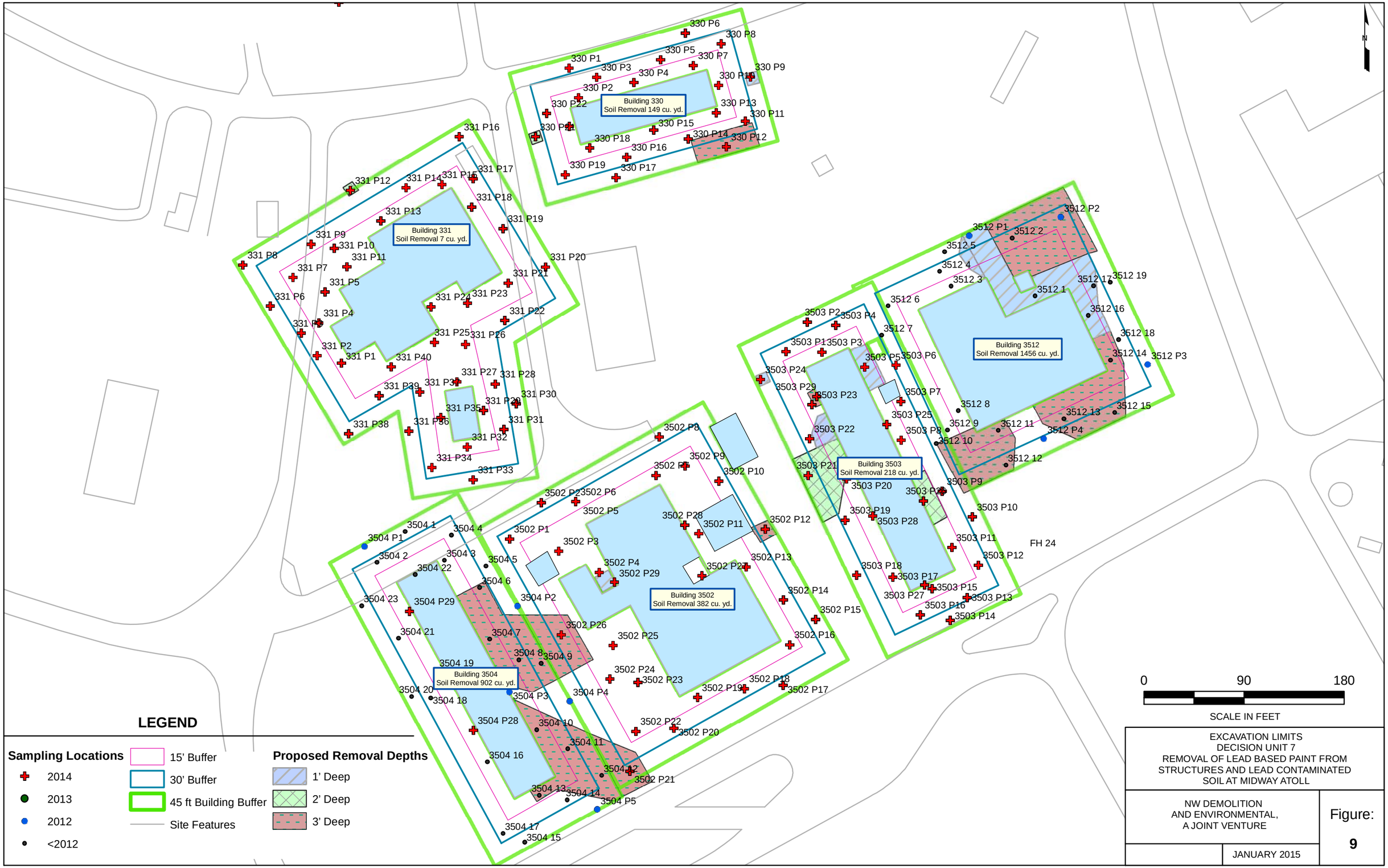
PROPOSED EXCAVATION LIMITS
DECISION UNIT 5
REMOVAL OF LEAD BASED PAINT FROM
STRUCTURES AND LEAD CONTAMINATED
SOIL AT MIDWAY ATOLL

NW DEMOLITION
AND ENVIRONMENTAL,
A JOINT VENTURE

Figure:
8

JANUARY 2015

Path: N:\MMdway\GIS\End_2014_Report\Figure8_ProposedExcavationLimits_DU5.mxd



EXCAVATION LIMITS
DECISION UNIT 7
REMOVAL OF LEAD BASED PAINT FROM STRUCTURES AND LEAD CONTAMINATED SOIL AT MIDWAY ATOLL

NW DEMOLITION AND ENVIRONMENTAL, A JOINT VENTURE

JANUARY 2015

Figure: 9

Path: N:\MMidway\GIS\End_2014_Report\Figure9_ExcavationLimits_DU7.mxd

CONFIRMATION SOIL SAMPLE BOUNDARIES
DECISION UNIT 4
REMOVAL OF LEAD BASED PAINT FROM
STRUCTURES AND LEAD CONTAMINATED
SOIL AT MIDWAY ATOLL

NW DEMOLITION
AND ENVIRONMENTAL,
A JOINT VENTURE

JANUARY 2015

Figure:
10

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CONFIRMATION SOIL SAMPLE BOUNDARIES
DECISION UNIT 7
REMOVAL OF LEAD BASED PAINT FROM
STRUCTURES AND LEAD CONTAMINATED
SOIL AT MIDWAY ATOLL

NW DEMOLITION
AND ENVIRONMENTAL,
A JOINT VENTURE

JANUARY 2015

Figure:
11

Path: P:\GIS\Projects\Midway\Maps\2013 Joint format_11.mxd

PLACEMENT OF SHADE CLOTH
DECISION UNIT 7
REMOVAL OF LEAD BASED PAINT FROM
STRUCTURES AND LEAD CONTAMINATED
SOIL AT MIDWAY ATOLL

NW DEMOLITION
AND ENVIRONMENTAL,
A JOINT VENTURE

JANUARY 2015

Figure:
12

Path: P:\GIS\Projects\Midway\Maps\Joint format_FIG_12.mxd

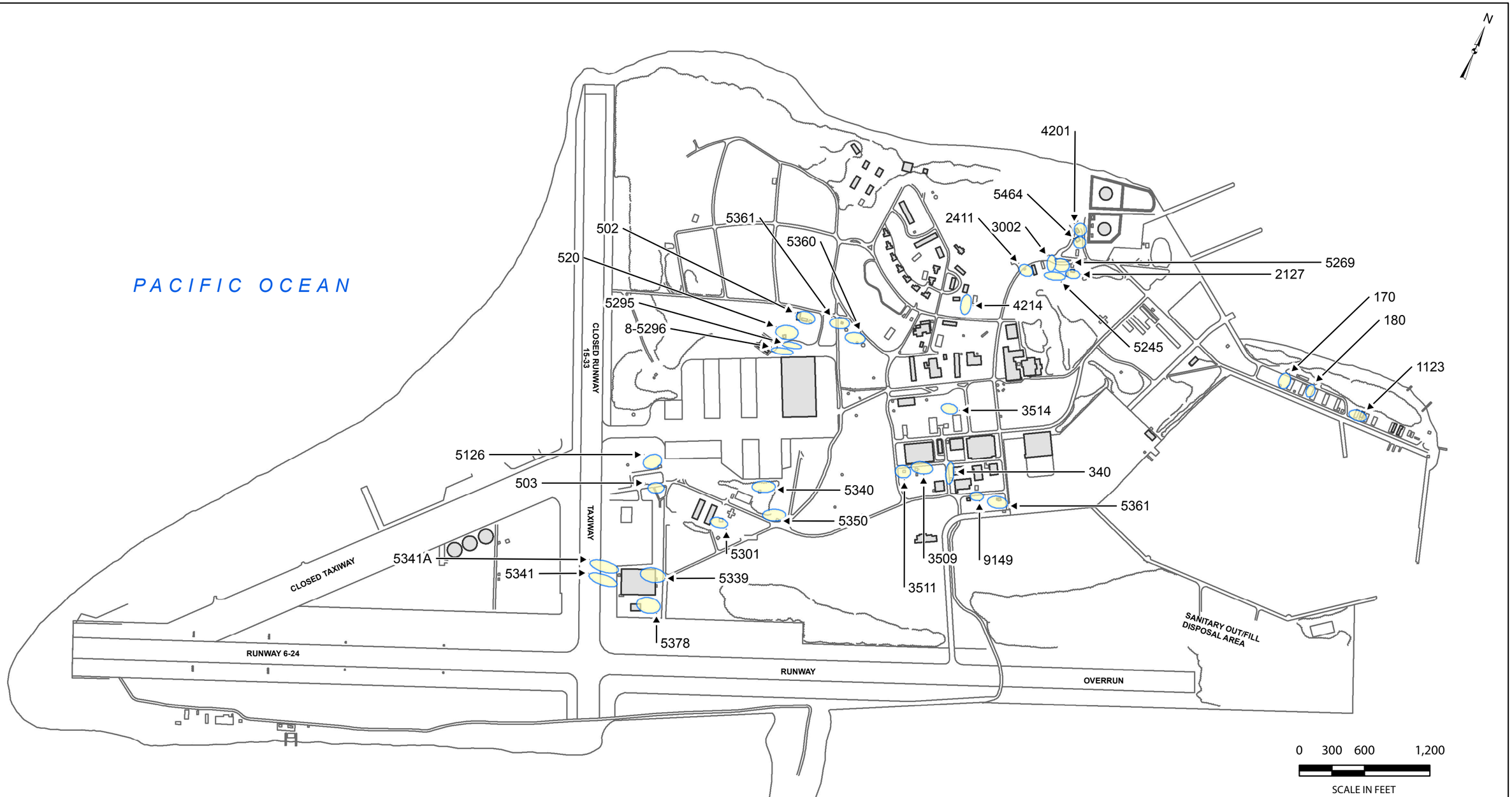
PLACEMENT OF SHADE CLOTH
DECISION UNIT 3
REMOVAL OF LEAD BASED PAINT FROM STRUCTURES AND LEAD CONTAMINATED SOIL AT MIDWAY ATOLL

NW DEMOLITION AND ENVIRONMENTAL, A JOINT VENTURE

JANUARY 2015

Figure: 13

Path: N:\MMidway\GIS\End_2014_Report\Figure13_ShadeClothPlacement_DU3.mxd



BUILDINGS SPRAYED WITH MAECTITE
DECISION UNIT 9
REMOVAL OF LEAD BASED PAINT FROM
STRUCTURES AND LEAD CONTAMINATED
SOIL AT MIDWAY ATOLL

NW DEMOLITION
AND ENVIRONMENTAL,
A JOINT VENTURE

JANUARY 2015

Figure:
14

LEGEND

Buildings Spayed with MAECTITE

Structures

Notes:
1. The location of all features shown are approximate.
2. This drawing is for information purposes.
3. ex: 5361 = indicates building number sprayed with MAECTITE

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APPENDIX E

2015 FIELD YEAR SUPORTING DOCUMENTATION

TABLE 1
DAILY SUMMARY
MIDWAY ATOLL NWR

Date	Maectite Totals (gal)						Treated Soil Totals[1]		
	Applied to Soils (DU3)	Applied to Walls (DU3)	Applied to Soils (DU5)	Applied to Walls (DU5)	Applied to Soils (DU8)	Cumulative Total	Treated Soil (Loads)[2]	Excavated / Hauled to R-2 Unit (LCY)	Excavated / Hauled to R-2 Unit Cumulative Total (LCY)
9/15/2015	0	0	0	0	0	0	0	0	0
9/16/2015	32	20	0	0	0	52	3	43	43
9/17/2015	76	20	0	0	0	147	6	104	147
9/18/2015	114	0	0	10	0	271	8	156	303
9/19/2015	63	0	0	0	0	334	6	86	389
9/20/2015						334			389
9/21/2015	130	0	0	0	0	464	10	177	566
9/22/2015	72	0	0	0	0	536	8	99	665
9/23/2015	68	0	0	0	0	604	6	93	758
9/24/2015	29	0	0	0	0	633	3	40	798
9/25/2015	60	0	0	0	0	692	6	82	880
9/26/2015	55	0	0	0	0	747	6	76	955
9/27/2015						747			955
9/28/2015	122		0	0	0	869	10	167	1,122
9/29/2015	131	0	0	0	0	1,000	11	179	1,301
9/30/2015	142	0	0	0	0	1,141	10	194	1,495
10/1/2015	102	0	0	0	0	1,243	11	140	1,635
10/2/2015	152	0	0	0	0	1,395	12	209	1,844
10/3/2015	0	0	0	0	0	1,395	1	0	1,844
10/4/2015	0	0	0	0	0	1,395	0	0	1,844
10/5/2015	0	0	0	0	0	1,395	0	0	1,844
10/6/2015	0	0	0	0	0	1,395	0	0	1,844
10/7/2015	33	0	42	0	0	1,470	3	103	1,947
10/8/2015	0	0	185	0	0	1,655	22	253	2,200
10/9/2015	0	0	156	0	0	1,810	16	213	2,413
10/10/2015	0	0	141	0	0	1,951	17	193	2,606
10/11/2015						1,951			2,606
10/12/2015		0	0	0	0	1,951	0	0	2,606
10/13/2015	0	0	0	0	0	1,951	0	0	2,606
10/14/2015	0	0	0	0	0	1,951	0	0	2,606
10/15/2015	0	0	0	0	0	1,951	0	0	2,606
10/16/2015	0	0	135	0	0	2,086	8	122	2,728
10/17/2015	0	0	0	0	0	2,086	0	0	2,728
10/18/2015	0	0	0	0	0	2,086	0	0	2,728
10/19/2015	0	0	0	0	0	2,086	0	0	2,728
10/20/2015	0	0	0	0	0	2,086	0	0	2,728
10/21/2015	0	0	0	0	0	2,086	0	0	2,728
10/22/2015	0	0	0	0	0	2,086	0	0	2,728
10/23/2015	0	0	0	0	199	2,285	0	273	3,001
10/24/2015	0	0	0	0	14	2,298	23	19	3,019
10/25/2015						2,298			3,019
10/26/2015	0	0	0	0	108	2,406	9	148	3,167
10/27/2015	0	0	0	0	58	2,463	6	79	3,246
10/28/2015	0	0	0	0	46	2,509	6	63	3,309
10/29/2015	0	0	0	0	101	2,610	16	138	3,447
10/30/2015	0	0	0	0	10	2,620	0	0	3,447
10/31/2015	0	0	0	0	0	2,620	0	0	3,447
11/1/2015						2,620			3,447
11/2/2015	0	0	0	0	0	2,620	0	0	3,447
Totals	1,378	40	658	10	534	2,620	243	3,447	3,447

Notes
1. Estimates are based on MAECTITE volume usage with an application rate rate of 0.75 gallons per cubic yard.
2. Treated soil and concrete loads were hauled to and deposited in the R-2 Unit.
LCY - loose cubic yard
gal - gallon

TABLE 2
DU3, DU5 AND DU8 CONFIRMATION SAMPLING ANALYTICAL RESULTS
MIDWAY ATOLL NWR

Sample Identification	Date	Lead Concentration (mg/kg)		Relative Percent Difference
Building 414 (DU-3)				
414 MIS 0-2"	10/2/2015	15	B	82%
414 MIS 0-2 DUP		36		
414 MIS 0-2 Triplicate		19	B	24%
Building 415 (DU-3)				
415 MIS 0-2"	9/28/2015	11	B	128%
415 MIS 0-2 DUP		50	B	
415 MIS 0-2 TRIPLICATE		18	B	48%
Building 419 (DU-3)				
419 MIS 0-2"	9/26/2015	82	B	164%
419 MIS 0-2 DUP		8.1	B	
419 MIS 0-2" Triplicate		4.7	B	178%
Building 421 (DU-3)				
421 MIS 0-2"	9/28/2015	8.6	B	41%
421 MIS 0-2 DUP		5.7	B	
421 MIS 0-2 Triplicate		6.9	B	22%
Building 422 (DU-3)				
422P100 0-2"	9/26/2015	50	B	60%
422P100 0-2 DUP		27	B	
Building 423 (DU-3)				
423P100 0-2"	9/26/2015	4	B	2%
423P100 0-2 DUP		4.1	B	
Building 424 (DU-3)				
424P100 0-2"	9/26/2015	1.1	J B	0%
424P100 0-2 DUP		1.1	J B	
424P101 0-2"	9/26/2015	14	B	13%
424P101 0-2 DUP		16	B	
Building 4203 (DU-3)				
4203 MIS 0-2"	10/5/2015	1.3	B	60%
4203 MIS 0-2 DUP		0.7	J B	
4203 MIS 0-2 Triplicate		0.99	J B	27%
Building 4204 (DU-3)				
4204 MIS 0-2"	10/3/2015	3.3	B	0%
4204 MIS 0-2 DUP		3.3	B	
4204 MIS 0-2 Triplicate		6.2	B	61%
Building 4208 (DU-3)				
4208P100 0-2"	10/2/2015	4.2	B	15%
4208P100 0-2 DUP		3.6	B	
4208P101 0-2"	10/2/2015	33	B	10%
4208P101 0-2 DUP		30	B	

TABLE 2
DU3, DU5 AND DU8 CONFIRMATION SAMPLING ANALYTICAL RESULTS
MIDWAY ATOLL NWR

Sample Identification	Date	Lead Concentration (mg/kg)		Relative Percent Difference
Building 5309 (DU-5)				
5309 MIS A 0-2"	10/9/2015	13	B	14%
5309 MIS A 0-2 DUP		15	B	
5309 MIS A 0-2 Triplicate		19	B	38%
5309 MIS B 0-2"	10/12/2015	9.8	B	39%
5309 MIS B 0-2 DUP		6.6		
5309 MIS B 0-2 Triplicate		16		48%
R-2 (DU-5)				
R2 MIS A NE 0-2"	10/16/2015	7		11%
R2 MIS A NE 0-2 DUP		6.3		
R2 MIS A NE 0-2 Triplicate		6.1		14%
R2 MIS B NE 0-2"	10/16/2015	44		2%
R2 MIS B NE 0-2 DUP		45		
R2 MIS B NE 0-2 Triplicate		52		17%
S-28 (DU-8)				
S28 MIS 0-2"	10/29/2015	190	B	89%
S28 MIS 0-2 DUP		73	B	
S28 MIS 0-2 Triplicate		55	B	110%
S-30 (DU-8)				
S30 MIS 0-2"	10/30/2015	110		46%
S30 MIS 0-2 DUP		69		
S30 MIS 0-2 Triplicate		82		29%

Notes

1. Lead was analyzed by Environmental Protection Agency Method 6010B following multi-incremental sample preparation.

B = Lead was detected in the blank and the sample.

J = Result is less than the reporting limit but greater than or equal to the method detection limit and the concentration is an approximate value.

TABLE 3
2015 ADDITIONAL SOIL SAMPLING RESULTS - DU8
MIDWAY ATOLL NWR

Sample Identification	Sample Date	Lead Concentration (mg/kg)	
S-28 (DU8)			
S28 -P1 0-6"	10/29/2015	54	B
S28 -P2 0-6"	10/29/2015	480	B
S28 -P3 0-6"	10/29/2015	61	B
S28 -P4 0-6"	10/29/2015	21	B
S28 -P5 0-6"	10/29/2015	59	B
S28 -P6 0-6"	10/29/2015	38	B
S28 -P7 0-6"	10/29/2015	24	B
S28 -P8 0-6"	10/29/2015	30	B
S28 -P9 0-6"	10/29/2015	65	B
S28-P10 0-6"	10/29/2015	25	B
S28-P11 0-6"	10/29/2015	19	B
S28 Gravel Pad	10/29/2015	41	B
S-30 (DU8)			
S30 -P1 0-6"	10/30/2015	24	B
S30 -P2 0-6 DUP		1.1	J B
S30 -P2 0-6"	10/30/2015	<1.1	
S30 -P3 0-6"	10/30/2015	3.9	B
S30 -P4 0-6"	10/30/2015	6.3	B
S30 -P5 0-6"	10/30/2015	79	B
S30 -P6 0-6"	10/30/2015	24	
S30 -P7 0-6"	10/30/2015	57	
S30 -P8 0-6"	10/30/2015	4.3	
S30 -P9 0-6"	10/30/2015	9.3	
S30-P10 0-6"	10/30/2015	100	
S30 Gravel Pad	10/30/2015	2.8	B

TABLE 3
2015 ADDITIONAL SOIL SAMPLING RESULTS - DU8
MIDWAY ATOLL NWR

Sample Identification	Sample Date	Lead Concentration (mg/kg)
QA/QC Results		
Trip Blank*	11/5/2015	<0.030 *

Notes

1. Lead was analyzed by Environmental Protection Agency Method 6010B.
2. Results based on wet weight.
3. Shading indicates concentration exceeds the cleanup value of 75 mg/kg.
4. "*" = Samples are reported in miligrams per liter (mg/l)

mg/kg - milligram per kilogram

TABLE 4
MULTI-EXTRACTION PROCEDURE ANALYTICAL RESULTS
MIDWAY ATOLL NWR

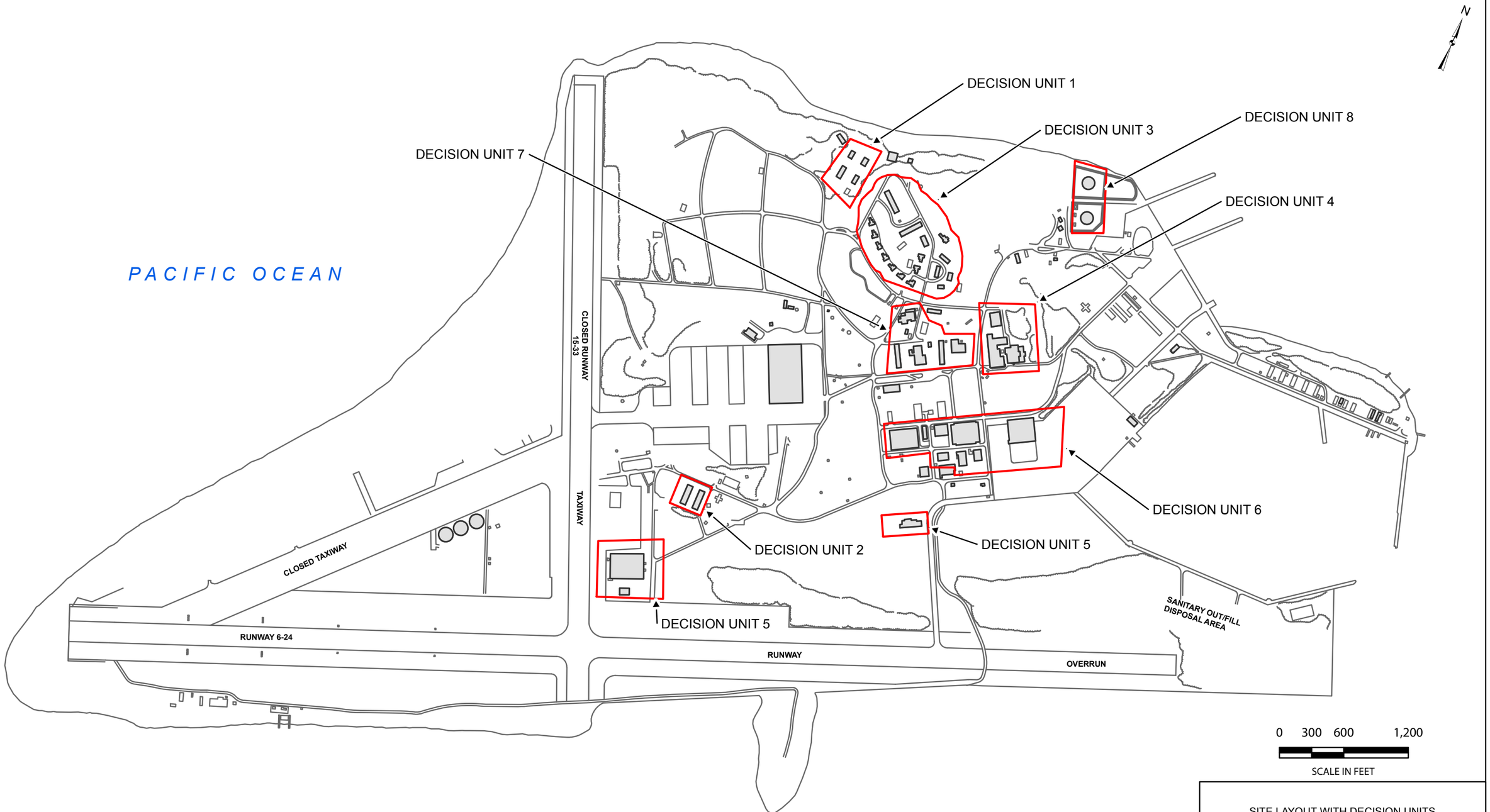
Sample Identification	Date	Lead Concentration (µg/l)
R2 Cell 1	11/2/2015	<11
		<11
		<11
		<11
		<11
		<11
		<11
		<11
		<11
R2 Cell 2	11/2/2015	<11
		<11
		<11
		<11
		<11
		<11
		<11
		<11
		<11

Notes

1. Lead was analyzed by Environmental Protection Agency Method 6010C-Leachability

2. The Toxicity Characteristic Leaching Procedure (TCLP) threshhold for lead is 5 milligrams per liter (mg/l)

µg/l - micrograms per liter



LEGEND

Decision Units Structures

Notes:
1. The location of all features shown are approximate.
2. This drawing is for information purposes.
3. Decision Unit 9 covers all remaining structures.

SITE LAYOUT WITH DECISION UNITS
REMOVAL OF LEAD BASED PAINT FROM STRUCTURES AND LEAD CONTAMINATED SOIL AT MIDWAY ATOLL

NW DEMOLITION AND ENVIRONMENTAL, A JOINT VENTURE

JANUARY 2015

Figure: 1

Path: P:\GIS\Projects\Midway\Maps\2014_Joint format_Fig1.mxd

Building 4203
Building 4204
Building 4208
Building 414
Building 400
Building 4209
Building 4212
Building 424
Building 4210
Building 423
Building 415
Building 422
Building 421
Building 419
Building 4211
Building 416
Building 418
Building 417

0 120 240
SCALE IN FEET

LEGEND

15' Buffer
30' Buffer
45' Buffer
Site Features

Removal Depths
1' Deep
2' Deep

Existing Building
Concrete Pad

EXCAVATION LIMITS
DECISION UNIT 3
REMOVAL OF LEAD BASED PAINT FROM
STRUCTURES AND LEAD CONTAMINATED
SOIL AT MIDWAY ATOLL

NW DEMOLITION
AND ENVIRONMENTAL,
A JOINT VENTURE

FEB 2016

Figure:
2

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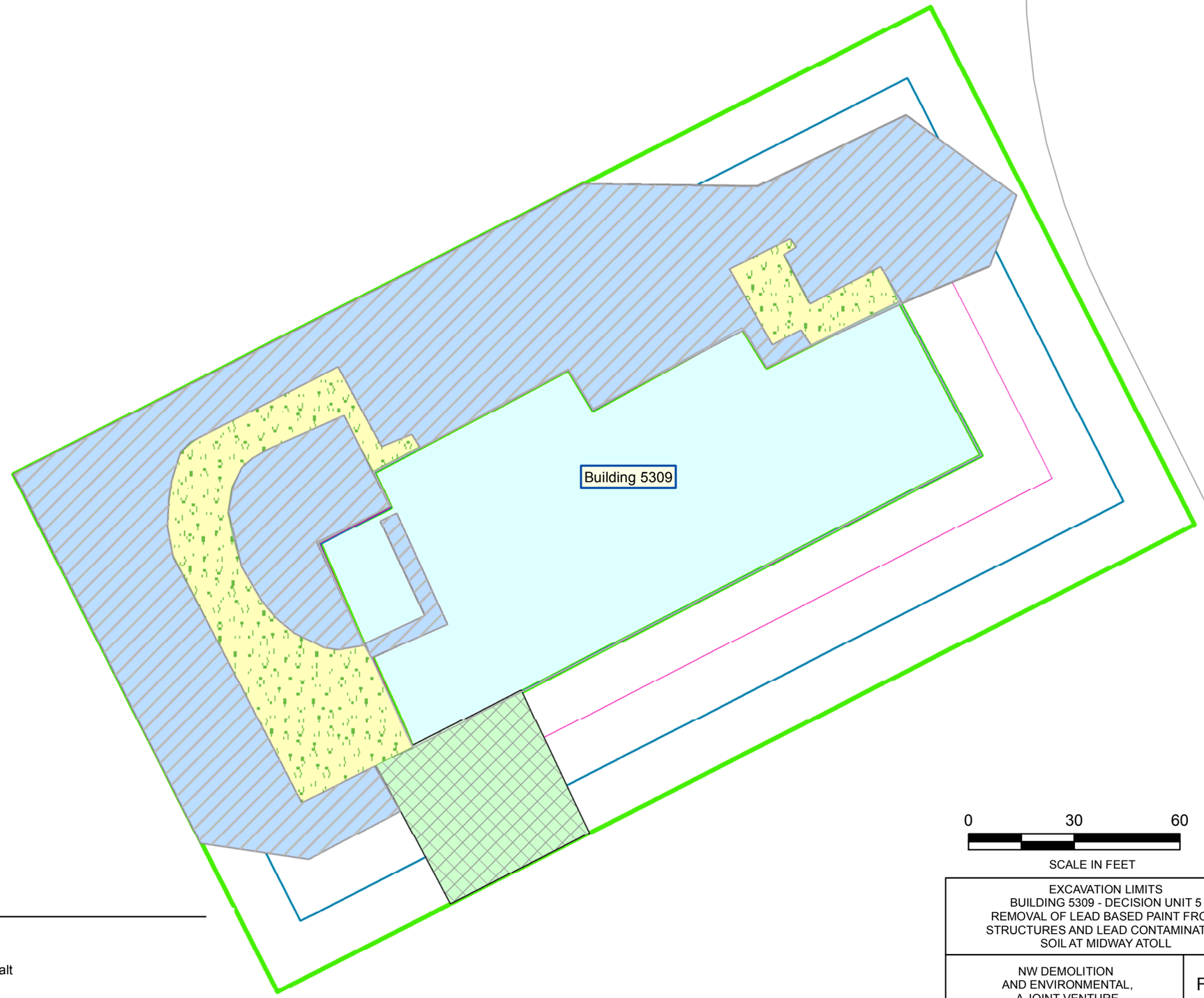

0 30 60

SCALE IN FEET

LEGEND

15' Buffer

30' Buffer

45 ft Building Buffer

Site Features

Removal Depths

0.5' Deep Underlain by Asphalt

1' Deep

2' Deep

EXCAVATION LIMITS
BUILDING 5309 - DECISION UNIT 5
REMOVAL OF LEAD BASED PAINT FROM
STRUCTURES AND LEAD CONTAMINATED
SOIL AT MIDWAY ATOLL

NW DEMOLITION
AND ENVIRONMENTAL,
A JOINT VENTURE

FEB 2016

Figure:

3

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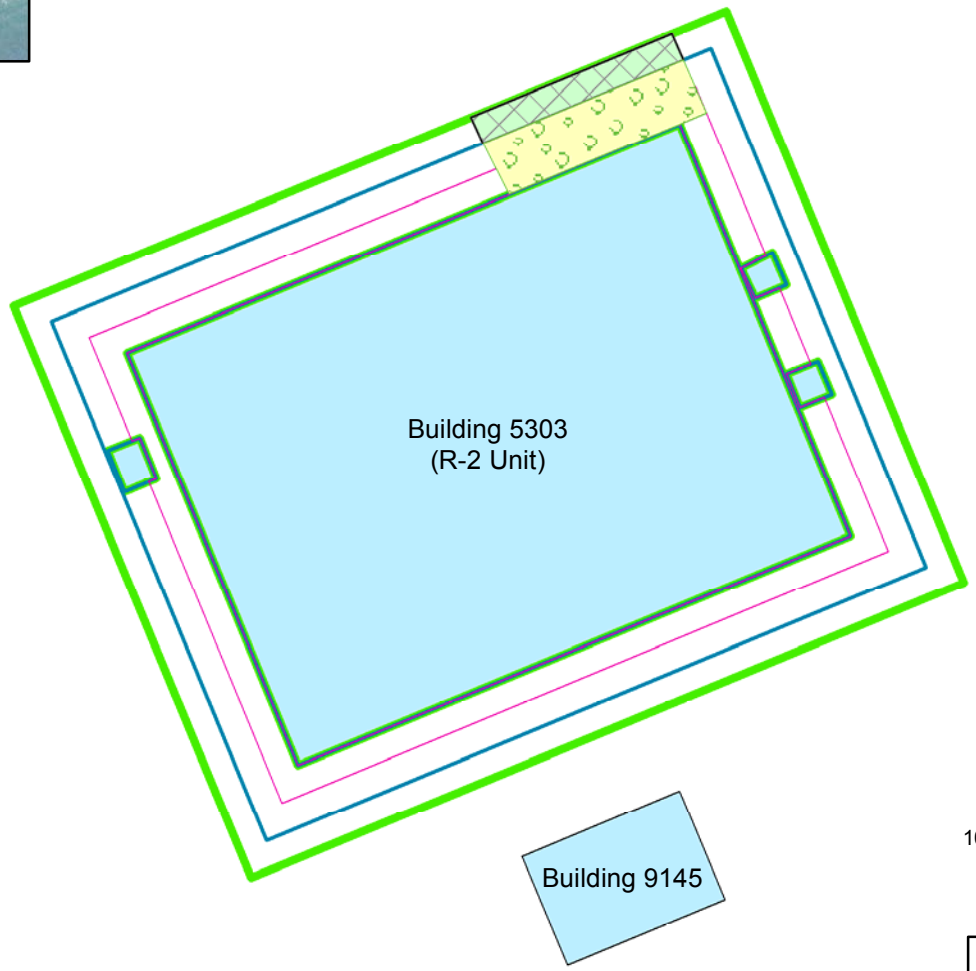


N

100 50 0 100 Feet

15' Buffer
30' Buffer
45' Buffer

Removal Depths

0.5' Deep Underlain by Asphalt
2' Deep

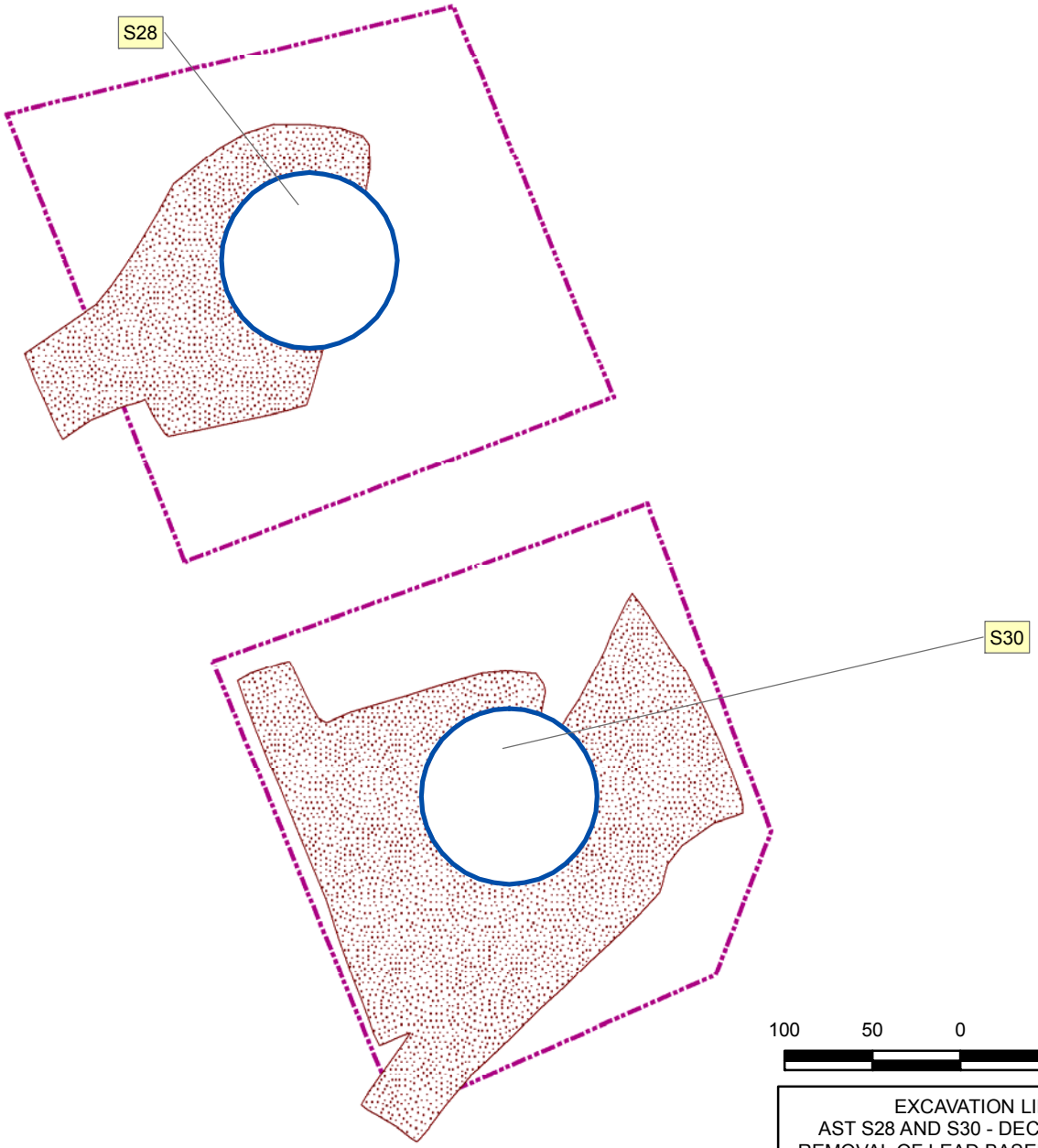
EXCAVATION LIMITS
BUILDING 5303 - DECISION UNIT 5
REMOVAL OF LEAD BASED PAINT FROM
STRUCTURES AND LEAD CONTAMINATED
SOIL AT MIDWAY ATOLL

NW DEMOLITION
AND ENVIRONMENTAL,
A JOINT VENTURE

Feb 2016

Figure
4

Path: N:\MMidway\GIS\End_2015_Report\Figure4_ExcavationLimits_DU2.mxd



N

100 50 0 100 Feet

Former Structure

Removal Depths

Surface Scrape Area (0-3")

EXCAVATION LIMITS
AST S28 AND S30 - DECISION UNIT 8
REMOVAL OF LEAD BASED PAINT FROM
STRUCTURES AND LEAD CONTAMINATED
SOIL AT MIDWAY ATOLL

NW DEMOLITION
AND ENVIRONMENTAL,
A JOINT VENTURE

Feb 2016

Figure
5

Path: N:\MMidway\GIS\End_2015_Report\Figure5_ExcavationLimits_DU9_S28_S30.mxd

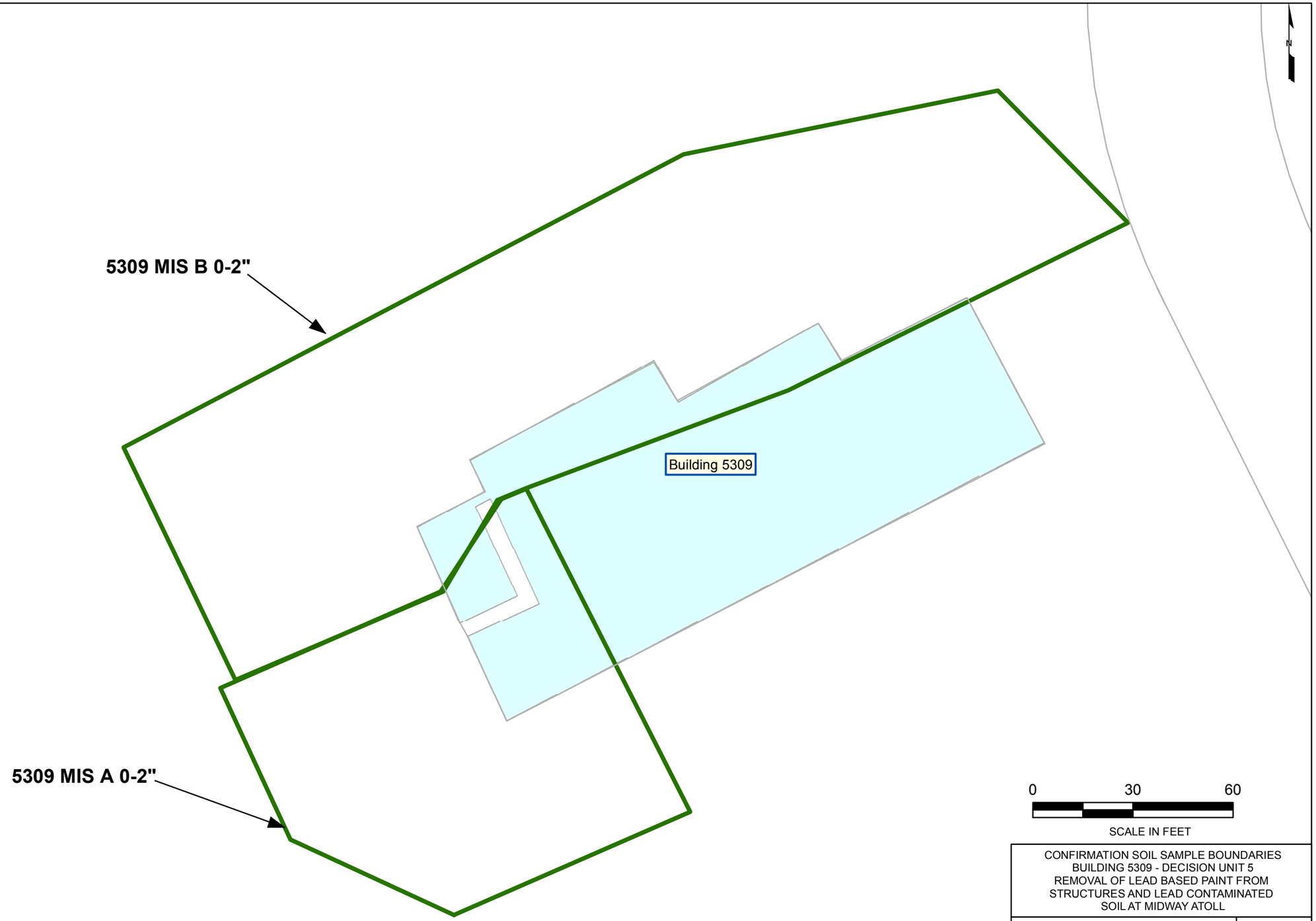
CONFIRMATION SOIL SAMPLE BOUNDARIES
DECISION UNIT 3
REMOVAL OF LEAD BASED PAINT FROM
STRUCTURES AND LEAD CONTAMINATED
SOIL AT MIDWAY ATOLL

NW DEMOLITION
AND ENVIRONMENTAL,
A JOINT VENTURE

Portland, OR | FEB 2016

Figure:
6

Path: N:\MIdway\GIS\Eng_2015_Report\Figure6_ConfirmationSoilSampleBoundaries_DU3.mxd



LEGEND

MIS Plots

Site Features

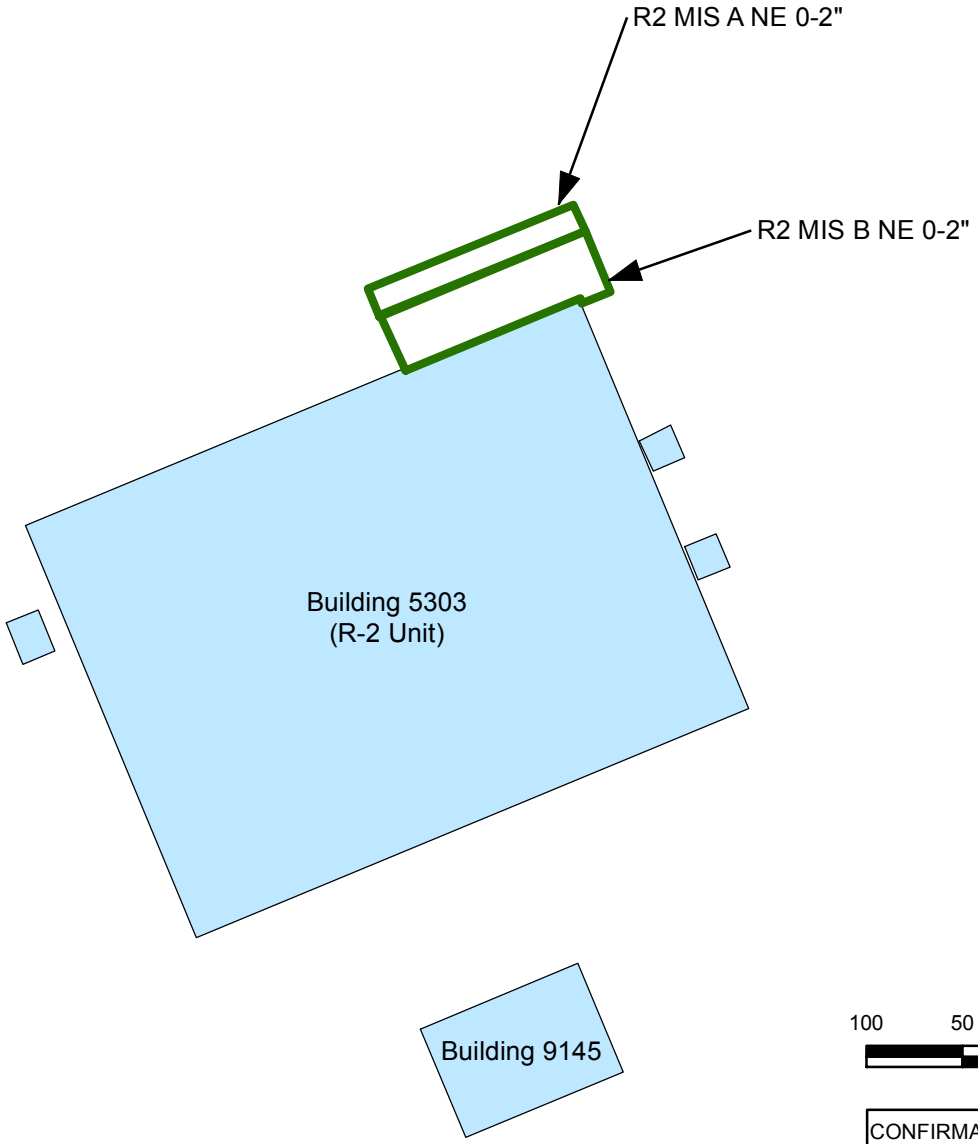
CONFIRMATION SOIL SAMPLE BOUNDARIES
BUILDING 5309 - DECISION UNIT 5
REMOVAL OF LEAD BASED PAINT FROM
STRUCTURES AND LEAD CONTAMINATED
SOIL AT MIDWAY ATOLL

NW DEMOLITION
AND ENVIRONMENTAL,
A JOINT VENTURE

FEB 2016

Figure:
7

Path: N:\MMidway\GIS\End_2015_Report\Figure7_ConfirmationSoilSampleBoundaries_DU5.mxd



N

100 50 0 100 Feet

MIS Plots

CONFIRMATION SOIL SAMPLE BOUNDARIES
BUILDING 5303 - DECISION UNIT 5
REMOVAL OF LEAD BASED PAINT FROM
STRUCTURES AND LEAD CONTAMINATED
SOIL AT MIDWAY ATOLL

NW DEMOLITION
AND ENVIRONMENTAL,
A JOINT VENTURE

Feb 2016

Figure
8

Path: N:\MMidway\GIS\End_2015_Report\Figure8_ConfirmationSoilSampleBoundaries_DU2.mxd

N

100 50 0 100 Feet

MIS Plots
Former Structure
Approximate HDPE Liner Extents

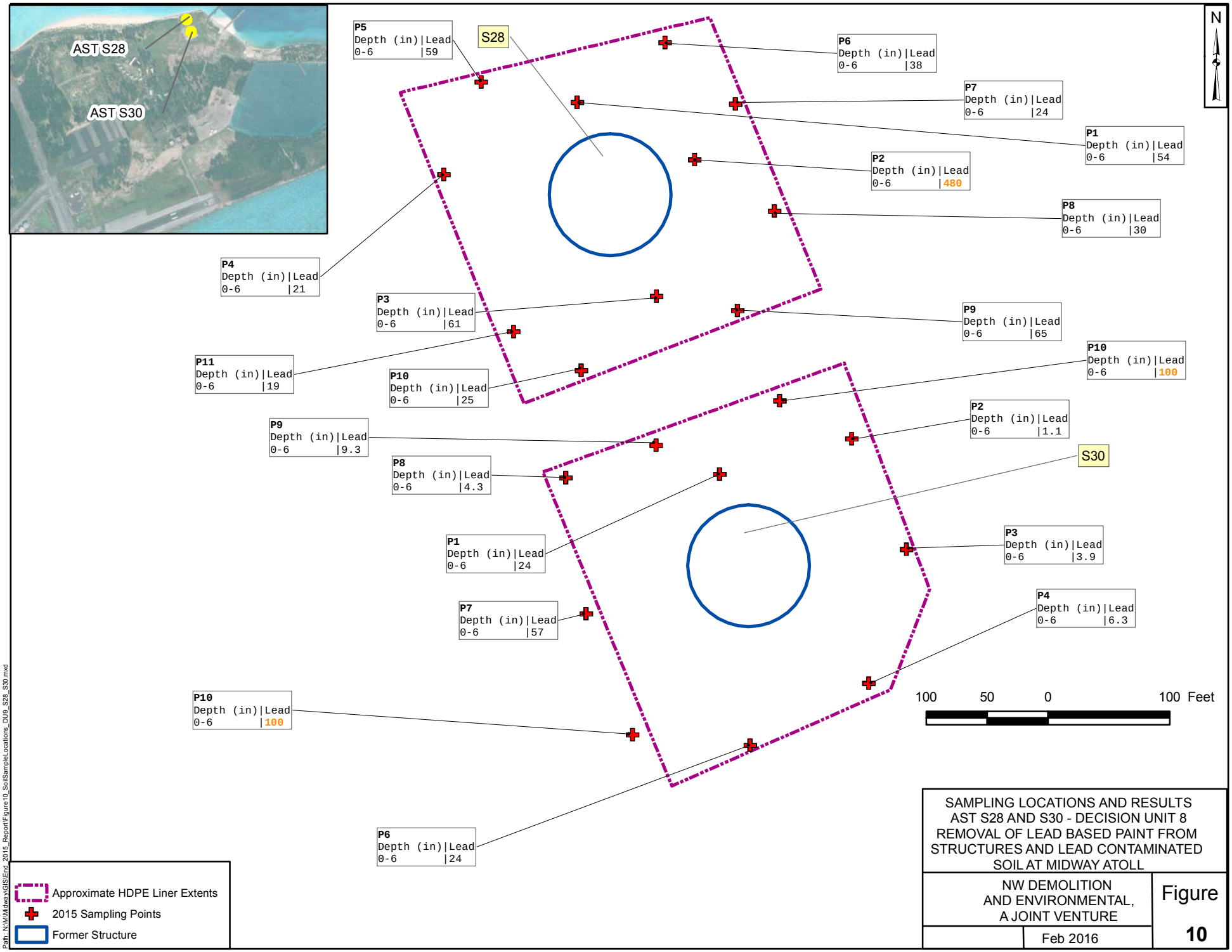
CONFIRMATION SOIL SAMPLE BOUNDARIES
AST S28 AND S30 - DECISION UNIT 8
REMOVAL OF LEAD BASED PAINT FROM
STRUCTURES AND LEAD CONTAMINATED
SOIL AT MIDWAY ATOLL

NW DEMOLITION
AND ENVIRONMENTAL,
A JOINT VENTURE

Feb 2016

Figure
9

Path: N:\MMidway\GIS\End_2015_Report\Figure9_ConfirmationSoilSampleBoundaries_DU9_S28_S30.mxd



SAMPLING LOCATIONS AND RESULTS
AST S28 AND S30 - DECISION UNIT 8
REMOVAL OF LEAD BASED PAINT FROM
STRUCTURES AND LEAD CONTAMINATED
SOIL AT MIDWAY ATOLL

NW DEMOLITION
AND ENVIRONMENTAL,
A JOINT VENTURE

Feb 2016

Figure
10

Path: N:\MMidway\GIS\End_2015_Report\Figure10_SoilSampleLocations_DU9_S28_S30.mxd

APPENDIX F

DECISION UNIT 9 DOCUMENTATION

Fig F-18
Boat
Houses

Fig F-13
Bldg S464

Fig F-14
Bldg 140

Fig F-11
Bldg 232
& 233

Fig F-7
Bldg 425
& S426

Fig F-12
Bldg 269,
2127, 2254

Fig F-15
Bldg
144

Fig F-17
Bldg S1126

Fig F-8
Bldg
5342

Fig F-5
Bldg
502

Fig F-16
Bldg
1124

Fig F-6
S598

Fig F-2
Bldgs
347, 3501,
S3126 & S3127

Fig F-3
Bldg
521

Fig F-10
Bldg
3521

Fig F-4
Bldg 520

Fig F-1
Bldg S361

Fig F-9
Bldg 309, 340,
354 & 9149

0 675 1,350

SCALE IN FEET

LEGEND

Fire Hydrant Lead Results in Soil (mg/kg)	Lead Results in Soil (mg/kg)
<75	<75
75 - 750	75 - 750
>750	>750
	Area Shown In Figure Set

Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AEX, Ge
Community

LEAD RESULTS IN SOIL
DECISION UNIT 9
REMOVAL OF LEAD BASED PAINT FROM
STRUCTURES AND LEAD CONTAMINATED
SOIL AT MIDWAY ATOLL

NW DEMOLITION
AND ENVIRONMENTAL,
A JOINT VENTURE

PORTLAND, OR | FEB 2016

Figure:
F

Path: N:\MMidway\GIS\End_2015_Report\FigA_LeadResults_IslandWide_Post2014.mxd

P10

Depth (in)	Lead
0-6	37
12-18	9.6
24-30	0.36 J

P9

Depth (in)	Lead
0-6	43
12-18	18
24-30	9

P13

Depth (in)	Lead
0-6	34
12-18	12
24-30	62
30-36	7.6

P8

Depth (in)	Lead
0-6	38
12-18	38
24-30	14

P11

Depth (in)	Lead
0-6	51
12-18	87
24-30	43

P12

Depth (in)	Lead
0-6	59
12-18	24
24-30	35

P7

Depth (in)	Lead
0-6	41
12-18	4.3
24-30	3.5

P16

Depth (in)	Lead
0-6	54
12-18	9
24-30	21

P6

Depth (in)	Lead
0-6	36
12-18	15
24-30	2.3
30-36	1.1 U

Building S361
(Pesticide Storage)

P14

Depth (in)	Lead
0-6	40
12-18	6.3
24-30	5.7

P5

Depth (in)	Lead
0-6	60
12-18	69
24-30	7.7

P15

Depth (in)	Lead
0-6	31
12-18	30
24-30	19

P4

Depth (in)	Lead
0-6	43
12-18	25
24-30	14

P3

Depth (in)	Lead
0-6	42
12-18	4.6
24-30	10

P17

Depth (in)	Lead
0-6	42
12-18	2.8
24-30	1.1 U

P1

Depth (in)	Lead
0-6	31
12-18	13
24-30	0.59 J

P2

Depth (in)	Lead
0-6	57
12-18	19
24-30	0.34 J

N

0 20 40

SCALE IN FEET

Legend/Notes

15' Buffer

30' Buffer

45' Buffer

Current and Historical Sampling Locations

J indicates estimated amount

U indicates non-detected at detection limit

Note: Lead results reported in milligrams per kilogram.

MIDWAY ISLAND
SOIL SAMPLING RESULTS
DECISION UNIT 9
BUILDING S361
(PESTICIDE STORAGE)

NW DEMOLITION
AND ENVIRONMENTAL,
A JOINT VENTURE

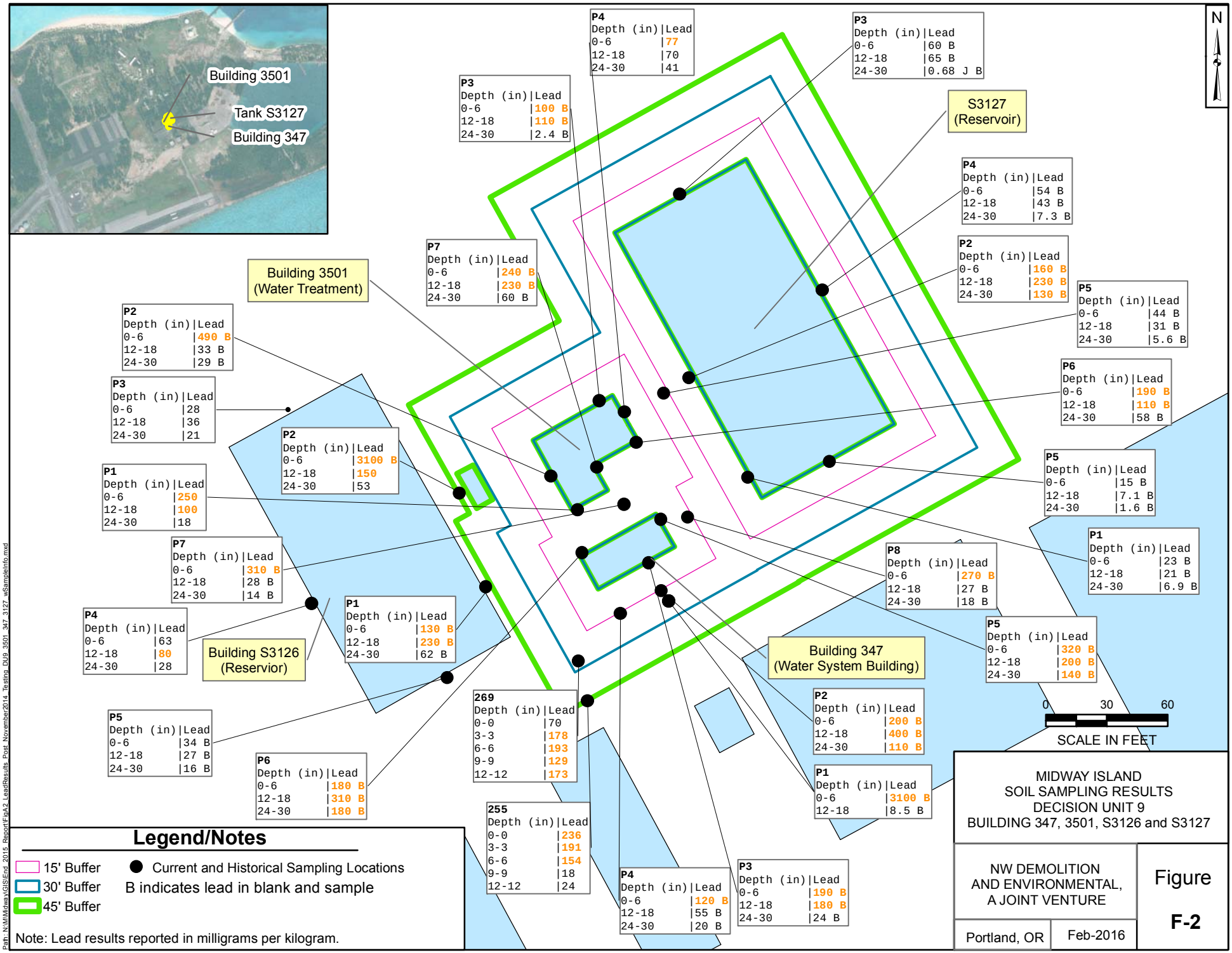
Portland, OR

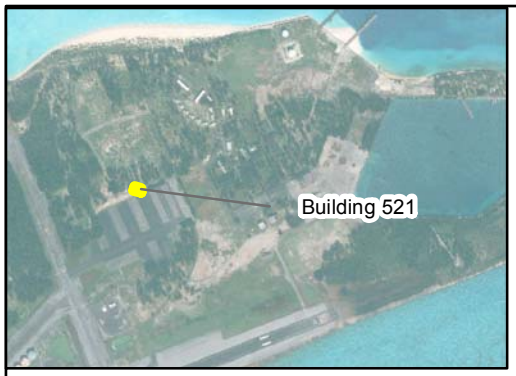
Feb-2016

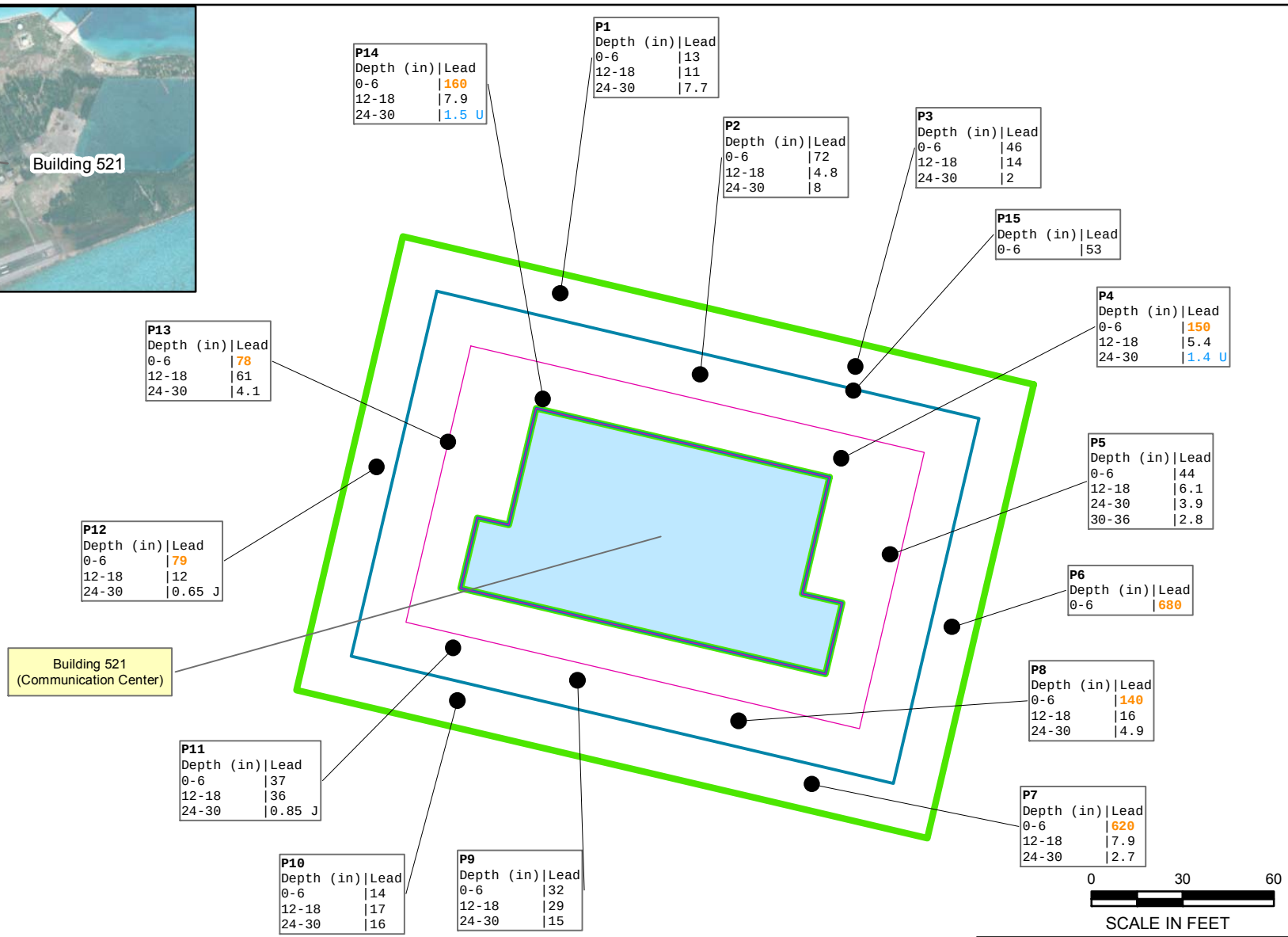
Figure

F-1

Path: N:\MMidway\GIS\End_2015_Report\FigA1_LeadResults_Pest_November2014_Testing_DU9_S361_Pest_wSampleInfo_v3.mxd


Building 3501
Tank S3127
Building 347
N
S3127 (Reservoir)
Building 3501 (Water Treatment)
Building S3126 (Reservior)
Building 347 (Water System Building)
P4 Depth (in) Lead 0-6 77 12-18 70 24-30 41
P3 Depth (in) Lead 0-6 60 B 12-18 65 B 24-30 0.68 J B
P3 Depth (in) Lead 0-6 100 B 12-18 110 B 24-30 2.4 B
P4 Depth (in) Lead 0-6 54 B 12-18 43 B 24-30 7.3 B
P7 Depth (in) Lead 0-6 240 B 12-18 230 B 24-30 60 B
P2 Depth (in) Lead 0-6 160 B 12-18 230 B 24-30 130 B
P5 Depth (in) Lead 0-6 44 B 12-18 31 B 24-30 5.6 B
P2 Depth (in) Lead 0-6 490 B 12-18 33 B 24-30 29 B
P6 Depth (in) Lead 0-6 190 B 12-18 110 B 24-30 58 B
P3 Depth (in) Lead 0-6 28 12-18 36 24-30 21
P2 Depth (in) Lead 0-6 3100 B 12-18 150 24-30 53
P5 Depth (in) Lead 0-6 15 B 12-18 7.1 B 24-30 1.6 B
P1 Depth (in) Lead 0-6 250 12-18 100 24-30 18
P1 Depth (in) Lead 0-6 23 B 12-18 21 B 24-30 6.9 B
P7 Depth (in) Lead 0-6 310 B 12-18 28 B 24-30 14 B
P8 Depth (in) Lead 0-6 270 B 12-18 27 B 24-30 18 B
P4 Depth (in) Lead 0-6 63 12-18 80 24-30 28
P1 Depth (in) Lead 0-6 130 B 12-18 230 B 24-30 62 B
P5 Depth (in) Lead 0-6 320 B 12-18 200 B 24-30 140 B
P2 Depth (in) Lead 0-6 200 B 12-18 400 B 24-30 110 B
P5 Depth (in) Lead 0-6 34 B 12-18 27 B 24-30 16 B
269 Depth (in) Lead 0-0 70 3-3 178 6-6 193 9-9 129 12-12 173
P6 Depth (in) Lead 0-6 180 B 12-18 310 B 24-30 180 B
P1 Depth (in) Lead 0-6 3100 B 12-18 8.5 B
255 Depth (in) Lead 0-0 236 3-3 191 6-6 154 9-9 18 12-12 24
P4 Depth (in) Lead 0-6 120 B 12-18 55 B 24-30 20 B
P3 Depth (in) Lead 0-6 190 B 12-18 180 B 24-30 24 B
0 30 60
SCALE IN FEET
Legend/Notes
15' Buffer
30' Buffer
45' Buffer
Current and Historical Sampling Locations
B indicates lead in blank and sample
Note: Lead results reported in milligrams per kilogram.
MIDWAY ISLAND
SOIL SAMPLING RESULTS
DECISION UNIT 9
BUILDING 347, 3501, S3126 and S3127
NW DEMOLITION AND ENVIRONMENTAL, A JOINT VENTURE
Portland, OR
Feb-2016
Figure
F-2
Path: N:\MMidway\GIS\End_2015_Report\FigA2_LeadResults_Post_November2014_Testing_DU9_3501_347_3127_wSampleInfo.mxd





Legend/Notes

- 15' Buffer
- 30' Buffer
- 45' Buffer
- Current and Historical Sampling Locations
- Existing Building
- U indicates non-detected at detection limit

Note: Lead results reported in milligrams per kilogram.

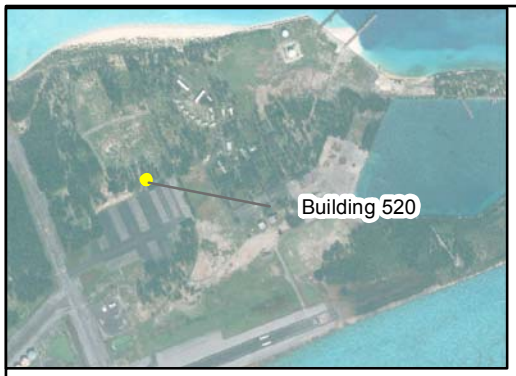
MIDWAY ISLAND
SOIL SAMPLING RESULTS
DECISION UNIT 9
BUILDING 521

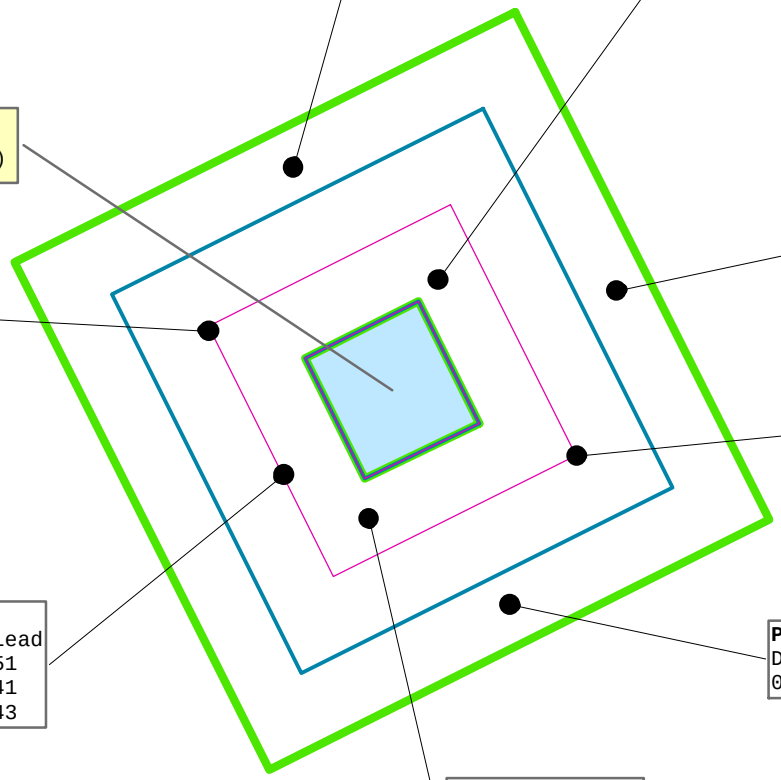
NW DEMOLITION
AND ENVIRONMENTAL,
A JOINT VENTURE

Portland, OR | Feb-2016

Figure
F-3

Path: N:\MMidway\GIS\End_2015_Report\FigA3_LeadResults_Sept2015_Testing_DU9_521_wSampleInfo.mxd





P1

Depth (in)	Lead
0-6	17
12-18	21
24-30	15

P2

Depth (in)	Lead
0-6	670
12-18	850
24-30	70

P3

Depth (in)	Lead
0-6	320
12-18	720
24-30	170

P4

Depth (in)	Lead
0-6	200

P5

Depth (in)	Lead
0-6	270

P6

Depth (in)	Lead
0-6	78
12-18	63
24-30	76

P7

Depth (in)	Lead
0-6	51
12-18	41
24-30	43

P8

Depth (in)	Lead
0-6	43
12-18	41
24-30	5.7

N

0 20 40

SCALE IN FEET

Legend/Notes

- 15' Buffer
- 30' Buffer
- 45' Buffer
- Current and Historical Sampling Locations
- Existing Building

Note: Lead results reported in milligrams per kilogram.

MIDWAY ISLAND
SOIL SAMPLING RESULTS
DECISION UNIT 9
BUILDING 520

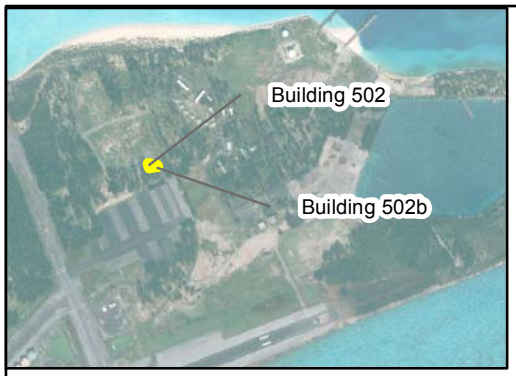
NW DEMOLITION
AND ENVIRONMENTAL,
A JOINT VENTURE

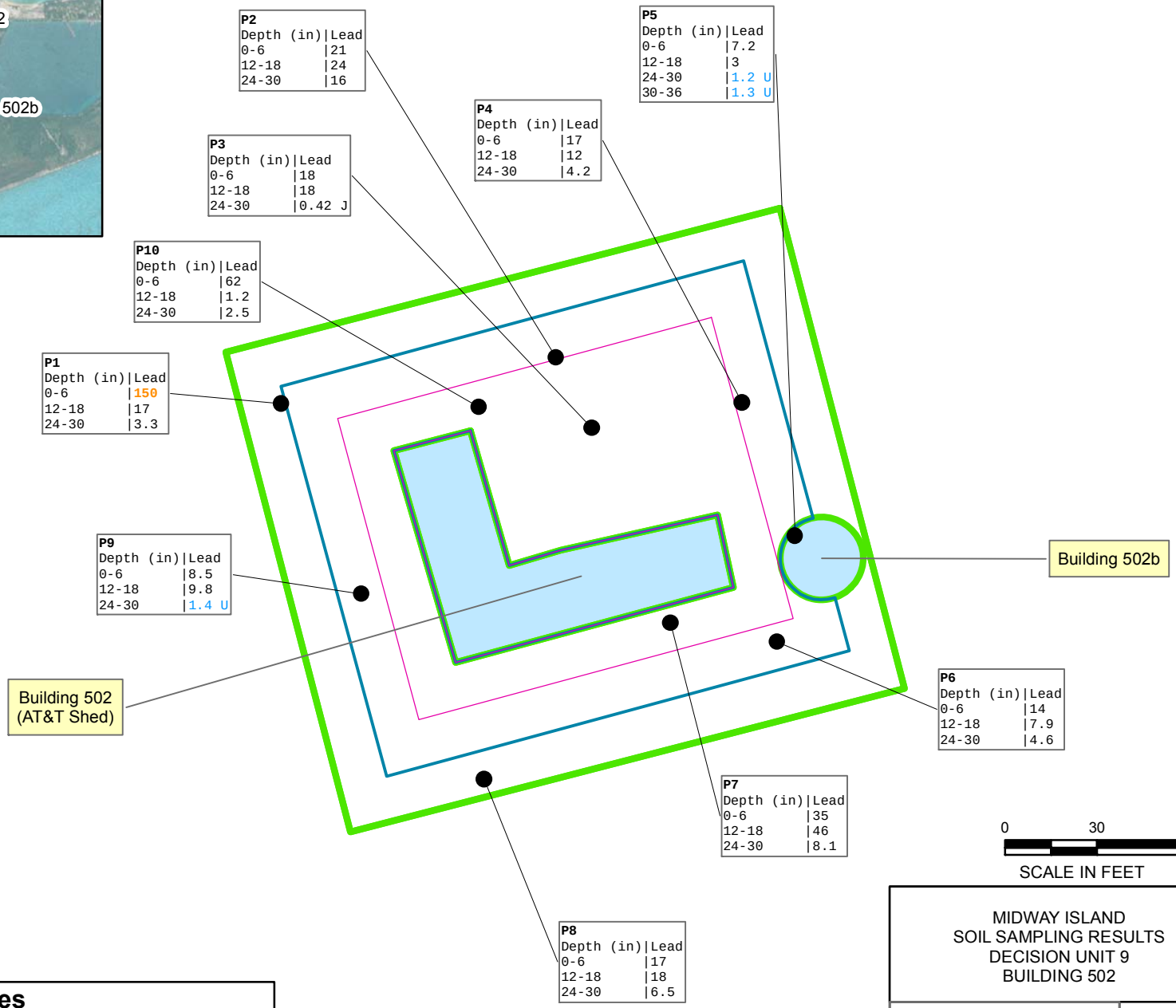
Portland, OR | Feb-2016

Figure

F-4

Path: N:\MMidway\GIS\End_2015_Report\FigA4_LeadResults_Sept2015_Testing_DU9_520_wSampleInfo.mxd





Legend/Notes

- 15' Buffer
- 30' Buffer
- 45' Buffer
- Current and Historical Sampling Locations
- Existing Building
- U indicates non-detected at detection limit

Note: Lead results reported in milligrams per kilogram.

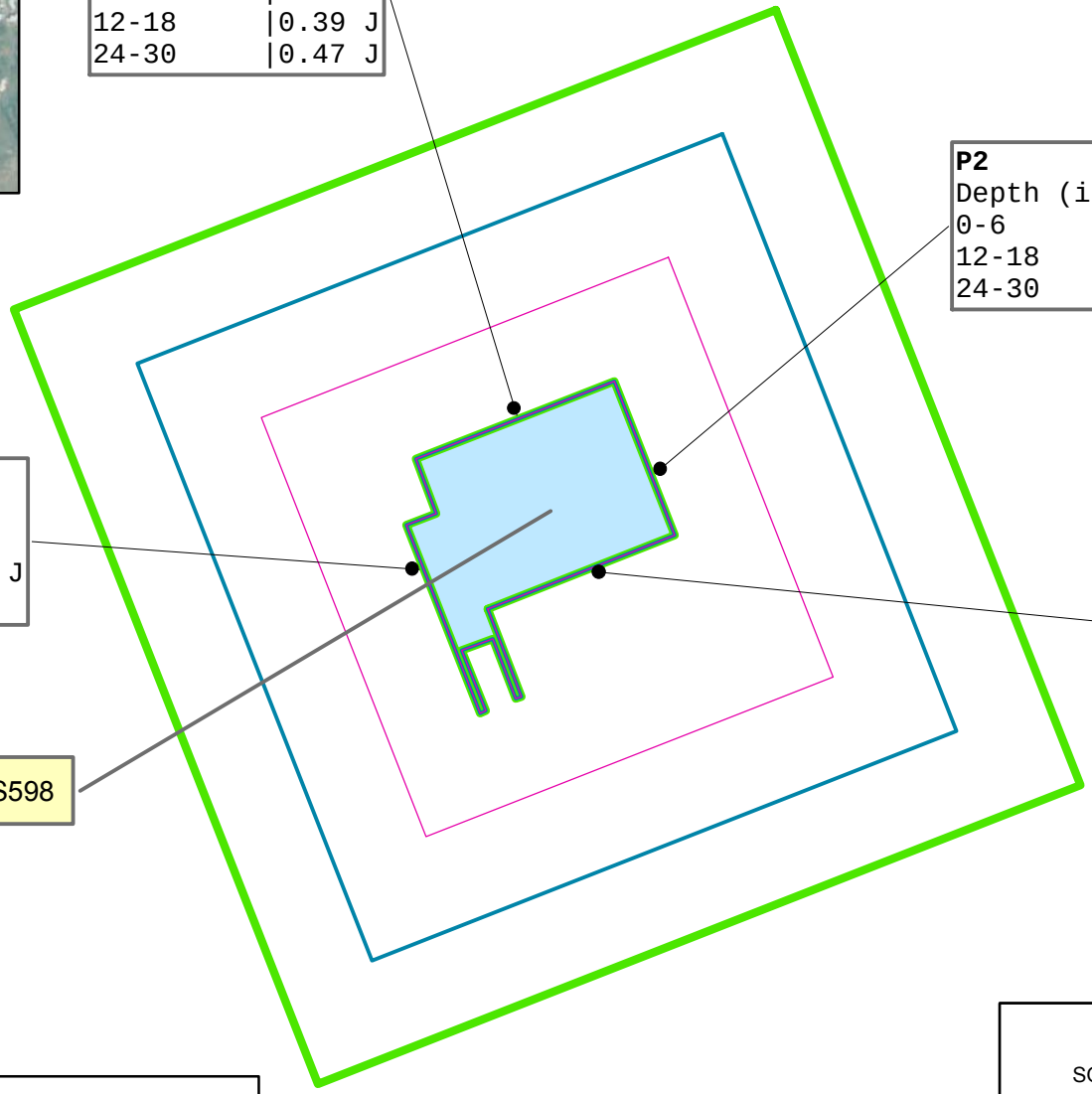
MIDWAY ISLAND
SOIL SAMPLING RESULTS
DECISION UNIT 9
BUILDING 502

NW DEMOLITION
AND ENVIRONMENTAL,
A JOINT VENTURE

Portland, OR | Feb-2016

Figure
F-5

Path: N:\MMidway\GIS\End_2015_Report\FigA5_LeadResults_Sept2015_Testing_DU9_502_wSampleInfo.mxd



P1

Depth (in)	Lead
0-6	1.2 J
12-18	0.39 J
24-30	0.47 J

P2

Depth (in)	Lead
0-6	6.1
12-18	8.1
24-30	8.2

P3

Depth (in)	Lead
0-6	8.8
12-18	1.2 J
24-30	1.1 J

P4

Depth (in)	Lead
0-6	25
12-18	0.91 J
24-30	2.7

N

0 10 20

SCALE IN FEET

Legend/Notes

- 15' Buffer
- 30' Buffer
- 45' Buffer
- Sampling Locations
- Exisitng Building
- J indicates estimated amount

Note: Lead results reported in milligrams per kilogram.

MIDWAY ISLAND
SOIL SAMPLING RESULTS
DECISION UNIT 9
BUILDING S598

NW DEMOLITION
AND ENVIRONMENTAL,
A JOINT VENTURE

Portland, OR | Feb-2016

Figure

F-6

Path: N:\MMidway\GIS\End_2015_Report\FigA.6_LeadResults_September2015_Testing_DU9_Tank_wSampleInfo.mxd

N

P2

Depth (in)	Lead
0-6	24 B

Building S426
(Satellite TV)

Building 425
(Receiver Building)

P1

Depth (in)	Lead
0-6	15 B

P1

Depth (in)	Lead
0-6	50 B
12-18	45 B
24-30	0.41 J B

0 10 20
SCALE IN FEET

Legend/Notes

- 15' Buffer
- 30' Buffer
- 45' Buffer
- Current and Historical Sampling Locations
- Existing Building
- B indicates lead in blank and sample
- J indicates estimated amount

Note: Lead results reported in milligrams per kilogram.

MIDWAY ISLAND
SOIL SAMPLING RESULTS
DECISION UNIT 9
BUILDING 425 and S426

NW DEMOLITION
AND ENVIRONMENTAL,
A JOINT VENTURE

Portland, OR | Feb-2016

Figure
F-7

Path: N:\MMidway\GIS\End_2015_Report\FigA7_LeadResults_Post_September2015_Testing_DU9_425_426_wSampleInfo.mxd

P5

Depth (in)	Lead
0-6	70
12-18	45
24-30	18

P4

Depth (in)	Lead
0-6	43
12-18	36
24-30	8.6

P1

Depth (in)	Lead
0-6	25
12-18	28
24-30	5.2

P6

Depth (in)	Lead
0-6	15
12-18	19
24-30	9.9

P3

Depth (in)	Lead
0-6	42
12-18	62
24-30	18

P2

Depth (in)	Lead
0-6	190
12-18	62
24-30	28

Building 5342
(Telephone South Bldg)

N

0 10 20 30
SCALE IN FEET

Legend/Notes

- 15' Buffer
- 30' Buffer
- 45' Buffer
- Current and Historical Sampling Locations
- Existing Building

Note: Lead results reported in milligrams per kilogram.

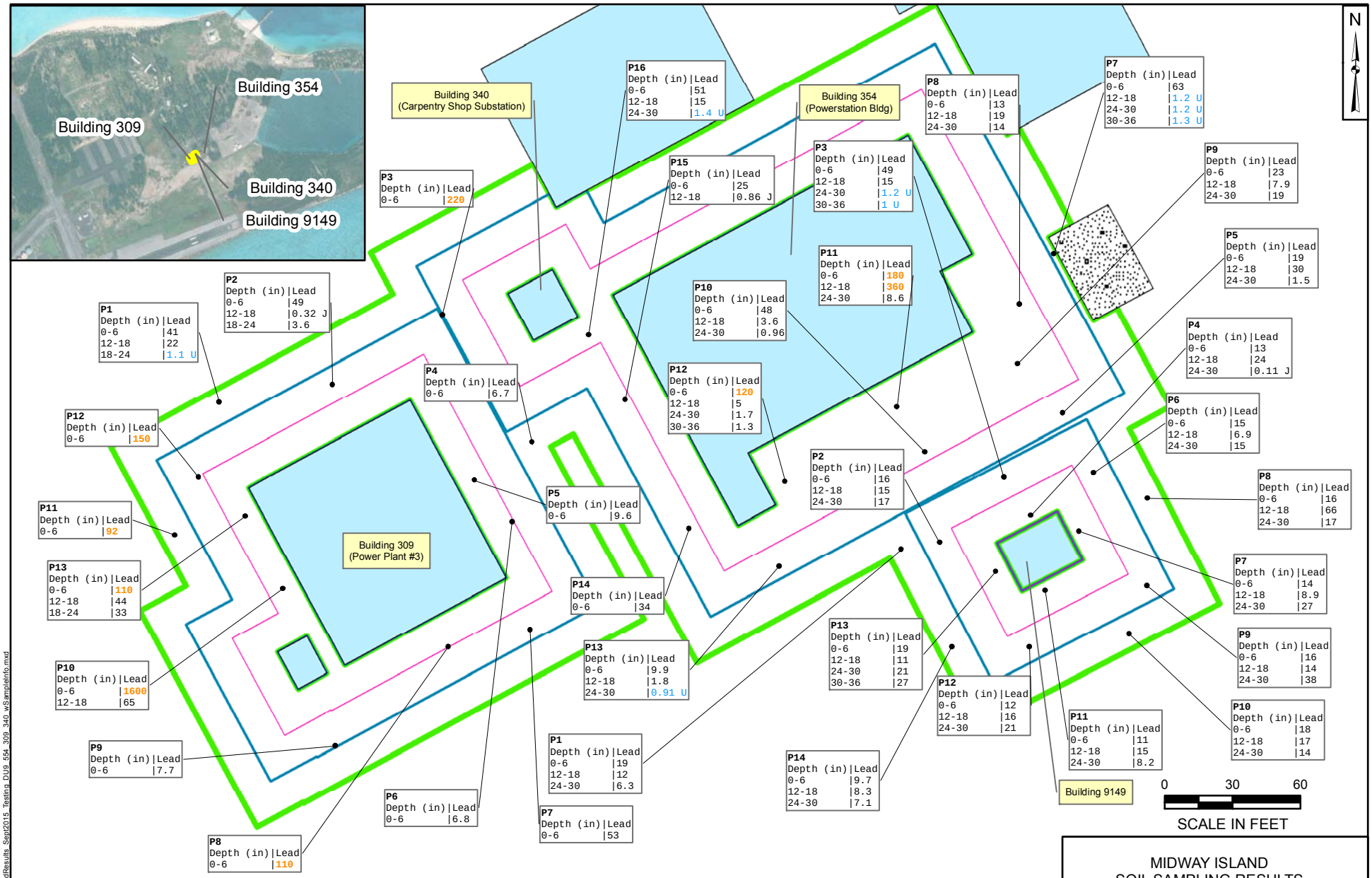
MIDWAY ISLAND
SOIL SAMPLING RESULTS
DECISION UNIT 9
BUILDING 5342
(TELEPHONE SOUTH BLDG)

NW DEMOLITION
AND ENVIRONMENTAL,
A JOINT VENTURE

Portland, OR | Feb-2016

Figure
F-8

Path: N:\MMidway\GIS\End_2015_Report\FigA8_LeadResults_Post_September2015_Testing_DU9_5342_wSampleInfo.mxd



Legend/Notes

- 15' Buffer
- 30' Buffer
- 45' Buffer
- Current and Historical Sampling Locations
- Existing Building
- Concrete Pad
- J indicates estimated amount
- U indicates non-detected at detection limit

Note: Lead results reported in milligrams per kilogram.

MIDWAY ISLAND
SOIL SAMPLING RESULTS
DECISION UNIT 9
BUILDINGS 309, 340, 354 AND 9149

NW DEMOLITION AND ENVIRONMENTAL, A JOINT VENTURE

Portland, OR | Feb-2016

Figure F-9

Path: N:\MMidway\GIS\End_2015_Report\FigA9_LeadResults_Sept2015_Testing_DU9_554_309_340_wSampleInfo.mxd

N

P1

Depth (in)	Lead
0-6	18
12-18	1.3 U
24-30	1.4 U

P2

Depth (in)	Lead
0-6	37
12-18	26
24-30	4.9

P3

Depth (in)	Lead
0-6	100
12-18	170
24-30	130

P4

Depth (in)	Lead
0-6	62
12-18	39
24-30	64

P5

Depth (in)	Lead
0-6	69
12-18	18
24-30	49
30-36	56

P6

Depth (in)	Lead
0-6	26
12-18	23
24-30	0.14 J

P7

Depth (in)	Lead
0-6	22
12-18	1500
24-30	37

P8

Depth (in)	Lead
0-6	36
12-18	7.8
24-30	18

P9

Depth (in)	Lead
0-6	26
12-18	2.4
24-30	1.3 U

P10

Depth (in)	Lead
0-6	37
12-18	60
24-30	1.3 U

P11

Depth (in)	Lead
0-6	31
12-18	1.3 U
24-30	1.2 U

P12

Depth (in)	Lead
0-6	27
12-18	27
24-30	77
30-36	9.9

Building 3521
(FWS Office)

0 20 40
SCALE IN FEET

Legend/Notes

- 15' Buffer
- 30' Buffer
- 45' Buffer
- Current and Historical Sampling Locations
- Existing Building
- J indicates estimated amount
- U indicates non-detected at detection limit

Note: Lead results reported in milligrams per kilogram.

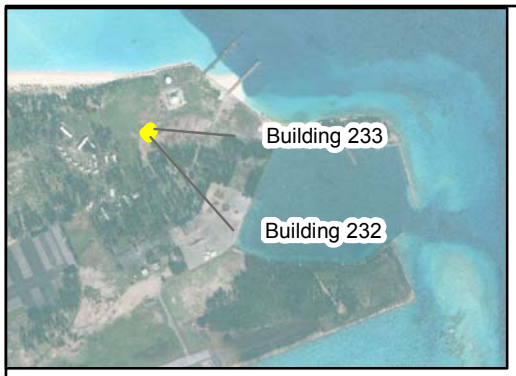
MIDWAY ISLAND
SOIL SAMPLING RESULTS
DECISION UNIT 9
BUILDING 3521

NW DEMOLITION
AND ENVIRONMENTAL,
A JOINT VENTURE

Portland, OR | Feb-2016

Figure
F-10

Path: N:\MMidway\GIS\End_2015_Report\Fig\A.10_LeadResults_Sept2015_Testing_DU9_3521_wSampleInfo.mxd



N

P1

Depth (in)	Lead
0-6	11
12-18	2.8
24-30	1.3 J

P3

Depth (in)	Lead
0-6	19
12-18	6.3
24-30	4

Building 233
(Tin Shed Maintenance Shop)

P5

Depth (in)	Lead
0-6	22
12-18	9
24-30	9.4

P12

Depth (in)	Lead
0-6	23
12-18	20
24-30	10

P4

Depth (in)	Lead
0-6	13
12-18	1.1 J
24-30	15
30-36	21

Building 232
(Fuel Farm Storage)

P11

Depth (in)	Lead
0-6	5.4
12-18	0.9 J
24-30	5

P6

Depth (in)	Lead
0-6	23
12-18	1.4 U
24-30	1.3 U

P10

Depth (in)	Lead
0-6	16
12-18	0.41 J
24-30	2.7

P7

Depth (in)	Lead
0-6	14
12-18	25
24-30	1.2 U

0 20 40

SCALE IN FEET

P8

Depth (in)	Lead
0-6	31
12-18	1.9
24-30	1.2 U

P9

Depth (in)	Lead
0-6	22
12-18	180
24-30	0.37 J

Legend/Notes

- 15' Buffer
- 30' Buffer
- 45' Buffer
- Concrete and Historical Sampling Locations
- Existing Building
- J indicates estimated amount
- U indicates non-detected at detection limit

Note: Lead results reported in milligrams per kilogram.

MIDWAY ISLAND
SOIL SAMPLING RESULTS
DECISION UNIT 9
BUILDINGS 232 AND 233

NW DEMOLITION
AND ENVIRONMENTAL,
A JOINT VENTURE

Portland, OR | Feb-2016

Figure
F-11

Path: N:\MMidway\GIS\End_2015_Report\FigA11_LeadResults_Sept2015_Testing_DU9_232_233_wSamplelnfo.mxd

N

P2

Depth (in)	Lead
0-6	59
12-18	4.7
24-30	1.5

P1

Depth (in)	Lead
0-6	66

P3

Depth (in)	Lead
0-6	24
12-18	33
24-30	1.5
30-36	1.3 U

Building S225A
(Mogas Fueling Station)

P12

Depth (in)	Lead
0-6	200
12-18	82
24-30	18

P5

Depth (in)	Lead
0-6	12
12-18	4.5
24-30	1.3 U

P10

Depth (in)	Lead
0-6	63
12-18	16
24-30	40

P11

Depth (in)	Lead
0-6	19
12-18	8.9
24-30	13
30-36	14

P4

Depth (in)	Lead
0-6	80
12-18	83
24-30	1.6

P8

Depth (in)	Lead
0-6	71
12-18	16
24-30	26

P6

Depth (in)	Lead
0-6	21
12-18	17
24-30	20

Tank S269
(Mogas Tanks)

Building 2127
(POL Office)

0 5,700 11,400

SCALE IN FEET

P7

Depth (in)	Lead
0-6	18
12-18	46
24-30	62

P9

Depth (in)	Lead
0-6	66
12-18	210
24-30	54

Legend/Notes

- 15' Buffer
- 30' Buffer
- 45' Buffer
- Current and Historical Sampling Locations
- Existing Building

Note: Lead results reported in milligrams per kilogram.

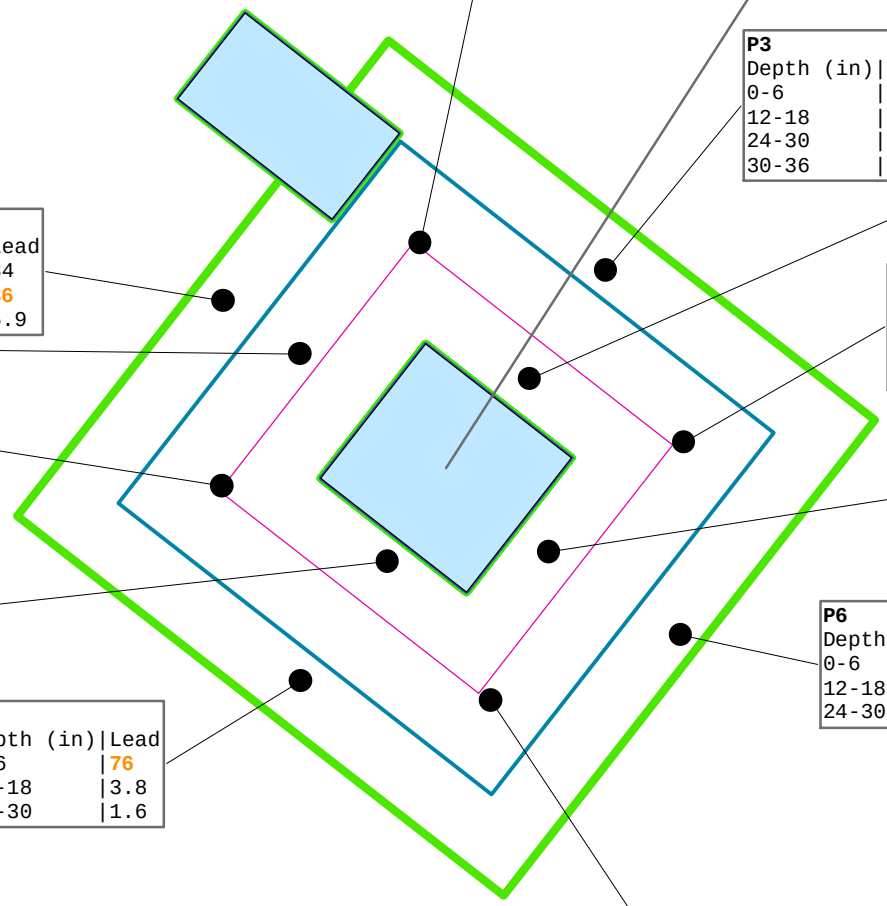
MIDWAY ISLAND
SOIL SAMPLING RESULTS
DECISION UNIT 9
BUILDING S269, S225A AND 2127

NW DEMOLITION
AND ENVIRONMENTAL,
A JOINT VENTURE

Portland, OR | Feb-2016

Figure
F-12

Path: N:\MMidway\GIS\End_2015_Report\Fig12_LeadResults_Sep2015_Testing_DU9_269_2127_2254_wSampleInfo.mxd



P1

Depth (in)	Lead
0-6	34
12-18	86
24-30	5.9

P2

Depth (in)	Lead
0-6	23
12-18	16
24-30	1.1 J

P3

Depth (in)	Lead
0-6	33
12-18	1.7
24-30	6.6
30-36	4.8

P4

Depth (in)	Lead
0-6	140
12-18	75
24-30	28

P5

Depth (in)	Lead
0-6	43
12-18	13
24-30	14

P6

Depth (in)	Lead
0-6	32
12-18	28
24-30	32

P7

Depth (in)	Lead
0-6	72
12-18	19
24-30	12
30-36	9.2

P8

Depth (in)	Lead
0-6	30
12-18	110
24-30	7.9

P9

Depth (in)	Lead
0-6	76
12-18	3.8
24-30	1.6

P10

Depth (in)	Lead
0-6	110
12-18	24
24-30	15

P11

Depth (in)	Lead
0-6	51
12-18	11
24-30	4

P12

Depth (in)	Lead
0-6	27
12-18	2.3
24-30	1.6
30-36	0.37 J

N

0 20 40

SCALE IN FEET

Legend/Notes

15' Buffer
30' Buffer
45' Buffer
Current And Historical Sampling Locations
Existing Building
J indicates estimated amount

Note: Lead results reported in milligrams per kilogram.

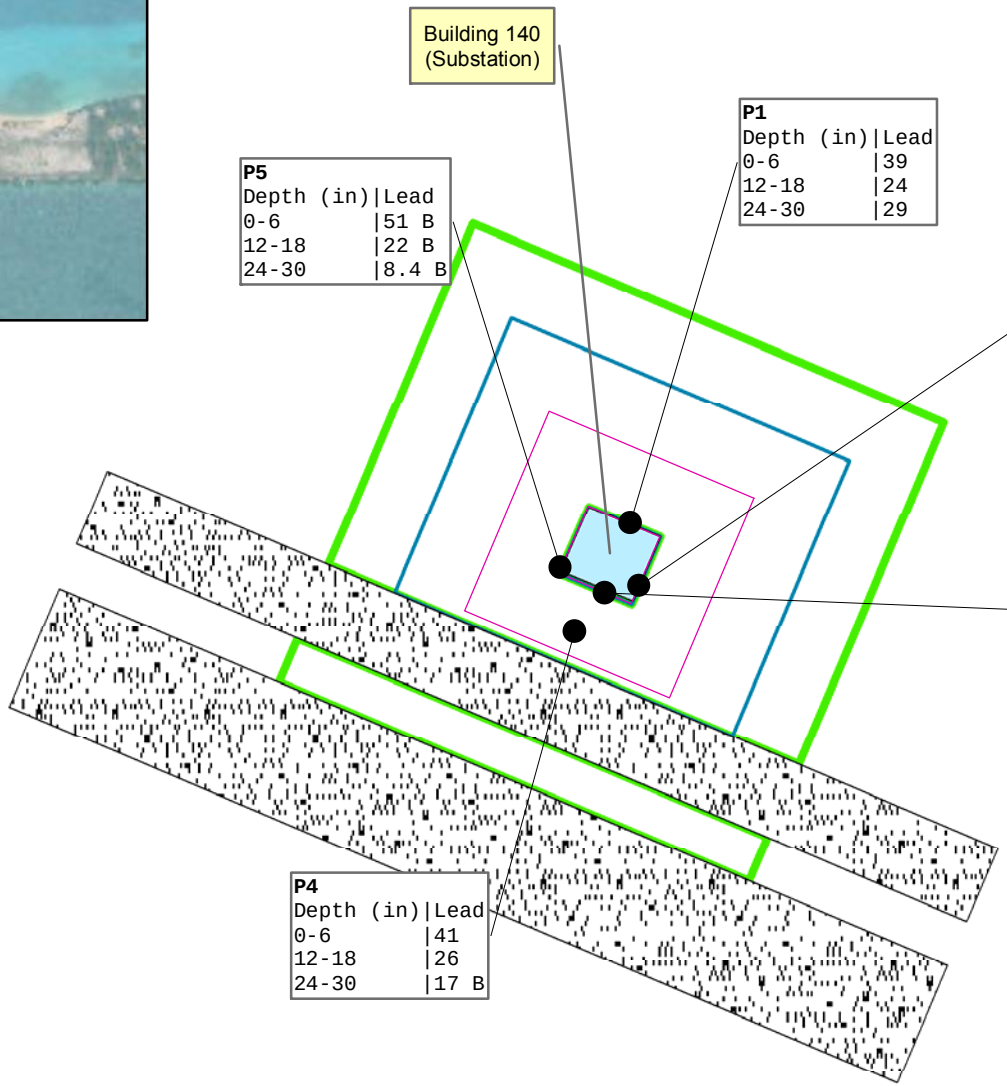
MIDWAY ISLAND
SOIL SAMPLING RESULTS
DECISION UNIT 9
BUILDING S464
(FUEL OIL PUMPHOUSE)

NW DEMOLITION
AND ENVIRONMENTAL,
A JOINT VENTURE

Portland, OR | Feb-2016

Figure
F-13

Path: N:\MMidway\GIS\End_2015_Report\Fig\A13_LeadResults_Sept2015_Testing_DU9_Pumphouse_wSampleInfo.mxd



Legend/Notes

- 15' Buffer
- 30' Buffer
- 45' Buffer
- Existing Building
- Concrete Pad
- Current and Historical Sampling Locations

B indicates lead in blank and sample

J indicates estimated amount

U indicates non-detected at detection limit

Note: Lead results reported in milligrams per kilogram.

MIDWAY ISLAND
SOIL SAMPLING RESULTS
DECISION UNIT 9
BUILDING 140
(SUBSTATION)

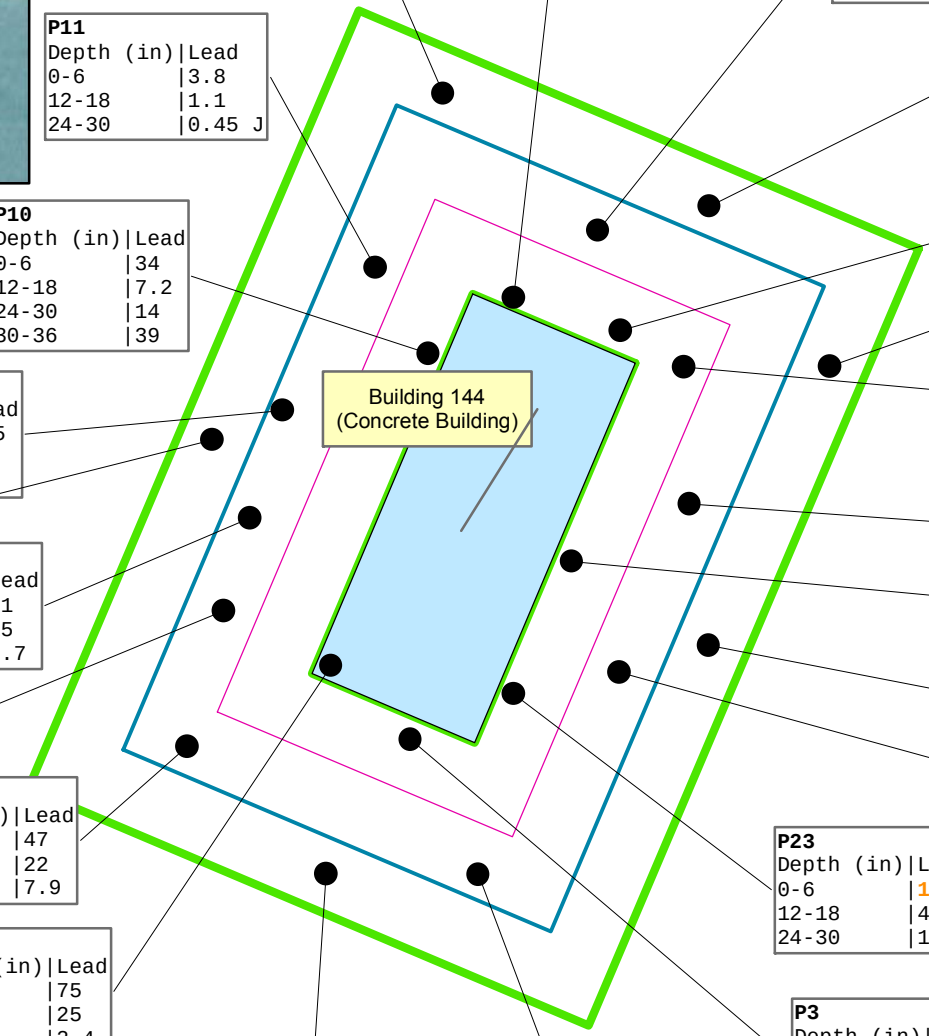
NW DEMOLITION
AND ENVIRONMENTAL,
A JOINT VENTURE

Portland, OR | Feb-2016

Figure

F-14

Path: N:\MMidway\GIS\End_2015_Report\Fig14_LeadResults_Post_November2014_Testing_DU9_140_wSampleInfo.mxd



P12

Depth (in)	Lead
0-6	54
12-18	37
24-30	2.2

P13

Depth (in)	Lead
0-6	120
12-18	46
24-30	49

P14

Depth (in)	Lead
0-6	110
12-18	4.4
24-30	0.32 J

P16

Depth (in)	Lead
0-6	110
12-18	4.8
24-30	0.51 J

P11

Depth (in)	Lead
0-6	3.8
12-18	1.1
24-30	0.45 J

P15

Depth (in)	Lead
0-6	560
12-18	110
24-30	8.1

P10

Depth (in)	Lead
0-6	34
12-18	7.2
24-30	14
30-36	39

P17

Depth (in)	Lead
0-6	120
12-18	5.3
24-30	100

P18

Depth (in)	Lead
0-6	410
12-18	83
24-30	3.6

P9

Depth (in)	Lead
0-6	8.5
12-18	16
24-30	11

P19

Depth (in)	Lead
0-6	410
12-18	1500
24-30	31

P8

Depth (in)	Lead
0-6	13
12-18	12
24-30	11

P7

Depth (in)	Lead
0-6	11
12-18	15
24-30	9.7

P20

Depth (in)	Lead
0-6	650
12-18	22
24-30	16

P21

Depth (in)	Lead
0-6	59
12-18	7.3
24-30	5.5
30-36	4

P6

Depth (in)	Lead
0-6	36
12-18	13
24-30	12

P5

Depth (in)	Lead
0-6	47
12-18	22
24-30	7.9

P22

Depth (in)	Lead
0-6	42
12-18	3
24-30	9.1

P23

Depth (in)	Lead
0-6	120
12-18	4
24-30	1.4

P4

Depth (in)	Lead
0-6	75
12-18	25
24-30	2.4

P3

Depth (in)	Lead
0-6	50
12-18	13
24-30	3.1

P2

Depth (in)	Lead
0-6	29
12-18	30
24-30	11

P1

Depth (in)	Lead
0-6	30
12-18	13
24-30	14

N

0 20 40

SCALE IN FEET

Legend/Notes

15' Buffer

30' Buffer

45' Buffer

Current and Historical Sampling Locations

J indicates estimated amount

Note: Lead results reported in milligrams per kilogram.

MIDWAY ISLAND
SOIL SAMPLING RESULTS
DECISION UNIT 9
BUILDING 144
(CONCRETE BUILDING)

NW DEMOLITION
AND ENVIRONMENTAL,
A JOINT VENTURE

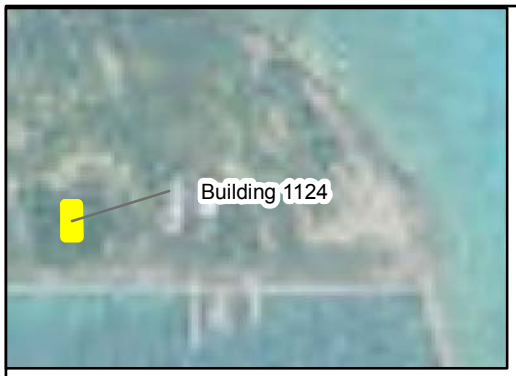
Portland, OR

Feb-2016

Figure

F-15

Path: N:\MMidway\GIS\End_2015_Report\FigA15_LeadResults_Post_November2014_Testing_DU9_144_wSampleInfo.mxd



N

16

Depth (in)	Lead
0-6	12
12-18	7.9

5

Depth (in)	Lead
0-6	9.7
12-18	2.5
24-28	2.4

17

Depth (in)	Lead
0-6	14
12-18	5
24-28	4.6

9

Depth (in)	Lead
0-6	3.6
12-18	5
24-28	4.7

4

Depth (in)	Lead
0-6	3.3
12-18	4.2

P3

Depth (in)	Lead
0-6	17 B
12-18	15 B
24-30	4.7 B

P4

Depth (in)	Lead
0-6	9.2 B
12-18	19 B
24-30	1.4 B

10

Depth (in)	Lead
0-6	14
12-18	17
24-28	2.4

15

Depth (in)	Lead
0-6	45
12-18	53
24-28	5.3

8

Depth (in)	Lead
0-6	30
12-18	18
24-28	12

3

Depth (in)	Lead
0-6	36
12-18	51
24-28	51

P5

Depth (in)	Lead
0-6	21 B
12-18	21 B
24-30	3.3
30-36	7.2

6

Depth (in)	Lead
0-6	13
12-18	39
24-28	6.8

P2

Depth (in)	Lead
0-6	30 B
12-18	30 B
24-30	27 B

14

Depth (in)	Lead
0-6	20
12-18	11
24-28	5.8

18

Depth (in)	Lead
0-6	2.3
12-18	2.3
24-28	5

P6

Depth (in)	Lead
0-6	28
12-18	20
24-30	8

2

Depth (in)	Lead
0-6	42
12-18	57
24-28	120
30-36	54

11

Depth (in)	Lead
0-6	42
12-18	3.1
24-28	2.6

13

Depth (in)	Lead
0-6	49
12-18	25
24-28	27

7

Depth (in)	Lead
0-6	40
12-18	2.4
24-28	5
30-36	4.8

1

Depth (in)	Lead
0-6	21
12-18	17
24-28	2.6

P1

Depth (in)	Lead
0-6	21 B
12-18	24 B
24-30	15 B

Building 1124
(Waste Storage Building)

0 20 40
SCALE IN FEET

Legend/Notes

- 15' Buffer
- 30' Buffer
- 45' Buffer
- Current and Historical Sampling Locations
- Existing Building
- B indicates lead in blank and sample

Note: Lead results reported in milligrams per kilogram.

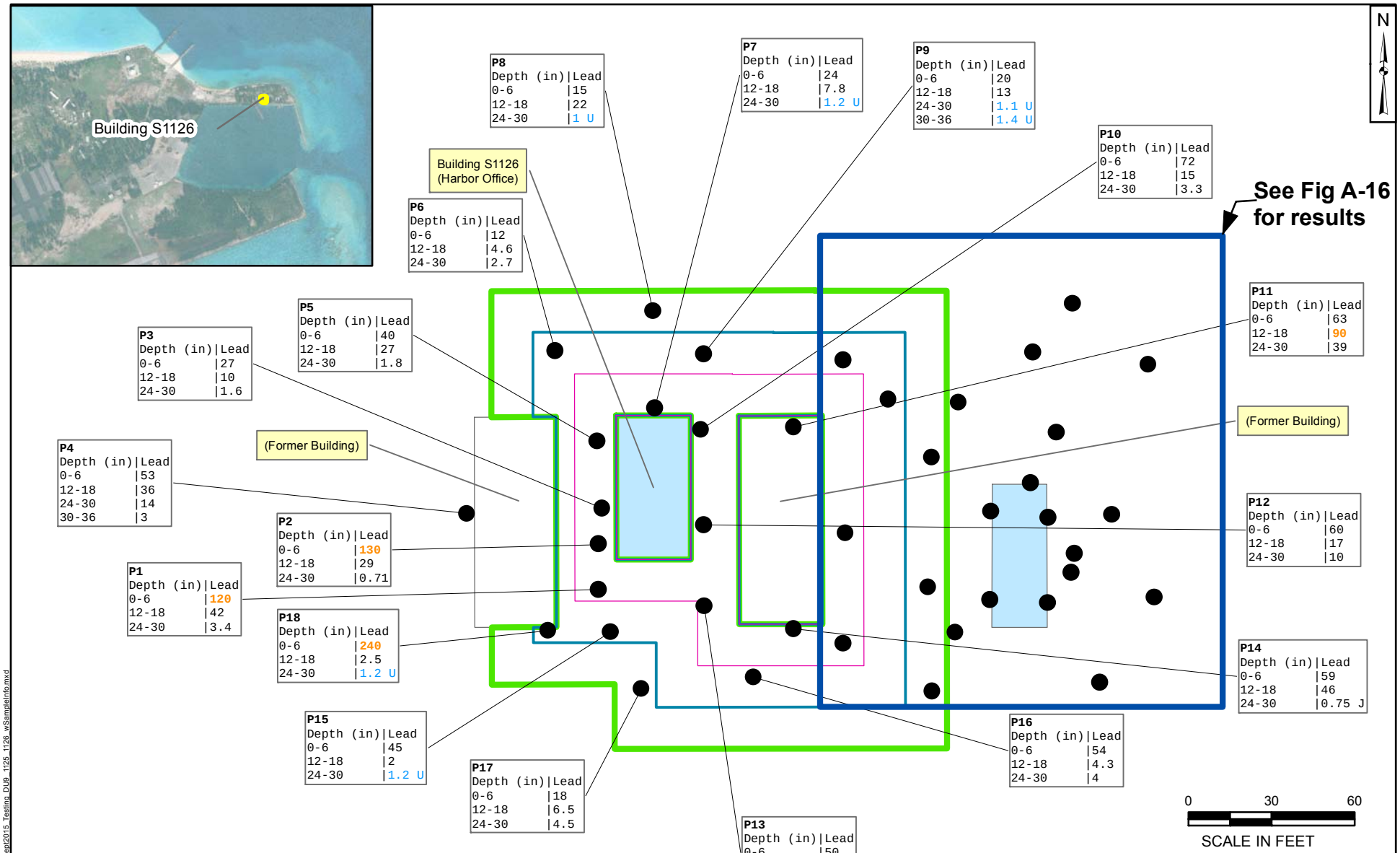
MIDWAY ISLAND
SOIL SAMPLING RESULTS
DECISION UNIT 9
BUILDING 1124
(WASTE STORAGE BUILDING)

NW DEMOLITION
AND ENVIRONMENTAL,
A JOINT VENTURE

Portland, OR | Feb-2016

Figure
F-16

Path: N:\MMidway\GIS\End_2015_Report\Fig\A16_LeadResults_Post_November2014_Testing_DU9_1124_wSampleInfo.mxd



P8

Depth (in)	Lead
0-6	15
12-18	22
24-30	1 U

P7

Depth (in)	Lead
0-6	24
12-18	7.8
24-30	1.2 U

P9

Depth (in)	Lead
0-6	20
12-18	13
24-30	1.1 U
30-36	1.4 U

P10

Depth (in)	Lead
0-6	72
12-18	15
24-30	3.3

P6

Depth (in)	Lead
0-6	12
12-18	4.6
24-30	2.7

P5

Depth (in)	Lead
0-6	40
12-18	27
24-30	1.8

P3

Depth (in)	Lead
0-6	27
12-18	10
24-30	1.6

P11

Depth (in)	Lead
0-6	63
12-18	90
24-30	39

P4

Depth (in)	Lead
0-6	53
12-18	36
24-30	14
30-36	3

P2

Depth (in)	Lead
0-6	130
12-18	29
24-30	0.71

P12

Depth (in)	Lead
0-6	60
12-18	17
24-30	10

P1

Depth (in)	Lead
0-6	120
12-18	42
24-30	3.4

P18

Depth (in)	Lead
0-6	240
12-18	2.5
24-30	1.2 U

P14

Depth (in)	Lead
0-6	59
12-18	46
24-30	0.75 J

P15

Depth (in)	Lead
0-6	45
12-18	2
24-30	1.2 U

P16

Depth (in)	Lead
0-6	54
12-18	4.3
24-30	4

P17

Depth (in)	Lead
0-6	18
12-18	6.5
24-30	4.5

P13

Depth (in)	Lead
0-6	50
12-18	11
24-30	5.8

Legend/Notes

- 15' Buffer
- 30' Buffer
- 45' Buffer
- Existing Building
- Former Building
- Current and Historical Sampling Locations
- J indicates estimated amount
- U indicates non-detected at detection limit

Note: Lead results reported in milligrams per kilogram.

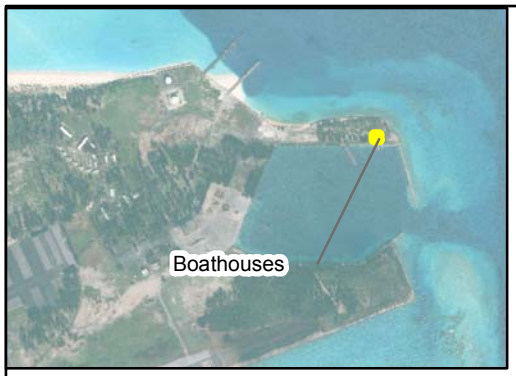
MIDWAY ISLAND
SOIL SAMPLING RESULTS
BUILDINGS S1126

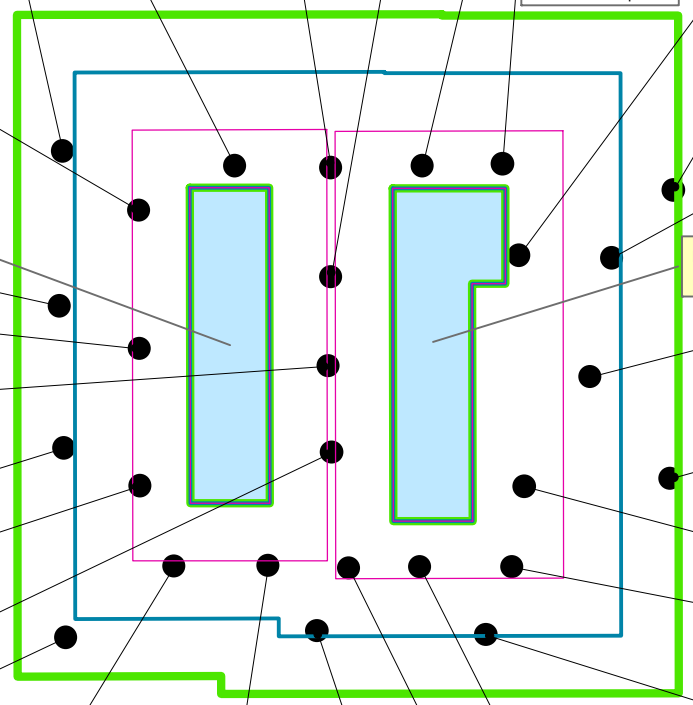
NW DEMOLITION
AND ENVIRONMENTAL,
A JOINT VENTURE

Portland, OR | Feb-2016

Figure
F-17

Path: N:\MMidway\GIS\End_2015_Report\FigA17_LeadResults_Sept2015_Testing_DUB_1125_1126_vSampleInfo.mxd





P1

Depth (in)	Lead
0-6	290
12-18	49
24-30	71

P2

Depth (in)	Lead
0-6	49
12-18	0.62 J
24-30	1.2

P3

Depth (in)	Lead
0-6	58
12-18	0.92 J
24-30	4.7

P4

Depth (in)	Lead
12-18	13
24-30	0.78 J

P5

Depth (in)	Lead
0-6	28
12-18	20
24-30	16

P6

Depth (in)	Lead
0-6	60
12-18	47
24-30	1.3 U

P7

Depth (in)	Lead
0-6	71
12-18	170
24-30	4.9

P8

Depth (in)	Lead
0-6	58
12-18	71
24-30	32

P9

Depth (in)	Lead
0-6	61
12-18	59
24-30	3.7

P10

Depth (in)	Lead
0-6	20
12-18	26
24-30	1.2 U
30-36	1.3 U

P11

Depth (in)	Lead
0-6	28
12-18	24
24-30	2

P12

Depth (in)	Lead
0-6	18
12-18	14
24-30	9.9

P13

Depth (in)	Lead
0-6	4.8
12-18	4.5
24-30	3.8

P14

Depth (in)	Lead
0-6	13
12-18	9.5
24-30	7.9

P15

Depth (in)	Lead
0-6	10
12-18	16
24-30	17

P16

Depth (in)	Lead
0-6	20
12-18	25

P17

Depth (in)	Lead
0-6	77
12-18	130

P18

Depth (in)	Lead
0-6	25
12-18	25
24-30	67

P19

Depth (in)	Lead
0-6	54
12-18	55
24-30	5.2

P20

Depth (in)	Lead
0-6	21
12-18	22
24-30	5.1

P21

Depth (in)	Lead
0-6	28
12-18	23
24-30	10

P22

Depth (in)	Lead
0-6	28
12-18	26
24-30	9.1
30-36	7

P23

Depth (in)	Lead
0-6	27
12-18	21
24-30	24

P24

Depth (in)	Lead
0-6	24
12-18	19
24-30	23
30-36	18

P25

Depth (in)	Lead
0-6	20
12-18	15
24-30	12

P26

Depth (in)	Lead
0-6	39
12-18	1100
24-30	44

P27

Depth (in)	Lead
0-6	38
12-18	58
24-30	12

N

0 30 60

SCALE IN FEET

Legend/Notes

- 15' Buffer
- 30' Buffer
- 45' Buffer
- Current and Historical Sampling Locations
- Existing Building
- J indicates estimated amount
- U indicates non-detected at detection limit

Note: Lead results reported in milligrams per kilogram.

MIDWAY ISLAND
SOIL SAMPLING RESULTS
DECISION UNIT 9
BOAT HOUSES

NW DEMOLITION
AND ENVIRONMENTAL,
A JOINT VENTURE

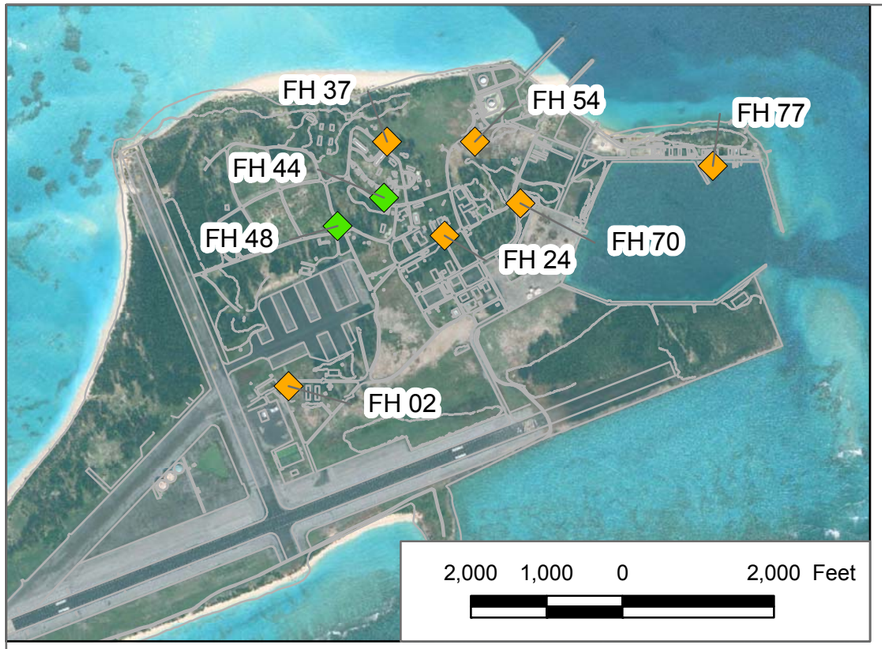
Portland, OR

Feb-2016

Figure

F-18

Path: N:\MMidway\GIS\End_2015_Report\Fig\A.18_LeadResults_Sept2015_Testing_DU9_Boathouse_wSampleInfo.mxd



N

FH 02

	P1	P2	P3
Depth (in)	Lead	Lead	Lead
0-6	110	180	180 B
12-18	89	110 B	84 B
24-30	5.7	21 B	3.6 B

FH 24

	P1	P2	P3
Depth (in)	Lead	Lead	Lead
0-6	73	160	180
12-18	96	86	110
24-30	22	32	41

FH 37

	P1	P2	P3
Depth (in)	Lead	Lead	Lead
0-6	190	160	200
12-18	390	140	130
24-30	110	280	170

FH 44

	P1	P2	P3
Depth (in)	Lead	Lead	Lead
0-6	11	11	15
12-18	18	11	6.6
24-30	27	2	2.1
30-36		1.9	

FH 48

	P1	P2	P3
Depth (in)	Lead	Lead	Lead
0-6	18	16	18
12-18	18	21	16
24-30	38	24	15

FH 54

	P1	P2	P3
Depth (in)	Lead	Lead	Lead
0-6	67	46	130
12-18	70	70	160
24-30	35	29	40

FH 70

	P1	P2	P3
Depth (in)	Lead	Lead	Lead
0-6	110	250	170
12-18	110	48	180
24-30	130	34	53

FH 77

	P1	P2	P3
Depth (in)	Lead	Lead	Lead
0-6	110	62	97
12-18	350	27	120
24-30		36	130

0 1 2 4 Feet

SCALE IN FEET

Legend/Notes

Fire Hydrants Events

- <75
- 75 - 750
- >750

● Current and Historical Sampling Locations

B indicates Lead in Blank and Sample

J indicates estimated amount

U indicates non-detected at detection limit

Note: Lead results reported in milligrams per kilogram.

MIDWAY ISLAND
SOIL SAMPLING RESULTS
DECISION UNIT 9
FIRE HYDRANTS

NW DEMOLITION
AND ENVIRONMENTAL,
A JOINT VENTURE

Portland, OR | Feb-2016

Figure

F-19

N:\MMidway\GIS\End_2015_Report\FigA19_LeadResults_FireHydrants_2015.mxd; JOBryan; 3/18/2016

Table F-1
Soil Sampling Results - DU9
Midway Atoll NWR

Sample Identification	Notes	Sample Date	Lead Concentration (mg/kg)	
140 Building (Figure F14)				
140-P1 0-6"		10/16/2014	39	
140-P1 12-18"		10/16/2014	24	
140-P1 24-30"		10/16/2014	29	
140-P2 0-6"		10/16/2014	37	
140-P2 12-18"		10/16/2014	62	
140-P2 24-30"		10/16/2014	3.1	
140-P3 0-6"		10/17/2014	26	
140-P3 12-18"		10/17/2014	0.18	J
140-P3 24-30"		10/17/2014	1.2	U
140-P4 0-6"		10/17/2014	41	
140-P4 12-18"		10/17/2014	26	
140-P4 24-30"		10/17/2014	17	B
140-P5 0-6"		10/17/2014	51	B
140-P5 12-18"		10/17/2014	22	B
140-P5 24-30"		10/17/2014	8.4	B
144 Building (Figure F15)				
144 P1 (0-6)		03/26/2014	30	
144 P1 (12-18)		03/26/2014	13	
144 P1 (24-30)		03/26/2014	14	
144 P2 (0-6)		03/26/2014	29	
144 P2 (12-18)		03/26/2014	30	
144 P2 (24-30)		03/26/2014	11	
144 P3 (0-6)		03/26/2014	50	
144 P3 (12-18)		03/26/2014	13	
144 P3 (24-30)		03/26/2014	3.1	
144 P4 (0-6)		03/26/2014	75	
144 P4 (12-18)		03/26/2014	25	
144 P4 (24-30)		03/26/2014	2.4	
144 P5 (0-6)		03/26/2014	47	
144 P5 (12-18)		03/26/2014	22	
144 P5 (24-30)		03/26/2014	7.9	
144 P6 (0-6)		03/26/2014	36	
144 P6 (12-18)		03/26/2014	13	
144 P6 (24-30)		03/26/2014	12	
144 P7 (0-6)		03/26/2014	11	
144 P7 (12-18)		03/26/2014	15	
144 P7 (24-30)		03/26/2014	9.7	
144 P8 (0-6)		03/26/2014	13	
144 P8 (12-18)		03/26/2014	12	
144 P8 (24-30)		03/26/2014	11	
144 P9 (0-6)		03/26/2014	8.5	
144 P9 (12-18)		03/26/2014	16	
144 P9 (24-30)		03/26/2014	11	
144 P10 (0-6)		03/26/2014	34	
144 P10 (12-18)		03/26/2014	7.2	
144 P10 (24-30)		03/26/2014	14	
144 P10 (30-36)		03/26/2014	39	
144 P11 (0-6)		03/26/2014	3.8	
144 P11 (12-18)		03/26/2014	1.1	
144 P11 (24-30)		03/26/2014	0.45	J
144 P12 (0-6)		03/26/2014	54	
144 P12 (12-18)		03/26/2014	37	
144 P12 (24-30)		03/26/2014	2.2	
144 P13 (0-6)		03/26/2014	120	
144 P13 (12-18)		03/26/2014	46	
144 P13 (24-30)		03/26/2014	49	

Table F-1
Soil Sampling Results - DU9
Midway Atoll NWR

Sample Identification	Notes	Sample Date	Lead Concentration (mg/kg)	
144 P14 (0-6)		03/26/2014	110	
144 P14 (12-18)		03/26/2014	4.4	
144 P14 (24-30)		03/26/2014	0.32	J
144 P15 (0-6)		03/26/2014	560	
144 P15 (12-18)		03/26/2014	110	
144 P15 (24-30)		03/26/2014	8.1	
144 P16 (0-6)		03/26/2014	110	
144 P16 (12-18)		03/26/2014	4.8	
144 P16 (24-30)		03/26/2014	0.51	J
144 P17 (0-6)		03/26/2014	120	
144 P17 (12-18)		03/26/2014	5.3	
144 P17 (24-30)		03/26/2014	100	
144 P18 (0-6)		03/26/2014	410	
144 P18 (12-18)		03/26/2014	83	
144 P18 (24-30)		03/26/2014	3.6	
144 P19 (0-6)		03/26/2014	410	
144 P19 (12-18)		03/26/2014	1,500	
144 P19 (24-30)		03/26/2014	31	
144 P20 (0-6)		03/26/2014	650	
144 P20 (12-18)		03/26/2014	22	
144 P20 (24-30)		03/26/2014	16	
144 P21 (0-6)		03/26/2014	59	
144 P21 (12-18)		03/26/2014	7.3	
144 P21 (24-30)		03/26/2014	5.5	
144 P21 (30-36)		03/26/2014	4.0	
144 P22 (0-6)		03/27/2014	42	
144 P22 (12-18)		03/27/2014	3.0	
144 P22 (24-30)		03/27/2014	9.1	
144 P23 (0-6)		03/27/2014	120	
144 P23 (12-18)		03/27/2014	4.0	
144 P23 (24-30)		03/27/2014	1.4	
233 Building (Figure F11)				
233 P1 (0-6)		12/11/2012	11	
233 P1 (12-18)		12/11/2012	2.8	
233 P1 (24-30)		12/11/2012	1.3	J
233 P3 (0-6)		12/11/2012	19	
233 P3 (12-18)		12/11/2012	6.3	
233 P3 (24-30)		12/11/2012	4.0	
233 P4 (0-6)		12/11/2012	13	
233 P4 (12-18)		12/11/2012	1.1	J
233 P4 (24-30)		12/11/2012	15	
233 P4 (30-36)		12/11/2012	21	
233 P5 (0-6)		12/11/2012	22	
233 P5 (12-18)		12/11/2012	9.0	
233 P5 (24-30)		12/11/2012	9.4	
233 P6 (0-6)		12/11/2012	23	
233 P6 (12-18)		12/11/2012	1.4	U
233 P6 (24-30)		12/11/2012	1.3	U
233 P7 (0-6)		12/11/2012	14	
233 P7 (12-18)		12/11/2012	25	
233 P7 (24-30)		12/11/2012	1.2	U
233 P8 (0-6)		12/11/2012	31	
233 P8 (12-18)		12/11/2012	1.9	
233 P8 (24-30)		12/11/2012	1.2	U
233 P9 (0-6)		12/11/2012	22	
233 P9 (12-18)		12/11/2012	180	
233 P9 (24-30)		12/11/2012	0.37	J

Table F-1
Soil Sampling Results - DU9
Midway Atoll NWR

Sample Identification	Notes	Sample Date	Lead Concentration (mg/kg)	
233 P10 (0-6)		12/11/2012	16	
233 P10 (12-18)		12/11/2012	0.41	J
233 P10 (24-30)		12/11/2012	2.7	
233 P11 (0-6)		12/11/2012	5.4	
233 P11 (12-18)		12/11/2012	0.9	J
233 P11 (24-30)		12/11/2012	5.0	
233 P12 (0-6)		12/11/2012	23	
233 P12 (12-18)		12/11/2012	20	
233 P12 (24-30)		12/11/2012	10	
309 Building (Figure F9)				
309 P1 (0-6)		12/13/2012	41	
309 P1 (12-18)		12/13/2012	22	
309 P1 (18-24)		12/13/2012	1.1	U
309 P2 (0-6)		12/13/2012	49	
309 P2 (12-18)		12/13/2012	0.32	J
309 P2 (18-24)		12/13/2012	3.6	
309 P3 (0-6)		12/13/2012	220	
309 P4 (0-6)		12/13/2012	6.7	
309 P5 (0-6)		12/13/2012	9.6	
309 P6 (0-6)		12/13/2012	6.8	
309 P7 (0-6)		12/13/2012	53	
309 P8 (0-6)		12/13/2012	110	
309 P9 (0-6)		12/13/2012	7.7	
309 P10 (0-6)		12/13/2012	1,600	
309 P10 (12-18)		12/13/2012	65	
309 P11 (0-6)		12/13/2012	92	
309 P12 (0-6)		12/13/2012	150	
309 P13 (0-6)		12/13/2012	110	
309 P13 (12-18)		12/13/2012	44	
309 P13 (18-24)	Lab report & COC use Sample ID: 309 P3 (18-24)	12/13/2012	33	
347 Building (Figure F2)				
347-P1 0-6"		10/18/2014	3,100	B
347-P1 12-18"		10/18/2014	8.5	B
347-P2 0-6"		10/31/2015	200	B
347-P2 12-18"		10/31/2015	400	B
347-P2 24-30"		10/31/2015	110	B
347-P3 0-6"		10/18/2014	190	B
347-P3 12-18"		10/18/2014	180	B
347-P3 24-30"		10/18/2014	24	B
347-P4 0-6"		10/31/2015	120	B
347-P4 12-18"		10/31/2015	55	B
347-P4 24-30"		10/31/2015	20	B
347-P5 0-6"		10/31/2015	320	B
347-P5 12-18"		10/31/2015	200	B
347-P5 24-30"		10/31/2015	140	B
347-P6 0-6"		10/18/2014	180	B
347-P6 12-18"		10/18/2014	310	B
347-P6 24-30"		10/18/2014	180	B
347-P7 0-6"		10/18/2014	310	B
347-P7 12-18"		10/18/2014	28	B
347-P7 24-30"		10/18/2014	14	B
347-P8 0-6"		10/31/2015	270	B
347-P8 12-18"		10/31/2015	27	B
347-P8 24-30"		10/31/2015	18	B
354 Building (Figure F9)				
554 P7 (0-6)	Samples labeled 554. Should have been 354	12/12/2012	63	
554 P7 (12-18)	Samples labeled 554. Should have been 354	12/12/2012	1.2	U

Table F-1
Soil Sampling Results - DU9
Midway Atoll NWR

Sample Identification	Notes	Sample Date	Lead Concentration (mg/kg)	
554 P7 (24-30)	Samples labeled 554. Should have been 354	12/12/2012	1.0	U
554 P7 (30-36)	Samples labeled 554. Should have been 354	12/12/2012	1.3	U
554 P8 (0-6)	Samples labeled 554. Should have been 354	12/12/2012	13	
554 P8 (12-18)	Samples labeled 554. Should have been 354	12/12/2012	19	
554 P8 (24-30)	Samples labeled 554. Should have been 354	12/12/2012	14	
554 P9 (0-6)	Samples labeled 554. Should have been 354	12/12/2012	23	
554 P9 (12-18)	Samples labeled 554. Should have been 354	12/12/2012	7.9	
554 P9 (24-30)	Samples labeled 554. Should have been 354	12/12/2012	19	
554 P10 (0-6)	Samples labeled 554. Should have been 354	12/12/2012	48	
554 P10 (12-18)	Samples labeled 554. Should have been 354	12/12/2012	3.6	
554 P10 (24-30)	Samples labeled 554. Should have been 354	12/12/2012	0.96	
554 P11 (0-6)	Samples labeled 554. Should have been 354	12/12/2012	180	
554 P11 (12-18)	Samples labeled 554. Should have been 354	12/12/2012	360	
554 P11 (24-30)	Samples labeled 554. Should have been 354	12/12/2012	8.6	
554 P12 (0-6)	Samples labeled 554. Should have been 354	12/12/2012	120	
554 P12 (12-18)	Samples labeled 554. Should have been 354	12/12/2012	5.0	
554 P12 (24-30)	Samples labeled 554. Should have been 354	12/12/2012	1.7	
554 P12 (30-36)	Samples labeled 554. Should have been 354	12/12/2012	1.3	
554 P13 (0-6)	Samples labeled 554. Should have been 354	12/12/2012	9.9	
554 P13 (12-18)	Samples labeled 554. Should have been 354	12/12/2012	1.8	
554 P13 (24-30)	Samples labeled 554. Should have been 354	12/12/2012	0.91	U
554 P14 (0-6)	Samples labeled 554. Should have been 354	12/12/2012	34	
554 P15 (0-6)	Samples labeled 554. Should have been 354	12/12/2012	25	
554 P15 (12-18)	Samples labeled 554. Should have been 354	12/12/2012	0.86	J
554 P16 (0-6)	Samples labeled 554. Should have been 354	12/12/2012	51	
554 P16 (12-18)	Samples labeled 554. Should have been 354	12/12/2012	15	
554 P16 (24-30)	Samples labeled 554. Should have been 354	12/12/2012	1.4	U
425 Building (Figure F7)				
425-P1 0-6"		10/18/2014	15	B
425-P2 0-6"		10/18/2014	24	B
426 Building (Figure F7)				
426-P1 0-6"		10/18/2014	50	B
426-P1 12-18"		10/18/2014	45	B
426-P1 24-30"		10/18/2014	0.41	J B
S464 (Figure F13)				
Pump House P1 (0-6)	Building is considered S464	12/10/2012	34	
Pump House P1 (12-18)	Building is considered S464	12/10/2012	86	
Pump House P1 (24-30)	Building is considered S464	12/10/2012	5.9	
Pump House P2 (0-6)	Building is considered S464	12/10/2012	23	
Pump House P2 (12-18)	Building is considered S464	12/10/2012	16	
Pump House P2 (24-30)	Building is considered S464	12/10/2012	1.1	J
Pump House P3 (0-6)	Building is considered S464	12/10/2012	33	
Pump House P3 (12-18)	Building is considered S464	12/10/2012	1.7	
Pump House P3 (24-30)	Building is considered S464	12/10/2012	6.6	
Pump House P3 (30-36)	Building is considered S464	12/10/2012	4.8	
Pump House P4 (0-6)	Building is considered S464	12/10/2012	140	
Pump House P4 (12-18)	Building is considered S464	12/10/2012	75	
Pump House P4 (24-30)	Building is considered S464	12/10/2012	28	
Pump House P5 (0-6)	Building is considered S464	12/10/2012	43	
Pump House P5 (12-18)	Building is considered S464	12/10/2012	13	
Pump House P5 (24-30)	Building is considered S464	12/10/2012	14	
Pump House P6 (0-6)	Building is considered S464	12/10/2012	32	
Pump House P6 (12-18)	Building is considered S464	12/10/2012	28	
Pump House P6 (24-30)	Building is considered S464	12/10/2012	32	
Pump House P7 (0-6)	Building is considered S464	12/10/2012	72	
Pump House P7 (12-18)	Building is considered S464	12/10/2012	19	
Pump House P7 (24-30)	Building is considered S464	12/10/2012	12	

Table F-1
Soil Sampling Results - DU9
Midway Atoll NWR

Sample Identification	Notes	Sample Date	Lead Concentration (mg/kg)	
Pump House P7 (30-36)	Building is considered S464	12/10/2012	9.2	
Pump House P8 (0-6)	Building is considered S464	12/10/2012	30	
Pump House P8 (12-18)	Building is considered S464	12/10/2012	110	
Pump House P8 (24-30)	Building is considered S464	12/10/2012	7.9	
Pump House P9 (0-6)	Building is considered S464	12/10/2012	76	
Pump House P9 (12-18)	Building is considered S464	12/10/2012	3.8	
Pump House P9 (24-30)	Building is considered S464	12/10/2012	1.6	
Pump House P10 (0-6)	Building is considered S464	12/10/2012	110	
Pump House P10 (12-18)	Building is considered S464	12/10/2012	24	
Pump House P10 (24-30)	Building is considered S464	12/10/2012	15	
Pump House P11 (0-6)	Building is considered S464	12/10/2012	51	
Pump House P11 (12-18)	Building is considered S464	12/10/2012	11	
Pump House P11 (24-30)	Building is considered S464	12/10/2012	4.0	
Pump House P12 (0-6)	Building is considered S464	12/10/2012	27	
Pump House P12 (12-18)	Building is considered S464	12/10/2012	2.3	
Pump House P12 (24-30)	Building is considered S464	12/10/2012	1.6	
Pump House P12 (30-36)	Building is considered S464	12/10/2012	0.37	J
502 Building (Figure F5)				
502 P1 (0-6)		12/09/2012	150	
502 P1 (12-18)		12/09/2012	17	
502 P1 (24-30)		12/09/2012	3.3	
502 P2 (0-6)		12/09/2012	21	
502 P2 (12-18)		12/09/2012	24	
502 P2 (24-30)		12/09/2012	16	
502 P3 (0-6)		12/09/2012	18	
502 P3 (12-18)		12/09/2012	18	
502 P3 (24-30)		12/09/2012	0.42	J
502 P4 (0-6)		12/09/2012	17	
502 P4 (12-18)		12/09/2012	12	
502 P4 (24-30)		12/09/2012	4.2	
502 P5 (0-6)		12/09/2012	7.2	
502 P5 (12-18)		12/09/2012	3.0	
502 P5 (24-30)		12/09/2012	1.2	U
502 P5 (30-36)		12/09/2012	1.3	U
502 P6 (0-6)		12/09/2012	14	
502 P6 (12-18)		12/09/2012	7.9	
502 P6 (24-30)		12/09/2012	4.6	
502 P7 (0-6)		12/09/2012	35	
502 P7 (12-18)		12/09/2012	46	
502 P7 (24-30)		12/09/2012	8.1	
502 P8 (0-6)		12/09/2012	17	
502 P8 (12-18)		12/09/2012	18	
502 P8 (24-30)		12/09/2012	6.5	
502 P9 (0-6)		12/09/2012	8.5	
502 P9 (12-18)		12/09/2012	9.8	
502 P9 (24-30)		12/09/2012	1.4	U
502 P10 (0-6)		12/09/2012	62	
502 P10 (12-18)		12/09/2012	1.2	
502 P10 (24-30)		12/09/2012	2.5	

Table F-1
Soil Sampling Results - DU9
Midway Atoll NWR

Sample Identification	Notes	Sample Date	Lead Concentration (mg/kg)	
520 Building (Figure F4)				
520 P1 (0-6)		12/08/2012	17	
520 P1 (12-18)		12/08/2012	21	
520 P1 (24-30)		12/08/2012	15	
520 P2 (0-6)		12/08/2012	670	
520 P2 (12-18)		12/08/2012	850	
520 P2 (24-30)		12/08/2012	70	
520 P3 (0-6)		12/08/2012	320	
520 P3 (12-18)		12/08/2012	720	
520 P3 (24-30)		12/08/2012	170	
520 P4 (0-6)		12/08/2012	200	
520 P5 (0-6)		12/08/2012	270	
520 P6 (0-6)		12/08/2012	78	
520 P6 (12-18)		12/08/2012	63	
520 P6 (24-30)		12/08/2012	76	
520 P7 (0-6)		12/08/2012	51	
520 P7 (12-18)		12/08/2012	41	
520 P7 (24-30)		12/08/2012	43	
520 P8 (0-6)		12/08/2012	43	
520 P8 (12-18)		12/08/2012	41	
520 P8 (24-30)		12/08/2012	5.7	
521 Building (Figure F3)				
521 P1 (0-6)		12/09/2012	13	
521 P1 (12-18)		12/09/2012	11	
521 P1 (24-30)		12/09/2012	7.7	
521 P2 (0-6)		12/09/2012	72	
521 P2 (12-18)		12/09/2012	4.8	
521 P2 (24-30)		12/09/2012	8	
521 P3 (0-6)		12/09/2012	46	
521 P3 (12-18)		12/09/2012	14	
521 P3 (24-30)		12/09/2012	2.0	
521 P4 (0-6)		12/09/2012	150	
521 P4 (12-18)		12/09/2012	5.4	
521 P4 (24-30)		12/09/2012	1.4	U
521 P5 (0-6)		12/09/2012	44	
521 P5 (12-18)		12/09/2012	6.1	
521 P5 (24-30)		12/09/2012	3.9	
521 P5 (30-36)		12/09/2012	2.8	
521 P6 (0-6)		12/09/2012	680	
521 P7 (0-6)		12/09/2012	620	
521 P7 (12-18)		12/09/2012	7.9	
521 P7 (24-30)		12/09/2012	2.7	
521 P8 (0-6)		12/09/2012	140	
521 P8 (12-18)		12/09/2012	16	
521 P8 (24-30)		12/09/2012	4.9	
521 P9 (0-6)		12/09/2012	32	
521 P9 (12-18)		12/09/2012	29	

Table F-1
Soil Sampling Results - DU9
Midway Atoll NWR

Sample Identification	Notes	Sample Date	Lead Concentration (mg/kg)	
521 P9 (24-30)		12/09/2012	15	
521 P10 (0-6)		12/09/2012	14	
521 P10 (12-18)		12/09/2012	17	
521 P10 (24-30)		12/09/2012	16	
521 P11 (0-6)		12/09/2012	37	
521 P11 (12-18)		12/09/2012	36	
521 P11 (24-30)		12/09/2012	0.85	J
521 P12 (0-6)		12/09/2012	79	
521 P12 (12-18)		12/09/2012	12	
521 P12 (24-30)		12/09/2012	0.65	J
521 P13 (0-6)		12/09/2012	78	
521 P13 (12-18)		12/09/2012	61	
521 P13 (24-30)		12/09/2012	4.1	
521 P14 (0-6)		12/09/2012	160	
521 P14 (12-18)		12/09/2012	7.9	
521 P14 (24-30)		12/09/2012	1.5	U
521 P15 (0-6)		12/13/2012	53	
S598 Building (Figure F6)				
Tank-P1 0-6"	Building is considered S598	10/17/2014	1.2	J
Tank-P1 12-18"	Building is considered S598	10/17/2014	0.39	J
Tank-P1 24-30"	Building is considered S598	10/17/2014	0.47	J
Tank-P2 0-6"	Building is considered S598	10/17/2014	6.1	
Tank-P2 12-18"	Building is considered S598	10/17/2014	8.1	
Tank-P2 24-30"	Building is considered S598	10/17/2014	8.2	
Tank-P3 0-6"	Building is considered S598	10/17/2014	8.8	
Tank-P3 12-18"	Building is considered S598	10/17/2014	1.2	J
Tank-P3 24-30"	Building is considered S598	10/17/2014	1.1	J
Tank-P4 0-6"	Building is considered S598	10/17/2014	25	
Tank-P4 12-18"	Building is considered S598	10/17/2014	0.91	J
Tank-P4 24-30"	Building is considered S598	10/17/2014	2.7	
1124 Building (Figure F16)				
1124 1 (0-6)		01/01/2011	21	
1124 1 (12-18)		12/06/2010	17	
1124 1 (24-28)		12/06/2010	2.6	
1124 2 (0-6)		12/06/2010	42	
1124 2 (12-18)		12/06/2010	57	
1124 2 (24-28)		12/06/2010	120	
1124 2 (30-36)		12/06/2010	54	
1124 3 (0-6)		12/06/2010	36	
1124 3 (12-18)		12/06/2010	51	
1124 3 (24-28)		01/01/2011	51	
1124 4 (0-6)		12/06/2010	3.3	
1124 4 (12-18)		12/06/2010	4.2	
1124 5 (0-6)		12/06/2010	9.7	
1124 5 (12-18)		12/06/2010	2.5	
1124 5 (24-28)		12/06/2010	2.4	
1124 6 (0-6)		12/06/2010	13	
1124 6 (12-18)		12/06/2010	39	
1124 6 (24-28)		12/06/2010	6.8	
1124 7 (0-6)		12/06/2010	40	
1124 7 (12-18)		12/06/2010	2.4	
1124 7 (24-28)		12/06/2010	5.0	
1124 7 (30-36)		12/06/2010	4.8	
1124 8 (0-6)		12/06/2010	30	
1124 8 (12-18)		12/06/2010	18	
1124 8 (24-28)		12/06/2010	12	
1124 9 (0-6)		12/06/2010	3.6	

Table F-1
Soil Sampling Results - DU9
Midway Atoll NWR

Sample Identification	Notes	Sample Date	Lead Concentration (mg/kg)	
1124 9 (12-18)		12/06/2010	5.0	
1124 9 (24-28)		12/06/2010	4.7	
1124 10 (0-6)		12/06/2010	14	
1124 10 (12-18)		12/06/2010	17	
1124 10 (24-28)		12/06/2010	2.4	
1124 11 (0-6)		12/06/2010	42	
1124 11 (12-18)		12/06/2010	3.1	
1124 11 (24-28)		12/06/2010	2.6	
1124 13 (0-6)		12/06/2010	49	
1124 13 (12-18)		01/01/2011	25	
1124 13 (24-28)		12/06/2010	27	
1124 14 (0-6)		12/06/2010	20	
1124 14 (12-18)		12/06/2010	11	
1124 14 (24-28)		12/06/2010	5.8	
1124 15 (0-6)		12/06/2010	45	
1124 15 (12-18)		12/06/2010	53	
1124 15 (24-28)		12/06/2010	5.3	
1124 16 (0-6)		01/01/2011	12	
1124 16 (12-18)		12/06/2010	7.9	
1124 17 (0-6)		12/06/2010	14	
1124 17 (12-18)		12/06/2010	5.0	
1124 17 (24-28)		12/06/2010	4.6	
1124 18 (0-6)		12/06/2010	2.3	
1124 18 (12-18)		12/06/2010	2.3	
1124 18 (24-28)		12/06/2010	5.0	
1124-P1 0-6"		10/17/2014	21	B
1124-P1 12-18"		10/17/2014	24	B
1124-P1 24-30"		10/17/2014	15	B
1124-P2 0-6"		10/17/2014	30	B
1124-P2 12-18"		10/17/2014	30	B
1124-P2 24-30"		10/17/2014	27	B
1124-P3 0-6"		10/17/2014	17	B
1124-P3 12-18"		10/17/2014	15	B
1124-P3 24-30"		10/17/2014	4.7	B
1124-P4 0-6"		10/17/2014	9.2	B
1124-P4 12-18"		10/17/2014	19	B
1124-P4 24-30"		10/17/2014	1.4	B
1124-P5 0-6"		10/17/2014	21	B
1124-P5 12-18"		10/17/2014	21	B
1124-P5 24-30"		10/17/2014	3.3	
1124-P5 30-36"		10/17/2014	7.2	
1124-P6 0-6"		10/17/2014	28	
1124-P6 12-18"		10/17/2014	20	
1124-P6 24-30"		10/17/2014	8.0	

Table F-1
Soil Sampling Results - DU9
Midway Atoll NWR

Sample Identification	Notes	Sample Date	Lead Concentration (mg/kg)	
1126 Building (Figure F17)				
1126 P1 (0-6)		03/24/2014	120	
1126 P1 (12-18)		03/24/2014	42	
1126 P1 (24-30)	Lab report used sample ID: 4211 P1 (24-30)	03/24/2014	3.4	
1126 P2 (0-6)		03/24/2014	130	
1126 P2 (12-18)		03/24/2014	29	
1126 P2 (24-30)		03/24/2014	0.71	
1126 P3 (0-6)		03/24/2014	27	
1126 P3 (12-18)		03/24/2014	10	
1126 P3 (24-30)		03/24/2014	1.6	
1126 P4 (0-6)		03/24/2014	53	
1126 P4 (12-18)		03/24/2014	36	
1126 P4 (24-30)		03/24/2014	14	
1126 P4 (30-36)		03/24/2014	3.0	
1126 P5 (0-6)		03/24/2014	40	
1126 P5 (12-18)		03/24/2014	27	
1126 P5 (24-30)		03/24/2014	1.8	
1126 P6 (0-6)		03/24/2014	12	
1126 P6 (12-18)		03/24/2014	4.6	
1126 P6 (24-30)		03/24/2014	2.7	
1126 P7 (0-6)		03/24/2014	24	
1126 P7 (12-18)		03/24/2014	7.8	
1126 P7 (24-30)		03/24/2014	1.2	U
1126 P8 (0-6)		03/24/2014	15	
1126 P8 (12-18)		03/24/2014	22	
1126 P8 (24-30)		03/24/2014	1.0	U
1126 P9 (0-6)		03/24/2014	20	
1126 P9 (12-18)		03/24/2014	13	
1126 P9 (24-30)		03/24/2014	1.1	U
1126 P9 (30-36)		03/24/2014	1.4	U
1126 P10 (0-6)		03/24/2014	72	
1126 P10 (12-18)		03/24/2014	15	
1126 P10 (24-30)		03/24/2014	3.3	
1126 P11 (0-6)		03/24/2014	63	
1126 P11 (12-18)		03/24/2014	90	
1126 P11 (24-30)		03/24/2014	39	
1126 P12 (0-6)		03/24/2014	60	
1126 P12 (12-18)		03/24/2014	17	
1126 P12 (24-30)		03/24/2014	10	
1126 P13 (0-6)		03/24/2014	50	
1126 P13 (12-18)		03/24/2014	11	
1126 P13 (24-30)		03/24/2014	5.8	
1126 P14 (0-6)		03/24/2014	59	
1126 P14 (12-18)		03/24/2014	46	
1126 P14 (24-30)		03/24/2014	0.75	J
1126 P15 (0-6)		03/24/2014	45	
1126 P15 (12-18)		03/24/2014	2.0	
1126 P15 (24-30)		03/24/2014	1.2	U
1126 P16 (0-6)		03/24/2014	54	
1126 P16 (12-18)		03/24/2014	4.3	
1126 P16 (24-30)		03/24/2014	4.0	
1126 P17 (0-6)		03/25/2014	18	
1126 P17 (12-18)		03/25/2014	6.5	
1126 P17 (24-30)		03/25/2014	4.5	
1126 P18 (0-6)		03/25/2014	240	
1126 P18 (12-18)		03/25/2014	2.5	
1126 P18 (24-30)		03/25/2014	1.2	U

Table F-1
Soil Sampling Results - DU9
Midway Atoll NWR

Sample Identification	Notes	Sample Date	Lead Concentration (mg/kg)	
2127 Building (Figure F12)				
2127 P1 (0-6)		12/11/2012	66	
2127 P2 (0-6)		12/11/2012	59	
2127 P2 (12-18)		12/11/2012	4.7	
2127 P2 (24-30)		12/11/2012	1.5	
2127 P3 (0-6)		12/11/2012	24	
2127 P3 (12-18)		12/11/2012	33	
2127 P3 (24-30)		12/11/2012	1.5	
2127 P3 (30-36)		12/11/2012	1.3	U
2127 P4 (0-6)		12/11/2012	80	
2127 P4 (12-18)		12/11/2012	83	
2127 P4 (24-30)		12/11/2012	1.6	
2127 P5 (0-6)		12/11/2012	12	
2127 P5 (12-18)		12/11/2012	4.5	
2127 P5 (24-30)		12/11/2012	1.3	U
2127 P6 (0-6)		12/11/2012	21	
2127 P6 (12-18)		12/11/2012	17	
2127 P6 (24-30)		12/11/2012	20	
2127 P7 (0-6)		12/11/2012	18	
2127 P7 (12-18)		12/11/2012	46	
2127 P7 (24-30)		12/11/2012	62	
2127 P8 (0-6)		12/11/2012	71	
2127 P8 (12-18)		12/11/2012	16	
2127 P8 (24-30)		12/11/2012	26	
2127 P9 (0-6)		12/11/2012	66	
2127 P9 (12-18)		12/11/2012	210	
2127 P9 (24-30)		12/11/2012	54	
2127 P10 (0-6)		12/11/2012	63	
2127 P10 (12-18)		12/11/2012	16	
2127 P10 (24-30)		12/11/2012	40	
2127 P11 (0-6)		12/11/2012	19	
2127 P11 (12-18)		12/11/2012	8.9	
2127 P11 (24-30)		12/11/2012	13	
2127 P11 (30-36)		12/11/2012	14	
2127 P12 (0-6)		12/11/2012	200	
2127 P12 (12-18)		12/11/2012	82	
2127 P12 (24-30)		12/11/2012	18	
S3126 Reservoir (Figure F2)				
3126E-P1 0-6"	Lab report & COC use Sample ID: 3127W-P1 0-6"	10/18/2014	130	B
3126E-P1 12-18"	Lab report & COC use Sample ID: 3127W-P1 12-18"	10/18/2014	230	B
3126E-P1 24-30"	Lab report & COC use Sample ID: 3127W-P1 24-30"	10/18/2014	62	B
3126E-P2 0-6"		10/31/2015	3,100	B
3126E-P2 12-18"		10/31/2015	150	
3126E-P2 24-30"		10/31/2015	53	
3126E-P3 0-6"		10/31/2015	28	
3126E-P3 12-18"		10/31/2015	36	
3126E-P3 24-30"		10/31/2015	21	
3126E-P4 0-6"		10/31/2015	63	
3126E-P4 12-18"		10/31/2015	80	
3126E-P4 24-30"		10/31/2015	28	
3126E-P5 0-6"		10/31/2015	34	B
3126E-P5 12-18"		10/31/2015	27	B
3126E-P5 24-30"		10/31/2015	16	B

Table F-1
Soil Sampling Results - DU9
Midway Atoll NWR

Sample Identification	Notes	Sample Date	Lead Concentration (mg/kg)	
S3127 Reservoir (Figure F2)				
3127W-P1 0-6"		10/31/2015	23	B
3127W-P1 12-18"		10/31/2015	21	B
3127W-P1 24-30"		10/31/2015	6.9	B
3127W-P2 0-6"	Lab report & COC use Sample ID: 3126E-P2 0-6"	10/18/2014	160	B
3127W-P2 12-18"	Lab report & COC use Sample ID: 3126E-P2 12-18"	10/18/2014	230	B
3127W-P2 24-30"	Lab report & COC use Sample ID: 3126E-P2 24-30"	10/18/2014	130	B
3127W-P3 0-6"		10/31/2015	60	B
3127W-P3 12-18"		10/31/2015	65	B
3127W-P3 24-30"		10/31/2015	0.68	J B
3127W-P4 0-6"		10/31/2015	54	B
3127W-P4 12-18"		10/31/2015	43	B
3127W-P4 24-30"		10/31/2015	7.3	B
3127W-P5 0-6"		10/31/2015	15	B
3127W-P5 12-18"		10/31/2015	7.1	B
3127W-P5 24-30"		10/31/2015	1.6	B
3501 Building (Figure F2)				
3501-P1 0-6"		10/31/2015	250	
3501-P1 12-18"		10/31/2015	100	
3501-P1 24-30"		10/31/2015	18	
3501-P2 0-6"		10/18/2014	490	B
3501-P2 12-18"		10/18/2014	33	B
3501-P2 24-30"		10/18/2014	29	B
3501-P3 0-6"		10/18/2014	100	B
3501-P3 12-18"		10/18/2014	110	B
3501-P3 24-30"		10/18/2014	2.4	B
3501-P4 0-6"		10/31/2015	77	
3501-P4 12-18"		10/31/2015	70	
3501-P4 24-30"		10/31/2015	41	
3501-P5 0-6"		10/31/2015	44	B
3501-P5 12-18"		10/31/2015	31	B
3501-P5 24-30"		10/31/2015	5.6	B
3501-P6 0-6"		10/31/2015	190	B
3501-P6 12-18"		10/31/2015	110	B
3501-P6 24-30"		10/31/2015	58	B
3501-P7 0-6"		10/18/2014	240	B
3501-P7 12-18"		10/18/2014	230	B
3501-P7 24-30"		10/18/2014	60	B
3521 Building (Figure F10)				
3521 P1 (0-6)		12/10/2012	18	
3521 P1 (12-18)		12/10/2012	1.3	U
3521 P1 (24-30)		12/10/2012	1.4	U
3521 P2 (0-6)		12/10/2012	37	
3521 P2 (12-18)		12/10/2012	26	
3521 P2 (24-30)		12/10/2012	4.9	
3521 P3 (0-6)		12/10/2012	100	
3521 P3 (12-18)		12/10/2012	170	
3521 P3 (24-30)		12/10/2012	130	
3521 P4 (0-6)		12/10/2012	62	
3521 P4 (12-18)		12/10/2012	39	
3521 P4 (24-30)		12/10/2012	64	
3521 P5 (0-6)		12/10/2012	69	
3521 P5 (12-18)		12/10/2012	18	
3521 P5 (24-30)		12/10/2012	49	
3521 P5 (30-36)		12/10/2012	56	
3521 P6 (0-6)		12/10/2012	26	
3521 P6 (12-18)		12/10/2012	23	

Table F-1
Soil Sampling Results - DU9
Midway Atoll NWR

Sample Identification	Notes	Sample Date	Lead Concentration (mg/kg)	
3521 P6 (24-30)		12/10/2012	0.14	J
3521 P7 (0-6)		12/10/2012	22	
3521 P7 (12-18)		12/10/2012	1,500	
3521 P7 (24-30)		12/10/2012	37	
3521 P8 (0-6)		12/10/2012	36	
3521 P8 (12-18)		12/10/2012	7.8	
3521 P8 (24-30)		12/10/2012	18	
3521 P9 (0-6)		12/10/2012	26	
3521 P9 (12-18)		12/10/2012	2.4	
3521 P9 (24-30)		12/10/2012	1.3	U
3521 P10 (0-6)		12/10/2012	37	
3521 P10 (12-18)		12/10/2012	60	
3521 P10 (24-30)		12/10/2012	1.3	U
3521 P11 (0-6)		12/10/2012	31	
3521 P11 (12-18)		12/10/2012	1.3	U
3521 P11 (24-30)		12/10/2012	1.2	U
3521 P12 (0-6)		12/10/2012	27	
3521 P12 (12-18)		12/10/2012	27	
3521 P12 (24-30)		12/10/2012	77	
3521 P12 (30-36)		12/10/2012	9.9	
5342 Building (Figure F8)				
5342-P1 0-6"		10/16/2014	25	
5342-P1 12-18"		10/16/2014	28	
5342-P1 24-30"		10/16/2014	5.2	
5342-P2 0-6"		10/16/2014	190	
5342-P2 12-18"		10/16/2014	62	
5342-P2 24-30"		10/16/2014	28	
5342-P3 0-6"		10/16/2014	42	
5342-P3 12-18"		10/16/2014	62	
5342-P3 24-30"		10/16/2014	18	
5342-P4 0-6"		10/16/2014	43	
5342-P4 12-18"		10/16/2014	36	
5342-P4 24-30"		10/16/2014	8.6	
5342-P5 0-6"		10/16/2014	70	
5342-P5 12-18"		10/16/2014	45	
5342-P5 24-30"		10/16/2014	18	
5342-P6 0-6"		10/16/2014	15	
5342-P6 12-18"		10/16/2014	19	
5342-P6 24-30"		10/16/2014	9.9	

Table F-1
Soil Sampling Results - DU9
Midway Atoll NWR

Sample Identification	Notes	Sample Date	Lead Concentration (mg/kg)	
9149 Building (Figure F9)				
9149 P1 (0-6)		03/25/2014	19	
9149 P1 (12-18)		03/25/2014	12	
9149 P1 (24-30)		03/25/2014	6.3	
9149 P2 (0-6)		03/25/2014	16	
9149 P2 (12-18)		03/25/2014	15	
9149 P2 (24-30)		03/25/2014	17	
9149 P3 (0-6)		03/25/2014	49	
9149 P3 (12-18)		03/25/2014	15	
9149 P3 (24-30)		03/25/2014	1.2	U
9149 P3 (30-36)		03/25/2014	1.0	U
9149 P4 (0-6)		03/25/2014	13	
9149 P4 (12-18)		03/25/2014	24	
9149 P4 (24-30)		03/25/2014	0.11	J
9149 P5 (0-6)		03/26/2014	19	
9149 P5 (12-18)		03/26/2014	30	
9149 P5 (24-30)		03/26/2014	1.5	
9149 P6 (0-6)		03/26/2014	15	
9149 P6 (12-18)		03/26/2014	6.9	
9149 P6 (24-30)		03/26/2014	15	
9149 P7 (0-6)		03/26/2014	14	
9149 P7 (12-18)		03/26/2014	8.9	
9149 P7 (24-30)		03/26/2014	27	
9149 P8 (0-6)		03/26/2014	16	
9149 P8 (12-18)		03/26/2014	66	
9149 P8 (24-30)		03/26/2014	17	
9149 P9 (0-6)		03/26/2014	16	
9149 P9 (12-18)		03/26/2014	14	
9149 P9 (24-30)		03/26/2014	38	
9149 P10 (0-6)		03/26/2014	18	
9149 P10 (12-18)		03/26/2014	17	
9149 P10 (24-30)		03/26/2014	14	
9149 P11 (0-6)		03/26/2014	11	
9149 P11 (12-18)		03/26/2014	15	
9149 P11 (24-30)		03/26/2014	8.2	
9149 P12 (0-6)		03/26/2014	12	
9149 P12 (12-18)		03/26/2014	16	
9149 P12 (24-30)		03/26/2014	21	
9149 P13 (0-6)		03/26/2014	19	
9149 P13 (12-18)		03/26/2014	11	
9149 P13 (24-30)		03/26/2014	21	
9149 P13 (30-36)		03/26/2014	27	
9149 P14 (0-6)		03/26/2014	9.7	
9149 P14 (12-18)		03/26/2014	8.3	
9149 P14 (24-30)		03/26/2014	7.1	

Table F-1
Soil Sampling Results - DU9
Midway Atoll NWR

Sample Identification	Notes	Sample Date	Lead Concentration (mg/kg)	
Boat House (Figure F18)				
Boat House #1/2 P1 (0-6)		03/22/2014	290	
Boat House #1/2 P1 (12-18)		03/22/2014	49	
Boat House #1/2 P1 (24-30)		03/22/2014	71	
Boat House #1/2 P2 (0-6)		03/22/2014	49	
Boat House #1/2 P2 (12-18)		03/22/2014	0.62	J
Boat House #1/2 P2 (24-30)		03/22/2014	1.2	
Boat House #1/2 P3 (0-6)		03/23/2014	58	
Boat House #1/2 P3 (12-18)		03/23/2014	0.92	J
Boat House #1/2 P3 (24-30)		03/23/2014	4.7	
Boat House #1/2 P4 (0-6)		03/23/2014	50	
Boat House #1/2 P4 (12-18)		03/23/2014	13	
Boat House #1/2 P4 (24-30)		03/23/2014	0.78	J
Boat House #1/2 P5 (0-6)		03/23/2014	28	
Boat House #1/2 P5 (12-18)		03/23/2014	20	
Boat House #1/2 P5 (24-30)		03/23/2014	16	
Boat House #1/2 P6 (0-6)		03/23/2014	60	
Boat House #1/2 P6 (12-18)		03/23/2014	47	
Boat House #1/2 P6 (24-30)		03/23/2014	1.3	U
Boat House #1/2 P7 (0-6)		03/23/2014	71	
Boat House #1/2 P7 (12-18)		03/23/2014	170	
Boat House #1/2 P7 (24-30)		03/23/2014	4.9	
Boat House #1/2 P8 (0-6)		03/23/2014	58	
Boat House #1/2 P8 (12-18)		03/23/2014	71	
Boat House #1/2 P8 (24-30)		03/23/2014	32	
Boat House #1/2 P9 (0-6)		03/23/2014	61	
Boat House #1/2 P9 (12-18)		03/23/2014	59	
Boat House #1/2 P9 (24-30)		03/23/2014	3.7	
Boat House #1/2 P10 (0-6)		03/23/2014	20	
Boat House #1/2 P10 (12-18)		03/23/2014	26	
Boat House #1/2 P10 (24-30)		03/23/2014	1.2	U
Boat House #1/2 P10 (30-36)		03/23/2014	1.3	U
Boat House #1/2 P11 (0-6)		03/23/2014	28	
Boat House #1/2 P11 (12-18)		03/23/2014	24	
Boat House #1/2 P11 (24-30)		03/23/2014	2.0	
Boat House #1/2 P12 (0-6)		03/23/2014	18	
Boat House #1/2 P12 (12-18)		03/23/2014	14	
Boat House #1/2 P12 (24-30)		03/23/2014	9.9	
Boat House #1/2 P13 (0-6)		03/23/2014	4.8	
Boat House #1/2 P13 (12-18)		03/23/2014	4.5	
Boat House #1/2 P13 (24-30)		03/23/2014	3.8	
Boat House #1/2 P14 (0-6)		03/23/2014	13	
Boat House #1/2 P14 (12-18)		03/23/2014	9.5	
Boat House #1/2 P14 (24-30)		03/23/2014	7.9	
Boat House #1/2 P15 (0-6)		03/24/2014	10	
Boat House #1/2 P15 (12-18)		03/24/2014	16	
Boat House #1/2 P15 (24-30)		03/24/2014	17	
Boat House #1/2 P16 (0-6)		03/24/2014	20	
Boat House #1/2 P16 (12-18)		03/24/2014	25	
Boat House #1/2 P17 (0-6)		03/24/2014	77	
Boat House #1/2 P17 (12-18)		03/24/2014	130	
Boat House #1/2 P18 (0-6)		03/24/2014	25	
Boat House #1/2 P18 (12-18)		03/24/2014	25	
Boat House #1/2 P18 (24-30)		03/24/2014	67	
Boat House #1/2 P19 (0-6)		03/24/2014	54	
Boat House #1/2 P19 (12-18)		03/24/2014	55	
Boat House #1/2 P19 (24-30)		03/24/2014	5.2	

Table F-1
Soil Sampling Results - DU9
Midway Atoll NWR

Sample Identification	Notes	Sample Date	Lead Concentration (mg/kg)	
Boat House #1/2 P20 (0-6)		03/24/2014	21	
Boat House #1/2 P20 (12-18)		03/24/2014	22	
Boat House #1/2 P20 (24-30)		03/24/2014	5.1	
Boat House #1/2 P21 (0-6)		03/24/2014	28	
Boat House #1/2 P21 (12-18)		03/24/2014	23	
Boat House #1/2 P21 (24-30)		03/24/2014	10	
Boat House #1/2 P22 (0-6)		03/24/2014	28	
Boat House #1/2 P22 (12-18)		03/24/2014	26	
Boat House #1/2 P22 (24-30)		03/24/2014	9.1	
Boat House #1/2 P22 (30-36)		03/24/2014	7.0	
Boat House #1/2 P23 (0-6)		03/24/2014	27	
Boat House #1/2 P23 (12-18)		03/24/2014	21	
Boat House #1/2 P23 (24-30)		03/24/2014	24	
Boat House #1/2 P24 (0-6)		03/24/2014	24	
Boat House #1/2 P24 (12-18)		03/24/2014	19	
Boat House #1/2 P24 (24-30)		03/24/2014	23	
Boat House #1/2 P24 (30-36)		03/24/2014	18	
Boat House #1/2 P25 (0-6)		03/24/2014	20	
Boat House #1/2 P25 (12-18)		03/24/2014	15	
Boat House #1/2 P25 (24-30)		03/24/2014	12	
Boat House #1/2 P26 (0-6)		03/24/2014	39	
Boat House #1/2 P26 (12-18)		03/24/2014	1,100	
Boat House #1/2 P26 (24-30)		03/24/2014	44	
Boat House #1/2 P27 (0-6)		03/24/2014	38	
Boat House #1/2 P27 (12-18)		03/24/2014	58	
Boat House #1/2 P27 (24-30)		03/24/2014	12	
Fire Hydrant 02 (Figure F19)				
FH 02-P1 0-6"		10/14/2014	110	
FH 02-P1 12-18"		10/14/2014	89	
FH 02-P1 24-30"		10/14/2014	5.7	
FH 02-P2 0-6"		10/14/2014	180	
FH 02-P2 12-18"		10/14/2014	110	B
FH 02-P2 24-30"		10/14/2014	21	B
FH 02-P3 0-6"		10/14/2014	180	B
FH 02-P3 12-18"		10/14/2014	84	B
FH 02-P3 24-30"		10/14/2014	3.6	B
Fire Hydrant 24 (Figure F19)				
FH 24-P1 0-6"		10/13/2014	73	
FH 24-P1 12-18"		10/13/2014	96	
FH 24-P1 24-30"		10/13/2014	22	
FH 24-P2 0-6"		10/13/2014	160	
FH 24-P2 12-18"		10/13/2014	86	
FH 24-P2 24-30"		10/13/2014	32	
FH 24-P3 0-6"		10/13/2014	180	
FH 24-P3 12-18"		10/13/2014	110	
FH 24-P3 24-30"		10/13/2014	41	

Table F-1
Soil Sampling Results - DU9
Midway Atoll NWR

Sample Identification	Notes	Sample Date	Lead Concentration (mg/kg)
Fire Hydrant 37 (Figure F19)			
FH 37-P1 0-6"		10/13/2014	190
FH 37-P1 12-18"		10/13/2014	390
FH 37-P1 24-30"		10/13/2014	110
FH 37-P2 0-6"		10/13/2014	160
FH 37-P2 12-18"		10/13/2014	140
FH 37-P2 24-30"		10/13/2014	280
FH 37-P3 0-6"		10/13/2014	200
FH 37-P3 12-18"		10/13/2014	130
FH 37-P3 24-30"		10/13/2014	170
Fire Hydrant 44 (Figure F19)			
FH 44-P1 0-6"		10/13/2014	11
FH 44-P1 12-18"		10/13/2014	18
FH 44-P1 24-30"		10/13/2014	27
FH 44-P2 0-6"		10/13/2014	11
FH 44-P2 12-18"		10/13/2014	11
FH 44-P2 24-30"		10/13/2014	2.0
FH 44-P2 30-36"		10/13/2014	1.9
FH 44-P3 0-6"		10/13/2014	15
FH 44-P3 12-18"		10/13/2014	6.6
FH 44-P3 24-30"		10/13/2014	2.1
Fire Hydrant 48 (Figure F19)			
FH 48-P1 0-6"		10/09/2014	18
FH 48-P1 12-18"		10/09/2014	18
FH 48-P1 24-30"		10/09/2014	38
FH 48-P2 0-6"		10/09/2014	16
FH 48-P2 12-18"		10/09/2014	21
FH 48-P2 24-30"		10/09/2014	24
FH 48-P3 0-6"		10/09/2014	18
FH 48-P3 12-18"		10/09/2014	16
FH 48-P3 24-30"		10/09/2014	15
Fire Hydrant 54 (Figure F19)			
FH 54-P1 0-6"		10/10/2014	67
FH 54-P1 12-18"		10/10/2014	70
FH 54-P1 24-30"		10/10/2014	35
FH 54-P2 0-6"		10/10/2014	46
FH 54-P2 12-18"		10/10/2014	70
FH 54-P2 24-30"		10/10/2014	29
FH 54-P3 0-6"		10/10/2014	130
FH 54-P3 12-18"		10/10/2014	160
FH 54-P3 24-30"		10/10/2014	40
Fire Hydrant 70 (Figure F19)			
FH 70-P1 0-6"		10/13/2014	110
FH 70-P1 12-18"		10/13/2014	110
FH 70-P1 24-30"		10/13/2014	130
FH 70-P2 0-6"		10/13/2014	250
FH 70-P2 12-18"		10/13/2014	48
FH 70-P2 24-30"		10/13/2014	34
FH 70-P3 0-6"		10/13/2014	170
FH 70-P3 12-18"		10/13/2014	180
FH 70-P3 24-30"		10/13/2014	53

Table F-1
Soil Sampling Results - DU9
Midway Atoll NWR

Sample Identification	Notes	Sample Date	Lead Concentration (mg/kg)	
Fire Hydrant 77 (Figure F19)				
FH 77-P1 0-6"		10/10/2014	110	
FH 77-P1 12-18"		10/10/2014	350	
FH 77-P2 0-6"		10/10/2014	62	
FH 77-P2 12-18"		10/10/2014	27	
FH 77-P2 24-30"		10/10/2014	36	
FH 77-P3 0-6"		10/10/2014	97	
FH 77-P3 12-18"		10/10/2014	120	
FH 77-P3 24-30"		10/10/2014	130	
Pesticide Building (Figure F1)				
PEST. STORAGE P1 (0-6)		03/25/2014	31	
PEST. STORAGE P1 (12-18)		03/25/2014	13	
PEST. STORAGE P1 (24-30)		03/25/2014	0.59	J
PEST. STORAGE P2 (0-6)		03/25/2014	57	
PEST. STORAGE P2 (12-18)		03/25/2014	19	
PEST. STORAGE P2 (24-30)		03/25/2014	0.34	J
PEST. STORAGE P3 (0-6)		03/25/2014	42	
PEST. STORAGE P3 (12-18)		03/25/2014	4.6	
PEST. STORAGE P3 (24-30)		03/25/2014	10	
PEST. STORAGE P4 (0-6)		03/25/2014	43	
PEST. STORAGE P4 (12-18)		03/25/2014	25	
PEST. STORAGE P4 (24-30)		03/25/2014	14	
PEST. STORAGE P5 (0-6)		03/25/2014	60	
PEST. STORAGE P5 (12-18)		03/25/2014	69	
PEST. STORAGE P5 (24-30)		03/25/2014	7.7	
PEST. STORAGE P6 (0-6)		03/25/2014	36	
PEST. STORAGE P6 (12-18)		03/25/2014	15	
PEST. STORAGE P6 (24-30)		03/25/2014	2.3	
PEST. STORAGE P6 (30-36)		03/25/2014	1.1	U
PEST. STORAGE P7 (0-6)		03/25/2014	41	
PEST. STORAGE P7 (12-18)		03/25/2014	4.3	
PEST. STORAGE P7 (24-30)		03/25/2014	3.5	
PEST. STORAGE P8 (0-6)		03/25/2014	38	
PEST. STORAGE P8 (12-18)		03/25/2014	38	
PEST. STORAGE P8 (24-30)		03/25/2014	14	
PEST. STORAGE P9 (0-6)		03/25/2014	43	
PEST. STORAGE P9 (12-18)		03/25/2014	18	
PEST. STORAGE P9 (24-30)		03/25/2014	9.0	
PEST. STORAGE P10 (0-6)		03/25/2014	37	
PEST. STORAGE P10 (12-18)		03/25/2014	9.6	
PEST. STORAGE P10 (24-30)		03/25/2014	0.36	J
PEST. STORAGE P11 (0-6)		03/25/2014	51	
PEST. STORAGE P11 (12-18)		03/25/2014	87	
PEST. STORAGE P11 (24-30)		03/25/2014	43	
PEST. STORAGE P12 (0-6)		03/25/2014	59	
PEST. STORAGE P12 (12-18)		03/25/2014	24	
PEST. STORAGE P12 (24-30)		03/25/2014	35	
PEST. STORAGE P13 (0-6)		03/25/2014	34	
PEST. STORAGE P13 (12-18)		03/25/2014	12	
PEST. STORAGE P13 (24-30)		03/25/2014	62	
PEST. STORAGE P13 (30-36)		03/25/2014	7.6	
PEST. STORAGE P14 (0-6)		03/25/2014	40	
PEST. STORAGE P14 (12-18)		03/25/2014	6.3	
PEST. STORAGE P14 (24-30)		03/25/2014	5.7	
PEST. STORAGE P15 (0-6)		03/25/2014	31	
PEST. STORAGE P15 (12-18)		03/25/2014	30	
PEST. STORAGE P15 (24-30)		03/25/2014	19	

Table F-1
Soil Sampling Results - DU9
Midway Atoll NWR

Sample Identification	Notes	Sample Date	Lead Concentration (mg/kg)
PEST. STORAGE P16 (0-6)		03/25/2014	54
PEST. STORAGE P16 (12-18)		03/25/2014	9.0
PEST. STORAGE P16 (24-30)		03/25/2014	21
PEST. STORAGE P17 (0-6)		03/25/2014	42
PEST. STORAGE P17 (12-18)		03/25/2014	2.8
PEST. STORAGE P17 (24-30)		03/25/2014	1.1 U

Notes:

1. For samples with duplicates, the results shown on the table are the higher of the two samples.

U Indicates non-detected compound at Reporting Limit

J Indicates estimated amount

B Indicates compound was found in the blank and sample

mg/kg = milligrams per kilogram

Shading indicates concentrations ≥ 75 mg/kg

APPENDIX F

2016 FIELD YEAR SUPORTING DOCUMENTATION

Table 1
Summary of Asbestos Abatement and Demolition Services - 2016
Midway Atoll NWR

Structure #	Name	Asbestos Abatement Completed (date)	Demolition Completed (date)	Soil Excavation Summary	Backfilling Complete	Confirmation Samples Collected at Bottom of Excavation	Concrete Footing Demo Work to Complete in 2017
170	Switch Station Electrical Feeder 1	09/10/2016	09/21/2016	Full dig 09/22/16	Yes	Yes	No
180	Electrical Building	09/09/2016	09/21/2016	Full dig 09/22/16	Yes	Yes	No
200	Switch Station	09/29/2016	10/11/2016	Full dig 10/11/16	Yes	Yes	No
300	Fuel Farm Transform Bank (Fuels Office)	09/15/2016	09/28/2016	Full dig 09/29/16	Yes	Yes	No
340	Carpentry Shop substation	09/19/2016	10/14/2016	Full dig 10/15/16	Yes	Yes	No
S464	Fuel Oil Pumphouse	N/A	09/29/2016	Full dig 10/01/16	No	Yes	Yes Footings
502	AT&T Shed	09/12/2016	10/07/2016	Full dig 10/08/16	No	Yes	Yes Footings
503	Barracks Substation	N/A	10/13/2016	Full dig 10/13/16	Yes	Yes	No
520	Fire Dept. Storage	09/24/2016	10/06/2016	Full dig 10/06/16	Yes	Yes	No
S1119	Tug Pier Substation	N/A	09/21/2016	Full dig 09/22/16	Yes	Yes	No
S1123	Electric Distribution Building	N/A	09/21/2016	Full dig 09/22/16	Yes	Yes	No
2127	POL Office	09/15/2016	09/27/2016	Full dig 09/29/16	Yes	Yes	No
2411	Fuel Farm Lab	N/A	09/28/2016	Full dig 09/29/16	Yes	Yes	No
3506	Liquid Oxygen Storage	09/29/2016	10/10/2016	Full dig 10/10/16	Yes	Yes	No
3509	Oxy/Acetylene Storage	N/A	10/01/2016	Full dig 10/03/16	Yes	Yes	No
3511	Sk1 Warehouse Transformer (substation)	09/20/2016	10/01/2016	Full dig 10/03/16	Yes	Yes	No
3514	Security Bldg. Storage @TOC	09/14/2016	10/17/2016	2017	No	No	No
3524	Steam heat bldg.	N/A	10/08/2016	2017	No	No	No
3529	Midway Laundry	N/A	10/11/2016	2017	No	No	No
4201	JP-5 Pumping Station	N/A	10/01/2016	Full dig 10/01/16	No	Yes	Yes Footings
4214	Substation electrical feeder 4	N/A	10/11/2016	Scrape 10/11/16 [1]	Yes	Yes	No
5126	Sewage Pump station	09/27/2016	10/13/2016	2017	No	No	Yes 12'x12'x15' sump
5267	Sewage Pump Transformer	09/20/2016	10/04/2016	Full dig 10/04/16	Yes	Yes	No
5295	Hangar Aux. Generator Bldg.	09/26/2016	10/07/2016	Full dig 10/07/16	No	Yes	Yes Blocks
5301	Runway light controls	N/A	10/12/2016	Full dig 10/12/16	Yes	Yes	No
5338	Electric Transformer near 5339	N/A	10/13/2016	Full dig 10/21/16	Yes	Yes	No
5339	Water treatment Bldg. @ R2 east side	09/28/2016	10/13/2016	Full dig 10/21/16	Yes	Yes	No
5340	Substation	09/29/2016	10/11/2016	Full dig 10/12/16	Yes	Yes	No
5341	R2 Chlorinator Bldg	N/A	10/14/2016	Partial dig 10/21/16	Yes	Yes	No
5342	Telephone Switch Bldg.	09/13/2016	10/08/2016	2017	No	No	Yes Footings
5350	Electrical Switch station	N/A	10/11/2016	Full dig 10/12/16	Yes	Yes	No
5360	Substation	09/20/2016	10/03/2016	Full dig 10/06/16	Yes	Yes	No
5361	Switch Station Electrical Feeder 9	09/16/2016	10/02/2016	Full dig 10/06/16	Yes	Yes	No
5378	Metal Shed near R2	N/A	10/15/2016	2017	No	No	No
9149	Power Plant shed	N/A	10/13/2016	Full dig 10/14/16	Yes	Yes	No
R2	Tanks on West side	N/A	10/14/2016	Full dig 10/21/16	Yes	Yes	No

Table 2
Summary of Lead Based Paint Abatement Services - 2016
Midway Atoll NWR

Structure #	Name	LBP Abatement and Repainting Completed (date)
140	Radionuclide Unit	09/19/2016
144	Power Plant	9/14/2016 [1]
S228	High Voltage Bldg.	09/19/2016
309	Power Plant #3	09/27/2016
347	Water System Bldg.	09/30/2016
S361	Pesticide Storage	09/28/2016
400	BEQ Transformer Bldg.	10/05/2016
1124	Waste Storage Building	09/15/2016
S1126	Harbor Office/Buddhist Temple	09/15/2016
3501	Main Freshwater Pump station	09/30/2016
5150	Sewage Pump Station	10/04/2016
8106	Freshwater Substation	10/04/2016
8105	R1 Concrete block/vault	10/05/2016
--	Ave Maria memorial	10/03/2016
--	Cross	09/15/2016
--	Platforms (2) R3 S3126W/S3127E	09/30/2016
--	Manholes (43)	10/06/2016
--	3 red AST by generator building 309	09/26/2016
--	FAA Bldg near R2	10/07/2016

Notes:
1 -Maectite only. No painting was completed

Table 3
Summary of Demolition and Backfill Load Counts - 2016
Midway Atoll NWR

Date	Steel (Loads)[1]	Clean Concrete (Loads)[2]	Concrete with Paint (Loads)[3]	Clean Backfill for 2016 Excavations (Loads)[4]	Clean Backfill for 2016 Slab Removal Areas (Loads)[4]	Clean Backfill Stockpile (Loads)[5]
09/07/2016	0	0	0	0	0	0
09/08/2016	0	0	0	0	0	0
09/09/2016	0	0	0	0	0	0
09/10/2016	0	0	0	0	0	0
09/11/2016	0	0	0	0	0	0
09/12/2016	0	0	0	0	0	0
09/13/2016	0	0	0	0	0	0
09/14/2016	0	0	0	0	0	0
09/15/2016	0	0	0	0	0	0
09/16/2016	0	0	0	0	0	0
09/17/2016	0	0	0	0	0	0
09/18/2016	0	0	0	0	0	0
09/19/2016	0	0	0	0	0	0
09/20/2016	0	0	0	0	0	0
09/21/2016	1	1	5	0	0	0
09/22/2016	0	7	0	0	0	0
09/23/2016	0	36	0	0	0	0
09/24/2016	0	0	0	0	32	14
09/25/2016	0	0	0	0	0	0
09/26/2016	0	0	0	16	0	32
09/27/2016	0	0	4	0	0	28
09/28/2016	0	1	0	0	0	0
09/29/2016	7	0	6	0	0	0
09/30/2016	2	0	5	0	0	0
10/01/2016	3	1	10	0	0	0
10/02/2016	0	0	0	0	0	0
10/03/2016	6	0	8	0	0	0
10/04/2016	2	0	9	0	0	0
10/05/2016	1	1	6	0	0	0
10/06/2016	0	0	0	0	0	0
10/07/2016	0	0	0	0	0	0
10/08/2016	6	0	6	0	0	0
10/09/2016	0	0	0	0	0	0
10/10/2016	2	0	13	0	0	0
10/11/2016	1	0	12	0	0	0
10/12/2016	1	2	6	0	0	0
10/13/2016	2	1	9	0	0	0
10/14/2016	6	4	5	0	0	0
10/15/2016	2	1	3	0	0	0
10/16/2016	0	0	0	0	0	0
10/17/2016	1	0	3	8	0	0
10/18/2016	0	0	0	45	0	0
10/19/2016	0	0	0	0	0	0
10/20/2016	0	0	0	32	2	0
10/21/2016	0	0	0	0	0	8
10/22/2016	0	0	0	0	0	32
10/23/2016	0	0	0	1	0	36
10/24/2016	0	0	0	0	0	0
10/25/2016	0	0	0	0	0	0
Total Load Count	42	55	109	102	34	150
Total CY Estimate	630 [6]	440 [7]	981 [8]	1,530 [6]	510 [6]	2,250 [6]

Notes
1. Steel was hauled to Sea Plane tarmac and staged with the existing scrap metal pile.
2. Clean concrete was hauled to Sea Plane tarmac for crushing.
3. Concrete with paint was disposed of in the R2 Unit.
4. Clean backfill was placed in daily excavation areas.
5. Clean backfill was staged by R2 Unit.
6. Estimates are based on an assumed 15 CY per truck load.
7. Estimates are based on an assumed 8 CY per truck load. Load sized varied from 7 to 10 CY per truck
8. Estimates are based on an assumed 9 CY per truck load. Load sized varied from 7 to 12 CY per truck
CY = cubic yard

TABLE 4
SUMMARY of MAECTITE USAGE AND VOLUMES OF SOIL TRANSPORTED TO R2 UNIT - 2016
MIDWAY ATOLL NWR

Date	Maectite Totals (gal)				Treated Soil Totals[1]		
	Applied to Soils (DU9)	Applied to Soils (DU5)	Applied to Structures (DU9)	Cumulative Total	Treated Soil (Loads)[2]	Excavated / Hauled to R-2 Unit (LCY)	Excavated / Hauled to R-2 Unit Cumulative Total (LCY)
09/07/2016	0	0	0	0	0	0	0
09/08/2016	0	0	0	0	0	0	0
09/09/2016	0	0	0	0	0	0	0
09/10/2016	0	0	0	0	0	0	0
09/11/2016				0			0
09/12/2016	0	0	0	0	0	0	0
09/13/2016	0	0	0	0	0	0	0
09/14/2016	0	0	0	0	0	0	0
09/15/2016	0	0	0	0	0	0	0
09/16/2016	0	0	0	0	0	0	0
09/17/2016	0	0	0	0	0	0	0
09/18/2016				0			0
09/19/2016	0	0	0	0	0	0	0
09/20/2016	0	0	54	54	0	0	0
09/21/2016	22	0	26	103	3	38	38
09/22/2016	98	0	0	201	8	120	158
09/23/2016	0	0	0	201	0	0	158
09/24/2016	0	0	0	201	0	0	158
09/25/2016				201			158
09/26/2016	0	0	0	201	0	0	158
09/27/2016	36	0	0	237	0	0	158
09/28/2016	76	0	0	313	14	210	368
09/29/2016	105	0	0	417	9	135	503
09/30/2016	102	0	0	519	10	150	653
10/01/2016	86	0	0	605	12	180	833
10/02/2016				605			833
10/03/2016	36	0	0	640	4	60	893
10/04/2016	58	0	0	698	4	60	953
10/05/2016	131	0	0	829	14	210	1,163
10/06/2016	160	0	0	988	10	150	1,313
10/07/2016	70	0	0	1,058	10	150	1,463
10/08/2016	5	0	0	1,062	3	45	1,508
10/09/2016				1,062			1,508
10/10/2016	29	0	0	1,091	3	45	1,553
10/11/2016	58	0	0	1,149	6	90	1,643
10/12/2016	112	0	0	1,261	12	180	1,823
10/13/2016	18	0	0	1,279	1	15	1,838
10/14/2016	81	0	0	1,360	8	120	1,958
10/15/2016	0	0	0	1,360	0	0	1,958
10/16/2016				1,360			1,958
10/17/2016	0	0	0	1,360	0	0	1,958
10/18/2016	0	0	0	1,360	0	0	1,958
10/19/2016	0	0	0	1,360	0	0	1,958
10/20/2016	0	0	0	1,360	0	0	1,958
10/21/2016	0	154	0	1,514	6	90	2,048
10/22/2016	0	0	0	1,514	0	0	2,048
10/23/2016				1,514			2,048
10/24/2016	0	0	0	1,514	0	0	2,048
10/25/2016	0	0	0	1,514	0	0	2,048
Totals	1,280	154	81	1,514	137	2,048	2,048

Notes
1. Estimates are based on MAECTITE volume usage with an application rate rate of 0.75 gallons per cubic yard.
2. Treated soil was hauled to and deposited in the R-2 Unit.
LCY = loose cubic yard
gal = gallon

TABLE 5
SUMMARY OF CONFIRMATION SOIL SAMPLING ANALYTICAL RESULTS - 2016
MIDWAY ATOLL NWR

Structure	Sample ID	Date	Lead (mg/kg)	Difference %
170	P100 0-2"	09/23/2016	30	3
	P100 0-2" DUP	09/23/2016	31	
	P101 0-2"	09/23/2016	5.9	16
	P101 0-2" DUP	09/23/2016	6.9	
180	P100 0-2"	09/23/2016	11	23
	P100 0-2" DUP	09/23/2016	8.7	
	P101 0-2"	09/23/2016	0.23 J	16
	P101 0-2" DUP	09/23/2016	0.27 J	
200	P100 0-2"	10/12/2016	ND	NA
	P100 0-2" DUP	10/12/2016	ND	
	P101 0-2"	10/12/2016	1.2	15
	P101 0-2" DUP	10/12/2016	1.4	
300	P100 0-2"	10/04/2016	37	31
	P100 0-2" DUP	10/04/2016	27 B	
	P101 0-2"	10/04/2016	16	13
	P101 0-2" DUP	10/04/2016	14 B	
340	P100 0-2"	10/17/2016	0.97 J B	27
	P100 0-2" DUP	10/17/2016	0.74 J B	
	P101 0-2"	10/17/2016	8.5 B	6
	P101 0-2" DUP	10/17/2016	8 B	
S464	P100 0-2"	10/04/2016	37	90
	P100 0-2" DUP	10/04/2016	14	
	P101 0-2"	10/04/2016	28	29
	P101 0-2" DUP	10/04/2016	21 B	
	P102 0-2"	10/04/2016	19 B	5
	P102 0-2" DUP	10/04/2016	18 B	
	P103 0-2"	10/04/2016	29	7
	P103 0-2" DUP	10/04/2016	31	
	P104 0-2"	10/04/2016	34	6
	P104 0-2" DUP	10/04/2016	36	
502	P100 0-2"	10/09/2016	3.6	11
	P100 0-2" DUP	10/09/2016	4	
	P101 0-2"	10/09/2016	9.4	117
	P101 0-2" DUP	10/09/2016	36	
	P102 0-2"	10/09/2016	22	59
	P102 0-2" DUP	10/09/2016	12	
	P103 0-2"	10/09/2016	9.9	1
	P103 0-2" DUP	10/09/2016	10	
503	P100 0-2"	10/14/2016	47	4
	P100 0-2" DUP	10/14/2016	45	
	P101 0-2"	10/14/2016	110	44
	P101 0-2" DUP	10/14/2016	70 B	

TABLE 5
SUMMARY OF CONFIRMATION SOIL SAMPLING ANALYTICAL RESULTS - 2016
MIDWAY ATOLL NWR

Structure	Sample ID	Date	Lead (mg/kg)	Difference %
520	P100 0-2"	10/07/2016	17	6
	P100 0-2" DUP	10/07/2016	16	
	P101 0-2"	10/07/2016	48	11
	P101 0-2" DUP	10/07/2016	43	
	P102 0-2"	10/07/2016	2.5	21
	P102 0-2" DUP	10/07/2016	3.1	
	P103 0-2"	10/07/2016	3.1	3
	P103 0-2" DUP	10/07/2016	3.2	
	P104 0-2"	10/07/2016	9	2
	P104 0-2" DUP	10/07/2016	9.2	
	P105 0-2"	10/07/2016	180	11
	P105 0-2" DUP	10/07/2016	200	
S1119	P100 0-2"	09/23/2016	9.7	7
	P100 0-2" DUP	09/23/2016	9	
	P101 0-2"	09/23/2016	18	0
	P101 0-2" DUP	09/23/2016	18	
S1123	P100 0-2"	09/23/2016	8.1	12
	P100 0-2" DUP	09/23/2016	7.2	
	P101 0-2"	09/23/2016	3.9	29
	P101 0-2" DUP	09/23/2016	5.2	
2127	P100 0-2"	10/04/2016	41	29
	P100 0-2" DUP	10/04/2016	55 B	
	P101 0-2"	10/04/2016	71 B	58
	P101 0-2" DUP	10/04/2016	39	
	P102 0-2"	10/04/2016	4.5	22
	P102 0-2" DUP	10/04/2016	5.6 B	
2411	P100 0-2"	10/09/2016	1 J	10
	P100 0-2" DUP	10/09/2016	1.1 J	
	P101 0-2"	10/09/2016	35	33
	P101 0-2" DUP	10/09/2016	49	
3506	P100 0-2"	10/12/2016	28	7
	P100 0-2" DUP	10/12/2016	30	
	P101 0-2"	10/12/2016	5.5	10
	P101 0-2" DUP	10/12/2016	5	
3509	P100 0-2"	10/09/2016	5.7	7
	P100 0-2" DUP	10/09/2016	6.1	
	P101 0-2"	10/09/2016	27	8
	P101 0-2" DUP	10/09/2016	25 B	
3511	P100 0-2"	10/09/2016	6.6 B	26
	P100 0-2" DUP	10/09/2016	8.6 B	
	P101 0-2"	10/09/2016	8 B	11
	P101 0-2" DUP	10/09/2016	7.2 B	

TABLE 5
SUMMARY OF CONFIRMATION SOIL SAMPLING ANALYTICAL RESULTS - 2016
MIDWAY ATOLL NWR

Structure	Sample ID	Date	Lead (mg/kg)	Difference %
4201	P100 0-2"	10/08/2016	1.6	0
	P100 0-2" DUP	10/08/2016	1.6	
	P101 0-2"	10/08/2016	6.1	32
	P101 0-2" DUP	10/08/2016	8.4 B	
	P102 0-2"	10/08/2016	20	10
	P102 0-2" DUP	10/08/2016	22	
	P103 0-2"	10/08/2016	12	29
	P103 0-2" DUP	10/08/2016	16	
	P104 0-2"	10/08/2016	44 B	38
	P104 0-2" DUP	10/08/2016	30	
4214	P100 0-2"	10/15/2016	3.2 B	21
	P100 0-2" DUP	10/15/2016	2.6 B	
5267	P100 0-2"	10/09/2016	4.4	50
	P100 0-2" DUP	10/09/2016	7.3	
	P101 0-2"	10/09/2016	0.15 J	24
	P101 0-2" DUP	10/09/2016	0.19 J	
5295	P100 0-2"	10/07/2016	64	9
	P100 0-2" DUP	10/07/2016	70	
	P101 0-2"	10/07/2016	51	0
	P101 0-2" DUP	10/07/2016	51	
	P102 0-2"	10/07/2016	28	28
	P102 0-2" DUP	10/07/2016	37	
	P103 0-2"	10/07/2016	38	3
	P103 0-2" DUP	10/07/2016	37	
	P104 0-2"	10/07/2016	6.2	5
	P104 0-2" DUP	10/07/2016	6.5	
	P105 0-2"	10/07/2016	9	3
	P105 0-2" DUP	10/07/2016	9.3	
5301	P100 0-2"	10/17/2016	4.1 B	8
	P100 0-2" DUP	10/17/2016	3.8 B	
	P101 0-2"	10/17/2016	6.1 B	3
	P101 0-2" DUP	10/17/2016	6.3 B	
	P102 0-2"	10/17/2016	7.9 B	5
	P102 0-2" DUP	10/17/2016	7.5 B	
	P103 0-2"	10/17/2016	14 B	0
	P103 0-2" DUP	10/17/2016	14 B	
5303	NW A 0-2"	10/21/2016	110	0
	NW A 0-2" DUP	10/21/2016	110	
	NW B 0-2"	10/21/2016	98	12
	NW B 0-2" DUP	10/21/2016	87 B	
	NW C 0-2"	10/21/2016	13	8
	NW C 0-2" DUP	10/21/2016	12	
	NW D 0-2"	10/21/2016	320	17
	NW D 0-2" DUP	10/21/2016	270	
	E A 0-2"	10/22/2016	120	176
	E A 0-2" DUP	10/22/2016	7.7	
	E B 0-2"	10/22/2016	190	74
	E B 0-2" DUP	10/22/2016	87	
	E C 0-2"	10/22/2016	14	15
	E C 0-2" DUP	10/22/2016	12	
	E D 0-2"	10/22/2016	40	12
	E D 0-2" DUP	10/22/2016	45	

TABLE 5
SUMMARY OF CONFIRMATION SOIL SAMPLING ANALYTICAL RESULTS - 2016
MIDWAY ATOLL NWR

Structure	Sample ID	Date	Lead (mg/kg)	Difference %
5340	P100 0-2"	10/12/2016	0.87 J B	2
	P100 0-2" DUP	10/12/2016	0.85 J B	
	P101 0-2"	10/12/2016	4 B	49
	P101 0-2" DUP	10/12/2016	6.6	
5350	P100 0-2"	10/12/2016	8.4	4
	P100 0-2" DUP	10/12/2016	8.1	
	P101 0-2"	10/12/2016	7	7
	P101 0-2" DUP	10/12/2016	6.5	
5360	P100 0-2"	10/08/2016	6.9	21
	P100 0-2" DUP	10/08/2016	5.6	
	P101 0-2"	10/08/2016	1.7	82
	P101 0-2" DUP	10/08/2016	0.71 J B	
5361	P100 0-2"	10/08/2016	5.5	10
	P100 0-2" DUP	10/08/2016	5	
	P101 0-2"	10/08/2016	7.3	1
	P101 0-2" DUP	10/08/2016	7.2 B	
9149	P100 0-2"	10/15/2016	16 B	12
	P100 0-2" DUP	10/15/2016	18 B	
	P101 0-2"	10/15/2016	8.6 B	10
	P101 0-2" DUP	10/15/2016	7.8 B	
	P102 0-2"	10/15/2016	11 B	0
	P102 0-2" DUP	10/15/2016	11 B	

Notes

1. Lead was analyzed by Environmental Protection Agency Method 6010B .

B = Lead was detected in the blank and the sample.

J = Result is less than the reporting limit but greater than or equal to the method detection limit and the concentration is an approximate value.

mg/kg = milligram per kilogram

ND = non detect

TABLE 6
SUMMARY OF ADDITIONAL SOIL SAMPLING ANALYTICAL RESULTS - 2016
MIDWAY ATOLL NWR

Structure	Sample ID	Date	Lead (mg/kg)	Difference %
Bollard	P1 MID 0-6"	10/16/2016	63	NA
	P2 NEAR 0-6"	10/16/2016	81	NA
PIPE	P1 0-6"	10/16/2016	25	NA
	P2 0-6"	10/16/2016	16	NA
	P3 0-6"	10/16/2016	4.5	NA
	P4 0-6"	10/16/2016	0.68 J B	NA
	P5 0-6"	10/16/2016	8.3 B	NA
	P6 0-6"	10/16/2016	5.8 B	NA
	P7 0-6"	10/16/2016	48 B	NA
	P8 0-6"	10/16/2016	34 B	NA
	P9 0-6"	10/16/2016	9.1 B	NA
	P10 0-6"	10/16/2016	31 B	NA
	P11 0-6"	10/16/2016	120 B	NA
	P12 0-6"	10/16/2016	31 B	NA
	P13 0-6"	10/16/2016	25 B	NA
	P14 0-6"	10/16/2016	100 B	NA
	P15 0-6"	10/16/2016	36 B	NA
	P16 0-6"	10/16/2016	61 B	NA
	P17 0-6"	10/16/2016	44 B	NA
	P18 0-6"	10/16/2016	92 B	NA
	P19 0-6"	10/16/2016	290 B	NA
	P20 0-6"	10/16/2016	310	NA
	P21 0-6"	10/16/2016	63	NA
	P22 0-6"	10/16/2016	120	NA
	P23 0-6"	10/16/2016	460	NA
	P24 0-6"	10/16/2016	91	14
	P24 0-6" DUP	10/16/2016	79	
R2	Cell 3 0-6"	10/23/2016	41 B	NA
	Cell 4 0-6"	10/23/2016	14 B	NA
S28	P12 0-6"	10/22/2016	19	NA
	P13 0-6"	10/22/2016	19	NA
	P14 0-6"	10/22/2016	20	NA
S29	P1 0-6"	10/16/2016	9.8	NA
	P2 0-6"	10/16/2016	29	NA
	P3 0-6"	10/16/2016	18	NA
	P4 0-6"	10/16/2016	18	NA
	P5 0-6"	10/16/2016	21	NA
	P6 0-6"	10/16/2016	24	NA
	P7 0-6"	10/16/2016	21	NA
	P8 0-6"	10/16/2016	26	21
	P8 0-6" DUP	10/16/2016	32	
	P9 0-6"	10/16/2016	9.2	NA
S30	P11 0-6"	10/22/2016	14	NA
	P12 0-6"	10/22/2016	59	NA
	P13 0-6"	10/22/2016	0.74 J	NA
	P14 0-6"	10/23/2016	21	NA
	P15 0-6"	10/23/2016	13	NA
	P16 0-6"	10/23/2016	36	NA
347	P9 0-6"	10/09/2016	78	NA
	P9 12-18"	10/09/2016	36	NA
	P9 24-30"	10/09/2016	18	NA

TABLE 6
SUMMARY OF ADDITIONAL SOIL SAMPLING ANALYTICAL RESULTS - 2016
MIDWAY ATOLL NWR

Structure	Sample ID	Date	Lead (mg/kg)	Difference %
3126E	P7 0-6"	10/23/2016	63	NA
	P7 12-18"	10/23/2016	59	NA
	P7 24-30"	10/23/2016	14 B	NA
	P8 0-6"	10/23/2016	73 B	NA
	P8 12-18"	10/23/2016	0.6 J B	NA
	P8 24-30"	10/23/2016	1.3 B	NA
	P6 0-6"	10/23/2016	61 B	NA
	P6 12-18"	10/23/2016	3.2 B	NA
	P6 24-30"	10/23/2016	ND	NA
3127W	P6 0-6"	10/09/2016	91 B	NA
	P6 12-18"	10/09/2016	84 B	NA
	P6 24-30"	10/09/2016	20 B	NA
	P7 0-6"	10/16/2016	24	NA
	P7 12-18"	10/16/2016	17	NA
	P7 24-30"	10/16/2016	2.2	NA
	P8 0-6"	10/16/2016	21	NA
	P8 12-18"	10/16/2016	7.3 B	NA
	P8 24-30"	10/16/2016	4.5 B	NA
3501	P8 0-6"	10/09/2016	530	NA
	P8 12-18"	10/09/2016	52	NA
	P8 24-30"	10/09/2016	4.9	NA
	P9 0-6"	10/09/2016	25	NA
	P9 12-18"	10/09/2016	24 B	NA
	P9 24-30"	10/09/2016	17	NA
	P10 0-6"	10/09/2016	110	NA
	P10 12-18"	10/09/2016	70	NA
	P10 24-30"	10/09/2016	6.9	NA
	P11 0-6"	10/09/2016	63	NA
	P11 12-18"	10/09/2016	17	NA
	P11 24-30"	10/09/2016	0.83 J	NA
4205	P1 0-6"	10/20/2016	19 B	NA
	P1 12-18"	10/20/2016	20 B	NA
	P1 24-30"	10/20/2016	21 F1 B	NA
	P1 30-36"	10/20/2016	12 B	NA
	P2 0-6"	10/20/2016	7.5 B	NA
	P2 12-18"	10/20/2016	21 B	NA
	P2 24-30"	10/20/2016	12 B	NA
	P3 0-6"	10/20/2016	20 B	NA
	P3 12-18"	10/20/2016	5.2 B	NA
	P3 24-30"	10/20/2016	5.7 B	NA
	P4 0-6"	10/20/2016	18 B	NA
	P4 12-18"	10/20/2016	10 B	NA
	P4 24-30"	10/20/2016	7.4 B	NA

TABLE 6
SUMMARY OF ADDITIONAL SOIL SAMPLING ANALYTICAL RESULTS - 2016
MIDWAY ATOLL NWR

Structure	Sample ID	Date	Lead (mg/kg)	Difference %
4206	P1 0-6"	10/21/2016	5.2 B	NA
	P1 12-18"	10/21/2016	5.7 B	NA
	P1 24-30"	10/21/2016	ND	NA
	P2 0-6"	10/21/2016	7.8 B	NA
	P2 12-18"	10/21/2016	1.2 B	NA
	P2 24-30"	10/21/2016	3.6 B	NA
	P3 0-6"	10/21/2016	24 B	NA
	P3 12-18"	10/21/2016	1.4 B	NA
	P3 24-30"	10/21/2016	1.8 B	NA
	P4 0-6"	10/21/2016	15 B	NA
	P4 12-18"	10/21/2016	1.8 B	NA
	P4 24-30"	10/21/2016	ND	NA
4207	P1 0-6"	10/21/2016	6.8 B	NA
	P1 12-18"	10/21/2016	8.6 B	NA
	P1 24-30"	10/21/2016	1.9 B	NA
	P2 0-6"	10/22/2016	15 B	NA
	P2 12-18"	10/22/2016	22 B	NA
	P2 24-30"	10/22/2016	6.2 B	NA
	P3 0-6"	10/22/2016	14 B	33
	P3 0-6" DUP	10/22/2016	10 B	
	P3 12-18"	10/22/2016	16 B	17
	P3 12-18" DUP	10/22/2016	19 B	
	P3 24-30"	10/22/2016	19 B	15
	P3 24-30" DUP	10/22/2016	22	
	P4 0-6"	10/22/2016	8	NA
	P4 12-18"	10/22/2016	6.2	NA
	P4 24-30"	10/22/2016	1.8	NA
4213	P1 24-30"	10/19/2016	ND	NA
	P1 0-6"	10/19/2016	10 B	NA
	P1 12-18"	10/19/2016	4.4	NA
	P2 0-6"	10/19/2016	5.3	NA
	P2 12-18"	10/19/2016	ND	NA
	P2 24-30"	10/19/2016	ND	NA
	P3 0-6"	10/19/2016	7.7 B	4
	P3 0-6" DUP	10/19/2016	8 B	
	P3 12-18"	10/19/2016	4 B	28
	P3 12-18" DUP	10/19/2016	5.3 B	
	P3 24-30"	10/19/2016	1.8 B	40
	P3 24-30" DUP	10/19/2016	1.2 J B	
	P4 0-6"	10/19/2016	8.9 B	NA
	P4 12-18"	10/19/2016	5.9 B	NA
	P4 24-30"	10/19/2016	0.64 J B	NA
	P5 0-6"	10/19/2016	78 B	NA
	P5 12-18"	10/19/2016	20 B	NA
	P5 24-30"	10/19/2016	1.6 B	NA
	P6 0-6"	10/19/2016	15 B	NA
	P6 12-18"	10/19/2016	12 B	NA
	P6 24-30"	10/19/2016	3.1 B	NA
4214	P1 0-6"	10/15/2016	19 B	NA
	P2 0-6"	10/15/2016	65	NA

TABLE 6
SUMMARY OF ADDITIONAL SOIL SAMPLING ANALYTICAL RESULTS - 2016
MIDWAY ATOLL NWR

Structure	Sample ID	Date	Lead (mg/kg)	Difference %
5304	WT P1 0-6"	10/23/2016	6,200	NA
	WT P1 12-18"	10/23/2016	9.9	NA
	WT P1 24-30"	10/23/2016	5.1	NA
	WT P2 0-6"	10/23/2016	110	NA
	WT P2 12-18"	10/23/2016	3.2	NA
	WT P2 24-30"	10/23/2016	ND	NA
5305	WT P1 0-6"	10/23/2016	650	NA
	WT P1 12-18"	10/23/2016	82	NA
	WT P1 24-30"	10/23/2016	ND	NA

Notes

1. Lead was analyzed by Environmental Protection Agency Method 6010B .

B = Lead was detected in the blank and the sample.

J = Result is less than the reporting limit but greater than or equal to the method detection limit and the concentration is an approximate value.

mg/kg = milligram per kilogram

ND = non detect

TABLE 7
MULTI-EXTRACTION PROCEDURE ANALYTICAL RESULTS - 2016
MIDWAY ATOLL NWR

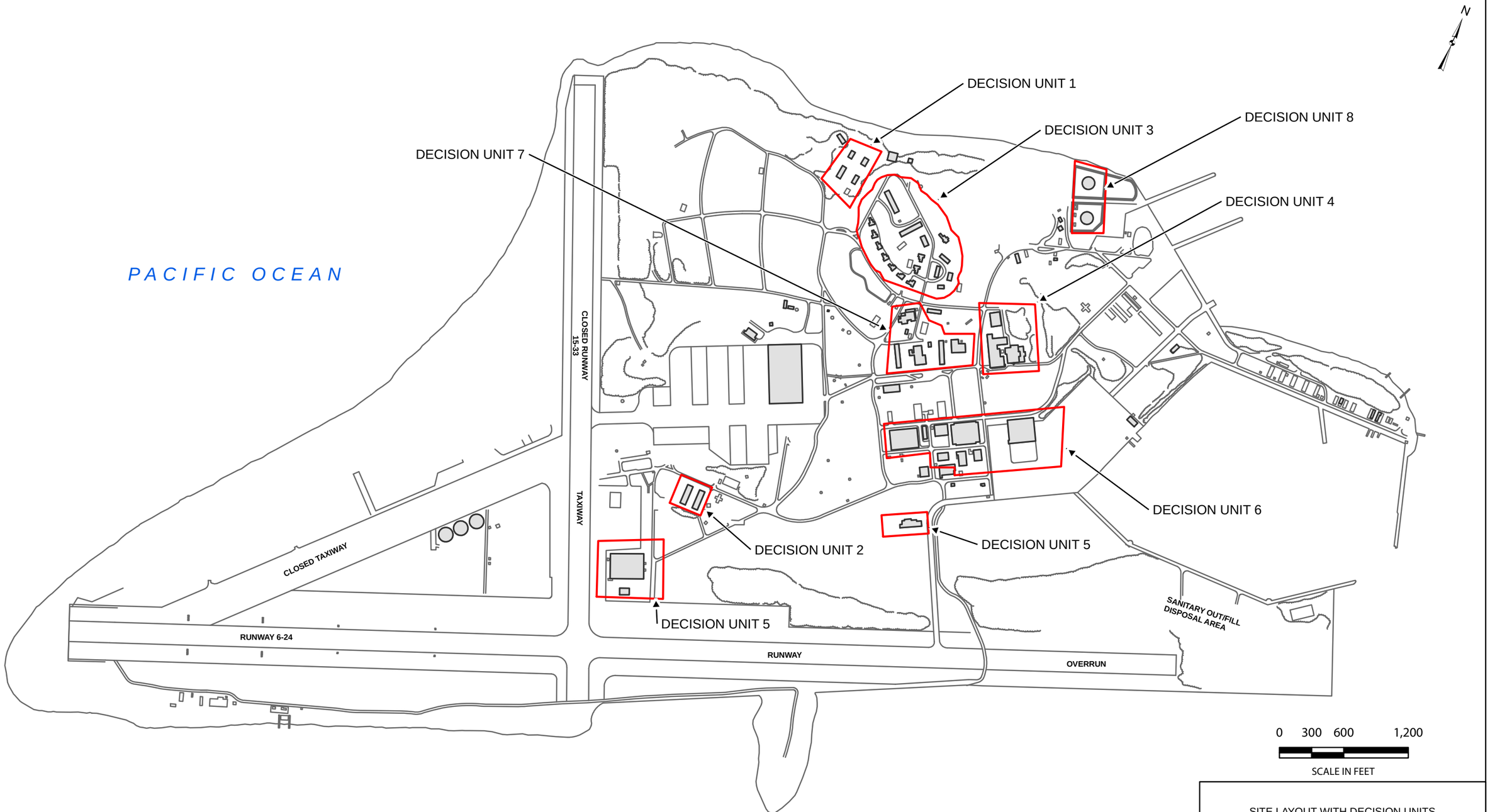
Sample Identification	Date	Lead Concentration (mg/l)
R2 Cell 3	10/23/2016	<0.10
		<0.10
		<0.10
		<0.10
		<0.10
		<0.10
		<0.10
		<0.10
		<0.10
R2 Cell 4	10/23/2016	<0.10
		<0.10
		<0.10
		<0.10
		<0.10
		<0.10
		<0.10
		<0.10
		<0.10

Notes

1. Lead was analyzed by Environmental Protection Agency Method 6010C-Leachability

2. The Toxicity Characteristic Leaching Procedure (TCLP) threshhold for lead is 5 milligrams per liter (mg/l)

FIGURES



LEGEND

Decision Units Structures

Notes:
1. The location of all features shown are approximate.
2. This drawing is for information purposes.
3. Decision Unit 9 covers all remaining structures.

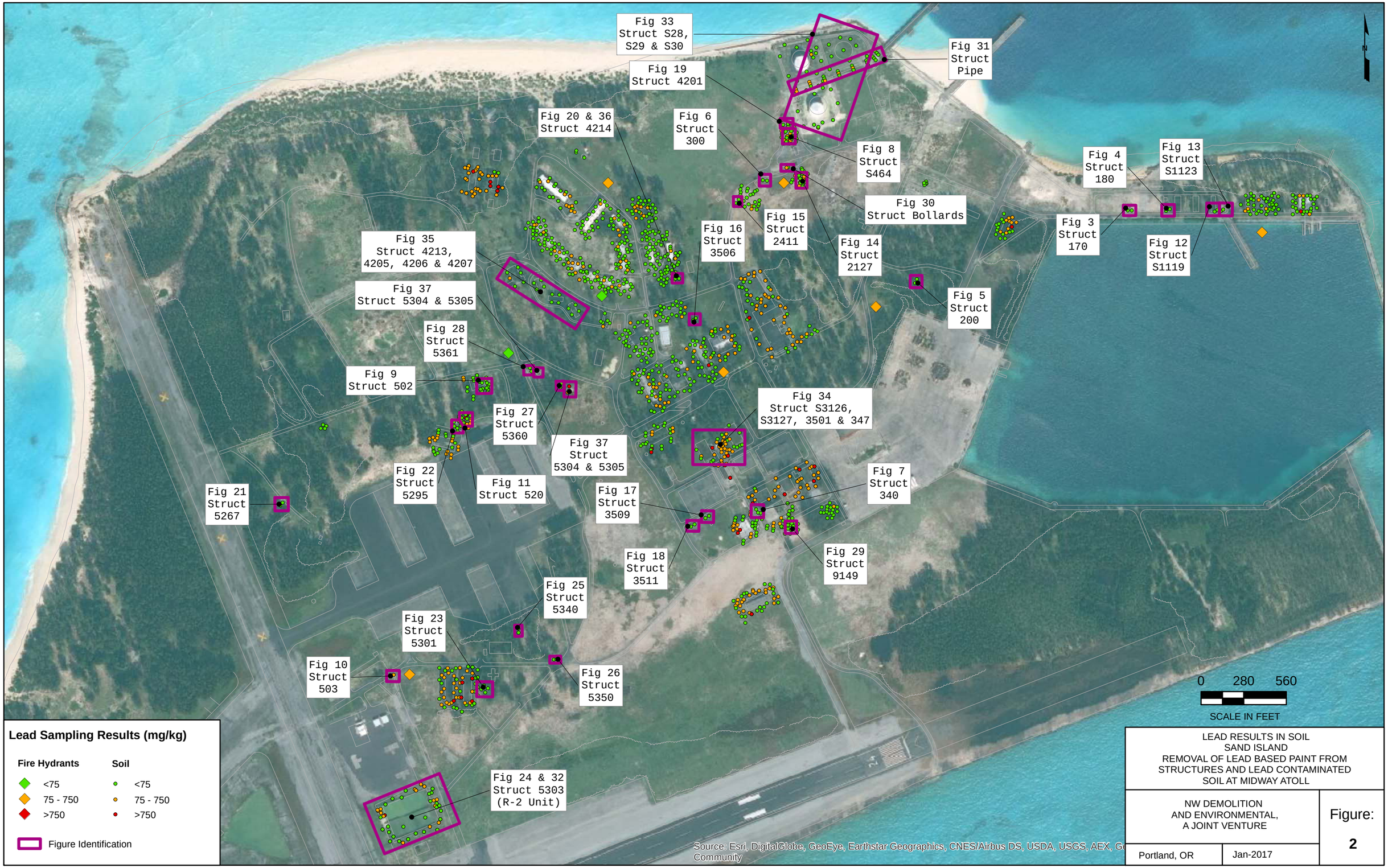
SITE LAYOUT WITH DECISION UNITS
REMOVAL OF LEAD BASED PAINT FROM STRUCTURES AND LEAD CONTAMINATED SOIL AT MIDWAY ATOLL

NW DEMOLITION AND ENVIRONMENTAL, A JOINT VENTURE

JANUARY 2015

Figure: 1

Path: P:\GIS\Projects\Midway\Maps\2014_Joint format_Fig1.mxd

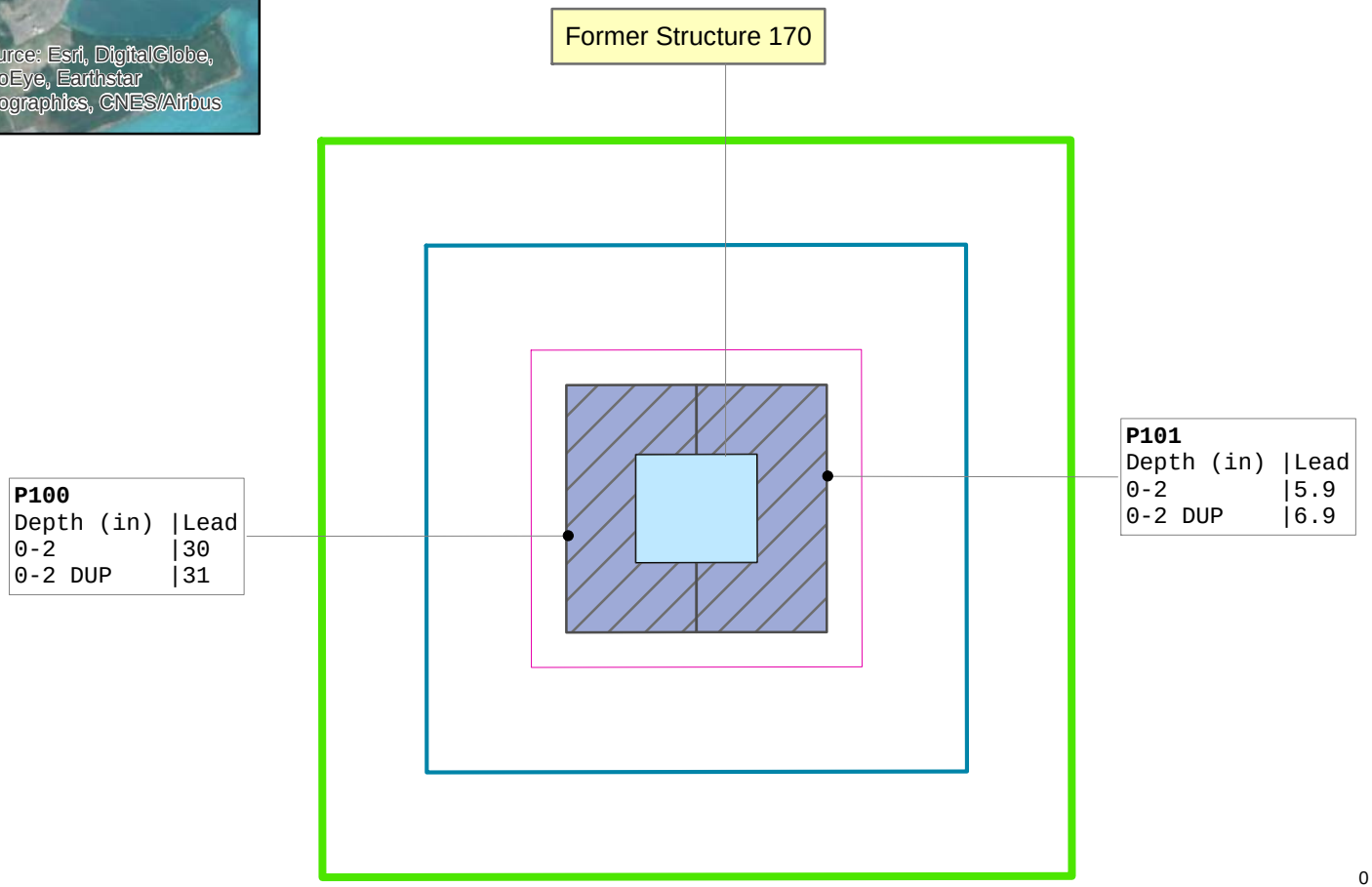


LEAD RESULTS IN SOIL
SAND ISLAND
REMOVAL OF LEAD BASED PAINT FROM
STRUCTURES AND LEAD CONTAMINATED
SOIL AT MIDWAY ATOLL

NW DEMOLITION
AND ENVIRONMENTAL,
A JOINT VENTURE

Portland, OR | Jan-2017

Figure:
2



0 9 18 27

SCALE IN FEET

15' Buffer
30' Buffer
45' Buffer
Former Structure
1' Excavation

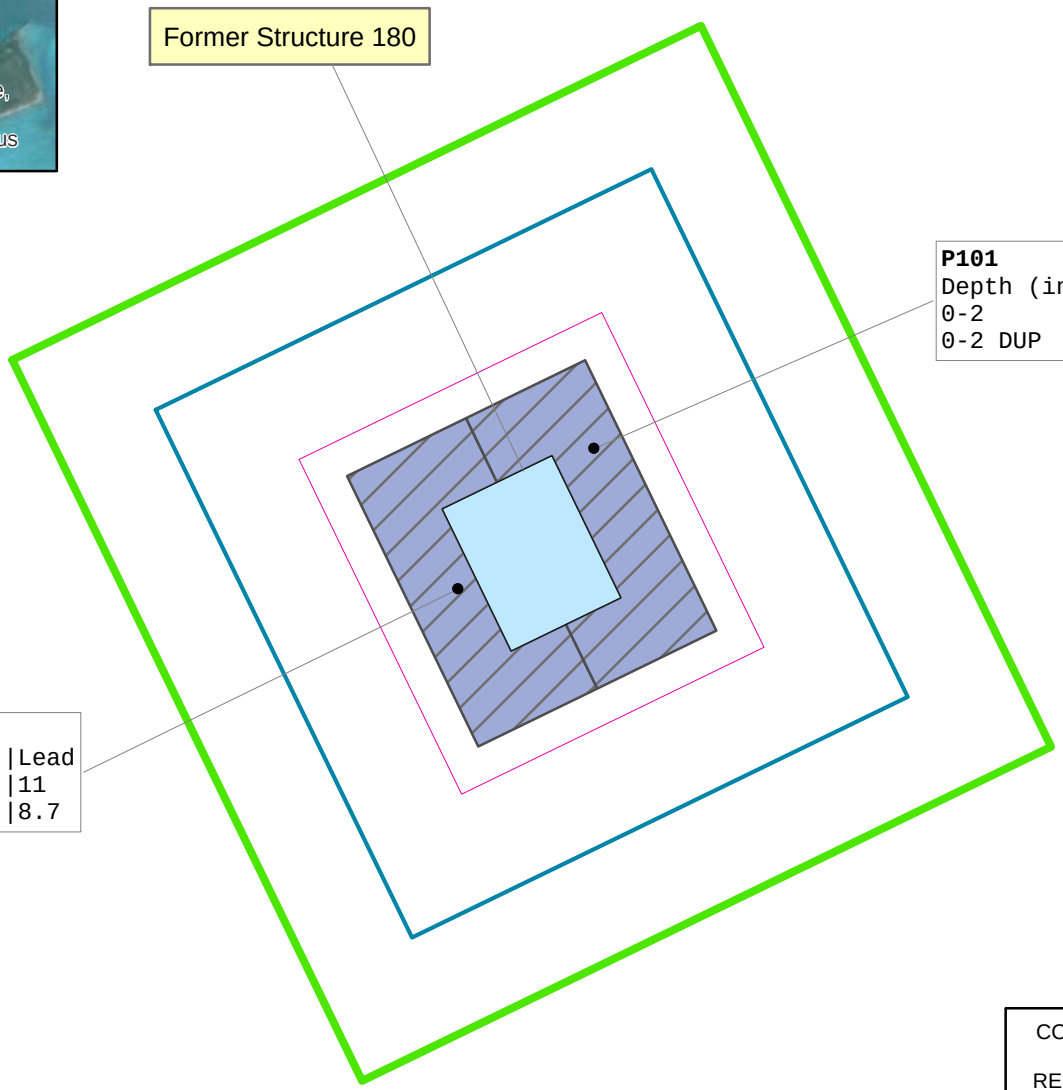
Note: Lead results reported in milligrams per kilogram
Soil samples consisted of a 5-point composite sample from excavation area shown

CONFIRMATION SOIL SAMPLE RESULTS
FORMER STRUCTURE 170
REMOVAL OF LEAD BASED PAINT FROM STRUCTURES AND LEAD CONTAMINATED SOIL AT MIDWAY ATOLL

NW DEMOLITION AND ENVIRONMENTAL, A JOINT VENTURE

Portland, OR | Mar-2017

Figure 3



0 9 18 27

SCALE IN FEET

15' Buffer
30' Buffer
45' Buffer
Former Structure
1' Excavation

J indicates estimated amount

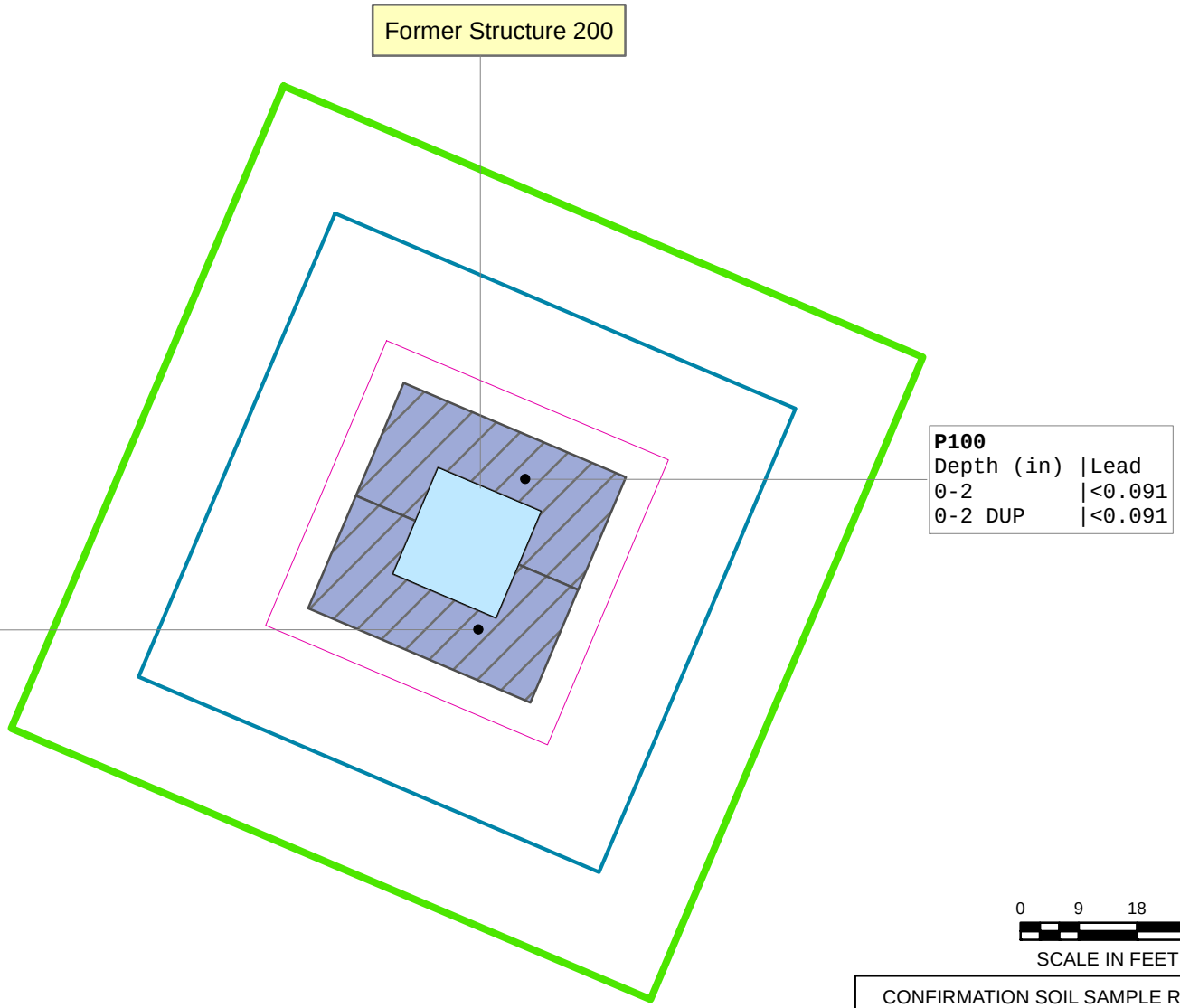
Note: Lead results reported in milligrams per kilogram
Soil samples consisted of a 5-point composite sample from excavation area shown

CONFIRMATION SOIL SAMPLE RESULTS
FORMER STRUCTURE 180
REMOVAL OF LEAD BASED PAINT FROM STRUCTURES AND LEAD CONTAMINATED SOIL AT MIDWAY ATOLL

NW DEMOLITION AND ENVIRONMENTAL, A JOINT VENTURE

Portland, OR | Mar-2017

Figure 4



0 9 18 27

SCALE IN FEET

15' Buffer
30' Buffer
45' Buffer
Former Structure
1' Excavation

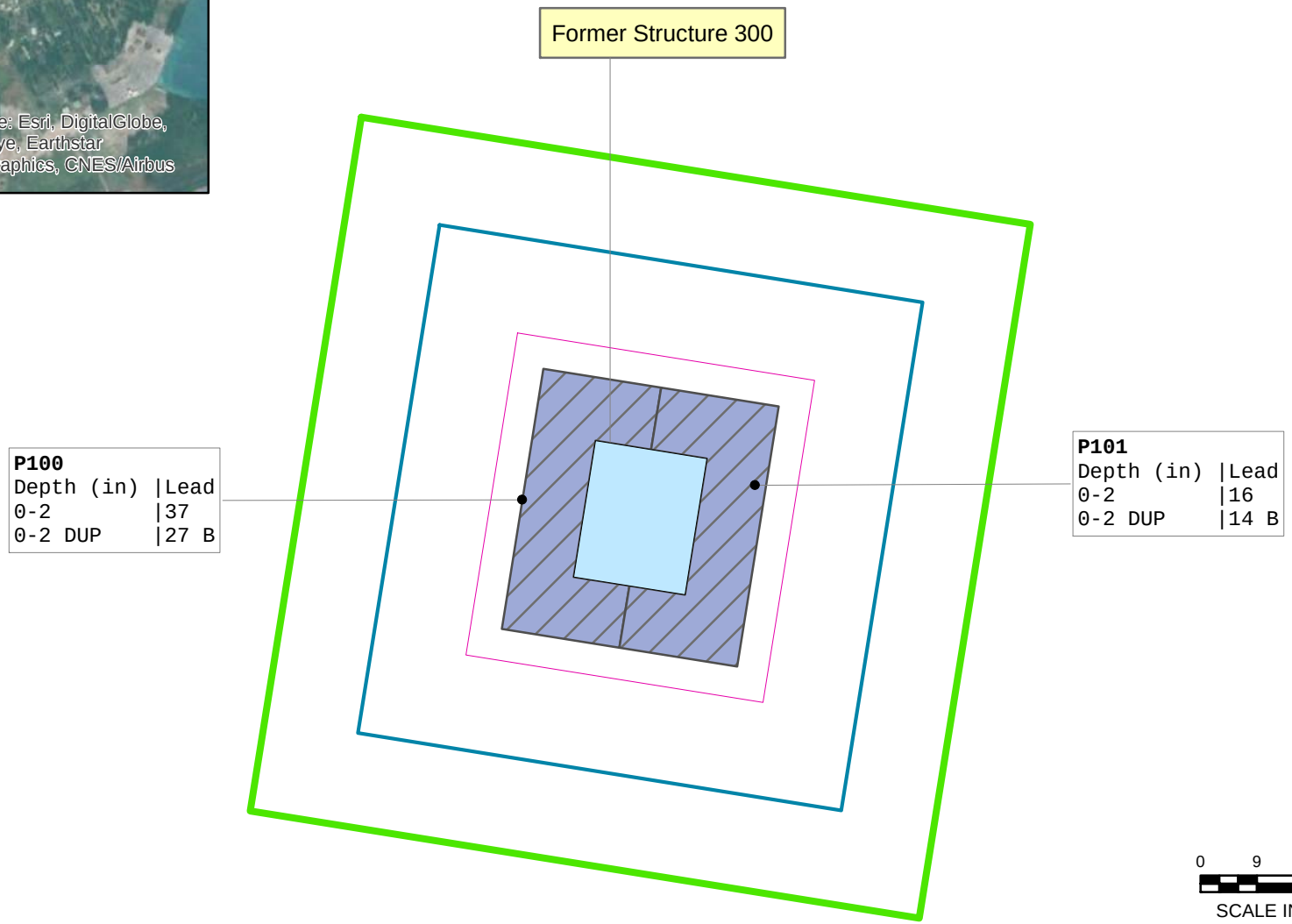
Note: Lead results reported in milligrams per kilogram
Soil samples consisted of a 5-point composite sample from excavation area shown

CONFIRMATION SOIL SAMPLE RESULTS
FORMER STRUCTURE 200
REMOVAL OF LEAD BASED PAINT FROM STRUCTURES AND LEAD CONTAMINATED SOIL AT MIDWAY ATOLL

NW DEMOLITION AND ENVIRONMENTAL, A JOINT VENTURE

Portland, OR | Mar-2017

Figure 5



15' Buffer
30' Buffer
45' Buffer
Former Structure
1' Excavation

B indicates lead was found in blank

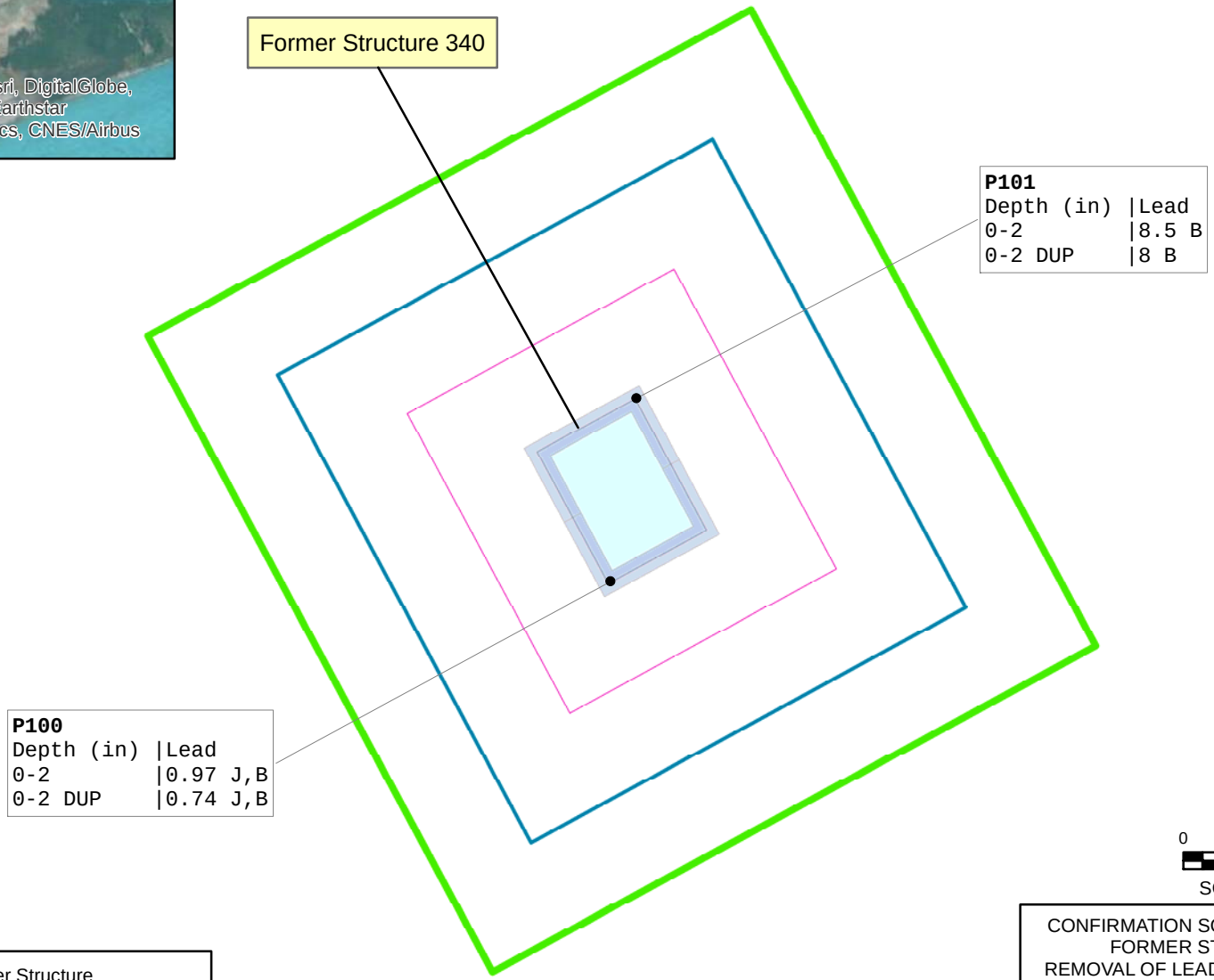
Note: Lead results reported in milligrams per kilogram
Soil samples consisted of a 5-point composite sample from excavation area shown

CONFIRMATION SOIL SAMPLE RESULTS
FORMER STRUCTURE 300
REMOVAL OF LEAD BASED PAINT FROM STRUCTURES AND LEAD CONTAMINATED SOIL AT MIDWAY ATOLL

NW DEMOLITION AND ENVIRONMENTAL, A JOINT VENTURE

Portland, OR | Mar-2017

Figure 6



15' Buffer
30' Buffer
45' Buffer
Former Structure
Composite Sample

J indicates estimated amount
B indicates lead was found in blank

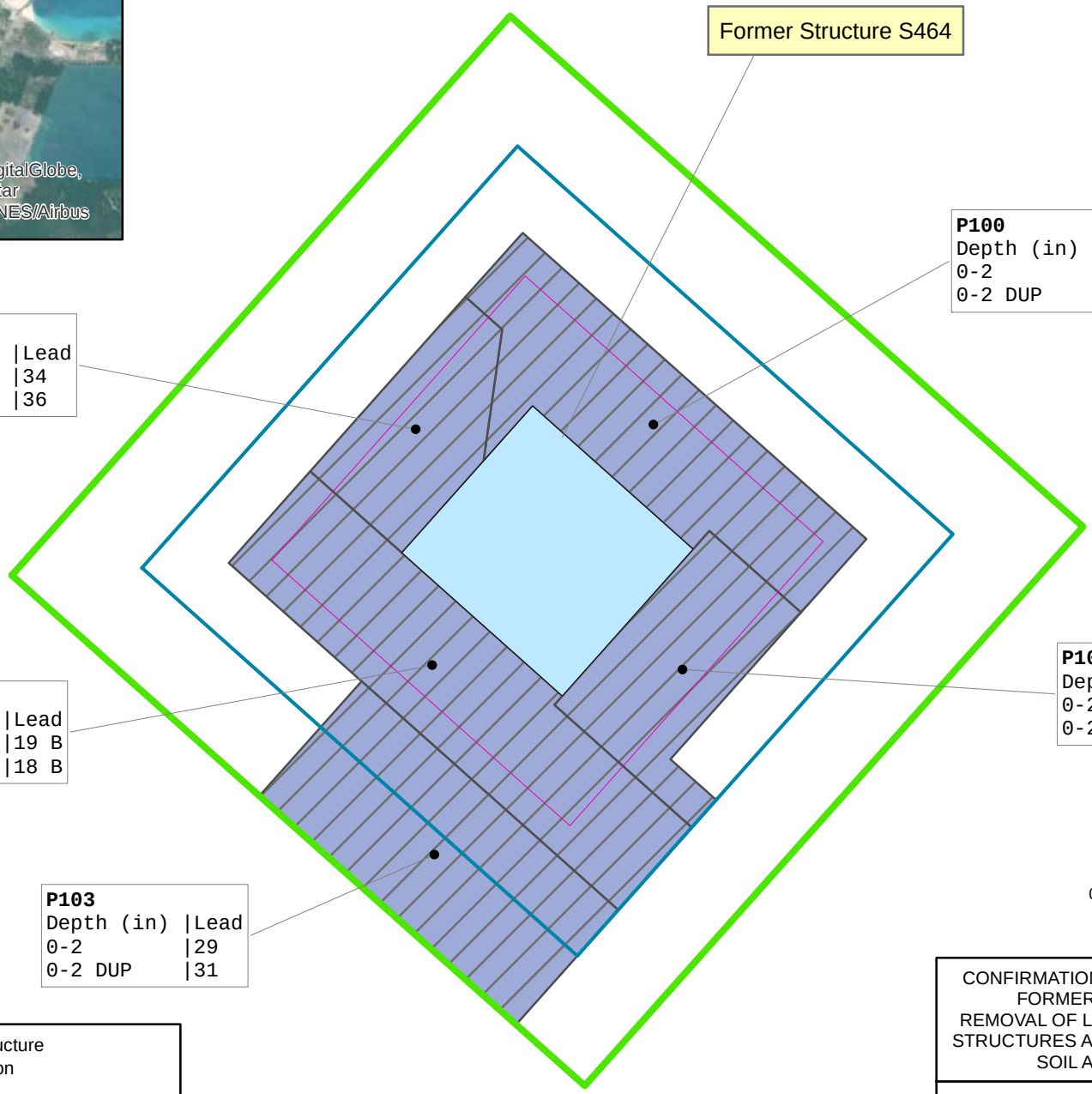
Note: Lead results reported in milligrams per kilogram
Soil samples consisted of a 5-point composite sample from excavation area shown

CONFIRMATION SOIL SAMPLE RESULTS
FORMER STRUCTURE 340
REMOVAL OF LEAD BASED PAINT FROM STRUCTURES AND LEAD CONTAMINATED SOIL AT MIDWAY ATOLL

NW DEMOLITION AND ENVIRONMENTAL, A JOINT VENTURE

Portland, OR | Mar-2017

Figure 7



15' Buffer
30' Buffer
45' Buffer
Former Structure
1' Excavation

B indicates lead was found in blank

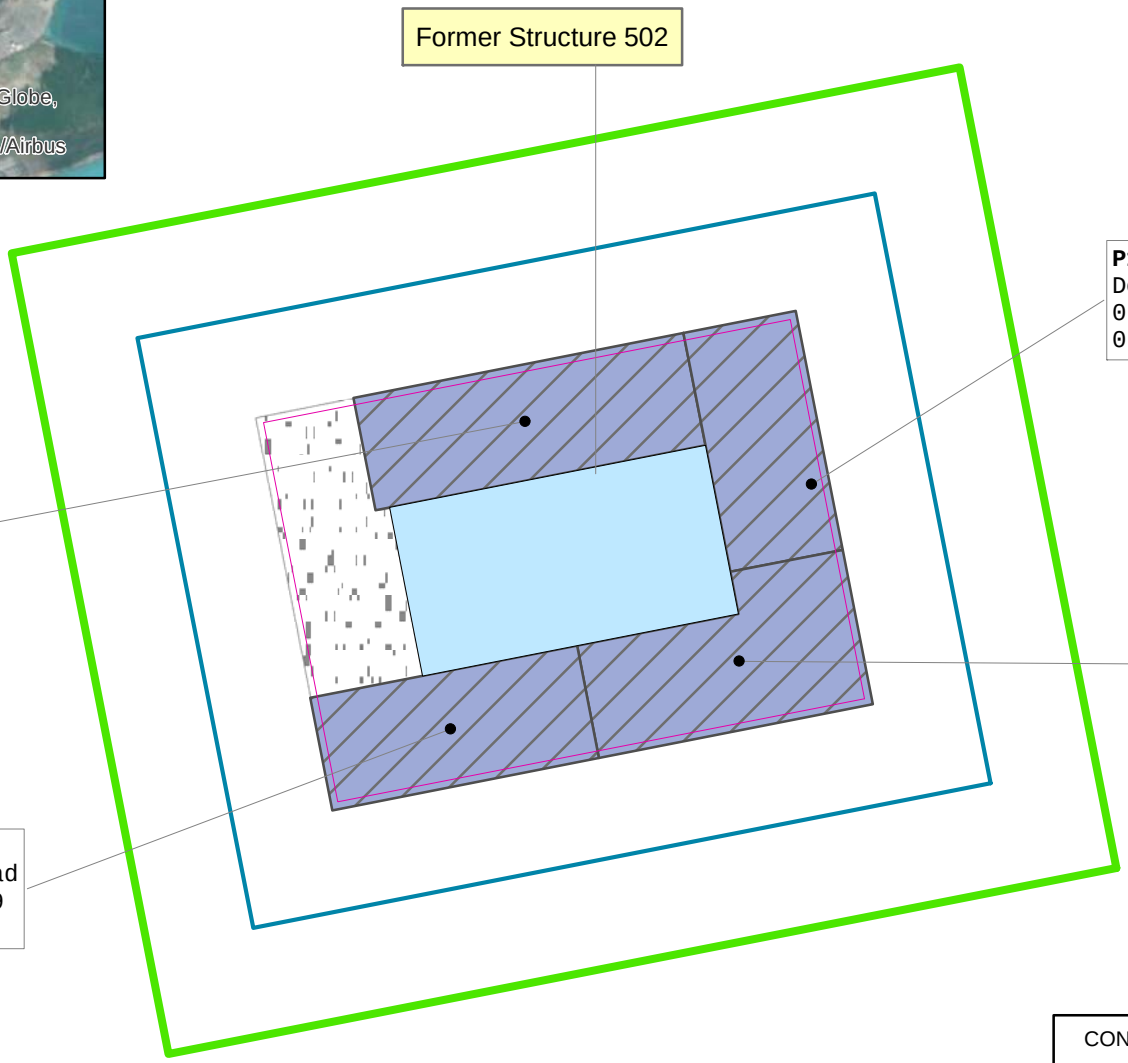
Note: Lead results reported in milligrams per kilogram
Soil samples consisted of a 5-point composite sample from excavation area shown

CONFIRMATION SOIL SAMPLE RESULTS
FORMER STRUCTURE S464
REMOVAL OF LEAD BASED PAINT FROM STRUCTURES AND LEAD CONTAMINATED SOIL AT MIDWAY ATOLL

NW DEMOLITION AND ENVIRONMENTAL, A JOINT VENTURE

Portland, OR | Mar-2017

Figure 8



0 9 18 27

SCALE IN FEET

15' Buffer
30' Buffer
45' Buffer
Former Structure
1' Excavation
Concrete Slab

Note: Lead results reported in milligrams per kilogram
Soil samples consisted of a 5-point composite sample from excavation area shown

CONFIRMATION SOIL SAMPLE RESULTS
FORMER STRUCTURE 502
REMOVAL OF LEAD BASED PAINT FROM STRUCTURES AND LEAD CONTAMINATED SOIL AT MIDWAY ATOLL

NW DEMOLITION AND ENVIRONMENTAL, A JOINT VENTURE

Portland, OR | Mar-2017

Figure 9

0 10 20
SCALE IN FEET

15' Buffer
30' Buffer
45' Buffer
Former Structure
1' Excavation

B indicates lead was found in blank

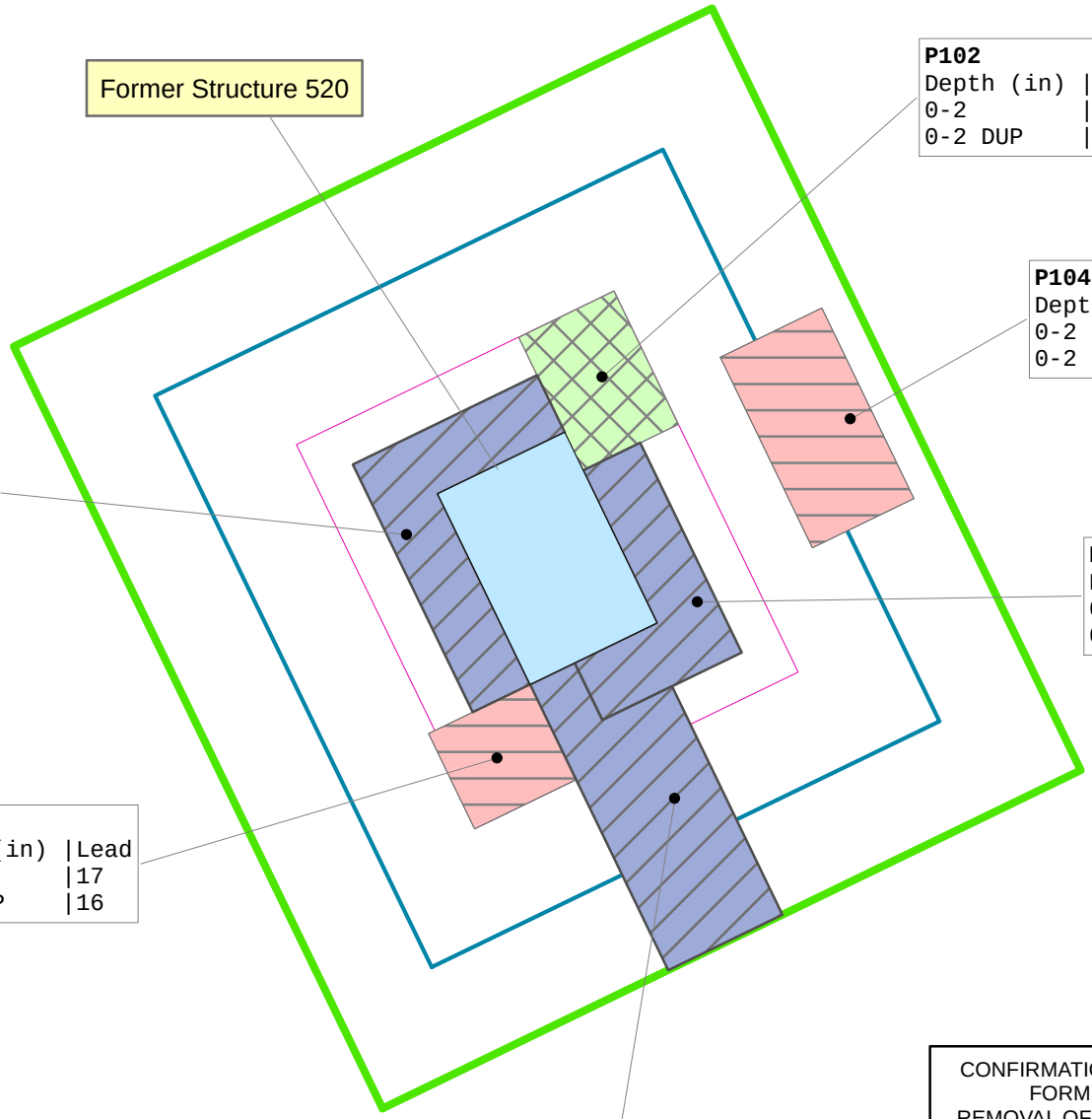
Note: Lead results reported in milligrams per kilogram
Soil samples consisted of a 5-point composite sample from excavation area shown

CONFIRMATION SOIL SAMPLE RESULTS
FORMER STRUCTURE 503
REMOVAL OF LEAD BASED PAINT FROM STRUCTURES AND LEAD CONTAMINATED SOIL AT MIDWAY ATOLL

NW DEMOLITION AND ENVIRONMENTAL, A JOINT VENTURE

Portland, OR | Mar-2017

Figure 10



15' Buffer
30' Buffer
45' Buffer
Former Structure
1' Excavation
2' Excavation
3' Excavation

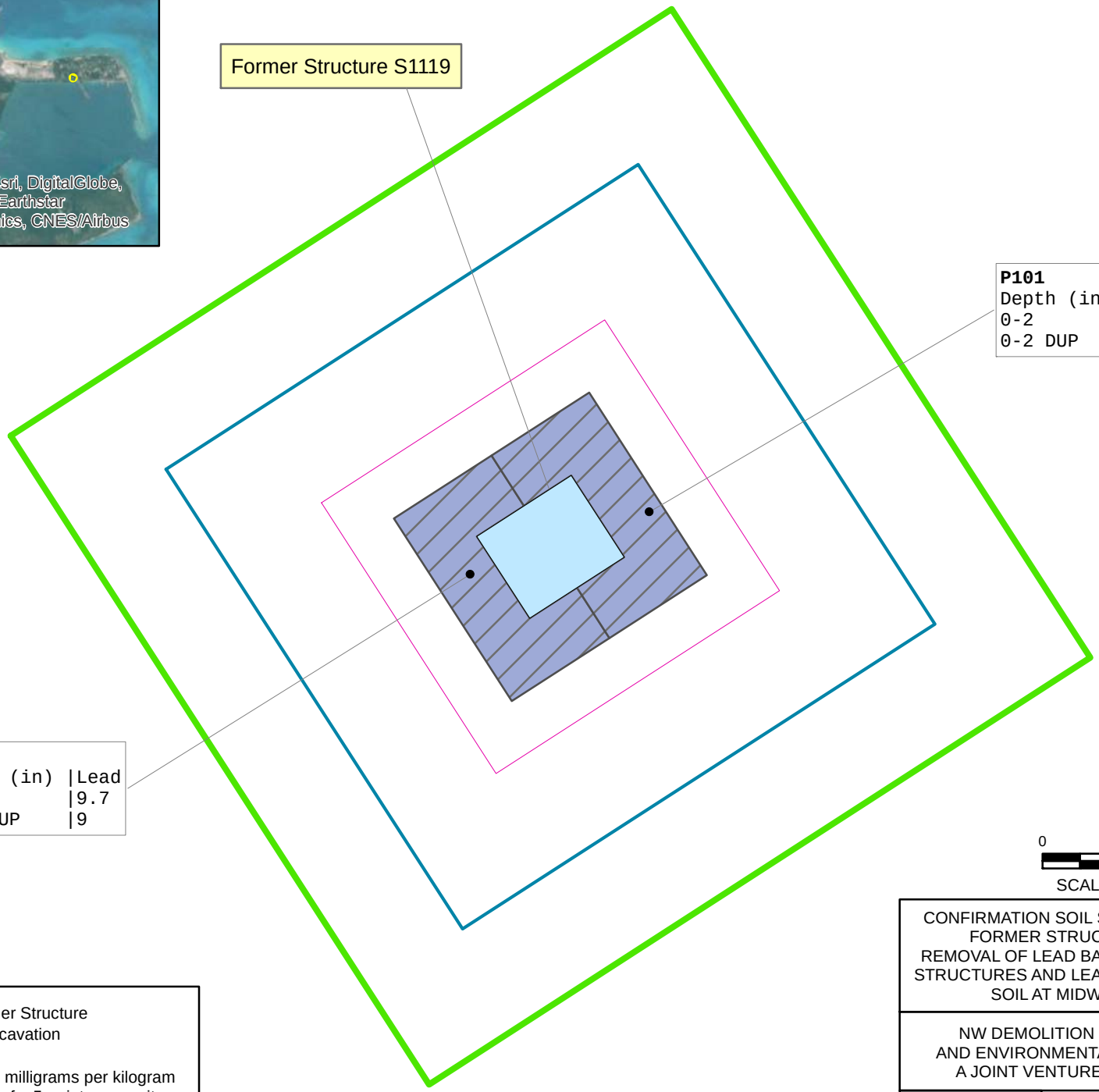
Note: Lead results reported in milligrams per kilogram
Soil samples consisted of a 5-point composite sample from excavation area shown

CONFIRMATION SOIL SAMPLE RESULTS
FORMER STRUCTURE 520
REMOVAL OF LEAD BASED PAINT FROM STRUCTURES AND LEAD CONTAMINATED SOIL AT MIDWAY ATOLL

NW DEMOLITION AND ENVIRONMENTAL, A JOINT VENTURE

Portland, OR | Mar-2017

Figure 11



15' Buffer
30' Buffer
45' Buffer
Former Structure
1' Excavation

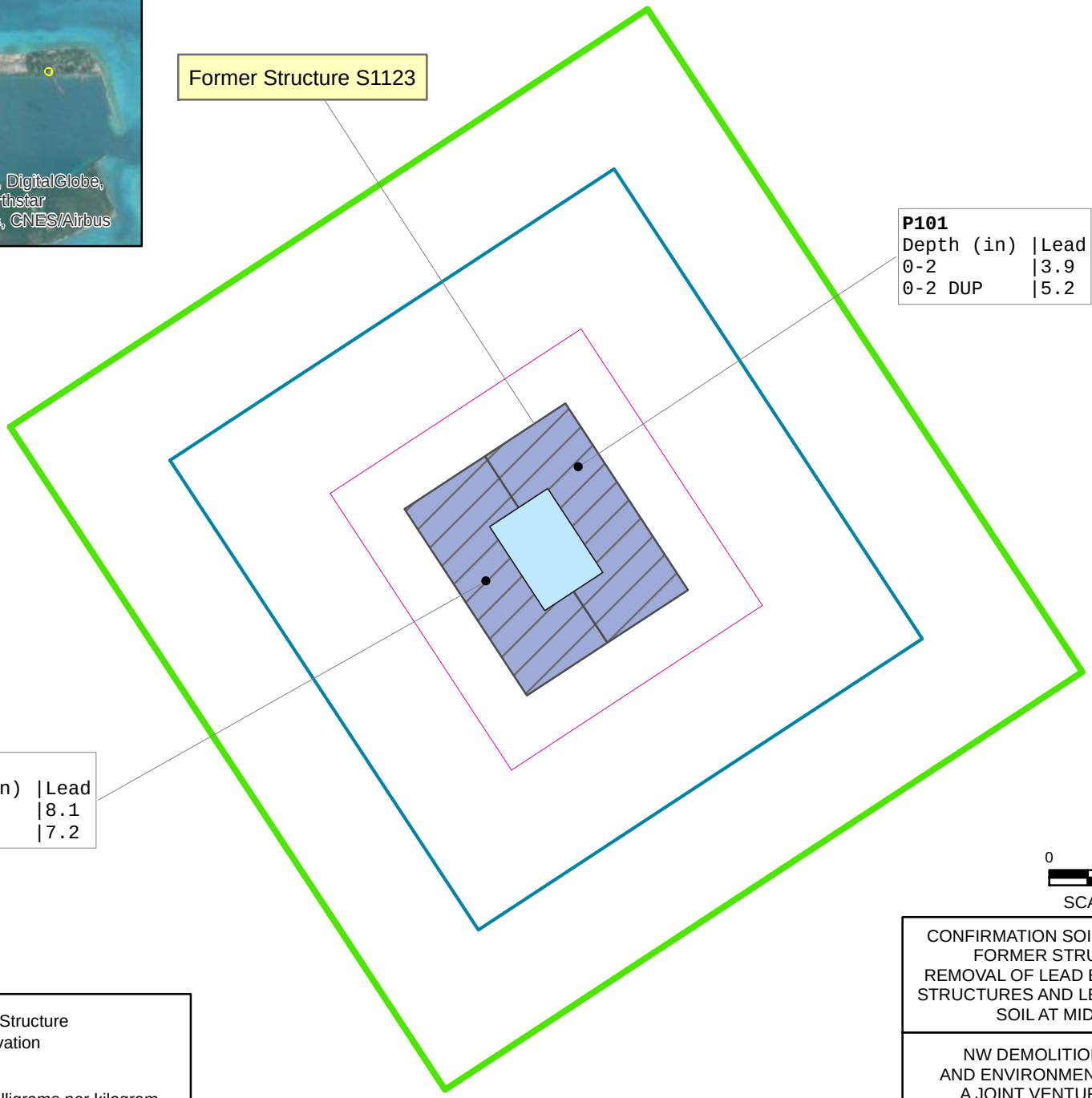
Note: Lead results reported in milligrams per kilogram
Soil samples consisted of a 5-point composite sample from excavation area shown

CONFIRMATION SOIL SAMPLE RESULTS
FORMER STRUCTURE S1119
REMOVAL OF LEAD BASED PAINT FROM STRUCTURES AND LEAD CONTAMINATED SOIL AT MIDWAY ATOLL

NW DEMOLITION AND ENVIRONMENTAL, A JOINT VENTURE

Portland, OR | Mar-2017

Figure 12



15' Buffer
30' Buffer
45' Buffer
Former Structure
1' Excavation

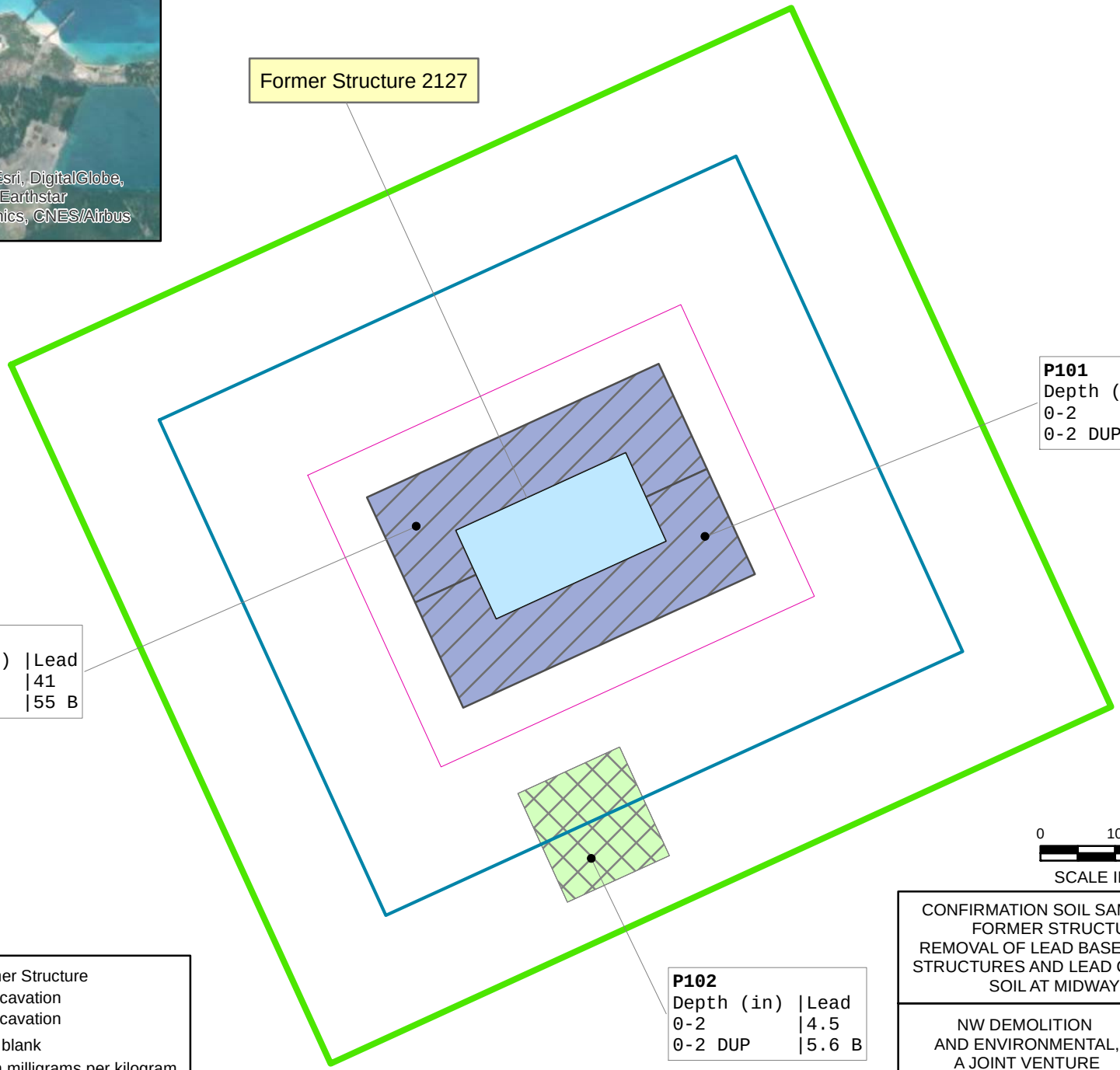
Note: Lead results reported in milligrams per kilogram
Soil samples consisted of a 5-point composite sample from excavation area shown

CONFIRMATION SOIL SAMPLE RESULTS
FORMER STRUCTURE S1123
REMOVAL OF LEAD BASED PAINT FROM STRUCTURES AND LEAD CONTAMINATED SOIL AT MIDWAY ATOLL

NW DEMOLITION AND ENVIRONMENTAL, A JOINT VENTURE

Portland, OR | Mar-2017

Figure 13



15' Buffer
30' Buffer
45' Buffer
Former Structure
1' Excavation
2' Excavation

B indicates lead was found in blank

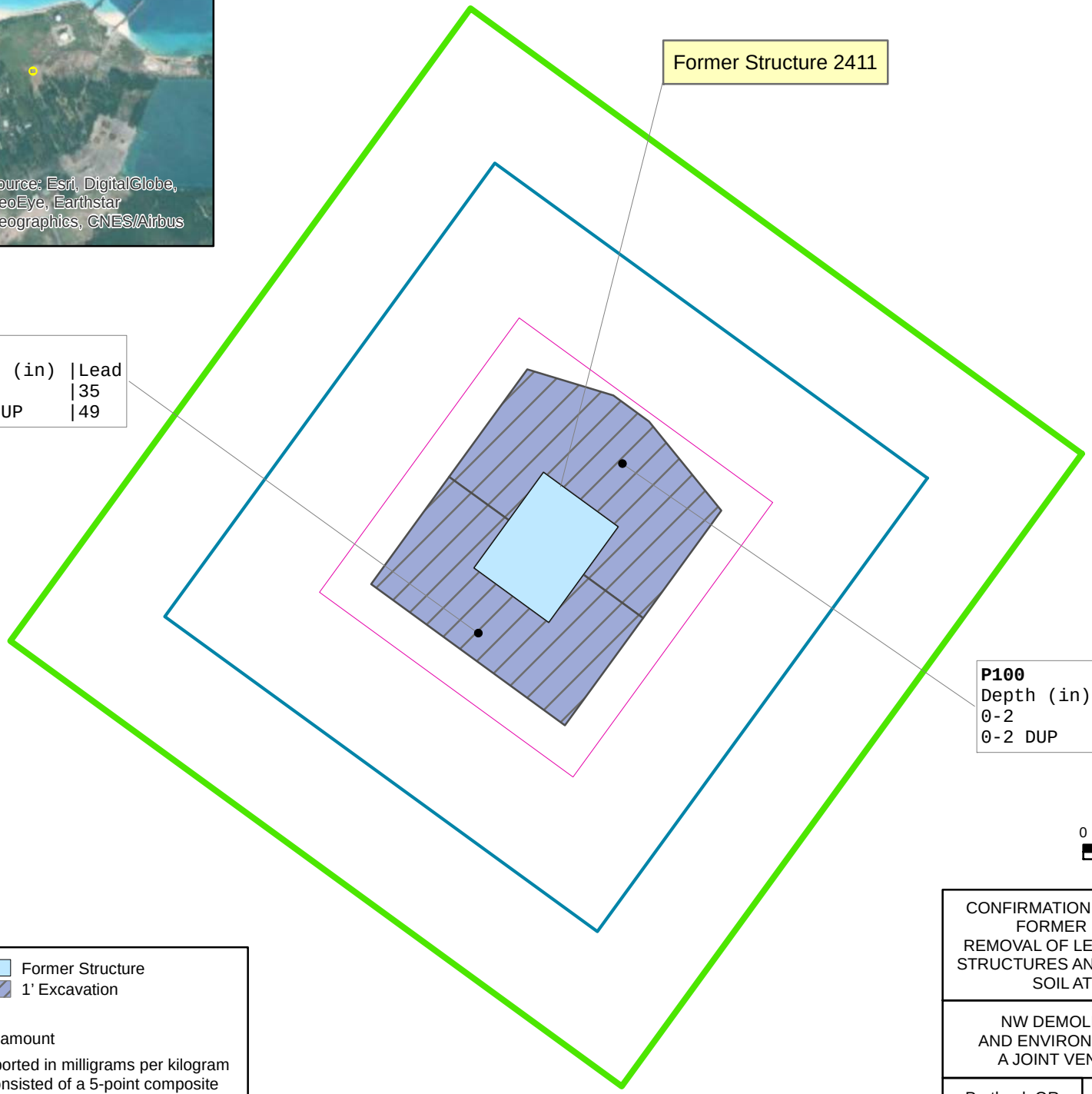
Note: Lead results reported in milligrams per kilogram
Soil samples consisted of a 5-point composite sample from excavation area shown

CONFIRMATION SOIL SAMPLE RESULTS
FORMER STRUCTURE 2127
REMOVAL OF LEAD BASED PAINT FROM STRUCTURES AND LEAD CONTAMINATED SOIL AT MIDWAY ATOLL

NW DEMOLITION AND ENVIRONMENTAL, A JOINT VENTURE

Portland, OR | Mar-2017

Figure 14



15' Buffer
30' Buffer
45' Buffer
Former Structure
1' Excavation

J indicates estimated amount

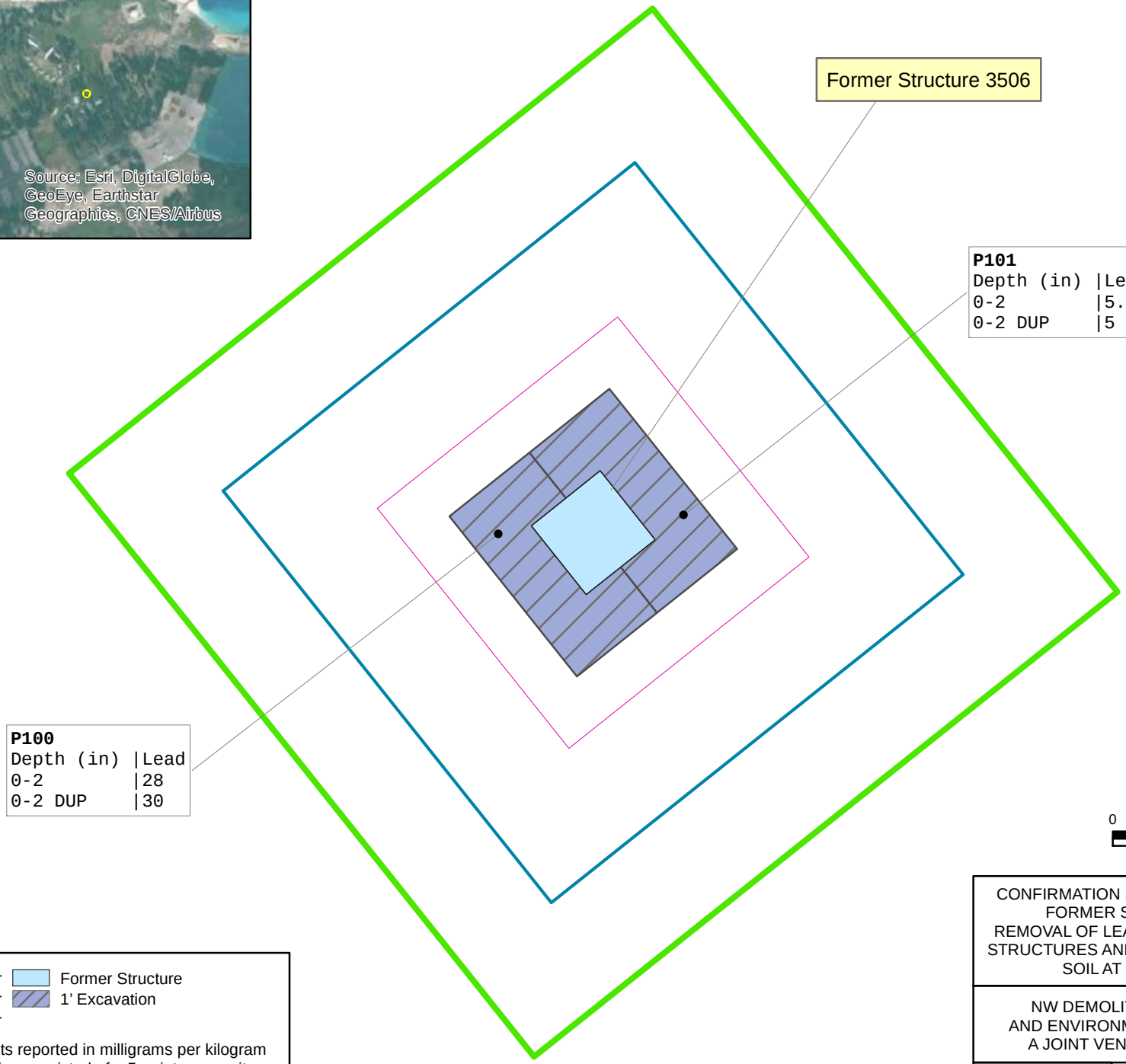
Note: Lead results reported in milligrams per kilogram
Soil samples consisted of a 5-point composite sample from excavation area shown

CONFIRMATION SOIL SAMPLE RESULTS
FORMER STRUCTURE 2411
REMOVAL OF LEAD BASED PAINT FROM STRUCTURES AND LEAD CONTAMINATED SOIL AT MIDWAY ATOLL

NW DEMOLITION AND ENVIRONMENTAL, A JOINT VENTURE

Portland, OR | Mar-2017

Figure 15



15' Buffer
30' Buffer
45' Buffer
Former Structure
1' Excavation

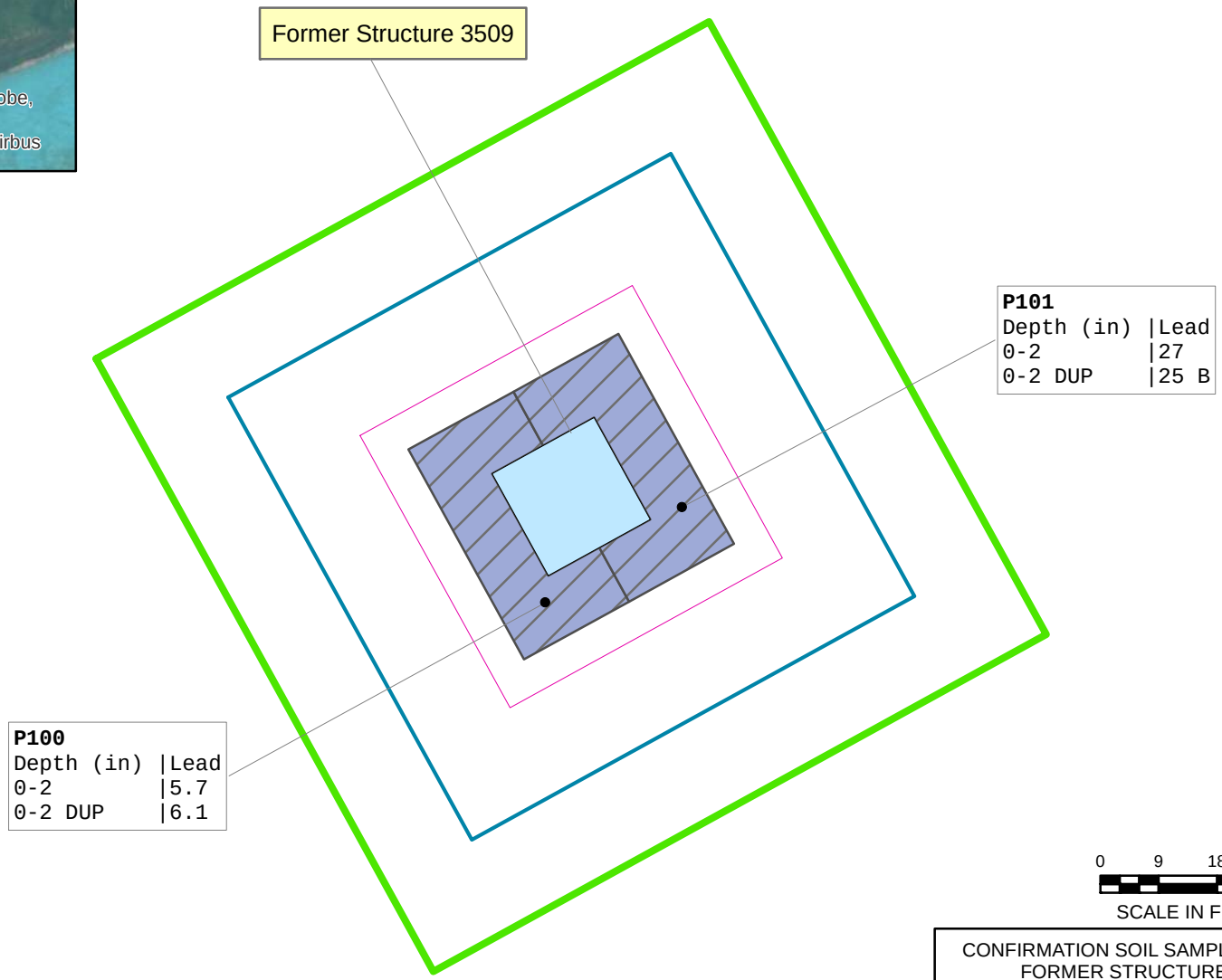
Note: Lead results reported in milligrams per kilogram
Soil samples consisted of a 5-point composite sample from excavation area shown

CONFIRMATION SOIL SAMPLE RESULTS
FORMER STRUCTURE 3506
REMOVAL OF LEAD BASED PAINT FROM STRUCTURES AND LEAD CONTAMINATED SOIL AT MIDWAY ATOLL

NW DEMOLITION AND ENVIRONMENTAL, A JOINT VENTURE

Portland, OR | Mar-2017

Figure 16



0 9 18 27

SCALE IN FEET

15' Buffer
30' Buffer
45' Buffer
Former Structure
1' Excavation

B indicates lead was found in blank

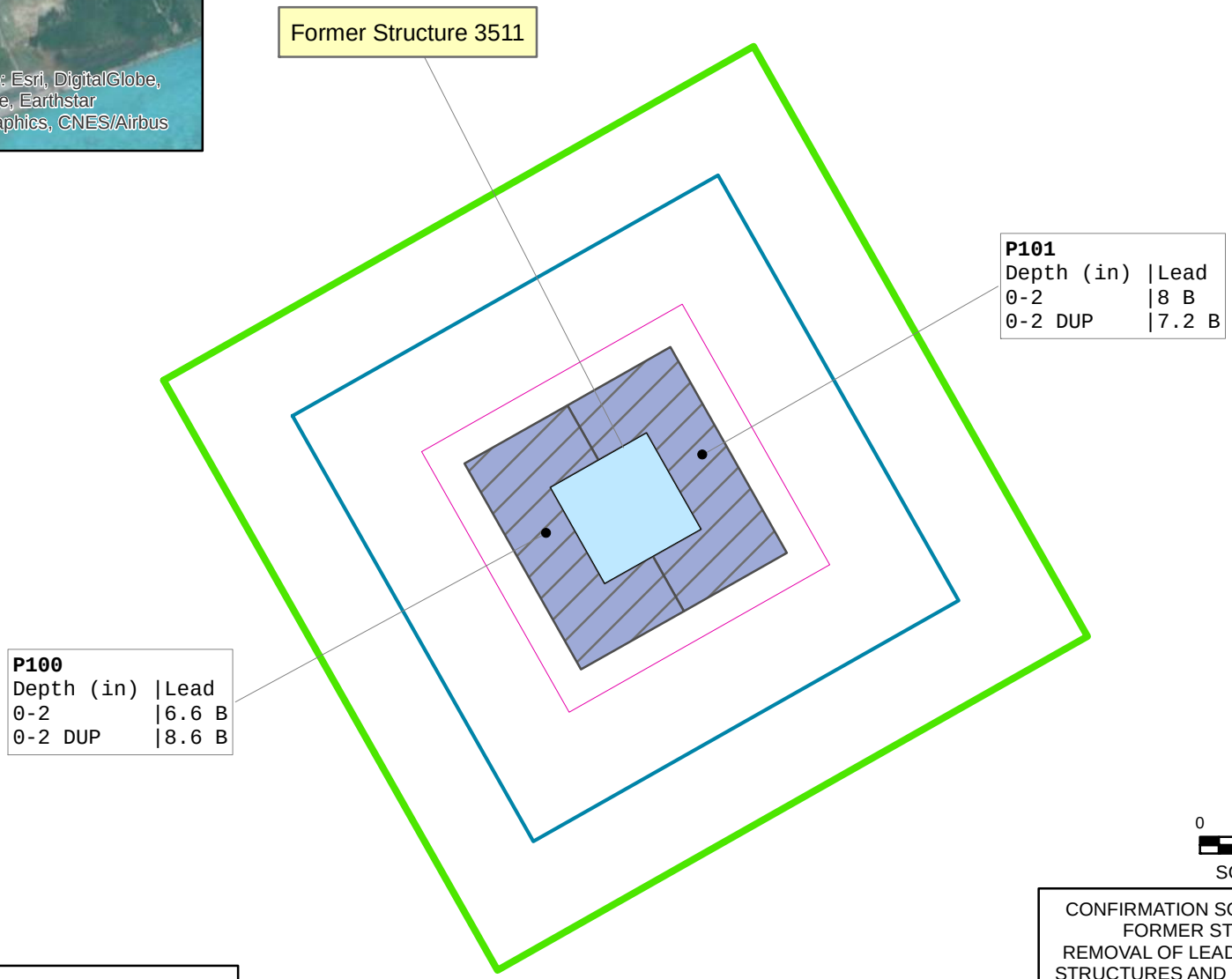
Note: Lead results reported in milligrams per kilogram
Soil samples consisted of a 5-point composite sample from excavation area shown

CONFIRMATION SOIL SAMPLE RESULTS
FORMER STRUCTURE 3509
REMOVAL OF LEAD BASED PAINT FROM STRUCTURES AND LEAD CONTAMINATED SOIL AT MIDWAY ATOLL

NW DEMOLITION AND ENVIRONMENTAL, A JOINT VENTURE

Portland, OR | Mar-2017

Figure 17



0 9 18 27

SCALE IN FEET

15' Buffer
30' Buffer
45' Buffer
Former Structure
1' Excavation

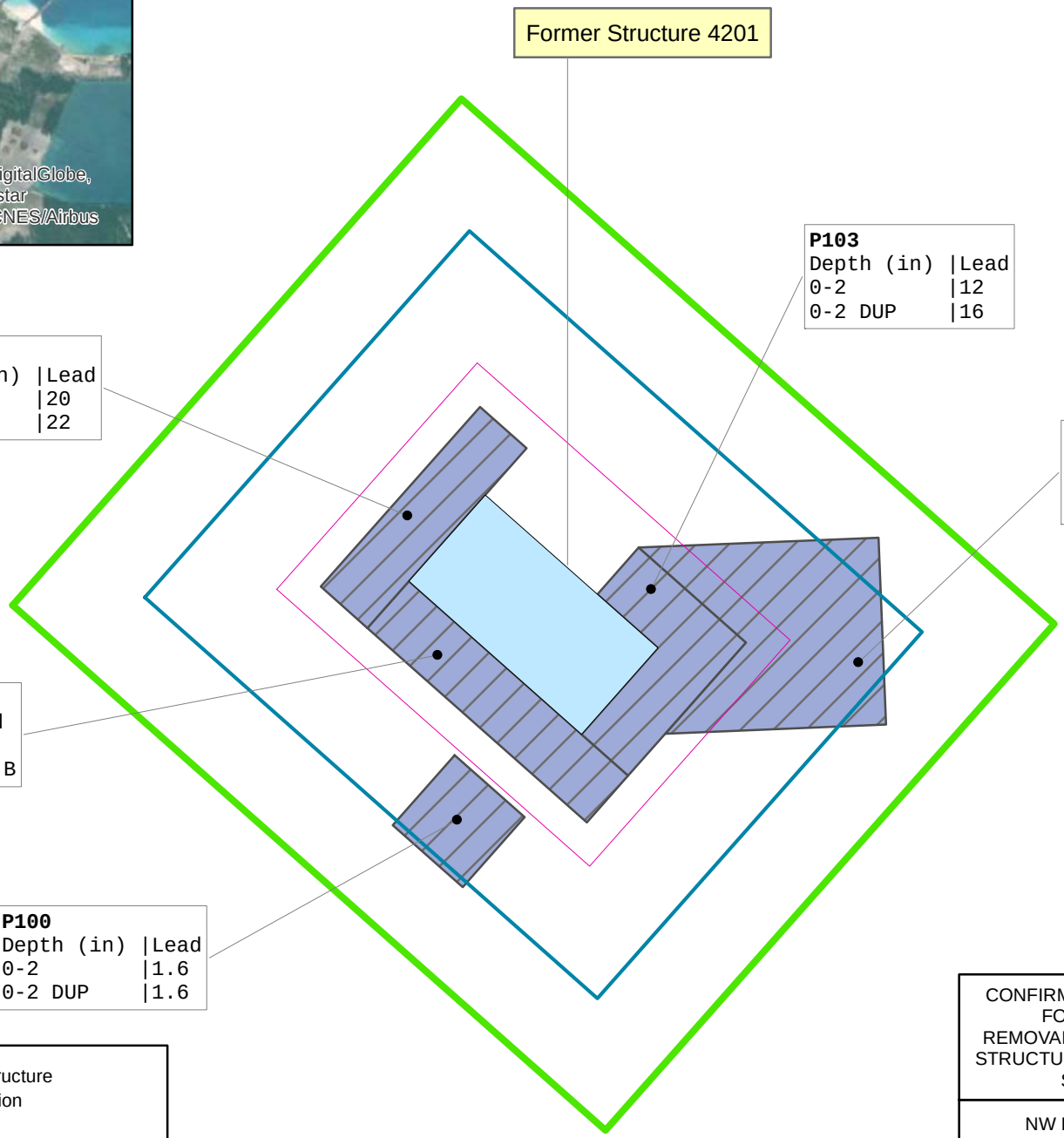
B indicates lead was found in blank
Note: Lead results reported in milligrams per kilogram
Soil samples consisted of a 5-point composite sample from excavation area shown

CONFIRMATION SOIL SAMPLE RESULTS
FORMER STRUCTURE 3511
REMOVAL OF LEAD BASED PAINT FROM STRUCTURES AND LEAD CONTAMINATED SOIL AT MIDWAY ATOLL

NW DEMOLITION AND ENVIRONMENTAL, A JOINT VENTURE

Portland, OR | Mar-2017

Figure 18



0 9 18 27

SCALE IN FEET

15' Buffer
30' Buffer
45' Buffer
Former Structure
1' Excavation

B indicates lead was found in blank

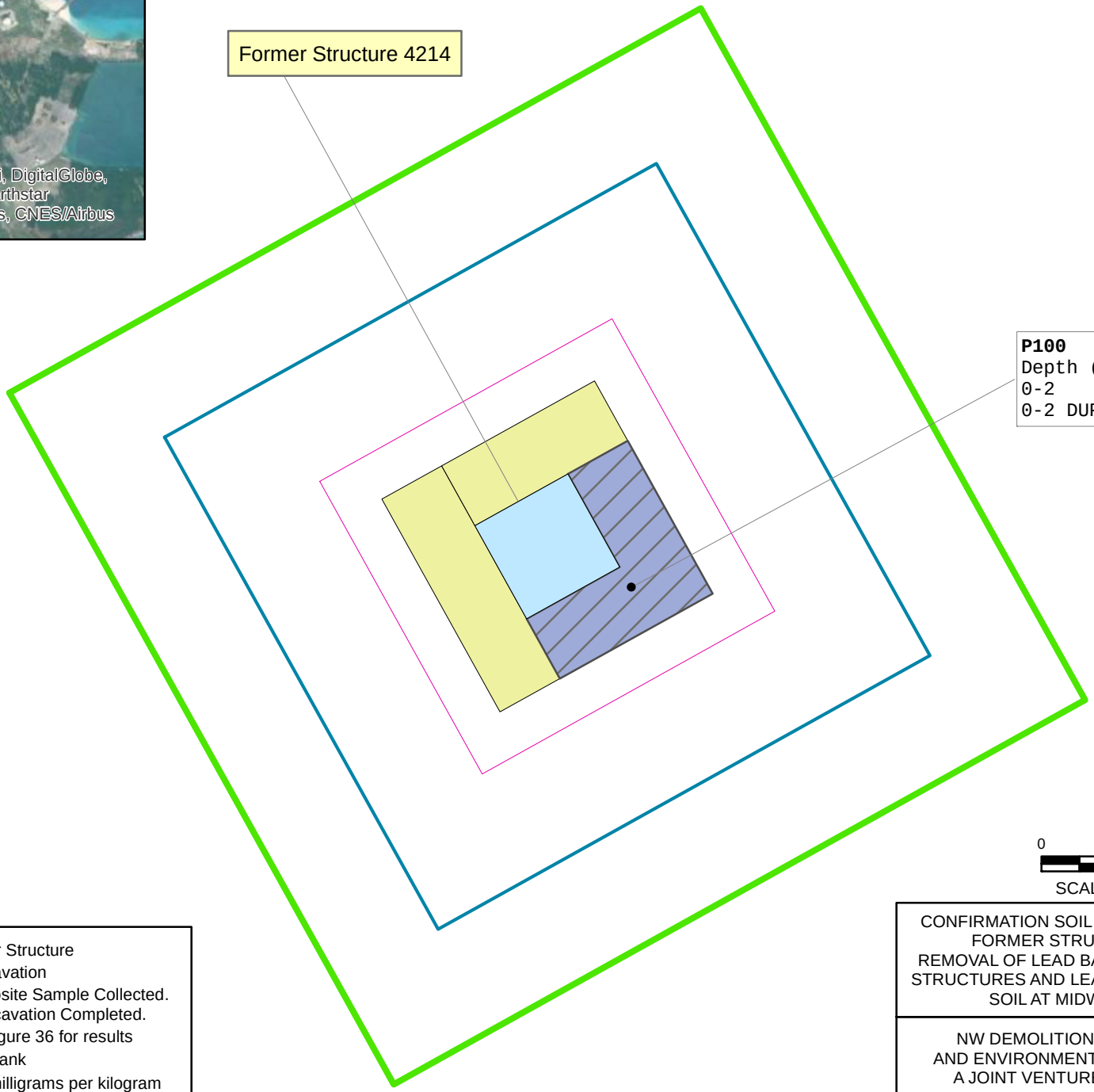
Note: Lead results reported in milligrams per kilogram
Soil samples consisted of a 5-point composite sample from excavation area shown

CONFIRMATION SOIL SAMPLE RESULTS
FORMER STRUCTURE 4201
REMOVAL OF LEAD BASED PAINT FROM STRUCTURES AND LEAD CONTAMINATED SOIL AT MIDWAY ATOLL

NW DEMOLITION AND ENVIRONMENTAL, A JOINT VENTURE

Portland, OR | Mar-2017

Figure 19



15' Buffer
30' Buffer
45' Buffer
Former Structure
1' Excavation
Composite Sample Collected. No Excavation Completed. See Figure 36 for results

B indicates lead was found in blank

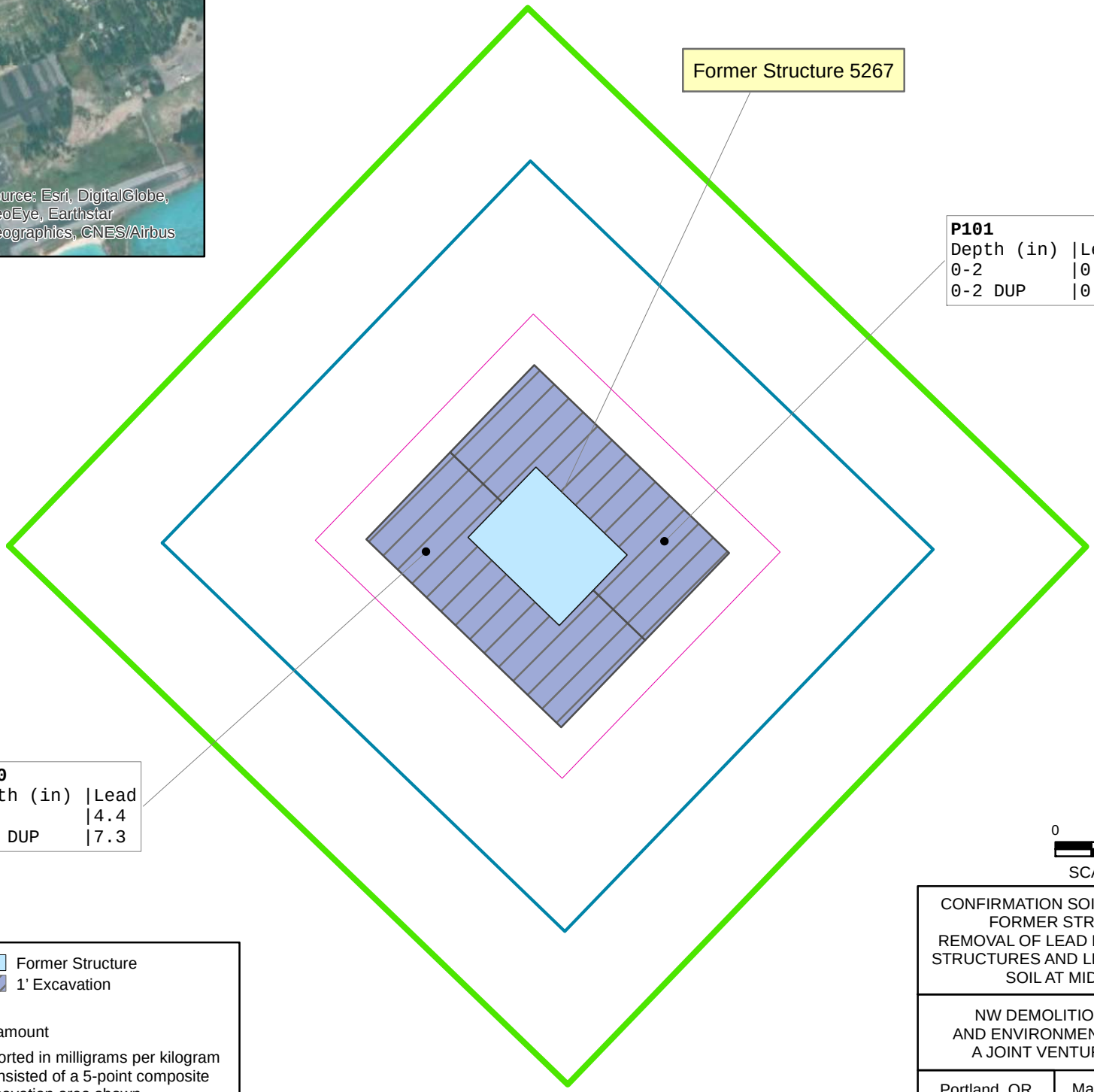
Note: Lead results reported in milligrams per kilogram
Soil samples consisted of a 5-point composite sample from excavation area shown

CONFIRMATION SOIL SAMPLE RESULTS
FORMER STRUCTURE 4214
REMOVAL OF LEAD BASED PAINT FROM STRUCTURES AND LEAD CONTAMINATED SOIL AT MIDWAY ATOLL

NW DEMOLITION AND ENVIRONMENTAL, A JOINT VENTURE

Portland, OR | Mar-2017

Figure 20



15' Buffer
30' Buffer
45' Buffer
Former Structure
1' Excavation

J indicates estimated amount

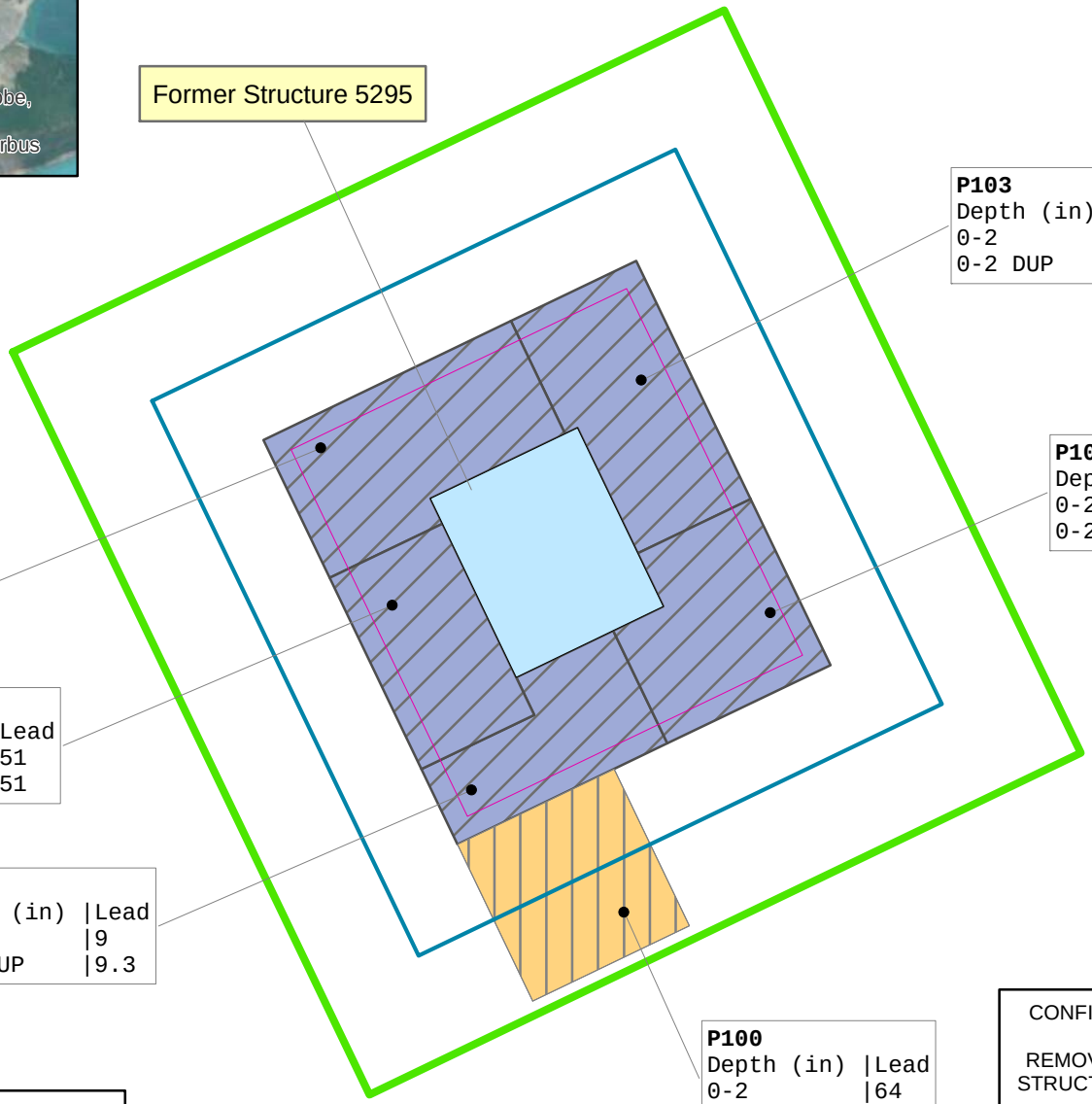
Note: Lead results reported in milligrams per kilogram
Soil samples consisted of a 5-point composite sample from excavation area shown

CONFIRMATION SOIL SAMPLE RESULTS
FORMER STRUCTURE 5267
REMOVAL OF LEAD BASED PAINT FROM STRUCTURES AND LEAD CONTAMINATED SOIL AT MIDWAY ATOLL

NW DEMOLITION AND ENVIRONMENTAL, A JOINT VENTURE

Portland, OR | Mar-2017

Figure 21



P103

Depth (in)	Lead
0-2	38
0-2 DUP	37

P104

Depth (in)	Lead
0-2	6.2
0-2 DUP	6.5

P102

Depth (in)	Lead
0-2	28
0-2 DUP	37

P101

Depth (in)	Lead
0-2	51
0-2 DUP	51

P105

Depth (in)	Lead
0-2	9
0-2 DUP	9.3

P100

Depth (in)	Lead
0-2	64
0-2 DUP	70

0 9 18 27

SCALE IN FEET

15' Buffer
30' Buffer
45' Buffer
Former Structure
0.5' Excavation
1' Excavation

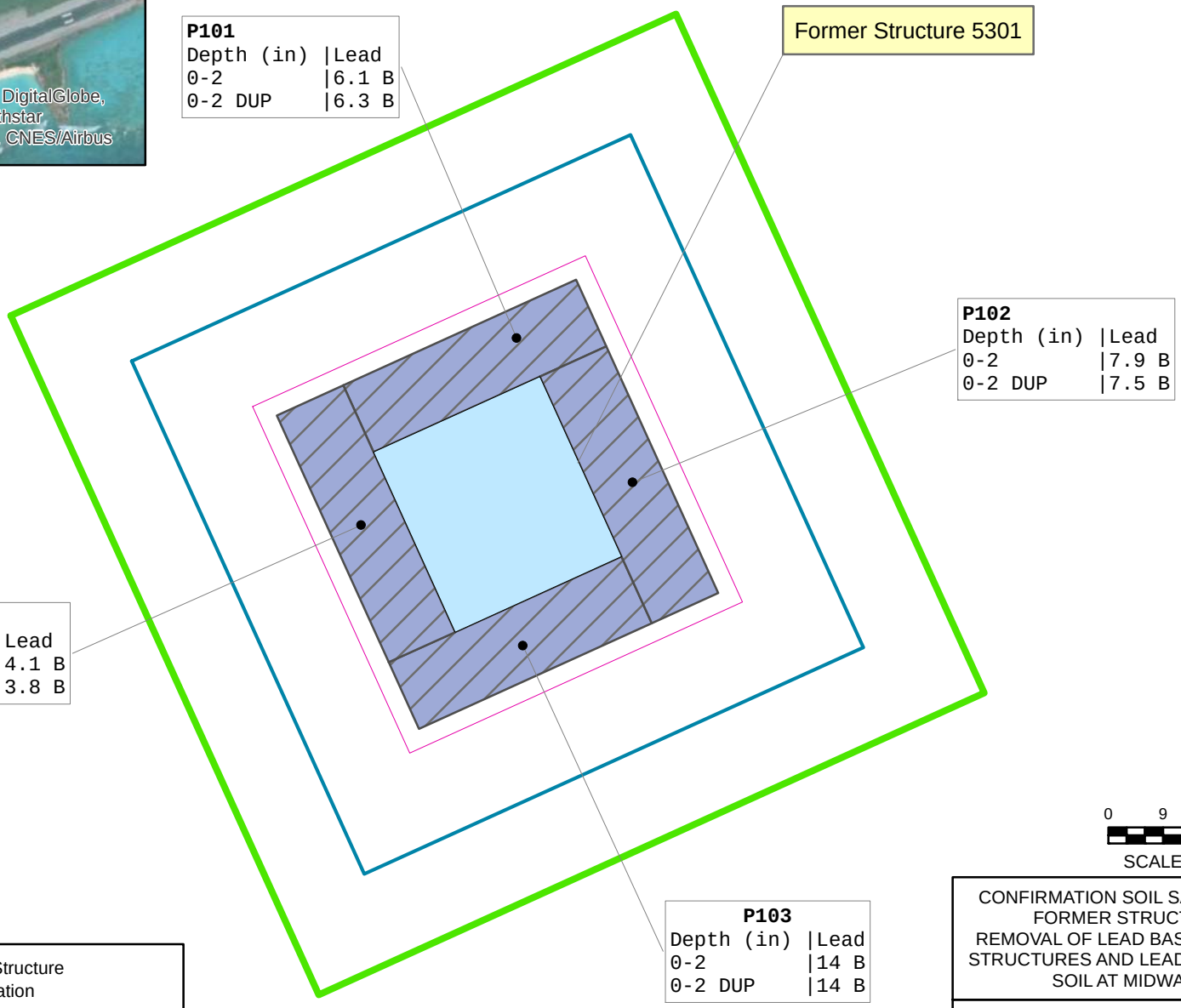
Note: Lead results reported in milligrams per kilogram
Soil samples consisted of a 5-point composite sample from excavation area shown

CONFIRMATION SOIL SAMPLE RESULTS
FORMER STRUCTURE 5295
REMOVAL OF LEAD BASED PAINT FROM STRUCTURES AND LEAD CONTAMINATED SOIL AT MIDWAY ATOLL

NW DEMOLITION AND ENVIRONMENTAL, A JOINT VENTURE

Portland, OR | Mar-2017

Figure 22



0 9 18 27

SCALE IN FEET

15' Buffer
30' Buffer
45' Buffer
Former Structure
1' Excavation

B indicates lead was found in blank

Note: Lead results reported in milligrams per kilogram
Soil samples consisted of a 5-point composite sample from excavation area shown

CONFIRMATION SOIL SAMPLE RESULTS
FORMER STRUCTURE 5301
REMOVAL OF LEAD BASED PAINT FROM STRUCTURES AND LEAD CONTAMINATED SOIL AT MIDWAY ATOLL

NW DEMOLITION AND ENVIRONMENTAL, A JOINT VENTURE

Portland, OR | Mar-2017

Figure 23

E A	
Depth (in)	Lead
0-2	120
0-2 DUP	7.7

E B	
Depth (in)	Lead
0-2	190
0-2 DUP	87

E C	
Depth (in)	Lead
0-2	14
0-2 DUP	12

E D	
Depth (in)	Lead
0-2	40
0-2 DUP	45

NW A	
Depth (in)	Lead
0-2	110
0-2 DUP	110

NW B	
Depth (in)	Lead
0-2	98
0-2 DUP	87 B

NW C	
Depth (in)	Lead
0-2	13
0-2 DUP	12

NW D	
Depth (in)	Lead
0-2	320
0-2 DUP	270

0 40 80
SCALE IN FEET

15' Buffer
30' Buffer
45' Buffer
Structure
0.5' Excavation
1' Excavation

B indicates lead was found in blank

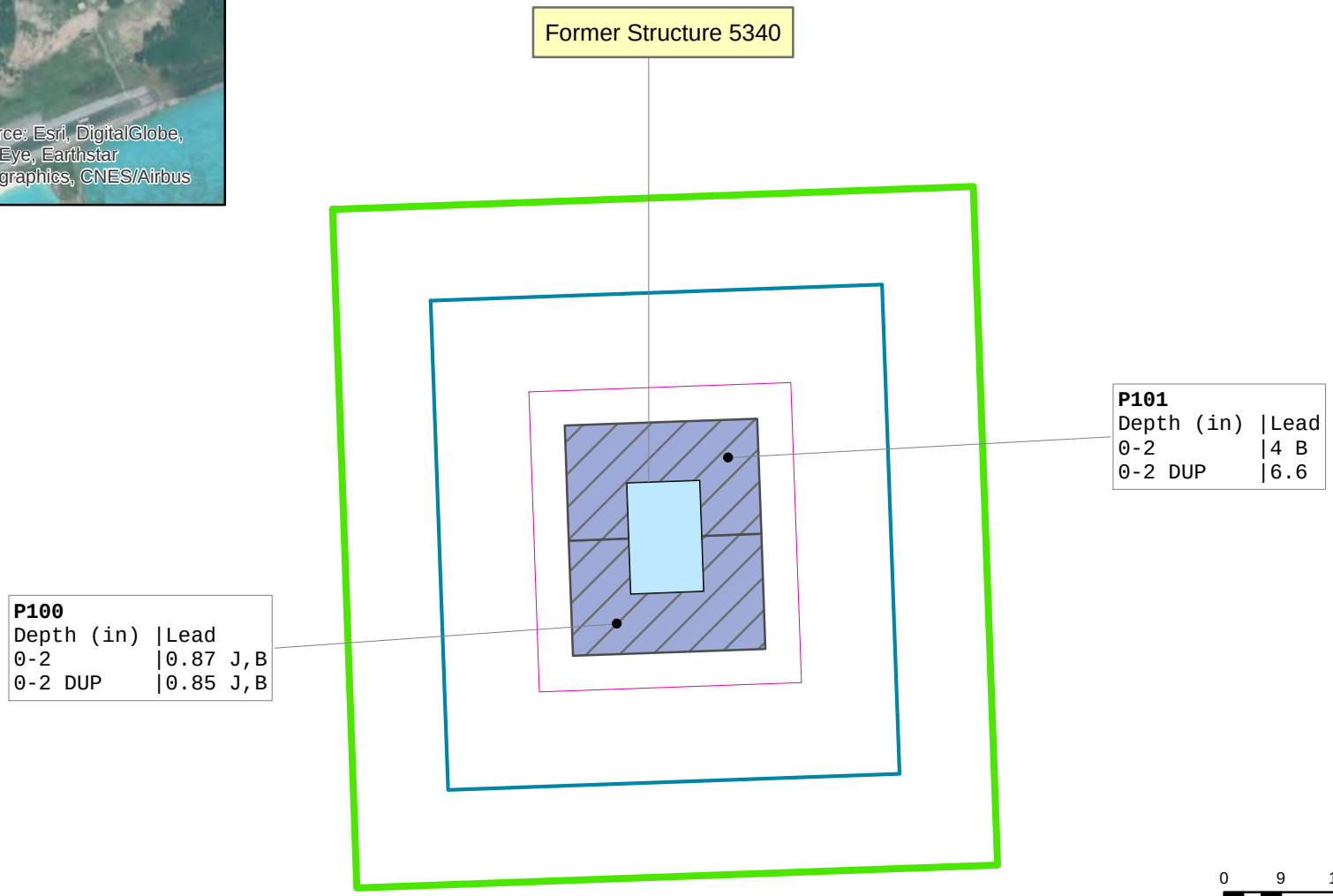
Note: Lead results reported in milligrams per kilogram
Soils within the 0.5 foot excavation area were left in place after treatment.
Soil samples consisted of a 5-point composite sample from excavation area shown

CONFIRMATION SOIL SAMPLE RESULTS
STRUCTURE 5303 (R-2 UNIT)
REMOVAL OF LEAD BASED PAINT FROM STRUCTURES AND LEAD CONTAMINATED SOIL AT MIDWAY ATOLL

NW DEMOLITION AND ENVIRONMENTAL, A JOINT VENTURE

Portland, OR | Mar-2017

Figure 24



0 9 18 27

SCALE IN FEET

15' Buffer
30' Buffer
45' Buffer
Former Structure
1' Excavation

J indicates estimated amount
B indicates lead was found in blank

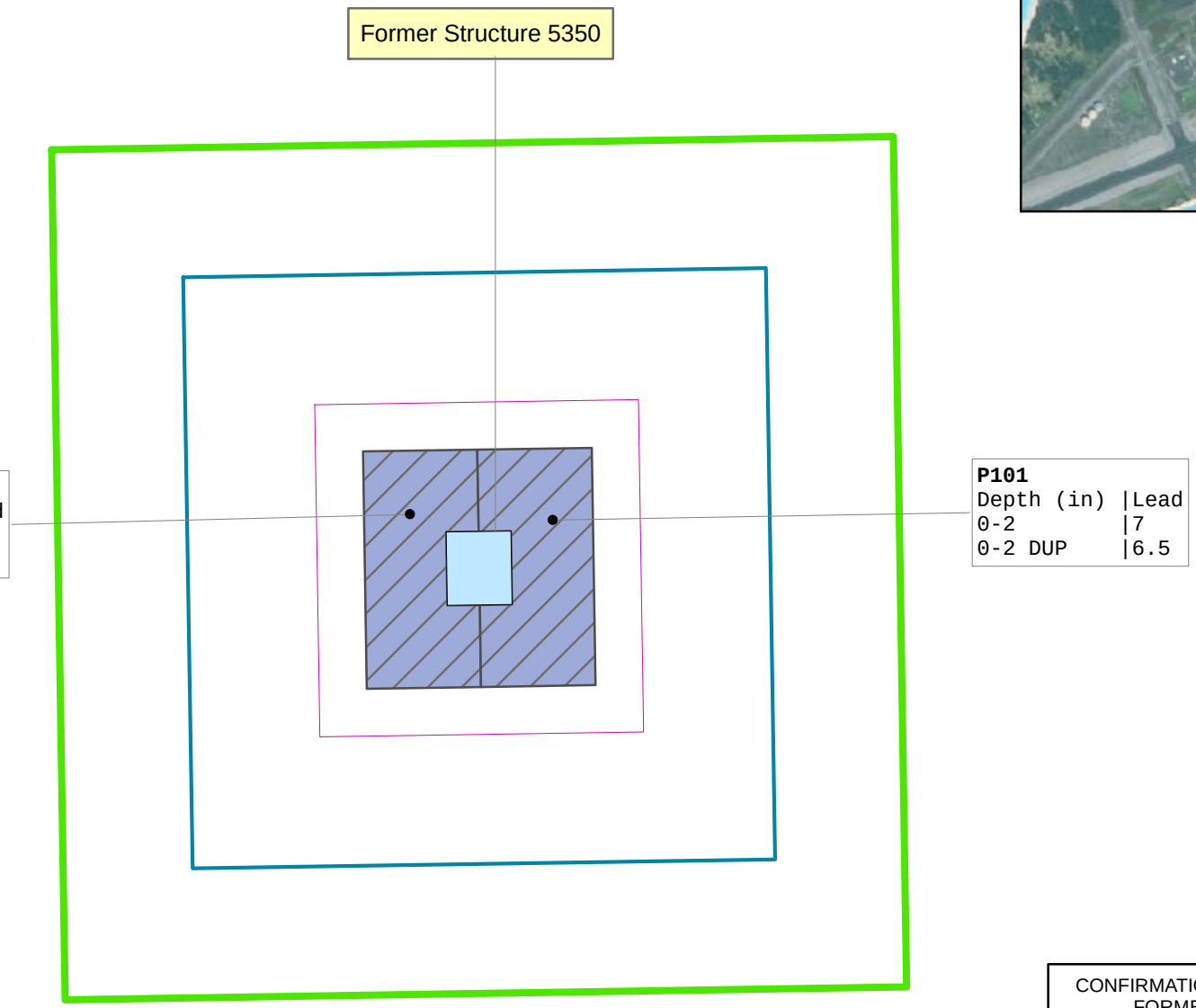
Note: Lead results reported in milligrams per kilogram
Soil samples consisted of a 5-point composite sample from excavation area shown

CONFIRMATION SOIL SAMPLE RESULTS
FORMER STRUCTURE 5340
REMOVAL OF LEAD BASED PAINT FROM STRUCTURES AND LEAD CONTAMINATED SOIL AT MIDWAY ATOLL

NW DEMOLITION AND ENVIRONMENTAL, A JOINT VENTURE

Portland, OR | Mar-2017

Figure 25



0 10 20

SCALE IN FEET

15' Buffer
30' Buffer
45' Buffer
Former Structure
1' Excavation

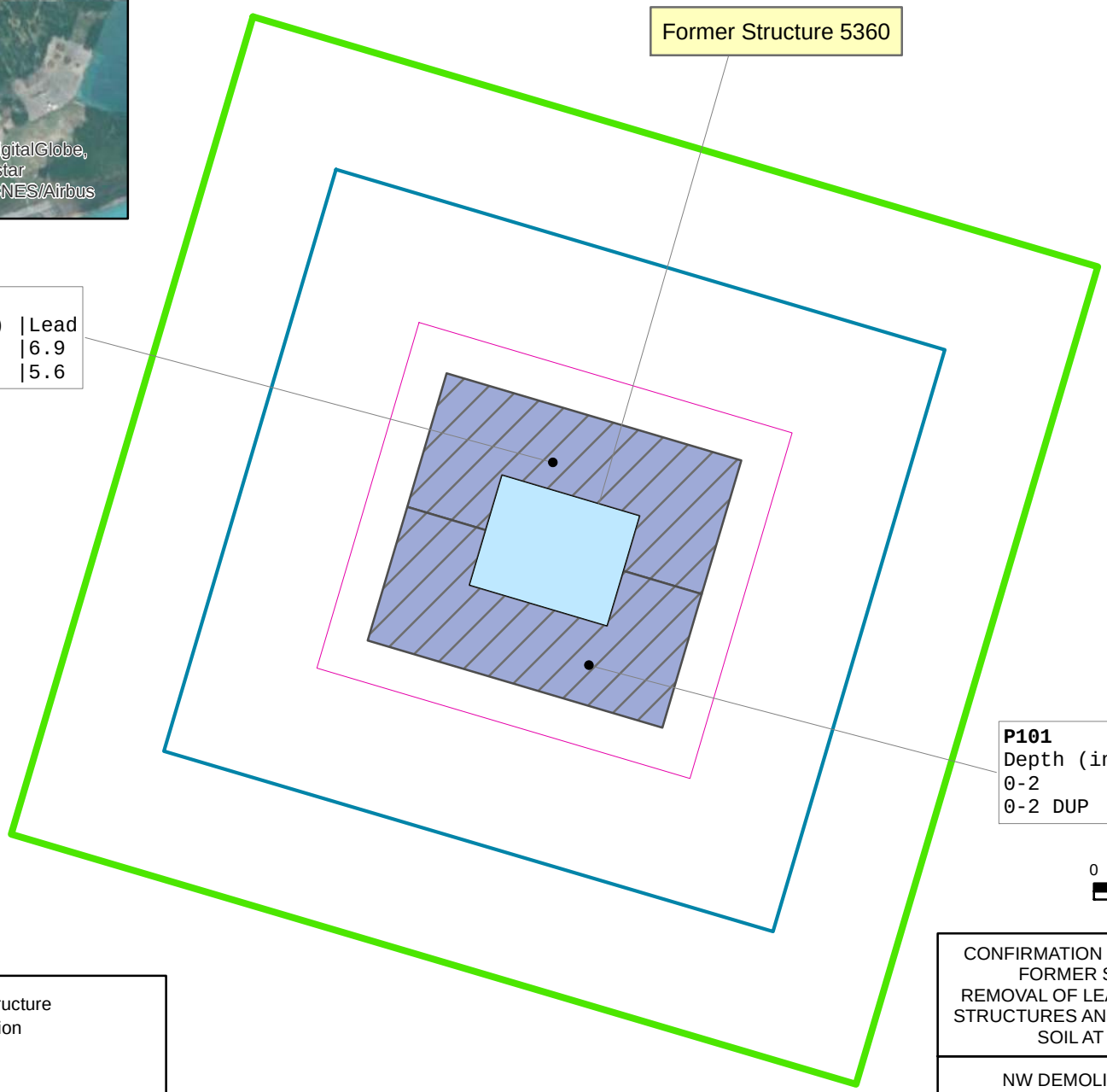
Note: Lead results reported in milligrams per kilogram
Soil samples consisted of a 5-point composite sample from excavation area shown

CONFIRMATION SOIL SAMPLE RESULTS
FORMER STRUCTURE 5350
REMOVAL OF LEAD BASED PAINT FROM STRUCTURES AND LEAD CONTAMINATED SOIL AT MIDWAY ATOLL

NW DEMOLITION AND ENVIRONMENTAL, A JOINT VENTURE

Portland, OR | Mar-2017

Figure 26



15' Buffer
30' Buffer
45' Buffer
Former Structure
1' Excavation

J indicates estimated amount
B indicates lead was found in blank

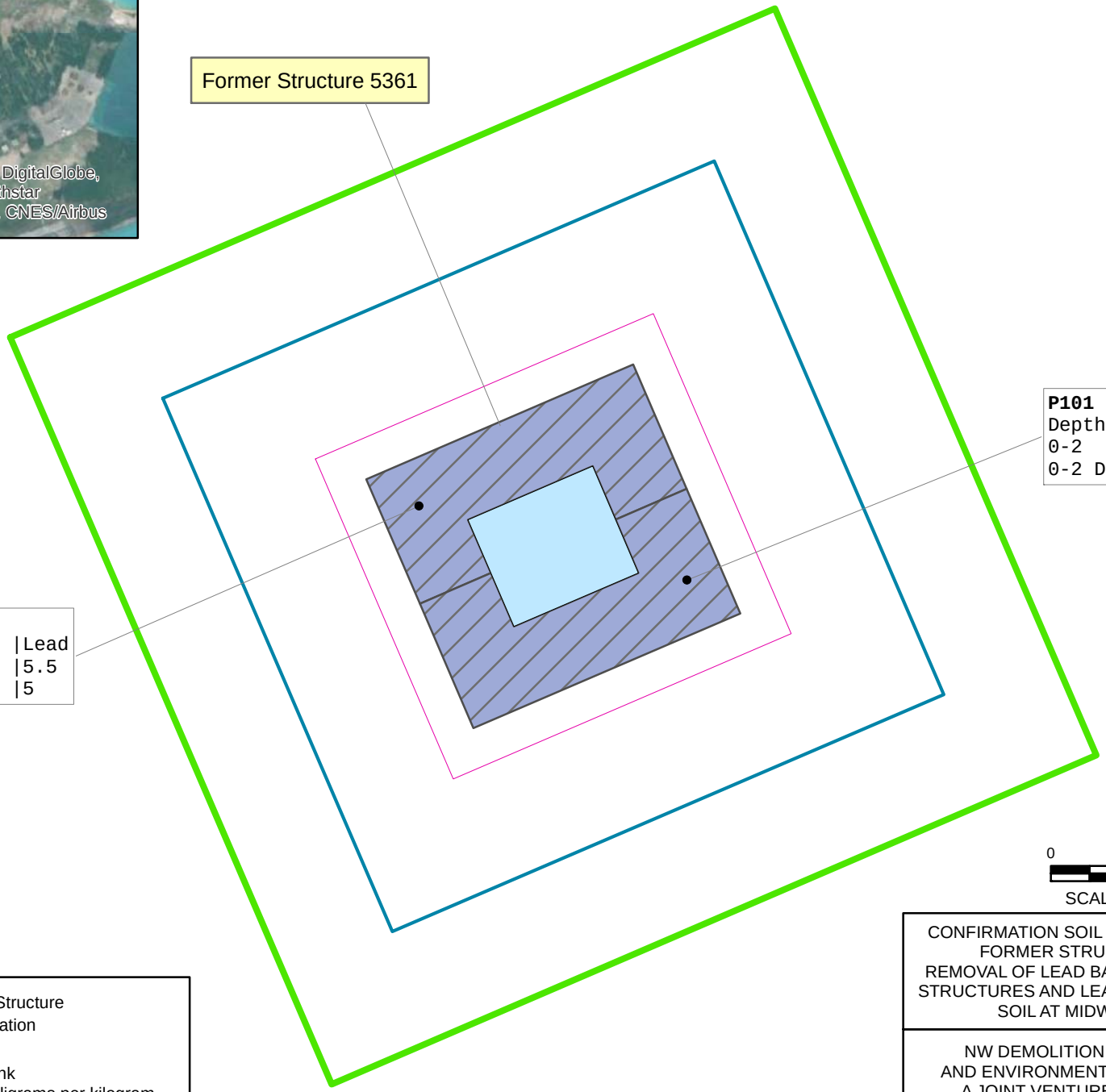
Note: Lead results reported in milligrams per kilogram
Soil samples consisted of a 5-point composite sample from excavation area shown

CONFIRMATION SOIL SAMPLE RESULTS
FORMER STRUCTURE 5360
REMOVAL OF LEAD BASED PAINT FROM STRUCTURES AND LEAD CONTAMINATED SOIL AT MIDWAY ATOLL

NW DEMOLITION AND ENVIRONMENTAL, A JOINT VENTURE

Portland, OR | Mar-2017

Figure 27



15' Buffer
30' Buffer
45' Buffer
Former Structure
1' Excavation

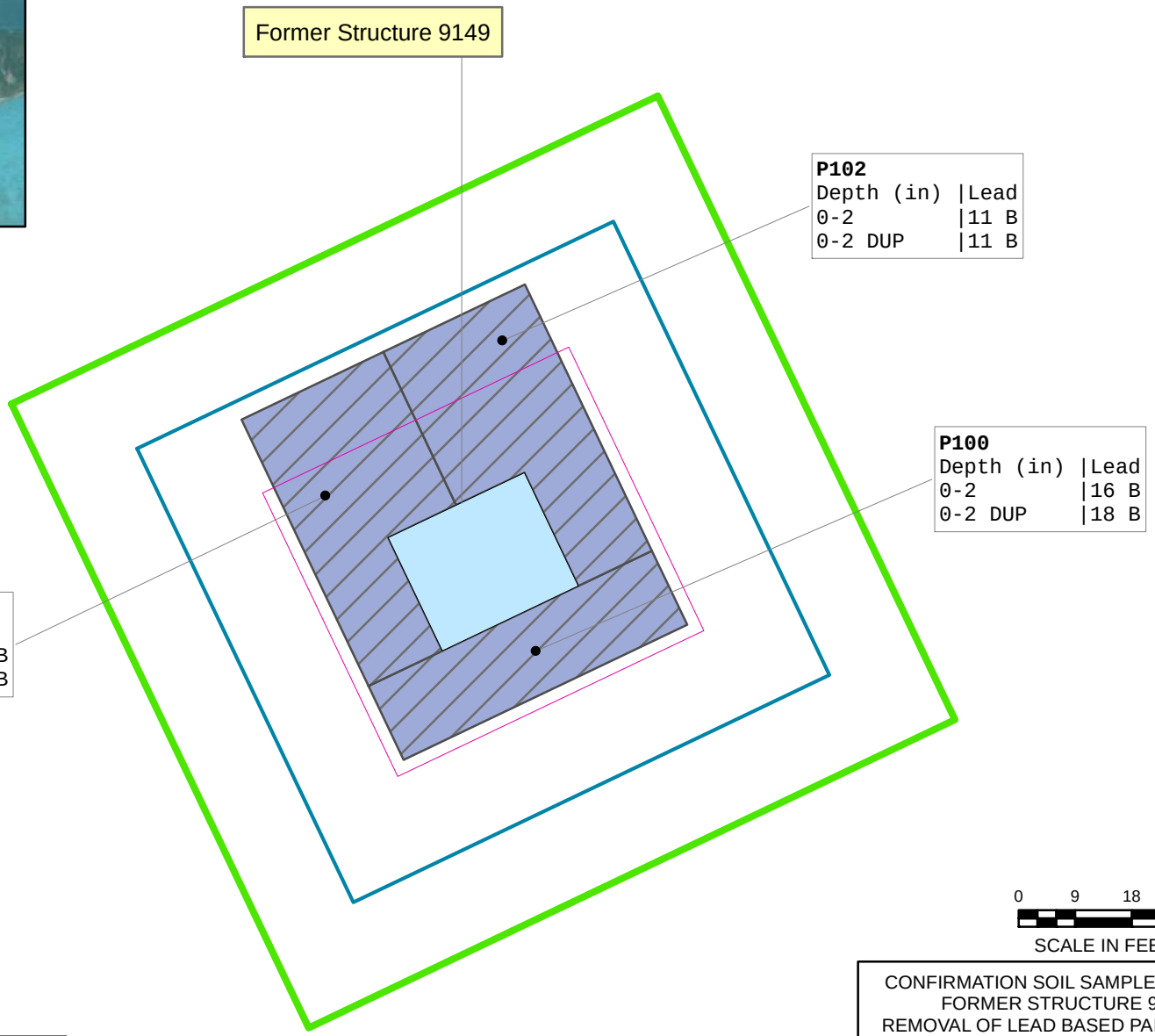
B indicates lead was found in blank
Note: Lead results reported in milligrams per kilogram
Soil samples consisted of a 5-point composite sample from excavation area shown

CONFIRMATION SOIL SAMPLE RESULTS
FORMER STRUCTURE 5361
REMOVAL OF LEAD BASED PAINT FROM STRUCTURES AND LEAD CONTAMINATED SOIL AT MIDWAY ATOLL

NW DEMOLITION AND ENVIRONMENTAL, A JOINT VENTURE

Portland, OR | Mar-2017

Figure 28



15' Buffer
30' Buffer
45' Buffer
Former Structure
1' Excavation

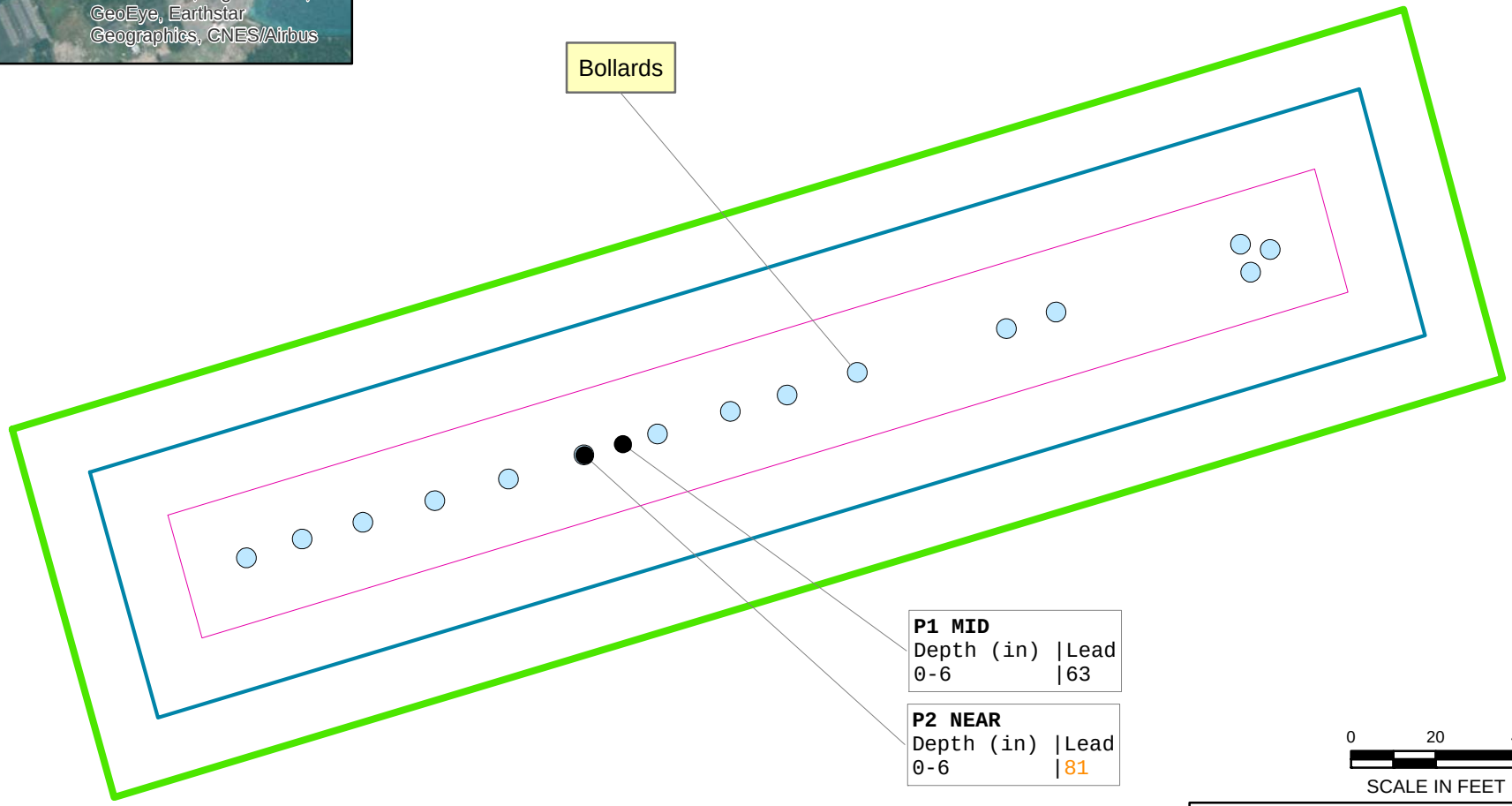
B indicates lead was found in blank
Note: Lead results reported in milligrams per kilogram
Soil samples consisted of a 5-point composite sample from excavation area shown

CONFIRMATION SOIL SAMPLE RESULTS
FORMER STRUCTURE 9149
REMOVAL OF LEAD BASED PAINT FROM STRUCTURES AND LEAD CONTAMINATED SOIL AT MIDWAY ATOLL

NW DEMOLITION AND ENVIRONMENTAL, A JOINT VENTURE

Portland, OR | Mar-2017

Figure 29



0 20 40
SCALE IN FEET

15' Buffer
30' Buffer
45' Buffer
Sampling Location
Feature

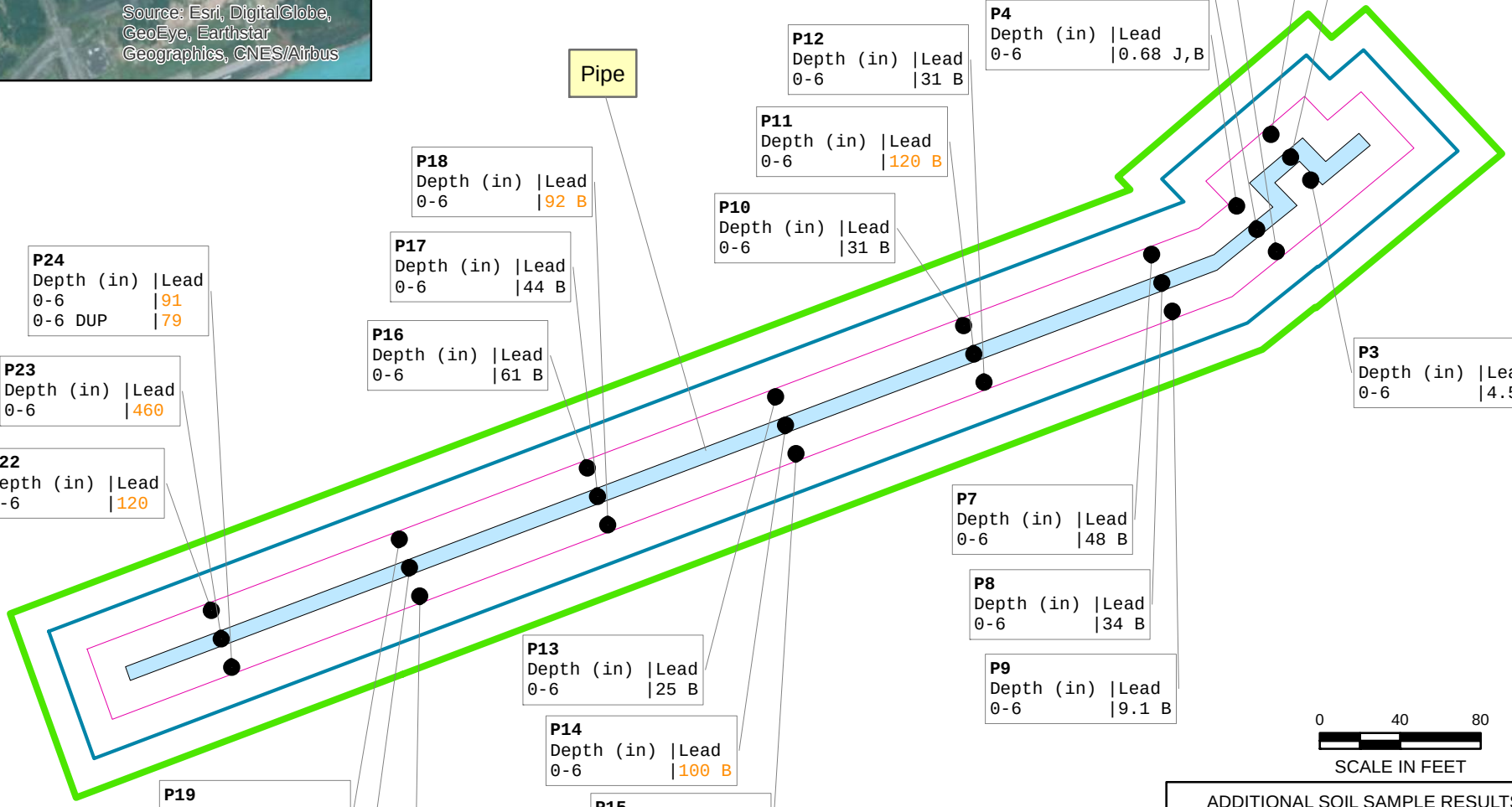
Note: Lead results reported in milligrams per kilogram

ADDITIONAL SOIL SAMPLE RESULTS
BOLLARDS
REMOVAL OF LEAD BASED PAINT FROM STRUCTURES AND LEAD CONTAMINATED SOIL AT MIDWAY ATOLL

NW DEMOLITION AND ENVIRONMENTAL, A JOINT VENTURE

Portland, OR | Mar-2017

Figure 30



15' Buffer
30' Buffer
45' Buffer
Sampling Location
Structure

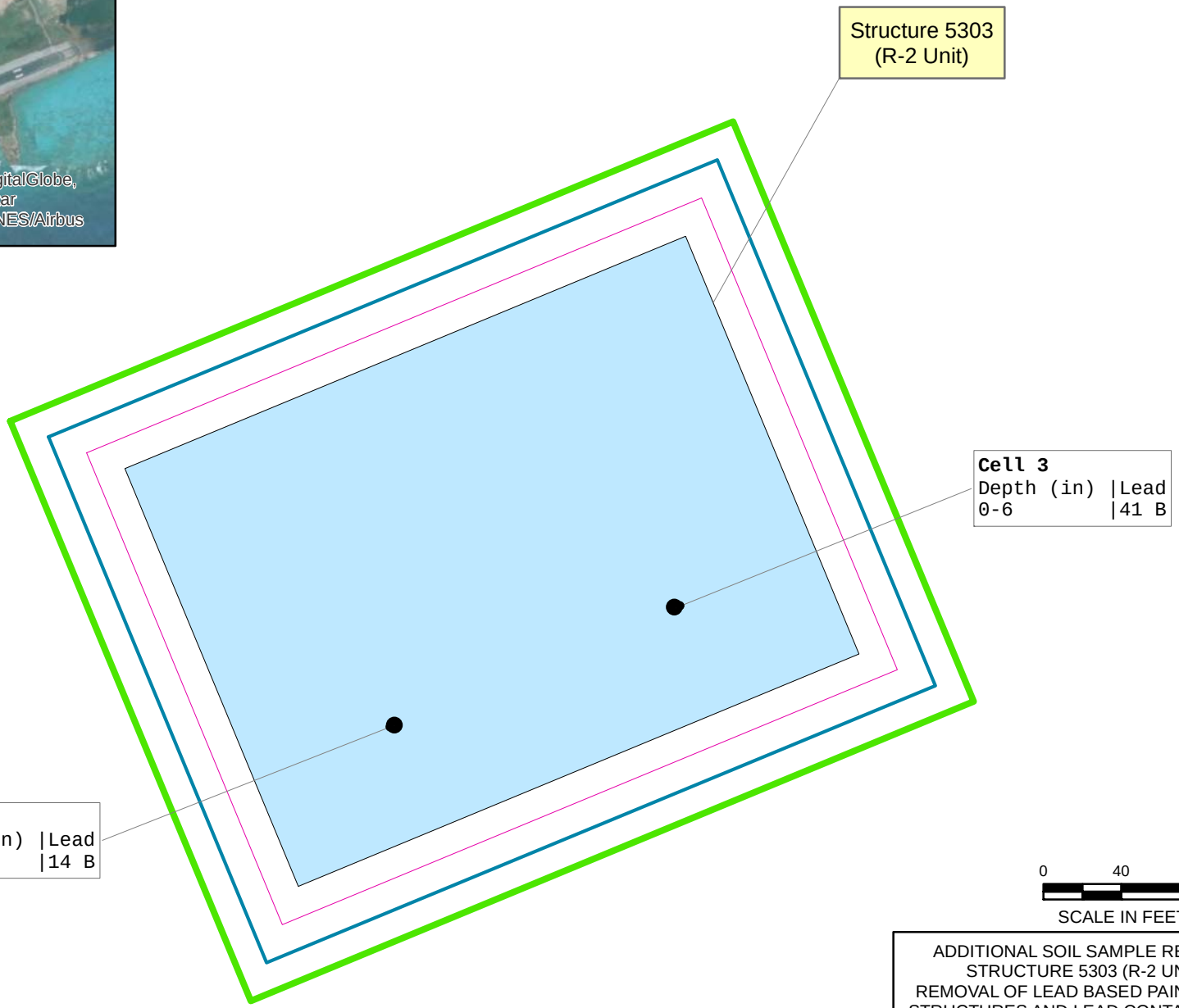
J indicates estimated amount
B indicates lead in blank and sample
Note: Lead results reported in milligrams per kilogram

ADDITIONAL SOIL SAMPLE RESULTS
PIPE
REMOVAL OF LEAD BASED PAINT FROM STRUCTURES AND LEAD CONTAMINATED SOIL AT MIDWAY ATOLL

NW DEMOLITION AND ENVIRONMENTAL, A JOINT VENTURE

Portland, OR | Mar-2017

Figure 31



15' Buffer
30' Buffer
45' Buffer
Sampling Location
Structure

B indicates lead in blank and sample

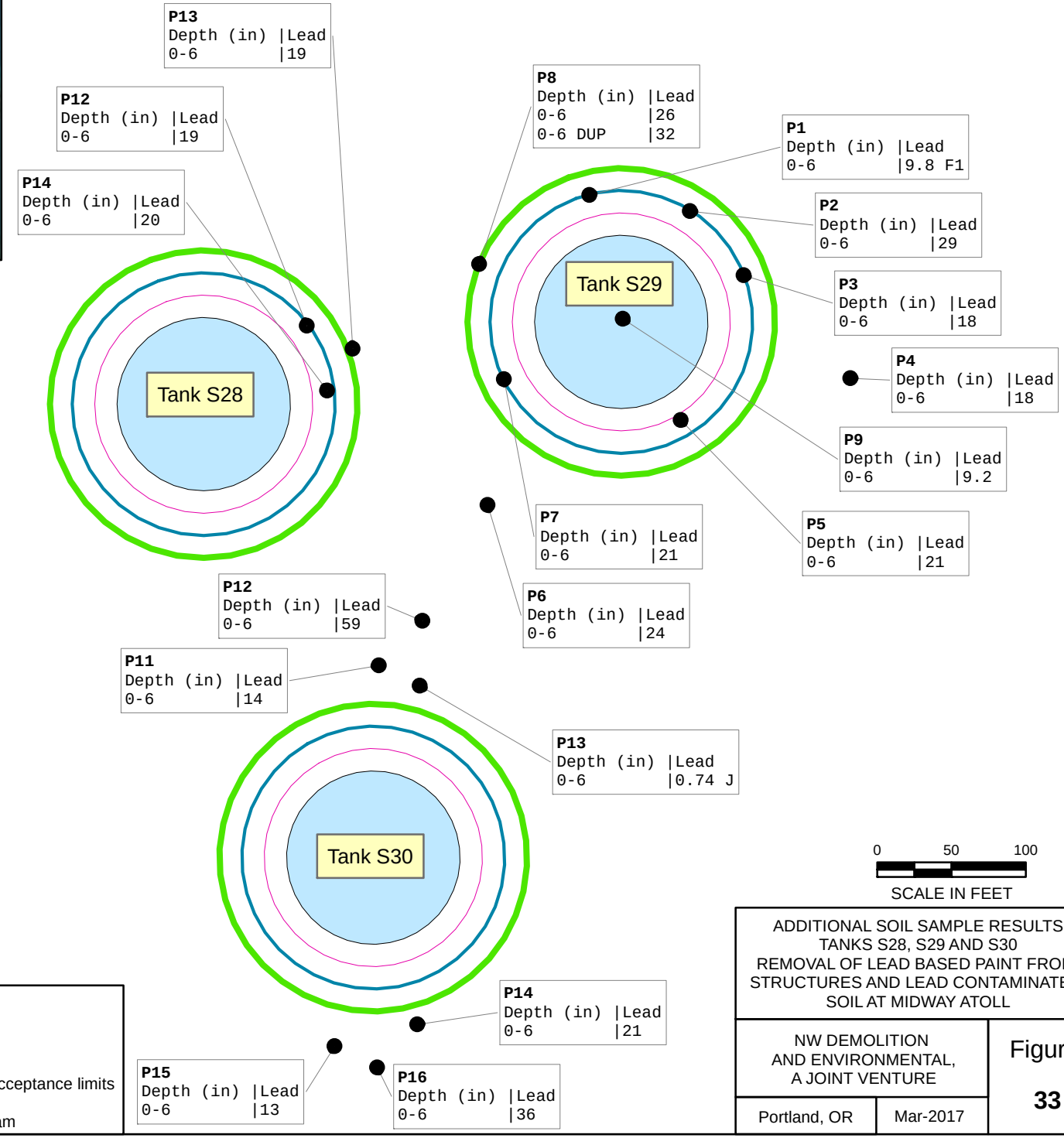
Note: Lead results reported in milligrams per kilogram

ADDITIONAL SOIL SAMPLE RESULTS
STRUCTURE 5303 (R-2 UNIT)
REMOVAL OF LEAD BASED PAINT FROM STRUCTURES AND LEAD CONTAMINATED SOIL AT MIDWAY ATOLL

NW DEMOLITION AND ENVIRONMENTAL, A JOINT VENTURE

Portland, OR | Mar-2017

Figure 32



15' Buffer
30' Buffer
45' Buffer
Sampling Location
Building

J indicates estimated amount
F1 indicates MS and/or MSD Recovery is outside acceptance limits

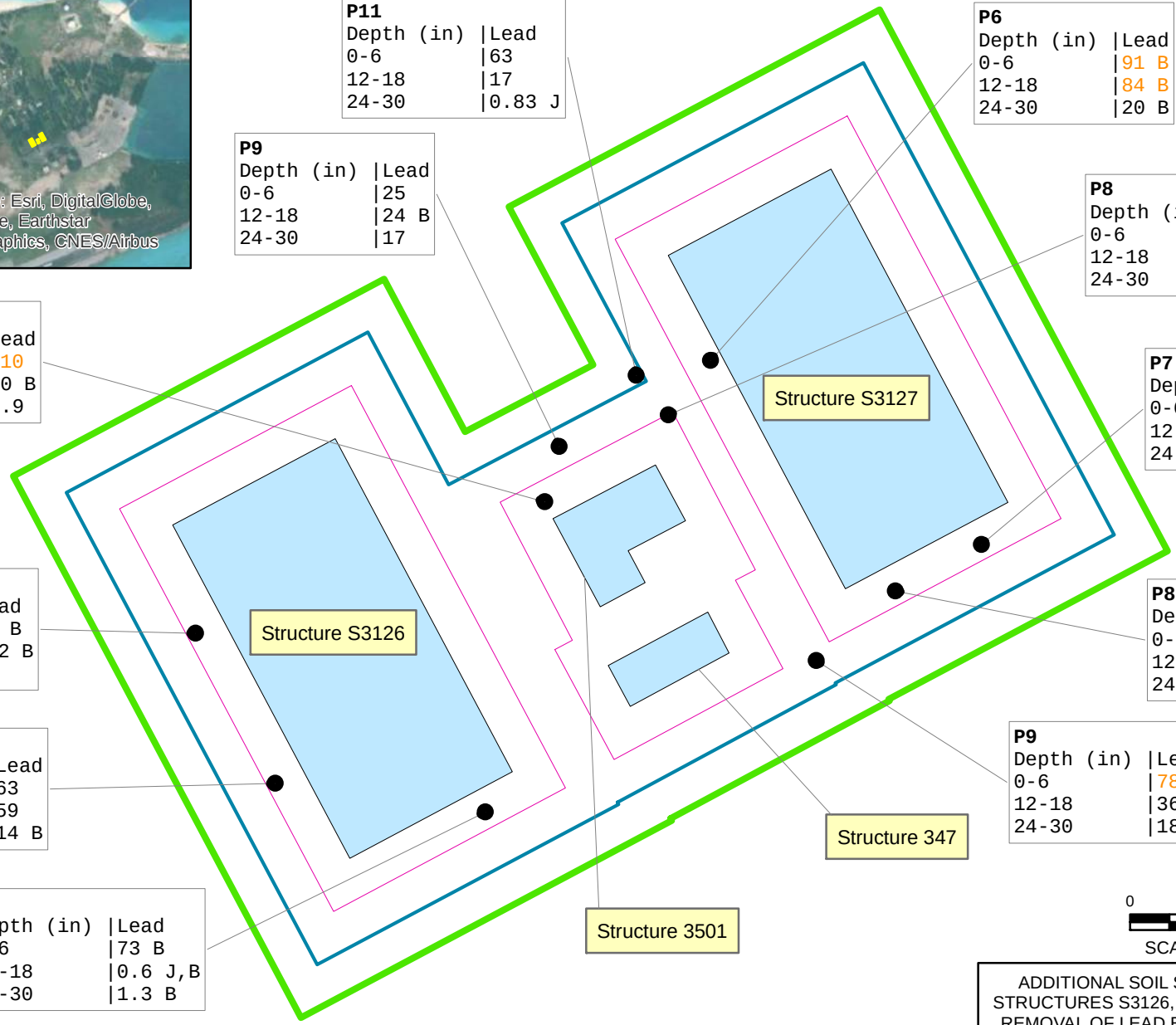
Note: Lead results reported in milligrams per kilogram

ADDITIONAL SOIL SAMPLE RESULTS
TANKS S28, S29 AND S30
REMOVAL OF LEAD BASED PAINT FROM STRUCTURES AND LEAD CONTAMINATED SOIL AT MIDWAY ATOLL

NW DEMOLITION AND ENVIRONMENTAL, A JOINT VENTURE

Portland, OR | Mar-2017

Figure 33



P11

Depth (in)	Lead
0-6	63
12-18	17
24-30	0.83 J

P6

Depth (in)	Lead
0-6	91 B
12-18	84 B
24-30	20 B

P9

Depth (in)	Lead
0-6	25
12-18	24 B
24-30	17

P8

Depth (in)	Lead
0-6	530
12-18	52
24-30	4.9

P10

Depth (in)	Lead
0-6	110
12-18	70 B
24-30	6.9

P7

Depth (in)	Lead
0-6	24
12-18	17 B
24-30	2.2

P6

Depth (in)	Lead
0-6	61 B
12-18	3.2 B
24-30	ND

P8

Depth (in)	Lead
0-6	21
12-18	7.3 B
24-30	4.5 B

P7

Depth (in)	Lead
0-6	63
12-18	59
24-30	14 B

P9

Depth (in)	Lead
0-6	78
12-18	36
24-30	18

P8

Depth (in)	Lead
0-6	73 B
12-18	0.6 J,B
24-30	1.3 B

0 30 60
SCALE IN FEET

15' Buffer
30' Buffer
45' Buffer
Sampling Location
Building

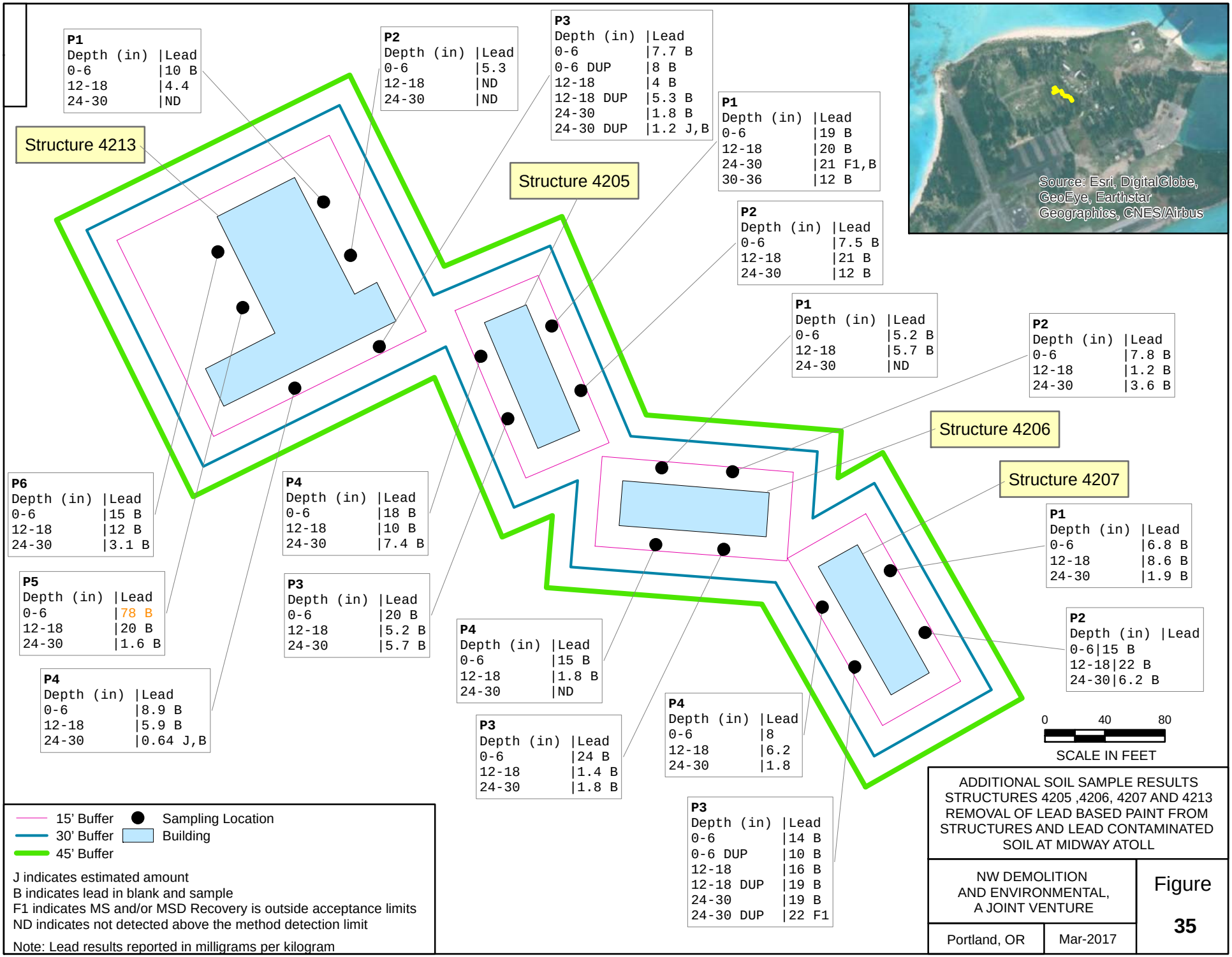
J indicates estimated amount
B indicates lead was found in blank
ND indicates not detected above the method detection limit
Note: Lead results reported in milligrams per kilogram

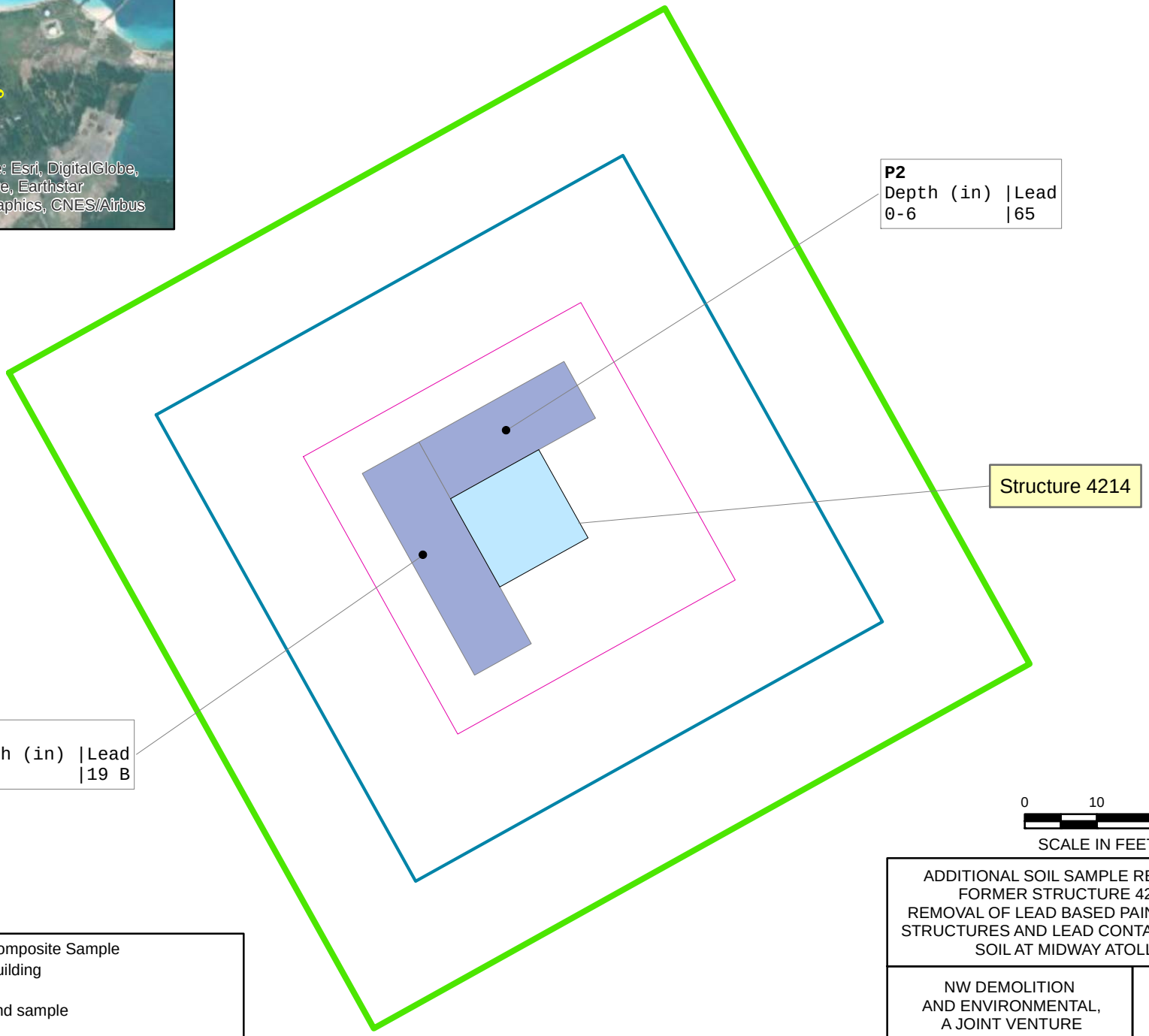
ADDITIONAL SOIL SAMPLE RESULTS
STRUCTURES S3126, S3127, 3501 AND 347
REMOVAL OF LEAD BASED PAINT FROM
STRUCTURES AND LEAD CONTAMINATED
SOIL AT MIDWAY ATOLL

NW DEMOLITION
AND ENVIRONMENTAL,
A JOINT VENTURE

Portland, OR | Mar-2017

Figure
34


Structure 4213
Structure 4205
Structure 4206
Structure 4207
P1
Depth (in) |Lead
0-6 |10 B
12-18 |4.4
24-30 |ND
P2
Depth (in) |Lead
0-6 |5.3
12-18 |ND
24-30 |ND
P3
Depth (in) |Lead
0-6 |7.7 B
0-6 DUP |8 B
12-18 |4 B
12-18 DUP |5.3 B
24-30 |1.8 B
24-30 DUP |1.2 J,B
P1
Depth (in) |Lead
0-6 |19 B
12-18 |20 B
24-30 |21 F1,B
30-36 |12 B
P2
Depth (in) |Lead
0-6 |7.5 B
12-18 |21 B
24-30 |12 B
P1
Depth (in) |Lead
0-6 |5.2 B
12-18 |5.7 B
24-30 |ND
P2
Depth (in) |Lead
0-6 |7.8 B
12-18 |1.2 B
24-30 |3.6 B
P6
Depth (in) |Lead
0-6 |15 B
12-18 |12 B
24-30 |3.1 B
P5
Depth (in) |Lead
0-6 |78 B
12-18 |20 B
24-30 |1.6 B
P4
Depth (in) |Lead
0-6 |8.9 B
12-18 |5.9 B
24-30 |0.64 J,B
P4
Depth (in) |Lead
0-6 |18 B
12-18 |10 B
24-30 |7.4 B
P3
Depth (in) |Lead
0-6 |20 B
12-18 |5.2 B
24-30 |5.7 B
P4
Depth (in) |Lead
0-6 |15 B
12-18 |1.8 B
24-30 |ND
P3
Depth (in) |Lead
0-6 |24 B
12-18 |1.4 B
24-30 |1.8 B
P4
Depth (in) |Lead
0-6 |8
12-18 |6.2
24-30 |1.8
P3
Depth (in) |Lead
0-6 |14 B
0-6 DUP |10 B
12-18 |16 B
12-18 DUP |19 B
24-30 |19 B
24-30 DUP |22 F1
P1
Depth (in) |Lead
0-6 |6.8 B
12-18 |8.6 B
24-30 |1.9 B
P2
Depth (in) |Lead
0-6|15 B
12-18|22 B
24-30|6.2 B
Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus
0 40 80
SCALE IN FEET
15' Buffer
30' Buffer
45' Buffer
Sampling Location
Building
J indicates estimated amount
B indicates lead in blank and sample
F1 indicates MS and/or MSD Recovery is outside acceptance limits
ND indicates not detected above the method detection limit
Note: Lead results reported in milligrams per kilogram
ADDITIONAL SOIL SAMPLE RESULTS
STRUCTURES 4205 ,4206, 4207 AND 4213
REMOVAL OF LEAD BASED PAINT FROM
STRUCTURES AND LEAD CONTAMINATED
SOIL AT MIDWAY ATOLL
NW DEMOLITION
AND ENVIRONMENTAL,
A JOINT VENTURE
Portland, OR
Mar-2017
Figure
35



0 10 20
SCALE IN FEET

15' Buffer
30' Buffer
45' Buffer
Composite Sample
Building
B indicates lead in blank and sample

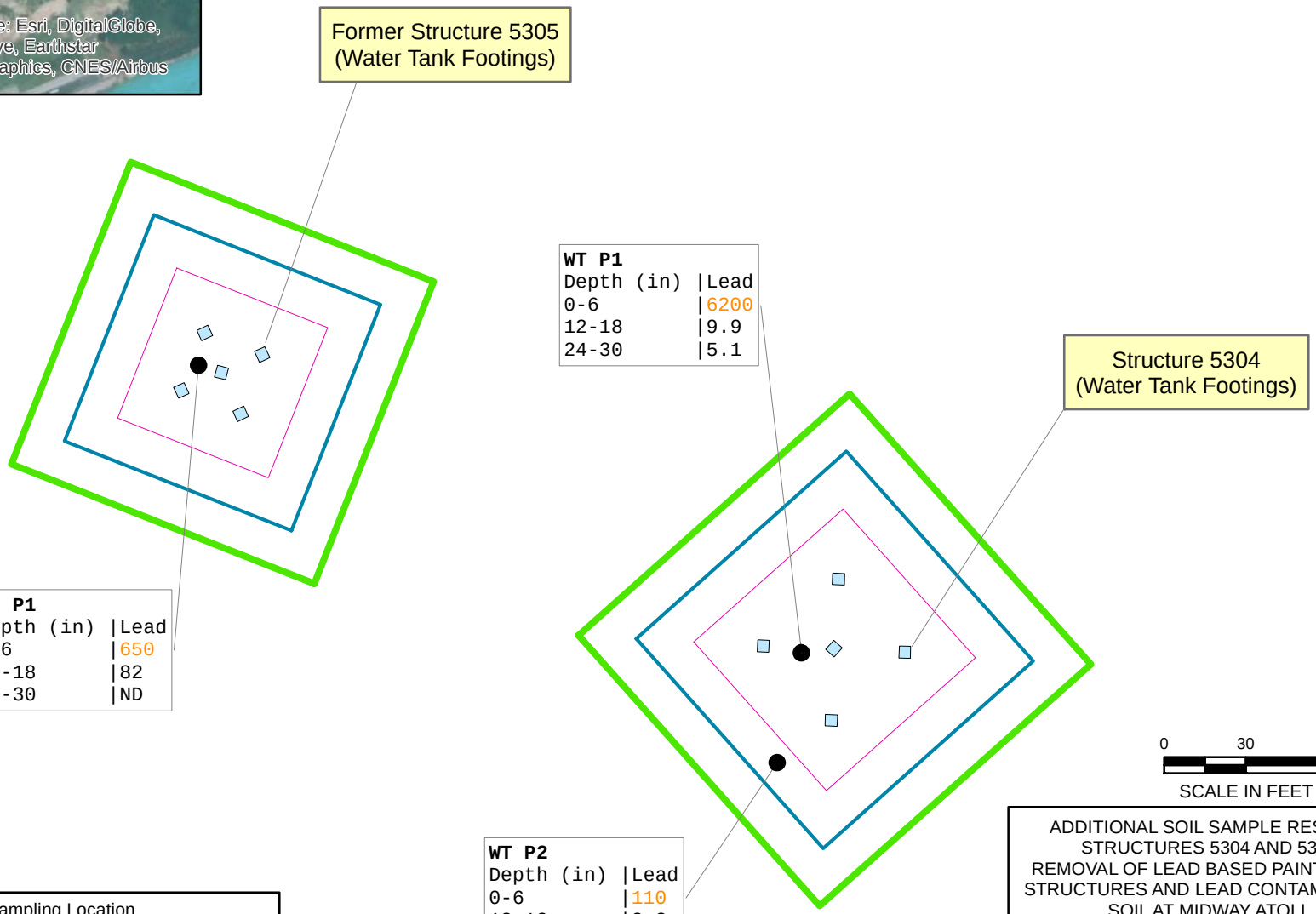
Note: Lead results reported in milligrams per kilogram

ADDITIONAL SOIL SAMPLE RESULTS
FORMER STRUCTURE 4214
REMOVAL OF LEAD BASED PAINT FROM STRUCTURES AND LEAD CONTAMINATED SOIL AT MIDWAY ATOLL

NW DEMOLITION AND ENVIRONMENTAL, A JOINT VENTURE

Portland, OR | Mar-2017

Figure 36



15' Buffer
30' Buffer
45' Buffer
Sampling Location
Structure

ND indicates not detected above the method detection limit

Note: Lead results reported in milligrams per kilogram

ADDITIONAL SOIL SAMPLE RESULTS
STRUCTURES 5304 AND 5305
REMOVAL OF LEAD BASED PAINT FROM
STRUCTURES AND LEAD CONTAMINATED
SOIL AT MIDWAY ATOLL

NW DEMOLITION
AND ENVIRONMENTAL,
A JOINT VENTURE

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Figure
37

APPENDIX G

R2 DRAINAGE VAULT MODIFICATION MEMO

Geosyntec consultants

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San Diego, California 92127
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FAX 858.674.6586
www.geosyntec.com

Memorandum

Date: 1 March 2017

To: Darin Leibelt – Northwest Demolition, LLC

From: Jennifer Nevius, P.E. and Greg Corcoran, P.E.

Subject: R-2 Unit Vault Backfill Construction

This memorandum has been prepared to document R-2 Unit drainage vault (vault) modifications completed during the 2016 construction season at Midway Atoll National Wildlife Refuge. Precise design measurements were not obtained due to limited access and confined space considerations. Therefore, design flexibility was required and the construction plans and specifications included several "field fit" elements. In our opinion, the construction of the vault modifications was appropriate for the intended purpose of maintaining the ability for stormwater conveyance through the vault while permitting the construction of the clean soil buttress in the vault area. Construction of the vault backfill meets the design intent outlined in the drawings, specifications and quality assurance plan referenced below.

A Geosyntec representative, Mr. Scott Wakefield, was on-site during the 2016 construction season between 9 September and 25 October 2016, and prepared detailed Daily Field Reports including notes on weather; visitors and personnel working on the project; equipment; materials; description of work; and photographs. These Daily Field Reports were transmitted to project team members, including representatives from NW Demolition and Environmental (NWD), and U.S. Fish and Wildlife Service (FWS). The intent of this memorandum is not to re-transmit the Daily Field Reports, but to summarize pertinent information regarding the construction of the vault backfill, particularly where design elements were modified. Numerous photographs documenting the construction of the system are included in the Daily Field Reports from September 8 through 24, 2016 (as summarized in Table 1). In addition, a photograph log of the vault modifications is attached to this memorandum.

The relevant construction documents regarding the vault backfill include the following:

- Construction Drawings, Midway Atoll Remediation Project, R-2 Unit, Midway Atoll National Wildlife Refuge, dated May 2015 (9 drawings);
- Technical Specifications, Midway Atoll Remediation Project, R-2 Unit, Midway Atoll National Wildlife Refuge, dated May 2015; and

- Construction Quality Assurance Plan, Removal of Lead-Based Paint from Structures and Lead Contaminated Soil, Midway Atoll National Wildlife Refuge, Midway Island, Contract No. F11PC00327, Revision 1 dated 28 May 2015.

AS-BUILT CONSTRUCTION DETAILS

The R-2 Unit vault inlet and outlet pipe diameters and vertical and horizontal positioning differed slightly than were approximated from the exterior of the vault during previous site investigations. The actual inlet and outlet pipe diameters measured to be 18 inches and 36 inches, respectively. The Rainstore3 (RS3) stacks were placed flush against the inlet and outlet as designed, however, longitudinally, the stacks were centered horizontally over the outlet. With a stack width of 40 inches, the RS3 stacks had an overlap of approximately 2 inches on each side of the outlet and approximately 9 inches and 13 inches on the east and west sides of the inlet, respectively. Vertically, the RS3 stacks were positioned with the base of the stack located approximately 2 inches below the outlet. The RS3 stacks as installed were 80 inches in height. The RS3 stacks were installed without offset between stacks, with approximately 12 inches (horizontally) of Select R-2 Unit Vault Backfill on the east side (away from the R-2 Unit, towards the eastern vault wall) and approximately 8 inches or more (horizontally) of Select R-2 Unit Vault Backfill on the west side (toward the existing concrete beam and R-2 Unit). Section 02200 of the project Technical specifications defines backfill materials; however, in general, Select R-2 Unit Vault Backfill consists of crushed concrete and clean native sand, blended to meet RS3 Manufacturer specifications. Figure 1 presents plan and profile illustrations of the RS3 system placement.

The R-2 Unit vault concrete beam separating the inlet and outlet bay from the remainder of the vault was found to be a baffle wall that did not extend to the base of the vault. General soil fill was placed beneath the concrete baffle wall base and compacted.

The R-2 Unit vault cast-in-place concrete (CIP) walls (from inlet pipe face to outlet pipe face) were measured at approximately 19.5 feet apart, slightly smaller than was measured for the concrete masonry unit (CMU) block wall on top of the CIP wall during previous site investigation. The total length of the RS3 delivered was greater than the length of the vault opening. After discussion with, and approval from, Ms. Kate Wright of Invisible Structures (RS3 Manufacturer), one row of “cups” were removed from one RS3 stack to accommodate the shorter length of the vault opening. The extra cups were used along with polyvinyl chloride (PVC) pipe pieces as horizontal spacers to maintain the position the RS3 units in latitudinal and longitudinal directions.

Holes cut in the upper two layers of geogrid facilitated installation of the three (3) PVC pipe maintenance ports installed, and geotextile “flanges” were added to prevent soil migration at the port locations. The ¼” thick steel plate cover (approximately 5 feet by 10 feet in plan dimensions) also had a hole cut for the center maintenance port access. The maintenance ports were finished within individual steel access manholes to support inspection and maintenance of the RS3 system. The PVC casing and steel manholes were set in place using 24-inch diameter and 24-inch tall forms and set in concrete. The top of the steel manhole lids were finished at

approximately 6 inches above the existing east CIP concrete vault wall, which is expected to be close to the final grade once the R-2 Unit cover is complete. The top of the 8-inch diameter PVC pipe ports was established approximately 9 inches below the top of the steel manholes and capped using an expanding plug with lockable hasp.

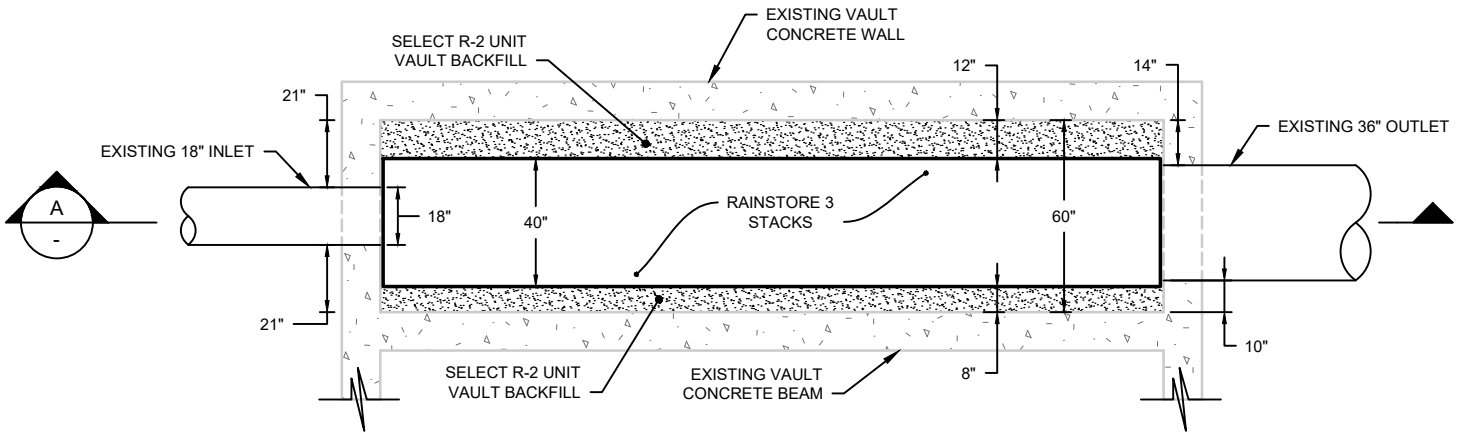
Following a small rain event on 20 October 2016, the taxiway valves were opened to verify that collective taxiway run off would flow towards the existing outfall to the south of the R-2 Unit. After removal of previously deposited sand at the outfall point, the taxiway water flowed towards the outfall as designed.

Continuing functionality of the RS3 system requires routine inspection and maintenance of the RS3 system and of the outfall as part of the inspection and maintenance of the R-2 Unit. We understand that FWS will develop and implement an operation and maintenance plan for the R-2 Unit, including the RS3 system. Inspection items may include checking the sediment and water levels within the RS3 system from the maintenance ports, flushing the RS3 system with water to remove accumulated sediments, and checking water levels and monitoring and removing sand accumulation at the ocean outfall. Previously, sand buildup between the outfall and the ocean has limited drainage of the R-2 vault. Inspection and maintenance of the RS3 system, particularly maintenance of the outfall (routine removal of sand buildup between the outfall and the ocean) is critical to functionality of the RS3 system installed as part of the R-2 Unit Vault backfill.

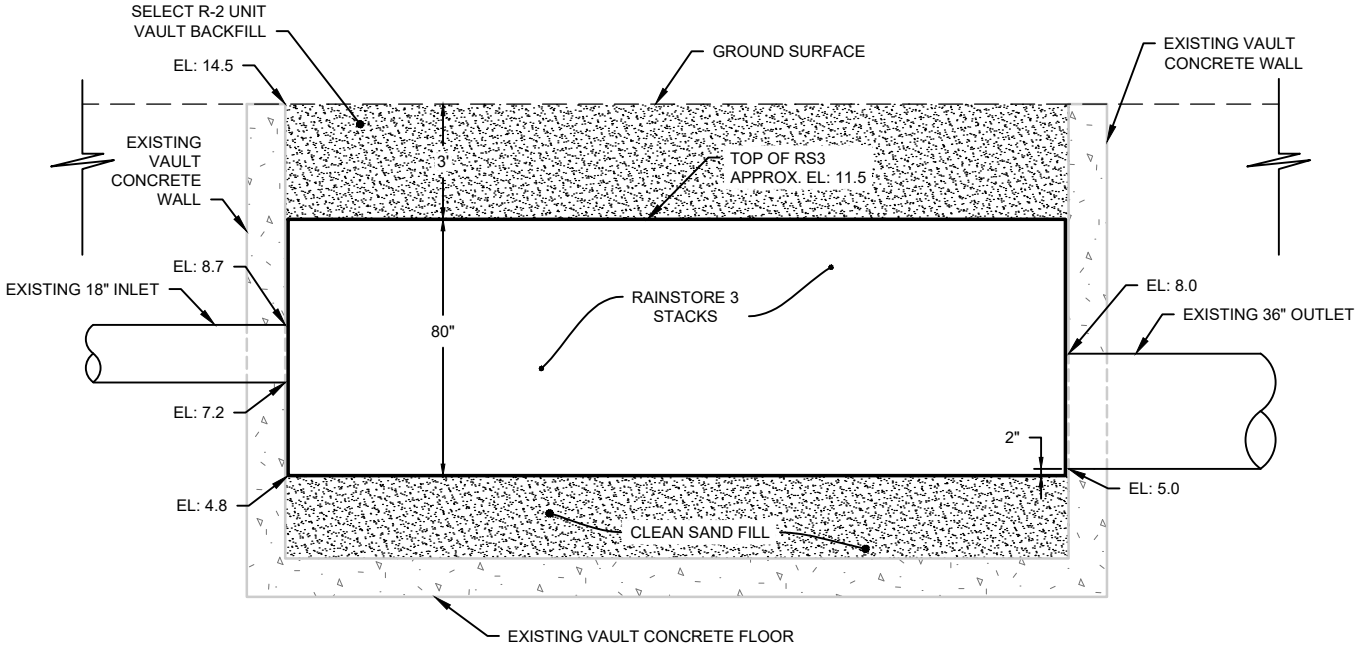
Table 1 – Summary of R-2 Unit Vault Backfill Daily Field Reports

Daily Field Report Date	Synopsis
8 September 2016	Dewatering equipment mobilized. R-2 vault dewatering begins.
9 September 2016	Materials for vault backfill mobilized to site. R-2 vault dewatering continues. Solids washed from sides of vault. Historical steel piping removed.
10 September 2016	R-2 vault cleaning and dewatering continues. Solids removed with excavator from surface. Select R-2 Unit Vault Backfill material generation started.
12 September 2016	R-2 vault cleaning and dewatering continues. Initial R-2 vault entry for cleaning and preparation for RS3 installation. Surface demolition. Select R-2 Unit Vault Backfill material generation continues.
13 September 2016	Select R-2 Unit Vault Backfill material generation continues. Native coral sand placed in R-2 vault as base for RS3.
14 September 2016	General Soil R-2 Unit Vault Backfill placement begins. Clean coral sand placement continues below RS3. Installation procedures verified and field adjusted for RS3.
15 September 2016	General Soil R-2 Unit Vault Backfill placement continues. Geogrid and geotextile placement begins. RS3 trimming. RS3 stack placement begins.
16 September 2016	General Soil R-2 Unit Vault Backfill placement continues. Select R-2 Unit Vault Backfill placement around RS3 stacks begins. Geosynthetic placement continues. RS3 stack placement completed. Maintenance ports placed.
17 September 2016	General Soil R-2 Unit Vault Backfill placement continues. Select R-2 Unit Vault Backfill placement around RS3 stacks continues.
19 September 2016	General Soil R-2 Unit Vault Backfill placement continues. Select R-2 Unit Vault Backfill placement around RS3 stacks continues. Geosynthetic placement completed. Port manhole/vault constructed.
20 September 2016	General Soil R-2 Unit Vault Backfill placement reaches initial rough grade. Select R-2 Unit Vault Backfill placement around RS3 stacks reaches initial rough grade. Site cleanup.
24 September 2016	RS3 stacks primed with hydrant water; water applied to RS3 stacks to near operating water levels.
20 October 2016	RS3 inlet and outlet valves opened for first time. Verified flow direction. Routine maintenance performed by Island personnel at outfall to remove sanded area.
24 October 2016	Photo in Daily Field Report of the taxiway drain channel recently excavated by DBSI south of the runway.

* * * * *



PLAN VIEW



ELEVATION VIEW

NOTES:

1. ALL ELEVATIONS AND DIMENSIONS ARE APPROXIMATE.
2. NOT ALL FEATURES (E.G. GEOTEXTILE, GEOGRID) SHOWN FOR CLARITY.

RS3 PLACEMENT DIAGRAM
R-2 UNIT VAULT BACKFILL
MIDWAY ATOLL

Geosyntec consultants

FIGURE 1

PROJECT NO: PNG0710 | FEBRUARY 2017

P:\PRJ\SDCADD\CADD\PNG0616 – MIDWAY R2 UNIT\FIGURES\PNG0710-F01

Photographic Log

R-2 Unit Vault Backfill Construction, Midway 2016

Photo 1. R2 drainage vault static level at 3.25' near end of the day.

Photo 2. View north. R2 vault dewatering via blue hose into the outfall of the raising stem valve grate.

Photo 3. View north – Bldg 5303 R2 taxiway vault. Steel shaft driven pumps (left).

Photo 4. View west – Bldg 5303 R2 taxiway vault. Steel pumps, motors and piping removed.

Photo 5. View north – Bldg 5303 R2 taxiway vault. Steel pumps, motors and piping removed.

Photo 6. View south – Bldg 5303 R2 taxiway vault. Steel pumps, motors and piping removed.

Photo 7. View southeast – Bldg 5303 R2 taxiway vault muck and sediment removal.

Photo 8. View northeast – Seaplane apron operations sizing ¾" minus concrete.

Photo 9. View north – Bldg 5303 R2 taxiway vault CMU wall removal.

Photo 10. Bldg 5303 R2 Taxiway vault – Clearing out small debris in vault bottom.

Photo 11. View southwest – Bldg 5305 R2 Taxiway vault work area.

Photo 12. View north - R2 east wall abutment stockpile of clean coral sand for General R2 Vault backfill

Photo 13. View east - Bldg 5303 R2 Taxiway vault. Placement of clean backfill with mini excavator.

Photo 14. View north-ish – Bldg 5303 R2 taxiway vault begin backfill lift.

Photo 15. View north-ish – Bldg 5303 R2 taxiway vault compaction followed by next material lift.

Photo 16: View north-ish – Bldg 5303 R2 taxiway vault backfill lift plate compaction.

Photo 17: View southwest – Bldg 5303 R2 taxiway vault General Backfill lift placement with mini.

Photo 18: View north- Final grade work that is the base for the Rainstore^3 cell stacks.

Photo 19: View north – The two layers of orange geotextile are buried 1.5' deep against wall.

Photo 20: View north – Layers of geotextile long wall edges are being flanged up. Adhesive to concrete.

Photo 21: View north – Base layer of black geogrid placed atop textile to form foundation.

Photo 22: View south – End cap panels of textile are aligned and temporarily affixed.
Photo

Photo 23: View northeast – Double layer textile is oriented then 2 layers of black geogrid staged.

Photo 24: View east – Rainstore[3] stacks #1 and #2 are positioned within the prepared area.

Photo 25: View north – Rainstore[3] stacks #1 and #2 are positioned within the prepared area.

Photo 26: View south- Rainstore[3] cell stack #6 (with port relief) aligned at the 36" effluent pipe.

Photo 27: View east – Six stacks of 40” x 40” x 80” Rainstore[3] units in place.

Photo 28: View northeast – Black geogrid two-layer wrap and orange geotextile layer #1 begin.

Photo 29: View northeast – Geotextile wrap layers # 1 and #2. End cap double flange to wall and cell.

Photo 30: View east – Geotextile wrap layers # 1 and #2. End cap double flange to wall and cell.

Photo 31: View south – Geotextile layer #3 & #4 (panel 1) are being positioned to the west cell wall.

Photo 32: View south – Geotextile layer #3 & #4 (panel 2) are positioned to the top and flanged to wall.

Photo 33: View east – Lift placement of Select backfill within the 12” and 8” vault / cell space.

Photo 34: View northeast – Overview of Select backfill progress and 8” inspection port locations.

Photo 35: View southeast- Rainstore^3 cell stacks being backfilled with Select material.

Photo 36: View south – Continued lifts of Select (l) and General (r) backfill prior to level and compaction.

Photo 37: View east – Setting the ¼" steel plate on top of the Rainstore[3] assembly.

Photo 38: View east – Flanged impermeable sheeting at inspection port to horizontal surfaces.

Photo 39: View northeast- Orange geotextile flanges at inspection port pipes intersecting top of cell.

Photo 40: View east – Black geogrid layer at 3.0' below top of east concrete vault wall.

Photo 41: View east – Foil utility tape above the Rainstore[3] assembly.

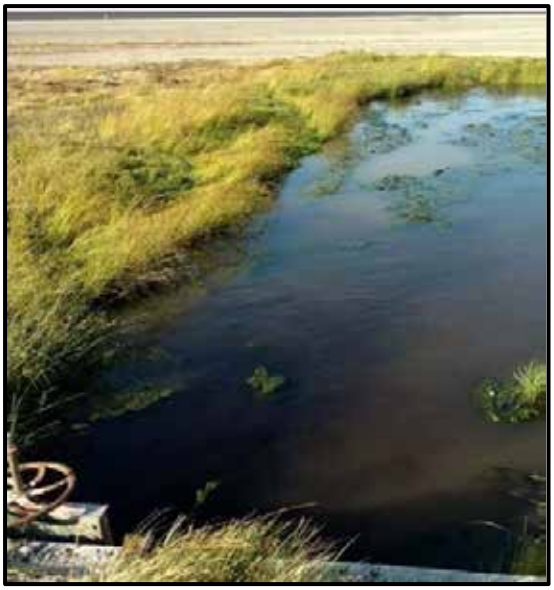
Photo 42: Setting the MON brand steel ring base for one of three 8" pvc vertical inspection ports.

Photo 43: View east – Second lift of concrete. Second geogrid layer at 1.5' below vault wall reference.

Photo 44: View east – R2 Taxiway vault Rainstore[3] installation initial rough grade.

Photo 45: View west – R2 Taxiway vault Rainstore^3 installation initial rough grade.

Photo 46: View north – R2 Taxiway vault Rainstore^3 installation initial rough grade.



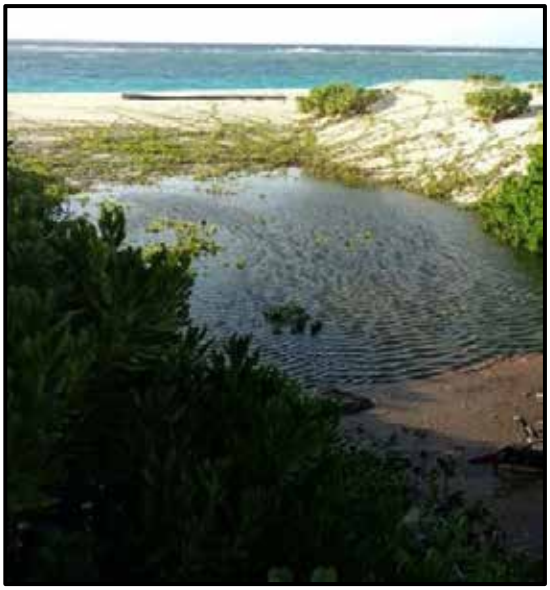


Photo 47: View west- Taxiway inlet and valve (L.) View south – Taxiway effluent prior to O&M (R.)

Photo 48: View south- Taxiway drain channel recently excavated by DBSI south of the runway.

APPENDIX G

2017 DAILY FIELD REPORTS

NW Demolition and Environmental
A Joint Venture

Daily Field Report

Date: Tuesday, July 25, 2017
Prepared by: Scott Wakefield

Project: Removal of Lead-Based Paint from Structures and Lead-Contaminated Soil
Location: Midway Atoll National Wildlife Refuge
Client: US Fish and Wildlife Service

Weather: High clouds, wind 8 mph, Temperature ~78F.

Personnel:

Name	Company	Site Hours
Scott Wakefield	NWDE Field Oversight	
Everett White	NWDE Supervisor	On Island
Ruth Inmon	NWDE Operator	
Joel Smith	NWDE Operator	
Dalton Sullivan	NWDE Labor	On Island
Antonio Davis	NWDE Labor	

Visitors/Additional Site Personnel:

Name	Title
MaryAnn Amann	U.S. FWS

Equipment:

Description	Model No.	Comments
Pickup Truck	F350 Service Truck	NWDE
Flatbed Truck	Ford F450	NWDE
Container Truck	Peterbuilt	NWDE
Skid Steer	Bobcat S185	NWDE
Tracked Skid Steer	Bobcat T750	NWDE
Mini-Excavator	CAT 308	NWDE
Excavator	Volvo EC290BLC	NWDE
Excavator	Volvo EC290BLC	NWDE
Off road Dump Truck	Volvo A30D	NWDE
Off road Dump Truck	Volvo A30D	NWDE

Materials Delivered:

Description	QTY	Condition/Comments
Diesel	0 gallons	
Gasoline	0 gallons	

Description of Work:

1730 HST – NWDE crew is arriving at Air Service Hawaii for mobilizing to Midway Atoll via Cinco Air Charter. The 2017 work season begins with the night flight bringing in today's second wave of NWDE team members. Currently NWDE E.White and D.Sullivan are on island performing equipment maintenance and preparations prior to the full crews arrival. An additional flight in August will bring the remaining LBP workers soon.

1920 HST – Wheels up in the Gulfstream 4 jet, departing Honolulu with a 3-hour ETA to PMDY Henderson Air Field.

2110 SST – Touchdown at Midway Atoll, PMDY. Unload and assemble at Charlie barracks to prepare for billeting. Confirm schedule for US FWS island orientation and NWDE HASP that will occur tomorrow morning.

End of travel day.

Photographs:

Photo 01: Arrival at Henderson Airfield

NW Demolition and Environmental
A Joint Venture

Daily Field Report

Date: Wednesday, July 26, 2017
Prepared by: Scott Wakefield

Project: Removal of Lead-Based Paint from Structures and Lead-Contaminated Soil
Location: Midway Atoll National Wildlife Refuge
Client: US Fish and Wildlife Service

Weather: High clouds, wind 9 mph, Temperature ~78F

Personnel:

Name	Company	Site Hours
Scott Wakefield	NWDE Field Oversight	10
Everett White	NWDE Supervisor	10
Ruth Inmon	NWDE Operator	10
Joel Smith	NWDE Operator	10
Dalton Sullivan	NWDE Labor	10
Antonio Davis	NWDE Labor	10

Visitors/Additional Site Personnel:

Name	Title
MaryAnn Amann	U.S. FWS
Bob Peyton	U.S. FWS Refuge Manager
Deisha Norwood	U.S. FWS Deputy Refuge Manager

Equipment:

Description	Model No.	Comments / Serial #
Pickup Truck	F350 Service Truck	NWDE
Flatbed Truck	Ford F450	NWDE
Container Truck	Peterbuilt	NWDE
Skid Steer	Bobcat S185	NWDE
Tracked Skid Steer	Bobcat T750	NWDE
Mini-Excavator	CAT 308	NWDE
Excavator	Volvo EC290BLC	NWDE
Excavator	Volvo EC290BLC	NWDE
Off road Dump Truck	Volvo A30D	NWDE
Off road Dump Truck	Volvo A30D	NWDE

Materials Delivered:

Description	QTY	Condition/Comments
Diesel	0 gallons	
Gasoline	0 gallons	

Description of Work:

0700 – NWDE is at the NAF staging area for beginning today's site orientation of work area.

0800 – Bob Peyton, US FWS refuge manager welcome and introduction.
Deisha Norwood, US FWS deputy refuge manager presents the cultural awareness orientation for Midway Atoll National Wildlife Refuge, Battle of Midway National Memorial within the Papahānaumokuākea Marine National Monument.

1030 – Ending the orientation, begin the site specific health and safety presentation by S.Wakefield, NWDE.

1130 – NWDE begins working to continue equipment preparations and maintenance activities. Including but not limited to removing the MB crusher bucket off the 290 excavator and repairs of punch list items with newly arrived parts.

1200 – Lunch

1230 – Throughout the afternoon, NWDE resumes mechanical and electrical maintenance work of the heavy equipment and support trucks. Unpacking container stored items in preparation of season work.

Reviewing and site inspection of the excavation areas at each building and former structure locations.

Make note that US FWS and NWDE have worked together this month on the shade cloth placement near the active Water Tower 5304. This includes bird and burrow clearing followed with shade cloth being anchored using sand bags southwest of the tower footings. The area covered is appx 52' x 162' and is the target landing zone for the 5304 Water Tower steel to be brought down onto for processing this season.

1730 – End of work day.

Photographs:

Photo 01: NAF Staging Area. Equipment maintenance for beginning the 2017 work season

Photo 02: Water Tower 5304 with shade cloth placement earlier this month

NW Demolition and Environmental
A Joint Venture

Daily Field Report

Date: Thursday, July 27, 2017
Prepared by: Scott Wakefield

Project: Removal of Lead-Based Paint from Structures and Lead-Contaminated Soil
Location: Midway Atoll National Wildlife Refuge
Client: US Fish and Wildlife Service

Weather: Cloudy, wind 10 mph, Temperature ~74F, light afternoon shower.

Personnel:

Name	Company	Site Hours
Scott Wakefield	NWDE Field Oversight	10
Everett White	NWDE Supervisor	10
Ruth Inmon	NWDE Operator	10
Joel Smith	NWDE Operator	10
Dalton Sullivan	NWDE Labor	10
Antonio Davis	NWDE Labor	10

Visitors/Additional Site Personnel:

Name	Title
MaryAnn Amann	U.S. FWS

Equipment:

Description	Model No.	Comments / Serial #
Pickup Truck	F350 Service Truck	NWDE
Flatbed Truck	Ford F450	NWDE
Container Truck	Peterbuilt	NWDE
Skid Steer	Bobcat S185	NWDE
Tracked Skid Steer	Bobcat T750	NWDE
Mini-Excavator	CAT 308	NWDE
Excavator	Volvo EC290BLC	NWDE
Excavator	Volvo EC290BLC	NWDE
Off road Dump Truck	Volvo A30D	NWDE
Off road Dump Truck	Volvo A30D	NWDE

Materials Delivered:

Description	QTY	Condition/Comments
Diesel	0 gallons	
Gasoline	0 gallons	

Description of Work:

0700 – Health and Safety meeting at NAF staging area. Review today's work tasks.
NWDE continues maintenance work on the construction equipment including the two large portable air compressors, skid steer and Ford trucks.

Inspect inventory of Iniki on island shipping containers that will be shipped off this season. There are 9 units with LBP / ACM waste and four units with abatement equipment / supplies.
Review of the 419 MIS figures and onsite viewing for the upcoming second excavation to achieve confirmation.

1000 – NWDE has mobilized to the R2, cells 2 and 4 to pull out sand bags that were placed over the shade cloth ending last season. The black bags are collected emptied, bundled and staged. Shade cloth will remain in place. The weathered and grass imbedded cloth will be capped with treated soil as the season progresses. Removal of the cloth in the past has proven that the material will tear significantly when pulled up. Additionally, the current flat layer of perforated shade cloth will be interned in place, capped and compacted with lifts of soil so no bridging or voids can form.

1200 – Lunch.

1230 – Throughout the afternoon, NWDE continues with workers removing sandbags from the R2.
At the active generator plant Bldg 309, layout plots for upcoming soil excavation work per the approved figures. Plots are marked and calculated for soil treatment, which will be followed by hauling to the R2 once the digging work begins. Mark up for onsite features of footings, slabs and AST's at each location.
Layout plots at Canon Bldg 354.

1730 – End of work day.

Photographs:

Photo 01: R2 Cell 4 – View southeast. Sandbags to be remove off shade cloth

Photo 02: Bldg 309 – View north. Marking out excavation plots

Photo 03: Bldg 354 – View west. Marking out excavation plots

NW Demolition and Environmental
A Joint Venture

Daily Field Report

Date: Friday, July 28, 2017
Prepared by: Scott Wakefield

Project: Removal of Lead-Based Paint from Structures and Lead-Contaminated Soil
Location: Midway Atoll National Wildlife Refuge
Client: US Fish and Wildlife Service

Weather: Cloudy, wind 10 mph, Temperature ~74F

Personnel:

Name	Company	Site Hours
Scott Wakefield	NWDE Field Oversight	10
Everett White	NWDE Supervisor	10
Ruth Inmon	NWDE Operator	10
Joel Smith	NWDE Operator	10
Dalton Sullivan	NWDE Labor	10
Antonio Davis	NWDE Labor	10

Visitors/Additional Site Personnel:

Name	Title
MaryAnn Amann	U.S. FWS

Equipment:

Description	Model No.	Comments / Serial #
Pickup Truck	F350 Service Truck	NWDE
Flatbed Truck	Ford F450	NWDE
Container Truck	Peterbuilt	NWDE
Skid Steer	Bobcat S185	NWDE
Tracked Skid Steer	Bobcat T750	NWDE
Mini-Excavator	CAT 308	NWDE
Excavator	Volvo EC290BLC	NWDE
Excavator	Volvo EC290BLC	NWDE
Off road Dump Truck	Volvo A30D	NWDE
Off road Dump Truck	Volvo A30D	NWDE

Materials Delivered:

Description	QTY	Condition/Comments
Diesel	0 gallons	
Gasoline	10 gal, 10 gal, 5 gal	7-14-17, 7-21-17, 7-28-17

Description of Work:

0700 – Health and Safety meeting at NAF staging area. Review today's work tasks.

NWDE mobilizes the Volvo 290 excavator out to the R2 unit. Spotters are out front of the machine while traversing to move albatross from the roadway, clearing the path. At the R2 west entry side the existing berm material that was positioned to close the R2 last fall is being repositioned to restore the truck ramp. This prepares the access for upcoming haul trucks to bring in treated soil this season.

0930 – At DU-3, stake out four plots for the 419 MIS areas that will be re-excavated for achieving a second round of confirmation sampling. The planned depth of an additional 0.5' from DU-3 elevations will be sampled at the bottom of this season's excavation. Lab results will be evaluated prior to backfilling around the joint MIS four plots at Officer Quarter Bldgs 419, 418 and 417.

1000 – The R2 entry ramp has been formed. T posts and ribbon are staked out to note the cell dividing wall to prevent tire hazards when entering Cell 2 and Cell 4.
NWDE crew is continuing prep and maintenance work at the NAF staging area for the Cat mini excavator, 290 excavator #2 and work/storage containers.

1200 – Lunch.

1230 – NWDE continues O&M at the NAF staging area on equipment through the afternoon.

Finish up Bldg 144 soil plots with stakes and ground markings for upcoming excavation areas.

1500 – Bldg 520 Fire Dept storage. Mark out soil plot that will be re-excavated for achieving an additional depth and confirmation sampling this season. This is one small plot per Figure P-7.

1730 – End of work day.

Photographs:

Photo 01: R2 west ramp – View north. Grade entry ramp into cells 2 and 4

Photo 02: Bldg 144 – View northeast. Marking out excavation plots

NW Demolition and Environmental
A Joint Venture

Daily Field Report

Date: Saturday, July 29, 2017
Prepared by: Scott Wakefield

Project: Removal of Lead-Based Paint from Structures and Lead-Contaminated Soil
Location: Midway Atoll National Wildlife Refuge
Client: US Fish and Wildlife Service

Weather: Sunny, wind 10 mph, Temperature ~80F

Personnel:

Name	Company	Site Hours
Scott Wakefield	NWDE Field Oversight	8
Everett White	NWDE Supervisor	8
Ruth Inmon	NWDE Operator	8
Joel Smith	NWDE Operator	8
Dalton Sullivan	NWDE Labor	8
Antonio Davis	NWDE Labor	8

Visitors/Additional Site Personnel:

Name	Title
MaryAnn Amann	U.S. FWS

Equipment:

Description	Model No.	Comments / Serial #
Pickup Truck	F350 Service Truck	NWDE
Flatbed Truck	Ford F450	NWDE
Container Truck	Peterbuilt	NWDE
Skid Steer	Bobcat S185	NWDE
Tracked Skid Steer	Bobcat T750	NWDE
Mini-Excavator	CAT 308	NWDE
Excavator	Volvo EC290BLC	NWDE
Excavator	Volvo EC290BLC	NWDE
Off road Dump Truck	Volvo A30D	NWDE
Off road Dump Truck	Volvo A30D	NWDE

Materials Delivered:

Description	QTY	Condition/Comments
Diesel	0 gallons	
Gasoline	0 gallons	

Description of Work:

0700 – Health and Safety meeting at NAF staging area. Review today's work tasks.

NWDE is gearing up to continue removing sand bags from the R2, Cell 4. These black sand bags are collected and hand stacked onto pallets, then moved with the tracked skid steer to the Ford flatbed truck.

Layout and staking of plots per the P figures continues in preparation for upcoming soil abatement.

1000 – Sandbags maintain steady progress being picked up in the R2 unit, palletized and moved out being transported over to the active Water Tower 5304. The sandbags will be used for additional anchoring of shade cloth and ultimately sheeting prior to demo of the water tower this season.
Today's weather has warmed up from the past few days with increasing sunshine.

1200 – Lunch.

1230 – NWDE is filling in more shade cloth at the Water Tower 5304 with additional sections of material. The dormant ground burrows are cleared prior to mobilizing and setting the material. Sandbags anchor the black shade cloth in position. These tasks are in preparation to limit the Bonin Petrel burrow activity within the work zone when tens of thousands of the small sea birds return to Midway Atoll in upcoming weeks.

Northwest also is completing additional O&M at the NAF staging area for the Volvo off road haul trucks.

Progress of marking out future excavation plots has continued through the afternoon and will resume next week.

1530 – End of work day.

Photographs:

Photo 01: R2, Cell 4– View northeast. Removal of sandbags over shade cloth

Photo 02: Water Tower 5304 – View north. Progress of additional shade cloth at the south side of tower

NW Demolition and Environmental
A Joint Venture

Daily Field Report

Date: Monday, July 31, 2017
Prepared by: Scott Wakefield

Project: Removal of Lead-Based Paint from Structures and Lead-Contaminated Soil
Location: Midway Atoll National Wildlife Refuge
Client: US Fish and Wildlife Service

Weather: Cloudy, wind 10 mph, Temperature ~74F

Personnel:

Name	Company	Site Hours
Scott Wakefield	NWDE Field Oversight	10
Everett White	NWDE Supervisor	10
Ruth Inmon	NWDE Operator	10
Joel Smith	NWDE Operator	10
Dalton Sullivan	NWDE Labor	10
Antonio Davis	NWDE Labor	10

Visitors/Additional Site Personnel:

Name	Title
MaryAnn Amann	U.S. FWS

Equipment:

Description	Model No.	Comments / Serial #
Pickup Truck	F350 Service Truck	NWDE
Flatbed Truck	Ford F450	NWDE
Container Truck	Peterbuilt	NWDE
Skid Steer	Bobcat S185	NWDE
Tracked Skid Steer	Bobcat T750	NWDE
Mini-Excavator	CAT 308	NWDE
Excavator	Volvo EC290BLC	NWDE
Excavator	Volvo EC290BLC	NWDE
Off road Dump Truck	Volvo A30D	NWDE
Off road Dump Truck	Volvo A30D	NWDE

Materials Delivered:

Description	QTY	Condition/Comments
Diesel	0 gallons	
Gasoline	0 gallons	

Description of Work:

0700 – Health and Safety meeting at NAF staging area. Review today's work tasks.

NWDE is headed to the R2, Cell 4 to remove more sand bags in the cooler weather of the morning. The black sand bags are collected and hand stacked onto pallets. Pallets and some shade cloth sections are moved to the active Water Tower 5304 and placed to increase the square footage of ground cover at the south side of the tower and proposed work area once the tower is brought down this season.

Inspecting the DU-7 areas that have previously placed shade cloth at select building perimeters 3502 Navy Dining Hall, 3503 Barracks and 3504 Barracks. NWDE will begin the 0.5' soil excavation of this area today. The sand bags have been removed earlier this season and used to anchor shade cloth at the active Water Tower 5304 prep area.

0930 – The NWDE crew is wrapping up this morning's additional shade cloth placement at the Water Tower 5304. Begin getting equipment mobilized to DU-7, including the Cat 308 mini excavator and one Volvo A-30 off road truck.

Clear the access path at the east side of Bldg 3503 headed north parallel to the structure. Inspect old burrows for birds prior to tracking the excavator and haul truck in towards Bldg 310.

Beginning at the foundation of Bldg 3503 near Bldg 310, fold up the grown in shade cloth with the excavator and continue in sections working south. The soil under the shade cloth is excavated and direct loaded into the haul truck. From the vertical foundation wall soil is removed at a minimum 0.5' depth. Soil will be transported to the R2, Cell 2 and treated with Maectite within the R2.

1200 – Lunch

1230 – Continue shallow excavation work at Bldg 3503 foundation perimeter on the east side.

At DU-8, marking out the proposed plot limits of S-28 to perform a second excavation this season for S-28 and S-30. These work areas were originally scraped in 2015 after the AST demolition, MIS sampled and backfilled. To achieve a successful confirmation sampling <75mg/kg, the plots for both S-28 and S-30 will have the 1.0' backfilled coral sand removed, excavate an additional 0.5' and then collect confirmation sampling in smaller plots. The bottom of excavation sample results will be processed prior to backfilling this season.

Inspect fire hydrants #59 and #60 that are at the sea wall for access. These will be included in this season's excavation of the fire hydrant soil abatement.

1600 – At Bldg 3503 Barracks the east side excavation is progressing the length of the building, nearing the south end. Digging continues to make the corner and work the south edge.

Soil loads moved from DU-7 today are 3 truck loads.

1530 – End of work day.

Photographs:

Photo 01: Bldg 3503– View north. Accessing the excavation area east of the barracks

Photo 02: Bldg 3503 – View south. Shade cloth removal and excavation to 0.5'

Photo 03: Bldg 3503 – View north. Progress of shade cloth removal and excavation

Photo 04: S-28 – View east. Plot excavation area for 2017 excavation to achieve confirmation sampling

NW Demolition and Environmental
A Joint Venture

Daily Field Report

Date: Tuesday, August 1, 2017
Prepared by: Scott Wakefield

Project: Removal of Lead-Based Paint from Structures and Lead-Contaminated Soil
Location: Midway Atoll National Wildlife Refuge
Client: US Fish and Wildlife Service

Weather: Cloudy, wind 10 mph, Temperature ~74F, light morning rain

Personnel:

Name	Company	Site Hours
Scott Wakefield	NWDE Field Oversight	10
Everett White	NWDE Supervisor	10
Ruth Inmon	NWDE Operator	10
Joel Smith	NWDE Operator	10
Dalton Sullivan	NWDE Labor	10
Antonio Davis	NWDE Labor	10

Visitors/Additional Site Personnel:

Name	Title
MaryAnn Amann	U.S. FWS

Equipment:

Description	Model No.	Comments / Serial #
Pickup Truck	F350 Service Truck	NWDE
Flatbed Truck	Ford F450	NWDE
Container Truck	Peterbuilt	NWDE
Skid Steer	Bobcat S185	NWDE
Tracked Skid Steer	Bobcat T750	NWDE
Mini-Excavator	CAT 308	NWDE
Excavator	Volvo EC290BLC	NWDE
Excavator	Volvo EC290BLC	NWDE
Off road Dump Truck	Volvo A30D	NWDE
Off road Dump Truck	Volvo A30D	NWDE

Materials Delivered:

Description	QTY	Condition/Comments
Diesel	0 gallons	
Gasoline	0 gallons	

Description of Work:

0700 – Health and Safety meeting at NAF staging area. Review today's work tasks.

NWDE crew is resuming the shallow 0.5' excavation work at Bldg 3503 Barracks. Through the morning the south end of the building is completed. The west access area is cleared of abandon ground burrows. Machines are then moved to the northeast corner of the barracks. The narrow area between Bldg 310 and Bldg 3503 is excavated, wrapping around the north end of Bldg 3503.

0930 – Excavated soil from the DU-7 area continues being hauled into the R2, Cell 1 where it will be treated with Maectite.

1000 - Weekly conference call with Mainland and Hawaii project offices. See NWDE Midway Meeting Agenda for specific detail.

1115 – At Bldg 3503 NWDE progresses the shallow excavation along the foundation's west side, working from north to south and direct loading into the A30 off road truck with the mini excavator.

1200 – Lunch

1230 – Continue shallow excavation work at Bldg 3503 foundation perimeter on the east side.

Arrange with DBSI for additional utility locates at the next two buildings in line, Bldg 3502 Navy Dining Hall and 3504 Barracks. Active utilities do not feed these abandon structures but primary power, fiber optic, 6" HDPE water main and coax do pass through the upcoming work areas.

1400 – At S-30, former JP-5 AST in the Fuel Farm, continue marking out the DU-8 excavation area. The plot previously excavated and backfilled will have the 1.0' coral backfill removed prior to continuing an additional 0.5' excavation depth, followed with confirmation sampling. Lab data will be returned and evaluated prior to backfilling the S-30 area. As will S-28 as previously described yesterday.

1500 – The mini excavator in use at Bldg 3503 has developed a hydraulic leak on the electric over hydraulic valve body control unit. The minimal volume of oil is contained, not being released to the environment. NWDE is troubleshooting the problem.

1615 – NWDE advises that the Cat 308 mini excavator has a mechanical breakdown that is currently halting the shallow excavation work at DU-7. Currently the excavator is being assessed for repair and parts requirement. Bldg 3503 excavation is approximately 70% complete, with Bldg 3502 and 3504 yet to do.

With the mini excavator off line, the excavation crew is mobilizing one Volvo 290 excavator and the tracked Bobcat skidsteer from the NAF staging area out to DU-8. The plan is to begin excavating the S-28 area to remove the clean backfill in preparation for the additional 0.5' soil removal. Following the additional native soil excavation, confirmation sampling in multiple plots will be collected for lab analysis prior to backfilling.

Soil loads moved from DU-7 to the R2 today are 4.5 truck loads.

1530 – End of work day.

Photographs:

Photo 01: Bldg 3503– View south. Progress of excavation at northwest corner

Photo 02: R2 Cell 1 – View southwest. Stockpiling DU-7 soil that will be treated with Maectite

Photo 03: Bldg 3503 – View northeast. 70% progress of shade cloth removal and excavation

Photo 04: S-30 – View north. Plot excavation area for 2017 excavation to achieve confirmation sampling

NW Demolition and Environmental
A Joint Venture

Daily Field Report

Date: Wednesday, August 2, 2017
Prepared by: Scott Wakefield

Project: Removal of Lead-Based Paint from Structures and Lead-Contaminated Soil
Location: Midway Atoll National Wildlife Refuge
Client: US Fish and Wildlife Service

Weather: Partly cloudy, wind 10 mph, Temperature ~77F

Personnel:

Name	Company	Site Hours
Scott Wakefield	NWDE Field Oversight	10
Everett White	NWDE Supervisor	10
Ruth Inmon	NWDE Operator	10
Joel Smith	NWDE Operator	10
Dalton Sullivan	NWDE Labor	10
Antonio Davis	NWDE Labor	10

Visitors/Additional Site Personnel:

Name	Title
MaryAnn Amann	U.S. FWS

Equipment:

Description	Model No.	Comments / Serial #
Pickup Truck	F350 Service Truck	NWDE
Flatbed Truck	Ford F450	NWDE
Container Truck	Peterbuilt	NWDE
Skid Steer	Bobcat S185	NWDE
Tracked Skid Steer	Bobcat T750	NWDE
Mini-Excavator	CAT 308	NWDE
Excavator	Volvo EC290BLC	NWDE
Excavator	Volvo EC290BLC	NWDE
Off road Dump Truck	Volvo A30D	NWDE
Off road Dump Truck	Volvo A30D	NWDE

Materials Delivered:

Description	QTY	Condition/Comments
Diesel	0 gallons	
Gasoline	0 gallons	

Description of Work:

0700 – Health and Safety meeting at NAF staging area. Review today's work tasks.

Northwest crew is heading to DU-8 to begin the second round of excavation at S-28. Check the access and work area abandon burrows in and around the excavation plot. Review the layout with team for removing the top backfill coral lift and stockpile this clean material at the edge of the excavation area. Reference the areas that have DU-8 liner in the excavation plot.

Begin excavating with the 290 Volvo the S-28 P2 plot at the AST foundation's east side, 1' deep. Material is direct loaded into the haul truck, to be placed at the R2 Cell 1 with the DU-7 stockpiles for treatment using Maectite™.

0900 – The tracked Bobcat skidsteer has been moving clean coral sand to stockpile at the edge of excavation plot on S-28. Continue working across the area to remove the majority of backfill sand. The 290 excavator is joining in to move sand backfill off the S-28 plot and stockpile at the edge.

1100 - Through the morning the S-28 sand backfill over the MIS plot is removed and stockpiled.

1200 – Lunch

1230 – Wrapping up removal of the S-28 backfill sand, having progressed from east to west up to the access road.

1300 – Mobilize the skidsteer and 290 excavator to S-30. The task of removing the clean sand backfill will be repeated to access the S-30 MIS plot for a second excavation depth of 0.5'.

Two small plots are prepped for excavation, S-30 P10 and S-30 P5. Materials are removed to 1' bgs, direct loaded into the haul truck and placed in the R2 Cell 1 for upcoming treatment alongside DU-7 staged soil.

The tracked skidsteer is working the northwest side of the AST plot to remove clean sand backfill and stockpile at the edge of the re-excavation plot. Northeast of the S-30 AST, the 290 excavator removes sand backfill, stockpiling it at the edge of the work plot. Throughout the afternoon the machines continue removing sand while spotters provide oversight for digging tasks and wildlife protection.

1715 – The afternoon ends with partial progress of removing the S-30 sand backfill. Tomorrow will continue and finish out the backfill removal.
Soil loads moved from DU-8 to the R2 today are 2 truck loads.

The mini excavator has been repaired to allow operation of the machine. Anticipate resuming the DU-7 shallow excavation work this week.

1730 – End of work day.

Photographs:

Photo 01: S-28 – View northwest. Excavating S-28 P2 soil plot

Photo 02: S-28 – View east. Remove and stockpile sand backfill from the area to be re-excavated

Photo 03: S-28 – View north. Sand backfill removed and stockpiled at edge of the plot to be re-excavated

Photo 04: S-30 – View east. Remove and stockpile sand backfill from the area to be re-excavated

NW Demolition and Environmental
A Joint Venture

Daily Field Report

Date: Thursday, August 3, 2017
Prepared by: Scott Wakefield

Project: Removal of Lead-Based Paint from Structures and Lead-Contaminated Soil
Location: Midway Atoll National Wildlife Refuge
Client: US Fish and Wildlife Service

Weather: Partly cloudy, wind 8 mph, Temperature ~76F, morning rain

Personnel:

Name	Company	Site Hours
Scott Wakefield	NWDE Field Oversight	10
Everett White	NWDE Supervisor	10
Ruth Inmon	NWDE Operator	10
Joel Smith	NWDE Operator	10
Dalton Sullivan	NWDE Labor	10
Antonio Davis	NWDE Labor	10

Visitors/Additional Site Personnel:

Name	Title
MaryAnn Amann	U.S. FWS

Equipment:

Description	Model No.	Comments / Serial #
Pickup Truck	F350 Service Truck	NWDE
Flatbed Truck	Ford F450	NWDE
Container Truck	Peterbuilt	NWDE
Skid Steer	Bobcat S185	NWDE
Tracked Skid Steer	Bobcat T750	NWDE
Mini-Excavator	CAT 308	NWDE
Excavator	Volvo EC290BLC	NWDE
Excavator	Volvo EC290BLC	NWDE
Off road Dump Truck	Volvo A30D	NWDE
Off road Dump Truck	Volvo A30D	NWDE

Materials Delivered:

Description	QTY	Condition/Comments
Diesel	0 gallons	
Gasoline	0 gallons	

Description of Work:

0700 – Health and Safety meeting at NAF staging area. Review today's work tasks.

NWDE is resuming work at S-30 this morning to remove the sand backfill from the work area surrounding the former AST foundation. The coral sand continues being stockpiled at the edge of the planned excavation. Both the Bobcat skidsteer and 290 excavator are in use.

1000 – At DU-8, S-30 backfill material continues being removed from the work area.
At DU-9 sites, flag trees that are within the excavation areas for removal prior to excavating. These sites are; Bldg 144, two ironwoods. R3 WTS four palms, one ironwood, two palm stumps. Bldg 521, one ironwood. Bldg 5304 Water Tower, nine ironwood trees.

1100 – At S-30, NWDE is finishing up the work task for removing the clean backfill lift from the proposed re-excavation plot. Mobilize to the DU-7 work area to resume shallow excavation around the perimeter of Bldg 3503 Barracks. The mini excavator repair allows use of the machine to continue the tight quarters work.

1200 – Lunch

1230 – Continue DU-7 excavation work at Bldg 3503, west side approximately 75% progress for the perimeter of the foundation. Materials are being direct loaded into the A30 truck and placed at the R2 Cell 1 for upcoming treatment using Maectite™.
DU-9 layout of this season's excavation plots continues including Bldgs 1124, 1126, Boat House #1, Boat House #2,

1530 – The shallow perimeter soil removal at Bldg 3503 Barracks is complete. Pending backfill. The machines are being cleaned and moved to DU-7 Bldg 3504 at the west side. Hand pothole the existing in use utility run for burial depth. This informs what access route is available for the haul truck. Inspection of ground burrows and bushes for seabirds prior to access. Begin the shallow excavation in the area previously covered with shade cloth. The lineal feet of dig plot for this building is approximately 120' for the southwest side and southern end.

Soil loads moved from DU-7 to the R2 today are 3 truck loads.

1730 – End of work day.

Photographs:

Photo 01: Bldg 3503 – View southeast. Progress of 0.5' excavation along foundation

Photo 02: S-30 – View northwest. Remove and stockpile sand backfill from the area to be re-excavated

Photo 03: S-30 – View north. Sand backfill removed and stockpiled at edge of the plot to be re-excavated

Photo 04: Bldg 3504 – View northwest. Progress of 0.5' excavation along foundation

NW Demolition and Environmental
A Joint Venture

Daily Field Report

Date: Friday, August 4, 2017
Prepared by: Scott Wakefield

Project: Removal of Lead-Based Paint from Structures and Lead-Contaminated Soil
Location: Midway Atoll National Wildlife Refuge
Client: US Fish and Wildlife Service

Weather: Scattered clouds, wind 8 mph, Temperature ~76F

Personnel:

Name	Company	Site Hours
Scott Wakefield	NWDE Field Oversight	10
Everett White	NWDE Supervisor	10
Ruth Inmon	NWDE Operator	0
Joel Smith	NWDE Operator	10
Dalton Sullivan	NWDE Labor	10
Antonio Davis	NWDE Labor	10

Visitors/Additional Site Personnel:

Name	Title
MaryAnn Amann	U.S. FWS

Equipment:

Description	Model No.	Comments / Serial #
Pickup Truck	F350 Service Truck	NWDE
Flatbed Truck	Ford F450	NWDE
Container Truck	Peterbuilt	NWDE
Skid Steer	Bobcat S185	NWDE
Tracked Skid Steer	Bobcat T750	NWDE
Mini-Excavator	CAT 308	NWDE
Excavator	Volvo EC290BLC	NWDE
Excavator	Volvo EC290BLC	NWDE
Off road Dump Truck	Volvo A30D	NWDE
Off road Dump Truck	Volvo A30D	NWDE

Materials Delivered:

Description	QTY	Condition/Comments
Diesel	0 gallons	
Gasoline	0 gallons	

Description of Work:

0700 – Health and Safety meeting at NAF staging area. Review today's work tasks.

NWDE continues work at DU-7, Bldg 3504 Barracks at the southwest foundation area. Soil is direct loaded into the A30 off road truck and placed at the R2 Cell 1 in the staged treatment area.

0930 – The shade cloth covered area at Bldg 3504 Barracks has been completed to the 0.5' excavation depth. Pending backfill. The machines are cleaned and mobilized to Bldg 3502 Navy Dining Hall.

At the northwest area of the Navy Dining Hall near the former Steam Bldg 3524, NWDE is checking abandon ground burrows for access to the work area and shade cloth portions to begin the shallow excavation. Begin in the narrow alcove of the Navy Dining Hall's mechanical rooms to remove the shade cloth and soil. Materials are loaded and placed at the R2 Cell 1 for upcoming batch treatment of DU-7 soils.

M.Amann and K.Goodale, US FWS are discussing the two water tower excavation plots 5304 and 5305. The planning is for US FWS volunteers to assist by checking ground burrows for shearwater sea birds and defining the location of potential ground nesting birds in the area. The volunteer group will be working on this area today and early next week.

1000 – Stake out the excavation plot of the Navy removed Water Tower 5305.
DU-7 shallow soil excavation work is progressing at the Navy Dining Hall 3502 alcove area.

1200 - Lunch

1230 – Continuing the DU-7 excavation work on the west side of the mechanical room of Bldg 5302 Navy Dining Hall. The abandon building utilities and pipes are worked around as the 0.5' depth excavation is collected and placed in the Volvo A30.

1300 – US FWS volunteers are working the in use Water Tower 5304 soil plot for active burrows.

Marking out the small soil plots at Bldg 4210 Duplex Housing. The Figure P22 sample plot 4210-01 3' depth dig is located on the east building side. The sample plot 4210-03 1' dig is located at the centerline of the building, 8' north of the eve line.

1430 – At Bldg 3502 Navy Dining Hall the crew is progressing to collect the shallow excavation plot. Hand shoveling assists up tight to the footing, typical of the process to remove the 0.5' soil cut.

1645 – Soil continues to be hauled to the R2 Cell 1 and staged for future treatment this season with Maectite™ within Cell 1.

1700 – The west side plot of 5202 is complete pending backfill. Move the equipment to the east side nearest the former Bldg 3529 New Midway Laundry. Work will resume tomorrow to finish DU-7 shade cloth plots at select foundation areas.
Soil loads moved from DU-7 to the R2 today are 4 truck loads.

1730 – End of work day.

Photographs:

Photo 01: Bldg 3504 Barracks – View north. Progress of 0.5' excavation along foundation

Photo 02: Bldg 3502 Navy Dining Hall – View east. Progress of 0.5' excavation along foundation

Photo 03: Bldg 3502 Navy Dining Hall – View north. Progress of 0.5' excavation along foundation

Photo 04: Bldg 3502 Navy Dining Hall – View east. Progress of 0.5' excavation along foundation

NW Demolition and Environmental
A Joint Venture

Daily Field Report

Date: Saturday, August 5, 2017
Prepared by: Scott Wakefield

Project: Removal of Lead-Based Paint from Structures and Lead-Contaminated Soil
Location: Midway Atoll National Wildlife Refuge
Client: US Fish and Wildlife Service

Weather: Sunny, wind 10 mph, Temperature ~79F

Personnel:

Name	Company	Site Hours
Scott Wakefield	NWDE Field Oversight	10
Everett White	NWDE Supervisor	10
Ruth Inmon	NWDE Operator	Off-island
Joel Smith	NWDE Operator	10
Dalton Sullivan	NWDE Labor	10
Antonio Davis	NWDE Labor	10

Visitors/Additional Site Personnel:

Name	Title
MaryAnn Amann	U.S. FWS

Equipment:

Description	Model No.	Comments / Serial #
Pickup Truck	F350 Service Truck	NWDE
Flatbed Truck	Ford F450	NWDE
Container Truck	Peterbuilt	NWDE
Skid Steer	Bobcat S185	NWDE
Tracked Skid Steer	Bobcat T750	NWDE
Mini-Excavator	CAT 308	NWDE
Excavator	Volvo EC290BLC	NWDE
Excavator	Volvo EC290BLC	NWDE
Off road Dump Truck	Volvo A30D	NWDE
Off road Dump Truck	Volvo A30D	NWDE

Materials Delivered:

Description	QTY	Condition/Comments
Diesel	90 gallons	
Gasoline	0 gallons	

Description of Work:

0700 – Health and Safety meeting at NAF staging area. Review today's work tasks.

NWDE continues work at DU-7, Bldg 3502 Navy Dining Hall at the northeast foundation area, 0.5" shallow excavation. Soil is direct loaded into the A30 off road truck and placed at the R2 Cell 1 in the staged treatment area.

Mark out DU-9 plot for former Bldg 3529 New Midway Laundry. This abuts the current DU-7 shallow excavation and will be next in line for treatment and excavation.

1015 – The DU-7 shallow excavation at the Navy Dining Hall northwest side is progressing to join up to the New Midway Laundry area. The Volvo A30 is hauling DU-7 soil to the R2 Cell 1 for staging and pending treatment in the R2.

1130 – DU-7 shallow excavation work is wrapping up around Bldg 3502 Navy Dining Hall. Begin preparations to start the DU-9 Maectite® treatment of Bldg 3529 New Midway Laundry.

1200 - Lunch

1230 – The Maectite® application equipment is being set up. This includes the support truck loaded with a chemical tote, compressor, pump and hoses that are used for applying the specific calculated volume of Maectite® to the measured soil plots. The reagent is applied at .75 gallons per cubic yard, amended with fire hydrant water and mixed to a uniform consistency. These methods of treating the soil and application are per the chemical manufacturer Sevenson, MANWR Stabilization Plan August 2013. This is the same reagent and application methods approved within the Removal Action Work Plan for prior seasons Decision Unit soil treatment.

NWDE applies and mixes the southern plot at former Bldg 3529 New Midway Laundry. The mini excavator with 5' flat edge bucket is mixing the Maectite® and hydrant water with the soil to the target 1' lift.

1500 – Treated soil at Bldg 3529 is being loaded out into the off-road haul truck and moved to the R2.

1715 – Picking up onsite and the last load of the day has been placed in the R2.
Soil loads moved from DU-7 to the R2 today are 2 truck loads.
Treated soil loads from DU-9 to the R2 today are 2 truck loads.

1730 – End of work day.

Photographs:

Photo 01: Bldg 3502 Navy Dining Hall – View northwest. Progress of 0.5' excavation along foundation

Photo 02: Bldg 3529 New Midway Laundry – View southwest. Mixing soil with reagent and water

Photo 03: Bldg 3529 New Midway Laundry – View northwest. Excavating treated DU-9 soil plot

Photo 04: Bldg 3529 New Midway Laundry – View southwest. Excavating treated DU-9 soil plot

Table 1. Maectite and Treated Soil Total Estimates

	Maectite Totals						Treated Soil Totals[1,2]		
	Applied Today (gal)					Total to Date	Excavated and Hauled to R-2 Unit **Today**		Excavated and Hauled to R-2 Unit **Total to Date**
Date	Soils (DU9)	Soils (DU8)	Soils (DU7)	Soils (DU5)	Soils (DU3)	(gal)	Load	^{3}yds[1]	^{3}yds[1]
07/31/17	0	0	0	0	0	0	0	0	0
08/01/17	0	0	0	0	0	0	0	0	0
08/02/17	0	0	0	0	0	0	0	0	0
08/03/17	0	0	0	0	0	0	0	0	0
08/04/17	0	0	0	0	0	0	0	0	0
08/05/17	26	0	0	0	0	26	2	35.5	35.5
Total to Date	26 gallons	0 gallons	0 gallons	0 gallons	0 gallons		2 loads		

Notes: 1. Estimates are based on the number of gallons of Maectite® applied.
2. Soil treatment with Maectite® and hauling to R2 may not occur on the same day.

2017 DU 9 – Figures P 1-16, 18, 20, 21, 23-27.
Bldg 1124, 1126, 3521, S361, 347, 3501, S3126, S3127, 521, 520, 502, 5342, 309, 340, 354, 9149, 232, 233, S269, S225A, 2127, 144, Boat House 1 & 2, 4205, 4206, 4207, 4213, 503, 5303, 5341, 5339, 5338, Bollards, Fire Hydrants, 5304, 5305, 4210, 3524, 3529, 5126, 5378, 3514, Fire Hydrants and other ancillary structures. Foundations S464, 502, 4201, 5126, 5295, 5342.
2017 DU 8 – S-28, S-30 re-ex, Pipe figure P19
2017 DU 7 – Bldg 3502, 3503, 3504 shade cloth
2017 DU 5 – R2 Unit, Figure P17
2017 DU 3 – Housing figure P22, 419 MIS re-ex

Table 2. Soil loads hauled to the R2 for ex situ Maectite® treatment

	Load Totals				
	Hauled to R2 for treatment in R2 cell (# of truck loads)				
Date	Soils (DU9)	Soils (DU8)	Soils (DU7)	Soils (DU5)	Soils (DU3)
07/31/17	0	0	3	0	0
08/01/17	0	0	4.5	0	0
08/02/17	0	2	0	0	0
08/03/17	0	0	3	0	0
08/04/17	0	0	4	0	0
08/05/17	0	0	2	0	0
Total to Date	0 loads	2 loads	16.5 loads	0 loads	0 loads

Table 3. Weekly Load Estimates

Date	Treated Demo Debris Loads to R2	Clean Concrete Loads to Crusher	Metal Debris Loads	Clean Wood Loads	~	~
07/31/17	0	0	0	0		
08/01/17	0	0	0	0		
08/02/17	0	0	0	0		
08/03/17	0	0	0	0		
08/04/17	0	0	0	0		
08/05/17	0	0	0	0		
Season Total	0 loads	0 loads	0 loads	0 loads		

NW Demolition and Environmental
A Joint Venture

Daily Field Report

Date: Monday, August 7, 2017
Prepared by: Scott Wakefield

Project: Removal of Lead-Based Paint from Structures and Lead-Contaminated Soil
Location: Midway Atoll National Wildlife Refuge
Client: US Fish and Wildlife Service

Weather: Sunny, wind 7 mph, Temperature ~82F

Personnel:

Name	Company	Site Hours
Scott Wakefield	NWDE Field Oversight	10
Everett White	NWDE Supervisor	10
Joel Smith	NWDE Operator	10
Dalton Sullivan	NWDE Labor	10
Antonio Davis	NWDE Labor	10

Visitors/Additional Site Personnel:

Name	Title
MaryAnn Amann	U.S. FWS

Equipment:

Description	Model No.	Comments / Serial #
Pickup Truck	F350 Service Truck	NWDE
Flatbed Truck	Ford F450	NWDE
Container Truck	Peterbuilt	NWDE
Skid Steer	Bobcat S185	NWDE
Tracked Skid Steer	Bobcat T750	NWDE
Mini-Excavator	CAT 308	NWDE
Excavator	Volvo EC290BLC	NWDE
Excavator	Volvo EC290BLC	NWDE
Off road Dump Truck	Volvo A30D	NWDE
Off road Dump Truck	Volvo A30D	NWDE

Materials Delivered:

Description	QTY	Condition/Comments
Diesel	0 gallons	
Gasoline	0 gallons	

Description of Work:

0700 – Health and Safety meeting at NAF staging area. Review today's work tasks.

NWDE continues work at DU-9, Bldg 3529 New Midway Laundry. The soil plots of Figure P24 ending work point last week are picked up to continue Maectite® application at the prescribed rate of .75 gal per cubic yard. The east side of the former Midway Laundry is being process this morning. The rotary laser level and grade stick continue being used for making elevation cuts through the grade.

1000 – Advancement for Bldg 3529 New Midway Laundry is progressing from south to north as the divided plots are applied and mixed with reagent. Treated soils are being hauled to the R2 Cell 4 near the center dividing wall of the R2. This lift of soil into the R2 is beginning to cap the top of the cast in place concrete divider wall between the north pair of Cells 1& 2 and the south pair of Cells 3&4.

1200 - Lunch

1230 – Work at the New Midway Laundry continues. With the south, east and west plots completed the former building foundation slab that was removed last year is having a 0.5' scape across the surface cut and loaded in to the off road A30 truck. This material is moved to the R2 and placed between Cell 2&4. Soil for this cut is not treated due to being under footprint of the former slab and simply verification of demo debris having been removed during last season's demo.

1400 – The Volvo A30 trips to the R2 continue to be escorted by the Kubota and worker for bird clearing of the road. The escort has lead every round trip this season. Currently the Laysan Albatross that have fledged or naturally deceased are decreasing significantly in the roadway haul route.

1600 – The north plot of Bldg 3529 New Midway Laundry is being applied with Maectite® and mechanically mixed to a uniform consistency, amended with hydrant water. This is followed with partial loading of the materials as grade is cut to 1.0' bgs.

1710 – Picking up onsite and the last load of the day has been placed in the R2.

Treated soil loads from DU-9 to the R2 today are 6 truck loads.
Non-treated soil loads from under former Bldg 3529 New Midway Laundry foundation slab is 3 loads being placed into the R2.

1730 – End of work day.

Photographs:

Photo 01: Bldg 3529 New Midway Laundry – Typical soil load escorted to the R2

Photo 02: Bldg 3529 New Midway Laundry – View west. Excavating treated soil into the A30 Volvo

Photo 03: Bldg 3529 New Midway Laundry – View north. Mechanical mixing of reagent in the north plot

Photo 04: R2 Cell 4 – View east. Placing treated soil in the repository

Table 1. Maectite and Treated Soil Total Estimates

	Maectite Totals						Treated Soil Totals[1,2]		
	Applied Today (gal)					Total to Date	Excavated and Hauled to R-2 Unit **Today**		Excavated and Hauled to R-2 Unit **Total to Date**
Date	Soils (DU9)	Soils (DU8)	Soils (DU7)	Soils (DU5)	Soils (DU3)	(gal)	Load	^{3}yds[1]	^{3}yds[1]
08/07/17	51	0	0	0	0	77	6	70	105.5
08/08/17									
08/09/17									
08/10/17									
08/11/17									
08/12/17									
Total to Date	77 gallons	0 gallons	0 gallons	0 gallons	0 gallons		8 loads		

Notes: 1. Estimates are based on the number of gallons of Maectite® applied.
2. Soil treatment with Maectite® and hauling to R2 may not occur on the same day.

2017 DU 9 – Figures P 1-16, 18, 20, 21, 23-27.
Bldg 1124, 1126, 3521, S361, 347, 3501, S3126, S3127, 521, 520, 502, 5342, 309, 340, 354, 9149, 232, 233, S269, S225A, 2127, 144, Boat House 1 & 2, 4205, 4206, 4207, 4213, 503, 5303, 5341, 5339, 5338, Bollards, Fire Hydrants, 5304, 5305, 4210, 3524, 3529, 5126, 5378, 3514, and other ancillary structures. Foundations S464, 502, 4201, 5126, 5295, 5342.
2017 DU 8 – S-28, S-30 re-ex, Pipe figure P19
2017 DU 7 – Bldg 3502, 3503, 3504 shade cloth
2017 DU 5 – R2 Unit, Figure P17
2017 DU 3 – Housing figure P22, 419 MIS re-ex

Table 2. Soil loads hauled to the R2 for ex situ Maectite® treatment

	Load Totals				
	Hauled to R2 for treatment in R2 cell (# of truck loads)				
Date	Soils (DU9)	Soils (DU8)	Soils (DU7)	Soils (DU5)	Soils (DU3)
08/07/17	0	0	0	0	0
08/08/17					
08/09/17					
08/10/17					
08/11/17					
08/12/17					
Total to Date	0 loads	2 loads	16.5 loads	0 loads	0 loads

Table 2.1 Soil loads hauled to the R2, non-treated internment

Date	Load Totals				
	Hauled to R2, non-treated soil (# of truck loads)				
	Soils (DU9)	Soils (DU8)	Soils (DU7)	Soils (DU5)	Soils (DU3)
08/07/17	3	0	0	0	0
08/08/17					
08/09/17					
08/10/17					
08/11/17					
08/12/17					
Total to Date	3 loads	0 loads	0 loads	0 loads	0 loads

Table 3. Weekly Load Estimates

Date	Treated Demo Debris Loads to R2	Clean Concrete Loads to Crusher	Metal Debris Loads	Clean Wood Loads	~	~
08/07/17	0	0	0	0		
08/08/17						
08/09/17						
08/10/17						
08/11/17						
08/12/17						
Season Total	0 loads	0 loads	0 loads	0 loads		

NW Demolition and Environmental
A Joint Venture

Daily Field Report

Date: Tuesday, August 8, 2017
Prepared by: Scott Wakefield

Project: Removal of Lead-Based Paint from Structures and Lead-Contaminated Soil
Location: Midway Atoll National Wildlife Refuge
Client: US Fish and Wildlife Service

Weather: Sunny, wind 7 mph, Temperature ~82F

Personnel:

Name	Company	Site Hours
Scott Wakefield	NWDE Field Oversight	10
Everett White	NWDE Supervisor	10
Jeff James	NWDE Supervisor	10
Darin Leibelt	NWDE PM	10
Joel Smith	NWDE Operator	10
Dalton Sullivan	NWDE Labor	10
Antonio Davis	NWDE Labor	10
Jevon Stone	NWDE Operator	10
Jose Ordaz	NWDE Operator	10
Matt Manning	NWDE Operator	10
Chris Fisher	NWDE Labor	10
Gary Lewis	Iniki Supervisor	10
Philip Kneubuhl	Iniki Labor	10

Visitors/Additional Site Personnel:

Name	Title
MaryAnn Amann	U.S. FWS

Equipment:

Description	Model No.	Comments / Serial #
Pickup Truck	F350 Service Truck	NWDE
Flatbed Truck	Ford F450	NWDE
Container Truck	Peterbuilt	NWDE
Skid Steer	Bobcat S185	NWDE
Tracked Skid Steer	Bobcat T750	NWDE
Mini-Excavator	CAT 308	NWDE
Excavator	Volvo EC290BLC	NWDE
Excavator	Volvo EC290BLC	NWDE
Off road Dump Truck	Volvo A30D	NWDE
Off road Dump Truck	Volvo A30D	NWDE

Materials Delivered:

Description	QTY	Condition/Comments
Diesel	0 gallons	
Gasoline	0 gallons	

Description of Work:

0700 – Health and Safety meeting at NAF staging area. Review today's work tasks.

NWDE continues work at DU-9, Bldg 3529 New Midway Laundry. The northern plot treated yesterday afternoon at day's end is being loaded out into the off road truck destine for the R2.

1000 – The G4 charter flight touches down at PMDY bringing the remaining NWDE split work crew and two Iniki Demolition workers to join the 2017 work season.

1100 - Treated soil from the New Midway Laundry continues being loaded and placed at the R2 center dividing wall. The buggy escort leads every round trip load of the haul route.
Site specific health and safety presentation by S.Wakefield, NWDE for new team member arrivals.

1200 - Lunch

1230 – Bldg 3529 New Midway Laundry exit cleanup is finishing up as the 308 mini excavator pulls out of the plot work area.
New arrival NWDE and Iniki group is attending the US FWS cultural awareness orientation for Midway Atoll National Wildlife Refuge, Battle of Midway National Memorial within the Papahānaumokuākea Marine National Monument.

1315 – NWDE is setting up for beginning Maectite® application to former Bldg 3524 Steam plot per Figure P23. Reagent and hydrant water are applied based on the calculated volume of soil and processed into a homogenous mixture with the flat edged excavator bucket. Treated DU-9 soil is then direct loaded into the A30 truck and hauled to the R2.
At the R2 Unit (Bldg 5303 south exterior wall,) NWDE is moving clean coral sand in lifts with the tracked skidsteer. Material is taken from the east side stockpile of coral and moved along the south wall. This section of toe for the final R2 design parallels an existing transite water main noted in previous year's field notes with minimal cover. The water main is approximately 15' south of the R2 cast in place wall and working above the pipe while not negatively impacting it with equipment is a prime focus.

1545 – Soil work at the DU-9 former Bldg 3524 Steam is picking up and equipment decon'd. Prep to mobilize the crew and machinery to DU-3 Bldg 4210 Housing Duplex. Inspect and check abandon burrows leading into the east side of the in-use housing. The plots per Figure P22, east side 4210-01 and north side 4210-03 will be accessed with the mini excavator and haul truck.

1645 – The excavator is moved and traverses around the multi utilities of power, water and sewer east of Bldg 4210 Duplex Housing. Bring in supplies to fence off the excavation once complete to minimize bird interactions with the smaller footprint, 3' depth plot at the east side.

1710 – Picking up onsite.
Treated soil loads from DU-9 to the R2 today are 4 truck loads.
Ex-situ soil loads from DU-7 exit scrape of former Bldg 3529 New Midway Laundry is 2 loads being placed into the R2 for upcoming treatment.

1730 – End of work day.

Photographs:

Photo 01: Bldg 3529 New Midway Laundry – View west. Exit scrape to close out DU-7 area

Photo 02: Bldg 3524 Steam – View northwest. Maectite® application to soil plot

Photo 03: R2 Unit Bldg 5303 – View north. Treated DU-9 soil placement atop center CIP dividing wall

Photo 04: R2 Unit Bldg 5303 – View east. Moving in clean coral abutment to south exterior wall

Table 1. Maectite and Treated Soil Total Estimates

	Maectite Totals						Treated Soil Totals[1,2]		
	Applied Today (gal)					Total to Date	Excavated and Hauled to R-2 Unit **Today**		Excavated and Hauled to R-2 Unit **Total to Date**
Date	Soils (DU9)	Soils (DU8)	Soils (DU7)	Soils (DU5)	Soils (DU3)	(gal)	Load	^{3}yds[1]	^{3}yds[1]
08/07/17	51	0	0	0	0	77	6	70	105.5
08/08/17	35	0	0	0	0	112	4	48	153.5
08/09/17									
08/10/17									
08/11/17									
08/12/17									
Total to Date	112 gallons	0 gallons	0 gallons	0 gallons	0 gallons		12 loads		

Notes: 1. Estimates are based on the number of gallons of Maectite® applied.
2. Soil treatment with Maectite® and hauling to R2 may not occur on the same day.

2017 DU 9 – Figures P 1-16, 18, 20, 21, 23-27.
Bldg 1124, 1126, 3521, S361, 347, 3501, S3126, S3127, 521, 520, 502, 5342, 309, 340, 354, 9149, 232, 233, S269, S225A, 2127, 144, Boat House 1 & 2, 4205, 4206, 4207, 4213, 503, 5303, 5341, 5339, 5338, Bollards, Fire Hydrants, 5304, 5305, 4210, 3524, 3529, 5126, 5378, 3514, and other ancillary structures. Foundations S464, 502, 4201, 5126, 5295, 5342.
2017 DU 8 – S-28, S-30 re-ex, Pipe figure P19
2017 DU 7 – Bldg 3502, 3503, 3504 shade cloth
2017 DU 5 – R2 Unit, Figure P17
2017 DU 3 – Housing figure P22, 419 MIS re-ex

Table 2. Soil loads hauled to the R2 for ex situ Maectite® treatment

	Load Totals				
	Hauled to R2 for treatment in R2 cell (# of truck loads)				
Date	Soils (DU9)	Soils (DU8)	Soils (DU7)	Soils (DU5)	Soils (DU3)
08/07/17	0	0	0	0	0
08/08/17	0	0	2	0	0
08/09/17					
08/10/17					
08/11/17					
08/12/17					
Total to Date	0 loads	2 loads	18.5 loads	0 loads	0 loads

Table 2.1 Soil loads hauled to the R2, non-treated internment

Date	Load Totals				
	Hauled to R2, non-treated soil (# of truck loads)				
	Soils (DU9)	Soils (DU8)	Soils (DU7)	Soils (DU5)	Soils (DU3)
08/07/17	3	0	0	0	0
08/08/17	0	0	0	0	0
08/09/17					
08/10/17					
08/11/17					
08/12/17					
Total to Date	3 loads	0 loads	0 loads	0 loads	0 loads

Table 3. Weekly Load Estimates

Date	Treated Demo Debris Loads to R2	Clean Concrete Loads to Crusher	Metal Debris Loads	Clean Wood Loads	~	~
08/07/17	0	0	0	0		
08/08/17	0	0	0	0		
08/09/17						
08/10/17						
08/11/17						
08/12/17						
Season Total	0 loads	0 loads	0 loads	0 loads		

NW Demolition and Environmental
A Joint Venture

Daily Field Report

Date: Wednesday, August 9, 2017
Prepared by: Scott Wakefield

Project: Removal of Lead-Based Paint from Structures and Lead-Contaminated Soil
Location: Midway Atoll National Wildlife Refuge
Client: US Fish and Wildlife Service

Weather: Sunny, wind 8 mph, Temperature ~82F

Personnel:

Name	Company	Site Hours
Scott Wakefield	NWDE Field Oversight	10
Everett White	NWDE Supervisor	10
Jeff James	NWDE Supervisor	10
Darin Leibelt	NWDE PM	10
Joel Smith	NWDE Operator	10
Dalton Sullivan	NWDE Labor	10
Antonio Davis	NWDE Labor	10
Jevon Stone	NWDE Operator	10
Jose Ordaz	NWDE Operator	10
Matt Manning	NWDE Operator	10
Chris Fisher	NWDE Labor	10
Gary Lewis	Iniki Supervisor	10
Philip Kneubuhl	Iniki Labor	10

Visitors/Additional Site Personnel:

Name	Title
MaryAnn Amann	U.S. FWS

Equipment:

Description	Model No.	Comments / Serial #
Pickup Truck	F350 Service Truck	NWDE
Flatbed Truck	Ford F450	NWDE
Container Truck	Peterbuilt	NWDE
Skid Steer	Bobcat S185	NWDE
Tracked Skid Steer	Bobcat T750	NWDE
Mini-Excavator	CAT 308	NWDE
Excavator	Volvo EC290BLC	NWDE
Excavator	Volvo EC290BLC	NWDE
Off road Dump Truck	Volvo A30D	NWDE
Off road Dump Truck	Volvo A30D	NWDE

Materials Delivered:

Description	QTY	Condition/Comments
Diesel	71 gallons	
Gasoline	0 gallons	

Description of Work:

0700 – Health and Safety meeting at NAF staging area. Review today's work tasks.

At the R2 Unit (Bldg 5303 south exterior wall,) NWDE is continuing to move in even lifts of stockpiled borrow source coral sand while tracking over the length of the work area. This progression is building up the abutment area to shape up the south slope.

The NW excavation crew is at Bldg 4210 Housing. The access route and dig area abandon burrows are checked for bird activity. Inspect also for Laysan ducks in the work area. Begin excavating the soil plots of Figure P22. Materials are direct loaded into the haul truck and being placed at the R2 Cell 1 staging area for upcoming batch Maectite® treatment. The active below ground utilities at Bldg 4210 are carefully worked around to prevent damage while excavating and driving in the area.

0845 – Arrange utility locate with DBSI at Bldgs 3521 FWS, 3514 Security storage, 4213 Ave Maria.

0900 – NW has the Bldg 4210 east plot excavated, moving to the north plot of the in-use housing duplex.

0915 – Bldg 4210 soil removal is complete, pending confirmation sampling and future backfill. Mark off the deeper 3.0' plot with orange snow fence and T posts to keep birds out of the excavated area. The area will be checked routinely for bird entrapment hazards until backfilled.

0950 – The excavation crew has mobilized to the 419 MIS re-excavation area. This MIS confirmation plot is four sub plots within the 419 MIS collection of 32 points. One excavation is at Bldg 417, two excavations at Bldg 418 and one excavation at Bldg 419. Having been previously backfilled with clean coral sand, the overburden material is removed and stockpiled adjacent to each location. This is in preparation to cut an additional 0.5' depth for each original layout of DU-3, Figure 2, 11-Aug-2014.

1000 – On island project meeting with NWDE and US FWS M.Amann for progress, projections and timeline goals. Notations will be reflected in the meeting minutes update.
A notable detail discussion for the DU-9 ironwood and palm trees: R3 Water Treatment Plant Fig P5, Bldg 5304 Water Tower Fig P21 and Bldg 144 Sub Generator Fig P13. Trees at the Water Plant impacting existing in-use utilities, cast in place 500,000 gallon tanks and water mains are limited to be removed without negatively impacting the root entangled features. The proposal is to use the air knife / vac trailer for removal of potential LBP impacted soils from the base of the trees without compromising tree's integrity. Field inspection and adjustments will be made at the plots surrounding each of the trees. At Bldg 144, the two ironwood trees are on the skirt of the 45' buffer and slated to remain vs removal. Topsoil there would also be vac'd out as needed.

1200 – Lunch

1230 – 419 MIS re-ex areas continue having the clean backfill removed and stockpiled from each of the four sub plots.

NWDE is inspecting the R2 exterior southwest corner valve vault location. Planning is that the raising stem gate valves that previously tied the R1 mainline to the R2 cells will remain close and in place,

backfilled with abutment coral sand. Mainline isolation valves will have pvc valve can extensions elevated up to be accessible in the toe slope of the R2 final cover.

1500 – At 419 MIS re-ex, Bldg 419 sub plot is being cut the additional 0.5' to a 1.5' bgs elevation cut. Material is direct loaded and being placed in the R2 Cell 2. As directed by US FWS this material will be interned in placed and exclude direct Maectite® application.

1715 – Bldgs 417, 418 and 419 are lined up with orange snow fence at the excavation areas around patio access and roadways for pedestrian safety.

Treated soil loads from DU-9 to the R2 today are 0 truck loads.
Ex-situ soil loads from DU-9 Bldg 4210 is 2 loads for future treatment in the R2.
Soil loads from DU-9 sub plot Bldg 419 is 2 loads to be directly interred into the R2, sans treatment.

1730 – End of work day.

Photographs:

Photo 01: Bldg 4210 Housing – View southwest. DU-3 excavation of plot 4210 01

Photo 02: Bldg 4210 Housing – View southwest. DU-3 excavation of plot 4210 01

Photo 03: Bldg 417 – View southeast. Removal of coral backfill over sub plot of 419 MIS

Photo 04: Bldg 417 – View southeast. Removal of coral backfill over sub plot of 419 MIS

Photo 05: R2 Unit Bldg 5303 – View east. Moving in clean coral abutment to south exterior wall

Table 1. Maectite and Treated Soil Total Estimates

	Maectite Totals						Treated Soil Totals[1,2]		
	Applied Today (gal)					Total to Date	Excavated and Hauled to R-2 Unit **Today**		Excavated and Hauled to R-2 Unit **Total to Date**
Date	Soils (DU9)	Soils (DU8)	Soils (DU7)	Soils (DU5)	Soils (DU3)	(gal)	Load	^{3}yds[1]	^{3}yds[1]
08/07/17	51	0	0	0	0	77	6	70	105.5
08/08/17	35	0	0	0	0	112	4	48	153.5
08/09/17	0	0	0	0	0	112	0	0	153.5
08/10/17									
08/11/17									
08/12/17									
Total to Date	112 gallons	0 gallons	0 gallons	0 gallons	0 gallons		12 loads		

Notes: 1. Estimates are based on the number of gallons of Maectite® applied.
2. Soil treatment with Maectite® and hauling to R2 may not occur on the same day.

2017 DU 9 – Figures P 1-16, 18, 20, 21, 23-27.
Bldg 1124, 1126, 3521, S361, 347, 3501, S3126, S3127, 521, 520, 502, 5342, 309, 340, 354, 9149, 232, 233, S269, S225A, 2127, 144, Boat House 1 & 2, 4205, 4206, 4207, 4213, 503, 5303, 5341, 5339, 5338, Bollards, Fire Hydrants, 5304, 5305, 4210, 3524, 3529, 5126, 5378, 3514, and other ancillary structures. Foundations S464, 502, 4201, 5126, 5295, 5342.
2017 DU 8 – S-28, S-30 re-ex, Pipe figure P19
2017 DU 7 – Bldg 3502, 3503, 3504 shade cloth
2017 DU 5 – R2 Unit, Figure P17
2017 DU 3 – Housing figure P22, 419 MIS re-ex

Table 2. Soil loads hauled to the R2 for ex situ Maectite® treatment

	Load Totals				
	Hauled to R2 for treatment in R2 cell (# of truck loads)				
Date	Soils (DU9)	Soils (DU8)	Soils (DU7)	Soils (DU5)	Soils (DU3)
08/07/17	0	0	0	0	0
08/08/17	0	0	2	0	0
08/09/17	2	0	0	0	0
08/10/17					
08/11/17					
08/12/17					
Total to Date	2 loads	2 loads	18.5 loads	0 loads	0 loads

Table 2.1 Soil loads hauled to the R2, non-treated internment

Date	Load Totals				
	Hauled to R2, non-treated soil (# of truck loads)				
	Soils (DU9)	Soils (DU8)	Soils (DU7)	Soils (DU5)	Soils (DU3)
08/07/17	3	0	0	0	0
08/08/17	0	0	0	0	0
08/09/17	2	0	0	0	0
08/10/17					
08/11/17					
08/12/17					
Total to Date	5 loads	0 loads	0 loads	0 loads	0 loads

Table 3. Weekly Load Estimates

Date	Treated Demo Debris Loads to R2	Clean Concrete Loads to Crusher	Metal Debris Loads	Clean Wood Loads	~	~
08/07/17	0	0	0	0		
08/08/17	0	0	0	0		
08/09/17	0	0	0	0		
08/10/17						
08/11/17						
08/12/17						
Season Total	0 loads	0 loads	0 loads	0 loads		

NW Demolition and Environmental
A Joint Venture

Daily Field Report

Date: Thursday, August 10, 2017
Prepared by: Scott Wakefield

Project: Removal of Lead-Based Paint from Structures and Lead-Contaminated Soil
Location: Midway Atoll National Wildlife Refuge
Client: US Fish and Wildlife Service

Weather: Partly cloudy, wind 10 mph, Temperature ~81F

Personnel:

Name	Company	Site Hours
Scott Wakefield	NWDE Field Oversight	10
Everett White	NWDE Supervisor	10
Jeff James	NWDE Supervisor	10
Darin Leibelt	NWDE PM	10
Joel Smith	NWDE Operator	10
Dalton Sullivan	NWDE Labor	10
Antonio Davis	NWDE Labor	10
Jevon Stone	NWDE Operator	10
Jose Ordaz	NWDE Operator	10
Matt Manning	NWDE Operator	10
Chris Fisher	NWDE Labor	10
Gary Lewis	Iniki Supervisor	-
Philip Kneubuhl	Iniki Labor	-

Visitors/Additional Site Personnel:

Name	Title
MaryAnn Amann	U.S. FWS

Equipment:

Description	Model No.	Comments / Serial #
Pickup Truck	F350 Service Truck	NWDE
Flatbed Truck	Ford F450	NWDE
Container Truck	Peterbuilt	NWDE
Skid Steer	Bobcat S185	NWDE
Tracked Skid Steer	Bobcat T750	NWDE
Mini-Excavator	CAT 308	NWDE
Excavator	Volvo EC290BLC	NWDE
Excavator	Volvo EC290BLC	NWDE
Off road Dump Truck	Volvo A30D	NWDE
Off road Dump Truck	Volvo A30D	NWDE

Materials Delivered:

Description	QTY	Condition/Comments
Diesel	0 gallons	
Gasoline	0 gallons	

Description of Work:

0700 – Health and Safety meeting at NAF staging area. Review today's work tasks.

At the R2 Unit (Bldg 5303) NWDE is removing the remaining black sand bag anchors and smaller sections of available shade cloth from Cell 3. This clears the way for importing more DU-9 soil and use of the shade cloth around the active water tower 5304.

Note that the Bonin Petrels have begun returning to Midway Atoll this week. The ground nesting bird numbers will steadily increase and shade cloth prep limits access in the proposed work areas.

Iniki Enterprise is wrapping up this week's onsite activities of physically preparing their 20' shipping containers of collected abatement debris for the seven-season project. Nine 20' containers at an estimated combined weight of 84,000 lbs gross will be barged to PVT/Nanakuli Landfill in Waianae, HI later this season. Four 20' shipping containers containing equipment, tools and supplies will be barged to return to Iniki's yard in Honolulu, HI.

NWDE excavation crew resumes work at Bldg 418 Officers Housing. The additional 0.5' of cut is being made to the original 2.0' DU-3 dig, direct loaded and hauled to the R2 for immediate placement in Cell 4. The tracked skid steer is steadily moving materials in lifts over the flattened concrete demo rubble and working the Cell to a rough, flat grade.

0800 – Walking the in-use utility locates with DBSI at Bldgs 3521 FWS, 3514 Security storage, 4213 Ave Maria and active Water Tower 5304.

The 170' tall Water Tower 5304 is marked out to show that a described 16" transite pipe crosses perpendicular to the fall zone area 86' south of the stem center line, 66' south of the tower's southern support legs. DBSI water facilities indicates this Parade Field pipe section has been recently shut off at the vault appx 100' southeast of the tower. This east/west pipe orients towards the north end of Bldg 5306 NAF between valve #44 and #21.

1000 – NWDE has a small crew prepping 20' shipping containers that will be barged out this season. There are three anticipated barge loads departing Midway Atoll this season that NWDE will selectively stage and send containers out as logistics require.

1120 – 419 MIS sub plot 418 west side section excavation is wrapping up. This is the re-ex of an additional 0.5' in one of the four sub plots. Move over to the Bldg 418 east side section, plot 3 of 4.

1200 – Lunch

1230 – Crews resume working on respective tasks that started this morning.

Mark out plot for Navy removed former structure Bldg 4213 Ave Maria, Figure P15.

1400 – The held over Cinco Air charter flight is loaded up and departing Henderson Airfield. Iniki workers G.Lewis and P.Kneubuhl are departing. This closes out the on-island field work for Iniki Enterprise. Pending off site work will include the final disposal of waste at PVT/Nanakuli Landfill.

1500 – 419 MIS sub plot Bldg 417 re-ex is completed. The four plots will remain open pending confirmation sampling and lab results. The crew is picking up and setting orange snow fence at limits.

1515 – NWDE excavation crew is mobilizing to former Bldg 3514 Security Storage for DU-9 soil treatment. Maectite® is calculated and applied to the staked plot, mechanically mixed while amended with hydrant water. Treated soils are loaded into the A30 haul truck and moved to the R2, Cell 4.

1710 – Former Bldg 3514 excavation is complete, pending backfill.

Treated soil loads from DU-9 to the R2 today is 1 truck load.
Soil loads from DU-3 419 MIS re-ex is 7 loads to be directly interred into the R2, sans treatment.

1730 – End of work day.

Photographs:

Photo 01: Bldg 418 Housing – View west. Progress of DU-3 additional 0.5' re-excavation of 419 MIS

Photo 02: Bldg 418 Housing – View south. Progress of DU-3 additional 0.5' re-excavation of 419 MIS

Photo 03: R2 Cell 4 – View west. Rough grade lift of waste material in the repository

Photo 04: R2 Cell 3 – View east. Progress for removing sandbags and shade cloth

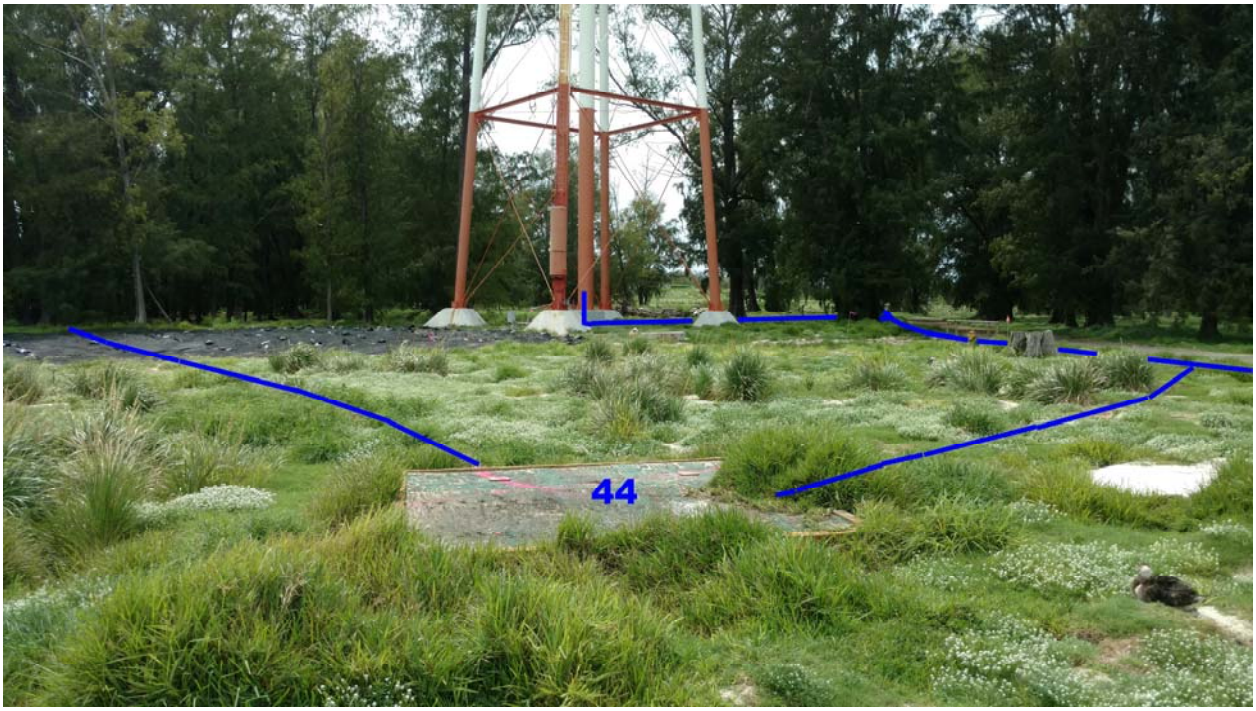


Photo 05: Active Water Tower 5304 – View northwest. Sketched image of expected 16” water mains

Table 1. Maectite and Treated Soil Total Estimates

	Maectite Totals						Treated Soil Totals[1,2]		
	Applied Today (gal)					Total to Date	Excavated and Hauled to R-2 Unit **Today**		Excavated and Hauled to R-2 Unit **Total to Date**
Date	Soils (DU9)	Soils (DU8)	Soils (DU7)	Soils (DU5)	Soils (DU3)	(gal)	Load	^{3}yds[1]	^{3}yds[1]
08/07/17	51	0	0	0	0	77	6	70	105.5
08/08/17	35	0	0	0	0	112	4	48	153.5
08/09/17	0	0	0	0	0	112	0	0	153.5
08/10/17	27	0	0	0	0	139	1	37	190.5
08/11/17									
08/12/17									
Total to Date	139 gallons	0 gallons	0 gallons	0 gallons	0 gallons		13 loads		

Notes: 1. Estimates are based on the number of gallons of Maectite® applied.
2. Soil treatment with Maectite® and hauling to R2 may not occur on the same day.

2017 DU 9 – Figures P 1-16, 18, 20, 21, 23-27.
Bldg 1124, 1126, 3521, S361, 347, 3501, S3126, S3127, 521, 520, 502, 5342, 309, 340, 354, 9149, 232, 233, S269, S225A, 2127, 144, Boat House 1 & 2, 4205, 4206, 4207, 4213, 503, 5303, 5341, 5339, 5338, Bollards, Fire Hydrants, 5304, 5305, 4210, 3524, 3529, 5126, 5378, 3514, and other ancillary structures. Foundations S464, 502, 4201, 5126, 5295, 5342.
2017 DU 8 – S-28, S-30 re-ex, Pipe figure P19
2017 DU 7 – Bldg 3502, 3503, 3504 shade cloth
2017 DU 5 – R2 Unit, Figure P17
2017 DU 3 – Housing figure P22, 419 MIS re-ex

Table 2. Soil loads hauled to the R2 for ex situ Maectite® treatment

	Load Totals				
	Hauled to R2 for treatment in R2 cell (# of truck loads)				
Date	Soils (DU9)	Soils (DU8)	Soils (DU7)	Soils (DU5)	Soils (DU3)
08/07/17	0	0	0	0	0
08/08/17	0	0	2	0	0
08/09/17	2	0	0	0	0
08/10/17	0	0	0	0	0
08/11/17					
08/12/17					
Total to Date	2 loads	2 loads	18.5 loads	0 loads	0 loads

Table 2.1 Soil loads hauled to the R2, non-treated internment

Date	Load Totals				
	Hauled to R2, non-treated soil (# of truck loads)				
	Soils (DU9)	Soils (DU8)	Soils (DU7)	Soils (DU5)	Soils (DU3)
08/07/17	3	0	0	0	0
08/08/17	0	0	0	0	0
08/09/17	0	0	0	0	2
08/10/17	0	0	0	0	7
08/11/17					
08/12/17					
Total to Date	3 loads	0 loads	0 loads	0 loads	9 loads

Correction to DFR 8/9/17
– DU-9 two loads is zero, DU-3 re-ex zero loads is two.

Table 3. Weekly Load Estimates

Date	Treated Demo Debris Loads to R2	Clean Concrete Loads to Crusher	Metal Debris Loads	Clean Wood Loads	~	~
08/07/17	0	0	0	0		
08/08/17	0	0	0	0		
08/09/17	0	0	0	0		
08/10/17	0	0	0	0		
08/11/17						
08/12/17						
Season Total	0 loads	0 loads	0 loads	0 loads		

NW Demolition and Environmental
A Joint Venture

Daily Field Report

Date: Friday, August 11, 2017
Prepared by: Scott Wakefield

Project: Removal of Lead-Based Paint from Structures and Lead-Contaminated Soil
Location: Midway Atoll National Wildlife Refuge
Client: US Fish and Wildlife Service

Weather: Partly cloudy, wind 10 mph, Temperature ~80F

Personnel:

Name	Company	Site Hours
Scott Wakefield	NWDE Field Oversight	10
Everett White	NWDE Supervisor	10
Jeff James	NWDE Supervisor	10
Darin Leibelt	NWDE PM	10
Joel Smith	NWDE Operator	10
Dalton Sullivan	NWDE Labor	10
Antonio Davis	NWDE Labor	10
Jevon Stone	NWDE Operator	10
Jose Ordaz	NWDE Operator	10
Matt Manning	NWDE Operator	10
Chris Fisher	NWDE Labor	10

Visitors/Additional Site Personnel:

Name	Title
MaryAnn Amann	U.S. FWS

Equipment:

Description	Model No.	Comments / Serial #
Pickup Truck	F350 Service Truck	NWDE
Flatbed Truck	Ford F450	NWDE
Container Truck	Peterbuilt	NWDE
Skid Steer	Bobcat S185	NWDE
Tracked Skid Steer	Bobcat T750	NWDE
Mini-Excavator	CAT 308	NWDE
Excavator	Volvo EC290BLC	NWDE
Excavator	Volvo EC290BLC	NWDE
Off road Dump Truck	Volvo A30D	NWDE
Off road Dump Truck	Volvo A30D	NWDE

Materials Delivered:

Description	QTY	Condition/Comments
Diesel	123 gallons	
Gasoline	0 gallons	

Description of Work:

0700 – Health and Safety meeting at NAF staging area. Review today's work tasks.

At the R2 Unit (Bldg 5303) NWDE will have two workers finish clearing out sand bags and shade cloth from the edge of the available cells. As the tracked skidsteer continues roughing soil in cell 4, the center CIP divider wall is staked out with T-Posts to mark the former roof pads and imbed bolt anchor hazards.

NWDE excavation crew is tracking from completed dig at Bldg 3514 to former Bldg 520 Fire Dept Storage. This will be a re-excavation to achieve confirmation sampling results. The backfilled clean coral sand is removed and stockpiled adjacent to the plot. Nearest the former building foundation, the plot is cut an additional 0.5' below last season's excavation depth. A portion of the 30' and 45' buffer zone encounters asphalt paving and is excavated to the hard surface. Materials excavated are direct loaded into the Volvo off road truck and placed in the R2 Cell 4, forming rough grade without treatment per the re-ex direction.

At the NAF Staging area NWDE 20' shipping containers continue being prepped for shipment off island. One task being worked on is loading a container with the DU-8 heavy mil poly liner from the Tank Farm AST work. The black liner will be disposed of off island.

1000 – Former Bldg 520 Fire Dept Storage re-ex is done, pending backfill.
At the NW corner of the NAF, Bldg 521 Comm Center is marked out for NWDE to move in and remove the pending soil plots. This DU-9 location is beyond the reach of a functioning fire hydrant to supply water for Maectite® application. The determination is to direct load and treat Bldg 521 soil in the R2.
The southern plot is removed to the 1' bgs depth, working up to the edge of the shoulder at the PMDY tarmac. Soil is hauled to the R2, Cell 1 and staged for upcoming Maectite® treatment.

1200 – Lunch

1230 – NWDE crew at the R2 is preparing to work on the vault at the southwest corner. The R2 water pump motors, steel support framework and covers are being removed. This opens access to the piping, valves and pumps. Steel removed is staged and will be moved to the recycle steel pile at the Boneyard apron.

At Bldg 521 excavation the access route is being checked for ground burrows and birds. Equipment is moving around to the smaller plots on Figure P6. Ultimately the work progresses to the largest plot at the northwest corner for the Communication Center. Three quarters of the area to excavate there is on a sloping grade to the south and will be cut at 1.0' deep with the Cat 308.

Verify upcoming list of plots to stake and perform a utility locate next week. This includes the more complex, active Water Plant Figure P5 features and Bldg 309 Gen plant Figure P10.

1600 – At the R2 valve vault, orange snow fence is placed around the area to limit albatross access and indicate the work zone of the concrete vault. The area is being picked up and equipment used to demo the framework mobilized out.

1710 – Excavation work at Bldg 521 has progressed in the NW corner plot. Appx 45% of the area to dig has been completed and moved to the R2 Cell 1.

Treated soil loads from DU-9 Bldg 3514 to the R2 today is 1 truck load.
Ex-situ soil loads from DU-9 Bldg 521 is 8 loads for future treatment in the R2.
Soil loads from DU-9 former Bldg 520 re-ex is 3 loads to be directly interred into the R2, sans treatment.

1730 – End of work day.

Photographs:

Photo 01: Bldg 520 Fire Dept Storage – View south. Progress of re-excavation

Photo 02: Bldg 520 Fire Dept Storage – View north. Progress of re-excavation, pending backfill

Photo 03: Bldg 521 Comm Center – View northwest. Excavation of southern area limits

Photo 04: Bldg 521 Comm Center – View west. Excavation of southern area limits

Photo 05: Bldg 521 Comm Center – View southeast. Progress of excavation

Photo 06: R2 Unit 5303 – View north. SW corner pump/valve vault demo progress

Photo 07: R2 Unit 5303 – View west. SW corner pump/valve vault demo progress

Table 1. Maectite and Treated Soil Total Estimates

	Maectite Totals						Treated Soil Totals[1,2]		
	Applied Today (gal)					Total to Date	Excavated and Hauled to R-2 Unit **Today**		Excavated and Hauled to R-2 Unit **Total to Date**
Date	Soils (DU9)	Soils (DU8)	Soils (DU7)	Soils (DU5)	Soils (DU3)	(gal)	Load	^{3}yds[1]	^{3}yds[1]
08/07/17	51	0	0	0	0	77	6	70	105.5
08/08/17	35	0	0	0	0	112	4	48	153.5
08/09/17	0	0	0	0	0	112	0	0	153.5
08/10/17	27	0	0	0	0	139	1	37	190.5
08/11/17	0	0	0	0	0	139	1	0	190.5
08/12/17									
Total to Date	139 gallons	0 gallons	0 gallons	0 gallons	0 gallons		14 loads		

Notes: 1. Estimates are based on the number of gallons of Maectite® applied.
2. Soil treatment with Maectite® and hauling to R2 may not occur on the same day.

2017 DU 9 – Figures P 1-16, 18, 20, 21, 23-27.
Bldg 1124, 1126, 3521, S361, 347, 3501, S3126, S3127, 521, 520, 502, 5342, 309, 340, 354, 9149, 232, 233, S269, S225A, 2127, 144, Boat House 1 & 2, 4205, 4206, 4207, 4213, 503, 5303, 5341, 5339, 5338, Bollards, Fire Hydrants, 5304, 5305, 4210, 3524, 3529, 5126, 5378, 3514, and other ancillary structures. Foundations S464, 502, 4201, 5126, 5295, 5342.
2017 DU 8 – S-28, S-30 re-ex, Pipe figure P19
2017 DU 7 – Bldg 3502, 3503, 3504 shade cloth
2017 DU 5 – R2 Unit, Figure P17
2017 DU 3 – Housing figure P22, 419 MIS re-ex

Table 2. Soil loads hauled to the R2 for ex situ Maectite® treatment

	Load Totals				
	Hauled to R2 for treatment in R2 cell (# of truck loads)				
Date	Soils (DU9)	Soils (DU8)	Soils (DU7)	Soils (DU5)	Soils (DU3)
08/07/17	0	0	0	0	0
08/08/17	0	0	2	0	0
08/09/17	2	0	0	0	0
08/10/17	0	0	0	0	0
08/11/17	8	0	0	0	0
08/12/17					
Total to Date	10 loads	2 loads	18.5 loads	0 loads	0 loads

Table 2.1 Soil loads hauled to the R2, non-treated internment

Date	Load Totals				
	Hauled to R2, non-treated soil (# of truck loads)				
	Soils (DU9)	Soils (DU8)	Soils (DU7)	Soils (DU5)	Soils (DU3)
08/07/17	3	0	0	0	0
08/08/17	0	0	0	0	0
08/09/17	0	0	0	0	2
08/10/17	0	0	0	0	7
08/11/17	3	0	0	0	0
08/12/17					
Total to Date	6 loads	0 loads	0 loads	0 loads	9 loads

Correction to DFR 8/9/17
– DU-9 two loads is zero, DU-3 re-ex zero loads is two.

Table 3. Weekly Load Estimates

Date	Treated Demo Debris Loads to R2	Clean Concrete Loads to Crusher	Metal Debris Loads	Clean Wood Loads	~	~
08/07/17	0	0	0	0		
08/08/17	0	0	0	0		
08/09/17	0	0	0	0		
08/10/17	0	0	0	0		
08/11/17	0	0	0	0		
08/12/17						
Season Total	0 loads	0 loads	0 loads	0 loads		

NW Demolition and Environmental
A Joint Venture

Daily Field Report

Date: Saturday, August 12, 2017
Prepared by: Scott Wakefield

Project: Removal of Lead-Based Paint from Structures and Lead-Contaminated Soil
Location: Midway Atoll National Wildlife Refuge
Client: US Fish and Wildlife Service

Weather: Sunny, wind 10 mph, Temperature ~80F

Personnel:

Name	Company	Site Hours
Scott Wakefield	NWDE Field Oversight	10
Everett White	NWDE Supervisor	10
Jeff James	NWDE Supervisor	10
Darin Leibelt	NWDE PM	10
Joel Smith	NWDE Operator	10
Dalton Sullivan	NWDE Labor	-
Antonio Davis	NWDE Labor	10
Jevon Stone	NWDE Operator	10
Jose Ordaz	NWDE Operator	-
Matt Manning	NWDE Operator	-
Chris Fisher	NWDE Labor	-

Visitors/Additional Site Personnel:

Name	Title
MaryAnn Amann	U.S. FWS

Equipment:

Description	Model No.	Comments / Serial #
Pickup Truck	F350 Service Truck	NWDE
Flatbed Truck	Ford F450	NWDE
Container Truck	Peterbuilt	NWDE
Skid Steer	Bobcat S185	NWDE
Tracked Skid Steer	Bobcat T750	NWDE
Mini-Excavator	CAT 308	NWDE
Excavator	Volvo EC290BLC	NWDE
Excavator	Volvo EC290BLC	NWDE
Off road Dump Truck	Volvo A30D	NWDE
Off road Dump Truck	Volvo A30D	NWDE

Materials Delivered:

Description	QTY	Condition/Comments
Diesel	0 gallons	
Gasoline	0 gallons	

Description of Work:

0700 – Health and Safety meeting at NAF staging area. Review today's work tasks.

NWDE excavation crew is partially complete at Bldg 521 Command Center, pending the ironwood tree removal in the NW corner plot. Equipment is being mobilized to the former Bldg 502 AT&T location to dig and haul the small area on Figure P8. This will be moved to the R2 and treated in Cell 1.

Following this site is the Navy removed former Bldg 4213 Ave Maria, Figure P15. Dig and haul the small plot to the R2 Cell 1 for upcoming batch Maectite® treatment.

0945 – At former Bldg 5342, Figure P9. Excavate and haul this small plot to the R2 Cell 1 for upcoming batch treatment of staged soil.

1015 – Mobilize the 290 Volvo excavator from the DU-8 Tank Farm location towards the Navy removed former water tower 5305. Measuring out sub grids for calculating application areas within the staked excavation extents.

1100 – US FWS Volunteer group arranges to check the former water tower 5305 plot for shearwater birds. Starting just after lunch the volunteers will have cleared for birds at the work area, finishing up by 130pm.

1200 – Lunch

1230 – NWDE is repositioned at the Fuel Farm region, Bldg S269 that was Maectite® sprayed in a previous season. This D1 fuel tank is still at ¾ capacity and currently holding off demolition until the tank is emptied. Checking access and excavation area for ground nesting birds. Going forward today is the soil excavation work per Figure P12 at the short block wall containment.

Proceed to former Bldg S225A Mogas Fueling Station excavation per Figure 12. Materials from both areas are direct loaded and placed a the R2 Cell 1 for upcoming soil treatment.

1610 – Ending the day's excavation work, former Bldg 232 Fuel Farm Storage (removed in past by others) is excavated per Figure P11. Soils are hauled to the R2 Cell 1 for upcoming treatment work.

1710 – Finishing up and headed back to the NAF staging area.

Ex-situ soil loads from DU-9 Bldgs is 8 loads for future treatment in the R2.

1730 – End of work day.

1800 – American Marine tug and barge arrives into the Midway harbor. The barge supplies will be unloaded for both the LBP project and an alternate on-island project. Once it is empty a portion of the NWDE LBP abatement project materials will be loaded onto the barge to ship off Midway Atoll. This includes select 20' shipping containers and scrap steel staged at the Boneyard from past season work.

Photographs:

Photo 01: Bldg 502 AT&T– View northwest. Progress of excavation

Photo 02: Bldg 4213 Ave Maria – View southeast. Progress of excavation

Photo 03: Bldg S269 Mogas Tank – View west. Soil excavation at exterior of containment for D1 tank

Photo 04: Bldg S225A Mogas Fueling Station – View northeast. Soil excavation progress

Photo 05: Bldg 232 Fuel Farm Storage – View northeast. Progress of excavation

Photo 06: Midway Harbor – View north. Arrival of barge for inbound and outbound shipping logistics

Table 1. Maectite and Treated Soil Total Estimates

	Maectite Totals						Treated Soil Totals[1,2]		
	Applied Today (gal)					Total to Date	Excavated and Hauled to R-2 Unit **Today**		Excavated and Hauled to R-2 Unit **Total to Date**
Date	Soils (DU9)	Soils (DU8)	Soils (DU7)	Soils (DU5)	Soils (DU3)	(gal)	Load	^{3}yds[1]	^{3}yds[1]
08/07/17	51	0	0	0	0	77	6	70	105.5
08/08/17	35	0	0	0	0	112	4	48	153.5
08/09/17	0	0	0	0	0	112	0	0	153.5
08/10/17	27	0	0	0	0	139	1	37	190.5
08/11/17	0	0	0	0	0	139	1	0	190.5
08/12/17	0	0	0	0	0	139	0	0	190.5
Total to Date	139 gallons	0 gallons	0 gallons	0 gallons	0 gallons		14 loads		

Notes: 1. Estimates are based on the number of gallons of Maectite® applied.
2. Soil treatment with Maectite® and hauling to R2 may not occur on the same day.

2017 DU 9 – Figures P 1-16, 18, 20, 21, 23-27.
Bldg 1124, 1126, 3521, S361, 347, 3501, S3126, S3127, 521, 520, 502, 5342, 309, 340, 354, 9149, 232, 233, S269, S225A, 2127, 144, Boat House 1 & 2, 4205, 4206, 4207, 4213, 503, 5303, 5341, 5339, 5338, Bollards, Fire Hydrants, 5304, 5305, 4210, 3524, 3529, 5126, 5378, 3514, and other ancillary structures. Foundations S464, 502, 4201, 5126, 5295, 5342.
2017 DU 8 – S-28, S-30 re-ex, Pipe figure P19
2017 DU 7 – Bldg 3502, 3503, 3504 shade cloth
2017 DU 5 – R2 Unit, Figure P17
2017 DU 3 – Housing figure P22, 419 MIS re-ex

Table 2. Soil loads hauled to the R2 for ex situ Maectite® treatment

	Load Totals				
	Hauled to R2 for treatment in R2 cell (# of truck loads)				
Date	Soils (DU9)	Soils (DU8)	Soils (DU7)	Soils (DU5)	Soils (DU3)
08/07/17	0	0	0	0	0
08/08/17	0	0	2	0	0
08/09/17	2	0	0	0	0
08/10/17	0	0	0	0	0
08/11/17	8	0	0	0	0
08/12/17	8	0	0	0	0
Total to Date	18 loads	2 loads	18.5 loads	0 loads	0 loads

Table 2.1 Soil loads hauled to the R2, non-treated internment

Date	Load Totals				
	Hauled to R2, non-treated soil (# of truck loads)				
	Soils (DU9)	Soils (DU8)	Soils (DU7)	Soils (DU5)	Soils (DU3)
08/07/17	3	0	0	0	0
08/08/17	0	0	0	0	0
08/09/17	0	0	0	0	2
08/10/17	0	0	0	0	7
08/11/17	3	0	0	0	0
08/12/17	0	0	0	0	0
Total to Date	6 loads	0 loads	0 loads	0 loads	9 loads

Correction to DFR 8/9/17
– DU-9 two loads is zero, DU-3 re-ex zero loads is two.

Table 3. Weekly Load Estimates

Date	Treated Demo Debris Loads to R2	Clean Concrete Loads to Crusher	Metal Debris Loads	Clean Wood Loads	~	~
08/07/17	0	0	0	0		
08/08/17	0	0	0	0		
08/09/17	0	0	0	0		
08/10/17	0	0	0	0		
08/11/17	0	0	0	0		
08/12/17	0	0	0	0		
Season Total	0 loads	0 loads	0 loads	0 loads		

NW Demolition and Environmental
A Joint Venture

Daily Field Report

Date: Sunday, August 13, 2017
Prepared by: Scott Wakefield

Project: Removal of Lead-Based Paint from Structures and Lead-Contaminated Soil
Location: Midway Atoll National Wildlife Refuge
Client: US Fish and Wildlife Service

Weather: Sunny, wind 8 mph, Temperature ~80F

Personnel:

Name	Company	Site Hours
Scott Wakefield	NWDE Field Oversight	10
Everett White	NWDE Supervisor	-
Jeff James	NWDE Supervisor	-
Darin Leibelt	NWDE PM	-
Joel Smith	NWDE Operator	-
Dalton Sullivan	NWDE Labor	-
Antonio Davis	NWDE Labor	-
Jevon Stone	NWDE Operator	-
Jose Ordaz	NWDE Operator	-
Matt Manning	NWDE Operator	-
Chris Fisher	NWDE Labor	-

Visitors/Additional Site Personnel:

Name	Title
MaryAnn Amann	U.S. FWS

Equipment:

Description	Model No.	Comments / Serial #
Pickup Truck	F350 Service Truck	NWDE
Flatbed Truck	Ford F450	NWDE
Container Truck	Peterbuilt	NWDE
Skid Steer	Bobcat S185	NWDE
Tracked Skid Steer	Bobcat T750	NWDE
Mini-Excavator	CAT 308	NWDE
Excavator	Volvo EC290BLC	NWDE
Excavator	Volvo EC290BLC	NWDE
Off road Dump Truck	Volvo A30D	NWDE
Off road Dump Truck	Volvo A30D	NWDE

Materials Delivered:

Description	QTY	Condition/Comments
Diesel	0 gallons	
Gasoline	0 gallons	

Description of Work:

0700 – Health and Safety meeting at NAF staging area. Review today's work tasks.

NWDE will be on tasks to unload the American Marine barge at the harbor.

Completed excavation progress this season have confirmation samples collected today. These samples will be transported off island to HNL tomorrow by charter flight, then forwarded to Test America for analysis. Results will be reviewed prior to backfilling plots.

1730 – End of work day.

Bldg samples-

3514 P100 0-2"	520 P101 0-2" Dup	3529 P100 0-2"
3514 P100 0-2" Dup	5342 P100 0-2"	3529 P100 0-2" Dup
3514 P101 0-2"	5342 P100 0-2" Dup	3529 P101 0-2"
3514 P101 0-2" Dup	4210 P100 0-2"	3529 P101 0-2" Dup
521 P100 0-2"	4210 P100 0-2" Dup	3529 P102 0-2"
521 P100 0-2" Dup	4210 P101 0-2"	3529 P102 0-2" Dup
521 P101 0-2"	4210 P101 0-2" Dup	3529 P103 0-2"
521 P101 0-2" Dup	419 P100 0-2"	3529 P103 0-2" Dup
521 P102 0-2"	419 P100 0-2" Dup	225A P100 0-2"
521 P102 0-2" Dup	418 P100 0-2"	225A P100 0-2" Dup
521 P103 0-2"	418 P100 0-2" Dup	225A P101 0-2"
521 P103 0-2" Dup	418 P101 0-2"	225A P101 0-2" Dup
502 P100 0-2"	418 P101 0-2" Dup	269 P100 0-2"
502 P100 0-2" Dup	417 P100 0-2"	269 P100 0-2" Dup
4213 P100 0-2"	417 P100 0-2" Dup	269 P101 0-2"
4213 P100 0-2"	3524 P100 0-2"	269 P101 0-2" Dup
520 P100 0-2"	3524 P100 0-2" Dup	232 P100 0-2"
520 P100 0-2" Dup	3524 P101 0-2"	232 P100 0-2" Dup
520 P101 0-2"	3524 P101 0-2" Dup	S28/S30 Paint & Debris

Photographs:

Photo 01: Confirmation samples collected at bottom of excavation plots

Photo 02: Midway Harbor Pier 2401- Prepping to unload the barge supplies

NW Demolition and Environmental
A Joint Venture

Daily Field Report

Date: Monday, August 14, 2017
Prepared by: Scott Wakefield

Project: Removal of Lead-Based Paint from Structures and Lead-Contaminated Soil
Location: Midway Atoll National Wildlife Refuge
Client: US Fish and Wildlife Service

Weather: Mixed clouds, wind 10 mph, Temperature ~84F

Personnel:

Name	Company	Site Hours
Scott Wakefield	NWDE Field Oversight	10
Everett White	NWDE Supervisor	10
Jeff James	NWDE Supervisor	-
Darin Leibelt	NWDE PM	10
Joel Smith	NWDE Operator	10
Dalton Sullivan	NWDE Labor	-
Antonio Davis	NWDE Labor	10
Jevon Stone	NWDE Operator	10
Jose Ordaz	NWDE Operator	-
Matt Manning	NWDE Operator	-
Chris Fisher	NWDE Labor	-
Alan Phillips	NWDE Operator	-
Kevin Bach	NWDE Labor	-
Lucas Peel	NWDE Labor	-
Tyler Wilson	NWDE Labor	-

Visitors/Additional Site Personnel:

Name	Title
MaryAnn Amann	U.S. FWS
Bill Spoerer	U.S. FWS

Equipment:

Description	Model No.	Comments / Serial #
Pickup Truck	F350 Service Truck	NWDE
Flatbed Truck	Ford F450	NWDE
Container Truck	Peterbuilt	NWDE
Skid Steer	Bobcat S185	NWDE
Tracked Skid Steer	Bobcat T750	NWDE
Mini-Excavator	CAT 308	NWDE
Excavator	Volvo EC290BLC	NWDE
Excavator	Volvo EC290BLC	NWDE
Off road Dump Truck	Volvo A30D	NWDE
Off road Dump Truck	Volvo A30D	NWDE

Materials Delivered:

Description	QTY	Condition/Comments
Diesel	59 gallons	
Gasoline	0 gallons	

Description of Work:

0700 – Health and Safety meeting at NAF staging area. Review today's work tasks.

Today is planned for the first batch treatment using Maectite® in the R2. This will be applied to soils excavated and direct hauled into the R2 Cell 1, per Table 2 below. The multiple excavated plot soil volumes have been calculated at each site for cubic yardage hauled in untreated. Individual loads that were dumped in Cell 1 are being rough graded into two pads appx 1.5' to 2' deep on top of the R2 shade cloth layer of the cell. The areas are divided and the Maectite® gallons per each subplot determined.
Mobilizing machines and equipment to the R2.

At the Harbor Pier, the barge with alternate project rock and LBP project shipping container supplies will continue being unloaded by NWDE. Once access to the containers is made the NWDE loader will haul these connex boxes to the NAF area to replenish the Maectite® supply, vac trailer and project goods.

0940 – Cinco Air charter flight arrives with parts and additional NWDE workers for alternate project. Also the arrival of B.Spoerer, US FWS will oversee on-island project work with the pre-planned hand-off from M.Amann for a few weeks.

1000 - The mini excavator has been knocking the R2 ex-situ designated soil piles to the even rectangular pad shape for consistency of treatment. Continue rough grade prep for treatment tasks.

At the NAF staging area, the second A30 Volvo haul truck is being repaired with newly arrived parts. This will bring the second truck back online.

1100 – At the R2 Cell 1, Maectite® application begins near the northwest corner inside Cell 1 of the soils. The liquid reagent once applied is then mechanically mixed with the 60" flat edged bucket while hydrant water is added to the soils with a spray nozzle. The process is repeated to mixed the materials and liquids to a uniform consistency within Cell 1.

1200 – Lunch

1230 – R2 Cell 1 resumes treatment of the soil in Cell 1. Progress is appx 50% complete for the loads placed this season to be treated. Anticipate that all the loads will be completely mixed with reagent and water by the end of the day.

1400 – The Cinco Air flight departs. Included in the departure is M.Amann US FWS and D.Leibelt NWDE.

1700 – Unloading of the barge has progressed throughout the afternoon. The LBP project connex boxes are yet to be accessible for using the loader for lifting and transport.

1715 – Finishing up and headed back to the NAF staging area.

Ex-situ soil loads in the R2 Cell 1 that were batch treated today is complete for the 38.5 truck loads placed so far, this season. Soil volumes are comingled from Decision Units, Table 2.

1730 – End of work day.

Photographs:

Photo 01: R2 Cell 1– View east. Prep for batch treatment of ex-situ placed soil loads within the R2

Photo 02: R2 Cell 1 – View west. Application of Maectite® at the prepared soil sub plots

Photo 03: R2 Cell 1 – View northwest. Mechanical mixing and hydrant water amendment

Photo 04: Midway Harbor Pier 2401- Progress of unloading the barge of supplies

Table 1. Maectite and Treated Soil Total Estimates

	Maectite Totals						Treated Soil Totals[1,2]		
	Applied Today (gal)					Total to Date	Excavated and Hauled to R-2 Unit **Today**		Excavated and Hauled to R-2 Unit **Total to Date**
Date	Soils (DU9)	Soils (DU8)	Soils (DU7)	Soils (DU5)	Soils (DU3)	(gal)	Load	^{3}yds[1]	^{3}yds[1]
08/14/17	150	17	153	0	0	459	38.5	439	630
08/15/17									
08/16/17									
08/17/17									
08/18/17									
08/19/17									
Total to Date	289 gallons	17 gallons	153 gallons	0 gallons	0 gallons		52.5 loads		

Notes:
1. Estimates are based on the number of gallons of Maectite® applied.
2. Soil treatment with Maectite® and hauling to R2 may not occur on the same day.
3. 8/14/17 – Table 2 loads were batch treated in R2, Cell 1. Inserted this data into Table 1 for totalizing the volumes and gallons.

2017 DU 9 – Figures P 1-16, 18, 20, 21, 23-27.
Bldg 1124, 1126, 3521, S361, 347, 3501, S3126, S3127, 521, 520, 502, 5342, 309, 340, 354, 9149, 232, 233, S269, S225A, 2127, 144, Boat House 1 & 2, 4205, 4206, 4207, 4213, 503, 5303, 5341, 5339, 5338, Bollards, Fire Hydrants, 5304, 5305, 4210, 3524, 3529, 5126, 5378, 3514, and other ancillary structures. Foundations S464, 502, 4201, 5126, 5295, 5342.
2017 DU 8 – S-28, S-30 re-ex, Pipe figure P19
2017 DU 7 – Bldg 3502, 3503, 3504 shade cloth
2017 DU 5 – R2 Unit, Figure P17
2017 DU 3 – Housing figure P22, 419 MIS re-ex

Table 2. Soil loads hauled to the R2 for ex situ Maectite® treatment

	Load Totals				
	Hauled to R2 for treatment in R2 cell (# of truck loads)				
Date	Soils (DU9)	Soils (DU8)	Soils (DU7)	Soils (DU5)	Soils (DU3)
08/14/17	0	0	0	0	0
08/15/17					
08/16/17					
08/17/17					
08/18/17					
08/19/17					
Total to Date	18 loads	2 loads	18.5 loads	0 loads	0 loads

8/14/17 - Batch treatment of all stockpiled "ex situ" loads to date in R2 Cell 1. Entered data into Table 1 for 8/14/17 for volume and gallon tracking.

Table 2.1 Soil loads hauled to the R2, non-treated internment

Date	Load Totals				
	Hauled to R2, non-treated soil (# of truck loads)				
	Soils (DU9)	Soils (DU8)	Soils (DU7)	Soils (DU5)	Soils (DU3)
08/14/17	0	0	0	0	0
08/15/17					
08/16/17					
08/17/17					
08/18/17					
08/19/17					
Total to Date	6 loads	0 loads	0 loads	0 loads	9 loads

Table 3. Weekly Load Estimates

Date	Treated Demo Debris Loads to R2	Clean Concrete Loads to Crusher	Metal Debris Loads	Clean Wood Loads	~	~
08/14/17	0	0	0	0		
08/15/17	0	0	0	0		
08/16/17	0	0	0	0		
08/17/17	0	0	0	0		
08/18/17	0	0	0	0		
08/19/17	0	0	0	0		
Season Total	0 loads	0 loads	0 loads	0 loads		

NW Demolition and Environmental
A Joint Venture

Daily Field Report

Date: Tuesday, August 15, 2017
Prepared by: Scott Wakefield

Project: Removal of Lead-Based Paint from Structures and Lead-Contaminated Soil
Location: Midway Atoll National Wildlife Refuge
Client: US Fish and Wildlife Service

Weather: Sunny, wind 10 mph, Temperature ~85F

Personnel:

Name	Company	Site Hours
Scott Wakefield	NWDE Field Oversight	10
Everett White	NWDE Supervisor	10
Jeff James	NWDE Supervisor	-
Joel Smith	NWDE Operator	10
Dalton Sullivan	NWDE Labor	-
Antonio Davis	NWDE Labor	10
Jevon Stone	NWDE Operator	10
Jose Ordaz	NWDE Operator	-
Matt Manning	NWDE Operator	-
Chris Fisher	NWDE Labor	-
Alan Phillips	NWDE Operator	Partial
Kevin Bach	NWDE Labor	-
Lucas Peel	NWDE Labor	-
Tyler Wilson	NWDE Labor	-

Visitors/Additional Site Personnel:

Name	Title
Bill Spoerer	U.S. FWS

Equipment:

Description	Model No.	Comments / Serial #
Pickup Truck	F350 Service Truck	NWDE
Flatbed Truck	Ford F450	NWDE
Container Truck	Peterbuilt	NWDE
Skid Steer	Bobcat S185	NWDE
Tracked Skid Steer	Bobcat T750	NWDE
Mini-Excavator	CAT 308	NWDE
Excavator	Volvo EC290BLC	NWDE
Excavator	Volvo EC290BLC	NWDE
Off road Dump Truck	Volvo A30D	NWDE
Off road Dump Truck	Volvo A30D	NWDE
Loader	Cat 966K	NWDE

Materials Delivered:

Description	QTY	Condition/Comments
Diesel	0 gallons	
Gasoline	0 gallons	

Description of Work:

0700 – Health and Safety meeting at NAF staging area. Review today's work tasks.

Soil treatment work will begin at the Navy removed former water tower 5305. The area is checked for bird burrow activities for the full plot and access points prior to mobilizing into position. Track over the 290 excavator from the harbor pier location.

NWDE is transferring Maectite® to have a full tote for starting the 14,400 sqft area treatment area that will be divided into smaller sub plots. Each sub plot is calculated, with an application rate of .75 gallons per cubic yard to the soils in a 1' lift. Hydrant water is added with a spray nozzle as the 290 excavator bucket lifts and folds the material to a homogenous mixture.

At the Harbor Pier, the barge with alternate project rock and LBP project shipping container supplies will continue being unloaded by NWDE. Preparations will also be made at the NAF Hanger area to receive the 20' supply containers for the LBP project.

1000 – Weekly conference call with Mainland and Hawaii project offices. See NWDE Midway Meeting Agenda for specific detail.

1100 – The Maectite® treated sub plot at former water tower 5305 is being loaded up into the A30 Volvo truck and hauled to the R2 Unit. The excavation area will continue through this morning and into the afternoon as soils are treated, mixed and hauled.

1200 – Lunch

1230 – To the Midway Water Treatment Plant for a scheduled meeting with DBSI facility, utility locates. This includes fiber optic, power, water, sewer and fuel. Today the larger complex areas with in-use utilities are marked out in preparation of the vac trailer and Maectite® being unloaded from the barge.

DBSI inspects and marks out P5 WTS Bldgs 347, 3501, S3126, S3127. P10 Bldgs 309, 354. P4 Bldg S361. P14 Bldgs Boathouse #1 & 2. P18 Bollards. P26 Bldg 5378 R2 metal shed.

1430 – Soil treatment at the former water tower 5303 is progressing into additional sub plots within the 120' x 120' plot area.

NWDE is moving 20' shipping containers from the NAF Hanger staging area to the Boneyard with the Cat 966K and forks that arrived on the current barge. Containers being moved include the Iniki Enterprise staged abatement materials and select units to be manifested and shipped of island this week. By day's end twelve containers have been moved and positioned, waiting for the barge loading event.

1700 – Unloading of the barge has progressed throughout the afternoon. The LBP project connex boxes access is nearing, anticipate that these supplies will be reachable late tomorrow.

1720 – Finishing up and headed back to the NAF staging area.

Treated soil from DU-9 Navy removed former water tower 5305 to the R2 today is 16 truck loads.

1730 – End of work day.

Photographs:

Photo 01: NAF Staging Area– View north. Transferring Maectite® to combine totes

Photo 02: Water Tower 5303 – View southeast. Application of Maectite® at the prepared soil sub plots

Photo 03: Water Tower 5303 – View northwest. Cutting grade of 1' of treated soil sub plot

Photo 04: NAF Staging Area- Partial view of project shipping containers with waste and supplies

Photo 05: Boneyard- Progress for staging outbound LBP project shipping containers. Barge (background)

Photo 06: Midway Harbor Pier 2401- Progress of unloading the barge of supplies

Table 1. Maectite and Treated Soil Total Estimates

Date	Maectite Totals: Applied Today (gal) Soils (DU9)	Soils (DU8)	Soils (DU7)	Soils (DU5)	Soils (DU3)	Total to Date (gal)	Treated Soil Totals[1,2]: Excavated and Hauled to R-2 Unit **Today** Load	^{3}yds[1]	Excavated and Hauled to R-2 Unit **Total to Date** ^{3}yds[1]
08/14/17	150	17	153	0	0	459	38.5	439	630
08/15/17	199	0	0	0	0	658	16	273	903
08/16/17									
08/17/17									
08/18/17									
08/19/17									
Total to Date	488 gallons	17 gallons	153 gallons	0 gallons	0 gallons		68.5 loads		

Notes:
1. Estimates are based on the number of gallons of Maectite® applied.
2. Soil treatment with Maectite® and hauling to R2 may not occur on the same day.
3. 8/14/17 – Table 2 loads were batch treated in R2, Cell 1. Inserted this data into Table 1 for totalizing the volumes and gallons. Reset Table 2 "Batch loads" to zero until next ex-situ stockpile treatment.

2017 DU 9 – Figures P 1-16, 18, 20, 21, 23-27.
Bldg 1124, 1126, 3521, S361, 347, 3501, S3126, S3127, 521, 520, 502, 5342, 309, 340, 354, 9149, 232, 233, S269, S225A, 2127, 144, Boat House 1 & 2, 4205, 4206, 4207, 4213, 503, 5303, 5341, 5339, 5338, Bollards, Fire Hydrants, 5304, 5305, 4210, 3524, 3529, 5126, 5378, 3514, and other ancillary structures.
Foundations S464, 502, 4201, 5126, 5295, 5342.
2017 DU 8 – S-28, S-30 re-ex, Pipe figure P19
2017 DU 7 – Bldg 3502, 3503, 3504 shade cloth
2017 DU 5 – R2 Unit, Figure P17
2017 DU 3 – Housing figure P22, 419 MIS re-ex

Table 2. Soil loads hauled to the R2 for ex situ Maectite® treatment

Date	Load Totals: Hauled to R2 for treatment in R2 cell (# of truck loads) Soils (DU9)	Soils (DU8)	Soils (DU7)	Soils (DU5)	Soils (DU3)
08/14/17	0	0	0	0	0
08/15/17	0	0	0	0	0
08/16/17					
08/17/17					
08/18/17					
08/19/17					
Batch loads to treat in R2	0 loads	0 loads	0 loads	0 loads	0 loads
Total to Date	18 loads	2 loads	18.5 loads	0 loads	0 loads

8/14/17 - Batch treatment of all stockpiled "ex situ" loads to date in R2 Cell 1. Entered this data into Table 1 on 8/14/17 for volume and gallon tracking.
8/15/17 - Add "Batch Loads to treat in R2" subtotal that tracks the truck loads placed for treatment. Reset this to zero once treatment event is complete.

Table 2.1 Soil loads hauled to the R2, non-treated internment

Date	Load Totals				
	Hauled to R2, non-treated soil (# of truck loads)				
	Soils (DU9)	Soils (DU8)	Soils (DU7)	Soils (DU5)	Soils (DU3)
08/14/17	0	0	0	0	0
08/15/17	0	0	0	0	0
08/16/17					
08/17/17					
08/18/17					
08/19/17					
Total to Date	6 loads	0 loads	0 loads	0 loads	9 loads

Table 3. Weekly Load Estimates

Date	Treated Demo Debris Loads to R2	Clean Concrete Loads to Crusher	Metal Debris Loads	Clean Wood Loads	~	~
08/14/17	0	0	0	0		
08/15/17	0	0	0	0		
08/16/17						
08/17/17						
08/18/17						
08/19/17						
Season Total	0 loads	0 loads	0 loads	0 loads		

NW Demolition and Environmental
A Joint Venture

Daily Field Report

Date: Wednesday, August 16, 2017
Prepared by: Scott Wakefield

Project: Removal of Lead-Based Paint from Structures and Lead-Contaminated Soil
Location: Midway Atoll National Wildlife Refuge
Client: US Fish and Wildlife Service

Weather: Sunny, wind 10 mph, Temperature ~84F

Personnel:

Name	Company	Site Hours
Scott Wakefield	NWDE Field Oversight	10
Everett White	NWDE Supervisor	10
Jeff James	NWDE Supervisor	-
Joel Smith	NWDE Operator	10
Dalton Sullivan	NWDE Labor	Partial
Antonio Davis	NWDE Labor	10
Jevon Stone	NWDE Operator	10
Jose Ordaz	NWDE Operator	-
Matt Manning	NWDE Operator	-
Chris Fisher	NWDE Labor	-
Alan Phillips	NWDE Operator	-
Kevin Bach	NWDE Labor	-
Lucas Peel	NWDE Labor	10
Tyler Wilson	NWDE Labor	-

Visitors/Additional Site Personnel:

Name	Title
Bill Spoerer	U.S. FWS

Equipment:

Description	Model No.	Comments / Serial #
Pickup Truck	F350 Service Truck	NWDE
Flatbed Truck	Ford F450	NWDE
Container Truck	Peterbuilt	NWDE
Skid Steer	Bobcat S185	NWDE
Tracked Skid Steer	Bobcat T750	NWDE
Mini-Excavator	CAT 308	NWDE
Excavator	Volvo EC290BLC	NWDE
Excavator	Volvo EC290BLC	NWDE
Off road Dump Truck	Volvo A30D	NWDE
Off road Dump Truck	Volvo A30D	NWDE
Loader	Cat 966K	NWDE

Materials Delivered:

Description	QTY	Condition/Comments
Diesel	171 gallons	08/13/17
Diesel	59 gallons	08/14/17
Gasoline	0 gallons	

Description of Work:

0700 – Health and Safety meeting at NAF staging area. Review today's work tasks.

Soil treatment at the Navy removed former Water Tower 5305 is postponed for the morning pending a mechanical repair of the 290 excavator.

At the R2 Cell 1, the treated soil piles placed yesterday are being rough graded with the mini excavator. The soil lift of 1' – 2' is bladed out to continue filling in the cells and tracked across. Concrete is positioned flat to minimize any bridging.

0800 - Unloading of the barge continues at the harbor. The smaller rock for alternate project is being hauled off to access the shipping containers of Maectite® and supplies.

1100 – Residual Maectite® totes are being transferred at the NAF to top off the volume needed for finishing the 5303 Water Tower plot. Included in this amount is using up the past season tote of 50/50 mix. Stock of Maectite® at the NAF Staging Area is dwindling to near zero after the 5303 Water Tower is completed. Expecting the newly arrived totes on the barge to be unloaded soon.

1200 – Lunch.

1230 – NWDE 290 excavator is operational. Begin the second half treatment area of the 5305 Water Tower. Reagent and hydrant water continue being applied at the prescribed rate and mixed with the excavator bucket.

1400 – The NWDE barge crew is making progress to get the Hurricane Vac trailer unloaded and air compressor moved to the NAF Staging Area. This opens up the barge deck space to begin pulling down the stacked 20' containers and moving equipment onto land.

1500 – At the 5303 Navy removed water tower the last plot of soil is set up for application and mixing of Maectite® and water. Through the afternoon, treated soil is hauled to the R2 Unit.

1720 – Finishing up and headed back to the NAF staging area.

Treated soil from DU-9 Navy removed former Water Tower 5305 to the R2 today is 8 truck loads.

1730 – End of work day.

Photographs:

Photo 01: R2 Unit– View south. Rough grading treated soil loads

Photo 02: NAF Staging Area – View west. Moving additional project containers to Boneyard

Photo 03: Water Tower 5303 – View north. General view of the project recycle steel pile to load on barge

Photo 04: Boneyard- View northeast. Progress for staging outbound LBP project shipping containers.

Photo 05: 5303 Water Tower – View northwest. Soil treatment progress at the Navy removed water tower

Photo 06: 5303 Water Tower – View southeast. Soil work progress at the Navy removed water tower

Table 1. Maectite and Treated Soil Total Estimates

	Maectite Totals						Treated Soil Totals[1,2]		
	Applied Today (gal)					Total to Date	Excavated and Hauled to R-2 Unit **Today**		Excavated and Hauled to R-2 Unit **Total to Date**
Date	Soils (DU9)	Soils (DU8)	Soils (DU7)	Soils (DU5)	Soils (DU3)	(gal)	Load	^{3}yds[1]	^{3}yds[1]
08/14/17	150	17	153	0	0	459	38.5	439	630
08/15/17	199	0	0	0	0	658	16	273	903
08/16/17	190	0	0	0	0	848	8	260	1162
08/17/17									
08/18/17									
08/19/17									
Total to Date	678 gallons	17 gallons	153 gallons	0 gallons	0 gallons		76.5 loads		

Notes:
1. Estimates are based on the number of gallons of Maectite® applied.
2. Soil treatment with Maectite® and hauling to R2 may not occur on the same day.
3. 8/14/17 – Table 2 loads were batch treated in R2, Cell 1. Inserted this data into Table 1 for totalizing the volumes and gallons. Reset Table 2 "Batch loads" to zero until next ex-situ stockpile treatment.

2017 DU 9 – Figures P 1-16, 18, 20, 21, 23-27.
Bldg 1124, 1126, 3521, S361, 347, 3501, S3126, S3127, 521, 520, 502, 5342, 309, 340, 354, 9149, 232, 233, S269, S225A, 2127, 144, Boat House 1 & 2, 4205, 4206, 4207, 4213, 503, 5303, 5341, 5339, 5338, Bollards, Fire Hydrants, 5304, 5305, 4210, 3524, 3529, 5126, 5378, 3514, and other ancillary structures.
Foundations S464, 502, 4201, 5126, 5295, 5342.
2017 DU 8 – S-28, S-30 re-ex, Pipe figure P19
2017 DU 7 – Bldg 3502, 3503, 3504 shade cloth
2017 DU 5 – R2 Unit, Figure P17
2017 DU 3 – Housing figure P22, 419 MIS re-ex

Table 2. Soil loads hauled to the R2 for ex situ Maectite® treatment

	Load Totals				
	Hauled to R2 for treatment in R2 cell (# of truck loads)				
Date	Soils (DU9)	Soils (DU8)	Soils (DU7)	Soils (DU5)	Soils (DU3)
08/14/17	0	0	0	0	0
08/15/17	0	0	0	0	0
08/16/17	0	0	0	0	0
08/17/17					
08/18/17					
08/19/17					
Batch loads to treat in R2	0 loads	0 loads	0 loads	0 loads	0 loads
Total to Date	18 loads	2 loads	18.5 loads	0 loads	0 loads

8/14/17 - Batch treatment of all stockpiled "ex situ" loads to date in R2 Cell 1. Entered this data into Table 1 on 8/14/17 for volume and gallon tracking.
8/15/17 - Add "Batch Loads to treat in R2" subtotal that tracks the truck loads placed for treatment. Reset this to zero once treatment event is complete.

Table 2.1 Soil loads hauled to the R2, non-treated internment

Date	Load Totals				
	Hauled to R2, non-treated soil (# of truck loads)				
	Soils (DU9)	Soils (DU8)	Soils (DU7)	Soils (DU5)	Soils (DU3)
08/14/17	0	0	0	0	0
08/15/17	0	0	0	0	0
08/16/17	0	0	0	0	0
08/17/17					
08/18/17					
08/19/17					
Total to Date	6 loads	0 loads	0 loads	0 loads	9 loads

Table 3. Weekly Load Estimates

Date	Treated Demo Debris Loads to R2	Clean Concrete Loads to Crusher	Metal Debris Loads	Clean Wood Loads	~	~
08/14/17	0	0	0	0		
08/15/17	0	0	0	0		
08/16/17	0	0	0	0		
08/17/17						
08/18/17						
08/19/17						
Season Total	0 loads	0 loads	0 loads	0 loads		

NW Demolition and Environmental
A Joint Venture

Daily Field Report

Date: Thursday, August 17, 2017
Prepared by: Scott Wakefield

Project: Removal of Lead-Based Paint from Structures and Lead-Contaminated Soil
Location: Midway Atoll National Wildlife Refuge
Client: US Fish and Wildlife Service

Weather: High clouds, wind 12 mph, Temperature ~84F

Personnel:

Name	Company	Site Hours
Scott Wakefield	NWDE Field Oversight	12
Everett White	NWDE Supervisor	10
Jeff James	NWDE Supervisor	12
Joel Smith	NWDE Operator	10
Dalton Sullivan	NWDE Labor	12
Antonio Davis	NWDE Labor	10
Jevon Stone	NWDE Operator	10
Jose Ordaz	NWDE Operator	10
Matt Manning	NWDE Operator	12
Chris Fisher	NWDE Labor	12
Alan Phillips	NWDE Operator	12
Kevin Bach	NWDE Labor	12
Lucas Peel	NWDE Labor	10
Tyler Wilson	NWDE Labor	12

Visitors/Additional Site Personnel:

Name	Title
Bill Spoerer	U.S. FWS

Equipment:

Description	Model No.	Comments / Serial #
Pickup Truck	F350 Service Truck	NWDE
Flatbed Truck	Ford F450	NWDE
Container Truck	Peterbuilt	NWDE
Skid Steer	Bobcat S185	NWDE
Tracked Skid Steer	Bobcat T750	NWDE
Tracked Skid Steer	Bobcat	NWDE
Mini-Excavator	CAT 308	NWDE
Excavator	Volvo EC290BLC	NWDE
Excavator	Volvo EC290BLC	NWDE
Excavator	Volvo EC290	NWDE
Off road Dump Truck	Volvo A30D	NWDE
Off road Dump Truck	Volvo A30D	NWDE
Off road Dump Truck	Volvo A30D	NWDE
Loader	Cat 966K	NWDE
Excavator – High reach	PC400HD	NWDE

Materials Delivered:

Description	QTY	Condition/Comments
Diesel	100 gallons	
Gasoline	0 gallons	

Description of Work:

0700 – Health and Safety meeting at NAF staging area. Review today's work tasks.

Unloading the barge remains a priority that will be immediately followed with loading tasks today. This morning the 20' container of Maectite® is one of the last items to be removed from the barge. The deck is being cleared and cleaned up in preparation for reloading.

At the Navy removed Water Tower 5305, the availability of a second A30 Volvo truck will be in use to excavate and move treated DU-9 soil to the R2. Loads are being placed in the four cells as needed to maintain an even filled area. Through the rest of the season the four cells will be dumped into, rather than past seasons when only one or two cells were active. The only single segregated area is when ex-situ loads arrive for treatment within the R2.

1000 – The Water Tower 5305 is nearly complete with the treatment and 1' excavation, pending backfill. The excavator decon and finishing cuts are being made.

Outbound shipping containers are being moved with the 966 Cat loader from the Boneyard to the barge for pre-loading activities. Today deck prep is made to weld down lashing rings and set containers in place and secure. A total of 12 containers are placed at the bow, two units in height.

1100 – The soil crew and equipment is mobilizing to Bldg 521 Communication Center to continue and finish the northwest excavation plot. Check the access route and work area for ground burrow activity. The single ironwood tree is prepared for removed.

1200 – Lunch.

1230 – Containers have made it onto the barge and working to get the lashing completed. A NWDE crew of two haul trucks and the 290 Volvo at the Boneyard are being prepared to start hauling scrap steel to the barge. Once steel is dumped on the deck, the PC400HD high reach excavator with grapple is managing the task of stacking the material as needed on the cargo deck.

At Bldg 521 the removal of the single ironwood is made with oversight of US FWS. The wood materials are placed at the west side of the excavation plot. The root ball is removed and processed. Soil and debris are loaded and hauled to the R2 Cell 1 for future batch treatment. The trunk and limbs remain as noted at the west side of Bldg 521.

1430 – Bldg 521 is wrapping up for the excavation task work. Picking up and mobilizing out of the area.

1500 – Prepping materials and supplies to go DU-8 Pipe rune, Figure P19. The Maectite® truck is loaded with a fresh tote, fire hoses and drives to the Fuel Farm work area. The mini Cat excavator is mobilized from the R2 to the Pipe run. Mark out of the soil treatment plots is re-painted and flagged. NWDE is rolling out hose from the hydrant several hundred feet to reach the pipe run area.

1730 – NWDE soil crew is finishing up for the day.
The steel hauling crew continues to move loads from the Boneyard to the barge for loading. This begins nearest the bow and positioned containers.

Treated soil from DU-9 Navy removed former Water Tower 5305 to the R2 today is 13.75 truck loads.
Ex-situ soil loads from DU-9 Bldg 521 is 4 loads for future treatment in the R2.
Project scrap steel from the Boneyard stockpile to barge is 38 loads. As a gauge reference, in 2015 S28/S30 demo steel loads and Pipe run (Fuel Farm steel only) total was 140 loads.

1930 – The loading and hauling of recycle steel is stopping for the day. End of work day.

Photographs:

Photo 01: 5303 Water Tower – View SW. Soil excavation progress at the Navy removed water tower

Photo 02: Harbor Pier area – View northwest. Unloading containers from barge

Photo 03: Harbor Pier route – View southwest. Reverse hauling containers to the barge from Boneyard

Photo 04: 521 Comm Center – View east. Soil excavation work progress at the NW plot

Photo 05: Midway Harbor Pier 2401- Progress of loading the barge with project scrap steel

Photo 06: Boneyard – View west. Loading project scrap steel for hauling to the barge

Photo 07: Boneyard – View north. Loading project scrap steel for hauling to the barge

Table 1. Maectite and Treated Soil Total Estimates

	Maectite Totals						Treated Soil Totals[1,2]		
	Applied Today (gal)					Total to Date	Excavated and Hauled to R-2 Unit **Today**		Excavated and Hauled to R-2 Unit **Total to Date**
Date	Soils (DU9)	Soils (DU8)	Soils (DU7)	Soils (DU5)	Soils (DU3)	(gal)	Load	^{3}yds[1]	^{3}yds[1]
08/14/17	150	17	153	0	0	459	38.5	439	630
08/15/17	199	0	0	0	0	658	16	273	903
08/16/17	190	0	0	0	0	848	8	260	1162
08/17/17	0	0	0	0	0	848	13.75	0	1162
08/18/17									
08/19/17									
Total to Date	678 gallons	17 gallons	153 gallons	0 gallons	0 gallons		90.25 loads		

Notes:
1. Estimates are based on the number of gallons of Maectite® applied.
2. Soil treatment with Maectite® and hauling to R2 may not occur on the same day.
3. 8/14/17 – Table 2 loads were batch treated in R2, Cell 1. Inserted this data into Table 1 for totalizing the volumes and gallons. Reset Table 2 "Batch loads" to zero until next ex-situ stockpile treatment.

2017 DU 9 – Figures P 1-16, 18, 20, 21, 23-27.
Bldg 1124, 1126, 3521, S361, 347, 3501, S3126, S3127, 521, 520, 502, 5342, 309, 340, 354, 9149, 232, 233, S269, S225A, 2127, 144, Boat House 1 & 2, 4205, 4206, 4207, 4213, 503, 5303, 5341, 5339, 5338, Bollards, Fire Hydrants, 5304, 5305, 4210, 3524, 3529, 5126, 5378, 3514, and other ancillary structures.
Foundations S464, 502, 4201, 5126, 5295, 5342.
2017 DU 8 – S-28, S-30 re-ex, Pipe figure P19
2017 DU 7 – Bldg 3502, 3503, 3504 shade cloth
2017 DU 5 – R2 Unit, Figure P17
2017 DU 3 – Housing figure P22, 419 MIS re-ex

Table 2. Soil loads hauled to the R2 for ex situ Maectite® treatment

	Load Totals				
	Hauled to R2 for treatment in R2 cell (# of truck loads)				
Date	Soils (DU9)	Soils (DU8)	Soils (DU7)	Soils (DU5)	Soils (DU3)
08/14/17	0	0	0	0	0
08/15/17	0	0	0	0	0
08/16/17	0	0	0	0	0
08/17/17	4	0	0	0	0
08/18/17					
08/19/17					
Batch loads to treat in R2	4 loads	0 loads	0 loads	0 loads	0 loads
Total to Date	22 loads	2 loads	18.5 loads	0 loads	0 loads

8/14/17 - Batch treatment of all stockpiled "ex situ" loads to date in R2 Cell 1. Entered this data into Table 1 on 8/14/17 for volume and gallon tracking.
8/15/17 - Add "Batch Loads to treat in R2" subtotal that tracks the truck loads placed for treatment. Reset this to zero once treatment event is complete.

Table 2.1 Soil loads hauled to the R2, non-treated internment

Date	Load Totals				
	Hauled to R2, non-treated soil (# of truck loads)				
	Soils (DU9)	Soils (DU8)	Soils (DU7)	Soils (DU5)	Soils (DU3)
08/14/17	0	0	0	0	0
08/15/17	0	0	0	0	0
08/16/17	0	0	0	0	0
08/17/17	0	0	0	0	0
08/18/17					
08/19/17					
Total to Date	6 loads	0 loads	0 loads	0 loads	9 loads

Table 3. Weekly Load Estimates

Date	Treated Demo Debris Loads to R2	Clean Concrete Loads to Crusher	Metal Debris Loads To Boneyard	Clean Wood Loads	Steel Debris Loaded onto Barge	~
08/14/17	0	0	0	0		
08/15/17	0	0	0	0		
08/16/17	0	0	0	0		
08/17/17	0	0	0	0	38	
08/18/17						
08/19/17						
Season Total	0 loads	0 loads	0 loads	0 loads	38 loads	

NW Demolition and Environmental
A Joint Venture

Daily Field Report

Date: Friday, August 18, 2017
Prepared by: Scott Wakefield

Project: Removal of Lead-Based Paint from Structures and Lead-Contaminated Soil
Location: Midway Atoll National Wildlife Refuge
Client: US Fish and Wildlife Service

Weather: High clouds, wind 10 mph, Temperature ~84F

Personnel:

Name	Company	Site Hours
Scott Wakefield	NWDE Field Oversight	11
Everett White	NWDE Supervisor	11
Jeff James	NWDE Supervisor	11
Joel Smith	NWDE Operator	11
Dalton Sullivan	NWDE Labor	11
Antonio Davis	NWDE Labor	11
Jevon Stone	NWDE Operator	11
Jose Ordaz	NWDE Operator	11
Matt Manning	NWDE Operator	11
Chris Fisher	NWDE Labor	11
Alan Phillips	NWDE Operator	11
Kevin Bach	NWDE Labor	11
Lucas Peel	NWDE Labor	11
Tyler Wilson	NWDE Labor	11

Visitors/Additional Site Personnel:

Name	Title
Bill Spoerer	U.S. FWS
Robert Kenyon	American Marine Corporation

Equipment:

Description	Model No.	Comments / Serial #
Pickup Truck	F350 Service Truck	NWDE
Flatbed Truck	Ford F450	NWDE
Container Truck	Peterbuilt	NWDE
Skid Steer	Bobcat S185	NWDE
Tracked Skid Steer	Bobcat T750	NWDE
Tracked Skid Steer	Bobcat	NWDE
Mini-Excavator	CAT 308	NWDE
Excavator	Volvo EC290BLC	NWDE
Excavator	Volvo EC290BLC	NWDE
Excavator	Volvo EC290	NWDE
Off road Dump Truck	Volvo A30D	NWDE
Off road Dump Truck	Volvo A30D	NWDE
Off road Dump Truck	Volvo A30D	NWDE
Loader	Cat 966K	NWDE
Excavator – High reach	Komatsu PC400HD	NWDE

Materials Delivered:

Description	QTY	Condition/Comments
Diesel	368 gallons	
Gasoline	9 gallons	

Description of Work:

0700 – Health and Safety meeting at NAF staging area. Review today's work tasks.

NWDE full crew is on track to continue loading the project scrap steel pile located at the Boneyard and hauling loads to the barge at the harbor pier. Three A30 Volvo trucks are being used today for the short turn trips, north on Roberts Street and east on Hennessy Ave for the route to the barge.

Outbound shipping containers are being moved with the 966 Cat loader for the barge stern loading. Four 20' NWDE containers will be in the right rear corner of the deck. D rings are placed and welded to the steel deck. Once the containers are in position they are lashed with ship chain and turnbuckles. The containers are two wide, two high.

Iniki's outbound containers as noted yesterday are at the bow of the barge. This includes all of the LBP, ACM and equipment containers. Actual number of Iniki shipping containers is 13, not 12 as indicated yesterday.

0800 – At the NAF Staging Area the supply containers from this barge are opened. Tools, supplies, parts and machinery are being organized. The Hurricane 500 vac trailer unit and ancillary items are being collected and grouped together in preparation of assembly and a test run.

1030 – Note that the Maectite® delivery is 10 full totes of reagent that will be used to finish out 2017.

1200 – Lunch.

1230 – Recycle mild steel continues being loaded at the Boneyard with two Volvo 290 excavators and three A30 haul trucks. At the barge, trucks are spotted backing up, dumped and material stacked on the pile using the Komatsu PC400HD high reach excavator. American Marine site supervisor Robert Kenyon has been onsite during the barge unload and loading work. He coordinates the placement and balance of the load working with NWDE.

1300 – Collect confirmation sampling at Navy removed former Water Tower 5305. The soil abatement area is divided into sub plots for sample collections to narrow the analytical results within the large square footage excavation.

1500 – The two excavators are progressing well at the scrap steel pile. This project steel is primarily the S-28, S-30 AST's (100' diameter x 40' JP-5 tanks,) manifold and pipe run on land at the fuel farm. Added to this over time has been recovered rebar from concrete processing, R2 sand filter tanks and demolition steel from DU-9 rafters.

The four containers of equipment, supplies, PPE, consumables and parts have progressed, being checked in and available. Parts being waited on to date are being assembled in the NAF area.

1730 – NWDE trucks continue hauling and shoving the last of the steel recycle material onto the barge in front of the 185' mark. The Boneyard project stockpile is nearly done, having all fit onto this barge #1.

Outbound equipment will be loaded and finalized to the stern of the deck in the morning. Anticipate that the American Marine barge will be towed out by the American Contender tug that is moored at the Cargo Pier tomorrow.

1830 – The crew is picking up and departing the harbor for the day.

Project scrap steel from the Boneyard stockpile to the barge today is 145 loads. Table 3 indicates a total of 183 A30 truck loads were completed to move the 2017 mild steel stockpile.

Photographs:

Photo 01: Boneyard – View north. Continue loading project scrap steel for hauling to the barge

Photo 02: Boneyard – View northwest. Loading mixed mild steel to haul to the barge

Photo 03: 5305 Water Tower – View southeast. Sub plot collection of confirmation samples

Photo 04: Boneyard – View north. Stockpile of steel nearing completion for sending it to the barge

Photo 05: Midway Harbor Pier 2401- Progress of loading the barge with project scrap steel and connex

Photo 06: Midway Harbor Pier 2401- View northeast. Moored barge being loaded at pier

Photo 07: Midway Harbor Pier 2401- Progress of loading the barge with project scrap steel and connex

Table 1. Maectite and Treated Soil Total Estimates

	Maectite Totals						Treated Soil Totals[1,2]		
	Applied Today (gal)					Total to Date	Excavated and Hauled to R-2 Unit **Today**		Excavated and Hauled to R-2 Unit **Total to Date**
Date	Soils (DU9)	Soils (DU8)	Soils (DU7)	Soils (DU5)	Soils (DU3)	(gal)	Load	^{3}yds[1]	^{3}yds[1]
08/14/17	150	17	153	0	0	459	38.5	439	630
08/15/17	199	0	0	0	0	658	16	273	903
08/16/17	190	0	0	0	0	848	8	260	1162
08/17/17	0	0	0	0	0	848	13.75	0	1162
08/18/17	0	0	0	0	0	848	0	0	1162
08/19/17									
Total to Date	678 gallons	17 gallons	153 gallons	0 gallons	0 gallons		90.25 loads		

Notes:
1. Estimates are based on the number of gallons of Maectite® applied.
2. Soil treatment with Maectite® and hauling to R2 may not occur on the same day.
3. 8/14/17 – Table 2 loads were batch treated in R2, Cell 1. Inserted this data into Table 1 for totalizing the volumes and gallons. Reset Table 2 "Batch loads" to zero until next ex-situ stockpile treatment.

2017 DU 9 – Figures P 1-16, 18, 20, 21, 23-27.
Bldg 1124, 1126, 3521, S361, 347, 3501, S3126, S3127, 521, 520, 502, 5342, 309, 340, 354, 9149, 232, 233, S269, S225A, 2127, 144, Boat House 1 & 2, 4205, 4206, 4207, 4213, 503, 5303, 5341, 5339, 5338, Bollards, Fire Hydrants, 5304, 5305, 4210, 3524, 3529, 5126, 5378, 3514, and other ancillary structures.
Foundations S464, 502, 4201, 5126, 5295, 5342.
2017 DU 8 – S-28, S-30 re-ex, Pipe figure P19
2017 DU 7 – Bldg 3502, 3503, 3504 shade cloth
2017 DU 5 – R2 Unit, Figure P17
2017 DU 3 – Housing figure P22, 419 MIS re-ex

Table 2. Soil loads hauled to the R2 for ex situ Maectite® treatment

	Load Totals				
	Hauled to R2 for treatment in R2 cell (# of truck loads)				
Date	Soils (DU9)	Soils (DU8)	Soils (DU7)	Soils (DU5)	Soils (DU3)
08/14/17	0	0	0	0	0
08/15/17	0	0	0	0	0
08/16/17	0	0	0	0	0
08/17/17	4	0	0	0	0
08/18/17	0	0	0	0	0
08/19/17					
Batch loads to treat in R2	4 loads	0 loads	0 loads	0 loads	0 loads
Total to Date	22 loads	2 loads	18.5 loads	0 loads	0 loads

8/14/17 - Batch treatment of all stockpiled "ex situ" loads to date in R2 Cell 1. Entered this data into Table 1 on 8/14/17 for volume and gallon tracking.
8/15/17 - Add "Batch Loads to treat in R2" subtotal that tracks the truck loads placed for treatment. Reset this to zero once treatment event is complete.

Table 2.1 Soil loads hauled to the R2, non-treated internment

Date	Load Totals				
	Hauled to R2, non-treated soil (# of truck loads)				
	Soils (DU9)	Soils (DU8)	Soils (DU7)	Soils (DU5)	Soils (DU3)
08/14/17	0	0	0	0	0
08/15/17	0	0	0	0	0
08/16/17	0	0	0	0	0
08/17/17	0	0	0	0	0
08/18/17	0	0	0	0	0
08/19/17					
Total to Date	6 loads	0 loads	0 loads	0 loads	9 loads

Table 3. Weekly Load Estimates

Date	Treated Demo Debris Loads to R2	Clean Concrete Loads to Crusher	Metal Debris Loads To Boneyard	Clean Wood Loads	Steel Debris Loaded onto Barge	~
08/14/17	0	0	0	0		
08/15/17	0	0	0	0		
08/16/17	0	0	0	0		
08/17/17	0	0	0	0	38	
08/18/17	0	0	0	0	145	
08/19/17						
Season Total	0 loads	0 loads	0 loads	0 loads	183 loads	

NW Demolition and Environmental
A Joint Venture

Daily Field Report

Date: Saturday, August 19, 2017
Prepared by: Scott Wakefield

Project: Removal of Lead-Based Paint from Structures and Lead-Contaminated Soil
Location: Midway Atoll National Wildlife Refuge
Client: US Fish and Wildlife Service

Weather: High clouds, wind 10 mph, Temperature ~84F

Personnel:

Name	Company	Site Hours
Scott Wakefield	NWDE Field Oversight	10
Everett White	NWDE Supervisor	10
Jeff James	NWDE Supervisor	10
Joel Smith	NWDE Operator	10
Dalton Sullivan	NWDE Labor	Partial
Antonio Davis	NWDE Labor	10
Jevon Stone	NWDE Operator	10
Jose Ordaz	NWDE Operator	10
Matt Manning	NWDE Operator	10
Chris Fisher	NWDE Labor	10
Alan Phillips	NWDE Operator	Partial
Kevin Bach	NWDE Labor	10
Lucas Peel	NWDE Labor	10
Tyler Wilson	NWDE Labor	10

Visitors/Additional Site Personnel:

Name	Title
Bill Spoerer	U.S. FWS
Robert Kenyon	American Marine Corporation

Equipment:

Description	Model No.	Comments / Serial #
Pickup Truck	F350 Service Truck	NWDE
Flatbed Truck	Ford F450	NWDE
Container Truck	Peterbuilt	NWDE
Skid Steer	Bobcat S185	NWDE
Tracked Skid Steer	Bobcat T750	NWDE
Tracked Skid Steer	Bobcat	NWDE
Mini-Excavator	CAT 308	NWDE
Excavator	Volvo EC290BLC	NWDE
Excavator	Volvo EC290BLC	NWDE
Excavator	Volvo EC290	NWDE
Off road Dump Truck	Volvo A30D	NWDE
Off road Dump Truck	Volvo A30D	NWDE
Off road Dump Truck	Volvo A30D	NWDE
Loader	Cat 966K	NWDE
Excavator – High reach	Komatsu PC400HD	NWDE

Materials Delivered:

Description	QTY	Condition/Comments
Diesel	204 gallons	
Gasoline	0 gallons	

Description of Work:

0700 – Health and Safety meeting at NAF staging area. Review today's work tasks.

NWDE will prepare the barge ramp for loading onto the steel deck. Once loaded, the final lashing of the three-piece steel ramp and American Marine's pre-trip inspection, barge load #1 will depart Midway for Honolulu.

The soil excavation crew is mobilizing to the Pipe run at the fuel farm. Figure P19 for the excavation area will be cut to 1' bgs, direct loaded into one of two A30 haul trucks and staged at the R2 Cell 2 for batch treatment of soil. The mini excavator will be in use for this longer pipe run area to work around the multiple concrete pipe footings that will remain in place.

0900 – The American Contender tug has been in use this morning to position the barge for loading of the steel ramps. NWDE used the PC400 and 290 machines to rig and set the ramps. The tug makes the final tow line connection to the barge bow and heads east out of the Midway Harbor to the deeper channel, bound for Honolulu, Hawaii.

At the Boneyard where the stockpiled steel has been removed, NWDE is working to pick up the remnants of steel and debris typical of such a large pile. This material is being processed to remove steel, minimal wood and soil debris. The overall volume is small and the piles are segregated. Sweeping is occurring, working from the outer edges inward. A skid steer mounted magnet is in use for sorting steel from the debris pile.

1030 – Excavation work at the DU-8 Pipe run is progressing, working to the southwest towards former AST areas S28/S30. Materials continue to be placed in the R2 for upcoming soil treatment work.

1200 – Lunch.

1230 – Cleanup work at the Boneyard removed steel pile continues. The sweeping and debris consolidation is capturing the materials for final processing.
Layout the Figure P18 Bollards for excavation limits. This area has a completed utility locate performed earlier this week. The in-use hydrant water line is active to the yellow fire hydrants in this area as the pipe orients parallel to the row of hydrants and bollards.

1600 – At the Boneyard, steel remnants are placed in a small pile in the original location. Soil debris is being loaded into a Volvo off-road truck and placed in the R2 Cell 1. This soil will be batch treated with Maectite® when managing the additional DU-8 stockpiles.

1645 – Excavation work at the Pipe run in DU-8 has progressed to the former manifold area of sample point P16. Anticipate that the pipe run will continue being excavated on Monday.

Ex-situ soil loads from DU-8 Pipe run is 13 loads for future treatment in the R2.
Ex-situ soil loads from DU-9 Boneyard steel pile collection is 1 load for future treatment in the R2,

1730 – The work is wrapped up for the day. End of work week.

Photographs:

Photo 01: Boneyard – View north. Cleanup work for debris collected under the removed steel pile

Photo 02: Midway Harbor Pier 2401– View south. Loading three-piece ramp onto barge

Photo 03: Midway Harbor Pier 2401– View southeast. Departure of barge load #1

Photo 04: Pipe run– View west. Excavation progress

Photo 05: Fuel Farm- View northeast. Mark out of plot at Bollard figure P18.

Photo 06: R2 Cell 1- View north. Staged soil piles for batch treatment

Table 1. Maectite and Treated Soil Total Estimates

	Maectite Totals						Treated Soil Totals[1,2]		
	Applied Today (gal)					Total to Date	Excavated and Hauled to R-2 Unit **Today**		Excavated and Hauled to R-2 Unit **Total to Date**
Date	Soils (DU9)	Soils (DU8)	Soils (DU7)	Soils (DU5)	Soils (DU3)	(gal)	Load	^{3}yds[1]	^{3}yds[1]
08/14/17	150	17	153	0	0	459	38.5	439	630
08/15/17	199	0	0	0	0	658	16	273	903
08/16/17	190	0	0	0	0	848	8	260	1162
08/17/17	0	0	0	0	0	848	13.75	0	1162
08/18/17	0	0	0	0	0	848	0	0	1162
08/19/17	0	0	0	0	0	848	0	0	1162
Total to Date	678 gallons	17 gallons	153 gallons	0 gallons	0 gallons		90.25 loads		

Notes:
1. Estimates are based on the number of gallons of Maectite® applied.
2. Soil treatment with Maectite® and hauling to R2 may not occur on the same day.
3. 8/14/17 – Table 2 loads were batch treated in R2, Cell 1. Inserted this data into Table 1 for totalizing the volumes and gallons. Reset Table 2 "Batch loads" to zero until next ex-situ stockpile treatment.

2017 DU 9 – Figures P 1-16, 18, 20, 21, 23-27.
Bldg 1124, 1126, 3521, S361, 347, 3501, S3126, S3127, 521, 520, 502, 5342, 309, 340, 354, 9149, 232, 233, S269, S225A, 2127, 144, Boat House 1 & 2, 4205, 4206, 4207, 4213, 503, 5303, 5341, 5339, 5338, Bollards, Fire Hydrants, 5304, 5305, 4210, 3524, 3529, 5126, 5378, 3514, and other ancillary structures.
Foundations S464, 502, 4201, 5126, 5295, 5342.
2017 DU 8 – S-28, S-30 re-ex, Pipe figure P19
2017 DU 7 – Bldg 3502, 3503, 3504 shade cloth
2017 DU 5 – R2 Unit, Figure P17
2017 DU 3 – Housing figure P22, 419 MIS re-ex

Table 2. Soil loads hauled to the R2 for ex situ Maectite® treatment

	Load Totals				
	Hauled to R2 for treatment in R2 cell (# of truck loads)				
Date	Soils (DU9)	Soils (DU8)	Soils (DU7)	Soils (DU5)	Soils (DU3)
08/14/17	0	0	0	0	0
08/15/17	0	0	0	0	0
08/16/17	0	0	0	0	0
08/17/17	4	0	0	0	0
08/18/17	0	0	0	0	0
08/19/17	1	13	0	0	0
Batch loads to treat in R2	5 loads	13 loads	0 loads	0 loads	0 loads
Total to Date	23 loads	15 loads	18.5 loads	0 loads	0 loads

8/14/17 - Batch treatment of all stockpiled "ex situ" loads to date in R2 Cell 1. Entered this data into Table 1 on 8/14/17 for volume and gallon tracking.
8/15/17 - Add "Batch Loads to treat in R2" subtotal that tracks the truck loads placed for treatment. Reset this to zero once treatment event is complete.

Table 2.1 Soil loads hauled to the R2, non-treated internment

Date	Load Totals				
	Hauled to R2, non-treated soil (# of truck loads)				
	Soils (DU9)	Soils (DU8)	Soils (DU7)	Soils (DU5)	Soils (DU3)
08/14/17	0	0	0	0	0
08/15/17	0	0	0	0	0
08/16/17	0	0	0	0	0
08/17/17	0	0	0	0	0
08/18/17	0	0	0	0	0
08/19/17	0	0	0	0	0
Total to Date	6 loads	0 loads	0 loads	0 loads	9 loads

Table 3. Weekly Load Estimates

Date	Treated Demo Debris Loads to R2	Clean Concrete Loads to Crusher	Metal Debris Loads To Boneyard	Clean Wood Loads	Steel Debris Loaded onto Barge	~
08/14/17	0	0	0	0		
08/15/17	0	0	0	0		
08/16/17	0	0	0	0		
08/17/17	0	0	0	0	38	
08/18/17	0	0	0	0	145	
08/19/17	0	0	0	0	0	
Season Total	0 loads	0 loads	0 loads	0 loads	183 loads	

NW Demolition and Environmental
A Joint Venture

Daily Field Report

Date: Monday, August 21, 2017
Prepared by: Scott Wakefield

Project: Removal of Lead-Based Paint from Structures and Lead-Contaminated Soil
Location: Midway Atoll National Wildlife Refuge
Client: US Fish and Wildlife Service

Weather: High clouds, wind 12 mph, Temperature ~82F

Personnel:

Name	Company	Site Hours
Scott Wakefield	NWDE Field Oversight	10
Everett White	NWDE Supervisor	10
Jeff James	NWDE Supervisor	Partial
Joel Smith	NWDE Operator	10
Dalton Sullivan	NWDE Labor	Partial
Antonio Davis	NWDE Labor	10
Jevon Stone	NWDE Operator	10
Jose Ordaz	NWDE Operator	10
Matt Manning	NWDE Operator	0
Chris Fisher	NWDE Labor	10
Alan Phillips	NWDE Operator	0
Kevin Bach	NWDE Labor	Partial
Lucas Peel	NWDE Labor	10
Tyler Wilson	NWDE Labor	Partial

Visitors/Additional Site Personnel:

Name	Title
Bill Spoerer	U.S. FWS
Bob Peyton	U.S. FWS
Eric Moore	DBSI

Equipment:

Description	Model No.	Comments / Serial #
Pickup Truck	F350 Service Truck	NWDE
Flatbed Truck	Ford F450	NWDE
Container Truck	Peterbuilt	NWDE
Skid Steer	Bobcat S185	NWDE
Tracked Skid Steer	Bobcat T750	NWDE
Tracked Skid Steer	Bobcat	NWDE
Mini-Excavator	CAT 308	NWDE
Excavator	Volvo EC290BLC	NWDE
Excavator	Volvo EC290BLC	NWDE
Excavator	Volvo EC290	NWDE
Off road Dump Truck	Volvo A30D	NWDE
Off road Dump Truck	Volvo A30D	NWDE
Off road Dump Truck	Volvo A30D	NWDE
Excavator – High reach	Komatsu PC400HD	NWDE

Materials Delivered:

Description	QTY	Condition/Comments
Diesel	0 gallons	
Gasoline	0 gallons	

Description of Work:

0700 – Health and Safety meeting at NAF staging area. Review today's work tasks.

NWDE soil excavation crew is resuming the excavation work at the DU-8 Pipe run, Fig P19. The concrete footings that were in use to support the fuel pipes above ground from tanks to pier are dug around and left in place. These concrete features will remain in place and are not being removed. Clean coral backfill will surround the concrete pipe supports once that backfill task is allowed by confirmation sample results.

At the Boneyard former recycle steel pile, workers are cleaning up the concrete work area to include the expansion joints between concrete panels. Debris is being collected and will be placed in the R2 for treatment with the initial generated debris.

0900 – Remark excavation limits & utility markings removed by rain at Bldg 309 and Bldg 144.
The R2 stockpiles for upcoming batch soil treatment are being rough graded to a consistent pad area that will be applied and mixed with Maectite® within the R2.

1000 – Joint island meeting for topic of the trees at the 5304 Water Tower and at the R3 Water Plant. Attending; B.Peyton, Bill Spoerer- US FWS, E.Moore, Public Works staff- DBSI, E.White, J.James, SWakefield- NWDE. Evaluate the site-specific trees, in use utility locations and logistics to remove the trees. The conclusion of the meeting is that NWDE will supply an excavator to work with DBSI fallers to remove the challenging trees in both work areas. Wood slash will be staged immediately adjacent to the tree removal area with exception of the largest ironwood northwest of Bldg 347. This tree with limited area will be brought down, temporarily staged and then NWDE will provide an A30 Volvo to haul the wood slash to a FWS appointed location near the Boneyard. Scheduling is set to begin tree removal this week, Wednesday morning, August 23rd.
DBSI Public Works advises a recent discovery that valve #44 for the transite water line will not fully isolate the pipe. The 16" line section is between valve #44 in the field and valve #21 near the northeast corner of the NAF Bldg 5306. The pipe running east/west through the Parade Field is where the Water Tower 5304 demolition landing zone and steel processing area is located. While the pipe is no longer in service, DBSI will be checking available options to fully isolate the pipe line.

1200 – Lunch.

1230 – Continue the DU-8 Pipe run excavation work, progressing past 75% complete for the plot. The 1' depth excavation is being hauled to the R2 with two trucks, placed for upcoming Maectite® treatment.

1300 – Bldg 521 confirmation sample collection at the northwest excavation plot. This will complete the Communication Center sample collection for the multiple dig areas around the building. The samples will be sent off-island this week, Thursday August 24th to Test America.

1645 – DU-8 Pipe run excavation work is nearing the southern termination point. The two former fuel line elbows and blind flanged area are being worked and cleaned up at the end of the plot near the road.

1730 – The crew is wrapped up for the day.

Ex-situ soil loads from DU-8 Pipe run is 19 loads for future treatment in the R2.

Photographs:

Photo 01: Pipe run– View west. Excavation progress at former manifold area

Photo 02: Pipe run– View south. Excavation progress at former manifold area

Photo 03: Pipe run– View east. Excavation progress nearing the flanged pipe connections

Photo 04: R2 Unit– View southwest. Stockpile preparation for upcoming Maectite® batch treatment

Table 1. Maectite and Treated Soil Total Estimates

	Maectite Totals						Treated Soil Totals[1,2]		
	Applied Today (gal)					Total to Date	Excavated and Hauled to R-2 Unit **Today**		Excavated and Hauled to R-2 Unit **Total to Date**
Date	Soils (DU9)	Soils (DU8)	Soils (DU7)	Soils (DU5)	Soils (DU3)	(gal)	Load	^{3}yds[1]	^{3}yds[1]
08/21/17	0	0	0	0	0	848	0	0	1162
08/22/17									
08/23/17									
08/24/17									
08/25/17									
08/26/17									
Total to Date	678 gallons	17 gallons	153 gallons	0 gallons	0 gallons		90.25 loads		

Notes:
1. Estimates are based on the number of gallons of Maectite® applied.
2. Soil treatment with Maectite® and hauling to R2 may not occur on the same day.
3. 8/14/17 – Table 2 loads were batch treated in R2, Cell 1. Inserted this data into Table 1 for totalizing the volumes and gallons. Reset Table 2 "Batch loads" to zero until next ex-situ stockpile treatment.

2017 DU 9 – Figures P 1-16, 18, 20, 21, 23-27.
Bldg 1124, 1126, 3521, S361, 347, 3501, S3126, S3127, 521, 520, 502, 5342, 309, 340, 354, 9149, 232, 233, S269, S225A, 2127, 144, Boat House 1 & 2, 4205, 4206, 4207, 4213, 503, 5303, 5341, 5339, 5338, Bollards, Fire Hydrants, 5304, 5305, 4210, 3524, 3529, 5126, 5378, 3514, and other ancillary structures.
Foundations S464, 502, 4201, 5126, 5295, 5342.
2017 DU 8 – S-28, S-30 re-ex, Pipe figure P19
2017 DU 7 – Bldg 3502, 3503, 3504 shade cloth
2017 DU 5 – R2 Unit, Figure P17
2017 DU 3 – Housing figure P22, 419 MIS re-ex

Table 2. Soil loads hauled to the R2 for ex situ Maectite® treatment

	Load Totals				
	Hauled to R2 for treatment in R2 cell (# of truck loads)				
Date	Soils (DU9)	Soils (DU8)	Soils (DU7)	Soils (DU5)	Soils (DU3)
08/21/17	0	19	0	0	0
08/22/17					
08/23/17					
08/24/17					
08/25/17					
08/26/17					
Batch loads to treat in R2	5 loads	32 loads	0 loads	0 loads	0 loads
Total to Date	23 loads	34 loads	18.5 loads	0 loads	0 loads

8/14/17 - Batch treatment of all stockpiled "ex situ" loads to date in R2 Cell 1. Entered this data into Table 1 on 8/14/17 for volume and gallon tracking.
8/15/17 - Add "Batch Loads to treat in R2" subtotal that tracks the truck loads placed for treatment. Reset this to zero once treatment event is complete.

Table 2.1 Soil loads hauled to the R2, non-treated internment

Date	Load Totals				
	Hauled to R2, non-treated soil (# of truck loads)				
	Soils (DU9)	Soils (DU8)	Soils (DU7)	Soils (DU5)	Soils (DU3)
08/21/17	0	0	0	0	0
08/22/17					
08/23/17					
08/24/17					
08/25/17					
08/26/17					
Total to Date	6 loads	0 loads	0 loads	0 loads	9 loads

Table 3. Weekly Load Estimates

Date	Treated Demo Debris Loads to R2	Clean Concrete Loads to Crusher	Metal Debris Loads To Boneyard	Clean Wood Loads	Steel Debris Loaded onto Barge	~
08/21/17	0	0	0	0	0	
08/22/17						
08/23/17						
08/24/17						
08/25/17						
08/26/17						
Season Total	0 loads	0 loads	0 loads	0 loads	183 loads	

NW Demolition and Environmental
A Joint Venture

Daily Field Report

Date: Tuesday, August 22, 2017
Prepared by: Scott Wakefield

Project: Removal of Lead-Based Paint from Structures and Lead-Contaminated Soil
Location: Midway Atoll National Wildlife Refuge
Client: US Fish and Wildlife Service

Weather: High clouds, wind 12 mph, Temperature ~83F

Personnel:

Name	Company	Site Hours
Scott Wakefield	NWDE Field Oversight	10
Everett White	NWDE Supervisor	10
Jeff James	NWDE Supervisor	Partial
Joel Smith	NWDE Operator	10
Dalton Sullivan	NWDE Labor	Partial
Antonio Davis	NWDE Labor	10
Jevon Stone	NWDE Operator	10
Jose Ordaz	NWDE Operator	10
Matt Manning	NWDE Operator	0
Chris Fisher	NWDE Labor	10
Alan Phillips	NWDE Operator	0
Kevin Bach	NWDE Labor	Partial
Lucas Peel	NWDE Labor	10
Tyler Wilson	NWDE Labor	Partial

Visitors/Additional Site Personnel:

Name	Title
Bill Spoerer	U.S. FWS

Equipment:

Description	Model No.	Comments / Serial #
Pickup Truck	F350 Service Truck	NWDE
Flatbed Truck	Ford F450	NWDE
Container Truck	Peterbuilt	NWDE
Skid Steer	Bobcat S185	NWDE
Tracked Skid Steer	Bobcat T750	NWDE
Tracked Skid Steer	Bobcat	NWDE
Mini-Excavator	CAT 308	NWDE
Excavator	Volvo EC290BLC	NWDE
Excavator	Volvo EC290BLC	NWDE
Excavator	Volvo EC290	NWDE
Off road Dump Truck	Volvo A30D	NWDE
Off road Dump Truck	Volvo A30D	NWDE
Off road Dump Truck	Volvo A30D	NWDE
Excavator – High reach	Komatsu PC400HD	NWDE

Materials Delivered:

Description	QTY	Condition/Comments
Diesel	0 gallons	
Gasoline	0 gallons	

Description of Work:

0700 – Health and Safety meeting at NAF staging area. Review today's work tasks.

NWDE soil excavation crew is preparing to move off the completed Pipe run Figure 19 and set up at Bollard Figure P18. Check ground burrows for birds. The fire hydrant water lines, tee's, individual below ground valves, three yellow hydrants and one pedestal all converge in the Bollard southwest plot area. The 1' excavation area is carefully cut, in addition to hand digging for removing soil and direct load into one of two A30 haul trucks. This plot runs up to the edge of the roadway to surround the old yellow painted steel bollards. Materials are stockpiled within the R2 Unit for upcoming batch treatment of the soil.

Layout confirmation plots for the completed Pipe run, Figure P19. Bottom of excavation composite will be collected to be included in the shipment off island, Thursday of this week to Test America.

0900 – The Bollard area progress is moving northeast with the Cat 308 excavator and 60" flat edged bucket. The steel pipe features near an expectant transite water line are set in concrete. When the bollard is worked up to, the vertical steel pipe is cut off where it meets the concrete footing. The steel bollard pipe is then removed and soil excavation continued. A total of 14 bollards are removed from the excavation area.

1000 - Weekly conference call with Mainland and Hawaii project offices. See NWDE Midway Meeting Agenda for specific detail.

1200 – Lunch.

1230 – Continue the Bollard excavation work in the Fuel Farm, progressing past 65% complete for the plot. Hydrant water has been in use for dust abatement during the digging work.
Collect confirmation samples for the Pipe run, Figure P19.

1500 – The mini excavator soil work at the Bollard plot is done. Two intersecting hard surface driveways have been left intact as they cross perpendicular to the excavation. Also noted is that a large percentage for the bottom of excavation is a hard surface 1' bgs, either a former road base or utilidor type feature.
NWDE soil crew is moving east to the harbor pier area and specifically Bldg 1124 HazWaste Storage. Check ground burrows for birds. Begin dig and haul of the small plots for Bldg 1124 Fig P1 and Bldg 1126 Fig P2. Soil hauled to the R2 is staged for upcoming batch treatment within the R2 Unit.

NWDE is mobilizing the Komatsu high reach excavator to the R3 Midway Water Plant. This is in preparation for beginning the tree removal work at the Plant with DBSI. Noted in yesterday's DFR for a joint work crew to remove trees from the excavation area.

1630 – Figure P1, Bldg 1124 excavation plot is complete. Collect confirmation sample.
Continue soil excavation at Bldg 1126.

1730 – The crew has picked up and closes out the day. Tomorrow will continue soil work at the harbor.

Ex-situ soil loads from DU-9 Bollards is 5 loads for future treatment in the R2.
Ex-situ soil loads from DU-9 1124, 1126 is 3 loads for future treatment in the R2.

Photographs:

Photo 01: Pipe run– View west. Completed excavation, prep for confirmation sampling

Photo 02: Bollard – View northeast. Excavating parallel to the roadway for bollards, hydrant and pedestal

Photo 03: Bollard – View southwest. Plot area divided by intersecting driveways

Photo 04: Bollard – View southwest. SW end of plot, view includes hydrants and pedestal

Photo 05: Bldg 1124 HazWaste Storage – View northeast. Excavating Figure P1

Photo 06: Bldg 1126 Harbor Office – View southwest. Progress excavation of Figure P2

Table 1. Maectite and Treated Soil Total Estimates

	Maectite Totals						Treated Soil Totals[1,2]		
	Applied Today (gal)					Total to Date	Excavated and Hauled to R-2 Unit **Today**		Excavated and Hauled to R-2 Unit **Total to Date**
Date	Soils (DU9)	Soils (DU8)	Soils (DU7)	Soils (DU5)	Soils (DU3)	(gal)	Load	^{3}yds[1]	^{3}yds[1]
08/21/17	0	0	0	0	0	848	0	0	1162
08/22/17	0	0	0	0	0	848	0	0	1162
08/23/17									
08/24/17									
08/25/17									
08/26/17									
Total to Date	678 gallons	17 gallons	153 gallons	0 gallons	0 gallons		90.25 loads		

Notes:
1. Estimates are based on the number of gallons of Maectite® applied.
2. Soil treatment with Maectite® and hauling to R2 may not occur on the same day.
3. 8/14/17 – Table 2 loads were batch treated in R2, Cell 1. Inserted this data into Table 1 for totalizing the volumes and gallons. Reset Table 2 "Batch loads" to zero until next ex-situ stockpile treatment.

2017 DU 9 – Figures P 1-16, 18, 20, 21, 23-27.
Bldg 1124, 1126, 3521, S361, 347, 3501, S3126, S3127, 521, 520, 502, 5342, 309, 340, 354, 9149, 232, 233, S269, S225A, 2127, 144, Boat House 1 & 2, 4205, 4206, 4207, 4213, 503, 5303, 5341, 5339, 5338, Bollards, Fire Hydrants, 5304, 5305, 4210, 3524, 3529, 5126, 5378, 3514, and other ancillary structures.
Foundations S464, 502, 4201, 5126, 5295, 5342.
2017 DU 8 – S-28, S-30 re-ex, Pipe figure P19
2017 DU 7 – Bldg 3502, 3503, 3504 shade cloth
2017 DU 5 – R2 Unit, Figure P17
2017 DU 3 – Housing figure P22, 419 MIS re-ex

Table 2. Soil loads hauled to the R2 for ex situ Maectite® treatment

	Load Totals				
	Hauled to R2 for treatment in R2 cell (# of truck loads)				
Date	Soils (DU9)	Soils (DU8)	Soils (DU7)	Soils (DU5)	Soils (DU3)
08/21/17	0	19	0	0	0
08/22/17	8	0	0	0	0
08/23/17					
08/24/17					
08/25/17					
08/26/17					
Batch loads to treat in R2	13 loads	32 loads	0 loads	0 loads	0 loads
Total to Date	31 loads	34 loads	18.5 loads	0 loads	0 loads

8/14/17 - Batch treatment of all stockpiled "ex situ" loads to date in R2 Cell 1. Entered this data into Table 1 on 8/14/17 for volume and gallon tracking.
8/15/17 - Add "Batch Loads to treat in R2" subtotal that tracks the truck loads placed for treatment. Reset this to zero once treatment event is complete.

Table 2.1 Soil loads hauled to the R2, non-treated internment

Date	Load Totals				
	Hauled to R2, non-treated soil (# of truck loads)				
	Soils (DU9)	Soils (DU8)	Soils (DU7)	Soils (DU5)	Soils (DU3)
08/21/17	0	0	0	0	0
08/22/17	0	0	0	0	0
08/23/17					
08/24/17					
08/25/17					
08/26/17					
Total to Date	6 loads	0 loads	0 loads	0 loads	9 loads

Table 3. Weekly Load Estimates

Date	Treated Demo Debris Loads to R2	Clean Concrete Loads to Crusher	Metal Debris Loads To Boneyard	Clean Wood Loads	Steel Debris Loaded onto Barge	~
08/21/17	0	0	0	0	0	
08/22/17	0	0	0	0	0	
08/23/17						
08/24/17						
08/25/17						
08/26/17						
Season Total	0 loads	0 loads	0 loads	0 loads	183 loads	

Daily Field Report

Date: Wednesday, August 23, 2017
Prepared by: Scott Wakefield

Project: Removal of Lead-Based Paint from Structures and Lead-Contaminated Soil
Location: Midway Atoll National Wildlife Refuge
Client: US Fish and Wildlife Service

Weather: High clouds, wind 11 mph, Temperature ~83F

Personnel:

Name	Company	Site Hours
Scott Wakefield	NWDE Field Oversight	10
Everett White	NWDE Supervisor	10
Jeff James	NWDE Supervisor	Partial
Joel Smith	NWDE Operator	10
Dalton Sullivan	NWDE Labor	Partial
Antonio Davis	NWDE Labor	10
Jevon Stone	NWDE Operator	10
Jose Ordaz	NWDE Operator	10
Matt Manning	NWDE Operator	0
Chris Fisher	NWDE Labor	10
Alan Phillips	NWDE Operator	0
Kevin Bach	NWDE Labor	Partial
Lucas Peel	NWDE Labor	10
Tyler Wilson	NWDE Labor	Partial
Eric Matteson	NWDE Operator	Partial

Visitors/Additional Site Personnel:

Name	Title
Bill Spoerer	U.S. FWS
Volunteers and staff	U.S. FWS
DBSI Public Works staff	DBSI

Equipment:

Description	Model No.	Comments / Serial #
Pickup Truck	F350 Service Truck	NWDE
Flatbed Truck	Ford F450	NWDE
Container Truck	Peterbuilt	NWDE
Skid Steer	Bobcat S185	NWDE
Tracked Skid Steer	Bobcat T750	NWDE
Tracked Skid Steer	Bobcat	NWDE
Mini-Excavator	CAT 308	NWDE
Excavator	Volvo EC290BLC	NWDE
Excavator	Volvo EC290BLC	NWDE
Excavator	Volvo EC290	NWDE
Off road Dump Truck	Volvo A30D	NWDE
Off road Dump Truck	Volvo A30D	NWDE
Off road Dump Truck	Volvo A30D	NWDE
Excavator – High reach	Komatsu PC400HD	NWDE

Materials Delivered:

Description	QTY	Condition/Comments
Diesel	~~204~~ 160 gallons 8/19/17	Correction to 8/19/17 DFR
Diesel	186 gallons 8/22/17	
Gasoline	0 gallons	

Description of Work:

0700 – Health and Safety meeting at NAF staging area. Review today's work tasks.

NWDE soil excavation crew resumes excavation at Bldg 1126 Harbor Office. The two smaller soil locations per Figure P2 are being direct loaded into the Volvo haul truck and moved to the R2 Unit. This morning a total of 3.5 loads are loaded and staged in the R2 prior to today's Maectite® batch treatment #2 event.

Crews are mobilizing to the Midway Water Plant for the planned tree removal work. NWDE, DBSI and US FWS are working jointly to remove one large ironwood and five palm trees from the Figure P5 excavation area. Trees are both an obstacle and hazard to complete soil abatement work between the R3 cisterns and buildings. NWDE is operating their high reach Komatsu PC400 grapple to manipulate the material handling. DBSI has four fallers and one manlift for accessing and making cuts as needed. US FWS is overseeing and handling bird as needs arise.

0900 – At the NAF Staging Area NWDE is prepping the vac trailer for upcoming impacted soil removal. This will include hydrants and near areas with utilities or limited access.

At the Water Plant one palm and the single ironwood tree have been brought down. The NWDE A30 haul truck is brought in and ironwood debris is loaded and moved to the appointed stockpile location northeast of the Boneyard. Mobilize PC400 to northeast side of the Water Plant to reach the additional palm trees.

1130 – The Water Plant area trees marked for removal are down and task complete. Tracking the machinery to the active 5304 Water Tower where ironwood trees in the work area will be removed. These are within the excavation plot and are slated for removal prior to tower demo or soil excavation.

1200 – Lunch.

1230 – US FWS has arranged for the volunteers to manage the 8 identified wedge tailed shearwaters in the work area. The area to pile the wood slash debris is prepared by managing the burrow locations during the tree removal tasks.

1400 – CMU demo debris at the north end of the 5306 NAF Hanger is being loaded into the A30 haul truck and placed in the R2. The three loads of small painted rubble material will be included in soil batch treatment work prior to final positioning in the R2 Cell.

At the R2, the Maectite® application and mixing has progressed through the day using the 290 Volvo excavator. Hydrant water is amended while the reagent is mixed to a uniform consistency in the Cell. Nearing day's end, the batch event #2 soil treatment is near completion.

1500 - Collect confirmation samples for the Bollard Figure P18, Fire Hydrants 53, 54, 54A, Bldg 1126.

1730 – The crew has picked up and closes out the day.

Ex-situ soil loads from DU-9 Bldg 1126 is 3.5 loads, batch treated in the R2 today with staged loads. Demo debris volume adjacent to NAF is 3 loads hauled to the R2 Unit.

Photographs:

Photo 01: Water Plant– View northwest. Water Plant trees prior to removal

Photo 02: Water Plant– View northwest. Water Plant trees after removal of six trees

Photo 03: Water Plant – View northeast. NWDE providing excavator equipment for tree removal

Photo 04: Water Plant – DBSI providing saw work and manlift as needed

Photo 05: 5304 Water Tower – View south. Prior to tree removal in excavation area

Photo 06: 5304 Water Tower – View south. Progress of tree removal in excavation area

Photo 07: Bldg 1126 Harbor Office – View north. DU-9 excavation area overview

Photo 08: R2 Cell 1 – View northeast. Batch treatment event #2 of DU-9 and DU-8 Pipe run soil

Table 1. Maectite and Treated Soil Total Estimates

	Maectite Totals						Treated Soil Totals[1,2]		
	Applied Today (gal)					Total to Date	Excavated and Hauled to R-2 Unit **Today**		Excavated and Hauled to R-2 Unit **Total to Date**
Date	Soils (DU9)	Soils (DU8)	Soils (DU7)	Soils (DU5)	Soils (DU3)	(gal)	Load	^{3}yds[1]	^{3}yds[1]
08/21/17	0	0	0	0	0	848	0	0	1162
08/22/17	0	0	0	0	0	848	0	0	1162
08/23/17	153	188	0	0	0	1189	48.5	467	1630
08/24/17									
08/25/17									
08/26/17									
Total to Date	831 gallons	205 gallons	153 gallons	0 gallons	0 gallons		138.75 loads		

Notes:
1. Estimates are based on the number of gallons of Maectite® applied.
2. Soil treatment with Maectite® and hauling to R2 may not occur on the same day.
3. 8/23/17 – Table 2 loads were batch treated in R2, Cell 1. Inserted this data into Table 1 for totalizing the volumes and gallons. Reset Table 2 "Batch loads" of 48.5 to zero until next ex-situ stockpile treatment.

2017 DU 9 – Figures P 1-16, 18, 20, 21, 23-27.
Bldg 1124, 1126, 3521, S361, 347, 3501, S3126, S3127, 521, 520, 502, 5342, 309, 340, 354, 9149, 232, 233, S269, S225A, 2127, 144, Boat House 1 & 2, 4205, 4206, 4207, 4213, 503, 5303, 5341, 5339, 5338, Bollards, Fire Hydrants, 5304, 5305, 4210, 3524, 3529, 5126, 5378, 3514, and other ancillary structures.
Foundations S464, 502, 4201, 5126, 5295, 5342.
2017 DU 8 – S-28, S-30 re-ex, Pipe figure P19
2017 DU 7 – Bldg 3502, 3503, 3504 shade cloth
2017 DU 5 – R2 Unit, Figure P17
2017 DU 3 – Housing figure P22, 419 MIS re-ex

Table 2. Soil loads hauled to the R2 for ex situ Maectite® treatment

	Load Totals				
	Hauled to R2 for treatment in R2 cell (# of truck loads)				
Date	Soils (DU9)	Soils (DU8)	Soils (DU7)	Soils (DU5)	Soils (DU3)
08/21/17	0	19	0	0	0
08/22/17	8	0	0	0	0
08/23/17	3.5	0	0	0	0
08/24/17					
08/25/17					
08/26/17					
Batch loads to treat in R2	16.5 loads	32 loads	0 loads	0 loads	0 loads
Total to Date	34.5 loads	34 loads	18.5 loads	0 loads	0 loads

8/14/17 - Batch treatment of all stockpiled "ex situ" loads to date in R2 Cell 1. Entered this data into Table 1 on 8/14/17 for volume and gallon tracking.
8/15/17 - Add "Batch Loads to treat in R2" subtotal that tracks the truck loads placed for treatment. Reset this to zero once treatment event is complete.
8/23/17 - Batch treatment of all stockpiled "ex situ" loads to date in R2 Cell 1. Entered this data into Table 1 on 8/23/17 for volume and gallon tracking.

Table 2.1 Soil loads hauled to the R2, non-treated internment

Date	Load Totals				
	Hauled to R2, non-treated soil (# of truck loads)				
	Soils (DU9)	Soils (DU8)	Soils (DU7)	Soils (DU5)	Soils (DU3)
08/21/17	0	0	0	0	0
08/22/17	0	0	0	0	0
08/23/17	0	0	0	0	0
08/24/17					
08/25/17					
08/26/17					
Total to Date	6 loads	0 loads	0 loads	0 loads	9 loads

Table 3. Weekly Load Estimates

Date	Treated Demo Debris Loads to R2	Clean Concrete Loads to Crusher	Metal Debris Loads To Boneyard	Clean Wood Loads	Steel Debris Loaded onto Barge	~
08/21/17	0	0	0	0	0	
08/22/17	0	0	0	0	0	
08/23/17	3	0	0	4	0	
08/24/17						
08/25/17						
08/26/17						
Season Total	3 loads	0 loads	0 loads	4 loads	183 loads	

Daily Field Report

Date: Thursday, August 24, 2017
Prepared by: Scott Wakefield

Project: Removal of Lead-Based Paint from Structures and Lead-Contaminated Soil
Location: Midway Atoll National Wildlife Refuge
Client: US Fish and Wildlife Service

Weather: High clouds, wind 10 mph, Temperature ~81F

Personnel:

Name	Company	Site Hours
Scott Wakefield	NWDE Field Oversight	10
Everett White	NWDE Supervisor	10
Jeff James	NWDE Supervisor	Partial
Joel Smith	NWDE Operator	10
Dalton Sullivan	NWDE Labor	Partial
Antonio Davis	NWDE Labor	10
Jevon Stone	NWDE Operator	10
Jose Ordaz	NWDE Operator	Partial
Matt Manning	NWDE Operator	0
Chris Fisher	NWDE Labor	10
Alan Phillips	NWDE Operator	0
Kevin Bach	NWDE Labor	Partial
Lucas Peel	NWDE Labor	10
Tyler Wilson	NWDE Labor	10
Eric Matteson	NWDE Operator	10

Visitors/Additional Site Personnel:

Name	Title
Bill Spoerer	U.S. FWS
Volunteers and staff	U.S. FWS
DBSI Public Works staff	DBSI

Equipment:

Description	Model No.	Comments / Serial #
Pickup Truck	F350 Service Truck	NWDE
Flatbed Truck	Ford F450	NWDE
Container Truck	Peterbuilt	NWDE
Skid Steer	Bobcat S185	NWDE
Tracked Skid Steer	Bobcat T750	NWDE
Tracked Skid Steer	Bobcat	NWDE
Mini-Excavator	CAT 308	NWDE
Excavator	Volvo EC290BLC	NWDE
Excavator	Volvo EC290BLC	NWDE
Excavator	Volvo EC290	NWDE
Off road Dump Truck	Volvo A30D	NWDE
Off road Dump Truck	Volvo A30D	NWDE
Off road Dump Truck	Volvo A30D	NWDE
Excavator – High reach	Komatsu PC400HD	NWDE

Materials Delivered:

Description	QTY	Condition/Comments
Diesel	7 gallons	8/23/17
Gasoline	0 gallons	

Description of Work:

0700 – Health and Safety meeting at NAF staging area. Review today's work tasks.

DBSI and NWDE will be finishing the last few tree removal tasks at the west side of the active Water Tower 5304. These smaller ironwood trees will be positioned using the NWDE high reach excavator while the four person DBSI crew faces and partial back cuts each tree. These are the same steps followed during yesterday's tree removal tasks.

Prior to equipment moving in, the US FWS crew is moving in to remove the identified 8 shearwater birds. Once today's work is complete, the same crew will place the chicks back into their original ground burrow. Plywood has remained atop the burrows as a location indicator and protection from inadvertent debris.

0830 – NWDE soil excavation work at Bldg 144 is planned for today. Inspect the access and work area for ground nesting burrow activity. The Maectite® equipment and Cat mini excavator move in at the east side of the existing structure. Plots with soil are treated at the manufacturer's prescribed rate of .75 gallons per cubic yard of reagent. Hydrant water is added while the flat edged 60" bucket lifts and folds the materials to a consistent mixture. At the east side of Bldg 144 as soil is probed with the excavator, there is a significant concrete feature that includes slab and small valve vaults for former 8" pipes. As the soil is drawn back the volume of Maectite® is re-calculated to account for the reduced yardage.

0900 – The tree removal work at the active Water Tower 5304 is complete. The Komatsu 400 is decon'd at the exit and moved off site. NWDE is now placing additional shade cloth nearest the footing locations to minimize future petrel sea bird burrowing activities.

1040 – Cinco Air charter flight that landed on Tuesday of this week is now lifting off from Henderson Airfield. Today E.White departs as previously scheduled.

1130 – Bldg 144 east side exterior area is carved out to note the 3' deep concrete valve vaults and pipes. Each vault has a concrete floor and are approximately 4'x8 in irregular configurations. The pipe arrangements indicate valve and grates were in use in the past. Soil is removed from the recesses and placed for treatment on the adjoining plot.

1200 – Lunch

1230 - The NWDE Vac trailer crew is going through the safety orientation and task work for operation of the vac and air knife system. A four-person crew will be typical of operating and moving materials with the extension hose, stinger and bag collection system.

1430 – At the Bollard area of the Tank Farm, the Vac system is being tested for additional edge work in the excavation. Details are adjusted to refine the repeated method of soil removal and emptying the hopper. At this time, the hopper is elevated to direct soil placement into one A30 Volvo truck.

1630 – Bldg 144 north side plot has been treated and mixed with Maectite®. At the east area treated material is being loaded and hauled to the R2 unit.

1730 – Ending the day.
Treated soil from DU-9 to the R2 today is one load.

Photographs:

Photo 01: 5304 Water Tower– View northwest. Morning work to finish removal of ironwood trees

Photo 02: 5304 Water Tower– View south. Additional shade cloth placement at the footings

Photo 03: Bldg 144– View south. Soil treat and haul work begins at the east side

Photo 04: Bldg 144– View north. East side concrete and former valve vaults

Photo 05: Vac trailer and A30 haul truck positioning testing

Photo 06: Bldg 144– View southwest. Maectite® and hydrant water mechanical mixing

Table 1. Maectite and Treated Soil Total Estimates

	Maectite Totals						Treated Soil Totals[1,2]		
	Applied Today (gal)					Total to Date	Excavated and Hauled to R-2 Unit **Today**		Excavated and Hauled to R-2 Unit **Total to Date**
Date	Soils (DU9)	Soils (DU8)	Soils (DU7)	Soils (DU5)	Soils (DU3)	(gal)	Load	^{3}yds[1]	^{3}yds[1]
08/21/17	0	0	0	0	0	848	0	0	1162
08/22/17	0	0	0	0	0	848	0	0	1162
08/23/17	153	188	0	0	0	1189	48.5	467	1630
08/24/17	177	0	0	0	0	1366	1	243	1873
08/25/17									
08/26/17									
Total to Date	1008 gallons	205 gallons	153 gallons	0 gallons	0 gallons		139.75 loads		

Notes:
1. Estimates are based on the number of gallons of Maectite® applied.
2. Soil treatment with Maectite® and hauling to R2 may not occur on the same day.
3. 8/23/17 – Table 2 loads were batch treated in R2, Cell 1. Inserted this data into Table 1 for totalizing the volumes and gallons. Reset Table 2 "Batch loads" of 48.5 to zero until next ex-situ stockpile treatment.

2017 DU 9 – Figures P 1-16, 18, 20, 21, 23-27.
Bldg 1124, 1126, 3521, S361, 347, 3501, S3126, S3127, 521, 520, 502, 5342, 309, 340, 354, 9149, 232, 233, S269, S225A, 2127, 144, Boat House 1 & 2, 4205, 4206, 4207, 4213, 503, 5303, 5341, 5339, 5338, Bollards, Fire Hydrants, 5304, 5305, 4210, 3524, 3529, 5126, 5378, 3514, and other ancillary structures.
Foundations S464, 502, 4201, 5126, 5295, 5342.
2017 DU 8 – S-28, S-30 re-ex, Pipe figure P19
2017 DU 7 – Bldg 3502, 3503, 3504 shade cloth
2017 DU 5 – R2 Unit, Figure P17
2017 DU 3 – Housing figure P22, 419 MIS re-ex

Table 2. Soil loads hauled to the R2 for ex situ Maectite® treatment

	Load Totals				
	Hauled to R2 for treatment in R2 cell (# of truck loads)				
Date	Soils (DU9)	Soils (DU8)	Soils (DU7)	Soils (DU5)	Soils (DU3)
08/21/17	0	19	0	0	0
08/22/17	8	0	0	0	0
08/23/17	3.5	0	0	0	0
08/24/17	0	0	0	0	0
08/25/17					
08/26/17					
Batch loads to treat in R2	0 loads	0 loads	0 loads	0 loads	0 loads
Total to Date	34.5 loads	34 loads	18.5 loads	0 loads	0 loads

8/14/17 - Batch treatment of all stockpiled "ex situ" loads to date in R2 Cell 1. Entered this data into Table 1 on 8/14/17 for volume and gallon tracking.
8/15/17 - Add "Batch Loads to treat in R2" subtotal that tracks the truck loads placed for treatment. Reset this to zero once treatment event is complete.
8/23/17 – Batch #2 treatment event of all stockpiled "ex situ" loads to date in R2 Cell 1. Entered this data into Table 1 on 8/23/17 for volume and gallon tracking.

Table 2.1 Soil loads hauled to the R2, non-treated internment

Date	Load Totals				
	Hauled to R2, non-treated soil (# of truck loads)				
	Soils (DU9)	Soils (DU8)	Soils (DU7)	Soils (DU5)	Soils (DU3)
08/21/17	0	0	0	0	0
08/22/17	0	0	0	0	0
08/23/17	0	0	0	0	0
08/24/17	0	0	0	0	0
08/25/17					
08/26/17					
Total to Date	6 loads	0 loads	0 loads	0 loads	9 loads

Table 3. Weekly Load Estimates

Date	Treated Demo Debris Loads to R2	Clean Concrete Loads to Crusher	Metal Debris Loads To Boneyard	Clean Wood Loads	Steel Debris Loaded onto Barge	~
08/21/17	0	0	0	0	0	
08/22/17	0	0	0	0	0	
08/23/17	3	0	0	4	0	
08/24/17	0	0	0	0	0	
08/25/17						
08/26/17						
Season Total	3 loads	0 loads	0 loads	4 loads	183 loads	

NW Demolition and Environmental
A Joint Venture

Daily Field Report

Date: Friday, August 25, 2017
Prepared by: Scott Wakefield

Project: Removal of Lead-Based Paint from Structures and Lead-Contaminated Soil
Location: Midway Atoll National Wildlife Refuge
Client: US Fish and Wildlife Service

Weather: High clouds, wind 10 mph, Temperature ~82F

Personnel:

Name	Company	Site Hours
Scott Wakefield	NWDE Field Oversight	10
Jeff James	NWDE Supervisor	Partial
Joel Smith	NWDE Operator	10
Dalton Sullivan	NWDE Labor	0
Antonio Davis	NWDE Labor	10
Jevon Stone	NWDE Operator	10
Jose Ordaz	NWDE Operator	Partial
Matt Manning	NWDE Operator	0
Chris Fisher	NWDE Labor	10
Alan Phillips	NWDE Operator	0
Kevin Bach	NWDE Labor	10
Lucas Peel	NWDE Labor	10
Tyler Wilson	NWDE Labor	10
Eric Matteson	NWDE Operator	10

Visitors/Additional Site Personnel:

Name	Title
Bill Spoerer	U.S. FWS

Equipment:

Description	Model No.	Comments / Serial #
Pickup Truck	F350 Service Truck	NWDE
Flatbed Truck	Ford F450	NWDE
Container Truck	Peterbuilt	NWDE
Skid Steer	Bobcat S185	NWDE
Tracked Skid Steer	Bobcat T750	NWDE
Tracked Skid Steer	Bobcat	NWDE
Mini-Excavator	CAT 308	NWDE
Excavator	Volvo EC290BLC	NWDE
Excavator	Volvo EC290BLC	NWDE
Excavator	Volvo EC290	NWDE
Off road Dump Truck	Volvo A30D	NWDE
Off road Dump Truck	Volvo A30D	NWDE
Off road Dump Truck	Volvo A30D	NWDE
Excavator – High reach	Komatsu PC400HD	NWDE

Materials Delivered:

Description	QTY	Condition/Comments
Diesel	80 gallons	
Gasoline	0 gallons	

Description of Work:

0700 – Health and Safety meeting at NAF staging area. Review today's work tasks.

NWDE soil excavation work at Bldg 144 will push forward with hauling previously treated materials on the north and northeast sections of the building. The Volvo 290 excavator is tracked from the NAF Hanger to the site to expedite the hauling, accompanied with two off road trucks today.

The Vac trailer and air knife compressor are in use at the Fuel Farm area for hydrant work near the Bollard area. Set up and vac work of the soil has encountered some hurdles regarding the function of the equipment not clearing the hose. Some revisions have been made to optimize how effective the system will remove soil from the hydrant locations. One notable item currently is coral rubble that won't pass the inlet nozzle is routinely removed. A second concern is the black vacuum hose inner laminated layer is un-bonding and stringing into streamers within the hose due to abrasion from coral. This creates variable sidewall friction and lodging of process material within the hose. The concerns are being worked through.

0745 – At the R2 Unit Cell 1 and 2 are being rough graded with the tracked Bobcat skidsteer. Materials are treated soil from the Maectite® batch #2 event that finished yesterday.

0930 – At Bldg 144 the east side vaults and sub surface concrete features continue to be both excavated and hand dug to removed material to the Figure P13 excavation depths.

1030 – Vac trailer crew is at Fuel Farm hydrant ID #55. The surface sod is loosened using shovels and loaded into the supersack in the UTV. Four hydrants are having the sod precut in preparation for native coral soil removed. Initially the sod is hindering the effectiveness to vac material without hand labor.

1100 – The A30 haul truck for placing the Vac trailer hopper directly into is swapped out for supersack collection method. The volume of material being collected does not warrant tying up the 15 yd truck. Sacks are positioned in the UTV and expected to be partially filled and transported to the R2 Unit.

1200 – Lunch

1230 - With sod removal finishing up on four hydrants the ID #55 red hydrant is being processed with the vac stinger. At times sandy material is flowing, yet coral rubble continues to be a hindrance.

1330 – Treated soil from Bldg 144 has progressed as it is loaded and moved to the R2 Unit.

1500 – The Vac trailer black Tigerflex style hose interior lamination continues to shred and contribute to blinding off flow. The compounding of coral rubble and sod are being evaluated for the best means to expedite the hydrant excavation areas. Currently on hydrant ID #58.

1600 – Bldg 144 work has wrapped around to the west side border of the building. This mix of slab and small soil plot are brought together and loaded. Included in the excavation area is the capture of 144 P4 at the southwest corner of the building.

1730 – Ending the day. Treated soil from DU-9 Bldg 144 to the R2 today is 16 loads.
Ex-situ soil loads from DU-9 is 3 loads for future treatment in the R2.

Photographs:

Photo 01: 5303 R2 Unit– View north. Batch #2 treated soil event being rough graded in Cell 2

Photo 02: #55 – View northwest. Vac soil removal at the hydrant perimeter

Photo 03: #58 – View southeast. Vac soil removal at the hydrant perimeter

Photo 04: Bldg 144– View south. East side concrete and former valve vaults

Photo 05: Bldg 144– View west. Progress of loading northern treated plot

Photo 06: Bldg 144– View north. West side and southwest corner progress

Table 1. Maectite and Treated Soil Total Estimates

	Maectite Totals						Treated Soil Totals[1,2]		
	Applied Today (gal)					Total to Date	Excavated and Hauled to R-2 Unit **Today**		Excavated and Hauled to R-2 Unit **Total to Date**
Date	Soils (DU9)	Soils (DU8)	Soils (DU7)	Soils (DU5)	Soils (DU3)	(gal)	Load	^{3}yds[1]	^{3}yds[1]
08/21/17	0	0	0	0	0	848	0	0	1162
08/22/17	0	0	0	0	0	848	0	0	1162
08/23/17	153	188	0	0	0	1189	48.5	467	1630
08/24/17	177	0	0	0	0	1366	1	243	1873
08/25/17	0	0	0	0	0	1366	16	0	1873
08/26/17									
Total to Date	1008 gallons	205 gallons	153 gallons	0 gallons	0 gallons		155.75 loads		

Notes:
1. Estimates are based on the number of gallons of Maectite® applied.
2. Soil treatment with Maectite® and hauling to R2 may not occur on the same day.
3. 8/23/17 – Table 2 loads were batch treated in the R2. Inserted this data into Table 1 for totalizing the volumes and gallons. Reset Table 2 "Batch loads" of 48.5 to zero until next ex-situ stockpile treatment.

2017 DU 9 – Figures P 1-16, 18, 20, 21, 23-27.
Bldg 1124, 1126, 3521, S361, 347, 3501, S3126, S3127, 521, 520, 502, 5342, 309, 340, 354, 9149, 232, 233, S269, S225A, 2127, 144, Boat House 1 & 2, 4205, 4206, 4207, 4213, 503, 5303, 5341, 5339, 5338, Bollards, Fire Hydrants, 5304, 5305, 4210, 3524, 3529, 5126, 5378, 3514, and other ancillary structures.
Foundations S464, 502, 4201, 5126, 5295, 5342.
2017 DU 8 – S-28, S-30 re-ex, Pipe figure P19
2017 DU 7 – Bldg 3502, 3503, 3504 shade cloth
2017 DU 5 – R2 Unit, Figure P17
2017 DU 3 – Housing figure P22, 419 MIS re-ex

Table 2. Soil loads hauled to the R2 for ex situ Maectite® treatment

	Load Totals				
	Hauled to R2 for treatment in R2 cell (# of truck loads)				
Date	Soils (DU9)	Soils (DU8)	Soils (DU7)	Soils (DU5)	Soils (DU3)
08/21/17	0	19	0	0	0
08/22/17	8	0	0	0	0
08/23/17	3.5	0	0	0	0
08/24/17	0	0	0	0	0
08/25/17	3	0	0	0	0
08/26/17					
Batch loads to treat in R2	3 loads	0 loads	0 loads	0 loads	0 loads
Total to Date	34.5 loads	34 loads	18.5 loads	0 loads	0 loads

8/14/17 - Batch treatment of all stockpiled "ex situ" loads to date in R2 Cell 1. Entered this data into Table 1 on 8/14/17 for volume and gallon tracking.
8/15/17 - Add "Batch Loads to treat in R2" subtotal that tracks the truck loads placed for treatment. Reset this to zero once treatment event is complete.
8/23/17 – Batch #2 treatment event of all stockpiled "ex situ" loads to date in R2 Cells. Entered this data into Table 1 on 8/23/17 for volume and gallon tracking.

Table 2.1 Soil loads hauled to the R2, non-treated internment

Date	Load Totals				
	Hauled to R2, non-treated soil (# of truck loads)				
	Soils (DU9)	Soils (DU8)	Soils (DU7)	Soils (DU5)	Soils (DU3)
08/21/17	0	0	0	0	0
08/22/17	0	0	0	0	0
08/23/17	0	0	0	0	0
08/24/17	0	0	0	0	0
08/25/17	0	0	0	0	0
08/26/17					
Total to Date	6 loads	0 loads	0 loads	0 loads	9 loads

Table 3. Weekly Load Estimates

Date	Treated Demo Debris Loads to R2	Clean Concrete Loads to Crusher	Metal Debris Loads To Boneyard	Clean Wood Loads	Steel Debris Loaded onto Barge	~
08/21/17	0	0	0	0	0	
08/22/17	0	0	0	0	0	
08/23/17	3	0	0	4	0	
08/24/17	0	0	0	0	0	
08/25/17	0	0	0	0	0	
08/26/17						
Season Total	3 loads	0 loads	0 loads	4 loads	183 loads	

Daily Field Report

Date: Saturday, August 26, 2017
Prepared by: Scott Wakefield

Project: Removal of Lead-Based Paint from Structures and Lead-Contaminated Soil
Location: Midway Atoll National Wildlife Refuge
Client: US Fish and Wildlife Service

Weather: High clouds, wind 10 mph, Temperature ~82F

Personnel:

Name	Company	Site Hours
Scott Wakefield	NWDE Field Oversight	10
Jeff James	NWDE Supervisor	Partial
Joel Smith	NWDE Operator	6.5
Dalton Sullivan	NWDE Labor	Partial
Antonio Davis	NWDE Labor	8.5
Jevon Stone	NWDE Operator	6.5
Jose Ordaz	NWDE Operator	10
Matt Manning	NWDE Operator	0
Chris Fisher	NWDE Labor	6.5
Alan Phillips	NWDE Operator	0
Kevin Bach	NWDE Labor	8.5
Lucas Peel	NWDE Labor	Partial
Tyler Wilson	NWDE Labor	10
Eric Matteson	NWDE Operator	10

Visitors/Additional Site Personnel:

Name	Title
Bill Spoerer	U.S. FWS

Equipment:

Description	Model No.	Comments / Serial #
Pickup Truck	F350 Service Truck	NWDE
Flatbed Truck	Ford F450	NWDE
Container Truck	Peterbuilt	NWDE
Skid Steer	Bobcat S185	NWDE
Tracked Skid Steer	Bobcat T750	NWDE
Tracked Skid Steer	Bobcat	NWDE
Mini-Excavator	CAT 308	NWDE
Excavator	Volvo EC290BLC	NWDE
Excavator	Volvo EC290BLC	NWDE
Excavator	Volvo EC290	NWDE
Off road Dump Truck	Volvo A30D	NWDE
Off road Dump Truck	Volvo A30D	NWDE
Off road Dump Truck	Volvo A30D	NWDE
Excavator – High reach	Komatsu PC400HD	NWDE

Materials Delivered:

Description	QTY	Condition/Comments
Diesel	0 gallons	
Gasoline	0 gallons	

Description of Work:

0700 – Health and Safety meeting at NAF staging area. Review today's work tasks.

Edit – Yesterday's treated soil from DU-9 Bldg 144 to the R2 was 15 loads, not 16 as noted.

NWDE excavation crew is taking the Cat mini excavator and using the 1' wide toothed bucket to removed soil at fire hydrant excavation sites. This morning six hydrants are worked with the mini excavator while the Vac trailer group will follow up to finishing tasks. The coral rubble layer at approximately 1' to 2' deep has been a hurdle for the vac and air knife to handle with speed. By using the excavator, interlocked rubble layer is cut and direct loaded into the A30 haul truck. Vac hand labor cleans off the hydrant base flange gussets, threaded studs and nuts, then the finishing layer of soil at the bottom of the excavation area.

At the NAF Hanger, NWDE is preparing items for return shipment off-island. Nonessential containers, equipment and supplies are prioritized for being loaded onto the next barge due in September.

1000 – Six hydrants off Hennessy Ave have been excavated and left for the Vac crew to continue on. The excavator and trucks are mobilized east to the Harbor Pier area, Boathouse #1. Inspect the work area for ground burrows and previously marked water utilities.

Excavate the northern plots of Boathouse #1, Figure P14. Access is unusually limited for reach and loading. With the usual use of spotters and aligning equipment in the space, soil is direct loaded and hauled to the R2 Unit for future batch treatment within the R2 cells.

1200 – Lunch

1230 – The Vac crew has progressed and continues working the excavator prepared areas at hydrants. Currently at hydrant ID #68.

1330 – Boathouse #1 north soil work excavation in the two northern plots continues being loaded. Areas close to the existing structure are hand dug and positioned for the Cat to reach.

1400 – Begin confirmation sample collection for excavated fire hydrants.

1500 – The Vac crew and equipment is moving to Bldg 144 to finish off the area nearest the tree that fringes the east edge of the excavation area. This is Figure P13, adjacent to sample point P19 at the 45' buffer. Soil at the base of the tree is being removed to close out the Bldg 144 excavation area in preparation for confirmation sample collection.

1730 – End work for the day.
Ex-situ soil loads from DU-9 (Boathouse #1 and hydrants) is 3 loads for future treatment in the R2.
Soil hauled into the R2 Unit this season is approximately 2,100 cuyds.

Photographs:

Photo 01: Fire Hydrant – View northwest. Soil excavation progress

Photo 02: Fire Hydrant – Vac soil progress

Photo 03: Boathouse #1 – View northwest. Excavation progress

Photo 04: Boathouse #1 – View northwest. Excavation progress

Photo 05: Bldg 144– View northeast. Vac work near tree 45' buffer

Photo 06: Bldg 144– View south. Vac work near tree 45' buffer

Table 1. Maectite and Treated Soil Total Estimates

	Maectite Totals						Treated Soil Totals[1,2]		
	Applied Today (gal)					Total to Date	Excavated and Hauled to R-2 Unit **Today**		Excavated and Hauled to R-2 Unit **Total to Date**
Date	Soils (DU9)	Soils (DU8)	Soils (DU7)	Soils (DU5)	Soils (DU3)	(gal)	Load	^{3}yds[1]	^{3}yds[1]
08/21/17	0	0	0	0	0	848	0	0	1162
08/22/17	0	0	0	0	0	848	0	0	1162
08/23/17	153	188	0	0	0	1189	48.5	467	1630
08/24/17	177	0	0	0	0	1366	1	243	1873
08/25/17	0	0	0	0	0	1366	16	0	1873
08/26/17	0	0	0	0	0	1366	0	0	1873
Total to Date	1008 gallons	205 gallons	153 gallons	0 gallons	0 gallons		155.75 loads		

Notes:
1. Estimates are based on the number of gallons of Maectite® applied.
2. Soil treatment with Maectite® and hauling to R2 may not occur on the same day.
3. 8/23/17 – Table 2 loads were batch treated in the R2. Inserted this data into Table 1 for totalizing the volumes and gallons. Reset Table 2 "Batch loads" of 48.5 to zero until next ex-situ stockpile treatment.

2017 DU 9 – Figures P 1-16, 18, 20, 21, 23-27.
Bldg 1124, 1126, 3521, S361, 347, 3501, S3126, S3127, 521, 520, 502, 5342, 309, 340, 354, 9149, 232, 233, S269, S225A, 2127, 144, Boat House 1 & 2, 4205, 4206, 4207, 4213, 503, 5303, 5341, 5339, 5338, Bollards, Fire Hydrants, 5304, 5305, 4210, 3524, 3529, 5126, 5378, 3514, and other ancillary structures.
Foundations S464, 502, 4201, 5126, 5295, 5342.
2017 DU 8 – S-28, S-30 re-ex, Pipe figure P19
2017 DU 7 – Bldg 3502, 3503, 3504 shade cloth
2017 DU 5 – R2 Unit, Figure P17
2017 DU 3 – Housing figure P22, 419 MIS re-ex

Table 2. Soil loads hauled to the R2 for ex situ Maectite® treatment

	Load Totals				
	Hauled to R2 for treatment in R2 cell (# of truck loads)				
Date	Soils (DU9)	Soils (DU8)	Soils (DU7)	Soils (DU5)	Soils (DU3)
08/21/17	0	19	0	0	0
08/22/17	8	0	0	0	0
08/23/17	3.5	0	0	0	0
08/24/17	0	0	0	0	0
08/25/17	3	0	0	0	0
08/26/17	3	0	0	0	0
Batch loads to treat in R2	6 loads	0 loads	0 loads	0 loads	0 loads
Total to Date	40.5 loads	34 loads	18.5 loads	0 loads	0 loads

8/14/17 - Batch treatment of all stockpiled "ex situ" loads to date in R2 Cell 1. Entered this data into Table 1 on 8/14/17 for volume and gallon tracking.
8/15/17 - Add "Batch Loads to treat in R2" subtotal that tracks the truck loads placed for treatment. Reset this to zero once treatment event is complete.
8/23/17 – Batch #2 treatment event of all stockpiled "ex situ" loads to date in R2 Cells. Entered this data into Table 1 on 8/23/17 for volume and gallon tracking.

Table 2.1 Soil loads hauled to the R2, non-treated internment

Date	Load Totals				
	Hauled to R2, non-treated soil (# of truck loads)				
	Soils (DU9)	Soils (DU8)	Soils (DU7)	Soils (DU5)	Soils (DU3)
08/21/17	0	0	0	0	0
08/22/17	0	0	0	0	0
08/23/17	0	0	0	0	0
08/24/17	0	0	0	0	0
08/25/17	0	0	0	0	0
08/26/17	0	0	0	0	0
Total to Date	6 loads	0 loads	0 loads	0 loads	9 loads

Table 3. Weekly Load Estimates

Date	Treated Demo Debris Loads to R2	Clean Concrete Loads to Crusher	Metal Debris Loads To Boneyard	Clean Wood Loads	Steel Debris Loaded onto Barge	~
08/21/17	0	0	0	0	0	
08/22/17	0	0	0	0	0	
08/23/17	3	0	0	4	0	
08/24/17	0	0	0	0	0	
08/25/17	0	0	0	0	0	
08/26/17	0	0	0	0	0	
Season Total	3 loads	0 loads	0 loads	4 loads	183 loads	

Table 4. Fire Hydrants, Pedestals and Monuments

Fire Hydrant Soil					Fire Hydrant Soil				
Fire Hydrant ID	Excavate	Sampled Collected FH # X 0-2"	Backfill	Notes-	Fire Hydrant ID	Excavate	Sampled Collected FH # X 0-2"	Backfill	Notes-
1					41				
2					42				
3					43				
4					44				
5					45				
6					46				
7					47				
8					48				
9					49				
10					50				
11					51				
12					52				
13					53	8/23/2017	8/23/2017		
14					54	8/23/2017	8/23/2017		
15					54A	8/23/2017	8/23/2017		
16					55	8/26/2017	8/26/2017		
17					56	8/26/2017			
18					57	8/26/2017	8/26/2017		
19					58				
20					59				
21					60				
22					61				
23					62				
24					63				
25					64				
26					65				
27					66	8/26/2017	8/26/2017		
28					67	8/25/2017			
29					68	8/25/2017			
30					69				
31					70				
32					71				
33					72				
34					73				
35					74				
36					75				
37					76				
38					77				
39									
40									

Pedestals /Monuments Soil					Pedestals /Monuments Soil				
Feature Unit ID	Excavate	Sampled Collected Unit # X 0-2"	Backfill	Notes-	Feature Unit ID	Excavate	Sampled Collected Unit # X 0-2"	Backfill	Notes-
1					23				
2					24				
3					25				
4					26				
5					27				
6					28				
7					29				
8					30				
9					31				
10					32				
11					33				
12					34				
13					35				
14					36				
15					37				
16					38				
17					39				
18					40				
19					41				
20					42				
21					43				
22									

Daily Field Report

Date: Monday, August 28, 2017
Prepared by: Scott Wakefield

Project: Removal of Lead-Based Paint from Structures and Lead-Contaminated Soil
Location: Midway Atoll National Wildlife Refuge
Client: US Fish and Wildlife Service

Weather: High clouds, wind 10 mph, Temperature ~82F

Personnel:

Name	Company	Site Hours
Scott Wakefield	NWDE Field Oversight	10
Jeff James	NWDE Supervisor	Partial
Joel Smith	NWDE Operator	10
Dalton Sullivan	NWDE Labor	Partial
Antonio Davis	NWDE Labor	Partial
Jevon Stone	NWDE Operator	10
Jose Ordaz	NWDE Operator	Partial
Matt Manning	NWDE Operator	0
Chris Fisher	NWDE Labor	10
Alan Phillips	NWDE Operator	0
Kevin Bach	NWDE Labor	10
Lucas Peel	NWDE Labor	10
Tyler Wilson	NWDE Labor	10
Eric Matteson	NWDE Operator	10

Visitors/Additional Site Personnel:

Name	Title
Bill Spoerer	U.S. FWS

Equipment:

Description	Model No.	Comments / Serial #
Pickup Truck	F350 Service Truck	NWDE
Flatbed Truck	Ford F450	NWDE
Container Truck	Peterbuilt	NWDE
Skid Steer	Bobcat S185	NWDE
Tracked Skid Steer	Bobcat T750	NWDE
Tracked Skid Steer	Bobcat	NWDE
Mini-Excavator	CAT 308	NWDE
Excavator	Volvo EC290BLC	NWDE
Excavator	Volvo EC290BLC	NWDE
Excavator	Volvo EC290	NWDE
Off road Dump Truck	Volvo A30D	NWDE
Off road Dump Truck	Volvo A30D	NWDE
Off road Dump Truck	Volvo A30D	NWDE
Excavator – High reach	Komatsu PC400HD	NWDE

Materials Delivered:

Description	QTY	Condition/Comments
Diesel	20 gallons	
Gasoline	0 gallons	

Description of Work:

0700 – Health and Safety meeting at NAF staging area. Review today's work tasks.

NWDE excavation crew work at the Boathouse #1 and Boathouse #2, Figure P14 continues this morning. The small plots are excavated and direct loaded into the haul trucks and placed at the R2, Cell 1. This material will be batch treated within the R2 with Maectite® soon.

0930 - The excavation of the two plots on the south side of the two structures is completed. The mini excavator is now turning to address fire hydrant #77 nearest the Harbor Pier 2401 (Kahana Pier.) Material is removed using the 1' wide toothed bucket. This step is pre-conditioning the hard coral soil at the hydrant base. Anticipate that the Vac trailer crew to follow up with final excavation depth and cleaning of the hydrant.

The NWDE Vac crew is finishing up at the east side of Bldg 144 for the area nearest the 45' buffer and tree location. The equipment is being mobilized to the Harbor hydrant #77 for vac work.

1000 – The mini excavator is working west along the harbor road to pre excavate hydrant ID #75, #74, #65, #64, #73, #72.

1030 – The Vac trailer is working hydrant ID #75.

1115 – The Cat 308 excavator and two A30 haul trucks are at Bldg S361 Pesticide Storage, Figure P4 to dig and haul the northeast 2' plot area. Material is hauled to the R2 Cell 1 for upcoming batch treatment.

1200 – Lunch

1230 - The Vac trailer has made two hydrants this morning. Currently it has paused for service and repair.

1320 – Excavation work near Bldg S361 was completed before lunch. Then hydrant ID #11 and adjacent pedestal are excavated. Moving on to the southwest corner of active Bldg 309 Power Plant. Inspect for bird burrows and review of active utilities within the excavation plots.

1600 – Bldg 309 Power Plant, Figure P10 has been worked on the southwest corner of the 1' depth excavation area. The west side of the Power Plant has significant structure, footings, I-beam and piping that supports the old Navy era primary generators. This external equipment for the two Fairbanks Morse generators are air filtration house, exhaust muffler and cooling system. Access is limited for the excavator and soil excavation slows.

1700 – The Vac trailer is expected to be back in service tomorrow morning.
Near Bldg 309 Power Plant, hydrant ID #10 and three pedestals are excavated. The location on Branon Ave south of the Power Plant are completed before moving the excavation crew around to the northwest side of the building. Above ground utilities limit full access without looping around the heat exchangers.

1730 – Ending work for the day.
Ex-situ soil loads from DU-9 (Boathouse #1 & #2, hydrants, pedestals, begin Bldg 309) is 5 loads for future treatment in the R2.

Photographs:

Photo 01: Boathouse #1 – View south. Soil excavation progress of Figure P14, point P26

Photo 02: Boathouse #1 – View northwest. Soil excavation progress of Figure P14, point P26

Photo 03: Hydrant ID #77 – View north. Vac excavation progress

Photo 04: Hydrant ID #75 – View west. Vac excavation progress

Photo 05: Pedestal – View northeast. Excavation of perimeter at concrete unit

Photo 06: Bldg S361– View southwest. Excavation of Figure P4, point P11

Table 1. Maectite and Treated Soil Total Estimates

	Maectite Totals						Treated Soil Totals[1,2]		
	Applied Today (gal)					Total to Date	Excavated and Hauled to R-2 Unit **Today**		Excavated and Hauled to R-2 Unit **Total to Date**
Date	Soils (DU9)	Soils (DU8)	Soils (DU7)	Soils (DU5)	Soils (DU3)	(gal)	Load	^{3}yds[1]	^{3}yds[1]
08/28/17	0	0	0	0	0	1366	0	0	1873
08/29/17									
08/30/17									
08/31/17									
09/01/17									
09/02/17									
Total to Date	1008 gallons	205 gallons	153 gallons	0 gallons	0 gallons		155.75 loads		

Notes:
1. Estimates are based on the number of gallons of Maectite® applied.
2. Soil treatment with Maectite® and hauling to R2 may not occur on the same day.
3. 8/23/17 – Table 2 loads were batch treated in the R2. Inserted this data into Table 1 for totalizing the volumes and gallons. Reset Table 2 "Batch loads" of 48.5 to zero until next ex-situ stockpile treatment.

2017 DU 9 – Figures P 1-16, 18, 20, 21, 23-27.
Bldg 1124, 1126, 3521, S361, 347, 3501, S3126, S3127, 521, 520, 502, 5342, 309, 340, 354, 9149, 232, 233, S269, S225A, 2127, 144, Boat House 1 & 2, 4205, 4206, 4207, 4213, 503, 5303, 5341, 5339, 5338, Bollards, Fire Hydrants, 5304, 5305, 4210, 3524, 3529, 5126, 5378, 3514, and other ancillary structures.
Foundations S464, 502, 4201, 5126, 5295, 5342.
2017 DU 8 – S-28, S-30 re-ex, Pipe figure P19
2017 DU 7 – Bldg 3502, 3503, 3504 shade cloth
2017 DU 5 – R2 Unit, Figure P17
2017 DU 3 – Housing figure P22, 419 MIS re-ex

Table 2. Soil loads hauled to the R2 for ex situ Maectite® treatment

	Load Totals				
	Hauled to R2 for treatment in R2 cell (# of truck loads)				
Date	Soils (DU9)	Soils (DU8)	Soils (DU7)	Soils (DU5)	Soils (DU3)
08/28/17	5	0	0	0	0
08/29/17					
08/30/17					
08/31/17					
09/01/17					
09/02/17					
Batch loads to treat in R2	11 loads	0 loads	0 loads	0 loads	0 loads
Total to Date	45.5 loads	34 loads	18.5 loads	0 loads	0 loads

8/14/17 - Batch treatment of all stockpiled "ex situ" loads to date in R2 Cell 1. Entered this data into Table 1 on 8/14/17 for volume and gallon tracking.
8/15/17 - Add "Batch Loads to treat in R2" subtotal that tracks the truck loads placed for treatment. Reset this to zero once treatment event is complete.
8/23/17 – Batch #2 treatment event of all stockpiled "ex situ" loads to date in R2 Cells. Entered this data into Table 1 on 8/23/17 for volume and gallon tracking.

Table 2.1 Soil loads hauled to the R2, non-treated internment

Date	Load Totals				
	Hauled to R2, non-treated soil (# of truck loads)				
	Soils (DU9)	Soils (DU8)	Soils (DU7)	Soils (DU5)	Soils (DU3)
08/28/17	0	0	0	0	0
08/29/17					
08/30/17					
08/31/17					
09/01/17					
09/02/17					
Total to Date	6 loads	0 loads	0 loads	0 loads	9 loads

Table 3. Weekly Load Estimates

Date	Treated Demo Debris Loads to R2	Clean Concrete Loads to Crusher	Metal Debris Loads To Boneyard	Clean Wood Loads	Steel Debris Loaded onto Barge	~
08/28/17	0	0	0	0	0	
08/29/17						
08/30/17						
08/31/17						
09/01/17						
09/02/17						
Season Total	3 loads	0 loads	0 loads	4 loads	183 loads	

Table 4. Fire Hydrants, Pedestals and Monuments

Fire Hydrant Soil					Fire Hydrant Soil				
Fire Hydrant ID	Excavate	Sampled Collected FH # X 0-2"	Backfill	Notes-	Fire Hydrant ID	Excavate	Sampled Collected FH # X 0-2"	Backfill	Notes-
1					41				
2					42				
3					43				
4					44				
5					45				
6					46				
7					47				
8					48				
9					49				
10					50				
11					51				
12					52				
13					53	8/23/2017	8/23/2017		
14					54	8/23/2017	8/23/2017		
15					54A	8/23/2017	8/23/2017		
16					55	8/26/2017	8/26/2017		
17					56	8/26/2017			
18					57	8/26/2017	8/26/2017		
19					58				
20					59				
21					60				
22					61				
23					62				
24					63				
25					64				
26					65				
27					66	8/26/2017	8/26/2017		
28					67	8/25/2017			
29					68	8/25/2017			
30					69				
31					70				
32					71				
33					72				
34					73				
35					74				
36					75	8/28/2017			
37					76				
38					77	8/28/2017			
39									
40									

Pedestals /Monuments Soil					Pedestals /Monuments Soil				
Feature Unit ID	Excavate	Sampled Collected Unit # X 0-2"	Backfill	Notes-	Feature Unit ID	Excavate	Sampled Collected Unit # X 0-2"	Backfill	Notes-
1					23				
2					24				
3					25				
4					26				
5					27				
6					28				
7					29				
8					30				
9					31				
10					32				
11					33				
12					34				
13					35				
14					36				
15					37				
16					38				
17					39				
18					40				
19					41				
20					42				
21					43				
22									

Daily Field Report

Date: Tuesday, August 29, 2017
Prepared by: Scott Wakefield

Project: Removal of Lead-Based Paint from Structures and Lead-Contaminated Soil
Location: Midway Atoll National Wildlife Refuge
Client: US Fish and Wildlife Service

Weather: High clouds, wind 5 mph, Temperature ~80F

Personnel:

Name	Company	Site Hours
Scott Wakefield	NWDE Field Oversight	10
Jeff James	NWDE Supervisor	Partial
Joel Smith	NWDE Operator	0
Dalton Sullivan	NWDE Labor	Partial
Antonio Davis	NWDE Labor	10
Jevon Stone	NWDE Operator	10
Jose Ordaz	NWDE Operator	Partial
Matt Manning	NWDE Operator	0
Chris Fisher	NWDE Labor	10
Alan Phillips	NWDE Operator	0
Kevin Bach	NWDE Labor	10
Lucas Peel	NWDE Labor	10
Tyler Wilson	NWDE Labor	10
Eric Matteson	NWDE Operator	10

Visitors/Additional Site Personnel:

Name	Title
Bill Spoerer	U.S. FWS

Equipment:

Description	Model No.	Comments / Serial #
Pickup Truck	F350 Service Truck	NWDE
Flatbed Truck	Ford F450	NWDE
Container Truck	Peterbuilt	NWDE
Skid Steer	Bobcat S185	NWDE
Tracked Skid Steer	Bobcat T750	NWDE
Tracked Skid Steer	Bobcat	NWDE
Mini-Excavator	CAT 308	NWDE
Excavator	Volvo EC290BLC	NWDE
Excavator	Volvo EC290BLC	NWDE
Excavator	Volvo EC290	NWDE
Off road Dump Truck	Volvo A30D	NWDE
Off road Dump Truck	Volvo A30D	NWDE
Off road Dump Truck	Volvo A30D	NWDE
Excavator – High reach	Komatsu PC400HD	NWDE

Materials Delivered:

Description	QTY	Condition/Comments
Diesel	0 gallons	
Gasoline	0 gallons	

Description of Work:

0700 – Health and Safety meeting at NAF staging area. Review today's work tasks.

The day begins with NWDE excavation crew and equipment accessing the fire hydrant south of Bldg 309 nearest the 5309 Transmitter Bldg. Soil surrounding the hydrant is loaded into the haul truck using the mini excavator to a depth of 2'.

As the crew tracks north on Morrell Street and east on Mayday Street, hydrants along the way are excavated for volume, expecting the finishing crew to follow up with the final cut and cleaning of the hydrant. This path is leading to reach the north side of Bldg 309 access route.

0940 – The Vac trailer service/repair will be wrapped up mid morning to resume the hydrant soil removal tasks along Hennessey Ave.

1000 - Weekly conference call with Mainland and Hawaii project offices. See NWDE Midway Meeting Agenda for specific detail.

1030 - Mobilize to the northeast corner of Bldg 309 Power Plant, Figure P10. A target 1' excavation depth begins for the north side of the tall structure. Using the mini excavator, soil is direct loaded into the single A30 haul truck and moved to the R2 Cell 1 for future batch treatment. The 5' flat edged bucket is cutting grade through the sand and rubble. Materials are removed from the foundation outward to the indicated 15' buffer.

1140 – Vac equipment and NWDE workers are finishing up hydrant ID #75 after the mechanical work on the vac system. Continue towards the west. The baghouse hopper is placing materials into the supersacks and staged later transport to the R2 today.

1200 – Lunch

1230 – Vac work continues at hydrants. The system performance to move sand has improved following the repair/service and continued adjustments. Additional parts are on order to arrive on the early NWDE scheduled September barge. Specifically, the rate of degradation for the stinger hose interior lining abraded by the coral sand and rubble requires frequent hose replacement. Once the hose lining delaminates, streamers of lining creates increased friction loss and prevalence for debris to stack up and blind off the process flow. Compounding this condition, the baghouse filter blowdown circuits have not performed to keep the individual sock filters within operational pressure drop range. These hurdles are being overcome by NWDE to gain performance from the Vac trailer system.

Hydrant soils being vac'd today have been previously worked over by the mini excavator. Rubble encountered that won't pass is hand loaded into the supersack for placement into the R2.

1330 – Confirmation sample collection for Bldg 144, FH77, FH75, FH74.
Staged supersacks are loaded and moved to the R2, emptying the material for future batch treatment.

1530 – Hydrants nearest the north Cargo Pier are also being dug out by hand. Available workers continue to move soil from the small diameter dig areas into supersacks.

Bldg 309 Power Plant has progressed along the north side and now cutting in at the west wall area. The limited access area below the existing steel structure that supports the two Navy era generators is carefully

removed. Soil is direct loaded into the haul truck and continues being placed in the R2. All soils will be batch treated with Maectite® in the future within the R2 Unit.

The mini excavator reversed bucket is manipulated to cut the 1' bgs target grade. This limits the boom angle to access below the steel columns and joists. Material is being removed at a slower rate due to the practical method available. This area has a hard pack condition that hand shoveling or the vac/air knife is not suited for at this time.

1730 – Ending the work day.

Ex-situ soil loads from DU-9 Bldg 309 and misc hydrants is 7 loads for future treatment in the R2.
Hydrant vac staged supersacks to the R2 today are 8 units, appx 8 cuyds.
Hydrants excavated today to completion are ID's #75, #74, #65, #73, #72.
Test America soil analytical results for COC 8/23/17 are received and being validated.

Photographs:

Photo 01: Bldg 5309 Transmitter – View south. Hydrant excavation work

Photo 02: Bldg 309 Power Plant – View southwest. Soil excavation progress at the north wall

Photo 03: Hydrant ID #73 – View west. Vac excavation progress and gusset flange cleaning

Photo 04: Bldg 309 Power Plant – View south. Soil excavation progress at the west wall

Photo 05: Bldg 309 Power Plant – View north. Soil excavation progress at the west wall

Table 1. Maectite and Treated Soil Total Estimates

	Maectite Totals						Treated Soil Totals[1,2]		
	Applied Today (gal)					Total to Date	Excavated and Hauled to R-2 Unit **Today**		Excavated and Hauled to R-2 Unit **Total to Date**
Date	Soils (DU9)	Soils (DU8)	Soils (DU7)	Soils (DU5)	Soils (DU3)	(gal)	Load	^{3}yds[1]	^{3}yds[1]
08/28/17	0	0	0	0	0	1366	0	0	1873
08/29/17	0	0	0	0	0	1366	0	0	1873
08/30/17									
08/31/17									
09/01/17									
09/02/17									
Total to Date	1008 gallons	205 gallons	153 gallons	0 gallons	0 gallons		155.75 loads		

Notes:
1. Estimates are based on the number of gallons of Maectite® applied.
2. Soil treatment with Maectite® and hauling to R2 may not occur on the same day.
3. 8/23/17 – Table 2 loads were batch treated in the R2. Inserted this data into Table 1 for totalizing the volumes and gallons. Reset Table 2 "Batch loads" of 48.5 to zero until next ex-situ stockpile treatment.

2017 DU 9 – Figures P 1-16, 18, 20, 21, 23-27.
Bldg 1124, 1126, 3521, S361, 347, 3501, S3126, S3127, 521, 520, 502, 5342, 309, 340, 354, 9149, 232, 233, S269, S225A, 2127, 144, Boat House 1 & 2, 4205, 4206, 4207, 4213, 503, 5303, 5341, 5339, 5338, Bollards, Fire Hydrants, 5304, 5305, 4210, 3524, 3529, 5126, 5378, 3514, and other ancillary structures.
Foundations S464, 502, 4201, 5126, 5295, 5342.
2017 DU 8 – S-28, S-30 re-ex, Pipe figure P19
2017 DU 7 – Bldg 3502, 3503, 3504 shade cloth
2017 DU 5 – R2 Unit, Figure P17
2017 DU 3 – Housing figure P22, 419 MIS re-ex

Table 2. Soil loads hauled to the R2 for ex situ Maectite® treatment

	Load Totals				
	Hauled to R2 for treatment in R2 cell (# of truck loads)				
Date	Soils (DU9)	Soils (DU8)	Soils (DU7)	Soils (DU5)	Soils (DU3)
08/28/17	5	0	0	0	0
08/29/17	7.6	0	0	0	0
08/30/17					
08/31/17					
09/01/17					
09/02/17					
Batch loads to treat in R2	18.6 loads	0 loads	0 loads	0 loads	0 loads
Total to Date	53.1 loads	34 loads	18.5 loads	0 loads	0 loads

8/14/17 - Batch treatment of all stockpiled "ex situ" loads to date in R2 Cell 1. Entered this data into Table 1 on 8/14/17 for volume and gallon tracking.
8/15/17 - Add "Batch Loads to treat in R2" subtotal that tracks the truck loads placed for treatment. Reset this to zero once treatment event is complete.
8/23/17 – Batch #2 treatment event of all stockpiled "ex situ" loads to date in R2 Cells. Entered this data into Table 1 on 8/23/17 for volume and gallon tracking.

Table 2.1 Soil loads hauled to the R2, non-treated internment

Date	Load Totals				
	Hauled to R2, non-treated soil (# of truck loads)				
	Soils (DU9)	Soils (DU8)	Soils (DU7)	Soils (DU5)	Soils (DU3)
08/28/17	0	0	0	0	0
08/29/17	0	0	0	0	0
08/30/17					
08/31/17					
09/01/17					
09/02/17					
Total to Date	6 loads	0 loads	0 loads	0 loads	9 loads

Table 3. Weekly Load Estimates

Date	Treated Demo Debris Loads to R2	Clean Concrete Loads to Crusher	Metal Debris Loads To Boneyard	Clean Wood Loads	Steel Debris Loaded onto Barge	~
08/28/17	0	0	0	0	0	
08/29/17	0	0	0	0	0	
08/30/17						
08/31/17						
09/01/17						
09/02/17						
Season Total	3 loads	0 loads	0 loads	4 loads	183 loads	

Table 4. Fire Hydrants, Pedestals and Monuments

Fire Hydrant Soil					Fire Hydrant Soil				
Fire Hydrant ID	Excavate	Sampled Collected FH # X 0-2"	Backfill	Notes-	Fire Hydrant ID	Excavate	Sampled Collected FH # X 0-2"	Backfill	Notes-
1					41				
2					42				
3					43				
4					44				
5					45				
6					46				
7					47				
8					48				
9					49				
10					50				
11					51				
12					52				
13					53	8/23/2017	8/23/2017		
14					54	8/23/2017	8/23/2017		
15					54A	8/23/2017	8/23/2017		
16					55	8/26/2017	8/26/2017		
17					56	8/26/2017			
18					57	8/26/2017	8/26/2017		
19					58				
20					59				
21					60				
22					61				
23					62				
24					63				
25					64				
26					65	8/29/2017			
27					66	8/26/2017	8/26/2017		
28					67	8/25/2017			
29					68	8/25/2017			
30					69				
31					70				
32					71				
33					72	8/29/2017			
34					73	8/29/2017			
35					74	8/29/2017	8/29/2017		
36					75	8/28/2017	8/29/2017		
37					76				
38					77	8/28/2017	8/29/2017		
39									
40									

Pedestals /Monuments Soil					Pedestals /Monuments Soil				
Feature Unit ID	Excavate	Sampled Collected Unit # X 0-2"	Backfill	Notes-	Feature Unit ID	Excavate	Sampled Collected Unit # X 0-2"	Backfill	Notes-
1					23				
2					24				
3					25				
4					26				
5					27				
6					28				
7					29				
8					30				
9					31				
10					32				
11					33				
12					34				
13					35				
14					36				
15					37				
16					38				
17					39				
18					40				
19					41				
20					42				
21					43				
22									

Daily Field Report

Date: Wednesday, August 30, 2017
Prepared by: Scott Wakefield

Project: Removal of Lead-Based Paint from Structures and Lead-Contaminated Soil
Location: Midway Atoll National Wildlife Refuge
Client: US Fish and Wildlife Service

Weather: High clouds, wind 7 mph, Temperature ~82F

Personnel:

Name	Company	Site Hours
Scott Wakefield	NWDE Field Oversight	10
Jeff James	NWDE Supervisor	Partial
Joel Smith	NWDE Operator	0
Dalton Sullivan	NWDE Labor	Partial
Antonio Davis	NWDE Labor	Partial
Jevon Stone	NWDE Operator	10
Jose Ordaz	NWDE Operator	Partial
Matt Manning	NWDE Operator	0
Chris Fisher	NWDE Labor	10
Alan Phillips	NWDE Operator	0
Kevin Bach	NWDE Labor	10
Lucas Peel	NWDE Labor	10
Tyler Wilson	NWDE Labor	10
Eric Matteson	NWDE Operator	10

Visitors/Additional Site Personnel:

Name	Title
Bill Spoerer	U.S. FWS

Equipment:

Description	Model No.	Comments / Serial #
Pickup Truck	F350 Service Truck	NWDE
Flatbed Truck	Ford F450	NWDE
Container Truck	Peterbuilt	NWDE
Skid Steer	Bobcat S185	NWDE
Tracked Skid Steer	Bobcat T750	NWDE
Tracked Skid Steer	Bobcat	NWDE
Mini-Excavator	CAT 308	NWDE
Excavator	Volvo EC290BLC	NWDE
Excavator	Volvo EC290BLC	NWDE
Excavator	Volvo EC290	NWDE
Off road Dump Truck	Volvo A30D	NWDE
Off road Dump Truck	Volvo A30D	NWDE
Off road Dump Truck	Volvo A30D	NWDE
Excavator – High reach	Komatsu PC400HD	NWDE

Materials Delivered:

Description	QTY	Condition/Comments
Diesel	60 gallons	8/30/17
Diesel	55 gallons	8/29/17
Gasoline	0 gallons	

Description of Work:

0700 – Health and Safety meeting at NAF staging area. Review today's work tasks.
NWDE is gearing up for ground work at the active Water Tower 5304. Currently shade cloth is at the tower footing base and south in the proposed fall zone for demo activities. This morning, shade cloth will be folded up and removed. Replacing this will be Dura-Skrim reinforced poly sheeting. The impermeable material is anchored using the black poly sandbags and will provide a work area for processing the steel tower once it is on the ground in September. The crew checks bird burrows for access and work areas.

Soil excavation work at Bldg 309 Power Plant resumes near the west wall and steel structure supports for the older generator system. The target 1' bgs grade is being cut and removed in the limited access soil plot. Hand labor assists to remove soils at the concrete pier footings. Soil continues being hauled in the one Volvo off road truck to the R2, Cell 1 for future batch treatment event.

0850 – Give notice to DBSI that the Officers' Quarters 417, 418 and 419 areas are cleared for backfill. Currently DBSI has been placing foundation shade cloth at the perimeter of buildings to manage Bonin Petrel burrowing. The Refuge project has been temporarily paused at the three buildings pending the confirmation sampling results and closing out the soil excavation tasks.

0900 – At the borrow source area, NWDE has given the Refuge notice for proceeding with hauling clean coral sand from the Cargo Pier beach. The area is inspected for wildlife and access route to resume the multiple project years of hauling out material. Today the coral sand will be stockpiled at the north side of the R2 Unit. Access to the hard surface north of the R2 has been approved with the Refuge and Midway Airfield to stockpile the length of the R2 east/ west, up to a 100' north/ south width. Simply put, sand will be placed parallel to the north abutment of the R2, beginning at the existing abutment toe.
One Volvo 290 excavator and A30 haul truck are accessing the beach where the Fuel Pier intersects the seawall. Digging clean sand begins at this corner location each year and systematically progresses the width of the beach, heading east. A biological monitor is in use during equipment operation for visual observation for wildlife and seabirds. Specifically, Green Sea Turtles and Hawaiian Monk Seals that reside in the Atoll. If animals approach the work zone equipment operations will stop and the situation reviewed.

1000 – Dura-Skrim placement at the active Water Tower in Parade Field continues being set and anchored with sandbags. Removed shade cloth is being folded, palletized and moved to the NAF Hanger area.

1200 – Lunch

1230 – The afternoon will continue hauling clean coral sand from the Cargo Pier beach to the stockpile area north of the R2. Round trips are repeated using the one haul truck.

1300 – At the active Bldg 309 Power Plant, progress is being reviewed for the west area soil plot. The steel I-beam and joist support structure for the air inlet filter houses and mufflers area are limiting equipment access nearest the building. Evaluating with the Team to manage this site's hurdles.
Confirmation sample collection for FH68, FH67, FH56, FH65.

1730 – Ending the work day.
Ex-situ soil loads from DU-9 Bldg 309 is 5 loads for future treatment in the R2.
Borrow source clean coral sand hauled to the R2 stockpile is 18 loads.

Photographs:

Photo 01: Borrow Source Area – View northwest. Loading clean coral sand for hauling to R2 stockpile

Photo 02: R2 Unit – View west. Stockpiling sand at north side of Cell 1 and Cell 2

Photo 03: R2 Unit – View east. Sandbags (left) marking the available stockpile area north of the R2

Photo 04: 5304 Water Tower – View north. Placing Dura-Skrim in the fall zone work area

Photo 05: 5304 Water Tower – View south. Placing Dura-Skrim in the fall zone work area

Photo 06: Bldg 309 Power Plant – View south. Soil excavation at the west side

Table 1. Maectite and Treated Soil Total Estimates

	Maectite Totals						Treated Soil Totals[1,2]		
	Applied Today (gal)					Total to Date	Excavated and Hauled to R-2 Unit **Today**		Excavated and Hauled to R-2 Unit **Total to Date**
Date	Soils (DU9)	Soils (DU8)	Soils (DU7)	Soils (DU5)	Soils (DU3)	(gal)	Load	^{3}yds[1]	^{3}yds[1]
08/28/17	0	0	0	0	0	1366	0	0	1873
08/29/17	0	0	0	0	0	1366	0	0	1873
08/30/17	0	0	0	0	0	1366	0	0	1873
08/31/17									
09/01/17									
09/02/17									
Total to Date	1008 gallons	205 gallons	153 gallons	0 gallons	0 gallons		155.75 loads		

Notes:
1. Estimates are based on the number of gallons of Maectite® applied.
2. Soil treatment with Maectite® and hauling to R2 may not occur on the same day.
3. 8/23/17 – Table 2 loads were batch treated in the R2. Inserted this data into Table 1 for totalizing the volumes and gallons. Reset Table 2 "Batch loads" of 48.5 to zero until next ex-situ stockpile treatment.

2017 DU 9 – Figures P 1-16, 18, 20, 21, 23-27.
Bldg 1124, 1126, 3521, S361, 347, 3501, S3126, S3127, 521, 520, 502, 5342, 309, 340, 354, 9149, 232, 233, S269, S225A, 2127, 144, Boat House 1 & 2, 4205, 4206, 4207, 4213, 503, 5303, 5341, 5339, 5338, Bollards, Fire Hydrants, 5304, 5305, 4210, 3524, 3529, 5126, 5378, 3514, and other ancillary structures.
Foundations S464, 502, 4201, 5126, 5295, 5342.
2017 DU 8 – S-28, S-30 re-ex, Pipe figure P19
2017 DU 7 – Bldg 3502, 3503, 3504 shade cloth
2017 DU 5 – R2 Unit, Figure P17
2017 DU 3 – Housing figure P22, 419 MIS re-ex

Table 2. Soil loads hauled to the R2 for ex situ Maectite® treatment

	Load Totals				
	Hauled to R2 for treatment in R2 cell (# of truck loads)				
Date	Soils (DU9)	Soils (DU8)	Soils (DU7)	Soils (DU5)	Soils (DU3)
08/28/17	5	0	0	0	0
08/29/17	7.6	0	0	0	0
08/30/17	5	0	0	0	0
08/31/17					
09/01/17					
09/02/17					
Batch loads to treat in R2	23.6 loads	0 loads	0 loads	0 loads	0 loads
Total to Date	58.1 loads	34 loads	18.5 loads	0 loads	0 loads

8/14/17 - Batch treatment of all stockpiled "ex situ" loads to date in R2 Cell 1. Entered this data into Table 1 on 8/14/17 for volume and gallon tracking.
8/15/17 - Add "Batch Loads to treat in R2" subtotal that tracks the truck loads placed for treatment. Reset this to zero once treatment event is complete.
8/23/17 – Batch #2 treatment event of all stockpiled "ex situ" loads to date in R2 Cells. Entered this data into Table 1 on 8/23/17 for volume and gallon tracking.

Table 2.1 Soil loads hauled to the R2, non-treated internment

Date	Load Totals				
	Hauled to R2, non-treated soil (# of truck loads)				
	Soils (DU9)	Soils (DU8)	Soils (DU7)	Soils (DU5)	Soils (DU3)
08/28/17	0	0	0	0	0
08/29/17	0	0	0	0	0
08/30/17	0	0	0	0	0
08/31/17					
09/01/17					
09/02/17					
Total to Date	6 loads	0 loads	0 loads	0 loads	9 loads

Table 3. Weekly Load Estimates

Date	Treated Demo Debris Loads to R2	Clean Concrete Loads to Crusher	Metal Debris Loads To Boneyard	Clean Wood Loads	Steel Debris Loaded onto Barge	~
08/28/17	0	0	0	0	0	
08/29/17	0	0	0	0	0	
08/30/17	0	0	0	0	0	
08/31/17						
09/01/17						
09/02/17						
Season Total	3 loads	0 loads	0 loads	4 loads	183 loads	

Table 4. Fire Hydrants, Pedestals and Monuments

Fire Hydrant Soil					Fire Hydrant Soil				
Fire Hydrant ID	Excavate	Sampled Collected FH # X 0-2"	Backfill	Notes-	Fire Hydrant ID	Excavate	Sampled Collected FH # X 0-2"	Backfill	Notes-
1					41				
2					42				
3					43				
4					44				
5					45				
6					46				
7					47				
8					48				
9					49				
10					50				
11					51				
12					52				
13					53	8/23/2017	8/23/2017		
14					54	8/23/2017	8/23/2017		
15					54A	8/23/2017	8/23/2017		
16					55	8/26/2017	8/26/2017		
17					56	8/26/2017	8/30/2017		
18					57	8/26/2017	8/26/2017		
19					58				
20					59				
21					60				
22					61				
23					62				
24					63				
25					64				
26					65	8/29/2017	8/30/2017		
27					66	8/26/2017	8/26/2017		
28					67	8/25/2017	8/30/2017		
29					68	8/25/2017	8/30/2017		
30					69				
31					70				
32					71				
33					72	8/29/2017			
34					73	8/29/2017			
35					74	8/29/2017	8/29/2017		
36					75	8/28/2017	8/29/2017		
37					76				
38					77	8/28/2017	8/29/2017		
39									
40									

Pedestals /Monuments Soil					Pedestals /Monuments Soil				
Feature Unit ID	Excavate	Sampled Collected Unit # X 0-2"	Backfill	Notes-	Feature Unit ID	Excavate	Sampled Collected Unit # X 0-2"	Backfill	Notes-
1					23				
2					24				
3					25				
4					26				
5					27				
6					28				
7					29				
8					30				
9					31				
10					32				
11					33				
12					34				
13					35				
14					36				
15					37				
16					38				
17					39				
18					40				
19					41				
20					42				
21					43				
22									

Table 5. DU 5 Buttress & Cover - Import Clean Coral Sand

DU 5 IMPORT CLEAN CORAL						
DATE	NORTH Wall Loads	SOUTH Wall Loads	EAST Wall Loads	WEST Wall Loads	Days total loads	Days cubic yardage
8/30/2017	18	0	0	0	18	270
8/31/2017	0	0	0	0	0	0
9/1/2017	0	0	0	0	0	0
9/2/2017	0	0	0	0	0	0
Load count per wall	18	0	0	0		
15cuyd estimate per wall	270	0	0	0		
2017 Total R2 combined clean coral import LOADS				18		
Loads x 15cuyd estimate				270		

Daily Field Report

Date: Thursday, August 31, 2017
Prepared by: Scott Wakefield

Project: Removal of Lead-Based Paint from Structures and Lead-Contaminated Soil
Location: Midway Atoll National Wildlife Refuge
Client: US Fish and Wildlife Service

Weather: High clouds, wind 8 mph, Temperature ~84F

Personnel:

Name	Company	Site Hours
Scott Wakefield	NWDE Field Oversight	10
Jeff James	NWDE Supervisor	Partial
Joel Smith	NWDE Operator	10
Dalton Sullivan	NWDE Labor	0
Antonio Davis	NWDE Labor	10
Jevon Stone	NWDE Operator	10
Jose Ordaz	NWDE Operator	10
Matt Manning	NWDE Operator	0
Chris Fisher	NWDE Labor	10
Alan Phillips	NWDE Operator	0
Kevin Bach	NWDE Labor	10
Lucas Peel	NWDE Labor	10
Tyler Wilson	NWDE Labor	10
Eric Matteson	NWDE Operator	10

Visitors/Additional Site Personnel:

Name	Title
Bill Spoerer	U.S. FWS

Equipment:

Description	Model No.	Comments / Serial #
Pickup Truck	F350 Service Truck	NWDE
Flatbed Truck	Ford F450	NWDE
Container Truck	Peterbuilt	NWDE
Skid Steer	Bobcat S185	NWDE
Tracked Skid Steer	Bobcat T750	NWDE
Tracked Skid Steer	Bobcat	NWDE
Mini-Excavator	CAT 308	NWDE
Excavator	Volvo EC290BLC	NWDE
Excavator	Volvo EC290BLC	NWDE
Excavator	Volvo EC290	NWDE
Off road Dump Truck	Volvo A30D	NWDE
Off road Dump Truck	Volvo A30D	NWDE
Off road Dump Truck	Volvo A30D	NWDE
Excavator – High reach	Komatsu PC400HD	NWDE

Materials Delivered:

Description	QTY	Condition/Comments
Diesel	70 gallons	
Gasoline	0 gallons	

Description of Work:

0700 – Health and Safety meeting at NAF staging area. Review today's work tasks.

Bldg 309 Power Plant soil excavation work is near the southwest corner of the building. The southern side of the building is limited access and a mixture of concrete AST containment, piping, active fuel lines, primary electrical conduits. The mini excavator will be replaced in favor of hand labor and the Vac trailer method in the future. Moving the mini excavator and equipment to Bldg 354 Cannon area.

Review the active fuel line utilities and narrow up the piping locations. This is adjacent to the two JP-5 ASTs located in the high wall concrete secondary containment. The excavation area begins at the southeast corner per Figure P10.

At the Cargo Pier beach, the work area is inspected for wildlife and a biological monitor stationed. Loading clean coral sand and hauling with one truck to the R2 northern stockpile resumes for the day. These round trip loads will continue this morning and throughout the day. Traffic hauling patterns onto Branon Ave are being coordinated with work near the Bldg 309 Power Plant and also DBSI unloading the Kahana supplies.

0830 – NWDE is hand excavating hydrant ID #11 south of Bldg 354 Cannon. The soil was previously conditioned with the mini excavator. An adjacent white pedestal is also finalized for the dig area.

1000 – Soil excavation at the south side of Bldg 354 Cannon is slow going. Multiple runs of abandon pipes and expected in use fuel lines are requiring careful actions to remove soil and direct load into the single A30 haul truck. Materials continue to be placed in the R2 Cell 1 for future treatment within the Cell.

1200 – Lunch

1230 – Excavation work at Bldg 354 Cannon is progressing to the west. The no longer in use SVE piping is left in place and worked past. It resides within the translucent poly box at the south side nearest sample point P12.

1300 – Hydrant ID #70 is being hand excavated, placing materials into half totes that will then be moved to the R2 Cell 1 for future treatment.

NWDE is moving one tracked skidsteer to the Officer's Housing 418. Begin backfill task work for placing the previously stockpiled clean sand near the excavation, (removed overburden before re-excavation) and positioning it within the plot. DBSI has positioned shade cloth at the building foundations for mitigating Bonin Petrel burrows directed at the homes. DBSI facilities has verbally given the approval that the full shade cloth is in position and backfilling can go forward. Installing foil tracer tape above electrical conduits.

1600 – Hauling clean sand to the R2 continues til day's end.

Soil work at Bldg 354 Cannon using the mini excavator is near complete. Outlying areas that can only be addressed with hand labor are being dug out.

1730 – Ending the work day.
Ex-situ soil loads from DU-9 Bldg 309 & 354 is 3 loads for future treatment in the R2.
Borrow source clean coral sand hauled to the R2 stockpile is 18 loads.
Borrow source clean coral sand backfill hauled to the DU-3 is 1 load.

Photographs:

Photo 01: Hydrant ID #11 – View north. Soil excavation work

Photo 02: Bldg 354 Cannon – View north. Soil excavation progress

Photo 03: Bldg 354 Cannon – View west. Soil excavation progress

Photo 04: Hydrant ID #70 – View west. Soil excavation progress

Photo 05: Bldg 418 – View south. Preparation to backfill with clean coral sand

Photo 06: Bldg 418 – View south. Backfill progress

Table 1. Maectite and Treated Soil Total Estimates

	Maectite Totals						Treated Soil Totals[1,2]		
	Applied Today (gal)					Total to Date	Excavated and Hauled to R-2 Unit **Today**		Excavated and Hauled to R-2 Unit **Total to Date**
Date	Soils (DU9)	Soils (DU8)	Soils (DU7)	Soils (DU5)	Soils (DU3)	(gal)	Load	^{3}yds[1]	^{3}yds[1]
08/28/17	0	0	0	0	0	1366	0	0	1873
08/29/17	0	0	0	0	0	1366	0	0	1873
08/30/17	0	0	0	0	0	1366	0	0	1873
08/31/17	0	0	0	0	0	1366	0	0	1873
09/01/17									
09/02/17									
Total to Date	1008 gallons	205 gallons	153 gallons	0 gallons	0 gallons		155.75 loads		

Notes:
1. Estimates are based on the number of gallons of Maectite® applied.
2. Soil treatment with Maectite® and hauling to R2 may not occur on the same day.
3. 8/23/17 – Table 2 loads were batch treated in the R2. Inserted this data into Table 1 for totalizing the volumes and gallons. Reset Table 2 "Batch loads" of 48.5 to zero until next ex-situ stockpile treatment.

2017 DU 9 – Figures P 1-16, 18, 20, 21, 23-27.
Bldg 1124, 1126, 3521, S361, 347, 3501, S3126, S3127, 521, 520, 502, 5342, 309, 340, 354, 9149, 232, 233, S269, S225A, 2127, 144, Boat House 1 & 2, 4205, 4206, 4207, 4213, 503, 5303, 5341, 5339, 5338, Bollards, Fire Hydrants, 5304, 5305, 4210, 3524, 3529, 5126, 5378, 3514, and other ancillary structures.
Foundations S464, 502, 4201, 5126, 5295, 5342.
2017 DU 8 – S-28, S-30 re-ex, Pipe figure P19
2017 DU 7 – Bldg 3502, 3503, 3504 shade cloth
2017 DU 5 – R2 Unit, Figure P17
2017 DU 3 – Housing figure P22, 419 MIS re-ex

Table 2. Soil loads hauled to the R2 for ex situ Maectite® treatment

	Load Totals				
	Hauled to R2 for treatment in R2 cell (# of truck loads)				
Date	Soils (DU9)	Soils (DU8)	Soils (DU7)	Soils (DU5)	Soils (DU3)
08/28/17	5	0	0	0	0
08/29/17	7.6	0	0	0	0
08/30/17	5	0	0	0	0
08/31/17	3	0	0	0	0
09/01/17					
09/02/17					
Batch loads to treat in R2	26.6 loads	0 loads	0 loads	0 loads	0 loads
Total to Date	61.1 loads	34 loads	18.5 loads	0 loads	0 loads

8/14/17 - Batch treatment of all stockpiled "ex situ" loads to date in R2 Cell 1. Entered this data into Table 1 on 8/14/17 for volume and gallon tracking.
8/15/17 - Add "Batch Loads to treat in R2" subtotal that tracks the truck loads placed for treatment. Reset this to zero once treatment event is complete.
8/23/17 – Batch #2 treatment event of all stockpiled "ex situ" loads to date in R2 Cells. Entered this data into Table 1 on 8/23/17 for volume and gallon tracking.

Table 2.1 Soil loads hauled to the R2, non-treated internment

Date	Load Totals				
	Hauled to R2, non-treated soil (# of truck loads)				
	Soils (DU9)	Soils (DU8)	Soils (DU7)	Soils (DU5)	Soils (DU3)
08/28/17	0	0	0	0	0
08/29/17	0	0	0	0	0
08/30/17	0	0	0	0	0
08/31/17	0	0	0	0	0
09/01/17					
09/02/17					
Total to Date	6 loads	0 loads	0 loads	0 loads	9 loads

Table 3. Weekly Load Estimates

Date	Treated Demo Debris Loads to R2	Clean Concrete Loads to Crusher	Metal Debris Loads To Boneyard	Clean Wood Loads	Steel Debris Loaded onto Barge	~
08/28/17	0	0	0	0	0	
08/29/17	0	0	0	0	0	
08/30/17	0	0	0	0	0	
08/31/17	0	0	0	0	0	
09/01/17						
09/02/17						
Season Total	3 loads	0 loads	0 loads	4 loads	183 loads	

Table 4. Fire Hydrants, Pedestals and Monuments

Fire Hydrant Soil					Fire Hydrant Soil				
Fire Hydrant ID	Excavate	Sampled Collected FH # X 0-2"	Backfill	Notes-	Fire Hydrant ID	Excavate	Sampled Collected FH # X 0-2"	Backfill	Notes-
1					41				
2					42				
3					43				
4					44				
5					45				
6					46				
7					47				
8					48				
9					49				
10					50				
11	8/31/2017				51				
12					52				
13					53	8/23/2017	8/23/2017		
14					54	8/23/2017	8/23/2017		
15					54A	8/23/2017	8/23/2017		
16					55	8/26/2017	8/26/2017		
17					56	8/26/2017	8/30/2017		
18					57	8/26/2017	8/26/2017		
19					58				
20					59				
21					60				
22					61				
23					62				
24					63				
25					64				
26					65	8/29/2017	8/30/2017		
27					66	8/26/2017	8/26/2017		
28					67	8/25/2017	8/30/2017		
29					68	8/25/2017	8/30/2017		
30					69				
31					70				
32					71				
33					72	8/29/2017			
34					73	8/29/2017			
35					74	8/29/2017	8/29/2017		
36					75	8/28/2017	8/29/2017		
37					76				
38					77	8/28/2017	8/29/2017		
39									
40									

Pedestals /Monuments Soil					Pedestals /Monuments Soil				
Feature Unit ID	Excavate	Sampled Collected Unit # X 0-2"	Backfill	Notes-	Feature Unit ID	Excavate	Sampled Collected Unit # X 0-2"	Backfill	Notes-
1					23				
2					24				
3					25				
4					26				
5					27				
6					28				
7					29				
8					30				
9					31				
10					32				
11					33				
12					34				
13					35				
14					36				
15					37				
16					38				
17					39				
18					40				
19					41				
20					42				
21					43				
22									

Table 5. DU 5 Buttress & Cover - Import Clean Coral Sand

DU 5 IMPORT CLEAN CORAL						
DATE	NORTH Wall Loads	SOUTH Wall Loads	EAST Wall Loads	WEST Wall Loads	Days total loads	Days cubic yardage
8/30/2017	18	0	0	0	18	270
8/31/2017	18	0	0	0	18	270
9/1/2017	0	0	0	0	0	0
9/2/2017	0	0	0	0	0	0
Load count per wall	36	0	0	0		
15cuyd estimate per wall	540	0	0	0		
2017 Total R2 combined clean coral import LOADS				36		
Loads x 15cuyd estimate				540		

Daily Field Report

Date: Friday, September 1, 2017
Prepared by: Scott Wakefield

Project: Removal of Lead-Based Paint from Structures and Lead-Contaminated Soil
Location: Midway Atoll National Wildlife Refuge
Client: US Fish and Wildlife Service

Weather: Cloudy, wind 14 mph. Temperature ~79F, afternoon rain

Personnel:

Name	Company	Site Hours
Scott Wakefield	NWDE Field Oversight	10
Jeff James	NWDE Supervisor	Partial
Joel Smith	NWDE Operator	10
Dalton Sullivan	NWDE Labor	0
Antonio Davis	NWDE Labor	10
Jevon Stone	NWDE Operator	10
Jose Ordaz	NWDE Operator	10
Matt Manning	NWDE Operator	0
Chris Fisher	NWDE Labor	10
Alan Phillips	NWDE Operator	0
Kevin Bach	NWDE Labor	10
Lucas Peel	NWDE Labor	10
Tyler Wilson	NWDE Labor	10
Eric Matteson	NWDE Operator	10

Visitors/Additional Site Personnel:

Name	Title
Bill Spoerer	U.S. FWS

Equipment:

Description	Model No.	Comments / Serial #
Pickup Truck	F350 Service Truck	NWDE
Flatbed Truck	Ford F450	NWDE
Container Truck	Peterbuilt	NWDE
Skid Steer	Bobcat S185	NWDE
Tracked Skid Steer	Bobcat T750	NWDE
Tracked Skid Steer	Bobcat	NWDE
Mini-Excavator	CAT 308	NWDE
Excavator	Volvo EC290BLC	NWDE
Excavator	Volvo EC290BLC	NWDE
Excavator	Volvo EC290	NWDE
Off road Dump Truck	Volvo A30D	NWDE
Off road Dump Truck	Volvo A30D	NWDE
Off road Dump Truck	Volvo A30D	NWDE
Excavator – High reach	Komatsu PC400HD	NWDE

Materials Delivered:

Description	QTY	Condition/Comments
Diesel	84 gallons	8/31/17
Gasoline	0 gallons	

Description of Work:

0700 – Health and Safety meeting at NAF staging area. Review today's work tasks.

Soil excavation work preparations are being made at the Midway Water Plant, Figure P5. The complex of in use Bldg 347, Bldg 3501, reservoir S3126, reservoir S3127 have a multitude of in use piping and electrical utilities. This includes but not limited; Water lines ranging ¾" up to 16" dia, pvc, steel, HDPE and transite. Fiber optic. Primary 2400vac electrical power. 208 3ph electrical power. Sanitary sewer. Valve vaults and sub grade boxes.

DBSI refreshes the locate marks. Inspect and check for shearwater and petrels at the access routes and excavation areas. Begin excavation work at the west 500,000 gallon reservoir S3126. Primarily this is a 0.5' cut around the perimeter of the concrete wall stick up. Use the flat edged 60" bucket on the mini excavator for direct loading soil for hauling to the R2. The concrete reservoir paint and building's exterior were abated and encapsulated last year by Iniki.

At the Cargo Pier beach, inspections are made prior to mobilizing the 290 excavator and A30 haul truck to continue hauling clean coral sand to the stockpile area north of the R2 Unit, Cell 1 & 2. Throughout the day clean coral sand is transported and placed in the approved location for future R2 final cap material. A full time biological monitor is working the site for wildlife awareness.

1000 – The mini excavator is working the west side of S3126. The block for point P4 is also excavated as the machine and workers move from the south side, west side and circle around clockwise to the northern side.

Confirmation sample collection of Boathouse #1 and #2, Figure P14.

1200 – Lunch

1230 – Clean borrow source area sand continues to be loaded and hauled to the R2 stockpile with an A30.

S3126 west water reservoir daylighted UST perimeter dig is nearing the east mid section (location appx 3 o'clock.) Once completed to approximately 80% circumference, the remaining run will be accessed at limited space areas in the future.

Moving equipment towards the east reservoir S3127. Inspect for ground burrowing birds at the north access route of the second 500,000 gallon water tank. The larger area with numerous mixed utilities are being potholed by hand for verification of depth and orientation. Excavation work begins near points P6 and P8 of Figure P5 to required depths.

1530 – Utility potholing continues within the Water Plant work area in advance of the mini excavator. Soil removal at the northeast side of Bldg 3501 continues. Soil remains destine for the R2 Cell 1 to be batch treated with Maectite®.

1730 – Ending the work day.
Ex-situ soil loads from DU-9 Water Plant is 6 loads for future treatment in the R2.
Borrow source clean coral sand hauled to the R2 stockpile is 19 loads.
Borrow source clean coral sand backfill hauled to the DU-3 is 8 loads.

Photographs:

Photo 01: S3126 W – View north. 500,000 gallon water reservoir 0.5' excavation progress

Photo 02: Borrow Source – View north. Loading clean coral sand for R2 northern stockpile task

Photo 03: Bldg 419 – View south. Backfill progress of re-ex area

Photo 04: Water Plant– View north. Flagging utilities, pothole work and excavation progress

Photo 05: Water Plant – View south. Flagging utilities, pothole work and excavation progress

Photo 06: Bldg 418 – View south. Backfill complete for Bldgs 417, 418, 419

Table 1. Maectite and Treated Soil Total Estimates

	Maectite Totals						Treated Soil Totals[1,2]		
	Applied Today (gal)					Total to Date	Excavated and Hauled to R-2 Unit **Today**		Excavated and Hauled to R-2 Unit **Total to Date**
Date	Soils (DU9)	Soils (DU8)	Soils (DU7)	Soils (DU5)	Soils (DU3)	(gal)	Load	^{3}yds[1]	^{3}yds[1]
08/28/17	0	0	0	0	0	1366	0	0	1873
08/29/17	0	0	0	0	0	1366	0	0	1873
08/30/17	0	0	0	0	0	1366	0	0	1873
08/31/17	0	0	0	0	0	1366	0	0	1873
09/01/17	0	0	0	0	0	1366	0	0	1873
09/02/17									
Total to Date	1008 gallons	205 gallons	153 gallons	0 gallons	0 gallons		155.75 loads		

Notes:
1. Estimates are based on the number of gallons of Maectite® applied.
2. Soil treatment with Maectite® and hauling to R2 may not occur on the same day.
3. 8/23/17 – Table 2 loads were batch treated in the R2. Inserted this data into Table 1 for totalizing the volumes and gallons. Reset Table 2 "Batch loads" of 48.5 to zero until next ex-situ stockpile treatment.

2017 DU 9 – Figures P 1-16, 18, 20, 21, 23-27.
Bldg 1124, 1126, 3521, S361, 347, 3501, S3126, S3127, 521, 520, 502, 5342, 309, 340, 354, 9149, 232, 233, S269, S225A, 2127, 144, Boat House 1 & 2, 4205, 4206, 4207, 4213, 503, 5303, 5341, 5339, 5338, Bollards, Fire Hydrants, 5304, 5305, 4210, 3524, 3529, 5126, 5378, 3514, and other ancillary structures.
Foundations S464, 502, 4201, 5126, 5295, 5342.
2017 DU 8 – S-28, S-30 re-ex, Pipe figure P19
2017 DU 7 – Bldg 3502, 3503, 3504 shade cloth
2017 DU 5 – R2 Unit, Figure P17
2017 DU 3 – Housing figure P22, 419 MIS re-ex

Table 2. Soil loads hauled to the R2 for ex situ Maectite® treatment

	Load Totals				
	Hauled to R2 for treatment in R2 cell (# of truck loads)				
Date	Soils (DU9)	Soils (DU8)	Soils (DU7)	Soils (DU5)	Soils (DU3)
08/28/17	5	0	0	0	0
08/29/17	7.6	0	0	0	0
08/30/17	5	0	0	0	0
08/31/17	3	0	0	0	0
09/01/17	6	0	0	0	0
09/02/17					
Batch loads to treat in R2	32.6 loads	0 loads	0 loads	0 loads	0 loads
Total to Date	67.1 loads	34 loads	18.5 loads	0 loads	0 loads

8/14/17 - Batch treatment of all stockpiled "ex situ" loads to date in R2 Cell 1. Entered this data into Table 1 on 8/14/17 for volume and gallon tracking.
8/15/17 - Add "Batch Loads to treat in R2" subtotal that tracks the truck loads placed for treatment. Reset this to zero once treatment event is complete.
8/23/17 – Batch #2 treatment event of all stockpiled "ex situ" loads to date in R2 Cells. Entered this data into Table 1 on 8/23/17 for volume and gallon tracking.

Table 2.1 Soil loads hauled to the R2, non-treated internment

Date	Load Totals				
	Hauled to R2, non-treated soil (# of truck loads)				
	Soils (DU9)	Soils (DU8)	Soils (DU7)	Soils (DU5)	Soils (DU3)
08/28/17	0	0	0	0	0
08/29/17	0	0	0	0	0
08/30/17	0	0	0	0	0
08/31/17	0	0	0	0	0
09/01/17	0	0	0	0	0
09/02/17					
Total to Date	6 loads	0 loads	0 loads	0 loads	9 loads

Table 3. Weekly Load Estimates

Date	Treated Demo Debris Loads to R2	Clean Concrete Loads to Crusher	Metal Debris Loads To Boneyard	Clean Wood Loads	Steel Debris Loaded onto Barge	~
08/28/17	0	0	0	0	0	
08/29/17	0	0	0	0	0	
08/30/17	0	0	0	0	0	
08/31/17	0	0	0	0	0	
09/01/17	0	0	0	0	0	
09/02/17						
Season Total	3 loads	0 loads	0 loads	4 loads	183 loads	

Table 4. Fire Hydrants, Pedestals and Monuments

Fire Hydrant Soil					Fire Hydrant Soil				
Fire Hydrant ID	Excavate	Sampled Collected FH # X 0-2"	Backfill	Notes-	Fire Hydrant ID	Excavate	Sampled Collected FH # X 0-2"	Backfill	Notes-
1					41				
2					42				
3					43				
4					44				
5					45				
6					46				
7					47				
8					48				
9					49				
10					50				
11	8/31/2017				51				
12					52				
13					53	8/23/2017	8/23/2017		
14					54	8/23/2017	8/23/2017		
15					54A	8/23/2017	8/23/2017		
16					55	8/26/2017	8/26/2017		
17					56	8/26/2017	8/30/2017		
18					57	8/26/2017	8/26/2017		
19					58				
20					59				
21					60				
22					61				
23					62				
24					63				
25					64				
26					65	8/29/2017	8/30/2017		
27					66	8/26/2017	8/26/2017		
28					67	8/25/2017	8/30/2017		
29					68	8/25/2017	8/30/2017		
30					69				
31					70				
32					71				
33					72	8/29/2017			
34					73	8/29/2017			
35					74	8/29/2017	8/29/2017		
36					75	8/28/2017	8/29/2017		
37					76				
38					77	8/28/2017	8/29/2017		
39									
40									

Pedestals /Monuments Soil					Pedestals /Monuments Soil				
Feature Unit ID	Excavate	Sampled Collected Unit # X 0-2"	Backfill	Notes-	Feature Unit ID	Excavate	Sampled Collected Unit # X 0-2"	Backfill	Notes-
1					23				
2					24				
3					25				
4					26				
5					27				
6					28				
7					29				
8					30				
9					31				
10					32				
11					33				
12					34				
13					35				
14					36				
15					37				
16					38				
17					39				
18					40				
19					41				
20					42				
21					43				
22									

Table 5. DU 5 Buttress & Cover - Import Clean Coral Sand

DU 5 IMPORT CLEAN CORAL						
DATE	NORTH Wall Loads	SOUTH Wall Loads	EAST Wall Loads	WEST Wall Loads	Days total loads	Days cubic yardage
8/30/2017	18	0	0	0	18	270
8/31/2017	18	0	0	0	18	270
9/1/2017	19	0	0	0	19	285
9/2/2017	0	0	0	0	0	0
Load count per wall	55	0	0	0		
15cuyd estimate per wall	825	0	0	0		
2017 Total R2 combined clean coral import LOADS				55		
Loads x 15cuyd estimate				825		

Daily Field Report

Date: Saturday, September 2, 2017
Prepared by: Scott Wakefield

Project: Removal of Lead-Based Paint from Structures and Lead-Contaminated Soil
Location: Midway Atoll National Wildlife Refuge
Client: US Fish and Wildlife Service

Weather: High clouds, wind 12 mph. Temperature ~80F

Personnel:

Name	Company	Site Hours
Scott Wakefield	NWDE Field Oversight	10
Jeff James	NWDE Supervisor	Partial
Joel Smith	NWDE Operator	10
Dalton Sullivan	NWDE Labor	0
Antonio Davis	NWDE Labor	10
Jevon Stone	NWDE Operator	10
Jose Ordaz	NWDE Operator	10
Matt Manning	NWDE Operator	0
Chris Fisher	NWDE Labor	10
Alan Phillips	NWDE Operator	0
Kevin Bach	NWDE Labor	10
Lucas Peel	NWDE Labor	10
Tyler Wilson	NWDE Labor	10
Eric Matteson	NWDE Operator	10

Visitors/Additional Site Personnel:

Name	Title
Bill Spoerer	U.S. FWS

Equipment:

Description	Model No.	Comments / Serial #
Pickup Truck	F350 Service Truck	NWDE
Flatbed Truck	Ford F450	NWDE
Container Truck	Peterbuilt	NWDE
Skid Steer	Bobcat S185	NWDE
Tracked Skid Steer	Bobcat T750	NWDE
Tracked Skid Steer	Bobcat	NWDE
Mini-Excavator	CAT 308	NWDE
Excavator	Volvo EC290BLC	NWDE
Excavator	Volvo EC290BLC	NWDE
Excavator	Volvo EC290	NWDE
Off road Dump Truck	Volvo A30D	NWDE
Off road Dump Truck	Volvo A30D	NWDE
Off road Dump Truck	Volvo A30D	NWDE
Excavator – High reach	Komatsu PC400HD	NWDE

Materials Delivered:

Description	QTY	Condition/Comments
Diesel	183 gallons	
Diesel	56 gallons	9/1/17
Gasoline	0 gallons	

Description of Work:

0700 – Health and Safety meeting at NAF staging area. Review today's work tasks.

NWDE soil excavation work resumes at the Midway Water Plant facility. Inspecting for bird burrowing activities within the work and access areas. North of Bldg 3501 the marked dig area is being removed using the mini excavator. Primarily a 1' excavation with limited areas of 2' and 3' depths, the material is placed into the single A30 haul truck and staged within the R2 Unit. An upcoming batch event will treat the soil with Maectite® and hydrant water within the Cell.

The Cargo Pier beach is prepared for mobilizing the 290 excavator and two A30 haul trucks. Today will be continuous loads of clean coral sand being hauled and staged north of the R2 at the hard surface. The trucks are using the designated southern haul route south of Bldg 309 on Branon Ave, then southwest on Madole Street to the R2. A biological monitor is posted for sea and wildlife oversight at the beach.

1000 – Work at the north edge of Bldg 3501 Water Plant includes the multiple crossings of active water lines and fiber optic conduit. Hand digging and constant ground crew spotting work with the mini excavator to clear soil to target grade. The haul truck is backing in from the north side of S3127 E in the cleared access path.

1200 – Lunch

1230 – The Water Plant excavation north of Bldg 3501 is nearing completion this afternoon. To follow is cutting the shallow 0.5' excavation around S3127 E Reservoir using the 60" bucket.

1330 – Soil excavation around S3127 E has progressed along the north and southwest concrete walls. A hornet nest at the east side has currently reduced access to the east side of the S3127 Reservoir.

1600 – Bldg 3501 Water Plant, east of the in-use building is progressing with the 1' and 3' areas. The haul truck is accessing from the south side and direct loading into the truck.

Hauling clean coral sand from the Borrow Source area has maintained a steady flow for the two trucks. Material continues being staged north of the R2.

1730 – Ending the work day.
Ex-situ soil loads from DU-9 Water Plant is 7 loads for future treatment in the R2.
Borrow source clean coral sand hauled to the R2 stockpile is 55 loads, fifty-five.

Photographs:

Photo 01: Bldg 3501 Water Plant – View west. Excavation progress

Photo 02: Bldg 3501 Water Plant – View northeast. Excavation progress

Photo 03: S3127 E – View east. Perimeter excavation of the 500,000-gallon reservoir

Photo 04: Water Plant– View north. Excavation progress

Photo 05: S3127 E – View northeast. Excavation progress

Photo 06: S3127 E – View southeast. Excavation progress

Table 1. Maectite and Treated Soil Total Estimates

	Maectite Totals						Treated Soil Totals[1,2]		
	Applied Today (gal)					Total to Date	Excavated and Hauled to R-2 Unit **Today**		Excavated and Hauled to R-2 Unit **Total to Date**
Date	Soils (DU9)	Soils (DU8)	Soils (DU7)	Soils (DU5)	Soils (DU3)	(gal)	Load	^{3}yds[1]	^{3}yds[1]
08/28/17	0	0	0	0	0	1366	0	0	1873
08/29/17	0	0	0	0	0	1366	0	0	1873
08/30/17	0	0	0	0	0	1366	0	0	1873
08/31/17	0	0	0	0	0	1366	0	0	1873
09/01/17	0	0	0	0	0	1366	0	0	1873
09/02/17	0	0	0	0	0	1366	0	0	1873
Total to Date	1008 gallons	205 gallons	153 gallons	0 gallons	0 gallons		155.75 loads		

Notes:
1. Estimates are based on the number of gallons of Maectite® applied.
2. Soil treatment with Maectite® and hauling to R2 may not occur on the same day.
3. 8/23/17 – Table 2 loads were batch treated in the R2. Inserted this data into Table 1 for totalizing the volumes and gallons. Reset Table 2 "Batch loads" of 48.5 to zero until next ex-situ stockpile treatment.

2017 DU 9 – Figures P 1-16, 18, 20, 21, 23-27.
Bldg 1124, 1126, 3521, S361, 347, 3501, S3126, S3127, 521, 520, 502, 5342, 309, 340, 354, 9149, 232, 233, S269, S225A, 2127, 144, Boat House 1 & 2, 4205, 4206, 4207, 4213, 503, 5303, 5341, 5339, 5338, Bollards, Fire Hydrants, 5304, 5305, 4210, 3524, 3529, 5126, 5378, 3514, and other ancillary structures.
Foundations S464, 502, 4201, 5126, 5295, 5342.
2017 DU 8 – S-28, S-30 re-ex, Pipe figure P19
2017 DU 7 – Bldg 3502, 3503, 3504 shade cloth
2017 DU 5 – R2 Unit, Figure P17
2017 DU 3 – Housing figure P22, 419 MIS re-ex

Table 2. Soil loads hauled to the R2 for ex situ Maectite® treatment

	Load Totals				
	Hauled to R2 for treatment in R2 cell (# of truck loads)				
Date	Soils (DU9)	Soils (DU8)	Soils (DU7)	Soils (DU5)	Soils (DU3)
08/28/17	5	0	0	0	0
08/29/17	7.6	0	0	0	0
08/30/17	5	0	0	0	0
08/31/17	3	0	0	0	0
09/01/17	6	0	0	0	0
09/02/17	7	0	0	0	0
Batch loads to treat in R2	39.6 loads	0 loads	0 loads	0 loads	0 loads
Total to Date	74.1 loads	34 loads	18.5 loads	0 loads	0 loads

8/14/17 - Batch treatment of all stockpiled "ex situ" loads to date in R2 Cell 1. Entered this data into Table 1 on 8/14/17 for volume and gallon tracking.
8/15/17 - Add "Batch Loads to treat in R2" subtotal that tracks the truck loads placed for treatment. Reset this to zero once treatment event is complete.
8/23/17 – Batch #2 treatment event of all stockpiled "ex situ" loads to date in R2 Cells. Entered this data into Table 1 on 8/23/17 for volume and gallon tracking.

Table 2.1 Soil loads hauled to the R2, non-treated internment

Date	Load Totals				
	Hauled to R2, non-treated soil (# of truck loads)				
	Soils (DU9)	Soils (DU8)	Soils (DU7)	Soils (DU5)	Soils (DU3)
08/28/17	0	0	0	0	0
08/29/17	0	0	0	0	0
08/30/17	0	0	0	0	0
08/31/17	0	0	0	0	0
09/01/17	0	0	0	0	0
09/02/17	0	0	0	0	0
Total to Date	6 loads	0 loads	0 loads	0 loads	9 loads

Table 3. Weekly Load Estimates

Date	Treated Demo Debris Loads to R2	Clean Concrete Loads to Crusher	Metal Debris Loads To Boneyard	Clean Wood Loads	Steel Debris Loaded onto Barge	~
08/28/17	0	0	0	0	0	
08/29/17	0	0	0	0	0	
08/30/17	0	0	0	0	0	
08/31/17	0	0	0	0	0	
09/01/17	0	0	0	0	0	
09/02/17	0	0	0	0	0	
Season Total	3 loads	0 loads	0 loads	4 loads	183 loads	

Table 4. Fire Hydrants, Pedestals and Monuments

Fire Hydrant Soil					Fire Hydrant Soil				
Fire Hydrant ID	Excavate	Sampled Collected FH # X 0-2"	Backfill	Notes-	Fire Hydrant ID	Excavate	Sampled Collected FH # X 0-2"	Backfill	Notes-
1					41				
2					42				
3					43				
4					44				
5					45				
6					46				
7					47				
8					48				
9					49				
10					50				
11	8/31/2017				51				
12					52				
13					53	8/23/2017	8/23/2017		
14					54	8/23/2017	8/23/2017		
15					54A	8/23/2017	8/23/2017		
16					55	8/26/2017	8/26/2017		
17					56	8/26/2017	8/30/2017		
18					57	8/26/2017	8/26/2017		
19					58				
20					59				
21					60				
22					61				
23					62				
24					63				
25					64				
26					65	8/29/2017	8/30/2017		
27					66	8/26/2017	8/26/2017		
28					67	8/25/2017	8/30/2017		
29					68	8/25/2017	8/30/2017		
30					69				
31					70				
32					71				
33					72	8/29/2017			
34					73	8/29/2017			
35					74	8/29/2017	8/29/2017		
36					75	8/28/2017	8/29/2017		
37					76				
38					77	8/28/2017	8/29/2017		
39									
40									

Pedestals /Monuments Soil					Pedestals /Monuments Soil				
Feature Unit ID	Excavate	Sampled Collected Unit # X 0-2"	Backfill	Notes-	Feature Unit ID	Excavate	Sampled Collected Unit # X 0-2"	Backfill	Notes-
1					23				
2					24				
3					25				
4					26				
5					27				
6					28				
7					29				
8					30				
9					31				
10					32				
11					33				
12					34				
13					35				
14					36				
15					37				
16					38				
17					39				
18					40				
19					41				
20					42				
21					43				
22									

Table 5. DU 5 Buttress & Cover - Import Clean Coral Sand

DU 5 IMPORT CLEAN CORAL						
DATE	NORTH Wall Loads	SOUTH Wall Loads	EAST Wall Loads	WEST Wall Loads	Days total loads	Days cubic yardage
8/30/2017	18	0	0	0	18	270
8/31/2017	18	0	0	0	18	270
9/1/2017	19	0	0	0	19	285
9/2/2017	55	0	0	0	55	825
Load count per wall	110	0	0	0		
15cuyd estimate per wall	1650	0	0	0		
2017 Total R2 combined clean coral import LOADS				110		
Loads x 15cuyd estimate				1650		

Table 6. Excavation Plots - Import Clean Coral Sand

EXCAVATION PLOTS- IMPORT CLEAN CORAL BACKFILL						
DATE	DU-9 Loads	DU-8 Loads	DU-5 Loads	DU-3 Loads	Days total loads	Days cubic yardage
8/27/2017						
8/28/2017						
8/29/2017						
8/30/2017						
8/31/2017	1	0	0	0	1	15
9/1/2017	8	0	0	0	8	120
Load count per column	9	0	0	0		
15cuyd estimate per column	135	0	0	0		
2017 Total combined clean import Backfill LOADS				9		
Loads x 15cuyd estimate				135		

Daily Field Report

Date: Monday, September 4, 2017
Prepared by: Scott Wakefield

Project: Removal of Lead-Based Paint from Structures and Lead-Contaminated Soil
Location: Midway Atoll National Wildlife Refuge
Client: US Fish and Wildlife Service

Weather: High clouds, wind 8 mph. Temperature ~80F

Personnel:

Name	Company	Site Hours
Scott Wakefield	NWDE Field Oversight	10
Jeff James	NWDE Supervisor	Partial
Joel Smith	NWDE Operator	10
Dalton Sullivan	NWDE Labor	0
Antonio Davis	NWDE Labor	10
Jevon Stone	NWDE Operator	10
Jose Ordaz	NWDE Operator	10
Matt Manning	NWDE Operator	0
Chris Fisher	NWDE Labor	10
Alan Phillips	NWDE Operator	0
Kevin Bach	NWDE Labor	10
Lucas Peel	NWDE Labor	10
Tyler Wilson	NWDE Labor	10
Eric Matteson	NWDE Operator	10

Visitors/Additional Site Personnel:

Name	Title
Bill Spoerer	U.S. FWS

Equipment:

Description	Model No.	Comments / Serial #
Pickup Truck	F350 Service Truck	NWDE
Flatbed Truck	Ford F450	NWDE
Container Truck	Peterbuilt	NWDE
Skid Steer	Bobcat S185	NWDE
Tracked Skid Steer	Bobcat T750	NWDE
Tracked Skid Steer	Bobcat	NWDE
Mini-Excavator	CAT 308	NWDE
Excavator	Volvo EC290BLC	NWDE
Excavator	Volvo EC290BLC	NWDE
Excavator	Volvo EC290	NWDE
Off road Dump Truck	Volvo A30D	NWDE
Off road Dump Truck	Volvo A30D	NWDE
Off road Dump Truck	Volvo A30D	NWDE
Excavator – High reach	Komatsu PC400HD	NWDE

Materials Delivered:

Description	QTY	Condition/Comments
Diesel	25 gallons	
Gasoline	0 gallons	

Description of Work:

0700 – Health and Safety meeting at NAF staging area. Review today's work tasks.

NWDE soil excavation work resumes at the Midway Water Plant facility. Inspecting for bird burrowing activities within the work and access routes. The southeast corner of Bldg 3501 and central zone of the 1' excavation area are being focused on with intense hand labor and the Cat 308. The location to excavate includes 2400 vac electrical utility, water lines, low voltage conduits, the ironwood stump, sidewalk and concrete landing at man doors. Each obstacle is identified and carefully worked to remove the soil materials without damaging the in use utilities.

At the Cargo Pier Borrow Source area, the beach is inspected prior to equipment access. Clean coral sand hauling will resume. Materials will resume being hauled to the north side of the R2 Unit for stockpiling clean sand for using at the final R2 cover and abutment. Two Volvo A30 trucks are in use again today with the 290 excavator loading. Hauling will begin this morning and continue uninterrupted until days end. A biological monitor is stationed for sea and wildlife observation.

0900 – The Vac Trailer is continuing to be serviced and tested for gaining the performance needed to clear sand and coral from the excavation areas. Currently there are parts inbound on the expected NWDE barge #2 that will fully remedy the mechanical problems by next week.

1100 – At the Water Plant complex, excavation near Figure 5, sample location 347 P7 is progressing. Additionally 347 P5 sample point targeting a deeper 3' excavation plot is being worked.

1200 – Lunch

1230 – Excavation work for the perimeter of S3127 E Reservoir at a 0.5' depth is picks up where leaving off last week. Native soils are cut using the 60" flat edged bucket and direct loaded into the off road haul truck. Soils are then placed within the R2 Cell 1 for future batch treatment event using Maectite®.

Review individual site progress and locations with B.Spoerer US FWS.

1500 – Confirmation sample collections for partial Bldg 309, Bldg S361, pedestals and fire hydrants. At Bldg 309 the north and northeast areas having been completed to target grade are sampled. Remining are the southwest region under the steel structure and south side of the Power Plant. Pending the vac trailer availability to work at the south side.

1730 – Ending the work day.
Ex-situ soil loads from DU-9 Water Plant is 6 loads for future treatment in the R2.
Borrow source clean coral sand hauled to the R2 stockpile is 52 loads, fifty-two.

Photographs:

Photo 01: R2 Unit – View east. Northern wall. Clean stockpile progress (left) Waste soil progress (right)

Photo 02: Bldg 3501 Water Plant – View northwest. Excavation progress near removed ironwood tree

Photo 03: Bldg 3501 Water Plant – View northeast. Excavation progress

Photo 04: Bldg 347 Water Plant– View southeast. Excavation progress

Photo 05: Pedestal 1-08 – View north. Example of excavation. Located nearest fire hydrant ID # 08

Photo 06: Pedestal 2-08 – View north. Example of excavation. Located nearest fire hydrant ID # 08

Table 1. Maectite and Treated Soil Total Estimates

	Maectite Totals						Treated Soil Totals[1,2]		
	Applied Today (gal)					Total to Date	Excavated and Hauled to R-2 Unit **Today**		Excavated and Hauled to R-2 Unit **Total to Date**
Date	Soils (DU9)	Soils (DU8)	Soils (DU7)	Soils (DU5)	Soils (DU3)	(gal)	Load	^{3}yds[1]	^{3}yds[1]
09/04/17	0	0	0	0	0	1366	0	0	1873
09/05/17									
09/06/17									
09/07/17									
09/08/17									
09/09/17									
Total to Date	1008 gallons	205 gallons	153 gallons	0 gallons	0 gallons		155.75 loads		

Notes:
1. Estimates are based on the number of gallons of Maectite® applied.
2. Soil treatment with Maectite® and hauling to R2 may not occur on the same day.
3. 8/23/17 – Table 2 loads were batch treated in the R2. Inserted this data into Table 1 for totalizing the volumes and gallons. Reset Table 2 "Batch loads" of 48.5 to zero until next ex-situ stockpile treatment.

2017 DU 9 – Figures P 1-16, 18, 20, 21, 23-27.
Bldg 1124, 1126, 3521, S361, 347, 3501, S3126, S3127, 521, 520, 502, 5342, 309, 340, 354, 9149, 232, 233, S269, S225A, 2127, 144, Boat House 1 & 2, 4205, 4206, 4207, 4213, 503, 5303, 5341, 5339, 5338, Bollards, Fire Hydrants, 5304, 5305, 4210, 3524, 3529, 5126, 5378, 3514, and other ancillary structures.
Foundations S464, 502, 4201, 5126, 5295, 5342.
2017 DU 8 – S-28, S-30 re-ex, Pipe figure P19
2017 DU 7 – Bldg 3502, 3503, 3504 shade cloth
2017 DU 5 – R2 Unit, Figure P17
2017 DU 3 – Housing figure P22, 419 MIS re-ex

Table 2. Soil loads hauled to the R2 for ex situ Maectite® treatment

	Load Totals				
	Hauled to R2 for treatment in R2 cell (# of truck loads)				
Date	Soils (DU9)	Soils (DU8)	Soils (DU7)	Soils (DU5)	Soils (DU3)
09/04/17	6	0	0	0	0
09/05/17					
09/06/17					
09/07/17					
09/08/17					
09/09/17					
Batch loads to treat in R2	45.6 loads	0 loads	0 loads	0 loads	0 loads
Total to Date	80.1 loads	34 loads	18.5 loads	0 loads	0 loads

8/14/17 - Batch treatment of all stockpiled "ex situ" loads to date in R2 Cell 1. Entered this data into Table 1 on 8/14/17 for volume and gallon tracking.
8/15/17 - Add "Batch Loads to treat in R2" subtotal that tracks the truck loads placed for treatment. Reset this to zero once treatment event is complete.
8/23/17 – Batch #2 treatment event of all stockpiled "ex situ" loads to date in R2 Cells. Entered this data into Table 1 on 8/23/17 for volume and gallon tracking.

Table 2.1 Soil loads hauled to the R2, non-treated internment

Date	Load Totals				
	Hauled to R2, non-treated soil (# of truck loads)				
	Soils (DU9)	Soils (DU8)	Soils (DU7)	Soils (DU5)	Soils (DU3)
09/04/17	0	0	0	0	0
09/05/17					
09/06/17					
09/07/17					
09/08/17					
09/09/17					
Total to Date	6 loads	0 loads	0 loads	0 loads	9 loads

Table 3. Weekly Load Estimates

Date	Treated Demo Debris Loads to R2	Clean Concrete Loads to Crusher	Metal Debris Loads To Boneyard	Clean Wood Loads	Steel Debris Loaded onto Barge	~
09/04/17	0	0	0	0	0	
09/05/17						
09/06/17						
09/07/17						
09/08/17						
09/09/17						
Season Total	3 loads	0 loads	0 loads	4 loads	183 loads	

Table 4. Fire Hydrants, Pedestals and Monuments

Fire Hydrant Soil					Fire Hydrant Soil				
Fire Hydrant ID	Excavate	Sampled Collected FH # X 0-2"	Backfill	Notes-	Fire Hydrant ID	Excavate	Sampled Collected FH # X 0-2"	Backfill	Notes-
1					41				
2					42				
3					43				
4					44				
5					45				
6					46				
7					47				
8					48				
9					49				
10					50				
11	8/31/2017	9/4/2017		FH 110-2"	51				
12					52				
13					53	8/23/2017	8/23/2017		FH 53 0-2"
14					54	8/23/2017	8/23/2017		FH 54 0-2"
15					54A	8/23/2017	8/23/2017		FH 54A 0-2"
16					55	8/26/2017	8/26/2017		FH 55 0-2"
17					56	8/26/2017	8/30/2017		FH 56 0-2"
18					57	8/26/2017	8/26/2017		FH 57 0-2"
19					58				
20					59				
21					60				
22					61				
23					62				
24					63				
25					64				
26					65	8/29/2017	8/30/2017		FH 65 0-2"
27					66	8/26/2017	8/26/2017		FH 66 0-2"
28					67	8/25/2017	8/30/2017		FH 67 0-2"
29					68	8/25/2017	8/30/2017		FH 68 0-2"
30					69				
31					70				
32					71				
33					72	8/29/2017			
34					73	8/29/2017			
35					74	8/29/2017	8/29/2017		FH 74 0-2"
36					75	8/28/2017	8/29/2017		FH 75 0-2"
37					76				
38					77	8/28/2017	8/29/2017		FH 77 0-2"
39									
40									

Pedestals /Monuments Soil					Pedestals /Monuments Soil				
Feature Unit ID	Excavate	Sampled Collected Unit # X 0-2"	Backfill	Notes-	Feature Unit ID	Excavate	Sampled Collected Unit # X 0-2"	Backfill	Notes-
1	8/29/2017	9/4/2017		1-08 0-2"	23				
2	8/29/2017	9/4/2017		2-08 0-2"	24				
3	8/29/2017	9/4/2017		3-10 0-2"	25				
4	8/29/2017	9/4/2017		4-10 0-2"	26				
5	8/29/2017	9/4/2017		5-11 0-2"	27				
6					28				
7					29				
8					30				
9					31				
10					32				
11					33				
12					34				
13					35				
14					36				
15					37				
16					38				
17					39				
18					40				
19					41				
20					42				
21					43				
22									

Fire Hydrant ID # per updated DBSI file -Navy Fresh Water Lines, Valves & Hydrants. BSI/DR-0034
Pedestal sample identification is a designated ID number followed by a dash and double-digit number relative to the closest Fire Hydrant ID location. No full prior map of pedestals exists.

Table 5. DU 5 Buttress & Cover - Import Clean Coral Sand

DU 5 IMPORT CLEAN CORAL						
DATE	NORTH Wall Loads	SOUTH Wall Loads	EAST Wall Loads	WEST Wall Loads	Days total loads	Days cubic yardage
9/4/2017	52	0	0	0	52	780
9/5/2017					0	0
9/6/2017					0	0
9/7/2017					0	0
9/8/2017					0	0
9/9/2017					0	0
Load count per wall	162	0	0	0		
15cuyd estimate per wall	2430	0	0	0		
2017 Total R2 combined clean coral import LOADS				162		
Loads x 15cuyd estimate				2430		

Table 6. Excavation Plots - Import Clean Coral Sand

EXCAVATION PLOTS- IMPORT CLEAN CORAL BACKFILL						
DATE	DU-9 Loads	DU-8 Loads	DU-5 Loads	DU-3 Loads	Days total loads	Days cubic yardage
9/4/2017	0	0	0	0	0	0
9/5/2017					0	0
9/6/2017					0	0
9/7/2017					0	0
9/8/2017					0	0
9/9/2017					0	0
Load count per column	9	0	0	0		
15cuyd estimate per column	135	0	0	0		
2017 Total combined clean import Backfill LOADS				9		
Loads x 15cuyd estimate				135		

Daily Field Report

Date: Tuesday, September 5, 2017
Prepared by: Scott Wakefield

Project: Removal of Lead-Based Paint from Structures and Lead-Contaminated Soil
Location: Midway Atoll National Wildlife Refuge
Client: US Fish and Wildlife Service

Weather: High clouds, wind 8 mph. Temperature ~82F

Personnel:

Name	Company	Site Hours
Scott Wakefield	NWDE Field Oversight	10
Jeff James	NWDE Supervisor	Partial
Mark Stoller	NWDE Supervisor	Partial
Joel Smith	NWDE Operator	10
Dalton Sullivan	NWDE Labor	0
Antonio Davis	NWDE Labor	10
Jevon Stone	NWDE Operator	10
Jose Ordaz	NWDE Operator	10
Matt Manning	NWDE Operator	0
Chris Fisher	NWDE Labor	10
Alan Phillips	NWDE Operator	0
Kevin Bach	NWDE Labor	10
Lucas Peel	NWDE Labor	10
Tyler Wilson	NWDE Labor	10
Eric Matteson	NWDE Operator	10

Visitors/Additional Site Personnel:

Name	Title
Bill Spoerer	U.S. FWS
MaryAnn Amann	U.S. FWS
Henderson Air Field personnel	Airport Operations

Equipment:

Description	Model No.	Comments / Serial #
Pickup Truck	F350 Service Truck	NWDE
Flatbed Truck	Ford F450	NWDE
Container Truck	Peterbuilt	NWDE
Skid Steer	Bobcat S185	NWDE
Tracked Skid Steer	Bobcat T750	NWDE
Tracked Skid Steer	Bobcat	NWDE
Mini-Excavator	CAT 308	NWDE
Excavator	Volvo EC290BLC	NWDE
Excavator	Volvo EC290BLC	NWDE
Excavator	Volvo EC290	NWDE
Off road Dump Truck	Volvo A30D	NWDE
Off road Dump Truck	Volvo A30D	NWDE
Off road Dump Truck	Volvo A30D	NWDE
Excavator – High reach	Komatsu PC400HD	NWDE

Materials Delivered:

Description	QTY	Condition/Comments
Diesel	327 gallons	
Gasoline	0 gallons	

Description of Work:

0700 – Health and Safety meeting at NAF staging area. Review today's work tasks.

NWDE soil excavation is ongoing at the Midway Water Plant facility. Inspecting for bird burrowing activities within the work and access routes. Today's area will be focusing on Bldg 347, Figure P5, east and south side. The in-use utilities continue to be present. Careful hand digging and the mini excavator progress to remove soil systematically while protecting piping and conduits from damage.

Clean coral sand hauling will begin for another day of stockpiling north of the R2 Unit. Today one A30 haul truck and the Volvo 290 excavator access the beach after a morning inspection for sea life. Continual round trips from the Cargo Pier to the R2 north stockpile steadily build a reserve of material for future R2 final cover.

0730 – Meet at the Midway Airfield with DBSI facility employees Airport 2 Keith Casttellano, NavAid George Cepavicius and Bill Spoerer, US FWS. Discuss and review the line of sight signal antenna that is oriented north/south between the FAA Bldg 9145 and the Henderson Field Airport Fire Station. This FAA antenna array is appx 7' above ground surface. At the Fire Station, the second antenna is appx 20' + above ground surface. This low wattage signal is directed across the R2, Cell 2 and 4.

Important goals are that during stockpile activities, the line of sight will not be continually blocked by large machinery. Also, that the signal sighting is not blocked by stockpiled clean coral sand or materials placed within the R2 Unit. Lastly, that the final R2 Cover is finishing at an elevation less than the required sight window for the antenna arrangement.

0800 – The clean R2 stockpile of sand is being roughed in for a top grade on the 162+ loads of material. The tracked skidsteer adds a gradual ramp to the west side that allows the Volvo haul truck to continue clean coral placement on the elevated pad, increasing the staged cubic yardage in a reduced footprint.

0920 – Work at the R2 area is paused for the routine inbound charter flight. M.Amann US FWS is returning today along with NWDE M.Stoller as scheduled.

Borrow Source clean coral sand hauling shifts to move backfill material into the 2017 Season excavated areas that have passed confirmation sampling at <75mg/kg. Begin moving backfill with one A30 truck to the small plot of Bldg 232 Fuel Farm Storage and larger plot Bldg 3529 New Midway Laundry. As material is placed, the tracked skidsteer is rough grading to a minimum +0.33' elevation over the original grade benchmarks. Near the New Midway Laundry, adjoining DU-9 and DU-7 excavations are combined during backfill clean sand placement and rough graded to the target elevation.

1045 – Cinco Air charter flight lifts off. As previously scheduled, Bill Spoerer, US FWS departs the island. Confirmation sample for COC #3 batch is sent out to Test America for lab analysis.

1200 – Lunch

1230 – Midway Water Plant excavation work is progressing at the east side of Bldg 347. Encountering the marked utilities safely remains the driving factor for cutting the broad 1.0' cut in this area and narrow 3' isolated depth at the building's east side.

1300 - Begin staking line of sight points for referencing the FAA antenna signal path. Include a 40' wide buffer zone using yellow caution tape as a "No Parking" marker reference. This is a visual awareness

indicator for trucks and earthmovers to not park or place materials directly in the zone that is required to remain open.

1345 – Backfilling excavations is altered to resume placing clean coral sand at the staging area north of the R2. Through the afternoon sand is loaded and travels from the Borrow Source via one truck to the pile.

1630 – Midway Water Plant excavation is at the south side of Bldg 347 near the sample point P1 and P3 of Figure P5. Material continues being direct loaded into the haul truck and placed in the R2 Cell 1 for upcoming batch treatment of soil using Maectite®, hydrant water and mechanical mixing.

1730 – Ending the work day.
Ex-situ soil loads from DU-9 Water Plant is 9 loads for future treatment in the R2.
Borrow source clean coral sand hauled to the R2 stockpile is 15 loads, fifteen.
Backfill clean coral sand into DU-9 today is 5 loads.
Backfill clean coral sand into DU-7 today is 4 loads.

Photographs:

Photo 01: S3127 Reservoir Water Plant – View southwest. Progress of excavation

Photo 02: R2 Unit – View northeast. Red reference line indicating the antenna signal path across R2

Photo 03: Henderson Air Field – Antenna equipment on Midway Fire Dept (left) Bldg 9145 NavAid (right)

Photo 04: Henderson Air Field – View north. Antenna equipment line of sight over R2 Unit

Photo 05: 3502 Navy Dining Hall– View southeast. DU-7 backfill

Photo 06: Bldg 3529 New Midway Laundry – View northwest. DU-9 backfill progress

Photo 07: Bldg 347 Water Plant – View northeast. Progress of excavation

Photo 08: Bldg 347 Water Plant – View northeast. Progress of excavation

Table 1. Maectite and Treated Soil Total Estimates

	Maectite Totals						Treated Soil Totals[1,2]		
	Applied Today (gal)					Total to Date	Excavated and Hauled to R-2 Unit **Today**		Excavated and Hauled to R-2 Unit **Total to Date**
Date	Soils (DU9)	Soils (DU8)	Soils (DU7)	Soils (DU5)	Soils (DU3)	(gal)	Load	^{3}yds[1]	^{3}yds[1]
09/04/17	0	0	0	0	0	1366	0	0	1873
09/05/17	0	0	0	0	0	1366	0	0	1873
09/06/17									
09/07/17									
09/08/17									
09/09/17									
Total to Date	1008 gallons	205 gallons	153 gallons	0 gallons	0 gallons		155.75 loads		

Notes:
1. Estimates are based on the number of gallons of Maectite® applied.
2. Soil treatment with Maectite® and hauling to R2 may not occur on the same day.
3. 8/23/17 – Table 2 loads were batch treated in the R2. Inserted this data into Table 1 for totalizing the volumes and gallons. Reset Table 2 "Batch loads" of 48.5 to zero until next ex-situ stockpile treatment.

2017 DU 9 – Figures P 1-16, 18, 20, 21, 23-27.
Bldg 1124, 1126, 3521, S361, 347, 3501, S3126, S3127, 521, 520, 502, 5342, 309, 340, 354, 9149, 232, 233, S269, S225A, 2127, 144, Boat House 1 & 2, 4205, 4206, 4207, 4213, 503, 5303, 5341, 5339, 5338, Bollards, Fire Hydrants, 5304, 5305, 4210, 3524, 3529, 5126, 5378, 3514, and other ancillary structures.
Foundations S464, 502, 4201, 5126, 5295, 5342.
2017 DU 8 – S-28, S-30 re-ex, Pipe figure P19
2017 DU 7 – Bldg 3502, 3503, 3504 shade cloth
2017 DU 5 – R2 Unit, Figure P17
2017 DU 3 – Housing figure P22, 419 MIS re-ex

Table 2. Soil loads hauled to the R2 for ex situ Maectite® treatment

	Load Totals				
	Hauled to R2 for treatment in R2 cell (# of truck loads)				
Date	Soils (DU9)	Soils (DU8)	Soils (DU7)	Soils (DU5)	Soils (DU3)
09/04/17	6	0	0	0	0
09/05/17	9	0	0	0	0
09/06/17					
09/07/17					
09/08/17					
09/09/17					
Batch loads to treat in R2	54.6 loads	0 loads	0 loads	0 loads	0 loads
Total to Date	89.1 loads	34 loads	18.5 loads	0 loads	0 loads

8/14/17 - Batch treatment of all stockpiled "ex situ" loads to date in R2 Cell 1. Entered this data into Table 1 on 8/14/17 for volume and gallon tracking.
8/15/17 - Add "Batch Loads to treat in R2" subtotal that tracks the truck loads placed for treatment. Reset this to zero once treatment event is complete.
8/23/17 – Batch #2 treatment event of all stockpiled "ex situ" loads to date in R2 Cells. Entered this data into Table 1 on 8/23/17 for volume and gallon tracking.

Table 2.1 Soil loads hauled to the R2, non-treated internment

Date	Load Totals				
	Hauled to R2, non-treated soil (# of truck loads)				
	Soils (DU9)	Soils (DU8)	Soils (DU7)	Soils (DU5)	Soils (DU3)
09/04/17	0	0	0	0	0
09/05/17	0	0	0	0	0
09/06/17					
09/07/17					
09/08/17					
09/09/17					
Total to Date	6 loads	0 loads	0 loads	0 loads	9 loads

Table 3. Weekly Load Estimates

Date	Treated Demo Debris Loads to R2	Clean Concrete Loads to Crusher	Metal Debris Loads To Boneyard	Clean Wood Loads	Steel Debris Loaded onto Barge	~
09/04/17	0	0	0	0	0	
09/05/17	0	0	0	0	0	
09/06/17						
09/07/17						
09/08/17						
09/09/17						
Season Total	3 loads	0 loads	0 loads	4 loads	183 loads	

Table 4. Fire Hydrants, Pedestals and Monuments

Fire Hydrant Soil					Fire Hydrant Soil				
Fire Hydrant ID	Excavate	Sampled Collected FH # X 0-2"	Backfill	Notes-	Fire Hydrant ID	Excavate	Sampled Collected FH # X 0-2"	Backfill	Notes-
1					41				
2					42				
3					43				
4					44				
5					45				
6					46				
7					47				
8					48				
9					49				
10					50				
11	8/31/2017	9/4/2017		FH 110-2"	51				
12					52				
13					53	8/23/2017	8/23/2017		FH 53 0-2"
14					54	8/23/2017	8/23/2017		FH 54 0-2"
15					54A	8/23/2017	8/23/2017		FH 54A 0-2"
16					55	8/26/2017	8/26/2017		FH 55 0-2"
17					56	8/26/2017	8/30/2017		FH 56 0-2"
18					57	8/26/2017	8/26/2017		FH 57 0-2"
19					58				
20					59				
21					60				
22					61				
23					62				
24					63				
25					64				
26					65	8/29/2017	8/30/2017		FH 65 0-2"
27					66	8/26/2017	8/26/2017		FH 66 0-2"
28					67	8/25/2017	8/30/2017		FH 67 0-2"
29					68	8/25/2017	8/30/2017		FH 68 0-2"
30					69				
31					70				
32					71				
33					72	8/29/2017			
34					73	8/29/2017			
35					74	8/29/2017	8/29/2017		FH 74 0-2"
36					75	8/28/2017	8/29/2017		FH 75 0-2"
37					76				
38					77	8/28/2017	8/29/2017		FH 77 0-2"
39									
40									

Pedestals /Monuments Soil					Pedestals /Monuments Soil				
Feature Unit ID	Excavate	Sampled Collected Unit # X 0-2"	Backfill	Notes-	Feature Unit ID	Excavate	Sampled Collected Unit # X 0-2"	Backfill	Notes-
1	8/29/2017	9/4/2017		1-08 0-2"	23				
2	8/29/2017	9/4/2017		2-08 0-2"	24				
3	8/29/2017	9/4/2017		3-10 0-2"	25				
4	8/29/2017	9/4/2017		4-10 0-2"	26				
5	8/29/2017	9/4/2017		5-11 0-2"	27				
6					28				
7					29				
8					30				
9					31				
10					32				
11					33				
12					34				
13					35				
14					36				
15					37				
16					38				
17					39				
18					40				
19					41				
20					42				
21					43				
22									

Fire Hydrant ID # per updated DBSI file -Navy Fresh Water Lines, Valves & Hydrants. BSI/DR-0034
Pedestal sample identification is a designated ID number followed by a dash and double-digit number relative to the closest Fire Hydrant ID location. No full prior map of pedestals exists.

Table 5. DU 5 Buttress & Cover - Import Clean Coral Sand

DU 5 IMPORT CLEAN CORAL						
DATE	NORTH Wall Loads	SOUTH Wall Loads	EAST Wall Loads	WEST Wall Loads	Days total loads	Days cubic yardage
9/4/2017	52	0	0	0	52	780
9/5/2017	15	0	0	0	15	225
9/6/2017					0	0
9/7/2017					0	0
9/8/2017					0	0
9/9/2017					0	0
Load count per wall	177	0	0	0		
15cuyd estimate per wall	2655	0	0	0		
2017 Total R2 combined clean coral import LOADS				177		
Loads x 15cuyd estimate				2655		

Table 6. Excavation Plots - Import Clean Coral Sand

EXCAVATION PLOTS- IMPORT CLEAN CORAL BACKFILL							
DATE	DU-9 Loads	DU-8 Loads	DU-7 Loads	DU-5 Loads	DU-3 Loads	Days total loads	Days cubic yardage
9/4/2017	0	0	0	0	0	0	0
9/5/2017	5	0	4	0	0	9	135
9/6/2017						0	0
9/7/2017						0	0
9/8/2017						0	0
9/9/2017						0	0
Load count per column	14	0	4	4	0		
15cuyd estimate per column	210	0	60	60	0		
2017 Total combined clean import Backfill LOADS					18		
Loads x 15cuyd estimate					270		

Daily Field Report

Date: Wednesday, September 6, 2017
Prepared by: Scott Wakefield

Project: Removal of Lead-Based Paint from Structures and Lead-Contaminated Soil
Location: Midway Atoll National Wildlife Refuge
Client: US Fish and Wildlife Service

Weather: Sunny, wind 8 mph. Temperature ~83F

Personnel:

Name	Company	Site Hours
Scott Wakefield	NWDE Field Oversight	10
Jeff James	NWDE Supervisor	Partial
Mark Stoller	NWDE Supervisor	10
Joel Smith	NWDE Operator	10
Dalton Sullivan	NWDE Labor	Partial
Antonio Davis	NWDE Labor	10
Jevon Stone	NWDE Operator	10
Jose Ordaz	NWDE Operator	10
Matt Manning	NWDE Operator	0
Chris Fisher	NWDE Labor	10
Alan Phillips	NWDE Operator	0
Kevin Bach	NWDE Labor	10
Lucas Peel	NWDE Labor	10
Tyler Wilson	NWDE Labor	10
Eric Matteson	NWDE Operator	10

Visitors/Additional Site Personnel:

Name	Title
MaryAnn Amann	U.S. FWS

Equipment:

Description	Model No.	Comments / Serial #
Pickup Truck	F350 Service Truck	NWDE
Flatbed Truck	Ford F450	NWDE
Container Truck	Peterbuilt	NWDE
Skid Steer	Bobcat S185	NWDE
Tracked Skid Steer	Bobcat T750	NWDE
Tracked Skid Steer	Bobcat	NWDE
Mini-Excavator	CAT 308	NWDE
Excavator	Volvo EC290BLC	NWDE
Excavator	Volvo EC290BLC	NWDE
Excavator	Volvo EC290	NWDE
Off road Dump Truck	Volvo A30D	NWDE
Off road Dump Truck	Volvo A30D	NWDE
Off road Dump Truck	Volvo A30D	NWDE
Excavator – High reach	Komatsu PC400HD	NWDE

Materials Delivered:

Description	QTY	Condition/Comments
Diesel	200 gallons	
Gasoline	0 gallons	

Description of Work:

0700 – Health and Safety meeting at NAF staging area. Review today's work tasks.

NWDE soil excavation at the Midway Water Plant facility pushes forward. The Bldg 347 is being wrapped around to the southwest side between the active building and the roadway. The road is left in place and hard surfaces are not removed as part of the soil excavation plot.

At the Cargo Pier, today will continue moving clean coral sand from the Borrow Source area and staging it north of the R2 Unit. The stockpile elevation will continue to increase as sand is driven up the bermed ramp and dumped into another lift. Awareness of the "No Park, No Dumping" zone for the FAA line of sight antenna signal is defined and machinery will work to keep the staked area open.

0900 – NWDE is mobilizing to the active Water Tower 5304 in preparation for demolition. Inspect the work area for ground burrowing petrels and make note of the pin flagged shearwater chicks identified during prior site work. This morning's onsite work will be brief, followed by additional communication across the Team as planning turns to action this month.

The steel cable lengths are being pulled out and positioned, one at each of the four tower legs. Align and orient the positioning of the cables to indicate the required area northeast of the water tower for equipment that will be in use during demo. Currently the cables are positioned on the ground. High area rigging tasks are not planned for today, expected to follow later this week.

The recent plane arrival yesterday had brought in the TOC work crew for finalizing details to take the active Water Tower 5304 off line permanently. This includes optimizing the multi pump water system and additional diesel powered high flow secondary pump. A past DFR reference for the water system can be found for September 12, 2016 relating to the fire hydrant operation and the 115' of tower stem head pressure in the 170' tall tower. US FWS, TOC and NWDE are working together in preparation for the tasks required to safely bring the water tower offline and to the ground.

1000 – At Bldg 3529 New Midway Laundry and Bldg 3524 Steam, occasional loads of clean coral sand have been split off from the hauling to the R2 stockpile. The small excavation plots backfill work began yesterday and will finish up today here. Included are the adjoining DU-7 shallow scape areas contacting the building foundations areas. Both DU-9 and DU-7 work areas are progressing for backfill.

1100 – Bldg 347 excavation progress has made it to the landmark "Water Plant" sign at the southwest corner of the building complex. Materials continue to be direct loaded into the Volvo haul truck and transferred to the R2 near Cell 1 & 2 dividing wall. The load piles continue to be positioned in rows in preparation for an upcoming batch event #3 treatment using Maectite® later this week.

1200 – Lunch

1230 – Coral sands continue being loaded at the Borrow Source area with the 290 Volvo and two A30 haul trucks. Repetitive round trips to the stockpile north of the R2 are growing the material reserves near the work site for the final cover and abutment tasks. The ever vigilant biological monitor at the beach observes for sea and wildlife while trucks are being loaded and the excavator is on the sand.

1330 – Excavation and hand digging the west and northwest sides of Bldg 347. Additional shovel work is occurring at the west side of Bldg 3501, nearest the foundation and utilities.

1630 – Excavation work at the Water Plant complex Bldg 347, Bldg 3501, S3126 W Reservoir and S3127 E Reservoir using the mini excavator is nearing the accessible end. Additional cleanup work will be performed using hand shovels and potentially the Vac trailer system in the limited work spaces.

Mobilize the mini excavator out of the Water Plant area. Continue the narrow areas of Bldg 3501 west side nearest the double doors and sample point P2 of Figure P5.

1730 – Ending the work day.
Ex-situ soil loads from DU-9 Water Plant is 3 loads for future treatment in the R2.
Borrow source clean coral sand hauled to the R2 stockpile is 36 loads, thirty-six.
Backfill clean coral sand into DU-9 today is 5 loads.
Backfill clean coral sand into DU-7 today is 3 loads.

Photographs:

Photo 01: Bldg 3529 New Midway Laundry – View southwest. Clean coral sand backfill progress

Photo 02: Bldg 3502 Navy Dining Hall– View northwest. DU-7 backfill

Photo 03: Bldg 3529 New Midway Laundry – View south. DU-9 backfill progress

Photo 04: Bldg 3524 Steam – View south. Progress of clean coral sand backfill

Photo 05: Bldg 347 Water Plant – View northwest. Progress of excavation

Photo 06: Bldg 347 Water Plant – View southeast. Progress of excavation

Photo 07: R2 Unit – View south. Progress of clean coral sand stockpile north of the R2

Table 1. Maectite and Treated Soil Total Estimates

	Maectite Totals						Treated Soil Totals[1,2]		
	Applied Today (gal)					Total to Date	Excavated and Hauled to R-2 Unit **Today**		Excavated and Hauled to R-2 Unit **Total to Date**
Date	Soils (DU9)	Soils (DU8)	Soils (DU7)	Soils (DU5)	Soils (DU3)	(gal)	Load	^{3}yds[1]	^{3}yds[1]
09/04/17	0	0	0	0	0	1366	0	0	1873
09/05/17	0	0	0	0	0	1366	0	0	1873
09/06/17	0	0	0	0	0	1366	0	0	1873
09/07/17									
09/08/17									
09/09/17									
Total to Date	1008 gallons	205 gallons	153 gallons	0 gallons	0 gallons		155.75 loads		

Notes:
1. Estimates are based on the number of gallons of Maectite® applied.
2. Soil treatment with Maectite® and hauling to R2 may not occur on the same day.
3. 8/23/17 – Table 2 loads were batch treated in the R2. Inserted this data into Table 1 for totalizing the volumes and gallons. Reset Table 2 "Batch loads" of 48.5 to zero until next ex-situ stockpile treatment.

2017 DU 9 – Figures P 1-16, 18, 20, 21, 23-27.
Bldg 1124, 1126, 3521, S361, 347, 3501, S3126, S3127, 521, 520, 502, 5342, 309, 340, 354, 9149, 232, 233, S269, S225A, 2127, 144, Boat House 1 & 2, 4205, 4206, 4207, 4213, 503, 5303, 5341, 5339, 5338, Bollards, Fire Hydrants, 5304, 5305, 4210, 3524, 3529, 5126, 5378, 3514, and other ancillary structures.
Foundations S464, 502, 4201, 5126, 5295, 5342.
2017 DU 8 – S-28, S-30 re-ex, Pipe figure P19
2017 DU 7 – Bldg 3502, 3503, 3504 shade cloth
2017 DU 5 – R2 Unit, Figure P17
2017 DU 3 – Housing figure P22, 419 MIS re-ex

Table 2. Soil loads hauled to the R2 for ex situ Maectite® treatment

	Load Totals				
	Hauled to R2 for treatment in R2 cell (# of truck loads)				
Date	Soils (DU9)	Soils (DU8)	Soils (DU7)	Soils (DU5)	Soils (DU3)
09/04/17	6	0	0	0	0
09/05/17	9	0	0	0	0
09/06/17	3	0	0	0	0
09/07/17					
09/08/17					
09/09/17					
Batch loads to treat in R2	57.6 loads	0 loads	0 loads	0 loads	0 loads
Total to Date	92.1 loads	34 loads	18.5 loads	0 loads	0 loads

8/14/17 - Batch treatment of all stockpiled "ex situ" loads to date in R2 Cell 1. Entered this data into Table 1 on 8/14/17 for volume and gallon tracking.
8/15/17 - Add "Batch Loads to treat in R2" subtotal that tracks the truck loads placed for treatment. Reset this to zero once treatment event is complete.
8/23/17 – Batch #2 treatment event of all stockpiled "ex situ" loads to date in R2 Cells. Entered this data into Table 1 on 8/23/17 for volume and gallon tracking.

Table 2.1 Soil loads hauled to the R2, non-treated internment

Date	Load Totals				
	Hauled to R2, non-treated soil (# of truck loads)				
	Soils (DU9)	Soils (DU8)	Soils (DU7)	Soils (DU5)	Soils (DU3)
09/04/17	0	0	0	0	0
09/05/17	0	0	0	0	0
09/06/17	0	0	0	0	0
09/07/17					
09/08/17					
09/09/17					
Total to Date	6 loads	0 loads	0 loads	0 loads	9 loads

Table 3. Weekly Load Estimates

Date	Treated Demo Debris Loads to R2	Clean Concrete Loads to Crusher	Metal Debris Loads To Boneyard	Clean Wood Loads	Steel Debris Loaded onto Barge	~
09/04/17	0	0	0	0	0	
09/05/17	0	0	0	0	0	
09/06/17	0	0	0	0	0	
09/07/17						
09/08/17						
09/09/17						
Season Total	3 loads	0 loads	0 loads	4 loads	183 loads	

Table 4. Fire Hydrants, Pedestals and Monuments

Fire Hydrant Soil					Fire Hydrant Soil				
Fire Hydrant ID	Excavate	Sampled Collected FH # X 0-2"	Backfill	Notes-	Fire Hydrant ID	Excavate	Sampled Collected FH # X 0-2"	Backfill	Notes-
1					41				
2					42				
3					43				
4					44				
5					45				
6					46				
7					47				
8					48				
9					49				
10					50				
11	8/31/2017	9/4/2017		FH 110-2"	51				
12					52				
13					53	8/23/2017	8/23/2017		FH 53 0-2"
14					54	8/23/2017	8/23/2017		FH 54 0-2"
15					54A	8/23/2017	8/23/2017		FH 54A 0-2"
16					55	8/26/2017	8/26/2017		FH 55 0-2"
17					56	8/26/2017	8/30/2017		FH 56 0-2"
18					57	8/26/2017	8/26/2017		FH 57 0-2"
19					58				
20					59				
21					60				
22					61				
23					62				
24					63				
25					64				
26					65	8/29/2017	8/30/2017		FH 65 0-2"
27					66	8/26/2017	8/26/2017		FH 66 0-2"
28					67	8/25/2017	8/30/2017		FH 67 0-2"
29					68	8/25/2017	8/30/2017		FH 68 0-2"
30					69				
31					70				
32					71				
33					72	8/29/2017			
34					73	8/29/2017			
35					74	8/29/2017	8/29/2017		FH 74 0-2"
36					75	8/28/2017	8/29/2017		FH 75 0-2"
37					76				
38					77	8/28/2017	8/29/2017		FH 77 0-2"
39									
40									

Pedestals /Monuments Soil					Pedestals /Monuments Soil				
Feature Unit ID	Excavate	Sampled Collected Unit # X 0-2"	Backfill	Notes-	Feature Unit ID	Excavate	Sampled Collected Unit # X 0-2"	Backfill	Notes-
1	8/29/2017	9/4/2017		1-08 0-2"	23				
2	8/29/2017	9/4/2017		2-08 0-2"	24				
3	8/29/2017	9/4/2017		3-10 0-2"	25				
4	8/29/2017	9/4/2017		4-10 0-2"	26				
5	8/29/2017	9/4/2017		5-11 0-2"	27				
6					28				
7					29				
8					30				
9					31				
10					32				
11					33				
12					34				
13					35				
14					36				
15					37				
16					38				
17					39				
18					40				
19					41				
20					42				
21					43				
22									

Fire Hydrant ID # per updated DBSI file -Navy Fresh Water Lines, Valves & Hydrants. BSI/DR-0034
Pedestal sample identification is a designated ID number followed by a dash and double-digit number relative to the closest Fire Hydrant ID location. No full prior map of pedestals exists.

Table 5. DU 5 Buttress & Cover - Import Clean Coral Sand

DU 5 IMPORT CLEAN CORAL						
DATE	NORTH Wall Loads	SOUTH Wall Loads	EAST Wall Loads	WEST Wall Loads	Days total loads	Days cubic yardage
9/4/2017	52	0	0	0	52	780
9/5/2017	15	0	0	0	15	225
9/6/2017	36	0	0	0	36	540
9/7/2017					0	0
9/8/2017					0	0
9/9/2017					0	0
Load count per wall	213	0	0	0		
15cuyd estimate per wall	3195	0	0	0		
2017 Total R2 combined clean coral import LOADS				213		
Loads x 15cuyd estimate				3195		

Table 6. Excavation Plots - Import Clean Coral Sand

EXCAVATION PLOTS- IMPORT CLEAN CORAL BACKFILL							
DATE	DU-9 Loads	DU-8 Loads	DU-7 Loads	DU-5 Loads	DU-3 Loads	Days total loads	Days cubic yardage
9/4/2017	0	0	0	0	0	0	0
9/5/2017	5	0	4	0	0	9	135
9/6/2017	5	0	3	0	0	8	120
9/7/2017						0	0
9/8/2017						0	0
9/9/2017						0	0
Load count per column	19	0	7	0	0		
15cuyd estimate per column	285	0	105	0	0		
2017 Total combined clean import Backfill LOADS					26		
Loads x 15cuyd estimate					390		

Correction – 9/5/17 DU-5 did not have 4 loads of clean sand. DU-5 load count to date this season is zero. Edit table calculation error.

Daily Field Report

Date: Thursday, September 7, 2017
Prepared by: Scott Wakefield

Project: Removal of Lead-Based Paint from Structures and Lead-Contaminated Soil
Location: Midway Atoll National Wildlife Refuge
Client: US Fish and Wildlife Service

Weather: Sunny, wind 6 mph. Temperature ~84F

Personnel:

Name	Company	Site Hours
Scott Wakefield	NWDE Field Oversight	10
Jeff James	NWDE Supervisor	Partial
Mark Stoller	NWDE Supervisor	10
Joel Smith	NWDE Operator	10
Dalton Sullivan	NWDE Labor	Partial
Antonio Davis	NWDE Labor	10
Jevon Stone	NWDE Operator	10
Jose Ordaz	NWDE Operator	10
Matt Manning	NWDE Operator	0
Chris Fisher	NWDE Labor	10
Alan Phillips	NWDE Operator	0
Kevin Bach	NWDE Labor	10
Lucas Peel	NWDE Labor	10
Tyler Wilson	NWDE Labor	Partial
Eric Matteson	NWDE Operator	10

Visitors/Additional Site Personnel:

Name	Title
MaryAnn Amann	U.S. FWS
Kelly Goodale	U.S. FWS

Equipment:

Description	Model No.	Comments / Serial #
Pickup Truck	F350 Service Truck	NWDE
Flatbed Truck	Ford F450	NWDE
Container Truck	Peterbuilt	NWDE
Skid Steer	Bobcat S185	NWDE
Tracked Skid Steer	Bobcat T750	NWDE
Tracked Skid Steer	Bobcat	NWDE
Mini-Excavator	CAT 308	NWDE
Excavator	Volvo EC290BLC	NWDE
Excavator	Volvo EC290BLC	NWDE
Excavator	Volvo EC290	NWDE
Off road Dump Truck	Volvo A30D	NWDE
Off road Dump Truck	Volvo A30D	NWDE
Off road Dump Truck	Volvo A30D	NWDE
Excavator – High reach	Komatsu PC400HD	NWDE

Materials Delivered:

Description	QTY	Condition/Comments
Diesel	0 gallons	
Gasoline	0 gallons	

Description of Work:

0700 – Health and Safety meeting at NAF staging area. Review today's work tasks.

NWDE soil excavation planning for Bldg 3521 FWS Office, Figure P3 is going forward this morning. The sensitive location of sample point P3 and the excavation plot is adjacent to the existing water guzzler. This feature provides fresh water and shade to Laysan ducks. Along with this, the duck presence is significant. US FWS K.Goodale is present for advisement and action while working in the area near the waterfowl.

The work area is marked and cleared for Bonin petrels, shearwater and Laysan duck activities. Equipment access is from the south, along S3126 E on a relatively hard packed lot with minimal impact to taller grass areas. The excavation plot has two significant active utilities within the P3 plot. The mini excavator coupled with watchful ground crew workers are able to carefully dig the soil and expose the fiber optic and power utilities while removing the target soil.

0800 – At the Active Water Tower 5304, DBSI Facilities and TOC are proceeding with the ground work for isolating the water lines and taking the Water Tower off line. Through the morning tasks are managed to begin pre-demo separation of live utilities from the Tower, including but not limited to power and water.

The Cargo Pier beach sand is continuing to be loaded and moved to the R2 clean stockpile that is north of the R2's north wall. A biological monitor is stationed for observation of the refuge's animals that have potential to arrive during work activities.

Two Volvo haul trucks are moving clean coral sand today. While most trips are taken to the R2 stockpile, an occasional load is moved to backfill areas. This morning Bldg 3524 Steam and adjacent DU-7 areas are being finalized for grade of backfill sand. Hand work the narrow edges in the alcove and corners.

1025 – Moving to sample plot P7 of Bldg 3521 FWS Office southwest corner.

1045 – Clean coral sand is being hauled to the harbor area excavations that have returned an acceptable confirmation lab result of <75mg/kg. This includes Bldg 1124 HazWaste Storage (Figure P1) and Bldg 1126 Harbor Office (Figure P2.) The sand is direct dumped and then graded in using the tracked skidsteer.

1115 – The FWS Office soil excavation work has been removed and hauled to the R2 Unit for future treatment. Inspect and access for a second time Bldg 3514 TOC Security, (Figure P27.) Returning analytical results for the original excavation confirmation sampling indicate that the 3514 P100 0-2" exceeded 75 mg/kg. Re-excavate the east half portion of the prescribed location an additional 0.5'. This half of the building includes abandon cast sewer pipe and active pvc water line. Soil is hauled to the R2.

1200 – Lunch

1230 – Crews are resuming the soil excavation activities and Borrow Source clean coral sand hauling in their respective work areas.

1240 – TOC Matt Kelly advises that the active Water Tower 5305 water line has been initially isolated. The island water system is now operating independent of the head pressure from the Water Tower. Additional verification and testing will be performed prior to closing the triple valves and air gapping the piping at the tower base. All critical steps in preparation for demolition. Tentatively, dependent on additional verification of disconnecting the Water Tower, the demo fall day may be this weekend.

1300 – The soil excavation machines and workers have finished the re-ex of Bldg 3514. Mobilize to the former Navy removed Water Tower 5305, Figure P21. Recent lab analytical data for the 8/23/17 COC indicate that two of the eight sub plots confirmation samples collected 8/18/17 after the initial 1.0' excavation are >75 mg/kg. Sample plots 5305 P104 0-2" and 5305 P106 0-2" are prepared for re-excavation to an additional 0.5'. Soils will be moved to the R2 Cell 3 and direct placed for internment, excluding Maectite® application. This is consistent with re-ex volume soils placed into the R2 Cells due to available reagent.

1430 – Recent lab results for confirmation sampling of DU-8 Pipe, Figure P19 indicate that two of the eight sub plots sampled exceed 75 mg/kg. These plots are adjoining, located at the excavation's northeast end, nearest original sample points P10, P11, P12, P13, P14, P15. With this info, Pipe P106 0-2" and Pipe P107 0-2" sub plots will be re-excavated.

Limited access to the Pipe plots P106 and P107 will require backfill of the successful <75mg/kg sub plots. This will re-establish the access trail for the haul trucks along the Pipe run. Sand begins being hauled into Pipe P100, P101, P102, P103, P104 and P105, all of which have confirmation results less than 75mg/kg. Clean coral sands are positioned with the tracked skidsteer to envelope the Pipe run concrete support pilings. These concrete features will remain in place.

Note that an inbound NWDE barge # 2 is anticipated to arrive this weekend for offloading.

1730 – Ending the work day.
Ex-situ soil loads from DU-9 is 5 loads for future treatment in the R2.
Re-excavation soil loads from DU-9 is 3 loads, placed in the R2 sans treatment.
Borrow source clean coral sand hauled to the R2 stockpile is 31 loads, thirty-one.
Backfill clean coral sand into DU-9 today is 22 loads.
Backfill clean coral sand into DU-7 today is 1 loads.

Photographs:

Photo 01: Bldg 3521 FWS Office – View northeast. Excavation progress of P3 plot

Photo 02: Bldg 3521 FWS Office – View northwest. Excavation progress of P7 plot

Photo 03: Borrow Source – View north. Clean coral sand for backfill and R2 stockpile

Photo 04: R2 Cell 1 – View northeast. Progress of DU-9 to treat (front) Clean external stockpile (back)

Photo 05: R2 Unit– View west. Clean external stockpile north of the R2

Photo 06: Navy Water Tower 5305 – View southeast. Re-excavation of smaller sub plots

Photo 07: Pipe Run – View southwest. Progress of clean coral sand backfill in passing sub plots

Table 1. Maectite and Treated Soil Total Estimates

	Maectite Totals						Treated Soil Totals[1,2]		
	Applied Today (gal)					Total to Date	Excavated and Hauled to R-2 Unit **Today**		Excavated and Hauled to R-2 Unit **Total to Date**
Date	Soils (DU9)	Soils (DU8)	Soils (DU7)	Soils (DU5)	Soils (DU3)	(gal)	Load	^{3}yds[1]	^{3}yds[1]
09/04/17	0	0	0	0	0	1366	0	0	1873
09/05/17	0	0	0	0	0	1366	0	0	1873
09/06/17	0	0	0	0	0	1366	0	0	1873
09/07/17	0	0	0	0	0	1366	0	0	1873
09/08/17									
09/09/17									
Total to Date	1008 gallons	205 gallons	153 gallons	0 gallons	0 gallons		155.75 loads		

Notes:
1. Estimates are based on the number of gallons of Maectite® applied.
2. Soil treatment with Maectite® and hauling to R2 may not occur on the same day.
3. 8/23/17 – Table 2 loads were batch treated in the R2. Inserted this data into Table 1 for totalizing the volumes and gallons. Reset Table 2 "Batch loads" of 48.5 to zero until next ex-situ stockpile treatment.

2017 DU 9 – Figures P 1-16, 18, 20, 21, 23-27.
Bldg 1124, 1126, 3521, S361, 347, 3501, S3126, S3127, 521, 520, 502, 5342, 309, 340, 354, 9149, 232, 233, S269, S225A, 2127, 144, Boat House 1 & 2, 4205, 4206, 4207, 4213, 503, 5303, 5341, 5339, 5338, Bollards, Fire Hydrants, 5304, 5305, 4210, 3524, 3529, 5126, 5378, 3514, and other ancillary structures.
Foundations S464, 502, 4201, 5126, 5295, 5342.
2017 DU 8 – S-28, S-30 re-ex, Pipe figure P19
2017 DU 7 – Bldg 3502, 3503, 3504 shade cloth
2017 DU 5 – R2 Unit, Figure P17
2017 DU 3 – Housing figure P22, 419 MIS re-ex

Table 2. Soil loads hauled to the R2 for ex situ Maectite® treatment

	Load Totals				
	Hauled to R2 for treatment in R2 cell (# of truck loads)				
Date	Soils (DU9)	Soils (DU8)	Soils (DU7)	Soils (DU5)	Soils (DU3)
09/04/17	6	0	0	0	0
09/05/17	9	0	0	0	0
09/06/17	3	0	0	0	0
09/07/17	5	0	0	0	0
09/08/17					
09/09/17					
Batch loads to treat in R2	62.6 loads	0 loads	0 loads	0 loads	0 loads
Total to Date	97.1 loads	34 loads	18.5 loads	0 loads	0 loads

8/14/17 - Batch treatment of all stockpiled "ex situ" loads to date in R2 Cell 1. Entered this data into Table 1 on 8/14/17 for volume and gallon tracking.
8/15/17 - Add "Batch Loads to treat in R2" subtotal that tracks the truck loads placed for treatment. Reset this to zero once treatment event is complete.
8/23/17 – Batch #2 treatment event of all stockpiled "ex situ" loads to date in R2 Cells. Entered this data into Table 1 on 8/23/17 for volume and gallon tracking.

Table 2.1 Soil loads hauled to the R2, non-treated internment

Date	Load Totals				
	Hauled to R2, non-treated soil (# of truck loads)				
	Soils (DU9)	Soils (DU8)	Soils (DU7)	Soils (DU5)	Soils (DU3)
09/04/17	0	0	0	0	0
09/05/17	0	0	0	0	0
09/06/17	0	0	0	0	0
09/07/17	3	0	0	0	0
09/08/17					
09/09/17					
Total to Date	9 loads	0 loads	0 loads	0 loads	9 loads

Table 3. Weekly Load Estimates

Date	Treated Demo Debris Loads to R2	Clean Concrete Loads to Crusher	Metal Debris Loads To Boneyard	Clean Wood Loads	Steel Debris Loaded onto Barge	~
09/04/17	0	0	0	0	0	
09/05/17	0	0	0	0	0	
09/06/17	0	0	0	0	0	
09/07/17	0	0	0	0	0	
09/08/17						
09/09/17						
Season Total	3 loads	0 loads	0 loads	4 loads	183 loads	

Table 4. Fire Hydrants, Pedestals and Monuments

Fire Hydrant Soil					Fire Hydrant Soil				
Fire Hydrant ID	Excavate	Sampled Collected FH # X 0-2"	Backfill	Notes-	Fire Hydrant ID	Excavate	Sampled Collected FH # X 0-2"	Backfill	Notes-
1					41				
2					42				
3					43				
4					44				
5					45				
6					46				
7					47				
8					48				
9					49				
10					50				
11	8/31/2017	9/4/2017		FH 110-2"	51				
12					52				
13					53	8/23/2017	8/23/2017		FH 53 0-2"
14					54	8/23/2017	8/23/2017		FH 54 0-2"
15					54A	8/23/2017	8/23/2017		FH 54A 0-2"
16					55	8/26/2017	8/26/2017		FH 55 0-2"
17					56	8/26/2017	8/30/2017		FH 56 0-2"
18					57	8/26/2017	8/26/2017		FH 57 0-2"
19					58				
20					59				
21					60				
22					61				
23					62				
24					63				
25					64				
26					65	8/29/2017	8/30/2017		FH 65 0-2"
27					66	8/26/2017	8/26/2017		FH 66 0-2"
28					67	8/25/2017	8/30/2017		FH 67 0-2"
29					68	8/25/2017	8/30/2017		FH 68 0-2"
30					69				
31					70				
32					71				
33					72	8/29/2017			
34					73	8/29/2017			
35					74	8/29/2017	8/29/2017		FH 74 0-2"
36					75	8/28/2017	8/29/2017		FH 75 0-2"
37					76				
38					77	8/28/2017	8/29/2017		FH 77 0-2"
39									
40									

Pedestals /Monuments Soil					Pedestals /Monuments Soil				
Feature Unit ID	Excavate	Sampled Collected Unit # X 0-2"	Backfill	Notes-	Feature Unit ID	Excavate	Sampled Collected Unit # X 0-2"	Backfill	Notes-
1	8/29/2017	9/4/2017		1-08 0-2"	23				
2	8/29/2017	9/4/2017		2-08 0-2"	24				
3	8/29/2017	9/4/2017		3-10 0-2"	25				
4	8/29/2017	9/4/2017		4-10 0-2"	26				
5	8/29/2017	9/4/2017		5-11 0-2"	27				
6					28				
7					29				
8					30				
9					31				
10					32				
11					33				
12					34				
13					35				
14					36				
15					37				
16					38				
17					39				
18					40				
19					41				
20					42				
21					43				
22									

Fire Hydrant ID # per updated DBSI file -Navy Fresh Water Lines, Valves & Hydrants. BSI/DR-0034
Pedestal sample identification is a designated ID number followed by a dash and double-digit number relative to the closest Fire Hydrant ID location. No full prior map of pedestals exists.

Table 5. DU 5 Buttress & Cover - Import Clean Coral Sand

DU 5 IMPORT CLEAN CORAL						
DATE	NORTH Wall Loads	SOUTH Wall Loads	EAST Wall Loads	WEST Wall Loads	Days total loads	Days cubic yardage
9/4/2017	52	0	0	0	52	780
9/5/2017	15	0	0	0	15	225
9/6/2017	36	0	0	0	36	540
9/7/2017	31	0	0	0	31	465
9/8/2017					0	0
9/9/2017					0	0
Load count per wall	244	0	0	0		
15cuyd estimate per wall	3660	0	0	0		
2017 Total R2 combined clean coral import LOADS				244		
Loads x 15cuyd estimate				3660		

Table 6. Excavation Plots - Import Clean Coral Sand

EXCAVATION PLOTS- IMPORT CLEAN CORAL BACKFILL							
DATE	DU-9 Loads	DU-8 Loads	DU-7 Loads	DU-5 Loads	DU-3 Loads	Days total loads	Days cubic yardage
9/4/2017	0	0	0	0	0	0	0
9/5/2017	5	0	4	0	0	9	135
9/6/2017	5	0	3	0	0	8	120
9/7/2017	22	0	1	0	0	23	345
9/8/2017						0	0
9/9/2017						0	0
Load count per column	41	0	8	0	0		
15cuyd estimate per column	615	0	120	0	0		
2017 Total combined clean import Backfill LOADS					49		
Loads x 15cuyd estimate					735		

Daily Field Report

Date: Friday, September 8, 2017
Prepared by: Scott Wakefield

Project: Removal of Lead-Based Paint from Structures and Lead-Contaminated Soil
Location: Midway Atoll National Wildlife Refuge
Client: US Fish and Wildlife Service

Weather: Sunny, wind 5 mph. Temperature ~84F

Personnel:

Name	Company	Site Hours
Scott Wakefield	NWDE Field Oversight	10
Jeff James	NWDE Supervisor	Partial
Mark Stoller	NWDE Supervisor	10
Joel Smith	NWDE Operator	10
Dalton Sullivan	NWDE Labor	0
Antonio Davis	NWDE Labor	10
Jevon Stone	NWDE Operator	10
Jose Ordaz	NWDE Operator	10
Matt Manning	NWDE Operator	0
Chris Fisher	NWDE Labor	10
Alan Phillips	NWDE Operator	0
Kevin Bach	NWDE Labor	10
Lucas Peel	NWDE Labor	10
Tyler Wilson	NWDE Labor	10
Eric Matteson	NWDE Operator	10

Visitors/Additional Site Personnel:

Name	Title
MaryAnn Amann	U.S. FWS
Bob Peyton	U.S. FWS
DBSI Public Works	DBSI

Equipment:

Description	Model No.	Comments / Serial #
Pickup Truck	F350 Service Truck	NWDE
Flatbed Truck	Ford F450	NWDE
Container Truck	Peterbuilt	NWDE
Skid Steer	Bobcat S185	NWDE
Tracked Skid Steer	Bobcat T750	NWDE
Tracked Skid Steer	Bobcat	NWDE
Mini-Excavator	CAT 308	NWDE
Excavator	Volvo EC290BLC	NWDE
Excavator	Volvo EC290BLC	NWDE
Excavator	Volvo EC290	NWDE
Off road Dump Truck	Volvo A30D	NWDE
Off road Dump Truck	Volvo A30D	NWDE
Off road Dump Truck	Volvo A30D	NWDE
Excavator – High reach	Komatsu PC400HD	NWDE

Materials Delivered:

Description	QTY	Condition/Comments
Diesel	85 gallons	
Gasoline	0 gallons	

Description of Work:

0700 – Health and Safety meeting at NAF staging area. Review today's work tasks.

NWDE continues soil re-excavation at the former Navy removed Water Tower 5305, Figure P21. Re-ex of P104 and P106 are following the recent lab analysis noted yesterday. Nearing completion, the two smaller sub plots are direct loaded and hauled to the R2 Cell 3.

Clean coral sand being loaded at the Cargo Pier beach will be distributed today across multiple points. This will include the R2 stockpiling effort along with DU-8 and DU-9 backfill. Exporting progress across the beach between the Fuel Pier and the Cargo Pier distance has made it beyond 50%.

Backfill work today includes Bldg 521 Communication Center, Bldg 520 Fire Dept and partial DU-8 Pipe Run. The biological monitor is present for beach oversight of the work area, birds and sea life.

0930 – DBSI Public Works facility is in action to close the three mainline valves and bypass to the Water Tower 5304. These valves are directly adjacent to the base of the tower in the vault box. Once isolated with the existing manual mechanical valves closed, the base of the stand pipe drain port is opened to remove water.

In preparation for performing the demolition plan, utilities have been isolated or disconnected. The manlift and cutting equipment is being set up to access the work area at the Water Tower 5304. Next the southeast tower leg will have the failing ladder and cage removed for access to the tower's pipe leg. To follow will be a planned weakening of select support members, controlled triggering of the buckling legs and ultimately toppling the structure to the ground.

0940 – Soil re-ex at the former Navy Water Tower 5305 is complete. Moving equipment to the re-excavation of former Bldg 503 Barracks Substation, Figure P16. Clean backfill is removed and staged. The additional excavation of 0.5' native soil is direct loaded into the A30 haul truck for placement into the R2.

1030 – Bldg 503 re-ex is completed along with the nearby white pedestal. Mobilize the crew and equipment to former Bldg 5378 Metal Shed, Figure P26. This is south of the southern R2 wall nearest the active FAA Bldg 9145 NavAids. Utilities are marked and special attention is given to the marked signal that intersects the soil excavation area. The utility is hand cleared and verified to be in excess of 2' deep prior to the 1' soil removal with the excavator.

1200 – Lunch

1230 – Crews are resuming the soil excavation activities and Borrow Source clean coral sand hauling in their respective work areas.

1300 – Former Bldg 5378 soil excavation is complete. Move the machines and crew to the Fuel Farm area. Begin with a small re-ex based on recent lab results for Bldg S269 Mogas Tanks, (D1 tank containment) Figure P12. Re-excavate subplot P101 since lab results for the 2017 excavation exceeded 75 mg/kg.

1330 – At the standing Water Tower 5304, steel preparations continue being made by removal of the lower ladder section and conduits at the southeast support leg.

1400 – Bldg S269 Mogas area soil re-ex removal is done. Moving to the DU-8 Pipe Run re-excavation area, Figure 19. At the Pipe Run, sub plots P100 through P105 lab data results have passed, being less

than 75 mg/kg. These six sub plots have been backfilled to allow truck access to the re-ex areas P106 and P107. Using the mini Cat 308 and one haul truck soil is cut an additional 0.5' in the existing open work plot. Soil is hauled to the R2 Cell 3 to be placed without treatment for the re-ex scope.

1600 – The day is finishing out with continuation of each site's activities, including DU-8 excavation, DU-9 backfill, R2 clean stockpiling and the Water Tower preparations for demo.

1730 – Ending the work day.
Ex-situ soil loads from DU-9 is 2 loads for future treatment in the R2.
Re-excavation soil loads from DU-9 is 7 loads, placed in the R2 sans treatment.
Borrow source clean coral sand hauled to the R2 stockpile is 21 loads, twenty-one.
Backfill clean coral sand into DU-9 today is 10 loads.
Backfill clean coral sand into DU-8 today is 5 loads.

Photographs:

Photo 01: DU-8 Pipe Run – View northeast. Clean backfill of P100 through P105

Photo 02: Bldg S269 Mogas – View south. Re-ex of the perimeter area P101

Photo 03: Former Bldg 5378 Metal Shed – View south. Soil excavation progress

Photo 04: Water Tower 5304 – View southwest. DBSI closing the three water main valves to stand pipe

Photo 05: Water Tower 5304– View west. Upper section and tank of the structure

Photo 06: Water Tower 5304 – View west. Progress of demo preparation

Photo 07: Water Tower 5304 – View south. Progress of demo preparation

Table 1. Maectite and Treated Soil Total Estimates

	Maectite Totals						Treated Soil Totals[1,2]		
	Applied Today (gal)					Total to Date	Excavated and Hauled to R-2 Unit **Today**		Excavated and Hauled to R-2 Unit **Total to Date**
Date	Soils (DU9)	Soils (DU8)	Soils (DU7)	Soils (DU5)	Soils (DU3)	(gal)	Load	^{3}yds[1]	^{3}yds[1]
09/04/17	0	0	0	0	0	1366	0	0	1873
09/05/17	0	0	0	0	0	1366	0	0	1873
09/06/17	0	0	0	0	0	1366	0	0	1873
09/07/17	0	0	0	0	0	1366	0	0	1873
09/08/17	0	0	0	0	0	1366	0	0	1873
09/09/17									
Total to Date	1008 gallons	205 gallons	153 gallons	0 gallons	0 gallons		155.75 loads		

Notes:
1. Estimates are based on the number of gallons of Maectite® applied.
2. Soil treatment with Maectite® and hauling to R2 may not occur on the same day.
3. 8/23/17 – Table 2 loads were batch treated in the R2. Inserted this data into Table 1 for totalizing the volumes and gallons. Reset Table 2 "Batch loads" of 48.5 to zero until next ex-situ stockpile treatment.

2017 DU 9 – Figures P 1-16, 18, 20, 21, 23-27.
Bldg 1124, 1126, 3521, S361, 347, 3501, S3126, S3127, 521, 520, 502, 5342, 309, 340, 354, 9149, 232, 233, S269, S225A, 2127, 144, Boat House 1 & 2, 4205, 4206, 4207, 4213, 503, 5303, 5341, 5339, 5338, Bollards, Fire Hydrants, 5304, 5305, 4210, 3524, 3529, 5126, 5378, 3514, and other ancillary structures.
Foundations S464, 502, 4201, 5126, 5295, 5342.
2017 DU 8 – S-28, S-30 re-ex, Pipe figure P19
2017 DU 7 – Bldg 3502, 3503, 3504 shade cloth
2017 DU 5 – R2 Unit, Figure P17
2017 DU 3 – Housing figure P22, 419 MIS re-ex

Table 2. Soil loads hauled to the R2 for ex situ Maectite® treatment

	Load Totals				
	Hauled to R2 for treatment in R2 cell (# of truck loads)				
Date	Soils (DU9)	Soils (DU8)	Soils (DU7)	Soils (DU5)	Soils (DU3)
09/04/17	6	0	0	0	0
09/05/17	9	0	0	0	0
09/06/17	3	0	0	0	0
09/07/17	5	0	0	0	0
09/08/17	2	0	0	0	0
09/09/17					
Batch loads to treat in R2	64.6 loads	0 loads	0 loads	0 loads	0 loads
Total to Date	99.1 loads	34 loads	18.5 loads	0 loads	0 loads

8/14/17 - Batch treatment of all stockpiled "ex situ" loads to date in R2 Cell 1. Entered this data into Table 1 on 8/14/17 for volume and gallon tracking.
8/15/17 - Add "Batch Loads to treat in R2" subtotal that tracks the truck loads placed for treatment. Reset this to zero once treatment event is complete.
8/23/17 – Batch #2 treatment event of all stockpiled "ex situ" loads to date in R2 Cells. Entered this data into Table 1 on 8/23/17 for volume and gallon tracking.

Table 2.1 Soil loads hauled to the R2, non-treated internment

Date	Load Totals				
	Hauled to R2, non-treated soil (# of truck loads)				
	Soils (DU9)	Soils (DU8)	Soils (DU7)	Soils (DU5)	Soils (DU3)
09/04/17	0	0	0	0	0
09/05/17	0	0	0	0	0
09/06/17	0	0	0	0	0
09/07/17	3	0	0	0	0
09/08/17	4	3	0	0	0
09/09/17					
Total to Date	13 loads	3 loads	0 loads	0 loads	9 loads

Table 3. Weekly Load Estimates

Date	Treated Demo Debris Loads to R2	Clean Concrete Loads to Crusher	Metal Debris Loads To Boneyard	Clean Wood Loads	Steel Debris Loaded onto Barge	~
09/04/17	0	0	0	0	0	
09/05/17	0	0	0	0	0	
09/06/17	0	0	0	0	0	
09/07/17	0	0	0	0	0	
09/08/17	0	0	0	0	0	
09/09/17						
Season Total	3 loads	0 loads	0 loads	4 loads	183 loads	

Table 4. Fire Hydrants, Pedestals and Monuments

Fire Hydrant Soil					Fire Hydrant Soil				
Fire Hydrant ID	Excavate	Sampled Collected FH # X 0-2"	Backfill	Notes-	Fire Hydrant ID	Excavate	Sampled Collected FH # X 0-2"	Backfill	Notes-
1					41				
2					42				
3					43				
4					44				
5					45				
6					46				
7					47				
8					48				
9					49				
10					50				
11	8/31/2017	9/4/2017		FH 110-2"	51				
12					52				
13					53	8/23/2017	8/23/2017		FH 53 0-2"
14					54	8/23/2017	8/23/2017		FH 54 0-2"
15					54A	8/23/2017	8/23/2017		FH 54A 0-2"
16					55	8/26/2017	8/26/2017		FH 55 0-2"
17					56	8/26/2017	8/30/2017		FH 56 0-2"
18					57	8/26/2017	8/26/2017		FH 57 0-2"
19					58				
20					59				
21					60				
22					61				
23					62				
24					63				
25					64				
26					65	8/29/2017	8/30/2017		FH 65 0-2"
27					66	8/26/2017	8/26/2017		FH 66 0-2"
28					67	8/25/2017	8/30/2017		FH 67 0-2"
29					68	8/25/2017	8/30/2017		FH 68 0-2"
30					69				
31					70				
32					71				
33					72	8/29/2017			
34					73	8/29/2017			
35					74	8/29/2017	8/29/2017		FH 74 0-2"
36					75	8/28/2017	8/29/2017		FH 75 0-2"
37					76				
38					77	8/28/2017	8/29/2017		FH 77 0-2"
39									
40									

Pedestals /Monuments Soil					Pedestals /Monuments Soil				
Feature Unit ID	Excavate	Sampled Collected Unit # X 0-2"	Backfill	Notes-	Feature Unit ID	Excavate	Sampled Collected Unit # X 0-2"	Backfill	Notes-
1	8/29/2017	9/4/2017		1-08 0-2"	23				
2	8/29/2017	9/4/2017		2-08 0-2"	24				
3	8/29/2017	9/4/2017		3-10 0-2"	25				
4	8/29/2017	9/4/2017		4-10 0-2"	26				
5	8/29/2017	9/4/2017		5-11 0-2"	27				
6					28				
7					29				
8					30				
9					31				
10					32				
11					33				
12					34				
13					35				
14					36				
15					37				
16					38				
17					39				
18					40				
19					41				
20					42				
21					43				
22									

Fire Hydrant ID # per updated DBSI file -Navy Fresh Water Lines, Valves & Hydrants. BSI/DR-0034
Pedestal sample identification is a designated ID number followed by a dash and double-digit number relative to the closest Fire Hydrant ID location. No full prior map of pedestals exists.

Table 5. DU 5 Buttress & Cover - Import Clean Coral Sand

DU 5 IMPORT CLEAN CORAL						
DATE	NORTH Wall Loads	SOUTH Wall Loads	EAST Wall Loads	WEST Wall Loads	Days total loads	Days cubic yardage
9/4/2017	52	0	0	0	52	780
9/5/2017	15	0	0	0	15	225
9/6/2017	36	0	0	0	36	540
9/7/2017	31	0	0	0	31	465
9/8/2017	21	0	0	0	21	315
9/9/2017					0	0
Load count per wall	265	0	0	0		
15cuyd estimate per wall	3975	0	0	0		
2017 Total R2 combined clean coral import LOADS				265		
Loads x 15cuyd estimate				3975		

Table 6. Excavation Plots - Import Clean Coral Sand

EXCAVATION PLOTS- IMPORT CLEAN CORAL BACKFILL							
DATE	DU-9 Loads	DU-8 Loads	DU-7 Loads	DU-5 Loads	DU-3 Loads	Days total loads	Days cubic yardage
9/4/2017	0	0	0	0	0	0	0
9/5/2017	5	0	4	0	0	9	135
9/6/2017	5	0	3	0	0	8	120
9/7/2017	5	17	1	0	0	23	345
9/8/2017	10	5	0	0	0	15	225
9/9/2017						0	0
Load count per column	34	22	8	0	0		
15cuyd estimate per column	510	330	120	0	0		
2017 Total combined clean import Backfill LOADS					64		
Loads x 15cuyd estimate					960		

9/7/17 – Edit- Break out loads between DU-9 structures and DU-8 Pipe Run backfill

Daily Field Report

Date: Saturday, September 9, 2017
Prepared by: Scott Wakefield

Project: Removal of Lead-Based Paint from Structures and Lead-Contaminated Soil
Location: Midway Atoll National Wildlife Refuge
Client: US Fish and Wildlife Service

Weather: Sunny, wind 4 mph. Temperature ~82F

Personnel:

Name	Company	Site Hours
Scott Wakefield	NWDE Field Oversight	10
Jeff James	NWDE Supervisor	Partial
Mark Stoller	NWDE Supervisor	10
Joel Smith	NWDE Operator	10
Dalton Sullivan	NWDE Labor	0
Antonio Davis	NWDE Labor	10
Jevon Stone	NWDE Operator	10
Jose Ordaz	NWDE Operator	10
Matt Manning	NWDE Operator	0
Chris Fisher	NWDE Labor	10
Alan Phillips	NWDE Operator	0
Kevin Bach	NWDE Labor	10
Lucas Peel	NWDE Labor	10
Tyler Wilson	NWDE Labor	10
Eric Matteson	NWDE Operator	10

Visitors/Additional Site Personnel:

Name	Title
MaryAnn Amann	U.S. FWS

Equipment:

Description	Model No.	Comments / Serial #
Pickup Truck	F350 Service Truck	NWDE
Flatbed Truck	Ford F450	NWDE
Container Truck	Peterbuilt	NWDE
Skid Steer	Bobcat S185	NWDE
Tracked Skid Steer	Bobcat T750	NWDE
Tracked Skid Steer	Bobcat	NWDE
Mini-Excavator	CAT 308	NWDE
Excavator	Volvo EC290BLC	NWDE
Excavator	Volvo EC290BLC	NWDE
Excavator	Volvo EC290	NWDE
Off road Dump Truck	Volvo A30D	NWDE
Off road Dump Truck	Volvo A30D	NWDE
Off road Dump Truck	Volvo A30D	NWDE
Excavator – High reach	Komatsu PC400HD	NWDE

Materials Delivered:

Description	QTY	Condition/Comments
Diesel	111 gallons	
Gasoline	0 gallons	

Description of Work:

0700 – Health and Safety meeting at NAF staging area. Review today's work tasks.

NWDE continues soil re-excavation at DU-8, Pipe Run, Figure P19. Re-ex of P106 and P107 are finishing up, following the recent lab analysis noted yesterday. Nearing completion, the two smaller sub plots are direct loaded and hauled to the R2 Cell 3 for non-treatment stockpile.

Clean coral sand being loaded at the Cargo Pier beach remain on track to be loaded and hauled to target locations. The primary volume of sand is moved to the R2 Unit northern stockpile outside of the Cells. Thousands of yards of sand are collecting to be used for the final R2 cap design that will be graded, then capped with crushed 3" concrete later this season.

NWDE demo crew at the recently disconnected Water Tower 5304 is preparing to perform hot work on the pipe leg structure and center water column. The temporary shade cloth ground covering below the tower is pulled back and the JLG manlift positioned to reach the higher work areas. Oxy/Acetylene supply, long lead hoses and long handle torch are being positioned for the work day.

0900 – The Pipe Run re-ex in DU-8 is near complete for the second cut of an additional 0.5' after the original 1.0' excavation. The mini excavator and one A30 haul truck will now be collecting soil from fire hydrant locations and pedestals while tracking southwest from the Fuel Farm. The abated and white LeadStop™ encapsulated pedestals from prior seasons will continue being excavated to a minimum 1' excavation depth, approximately 2' from the vertical face of the concrete feature. Hydrants are targeting a 2.0' radius x 2.0' depth soil removal. Materials removed are direct loaded and moved to the R2 Cell 2 for future batch treatment using Maectite®.

At the recently decommissioned Water Tower 5304, NWDE has begun gas cutting work into the steel tower structure. The center water column is being relieved in a predetermined pattern that will retain vertical strength during pre-fall tasks, yet the steel will fatigue controllably at the moment of the tower toppling southward. As hot work from the manlift goes upward, the ground crew tends to torch hoses and a light fire hose application of water to manage hot slag below the work location.

1045 – Hydrant excavation and pedestal work is moving along at each distant location.

1120 – The Water Tower cutting on the center column is ongoing to torch out each relief window on the east and west sides of the vertical pipe. The rolled steel pipe wall thickness is approximately 3/16" thick mild steel. As relieves are cut, the drop material is sent down the inside of the steel column for safely lowering the steel in a controlled manner.

1200 – Lunch

1230 – Hydrant soil excavation near ID #51 is wrapping up and heading south on Nimitz Ave towards the Midway Mall. Soil removed is loaded into the haul truck in small volumes per hydrant and pedestal.

US FWS has been on call for handling the Water Tower area birds identified in ground burrows. These are primarily the shearwater birds at the north side of the standing tower managed during tree removal work. NWDE will advise when the timeline approaches the appropriate moment to safely remove the birds. After work activities are completed, the birds will again return to their specific burrows by US FWS.

1500 – Torch cutting steel components of the standing Water Tower 5304 push forward in preparing the support legs. While partial cuts and reliefs are made, key locations are cut for lashing a steel shackle and the eye of the steel cable to. The two cables, one for each southern leg, are oriented north. They will be connected to future NWDE machinery to provide a controlled triggering of the tower demolition.

1600 – Today clean coral sand has been stockpiled at the R2 north staging area. Additionally, specific dig locations that have received recent Test America lab data less than 75 mg/kg are staged with clean sand. Within these results are Bldg 4213 Ave Maria, topping off Bldg 520 Fire Dept Storage and adding volume at Bldg 521 Comm Center. The tracked skid steer provides rough in grading of sands.

1700 – As the afternoon unfolds, the Water Tower 5304 remains intact with select cut preparations being completed. The timeline will proceed tomorrow morning to resume the lower elevation oxy/acetylene torch reliefs, rigging finalization and pre-fall protection preparedness. Currently the tower structure remains stable and will remain so through the night.

1730 – Ending the work day.
Ex-situ soil loads from DU-9 is 3 loads for future treatment in the R2.
Re-excavation soil loads from DU-8 is 1 load, placed in the R2 sans treatment.
Borrow source clean coral sand hauled to the R2 stockpile is 14 loads, fourteen.
Backfill clean coral sand into DU-9 today is 3 loads.
Backfill clean coral sand into DU-7 today is 1 load.
Hydrants and pedestal locations excavated today is 10 items.

1830 – Tug boat American Contender arrives to the Midway Harbor, bringing the scheduled NWDE barge #2 of 3. Unloading work will begin in the morning to make way for loading outbound containers and steel.

Photographs:

Photo 01: Fire Hydrant ID #33 – View southeast. Excavation near hydrant and pedestal

Photo 02: Pedestal – View north. Progress of excavation work

Photo 03: Water Tower 5304 – View north. Tower demo progress overview

Photo 04: Water Tower 5304 – View north. Weathered LBP surfaces and degraded steel prior to demo

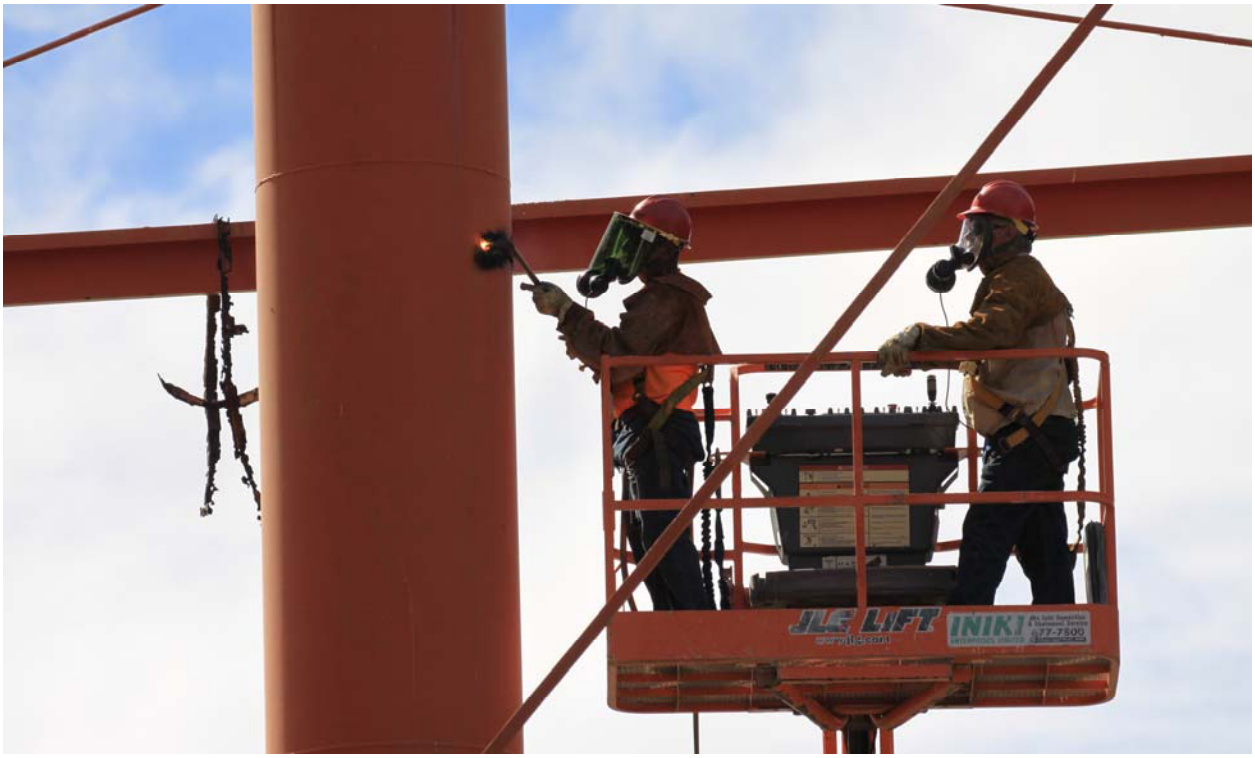


Photo 05: Water Tower 5304– View south. Relief cutting progress of center water column stem

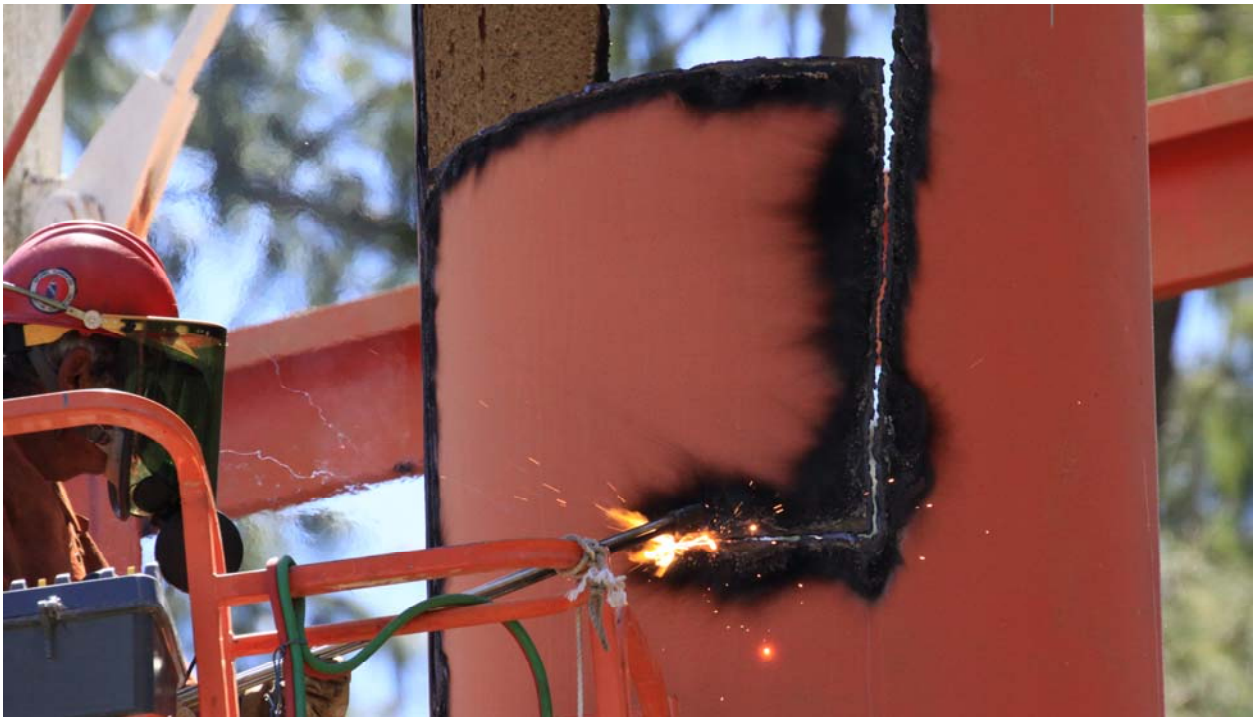


Photo 06: Water Tower 5304 – View west. Progress of demo preparation

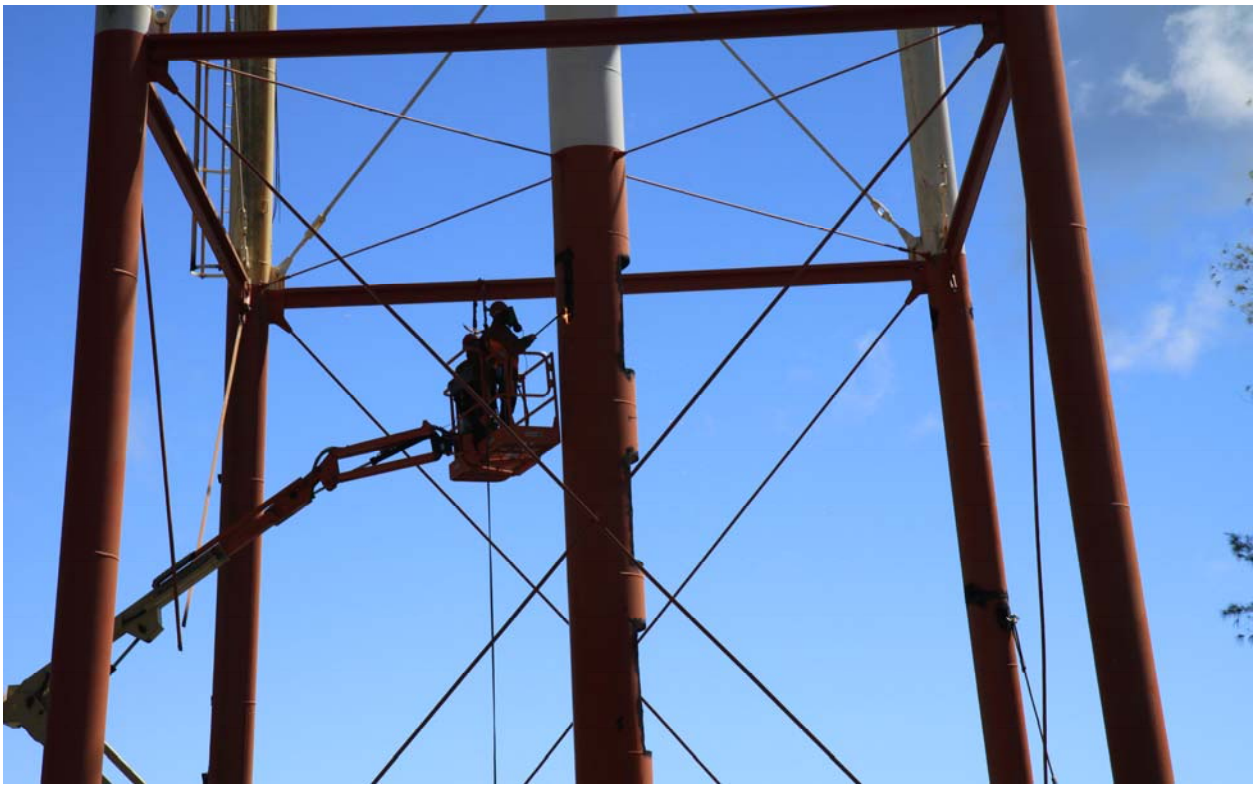


Photo 07: Water Tower 5304 – View south. Progress of demo preparation

Photo 08: Water Tower 5304 – View west. Progress of demo preparation

Photo 08: Borrow Source – View northwest. Progress of hauling clean coral sand out

Table 1. Maectite and Treated Soil Total Estimates

	Maectite Totals						Treated Soil Totals[1,2]		
	Applied Today (gal)					Total to Date	Excavated and Hauled to R-2 Unit **Today**		Excavated and Hauled to R-2 Unit **Total to Date**
Date	Soils (DU9)	Soils (DU8)	Soils (DU7)	Soils (DU5)	Soils (DU3)	(gal)	Load	^{3}yds[1]	^{3}yds[1]
09/04/17	0	0	0	0	0	1366	0	0	1873
09/05/17	0	0	0	0	0	1366	0	0	1873
09/06/17	0	0	0	0	0	1366	0	0	1873
09/07/17	0	0	0	0	0	1366	0	0	1873
09/08/17	0	0	0	0	0	1366	0	0	1873
09/09/17	0	0	0	0	0	1366	0	0	1873
Total to Date	1008 gallons	205 gallons	153 gallons	0 gallons	0 gallons		155.75 loads		

Notes:
1. Estimates are based on the number of gallons of Maectite® applied.
2. Soil treatment with Maectite® and hauling to R2 may not occur on the same day.
3. 8/23/17 – Table 2 loads were batch treated in the R2. Inserted this data into Table 1 for totalizing the volumes and gallons. Reset Table 2 "Batch loads" of 48.5 to zero until next ex-situ stockpile treatment.

2017 DU 9 – Figures P 1-16, 18, 20, 21, 23-27.
Bldg 1124, 1126, 3521, S361, 347, 3501, S3126, S3127, 521, 520, 502, 5342, 309, 340, 354, 9149, 232, 233, S269, S225A, 2127, 144, Boat House 1 & 2, 4205, 4206, 4207, 4213, 503, 5303, 5341, 5339, 5338, Bollards, Fire Hydrants, 5304, 5305, 4210, 3524, 3529, 5126, 5378, 3514, and other ancillary structures.
Foundations S464, 502, 4201, 5126, 5295, 5342.
2017 DU 8 – S-28, S-30 re-ex, Pipe figure P19
2017 DU 7 – Bldg 3502, 3503, 3504 shade cloth
2017 DU 5 – R2 Unit, Figure P17
2017 DU 3 – Housing figure P22, 419 MIS re-ex

Table 2. Soil loads hauled to the R2 for ex situ Maectite® treatment

	Load Totals				
	Hauled to R2 for treatment in R2 cell (# of truck loads)				
Date	Soils (DU9)	Soils (DU8)	Soils (DU7)	Soils (DU5)	Soils (DU3)
09/04/17	6	0	0	0	0
09/05/17	9	0	0	0	0
09/06/17	3	0	0	0	0
09/07/17	5	0	0	0	0
09/08/17	2	0	0	0	0
09/09/17	3	0	0	0	0
Batch loads to treat in R2	67.6 loads	0 loads	0 loads	0 loads	0 loads
Total to Date	102.1 loads	34 loads	18.5 loads	0 loads	0 loads

8/14/17 - Batch treatment of all stockpiled "ex situ" loads to date in R2 Cell 1. Entered this data into Table 1 on 8/14/17 for volume and gallon tracking.
8/15/17 - Add "Batch Loads to treat in R2" subtotal that tracks the truck loads placed for treatment. Reset this to zero once treatment event is complete.
8/23/17 – Batch #2 treatment event of all stockpiled "ex situ" loads to date in R2 Cells. Entered this data into Table 1 on 8/23/17 for volume and gallon tracking.

Table 2.1 Soil loads hauled to the R2, non-treated internment

Date	Load Totals				
	Hauled to R2, non-treated soil (# of truck loads)				
	Soils (DU9)	Soils (DU8)	Soils (DU7)	Soils (DU5)	Soils (DU3)
09/04/17	0	0	0	0	0
09/05/17	0	0	0	0	0
09/06/17	0	0	0	0	0
09/07/17	3	0	0	0	0
09/08/17	4	3	0	0	0
09/09/17	0	1	0	0	0
Total to Date	13 loads	4 loads	0 loads	0 loads	9 loads

Table 3. Weekly Load Estimates

Date	Treated Demo Debris Loads to R2	Clean Concrete Loads to Crusher	Metal Debris Loads To Boneyard	Clean Wood Loads	Steel Debris Loaded onto Barge	~
09/04/17	0	0	0	0	0	
09/05/17	0	0	0	0	0	
09/06/17	0	0	0	0	0	
09/07/17	0	0	0	0	0	
09/08/17	0	0	0	0	0	
09/09/17	0	0	0	0	0	
Season Total	3 loads	0 loads	0 loads	4 loads	183 loads	

Table 4. Fire Hydrants, Pedestals and Monuments

Fire Hydrant Soil					Fire Hydrant Soil				
Fire Hydrant ID	Excavate	Sampled Collected FH # X 0-2"	Backfill	Notes-	Fire Hydrant ID	Excavate	Sampled Collected FH # X 0-2"	Backfill	Notes-
1					41				
2					42				
3					43				
4					44				
5					45				
6					46				
7					47				
8					48				
9					49				
10					50				
11	8/31/2017	9/4/2017		FH 11 0-2"	51				
12					52				
13					53	8/23/2017	8/23/2017		FH 53 0-2"
14					54	8/23/2017	8/23/2017		FH 54 0-2"
15					54A	8/23/2017	8/23/2017		FH 54A 0-2"
16					55	8/26/2017	8/26/2017		FH 55 0-2"
17					56	8/26/2017	8/30/2017		FH 56 0-2"
18					57	8/26/2017	8/26/2017		FH 57 0-2"
19					58				
20					59				
21					60				
22					61				
23					62				
24					63				
25					64				
26					65	8/29/2017	8/30/2017		FH 65 0-2"
27					66	8/26/2017	8/26/2017		FH 66 0-2"
28					67	8/25/2017	8/30/2017		FH 67 0-2"
29					68	8/25/2017	8/30/2017		FH 68 0-2"
30					69				
31					70				
32					71				
33					72	8/29/2017			
34					73	8/29/2017			
35					74	8/29/2017	8/29/2017		FH 74 0-2"
36					75	8/28/2017	8/29/2017		FH 75 0-2"
37					76				
38					77	8/28/2017	8/29/2017		FH 77 0-2"
39									
40									

Pedestals /Monuments Soil					Pedestals /Monuments Soil				
Feature Unit ID	Excavate	Sampled Collected Unit # X 0-2"	Backfill	Notes-	Feature Unit ID	Excavate	Sampled Collected Unit # X 0-2"	Backfill	Notes-
1	8/29/2017	9/4/2017		1-08 0-2"	23				
2	8/29/2017	9/4/2017		2-08 0-2"	24				
3	8/29/2017	9/4/2017		3-10 0-2"	25				
4	8/29/2017	9/4/2017		4-10 0-2"	26				
5	8/29/2017	9/4/2017		5-11 0-2"	27				
6					28				
7					29				
8					30				
9					31				
10					32				
11					33				
12					34				
13					35				
14					36				
15					37				
16					38				
17					39				
18					40				
19					41				
20					42				
21					43				
22									

Fire Hydrant ID # per updated DBSI file -Navy Fresh Water Lines, Valves & Hydrants. BSI/DR-0034
Pedestal sample identification is a designated ID number followed by a dash and double-digit number relative to the closest Fire Hydrant ID location. No full prior map of pedestals exists.

Table 5. DU 5 Buttress & Cover - Import Clean Coral Sand

DU 5 IMPORT CLEAN CORAL						
DATE	NORTH Wall Loads	SOUTH Wall Loads	EAST Wall Loads	WEST Wall Loads	Days total loads	Days cubic yardage
9/4/2017	52	0	0	0	52	780
9/5/2017	15	0	0	0	15	225
9/6/2017	36	0	0	0	36	540
9/7/2017	31	0	0	0	31	465
9/8/2017	21	0	0	0	21	315
9/9/2017	14	0	0	0	14	210
Load count per wall	279	0	0	0		
15cuyd estimate per wall	4185	0	0	0		
2017 Total R2 combined clean coral import LOADS				279		
Loads x 15cuyd estimate				4185		

Table 6. Excavation Plots - Import Clean Coral Sand

EXCAVATION PLOTS- IMPORT CLEAN CORAL BACKFILL							
DATE	DU-9 Loads	DU-8 Loads	DU-7 Loads	DU-5 Loads	DU-3 Loads	Days total loads	Days cubic yardage
9/4/2017	0	0	0	0	0	0	0
9/5/2017	5	0	4	0	0	9	135
9/6/2017	5	0	3	0	0	8	120
9/7/2017	5	17	1	0	0	23	345
9/8/2017	10	5	0	0	0	15	225
9/9/2017	3	0	1			4	60
Load count per column	37	22	9	0	0		
15cuyd estimate per column	555	330	135	0	0		
2017 Total combined clean import Backfill LOADS					68		
Loads x 15cuyd estimate					1020		

9/7/17 – Edit- Break out loads between DU-9 structures and DU-8 Pipe Run backfill

Daily Field Report

Date: Sunday, September 10, 2017
Prepared by: Scott Wakefield

Project: Removal of Lead-Based Paint from Structures and Lead-Contaminated Soil
Location: Midway Atoll National Wildlife Refuge
Client: US Fish and Wildlife Service

Weather: Sunny, wind 8 mph. Temperature ~84F

Personnel:

Name	Company	Site Hours
Scott Wakefield	NWDE Field Oversight	10
Jeff James	NWDE Supervisor	Partial
Mark Stoller	NWDE Supervisor	10
Joel Smith	NWDE Operator	Partial
Dalton Sullivan	NWDE Labor	Partial
Antonio Davis	NWDE Labor	5
Jevon Stone	NWDE Operator	0
Jose Ordaz	NWDE Operator	5
Matt Manning	NWDE Operator	0
Chris Fisher	NWDE Labor	0
Alan Phillips	NWDE Operator	0
Kevin Bach	NWDE Labor	0
Lucas Peel	NWDE Labor	0
Tyler Wilson	NWDE Labor	5
Eric Matteson	NWDE Operator	0

Visitors/Additional Site Personnel:

Name	Title
MaryAnn Amann	U.S. FWS
Bob Peyton	U.S. FWS

Equipment:

Description	Model No.	Comments / Serial #
Pickup Truck	F350 Service Truck	NWDE
Flatbed Truck	Ford F450	NWDE
Container Truck	Peterbuilt	NWDE
Skid Steer	Bobcat S185	NWDE
Tracked Skid Steer	Bobcat T750	NWDE
Tracked Skid Steer	Bobcat	NWDE
Mini-Excavator	CAT 308	NWDE
Excavator	Volvo EC290BLC	NWDE
Excavator	Volvo EC290BLC	NWDE
Excavator	Volvo EC290	NWDE
Off road Dump Truck	Volvo A30D	NWDE
Off road Dump Truck	Volvo A30D	NWDE
Off road Dump Truck	Volvo A30D	NWDE
Excavator – High reach	Komatsu PC400HD	NWDE

Materials Delivered:

Description	QTY	Condition/Comments
Diesel	166 gallons	
Gasoline	0 gallons	

Description of Work:

0700 – Health and Safety meeting at NAF staging area. Review today's work tasks.

Today's project work will focus on two tasks with two crews. Water Tower 5304 falling and unloading NWDE barge #2 of 3.

0800 – Preparations are being made at the Water Tower 5304 work site. Shade cloth directly around the footings is pulled back for the JLG manlift access. The hydrant hose is charged and oxy/acetylene torch is being set up for upcoming final hot work.

U.S. FWS crew is carefully managing the burrow nesting birds during today's work activities. The group is marking burrows and individual shearwaters to return the birds to their respective home once the work area is safe to do so. This morning, bird boxes are in use to transport offsite and plywood placed above burrows for preventative cave-in of the sand. Time onsite for tasks is approximately 30 minutes.

At the Harbor Pier 2410, the American Marine barge and American Contender tug arrival will keep busy with NWDE to begin unloading activities for an alternate project. In this offload are materials for the R2 Unit cover including the geomembrane liner and witness layer cloth. Additionally, supplies are arriving as needed including materials for servicing the Sandman Vac trailer.

Once this barge has been unloaded, the return trip will include placing scrap steel and LBP project shipping containers on board for partial demobilization of the project equipment, non-essential items and equipment no longer in que for project completion.

0930 – Hot work at the isolated Water Tower 5304 picks up where leaving off yesterday afternoon. In the center water column stem, an additional pair of reliefs are made. Lower front leg cuts are accomplished in the support leg nearest the footings.

1000 – Two NWDE Volvo 290 excavators are being positioned to the previously placed steel cables shackled to the Water Tower south support legs. Parked at the north side of the Water tower, these two machines will be the triggering action to shift the crippled legs into the intended direction allowing the tower to lean and topple south.

The restricted roadway access near the work site is expanded to the phase two lock down of vehicle and pedestrian traffic. U.S. FWS is assisting to manage the roadblocks at the southern intersection of Peters Ave and Morrell St for safety.

1100 – NWDE is making final checks with the structure and project area for proceeding with toppling Water Tower 5304 that has been removed from service.

1110 – The final two torch back cuts are made in the north support legs nearest the footings. Once the footing area is clear, the excavators begin tensioning the steel cables shackled to the south legs.

1126 – The Water Tank south legs are purposely toggled out of vertical alignment by pulling on the steel cables with the two excavators. The Water Tower tilts and then falls south in a seven second trip to the ground. Positioned well within the previously placed Dura-Skrim area, the top of the tower tank has landed gracefully at the target location. Minimal loose debris is contained on top of the reinforced poly sheeting to be collected prior to steel processing.

1200 – Lunch

1230 – Barge unloading activities have continued through the morning and into the afternoon. Vac trailer supplies are being hauled to the NAF Staging area. Begin servicing the Vac trailer in preparation to resume using it for soil excavation areas.

1345 – The day progresses with unloading the barge, mechanical work at the NAF and pickup site tasks at the retired Water Tower 5304.

1730 – Ending the work day.
Today accomplished reducing the Water Tower from ~ 170' tall to a more manageable 40' height.
The barge unloading is progressing.
The Vac trailer is ready for operation testing tomorrow.

Photographs:

Photo 01: Water Tower 5304 – View northwest. Center column relief cut prep

Photo 02: Water Tower 5304 – View northeast. South leg lower torch cutting

Photo 03: Water Tower 5304 – View north. Center water column torch cutting

Photo 04: Water Tower 5304 – View west. Triggering the southern legs out of alignment

Photo 05: Water Tower 5304 – View west. Controlled falling to the south

Photo 06: Water Tower 5304 – View west. Controlled falling to the south

Photo 07: Water Tower 5304 – View west. Touchdown to earth

Photo 08: Water Tower 5304 – View north. Placement within the Dura-Skirm reinforced sheeting

Photo 09: Water Tower 5304 – View northeast. Ground Zero of the top rotating beacon

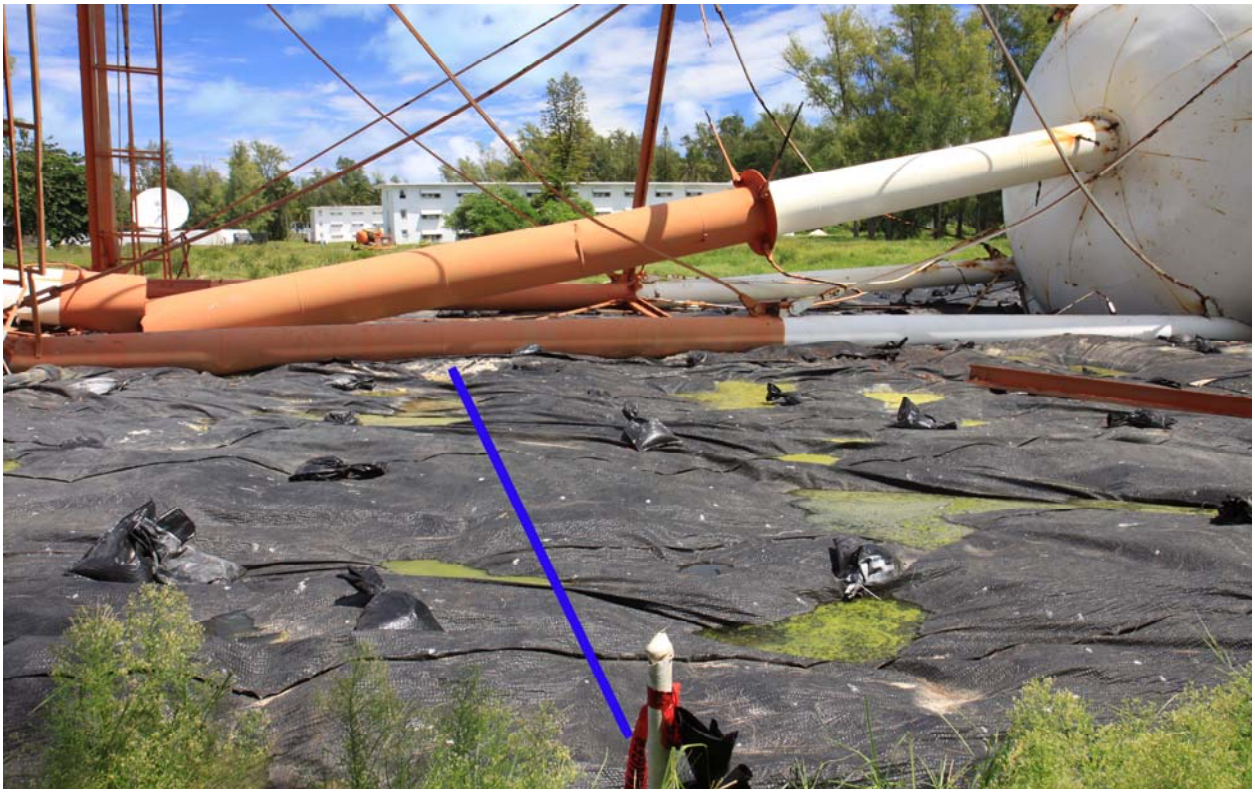


Photo 10: Water Tower 5304 – View southeast. Marker indicates below ground transite water main path

Photo 11: Water Tower 5304 – View north. Tower demo progress overview

Daily Field Report

Date: Monday, September 11, 2017
Prepared by: Scott Wakefield

Project: Removal of Lead-Based Paint from Structures and Lead-Contaminated Soil
Location: Midway Atoll National Wildlife Refuge
Client: US Fish and Wildlife Service

Weather: Cloudy, wind 12 mph. Temperature ~78F, intermittent morning rain

Personnel:

Name	Company	Site Hours
Scott Wakefield	NWDE Field Oversight	10
Jeff James	NWDE Supervisor	Partial
Mark Stoller	NWDE Supervisor	10
Joel Smith	NWDE Operator	10
Dalton Sullivan	NWDE Labor	0
Antonio Davis	NWDE Labor	10
Jevon Stone	NWDE Operator	10
Jose Ordaz	NWDE Operator	10
Matt Manning	NWDE Operator	0
Chris Fisher	NWDE Labor	10
Alan Phillips	NWDE Operator	0
Kevin Bach	NWDE Labor	10
Lucas Peel	NWDE Labor	10
Tyler Wilson	NWDE Labor	10
Eric Matteson	NWDE Operator	0

Visitors/Additional Site Personnel:

Name	Title
MaryAnn Amann	U.S. FWS

Equipment:

Description	Model No.	Comments / Serial #
Pickup Truck	F350 Service Truck	NWDE
Flatbed Truck	Ford F450	NWDE
Container Truck	Peterbuilt	NWDE
Skid Steer	Bobcat S185	NWDE
Tracked Skid Steer	Bobcat T750	NWDE
Tracked Skid Steer	Bobcat	NWDE
Mini-Excavator	CAT 308	NWDE
Excavator	Volvo EC290BLC	NWDE
Excavator	Volvo EC290BLC	NWDE
Excavator	Volvo EC290	NWDE
Off road Dump Truck	Volvo A30D	NWDE
Off road Dump Truck	Volvo A30D	NWDE
Off road Dump Truck	Volvo A30D	NWDE
Excavator – High reach	Komatsu PC400HD	NWDE

Materials Delivered:

Description	QTY	Condition/Comments
Diesel	0 gallons	
Gasoline	0 gallons	

Description of Work:

0700 – Health and Safety meeting at NAF staging area. Review today's work tasks.

Soil treatment tasks today will focus on Batch # 3 event within the R2 Unit, Cell 1 and 2. Since Batch event # 2 on 8/23/17, 67.6 loads of DU-9 soil has been stockpiled in rows inside the R2 interior.

Loading up the tote of Maectite® and support truck equipment. Soil piles are being roughed out flat using the tracked skidsteer, then assisted shortly after when the 290 excavator arrives. The rough grade is a 1.5' to 2' lift, configured in a horse shoe layout. This planning allows the crew and equipment to access the long rectangular plots on the north and south side of the Maectite® application setup easily.

The recently retired Water Tower 5304 laying on its side will start being processed today with the NWDE UP40 shear. The tower's position in the Dura-Skrim field will be worked from the base, progressing south. Steel pipe, catwalks, cross bracing and the tank are to be downsized and then stockpiled within the work area. Minimal disruption to the reinforced poly liner is expected external to the tower. This liner is the barrier to aid in final cleanup of the work area for demo debris.

Mobilize the Vac trailer to work hydrants and pedestals today. Recent service and repair of the rental trailer system has increased the performance and reliability to lift up coral sand from the target dig locations. Through the day the vac trailer is able to draw soil into the stinger hose, drop it out of the bag house into one yard supersacks. The sacks are then staged for pickup, when they will be moved to the R2 Unit for future batch treatment with Maectite®.

0930 – Hydrant ID #51 near the Fuel Farm is nearly complete using the Vac trailer method to finish off the previous mini excavator soil removal. Working so close to the active water utility limits the mini excavator from the final cut of soil to 2' in depth.

At the Harbor, unloading of the NWDE barge #2 of 3 has been ongoing this morning. The alternate project material being unloaded will make way for LBP Project materials being backhauled as the demobilization takes place in segments.

1100 – At Parade Field, the Water Tower 5304 progress to shear up the steel structure continues moving forward. Processing includes downsizing longer lengths and reducing the bulky wasted space by flattening support leg pipes. Materials are prepped for loading into the A30 sized haul trucks to be placed onto the barge when required.

1200 – Lunch

1230 – Batch treatment event #3 at the R2 Cell 1 and 2 is systematically working the staged materials. Maectite® is applied at the prescribed rate of .75 gallons per cubic yard, amended with hydrant water as the 290 excavator and flat edged bucket fold the materials into a homogenous mixture.

1300 – Fuel Farm area fire hydrants being worked with the Vac trailer are being bagged up as the hopper and supersacks stage pallet loads. The tracked skidsteer is in use to move the pallets of bagged soil.

Follow up completed hydrants and pedestals with confirmation sample collections at the bottom of the excavated / vac'd location. Include the re-excavation of fire hydrant ID #54 that had lab results returned >75 mg/kg. The Vac trailer not only worked over hydrant ID #54, but also another pass at the Bollard P100 0-2" sample plot (8/23/17 1615) that exceeded 75 mg/kg.

The tracked skidsteer is grading out previously staged backfill locations that have clean coral sand in position. This includes rough grading at DU-9 Bldg 521 Comm Center, Bldg 232 Fuel Farm Storage, Bldg 4213 Ave Maria and DU-7 Bldg 3504 Barracks.

1645 – R2 soil batch treatment event #3 is nearing the 80% complete mark. Expect to finish the remaining soil treatment in Cell 2 tomorrow to fully clear out the 67.6 loads of stockpiled DU-9 soils in this batch event.

1700 – Steel processing of the off-line Water Tower 5304 has made short work of the support legs, catwalks, bracing and stand pipe. The tank is being worked apart into manageable sized pieces. Anticipate that the steel will be fully process and stockpiled at the work site tomorrow.

Barge unloading has continued nonstop through the day, expectant to continue again tomorrow.

1730 – Ending the work day.
Batch event #3 treatment of DU-9 soils in the R2 stockpile is 80% complete.
Hydrants and pedestal locations excavated today is 6 units plus plot Bollard P100 0-2" re-ex.

Photographs:

Photo 01: Fire Hydrant ID #51– View north. Excavation near hydrant and pedestal

Photo 02: 6-51 Pedestal – View west. Progress of excavation work using Vac trailer

Photo 03: Water Tower 5304 – View northwest. Tower demo steel processing

Photo 04: Water Tower 5304 – View south. Overview prior to downsizing steel

Photo 05: Water Tower 5304 – View south. Progress of downsizing steel

Photo 06: Water Tower 5304 – View north. Progress of downsizing steel

Photo 07: R2 Cell 1&2 – View west. Maectite® batch treatment event #3, rough grading the loads

Photo 08: R2 Cell 1&2 – View east. Maectite® batch treatment event #3 of staged soil within the R2

Photo 09: R2 Cell 1&2 – View west. Maectite® batch treatment event #3, 80% complete

Table 1. Maectite and Treated Soil Total Estimates

	Maectite Totals						Treated Soil Totals[1,2]		
	Applied Today (gal)					Total to Date	Excavated and Hauled to R-2 Unit **Today**		Excavated and Hauled to R-2 Unit **Total to Date**
Date	Soils (DU9)	Soils (DU8)	Soils (DU7)	Soils (DU5)	Soils (DU3)	(gal)	Load	^{3}yds[1]	^{3}yds[1]
09/11/17	581	0	0	0	0	1947	55	797	2670
09/12/17									
09/13/17									
09/14/17									
09/15/17									
09/16/17									
Total to Date	1589 gallons	205 gallons	153 gallons	0 gallons	0 gallons		210 loads		

Notes:
1. Estimates are based on the number of gallons of Maectite® applied.
2. Soil treatment with Maectite® and hauling to R2 may not occur on the same day.
3. 9/11/17 & 9/12/17– Table 2 loads were batch treated in the R2. Inserted this data into Table 1 for totalizing the volumes and gallons. Reset Table 2 "Batch loads" of 67.6 to zero until next ex-situ stockpile treatment.

2017 DU 9 – Figures P 1-16, 18, 20, 21, 23-27.
Bldg 1124, 1126, 3521, S361, 347, 3501, S3126, S3127, 521, 520, 502, 5342, 309, 340, 354, 9149, 232, 233, S269, S225A, 2127, 144, Boat House 1 & 2, 4205, 4206, 4207, 4213, 503, 5303, 5341, 5339, 5338, Bollards, Fire Hydrants, 5304, 5305, 4210, 3524, 3529, 5126, 5378, 3514, and other ancillary structures.
Foundations S464, 502, 4201, 5126, 5295, 5342.
2017 DU 8 – S-28, S-30 re-ex, Pipe figure P19
2017 DU 7 – Bldg 3502, 3503, 3504 shade cloth
2017 DU 5 – R2 Unit, Figure P17
2017 DU 3 – Housing figure P22, 419 MIS re-ex

Table 2. Soil loads hauled to the R2 for ex situ Maectite® treatment

	Load Totals				
	Hauled to R2 for treatment in R2 cell (# of truck loads)				
Date	Soils (DU9)	Soils (DU8)	Soils (DU7)	Soils (DU5)	Soils (DU3)
09/11/17	0	0	0	0	0
09/12/17					
09/13/17					
09/14/17					
09/15/17					
09/16/17					
Batch loads to treat in R2	0 loads	0 loads	0 loads	0 loads	0 loads
Total to Date	102.1 loads	34 loads	18.5 loads	0 loads	0 loads

8/14/17 - Batch treatment of all stockpiled "ex situ" loads to date in R2 Cell 1. Entered this data into Table 1 on 8/14/17 for volume and gallon tracking.
8/15/17 - Add "Batch Loads to treat in R2" subtotal that tracks the truck loads placed for treatment. Reset this to zero once treatment event is complete.
8/23/17 – Batch #2 treatment event of all stockpiled "ex situ" loads to date in R2 Cells. Entered this data into Table 1 on 8/23/17 for volume and gallon tracking.
9/12/17 – Batch #3 treatment event of all stockpiled "ex situ" loads to date in R2 Cells. Entered this data into Table 1 on 9/11/17 & 9/12/17 for volume and gallon tracking.

Table 2.1 Soil loads hauled to the R2, non-treated internment

Date	Load Totals				
	Hauled to R2, non-treated soil (# of truck loads)				
	Soils (DU9)	Soils (DU8)	Soils (DU7)	Soils (DU5)	Soils (DU3)
09/11/17	0	0	0	0	0
09/12/17					
09/13/17					
09/14/17					
09/15/17					
09/16/17					
Total to Date	13 loads	4 loads	0 loads	0 loads	9 loads

Table 3. Weekly Load Estimates

Date	Treated Demo Debris Loads to R2	Clean Concrete Loads to Crusher	Metal Debris Loads To Boneyard	Clean Wood Loads	Steel Debris Loaded onto Barge	~
09/11/17	0	0	0	0	0	
09/12/17						
09/13/17						
09/14/17						
09/15/17						
09/16/17						
Season Total	3 loads	0 loads	0 loads	4 loads	183 loads	

Table 4. Fire Hydrants, Pedestals and Monuments

Fire Hydrant Soil					Fire Hydrant Soil				
Fire Hydrant ID	Excavate	Sampled Collected FH # X 0-2"	Backfill	Notes-	Fire Hydrant ID	Excavate	Sampled Collected FH # X 0-2"	Backfill	Notes-
1					41				
2					42				
3					43				
4					44				
5					45				
6					46				
7					47				
8					48				
9					49				
10					50				
11	8/31/2017	9/4/2017		FH 11 0-2"	51	9/11/2017	9/11/2017		FH 51 0-2"
12					52	9/11/2017	9/11/2017		FH 52 0-2"
13					53	8/23/2017	8/23/2017		FH 53 0-2"
14					54	9/11/2017	9/11/2017		FH 54 0-2"re-ex
15					54A	8/23/2017	8/23/2017		FH 54A 0-2"
16					55	8/26/2017	8/26/2017		FH 55 0-2"
17					56	8/26/2017	8/30/2017		FH 56 0-2"
18					57	8/26/2017	8/26/2017		FH 57 0-2"
19					58	9/11/2017	9/11/2017		FH 58 0-2"
20					59				
21					60				
22					61				
23					62				
24					63				
25					64				
26					65	8/29/2017	8/30/2017		FH 65 0-2"
27					66	8/26/2017	8/26/2017		FH 66 0-2"
28					67	8/25/2017	8/30/2017		FH 67 0-2"
29					68	8/25/2017	8/30/2017		FH 68 0-2"
30					69				
31					70				
32					71				
33					72	8/29/2017			
34					73	8/29/2017	9/11/2017		FH 73 0-2"
35					74	8/29/2017	8/29/2017		FH 74 0-2"
36					75	8/28/2017	8/29/2017		FH 75 0-2"
37					76				
38					77	8/28/2017	8/29/2017		FH 77 0-2"
39									
40									

Pedestals /Monuments Soil					Pedestals /Monuments Soil				
Feature Unit ID	Excavate	Sampled Collected Unit # X 0-2"	Backfill	Notes-	Feature Unit ID	Excavate	Sampled Collected Unit # X 0-2"	Backfill	Notes-
1	8/29/2017	9/4/2017		1-08 0-2"	23				
2	8/29/2017	9/4/2017		2-08 0-2"	24				
3	8/29/2017	9/4/2017		3-10 0-2"	25				
4	8/29/2017	9/4/2017		4-10 0-2"	26				
5	8/29/2017	9/4/2017		5-11 0-2"	27				
6	9/11/2017	9/11/2017		6-51 0-2"	28				
7	9/11/2017	9/11/2017		7-32 0-2"	29				
8					30				
9					31				
10					32				
11					33				
12					34				
13					35				
14					36				
15					37				
16					38				
17					39				
18					40				
19					41				
20					42				
21					43				

Fire Hydrant ID # per updated DBSI file -Navy Fresh Water Lines, Valves & Hydrants. BSI/DR-0034
Pedestal sample identification is a designated ID number followed by a dash and double-digit number relative to the closest Fire Hydrant ID location. No full prior map of pedestals exists.

Table 5. DU 5 Buttress & Cover - Import Clean Coral Sand

DU 5 IMPORT CLEAN CORAL						
DATE	NORTH Wall Loads	SOUTH Wall Loads	EAST Wall Loads	WEST Wall Loads	Days total loads	Days cubic yardage
9/11/2017	0	0	0	0	0	0
9/12/2017					0	0
9/13/2017					0	0
9/14/2017					0	0
9/15/2017					0	0
9/16/2017					0	0
Load count per wall	279	0	0	0		
15cuyd estimate per wall	4185	0	0	0		
2017 Total R2 combined clean coral import LOADS				279		
Loads x 15cuyd estimate				4185		

Table 6. Excavation Plots - Import Clean Coral Sand

EXCAVATION PLOTS- IMPORT CLEAN CORAL BACKFILL							
DATE	DU-9 Loads	DU-8 Loads	DU-7 Loads	DU-5 Loads	DU-3 Loads	Days total loads	Days cubic yardage
9/11/2017	0	0	0	0	0	0	0
9/12/2017						0	0
9/13/2017						0	0
9/14/2017						0	0
9/15/2017						0	0
9/16/2017						0	0
Load count per column	37	22	9	0	0		
15cuyd estimate per column	555	330	135	0	0		
2017 Total combined clean import Backfill LOADS					68		
Loads x 15cuyd estimate					1020		

Daily Field Report

Date: Tuesday, September 12, 2017
Prepared by: Scott Wakefield

Project: Removal of Lead-Based Paint from Structures and Lead-Contaminated Soil
Location: Midway Atoll National Wildlife Refuge
Client: US Fish and Wildlife Service

Weather: Cloudy, wind 18-21 mph. Temperature ~78F, intermittent morning rain

Personnel:

Name	Company	Site Hours
Scott Wakefield	NWDE Field Oversight	10
Jeff James	NWDE Supervisor	Partial
Mark Stoller	NWDE Supervisor	Partial
Joel Smith	NWDE Operator	10
Dalton Sullivan	NWDE Labor	0
Antonio Davis	NWDE Labor	10
Jevon Stone	NWDE Operator	10
Jose Ordaz	NWDE Operator	Partial
Matt Manning	NWDE Operator	0
Chris Fisher	NWDE Labor	Partial
Alan Phillips	NWDE Operator	0
Kevin Bach	NWDE Labor	10
Lucas Peel	NWDE Labor	10
Tyler Wilson	NWDE Labor	10
Eric Matteson	NWDE Operator	0

Visitors/Additional Site Personnel:

Name	Title
MaryAnn Amann	U.S. FWS

Equipment:

Description	Model No.	Comments / Serial #
Pickup Truck	F350 Service Truck	NWDE
Flatbed Truck	Ford F450	NWDE
Container Truck	Peterbuilt	NWDE
Skid Steer	Bobcat S185	NWDE
Tracked Skid Steer	Bobcat T750	NWDE
Tracked Skid Steer	Bobcat	NWDE
Mini-Excavator	CAT 308	NWDE
Excavator	Volvo EC290BLC	NWDE
Excavator	Volvo EC290BLC	NWDE
Excavator	Volvo EC290	NWDE
Off road Dump Truck	Volvo A30D	NWDE
Off road Dump Truck	Volvo A30D	NWDE
Off road Dump Truck	Volvo A30D	NWDE
Excavator – High reach	Komatsu PC400HD	NWDE

Materials Delivered:

Description	QTY	Condition/Comments
Diesel	0 gallons	
Gasoline	0 gallons	

Description of Work:

0700 – Health and Safety meeting at NAF staging area. Review today's work tasks.

Soil treatment tasks today will be to complete Batch # 3 event within the R2 Unit, Cell 1 and 2. With approximately 20% of the 67.6 stockpiled truckloads left to treat, the crew is getting into position with additional Maectite® at Cell 1, northwest region. Hydrant water hoses are connected and will add the required water during mixing as the flat edged bucket repeatedly mixes and folds to a uniform consistency. Batch event #3 is calculated to finish at 710 gallons, total.

Yesterday the UP40 shear and 290 Volvo had processed most of the steel Water Tower 5305 with only the main water tank left to go. Continuing through this morning and into the afternoon, steel is downsized and then folded into target size pieces appropriate for the A30 haul trucks. The steel stockpile remains at the east side of the tower footings in preparation for future hauling to the barge.

At the NWDE American Marine barge #2 of 3, unloading progress has remained steady in emptying the deck of materials in preparation for shipping project material off island. This morning will continue to finish off unloading and clear the cargo deck space for containers and scrap steel.

NWDE is finalizing to load up the NWDE staged items that are outbound into the shipping containers.

The Vac trailer system is being set up at the R3 Water Plant. For the west wall of Bldg 3501 the crew is focusing to removed soil at congested areas that have limited access and significant water lines above and below grade. The 5" vac hose connected to the baghouse is able to be positioned and work the area. Soil then is automated to drop out into 1 yard supersacks. These sacks are manually swapped out using the skidsteer and the process repeated.

Collection of confirmation samples for select areas, expectant to go out on next week's charter flight.

1000 – Weekly conference call with Mainland and Hawaii project offices. See NWDE Midway Meeting Agenda for specific detail.

1200 – Lunch

1230 – Soil treatment Batch event #3 is complete. The staged piles of DU-9 soil have been treated and remain in side cells 1 & 2. The crew is cleaning up, decon and departing the R2 unit.

Staged supersacks of DU-9 are planned for moving to the R2, staged for an upcoming treatment, Batch event #4. By days end the total number of 1 yard supersacks transported to the R2 Cell 3 is three.

Work is shifting to more hands on at the barge unloading in preparation to backhaul equipment and materials going off island. The inbound rolls of geotextile and hydraulic membrane are being unloaded and placed in a haul truck. Rolls are moved to the NAF staging area for placement. The total shipping container weight exceeds the upper capacity of the DBSI front end loader, requiring splitting the load manually.

1300 – 20' shipping containers leaving Midway Atoll are making their way onto the barge. Stacking and lashing the connex boxes down at the bow of the barge will absorb workers and equipment through the afternoon.

1430 – At the recently dismantled Water Tower 5305, the last of the large mild steel on the ground is processed. Remaining will be clean up of the concrete pier footings for removal of the four bolt anchors and flanges attached to the concrete imbeds. Following those actions will be the area cleanup, collection of smaller steel debris and ultimately soil excavation work.

1530 – Two loads of clean coral sand are being positioned for DU-9 backfill. One at Bldg 521 Communication Center and one at Bldg 520 Fire Dept Storage. These are clean up loads to make final grade as the skidsteer makes evident how far the previous loads stretched. Advise for additional backfill to go to DU-7 Bldg 5303 Barracks, to be followed up in as time and equipment allows.

1730 – Ending the work day.
Batch event #3 treatment of DU-9 soils in the R2 stockpile is 100% complete at 710 gallons applied.
Ex situ volume of soil to the R2 Unit for future Batch #4 treatment is three cubic yards. More supersacks are staged at various locations and are only counted when placed in the R2.

Photographs:

Photo 01: Water Tower 5304– View west. Tower demo steel processing

Photo 02: Water Tower 5304– View west. Tower demo steel processing

Photo 03: Water Tower 5304 – View north. Afternoon tower demo steel processing progress

Photo 04: Water Plant Bldg 3501 – View north. Vac trailer work at the western wall location

Photo 05: Water Plant Bldg 3501 – View north. Vac trailer work at the western wall location

Photo 06: Harbor Pier 2401 – View southwest. Yesterday's view of the unloading progress

Photo 07: NAF Staging Area – View southwest. Unloading barge arrived rolls of R2 final cap materials

Table 1. Maectite and Treated Soil Total Estimates

	Maectite Totals						Treated Soil Totals[1,2]		
	Applied Today (gal)					Total to Date	Excavated and Hauled to R-2 Unit **Today**		Excavated and Hauled to R-2 Unit **Total to Date**
Date	Soils (DU9)	Soils (DU8)	Soils (DU7)	Soils (DU5)	Soils (DU3)	(gal)	Load	^{3}yds[1]	^{3}yds[1]
09/11/17	581	0	0	0	0	1947	55	797	2670
09/12/17	129	0	0	0	0	2076	12.6	177	2847
09/13/17									
09/14/17									
09/15/17									
09/16/17									
Total to Date	1718 gallons	205 gallons	153 gallons	0 gallons	0 gallons		223 loads		

Notes:
1. Estimates are based on the number of gallons of Maectite® applied.
2. Soil treatment with Maectite® and hauling to R2 may not occur on the same day.
3. 9/11/17 & 9/12/17– Table 2 loads were batch treated in the R2. Inserted this data into Table 1 for totalizing the volumes and gallons. Reset Table 2 "Batch loads" of 67.6 to zero until next ex-situ stockpile treatment.

2017 DU 9 – Figures P 1-16, 18, 20, 21, 23-27.
Bldg 1124, 1126, 3521, S361, 347, 3501, S3126, S3127, 521, 520, 502, 5342, 309, 340, 354, 9149, 232, 233, S269, S225A, 2127, 144, Boat House 1 & 2, 4205, 4206, 4207, 4213, 503, 5303, 5341, 5339, 5338, Bollards, Fire Hydrants, 5304, 5305, 4210, 3524, 3529, 5126, 5378, 3514, and other ancillary structures.
Foundations S464, 502, 4201, 5126, 5295, 5342.
2017 DU 8 – S-28, S-30 re-ex, Pipe figure P19
2017 DU 7 – Bldg 3502, 3503, 3504 shade cloth
2017 DU 5 – R2 Unit, Figure P17
2017 DU 3 – Housing figure P22, 419 MIS re-ex

Table 2. Soil loads hauled to the R2 for ex situ Maectite® treatment

	Load Totals				
	Hauled to R2 for treatment in R2 cell (# of truck loads)				
Date	Soils (DU9)	Soils (DU8)	Soils (DU7)	Soils (DU5)	Soils (DU3)
09/11/17	0	0	0	0	0
09/12/17	0.2	0	0	0	0
09/13/17					
09/14/17					
09/15/17					
09/16/17					
Batch loads to treat in R2	0.2 loads	0 loads	0 loads	0 loads	0 loads
Total to Date	102.3 loads	34 loads	18.5 loads	0 loads	0 loads

8/14/17 - Batch treatment of all stockpiled "ex situ" loads to date in R2 Cell 1. Entered this data into Table 1 on 8/14/17 for volume and gallon tracking.
8/15/17 - Add "Batch Loads to treat in R2" subtotal that tracks the truck loads placed for treatment. Reset this to zero once treatment event is complete.
8/23/17 – Batch #2 treatment event of all stockpiled "ex situ" loads to date in R2 Cells. Entered this data into Table 1 on 8/23/17 for volume and gallon tracking.
9/12/17 – Batch #3 treatment event of all stockpiled "ex situ" loads to date in R2 Cells. Entered this data into Table 1 on 9/11/17 & 9/12/17 for volume and gallon tracking.

Table 2.1 Soil loads hauled to the R2, non-treated internment

Date	Load Totals				
	Hauled to R2, non-treated soil (# of truck loads)				
	Soils (DU9)	Soils (DU8)	Soils (DU7)	Soils (DU5)	Soils (DU3)
09/11/17	0	0	0	0	0
09/12/17	0	0	0	0	0
09/13/17					
09/14/17					
09/15/17					
09/16/17					
Total to Date	13 loads	4 loads	0 loads	0 loads	9 loads

Table 3. Weekly Load Estimates

Date	Treated Demo Debris Loads to R2	Clean Concrete Loads to Crusher	Metal Debris Loads To Boneyard	Clean Wood Loads	Steel Debris Loaded onto Barge	~
09/11/17	0	0	0	0	0	
09/12/17	0	0	0	0	0	
09/13/17						
09/14/17						
09/15/17						
09/16/17						
Season Total	3 loads	0 loads	0 loads	4 loads	183 loads	

Table 4. Fire Hydrants, Pedestals and Monuments

Fire Hydrant Soil					Fire Hydrant Soil				
Fire Hydrant ID	Excavate	Sampled Collected FH # X 0-2"	Backfill	Notes-	Fire Hydrant ID	Excavate	Sampled Collected FH # X 0-2"	Backfill	Notes-
1					41				
2					42				
3					43				
4					44				
5					45				
6					46				
7					47				
8					48				
9					49				
10					50				
11	8/31/2017	9/4/2017		FH 11 0-2"	51	9/11/2017	9/11/2017		FH 51 0-2"
12					52	9/11/2017	9/11/2017		FH 52 0-2"
13					53	8/23/2017	8/23/2017		FH 53 0-2"
14					54	9/11/2017	9/11/2017		FH 54 0-2"re-ex
15					54A	8/23/2017	8/23/2017		FH 54A 0-2"
16					55	8/26/2017	8/26/2017		FH 55 0-2"
17					56	8/26/2017	8/30/2017		FH 56 0-2"
18					57	8/26/2017	8/26/2017		FH 57 0-2"
19					58	9/11/2017	9/11/2017		FH 58 0-2"
20					59				
21					60				
22					61				
23					62				
24					63				
25					64				
26					65	8/29/2017	8/30/2017		FH 65 0-2"
27					66	8/26/2017	8/26/2017		FH 66 0-2"
28					67	8/25/2017	8/30/2017		FH 67 0-2"
29					68	8/25/2017	8/30/2017		FH 68 0-2"
30					69				
31					70				
32					71				
33					72	8/29/2017			
34					73	8/29/2017	9/11/2017		FH 73 0-2"
35					74	8/29/2017	8/29/2017		FH 74 0-2"
36					75	8/28/2017	8/29/2017		FH 75 0-2"
37					76				
38					77	8/28/2017	8/29/2017		FH 77 0-2"
39									
40									

Pedestals /Monuments Soil					Pedestals /Monuments Soil				
Feature Unit ID	Excavate	Sampled Collected Unit # X 0-2"	Backfill	Notes-	Feature Unit ID	Excavate	Sampled Collected Unit # X 0-2"	Backfill	Notes-
1	8/29/2017	9/4/2017		1-08 0-2"	23				
2	8/29/2017	9/4/2017		2-08 0-2"	24				
3	8/29/2017	9/4/2017		3-10 0-2"	25				
4	8/29/2017	9/4/2017		4-10 0-2"	26				
5	8/29/2017	9/4/2017		5-11 0-2"	27				
6	9/11/2017	9/11/2017		6-510-2"	28				
7	9/11/2017	9/11/2017		7-32 0-2"	29				
8					30				
9					31				
10					32				
11					33				
12					34				
13					35				
14					36				
15					37				
16					38				
17					39				
18					40				
19					41				
20					42				
21					43				

Fire Hydrant ID # per updated DBSI file -Navy Fresh Water Lines, Valves & Hydrants. BSI/DR-0034
Pedestal sample identification is a designated ID number followed by a dash and double-digit number relative to the closest Fire Hydrant ID location. No full prior map of pedestals exists.

Table 5. DU 5 Buttress & Cover - Import Clean Coral Sand

DU 5 IMPORT CLEAN CORAL						
DATE	NORTH Wall Loads	SOUTH Wall Loads	EAST Wall Loads	WEST Wall Loads	Days total loads	Days cubic yardage
9/11/2017	0	0	0	0	0	0
9/12/2017	0	0	0	0	0	0
9/13/2017					0	0
9/14/2017					0	0
9/15/2017					0	0
9/16/2017					0	0
Load count per wall	279	0	0	0		
15cuyd estimate per wall	4185	0	0	0		
2017 Total R2 combined clean coral import LOADS				279		
Loads x 15cuyd estimate				4185		

Table 6. Excavation Plots - Import Clean Coral Sand

EXCAVATION PLOTS- IMPORT CLEAN CORAL BACKFILL							
DATE	DU-9 Loads	DU-8 Loads	DU-7 Loads	DU-5 Loads	DU-3 Loads	Days total loads	Days cubic yardage
9/11/2017	0	0	0	0	0	0	0
9/12/2017	2	0	0	0	0	2	30
9/13/2017						0	0
9/14/2017						0	0
9/15/2017						0	0
9/16/2017						0	0
Load count per column	39	22	9	0	0		
15cuyd estimate per column	585	330	135	0	0		
2017 Total combined clean import Backfill LOADS					70		
Loads x 15cuyd estimate					1050		

Daily Field Report

Date: Wednesday, September 13, 2017
Prepared by: Scott Wakefield

Project: Removal of Lead-Based Paint from Structures and Lead-Contaminated Soil
Location: Midway Atoll National Wildlife Refuge
Client: US Fish and Wildlife Service

Weather: Cloudy, wind 8 mph. Temperature ~78F

Personnel:

Name	Company	Site Hours
Scott Wakefield	NWDE Field Oversight	10
Jeff James	NWDE Supervisor	Partial
Mark Stoller	NWDE Supervisor	Partial
Joel Smith	NWDE Operator	Partial
Dalton Sullivan	NWDE Labor	Partial
Antonio Davis	NWDE Labor	10
Jevon Stone	NWDE Operator	Partial
Jose Ordaz	NWDE Operator	10
Matt Manning	NWDE Operator	0
Chris Fisher	NWDE Labor	Partial
Alan Phillips	NWDE Operator	0
Kevin Bach	NWDE Labor	10
Lucas Peel	NWDE Labor	10
Tyler Wilson	NWDE Labor	10
Eric Matteson	NWDE Operator	Partial

Visitors/Additional Site Personnel:

Name	Title
MaryAnn Amann	U.S. FWS

Equipment:

Description	Model No.	Comments / Serial #
Pickup Truck	F350 Service Truck	NWDE
Flatbed Truck	Ford F450	NWDE
Container Truck	Peterbuilt	NWDE
Skid Steer	Bobcat S185	NWDE
Tracked Skid Steer	Bobcat T750	NWDE
Tracked Skid Steer	Bobcat	NWDE
Mini-Excavator	CAT 308	NWDE
Excavator	Volvo EC290BLC	NWDE
Excavator	Volvo EC290BLC	NWDE
Excavator	Volvo EC290	NWDE
Off road Dump Truck	Volvo A30D	NWDE
Off road Dump Truck	Volvo A30D	NWDE
Off road Dump Truck	Volvo A30D	NWDE
Excavator – High reach	Komatsu PC400HD	NWDE

Materials Delivered:

Description	QTY	Condition/Comments
Diesel	97 gallons	
Gasoline	0 gallons	

Description of Work:

0700 – Health and Safety meeting at NAF staging area. Review today's work tasks.
Note - Correction to yesterday's DFR, referencing the Water Tower being demolished (0700 and 1430 entries.) The correct reference is Water Tower 5304, not 5305 (Navy removed Water Tower.)

NWDE is at the recently fallen Water Tower 5304. In the field preparations are being made to begin collecting and folding up the reinforced poly ground cover sheeting. This Dura-Skrim has contained the smaller demo debris as well as managing the Bonin Petrel activities in the immediate work area. Workers are collecting the debris nearest the impact area of the removed tower. Materials are being worked inward towards the impact area where soil is planned for cleanup excavation on exiting. Sandbags with debris on them are centrally located, while clean sandbags are staged near the edge of the work space.

As the morning goes forward, the action is to corral water tower debris, then cut the Dura-Skrim into large manageable sections one at a time. The sections are then folded up and staged for removal from the field.

0900 – The NWDE barge crew has unloaded the cargo deck and is beginning the loading tasks for returning equipment and shipping containers. The roll off truck and boxes, JLG manlift and four 20' connex boxes are positioned and being lashed down with welded D-rings. This barge #2 of 3 is a percentage of the demobilization from the LBP project.

1000 – The Water Tower 5304 processed steel stockpile is being loaded into 1 of 2 A30 haul trucks and dumped onto the barge deck. While one 290 Volvo excavator loads, the second alike excavator on the barge is settling the steel in place for the trip. Steel plates are in use on top of the site water line utility to assist in truck access to the loading site. Later in the day, three total haul trucks are running steel from the site to the barge.

Dura-Skrim tasks at the Water Tower 5304 continue to be worked on. Debris and rain water puddles are being moved inward to the impact area. This will be included in the upcoming area exit excavation that abuts the planned tower excavation surrounding the footings. The reinforced black poly liner sectional cuts and folding are working well to contain light demo debris collected on top of the liner.

1200 – Lunch

1230 – Steel from the Water Tower 5304 resumes being moved to the barge and staged for the trip.

In the work site field, the Dura-Skrim and black sandbags continue being processed to include folding and centrally staging.

1545 – Steel from the Water Tower 5304 work area is nearing completion of the larger debris. Begin hand picking some of the smaller ferrous and non-ferrous materials in the work zone. Sending the last load to the barge for the ~170' tall tower. The remaining steel yet to be removed are the footing bolt flanges and imbed anchor bolts. These will be removed via torch.

1730 – Ending the work day.
Water Tower 5304 steel is 95% complete, having been loaded on the barge other than the base flanges.
The barge is loaded and expecting to sail in the morning, once the ramps are positioned and lines cast off.

Photographs:

Photo 01: American Marine barge #2 of 3 – View south. Begin loading activities

Photo 02: American Marine barge #2 of 3 – View south. Manlift and roll off box truck departing

Photo 03: American Marine barge #2 of 3 – View southwest. Loading steel onto the cargo deck

Photo 04: Water Tower 5304 – View west. Prep to manage the Dura-Skrim reinforced liner and debris

Photo 05: Water Tower 5304 – View southwest. Removal of the Dura-Skrim reinforced liner and debris

Photo 06: Water Tower 5304 – View east. Loading steel to haul to the barge

Table 1. Maectite and Treated Soil Total Estimates

	Maectite Totals						Treated Soil Totals[1,2]		
	Applied Today (gal)					Total to Date	Excavated and Hauled to R-2 Unit **Today**		Excavated and Hauled to R-2 Unit **Total to Date**
Date	Soils (DU9)	Soils (DU8)	Soils (DU7)	Soils (DU5)	Soils (DU3)	(gal)	Load	^{3}yds[1]	^{3}yds[1]
09/11/17	581	0	0	0	0	1947	55	797	2670
09/12/17	129	0	0	0	0	2076	12.6	177	2847
09/13/17	0	0	0	0	0	2076	0	0	2847
09/14/17									
09/15/17									
09/16/17									
Total to Date	1718 gallons	205 gallons	153 gallons	0 gallons	0 gallons		223 loads		

Notes:
1. Estimates are based on the number of gallons of Maectite® applied.
2. Soil treatment with Maectite® and hauling to R2 may not occur on the same day.
3. 9/11/17 & 9/12/17– Table 2 loads were batch treated in the R2. Inserted this data into Table 1 for totalizing the volumes and gallons. Reset Table 2 "Batch loads" of 67.6 to zero until next ex-situ stockpile treatment.

2017 DU 9 – Figures P 1-16, 18, 20, 21, 23-27.
Bldg 1124, 1126, 3521, S361, 347, 3501, S3126, S3127, 521, 520, 502, 5342, 309, 340, 354, 9149, 232, 233, S269, S225A, 2127, 144, Boat House 1 & 2, 4205, 4206, 4207, 4213, 503, 5303, 5341, 5339, 5338, Bollards, Fire Hydrants, 5304, 5305, 4210, 3524, 3529, 5126, 5378, 3514, and other ancillary structures.
Foundations S464, 502, 4201, 5126, 5295, 5342.
2017 DU 8 – S-28, S-30 re-ex, Pipe figure P19
2017 DU 7 – Bldg 3502, 3503, 3504 shade cloth
2017 DU 5 – R2 Unit, Figure P17
2017 DU 3 – Housing figure P22, 419 MIS re-ex

Table 2. Soil loads hauled to the R2 for ex situ Maectite® treatment

	Load Totals				
	Hauled to R2 for treatment in R2 cell (# of truck loads)				
Date	Soils (DU9)	Soils (DU8)	Soils (DU7)	Soils (DU5)	Soils (DU3)
09/11/17	0	0	0	0	0
09/12/17	0.2	0	0	0	0
09/13/17	0	0	0	0	0
09/14/17					
09/15/17					
09/16/17					
Batch loads to treat in R2	0.2 loads	0 loads	0 loads	0 loads	0 loads
Total to Date	102.3 loads	34 loads	18.5 loads	0 loads	0 loads

8/14/17 - Batch treatment of all stockpiled "ex situ" loads to date in R2 Cell 1. Entered this data into Table 1 on 8/14/17 for volume and gallon tracking.
8/15/17 - Add "Batch Loads to treat in R2" subtotal that tracks the truck loads placed for treatment. Reset this to zero once treatment event is complete.
8/23/17 – Batch #2 treatment event of all stockpiled "ex situ" loads to date in R2 Cells. Entered this data into Table 1 on 8/23/17 for volume and gallon tracking.
9/12/17 – Batch #3 treatment event of all stockpiled "ex situ" loads to date in R2 Cells. Entered this data into Table 1 on 9/11/17 & 9/12/17 for volume and gallon tracking.

Table 2.1 Soil loads hauled to the R2, non-treated internment

Date	Load Totals				
	Hauled to R2, non-treated soil (# of truck loads)				
	Soils (DU9)	Soils (DU8)	Soils (DU7)	Soils (DU5)	Soils (DU3)
09/11/17	0	0	0	0	0
09/12/17	0	0	0	0	0
09/13/17	0	0	0	0	0
09/14/17					
09/15/17					
09/16/17					
Total to Date	13 loads	4 loads	0 loads	0 loads	9 loads

Table 3. Weekly Load Estimates

Date	Treated Demo Debris Loads to R2	Clean Concrete Loads to Crusher	Metal Debris Loads To Boneyard	Clean Wood Loads	Steel Debris Loaded onto Barge	~
09/11/17	0	0	0	0	0	
09/12/17	0	0	0	0	0	
09/13/17	0	0	0	0	12	
09/14/17						
09/15/17						
09/16/17						
Season Total	3 loads	0 loads	0 loads	4 loads	195 loads	

Table 4. Fire Hydrants, Pedestals and Monuments

Fire Hydrant Soil					Fire Hydrant Soil				
Fire Hydrant ID	Excavate	Sampled Collected FH # X 0-2"	Backfill	Notes-	Fire Hydrant ID	Excavate	Sampled Collected FH # X 0-2"	Backfill	Notes-
1					41				
2					42				
3					43				
4					44				
5					45				
6					46				
7					47				
8					48				
9					49				
10					50				
11	8/31/2017	9/4/2017		FH 11 0-2"	51	9/11/2017	9/11/2017		FH 51 0-2"
12					52	9/11/2017	9/11/2017		FH 52 0-2"
13					53	8/23/2017	8/23/2017		FH 53 0-2"
14					54	9/11/2017	9/11/2017		FH 54 0-2"re-ex
15					54A	8/23/2017	8/23/2017		FH 54A 0-2"
16					55	8/26/2017	8/26/2017		FH 55 0-2"
17					56	8/26/2017	8/30/2017		FH 56 0-2"
18					57	8/26/2017	8/26/2017		FH 57 0-2"
19					58	9/11/2017	9/11/2017		FH 58 0-2"
20					59				
21					60				
22					61				
23					62				
24					63				
25					64				
26					65	8/29/2017	8/30/2017		FH 65 0-2"
27					66	8/26/2017	8/26/2017		FH 66 0-2"
28					67	8/25/2017	8/30/2017		FH 67 0-2"
29					68	8/25/2017	8/30/2017		FH 68 0-2"
30					69				
31					70				
32					71				
33					72	8/29/2017			
34					73	8/29/2017	9/11/2017		FH 73 0-2"
35					74	8/29/2017	8/29/2017		FH 74 0-2"
36					75	8/28/2017	8/29/2017		FH 75 0-2"
37					76				
38					77	8/28/2017	8/29/2017		FH 77 0-2"
39									
40									

Pedestals /Monuments Soil					Pedestals /Monuments Soil				
Feature Unit ID	Excavate	Sampled Collected Unit # X 0-2"	Backfill	Notes-	Feature Unit ID	Excavate	Sampled Collected Unit # X 0-2"	Backfill	Notes-
1	8/29/2017	9/4/2017		1-08 0-2"	23				
2	8/29/2017	9/4/2017		2-08 0-2"	24				
3	8/29/2017	9/4/2017		3-10 0-2"	25				
4	8/29/2017	9/4/2017		4-10 0-2"	26				
5	8/29/2017	9/4/2017		5-11 0-2"	27				
6	9/11/2017	9/11/2017		6-510-2"	28				
7	9/11/2017	9/11/2017		7-32 0-2"	29				
8					30				
9					31				
10					32				
11					33				
12					34				
13					35				
14					36				
15					37				
16					38				
17					39				
18					40				
19					41				
20					42				
21					43				

Fire Hydrant ID # per updated DBSI file -Navy Fresh Water Lines, Valves & Hydrants. BSI/DR-0034
Pedestal sample identification is a designated ID number followed by a dash and double-digit number relative to the closest Fire Hydrant ID location. No full prior map of pedestals exists.

Table 5. DU 5 Buttress & Cover - Import Clean Coral Sand

DU 5 IMPORT CLEAN CORAL						
DATE	NORTH Wall Loads	SOUTH Wall Loads	EAST Wall Loads	WEST Wall Loads	Days total loads	Days cubic yardage
9/11/2017	0	0	0	0	0	0
9/12/2017	0	0	0	0	0	0
9/13/2017	0	0	0	0	0	0
9/14/2017					0	0
9/15/2017					0	0
9/16/2017					0	0
Load count per wall	279	0	0	0		
15cuyd estimate per wall	4185	0	0	0		
2017 Total R2 combined clean coral import LOADS				279		
Loads x 15cuyd estimate				4185		

Table 6. Excavation Plots - Import Clean Coral Sand

EXCAVATION PLOTS- IMPORT CLEAN CORAL BACKFILL							
DATE	DU-9 Loads	DU-8 Loads	DU-7 Loads	DU-5 Loads	DU-3 Loads	Days total loads	Days cubic yardage
9/11/2017	0	0	0	0	0	0	0
9/12/2017	2	0	0	0	0	2	30
9/13/2017	0	0	0	0	0	0	0
9/14/2017						0	0
9/15/2017						0	0
9/16/2017						0	0
Load count per column	39	22	9	0	0		
15cuyd estimate per column	585	330	135	0	0		
2017 Total combined clean import Backfill LOADS					70		
Loads x 15cuyd estimate					1050		

Daily Field Report

Date: Thursday, September 14, 2017
Prepared by: Scott Wakefield

Project: Removal of Lead-Based Paint from Structures and Lead-Contaminated Soil
Location: Midway Atoll National Wildlife Refuge
Client: US Fish and Wildlife Service

Weather: High clouds, wind 14 mph. Temperature ~82F

Personnel:

Name	Company	Site Hours
Scott Wakefield	NWDE Field Oversight	10
Jeff James	NWDE Supervisor	Partial
Mark Stoller	NWDE Supervisor	Partial
Joel Smith	NWDE Operator	Partial
Dalton Sullivan	NWDE Labor	Partial
Antonio Davis	NWDE Labor	10
Jevon Stone	NWDE Operator	Partial
Jose Ordaz	NWDE Operator	10
Matt Manning	NWDE Operator	0
Chris Fisher	NWDE Labor	Partial
Alan Phillips	NWDE Operator	0
Kevin Bach	NWDE Labor	10
Lucas Peel	NWDE Labor	10
Tyler Wilson	NWDE Labor	10
Eric Matteson	NWDE Operator	Partial

Visitors/Additional Site Personnel:

Name	Title
MaryAnn Amann	U.S. FWS

Equipment:

Description	Model No.	Comments / Serial #
Pickup Truck	F350 Service Truck	NWDE
Flatbed Truck	Ford F450	NWDE
Container Truck	Peterbuilt	NWDE
Skid Steer	Bobcat S185	NWDE
Tracked Skid Steer	Bobcat T750	NWDE
Tracked Skid Steer	Bobcat	NWDE
Mini-Excavator	CAT 308	NWDE
Excavator	Volvo EC290BLC	NWDE
Excavator	Volvo EC290BLC	NWDE
Excavator	Volvo EC290	NWDE
Off road Dump Truck	Volvo A30D	NWDE
Off road Dump Truck	Volvo A30D	NWDE
Off road Dump Truck	Volvo A30D	NWDE
Excavator – High reach	Komatsu PC400HD	NWDE

Materials Delivered:

Description	QTY	Condition/Comments
Diesel	0 gallons	
Gasoline	0 gallons	

Description of Work:

0700 – Health and Safety meeting at NAF staging area. Review today's work tasks.

This morning the NWDE barge #2 of 3 is being finalized for departure. Last preparations are made to secure the equipment, shipping containers and recyclable mild steel from former Water Tower 5304 loaded on the steel cargo deck.

The work site at former Water Tower 5304 will be arranged to make way for soil treatment and hauling to the R2. Petrel Patrol inspection for ground burrows in the access and work areas. Today's tasks will include removing the steel base flanges from the five concrete footings, picking up remaining small steel debris, wrapping and removal of Dura-Skrim ground covering, removal of sandbags, and subplot layouts.

0930 – Sections of Dura-Skrim continue being collected, folded up, secondary wrapped and secured. Materials are being moved to the NAF Hanger staging area for future transport off island at the end of this season. The hundreds of black sandbags are making it onto pallets after inspection for condition. These bags will be transported to the NAF Hanger area and staged for future use.

The Water Tower 5304 concrete footings have the remnant steel flange bases and pipe legs attached. NWDE is torching the threaded nuts free of the assembly to prepare for full removal.
The water main that feeds up into the former tower column stem is being torched and severed above the near ground surface flange within the center concrete feature. This will allow DBSI the option to isolate the water main above ground surface using a sandwiched steel paddle or blind flange bolted up.

1000 – As the work area of the Water Tower is being arranged and materials removed, the layout of the fall area soil excavation and the main prescribed plot is marked. Continue inspection of the outer limits of the work area for debris. The reinforced poly ground covering has performed well to contain demo debris and make removal effective.

The barge ramp loading and final sendoff of the American Contender and American Marine barge #2 of 3 is nearing completion. The tug will set sail to Honolulu with the Water Tower recyclable steel, LBP project shipping containers and equipment.

1200 – Lunch

1230 – The Water Tower fall area ground covering continues to be collected and moved towards the work area exit, loaded and hauled to the NAF staging area. Continue to move sandbags towards the exit area.

One 290 Volvo excavator is being fitted with the hydro hammer in preparation for wrecking the concrete foundations for select buildings removed in 2016. This will include Bldg 502 AT&T, Bldg 5342 Telephone Switch, Bldg 5126 Sewage Pump Station, Bldg S464 Fuel Oil Pump House, Bldg 4201 JP-5 Pumping Station and Bldg 5295 Hanger Aux Gen. Target concrete elevation removal is 2.0' bgs, haul, then backfill with clean coral sand.

1400 – The torch work on the Water Tower 5304 bolts and piping has been completed earlier this morning. The 290 excavator and hydro hammer are temporarily brought in to gently separate the steel tower bases from the imbed bolts and additional imbed tie in structure. The mini excavator then lifts the sections off and loads into the haul truck. The steel bases original installation shows steel shims and grout as the method

of alignment and support. Bolt protrusions are torched off flush with the concrete piers. The concrete footings of former Water Tower 5304 will be left in place and are not being removed or downsized. The external surfaces of the painted concrete will be treated with Maectite® in parallel with soil excavation.

1415 – NWDE is beginning on Bldg 5342 Telephone Switch concrete footings. The vertical load bearing foundations are broken apart and moved about. This steel reinforced concrete will be removed and hauled to the concrete stockpile area in an upcoming task.

1630 – Bldg 5342 Telephone Switch concrete has been busted. This includes the larger block transformer footing base and perimeter footings.

At the former Water Tower 5304, the site is near ready for beginning soil treatment and hauling to the R2. Expect to begin excavation work at this site tomorrow.

1730 – Ending the work day.
Water Tower 5304 steel is 100% complete, having been removed from the footings and work site.
Barge #2 of 3 has departed, bound for Hawaii.

Photographs:

Photo 01: Water Tower 5304 – View southwest. Removal of the Dura-Skrim reinforced liner and debris

Photo 02: Water Tower 5304 – View southwest. Torch work to remove steel base flanges

Photo 03: Water Tower 5304 – View northeast. Removal of the steel tower base flanges

Photo 04: Water Tower 5304 – View north. Dura-Skrim reinforced liner and sandbags removal progress

Photo 05: Water Tower 5304 – View southwest. Progression to begin soil treatment

Table 1. Maectite and Treated Soil Total Estimates

	Maectite Totals						Treated Soil Totals[1,2]		
	Applied Today (gal)					Total to Date	Excavated and Hauled to R-2 Unit **Today**		Excavated and Hauled to R-2 Unit **Total to Date**
Date	Soils (DU9)	Soils (DU8)	Soils (DU7)	Soils (DU5)	Soils (DU3)	(gal)	Load	^{3}yds[1]	^{3}yds[1]
09/11/17	581	0	0	0	0	1947	55	797	2670
09/12/17	129	0	0	0	0	2076	12.6	177	2847
09/13/17	0	0	0	0	0	2076	0	0	2847
09/14/17	0	0	0	0	0	2076	0	0	2847
09/15/17									
09/16/17									
Total to Date	1718 gallons	205 gallons	153 gallons	0 gallons	0 gallons		223 loads		

Notes:
1. Estimates are based on the number of gallons of Maectite® applied.
2. Soil treatment with Maectite® and hauling to R2 may not occur on the same day.
3. 9/11/17 & 9/12/17– Table 2 loads were batch treated in the R2. Inserted this data into Table 1 for totalizing the volumes and gallons. Reset Table 2 "Batch loads" of 67.6 to zero until next ex-situ stockpile treatment.

2017 DU 9 – Figures P 1-16, 18, 20, 21, 23-27.
Bldg 1124, 1126, 3521, S361, 347, 3501, S3126, S3127, 521, 520, 502, 5342, 309, 340, 354, 9149, 232, 233, S269, S225A, 2127, 144, Boat House 1 & 2, 4205, 4206, 4207, 4213, 503, 5303, 5341, 5339, 5338, Bollards, Fire Hydrants, 5304, 5305, 4210, 3524, 3529, 5126, 5378, 3514, and other ancillary structures.
Foundations S464, 502, 4201, 5126, 5295, 5342.
2017 DU 8 – S-28, S-30 re-ex, Pipe figure P19
2017 DU 7 – Bldg 3502, 3503, 3504 shade cloth
2017 DU 5 – R2 Unit, Figure P17
2017 DU 3 – Housing figure P22, 419 MIS re-ex

Table 2. Soil loads hauled to the R2 for ex situ Maectite® treatment

	Load Totals				
	Hauled to R2 for treatment in R2 cell (# of truck loads)				
Date	Soils (DU9)	Soils (DU8)	Soils (DU7)	Soils (DU5)	Soils (DU3)
09/11/17	0	0	0	0	0
09/12/17	0.2	0	0	0	0
09/13/17	0	0	0	0	0
09/14/17	0	0	0	0	0
09/15/17					
09/16/17					
Batch loads to treat in R2	0.2 loads	0 loads	0 loads	0 loads	0 loads
Total to Date	102.3 loads	34 loads	18.5 loads	0 loads	0 loads

8/14/17 - Batch treatment of all stockpiled "ex situ" loads to date in R2 Cell 1. Entered this data into Table 1 on 8/14/17 for volume and gallon tracking.
8/15/17 - Add "Batch Loads to treat in R2" subtotal that tracks the truck loads placed for treatment. Reset this to zero once treatment event is complete.
8/23/17 – Batch #2 treatment event of all stockpiled "ex situ" loads to date in R2 Cells. Entered this data into Table 1 on 8/23/17 for volume and gallon tracking.
9/12/17 – Batch #3 treatment event of all stockpiled "ex situ" loads to date in R2 Cells. Entered this data into Table 1 on 9/11/17 & 9/12/17 for volume and gallon tracking.

Table 2.1 Soil loads hauled to the R2, non-treated internment

Date	Load Totals				
	Hauled to R2, non-treated soil (# of truck loads)				
	Soils (DU9)	Soils (DU8)	Soils (DU7)	Soils (DU5)	Soils (DU3)
09/11/17	0	0	0	0	0
09/12/17	0	0	0	0	0
09/13/17	0	0	0	0	0
09/14/17	0	0	0	0	0
09/15/17					
09/16/17					
Total to Date	13 loads	4 loads	0 loads	0 loads	9 loads

Table 3. Weekly Load Estimates

Date	Treated Demo Debris Loads to R2	Clean Concrete Loads to Crusher	Metal Debris Loads To Boneyard	Clean Wood Loads	Steel Debris Loaded onto Barge	~
09/11/17	0	0	0	0	0	
09/12/17	0	0	0	0	0	
09/13/17	0	0	0	0	12	
09/14/17	0	0	0	0	0	
09/15/17						
09/16/17						
Season Total	3 loads	0 loads	0 loads	4 loads	195 loads	

Table 4. Fire Hydrants, Pedestals and Monuments

Fire Hydrant Soil					Fire Hydrant Soil				
Fire Hydrant ID	Excavate	Sampled Collected FH # X 0-2"	Backfill	Notes-	Fire Hydrant ID	Excavate	Sampled Collected FH # X 0-2"	Backfill	Notes-
1					41				
2					42				
3					43				
4					44				
5					45				
6					46				
7					47				
8					48				
9					49				
10					50				
11	8/31/2017	9/4/2017		FH 11 0-2"	51	9/11/2017	9/11/2017		FH 51 0-2"
12					52	9/11/2017	9/11/2017		FH 52 0-2"
13					53	8/23/2017	8/23/2017		FH 53 0-2"
14					54	9/11/2017	9/11/2017		FH 54 0-2"re-ex
15					54A	8/23/2017	8/23/2017		FH 54A 0-2"
16					55	8/26/2017	8/26/2017		FH 55 0-2"
17					56	8/26/2017	8/30/2017		FH 56 0-2"
18					57	8/26/2017	8/26/2017		FH 57 0-2"
19					58	9/11/2017	9/11/2017		FH 58 0-2"
20					59				
21					60				
22					61				
23					62				
24					63				
25					64				
26					65	8/29/2017	8/30/2017		FH 65 0-2"
27					66	8/26/2017	8/26/2017		FH 66 0-2"
28					67	8/25/2017	8/30/2017		FH 67 0-2"
29					68	8/25/2017	8/30/2017		FH 68 0-2"
30					69				
31					70				
32					71				
33					72	8/29/2017			
34					73	8/29/2017	9/11/2017		FH 73 0-2"
35					74	8/29/2017	8/29/2017		FH 74 0-2"
36					75	8/28/2017	8/29/2017		FH 75 0-2"
37					76				
38					77	8/28/2017	8/29/2017		FH 77 0-2"
39									
40									

Pedestals /Monuments Soil					Pedestals /Monuments Soil				
Feature Unit ID	Excavate	Sampled Collected Unit # X 0-2"	Backfill	Notes-	Feature Unit ID	Excavate	Sampled Collected Unit # X 0-2"	Backfill	Notes-
1	8/29/2017	9/4/2017		1-08 0-2"	23				
2	8/29/2017	9/4/2017		2-08 0-2"	24				
3	8/29/2017	9/4/2017		3-10 0-2"	25				
4	8/29/2017	9/4/2017		4-10 0-2"	26				
5	8/29/2017	9/4/2017		5-11 0-2"	27				
6	9/11/2017	9/11/2017		6-510-2"	28				
7	9/11/2017	9/11/2017		7-32 0-2"	29				
8					30				
9					31				
10					32				
11					33				
12					34				
13					35				
14					36				
15					37				
16					38				
17					39				
18					40				
19					41				
20					42				
21					43				

Fire Hydrant ID # per updated DBSI file -Navy Fresh Water Lines, Valves & Hydrants. BSI/DR-0034
Pedestal sample identification is a designated ID number followed by a dash and double-digit number relative to the closest Fire Hydrant ID location. No full prior map of pedestals exists.

Table 5. DU 5 Buttress & Cover - Import Clean Coral Sand

DU 5 IMPORT CLEAN CORAL						
DATE	NORTH Wall Loads	SOUTH Wall Loads	EAST Wall Loads	WEST Wall Loads	Days total loads	Days cubic yardage
9/11/2017	0	0	0	0	0	0
9/12/2017	0	0	0	0	0	0
9/13/2017	0	0	0	0	0	0
9/14/2017	0	0	0	0	0	0
9/15/2017					0	0
9/16/2017					0	0
Load count per wall	279	0	0	0		
15cuyd estimate per wall	4185	0	0	0		
2017 Total R2 combined clean coral import LOADS				279		
Loads x 15cuyd estimate				4185		

Table 6. Excavation Plots - Import Clean Coral Sand

EXCAVATION PLOTS- IMPORT CLEAN CORAL BACKFILL							
DATE	DU-9 Loads	DU-8 Loads	DU-7 Loads	DU-5 Loads	DU-3 Loads	Days total loads	Days cubic yardage
9/11/2017	0	0	0	0	0	0	0
9/12/2017	2	0	0	0	0	2	30
9/13/2017	0	0	0	0	0	0	0
9/14/2017	0	0	0	0	0	0	0
9/15/2017						0	0
9/16/2017						0	0
Load count per column	39	22	9	0	0		
15cuyd estimate per column	585	330	135	0	0		
2017 Total combined clean import Backfill LOADS					70		
Loads x 15cuyd estimate					1050		

NW Demolition and Environmental
A Joint Venture

Daily Field Report

Date: Friday, September 15, 2017
Prepared by: Scott Wakefield

Project: Removal of Lead-Based Paint from Structures and Lead-Contaminated Soil
Location: Midway Atoll National Wildlife Refuge
Client: US Fish and Wildlife Service

Weather: Cloudy, wind 14 mph. Temperature ~81F

Personnel:

Name	Company	Site Hours
Scott Wakefield	NWDE Field Oversight	10
Jeff James	NWDE Supervisor	Partial
Mark Stoller	NWDE Supervisor	10
Joel Smith	NWDE Operator	Partial
Dalton Sullivan	NWDE Labor	Partial
Antonio Davis	NWDE Labor	10
Jevon Stone	NWDE Operator	10
Jose Ordaz	NWDE Operator	10
Matt Manning	NWDE Operator	0
Chris Fisher	NWDE Labor	10
Alan Phillips	NWDE Operator	0
Kevin Bach	NWDE Labor	10
Lucas Peel	NWDE Labor	10
Tyler Wilson	NWDE Labor	10
Eric Matteson	NWDE Operator	10

Visitors/Additional Site Personnel:

Name	Title
MaryAnn Amann	U.S. FWS

Equipment:

Description	Model No.	Comments / Serial #
Pickup Truck	F350 Service Truck	NWDE
Flatbed Truck	Ford F450	NWDE
Container Truck	Peterbuilt	NWDE
Skid Steer	Bobcat S185	NWDE
Tracked Skid Steer	Bobcat T750	NWDE
Tracked Skid Steer	Bobcat	NWDE
Mini-Excavator	CAT 308	NWDE
Excavator	Volvo EC290BLC	NWDE
Excavator	Volvo EC290BLC	NWDE
Excavator	Volvo EC290	NWDE
Off road Dump Truck	Volvo A30D	NWDE
Off road Dump Truck	Volvo A30D	NWDE
Off road Dump Truck	Volvo A30D	NWDE
Excavator – High reach	Komatsu PC400HD	NWDE
Excavator	Komatsu 450	NWDE

Materials Delivered:

Description	QTY	Condition/Comments
Diesel	0 gallons	
Gasoline	0 gallons	

Description of Work:

0700 – Health and Safety meeting at NAF staging area. Review today's work tasks.

Soil treatment at former Water Tower 5304 will begin this morning. Inspection for ground burrows in the access and work areas. Today's tasks will include application of Maectite and hydrant water to the pre-measured soil plots. The mini Cat excavator with 60" flat edged bucket provides the mixing method to blend the reagent and water to a uniform consistency. The focus is to treat the fall area and prescribed base footprint, followed up with hauling to the R2 Unit.

NWDE Vac trailer crew is setting up to resume the Water Plant excavation areas. This morning the work area is west of Bldg 3501 to remove soil surrounding the larger 12" water lines. Collected soils are dropped from the hopper directly into supersacks and staged nearby. These sacks then will be moved and emptied within the R2 Unit for future DU-9 soil treatment batch event #4.

Concrete foundation demo will begin at Bldg 5295 Hanger Aux Gen. Using the 290 excavator and hydro hammer, the generator footing pads are prepared. The top layer of Maectite® treated concrete/floor paint is being manually spalled off. After this removal task, the concrete will be process to a rubble size and hauled to the Boneyard area for future crushing event. The material is slated for the final R2 cover.
Spalled concrete materials will be collected and hauled to the R2 Unit.

1030 – Demo and rebar steel processing is occurring at Bldg 5295 Hanger Aux Gen. The foundation blocks are being downsized, steel separated and staged for loading out in an upcoming event.

Sand Vac trailer work is steadily removing sand. The day's end will see a total of 10.5 staged supersacks being moved to the R2 Unit.

1200 – Lunch

1230 – Continuation of soil Maectite® application and mixing within the tower fall zone. Here the soil is being treated and planned for removal. The process will be repeated in each sub plot working from the south to the north.

1330 – At DU-8 Fuel Farm, S28 and S30 former JP-5 ASTs. Re-mark the excavation areas in preparation to begin digging the re-excavations for each plot. This will address the past confirmation sampling lab results that indicated >75 mg/kg surrounding the tanks using MIS. Target grade cut of native soil is 0.5'. This additional re-ex is performed where the clean coral and backfill cap was removed and staged previously this season.

Supersacks are being emptied with materials making it to the R2 for future treatment. This action is freeing up sacks for cycling back under the Vac trailer work area at the Water Treatment site.

1545 – The 450 Komatsu excavator has been swapped out with the 290 Volvo. Swap bucket to the flat edged muck bucket for beginning excavation work at S30. This material is direct loaded into one of two A30 haul trucks and placed into the R2. This re-ex will remain in the R2, without treatment that is consistent with the re-excavation planning.

1615 - Bldg 5295 Hanger Aux Gen concrete is broken up. Move the hydro hammer to Bldg 502 AT&T to begin removal of the foundation concrete.

1700 – Vac trailer excavation work at the Water Treatment Plant has reached 9 supersacks being filled today, each at appx one cubic yard. These sacks will be moved to the R2 and sacks recycled back into the work flow as excavation goes forward.

1730 – Ending the work day.
Water Tower 5304 soil treatment is approximately 28% applied, yet to be hauled to the R2 Unit.
DU-9 soil moved today in supersacks is 10.5 cuyds.
DU-8 re-ex soil hauled to the R2 is 6 loads.

Photographs:

Photo 01: Bldg 5295 Hanger Aux Gen – View west. Processing the concrete generator footings

Photo 02: Bldg 5295 Hanger Aux Gen – View north. Processing the concrete generator footings

Photo 03: Bldg 502 AT&T – View south. Processing the concrete foundation footings

Photo 04: Water Tower 5304 – View north. Maectite® application to the tower fall area

Photo 05: Water Tower 5304 – View southwest. Days end, progression of soil treatment

Photo 06: Water Tower 5304 – View west. Days end, progression of soil treatment

Photo 07: R2 Cell 1&2 – View east. Current view of waste material in Cell 2 (foreground)

Photo 08: R2 Cell 3&4 – View east. Current view of waste material in Cell 4 (foreground)

Photo 09: S30 – View southeast. Beginning the re-ex of soil at the former JP-5 AST

Table 1. Maectite and Treated Soil Total Estimates

	Maectite Totals						Treated Soil Totals[1,2]		
	Applied Today (gal)					Total to Date	Excavated and Hauled to R-2 Unit **Today**		Excavated and Hauled to R-2 Unit **Total to Date**
Date	Soils (DU9)	Soils (DU8)	Soils (DU7)	Soils (DU5)	Soils (DU3)	(gal)	Load	^{3}yds[1]	^{3}yds[1]
09/11/17	581	0	0	0	0	1947	55	797	2670
09/12/17	129	0	0	0	0	2076	12.6	177	2847
09/13/17	0	0	0	0	0	2076	0	0	2847
09/14/17	0	0	0	0	0	2076	0	0	2847
09/15/17	168.5	0	0	0	0	2246	0	231	3078
09/16/17									
Total to Date	1886.5 gallons	205 gallons	153 gallons	0 gallons	0 gallons		223 loads		

Notes:
1. Estimates are based on the number of gallons of Maectite® applied.
2. Soil treatment with Maectite® and hauling to R2 may not occur on the same day.
3. 9/11/17 & 9/12/17– Table 2 loads were batch treated in the R2. Inserted this data into Table 1 for totalizing the volumes and gallons. Reset Table 2 "Batch loads" of 67.6 to zero until next ex-situ stockpile treatment.

2017 DU 9 – Figures P 1-16, 18, 20, 21, 23-27.
Bldg 1124, 1126, 3521, S361, 347, 3501, S3126, S3127, 521, 520, 502, 5342, 309, 340, 354, 9149, 232, 233, S269, S225A, 2127, 144, Boat House 1 & 2, 4205, 4206, 4207, 4213, 503, 5303, 5341, 5339, 5338, Bollards, Fire Hydrants, 5304, 5305, 4210, 3524, 3529, 5126, 5378, 3514, and other ancillary structures.
Foundations S464, 502, 4201, 5126, 5295, 5342.
2017 DU 8 – S-28, S-30 re-ex, Pipe figure P19
2017 DU 7 – Bldg 3502, 3503, 3504 shade cloth
2017 DU 5 – R2 Unit, Figure P17
2017 DU 3 – Housing figure P22, 419 MIS re-ex

Table 2. Soil loads hauled to the R2 for ex situ Maectite® treatment

	Load Totals				
	Hauled to R2 for treatment in R2 cell (# of truck loads)				
Date	Soils (DU9)	Soils (DU8)	Soils (DU7)	Soils (DU5)	Soils (DU3)
09/11/17	0	0	0	0	0
09/12/17	0.2	0	0	0	0
09/13/17	0	0	0	0	0
09/14/17	0	0	0	0	0
09/15/17	.75	0	0	0	0
09/16/17					
Batch loads to treat in R2	.95 loads	0 loads	0 loads	0 loads	0 loads
Total to Date	103.2 loads	34 loads	18.5 loads	0 loads	0 loads

8/14/17 - Batch treatment of all stockpiled "ex situ" loads to date in R2 Cell 1. Entered this data into Table 1 on 8/14/17 for volume and gallon tracking.
8/15/17 - Add "Batch Loads to treat in R2" subtotal that tracks the truck loads placed for treatment. Reset this to zero once treatment event is complete.
8/23/17 – Batch #2 treatment event of all stockpiled "ex situ" loads to date in R2 Cells. Entered this data into Table 1 on 8/23/17 for volume and gallon tracking.
9/12/17 – Batch #3 treatment event of all stockpiled "ex situ" loads to date in R2 Cells. Entered this data into Table 1 on 9/11/17 & 9/12/17 for volume and gallon tracking.

Table 2.1 Soil loads hauled to the R2, non-treated internment

Date	Load Totals				
	Hauled to R2, non-treated soil (# of truck loads)				
	Soils (DU9)	Soils (DU8)	Soils (DU7)	Soils (DU5)	Soils (DU3)
09/11/17	0	0	0	0	0
09/12/17	0	0	0	0	0
09/13/17	0	0	0	0	0
09/14/17	0	0	0	0	0
09/15/17	0	6	0	0	0
09/16/17					
Total to Date	13 loads	10 loads	0 loads	0 loads	9 loads

Table 3. Weekly Load Estimates

Date	Treated Demo Debris Loads to R2	Clean Concrete Loads to Crusher	Metal Debris Loads To Boneyard	Clean Wood Loads	Steel Debris Loaded onto Barge	~
09/11/17	0	0	0	0	0	
09/12/17	0	0	0	0	0	
09/13/17	0	0	0	0	12	
09/14/17	0	0	0	0	0	
09/15/17	0	0	0	0	0	
09/16/17						
Season Total	3 loads	0 loads	0 loads	4 loads	195 loads	

Table 4. Fire Hydrants, Pedestals and Monuments

Fire Hydrant Soil					Fire Hydrant Soil				
Fire Hydrant ID	Excavate	Sampled Collected FH # X 0-2"	Backfill	Notes-	Fire Hydrant ID	Excavate	Sampled Collected FH # X 0-2"	Backfill	Notes-
1					41				
2					42				
3					43				
4					44				
5					45				
6					46				
7					47				
8					48				
9					49				
10					50				
11	8/31/2017	9/4/2017		FH 11 0-2"	51	9/11/2017	9/11/2017		FH 51 0-2"
12					52	9/11/2017	9/11/2017		FH 52 0-2"
13					53	8/23/2017	8/23/2017		FH 53 0-2"
14					54	9/11/2017	9/11/2017		FH 54 0-2"re-ex
15					54A	8/23/2017	8/23/2017		FH 54A 0-2"
16					55	8/26/2017	8/26/2017		FH 55 0-2"
17					56	8/26/2017	8/30/2017		FH 56 0-2"
18					57	8/26/2017	8/26/2017		FH 57 0-2"
19					58	9/11/2017	9/11/2017		FH 58 0-2"
20					59				
21					60				
22					61				
23					62				
24					63				
25					64				
26					65	8/29/2017	8/30/2017		FH 65 0-2"
27					66	8/26/2017	8/26/2017		FH 66 0-2"
28					67	8/25/2017	8/30/2017		FH 67 0-2"
29					68	8/25/2017	8/30/2017		FH 68 0-2"
30					69				
31					70				
32					71				
33					72	8/29/2017			
34					73	8/29/2017	9/11/2017		FH 73 0-2"
35					74	8/29/2017	8/29/2017		FH 74 0-2"
36					75	8/28/2017	8/29/2017		FH 75 0-2"
37					76				
38					77	8/28/2017	8/29/2017		FH 77 0-2"
39									
40									

Pedestals /Monuments Soil					Pedestals /Monuments Soil				
Feature Unit ID	Excavate	Sampled Collected Unit # X 0-2"	Backfill	Notes-	Feature Unit ID	Excavate	Sampled Collected Unit # X 0-2"	Backfill	Notes-
1	8/29/2017	9/4/2017		1-08 0-2"	23				
2	8/29/2017	9/4/2017		2-08 0-2"	24				
3	8/29/2017	9/4/2017		3-10 0-2"	25				
4	8/29/2017	9/4/2017		4-10 0-2"	26				
5	8/29/2017	9/4/2017		5-11 0-2"	27				
6	9/11/2017	9/11/2017		6-510-2"	28				
7	9/11/2017	9/11/2017		7-32 0-2"	29				
8					30				
9					31				
10					32				
11					33				
12					34				
13					35				
14					36				
15					37				
16					38				
17					39				
18					40				
19					41				
20					42				
21					43				

Fire Hydrant ID # per updated DBSI file -Navy Fresh Water Lines, Valves & Hydrants. BSI/DR-0034
Pedestal sample identification is a designated ID number followed by a dash and double-digit number relative to the closest Fire Hydrant ID location. No full prior map of pedestals exists.

Table 5. DU 5 Buttress & Cover - Import Clean Coral Sand

DU 5 IMPORT CLEAN CORAL						
DATE	NORTH Wall Loads	SOUTH Wall Loads	EAST Wall Loads	WEST Wall Loads	Days total loads	Days cubic yardage
9/11/2017	0	0	0	0	0	0
9/12/2017	0	0	0	0	0	0
9/13/2017	0	0	0	0	0	0
9/14/2017	0	0	0	0	0	0
9/15/2017	0	0	0	0	0	0
9/16/2017					0	0
Load count per wall	279	0	0	0		
15cuyd estimate per wall	4185	0	0	0		
2017 Total R2 combined clean coral import LOADS				279		
Loads x 15cuyd estimate				4185		

Table 6. Excavation Plots - Import Clean Coral Sand

EXCAVATION PLOTS- IMPORT CLEAN CORAL BACKFILL							
DATE	DU-9 Loads	DU-8 Loads	DU-7 Loads	DU-5 Loads	DU-3 Loads	Days total loads	Days cubic yardage
9/11/2017	0	0	0	0	0	0	0
9/12/2017	2	0	0	0	0	2	30
9/13/2017	0	0	0	0	0	0	0
9/14/2017	0	0	0	0	0	0	0
9/15/2017	0	0	0	0	0	0	0
9/16/2017						0	0
Load count per column	39	22	9	0	0		
15cuyd estimate per column	585	330	135	0	0		
2017 Total combined clean import Backfill LOADS					70		
Loads x 15cuyd estimate					1050		

NW Demolition and Environmental
A Joint Venture

Daily Field Report

Date: Saturday, September 16, 2017
Prepared by: Scott Wakefield

Project: Removal of Lead-Based Paint from Structures and Lead-Contaminated Soil
Location: Midway Atoll National Wildlife Refuge
Client: US Fish and Wildlife Service

Weather: Cloudy, wind 14 mph. Temperature ~78F

Personnel:

Name	Company	Site Hours
Scott Wakefield	NWDE Field Oversight	10
Jeff James	NWDE Supervisor	Partial
Mark Stoller	NWDE Supervisor	10
Joel Smith	NWDE Operator	10
Dalton Sullivan	NWDE Labor	Partial
Antonio Davis	NWDE Labor	10
Jevon Stone	NWDE Operator	10
Jose Ordaz	NWDE Operator	10
Matt Manning	NWDE Operator	0
Chris Fisher	NWDE Labor	10
Alan Phillips	NWDE Operator	0
Kevin Bach	NWDE Labor	10
Lucas Peel	NWDE Labor	10
Tyler Wilson	NWDE Labor	10
Eric Matteson	NWDE Operator	10

Visitors/Additional Site Personnel:

Name	Title
MaryAnn Amann	U.S. FWS

Equipment:

Description	Model No.	Comments / Serial #
Pickup Truck	F350 Service Truck	NWDE
Flatbed Truck	Ford F450	NWDE
Container Truck	Peterbuilt	NWDE
Skid Steer	Bobcat S185	NWDE
Tracked Skid Steer	Bobcat T750	NWDE
Tracked Skid Steer	Bobcat	NWDE
Mini-Excavator	CAT 308	NWDE
Excavator	Volvo EC290BLC	NWDE
Excavator	Volvo EC290BLC	NWDE
Excavator	Volvo EC290	NWDE
Off road Dump Truck	Volvo A30D	NWDE
Off road Dump Truck	Volvo A30D	NWDE
Off road Dump Truck	Volvo A30D	NWDE
Excavator – High reach	Komatsu PC400HD	NWDE
Excavator	Komatsu 450	NWDE

Materials Delivered:

Description	QTY	Condition/Comments
Diesel	33 gallons	
Gasoline	0 gallons	

Description of Work:

0700 – Health and Safety meeting at NAF staging area. Review today's work tasks.

Soil treatment at former Water Tower 5304 will continue this today. Inspection for ground burrows in the access and work areas. Today's tasks will include application of Maectite and hydrant water to the pre-measured soil plots. The prescribed base area is being worked. Make arrangement for Monday to manage the identified shearwater burrows with US FWS as excavation work continues.

NWDE Vac trailer crew will resume the Water Plant excavation areas. Anticipating that the soil removal tasks at the Water Plant will wrap up later this afternoon. The intertwined areas of Bldgs 5301, 347, 3126 Reservoir and 3127 Reservoir have remained in excavation mode as the Vac trailer performance was being remedied with troubleshooting and parts repair. Currently the Vac trailer system has been performing satisfactorily to finish tight utility areas that the unit had been slated for.

Concrete foundation demo of Bldg 502 AT&T is moving along. The reinforcement rebar is partially sorted. NWDE intends to downsize this collected foundation rubble. At which time the crusher bucket will do the work to produce additional 3" armament. Hauling and crushing will occur at the Boneyard stockpile area.

The Fuel Farm DU-8, S30 re-ex activities will be occurring throughout the day. The excavator is cutting the additional 0.5' within the flagged soil plot. Materials are direct loaded into one of two A30 haul trucks to be placed in the R2 cell 1, sans treatment. Initially the non-treatment soil is placed in a tight windrow north of the E/W centerline. Planning is to use this relatively consistent sand and coral free of demo debris to be bladed nearest the final waste layer elevation to fit the needs of protecting the hydraulic membrane.

1000 – Concrete demolition using the Allied hydro hammer mounted on the 290 Volvo is wrapping up at Bldg 502 AT&T. Mobilize to Bldg 5126 Sewage Pump Station to begin breaking the concrete top and foundation 2.0' bgs. This vault described last season is approximately 15' deep. As the top concrete lid is broken up, the materials are allowed to fall into the vault as planned. Following this immediately will be clean sand backfill to fill in the void of the vault and reduce the fall hazard and wildlife entrapment.

1200 – Lunch

1230 – Work resumes at the multiple sites as tasks had begun this morning.

1330 – The concrete demo of Bldg 5126 Sewage Pump Station is done, ready to have clean backfill within the vault. Arrange truck and stockpiled sand for loading and hauling into the below ground vault.
Mobilize the 290 and hydro hammer to the Fuel Farm, Bldg S464 Fuel Oil Pump House for foundation demo work. This short steel reinforced concrete footing will be removed to the target 2.0' below finished grade.

1500 – Backfill three A30 truck loads of clean coral sand into Bldg 5126 Sewage Pump Station as planned.

1530 – Water Tower 5304 soil treatment activities have been ongoing to treat in place the pre measured areas. Maectite® continues to be applied at the .75 gallons per cubic yard of soil, supplemented with hydrant water at a rate consistent with the manufacturer's recommendation. The mini excavator and 5' straight edged bucket mechanically mix the materials to a consistent mixture before being knocked down flat again, staged for future excavation work to haul out.

1600 – Fuel Farm DU-8 re-ex at S30 has been ongoing today with one to two haul trucks. Being one of the largest square footage sites of this season, the former S30 AST foundation pad is worked around to cut 0.5' of native soil and haul to the R2 Cell 1. While most of the clean sand backfill cap was removed earlier this season, a small volume of clean sand still remains on top and is being exported to the R2 as expected. The Komatsu 450 with straight edged bucket keeps on task to cut grade. Heavy mil black poly liner remnants are being collected, shaken and swept, then staged for off island disposal.

The Water Treatment Plant building complex excavation work is done, ready for confirmation sampling collection. Move the supersacks to the central staging area that will allow them to be hauled to the R2 soon. The Vac trailer system and crew are mobilizing to Bldg 309 area to work on pending vacuum areas the trailer has been slated for. Set up at Bldg 309, Figure P10, sample point P3 that is positioned at in-use electrical conduits. The shallow 1.0' excavation will be potholed to identify the burial of electrical conduits.

1645 – Concrete foundation demo work for Bldg S464 Fuel Oil Pump House and Bldg 4201 JP-5 Pumping Station is wrapping up west of S30. This finishes the pending task to demo concrete held over from the 2016 work season for six sites; Bldgs 502, 5342, 5126, S464, 4201 and 5295.

Moving the 290 and Allied hammer back to the NAF staging area to change out for a bucket and circle around again to load out the processed concrete from each site in preparation for finalizing grades.

1730 – Ending the work day.
Water Tower 5304 soil treatment is approximately 49% applied, yet to be hauled to the R2 Unit.
DU-8 S30 re-ex soil hauled to the R2 is 18 loads, sans treatment.
DU-9 clean coral sand backfill (into Bldg 5126 Sewage Pump Station vault) is 3 loads.

Photographs:

Photo 01: Bldg 502 AT&T – View west. Processing the concrete footings

Photo 02: Bldg 5126 Sewage Pump Station – View northeast. Processing the concrete vault

Photo 03: Bldg 5126 Sewage Pump Station – View southwest. Concrete top demo, prior to sand backfill

Photo 04: Bldg S464 Fuel Oil Pump House – View north. Demo of the concrete foundation footings (left)

Photo 05: Bldg 4201 JP-5 Pumping Station – View north. Processing the concrete foundation footings

Photo 06: Bldg S464 Fuel Oil Pump House – View north. Processing the concrete foundation footings

Photo 07: S30 AST– View northeast. Re-ex of Fuel Farm at S30

Photo 08: 5303 R2 Unit – View south. Rough grade work of treated soil batch #3

Photo 09: S3126 W Reservoir – View northwest. Progress of Vac trailer work at Water Plant utilities

Photo 10: Bldg 354 Cannon. View east. Vac excavation at Bldg 309, Fig P10, sample point P3

Photo 11: Water Tower 5304 – View southwest. Progress of in-situ soil treatment prior to hauling

Table 1. Maectite and Treated Soil Total Estimates

	Maectite Totals						Treated Soil Totals[1,2]		
	Applied Today (gal)					Total to Date	Excavated and Hauled to R-2 Unit **Today**		Excavated and Hauled to R-2 Unit **Total to Date**
Date	Soils (DU9)	Soils (DU8)	Soils (DU7)	Soils (DU5)	Soils (DU3)	(gal)	Load	^{3}yds[1]	^{3}yds[1]
09/11/17	581	0	0	0	0	1947	55	797	2670
09/12/17	129	0	0	0	0	2076	12.6	177	2847
09/13/17	0	0	0	0	0	2076	0	0	2847
09/14/17	0	0	0	0	0	2076	0	0	2847
09/15/17	168.5	0	0	0	0	2246	0	231	3078
09/16/17	126.25	0	0	0	0	2371	0	173	3251
Total to Date	2013 gallons	205 gallons	153 gallons	0 gallons	0 gallons		223 loads		

Notes:
1. Estimates are based on the number of gallons of Maectite® applied.
2. Soil treatment with Maectite® and hauling to R2 may not occur on the same day.
3. 9/11/17 & 9/12/17– Table 2 loads were batch treated in the R2. Inserted this data into Table 1 for totalizing the volumes and gallons. Reset Table 2 "Batch loads" of 67.6 to zero until next ex-situ stockpile treatment.

2017 DU 9 – Figures P 1-16, 18, 20, 21, 23-27.
Bldg 1124, 1126, 3521, S361, 347, 3501, S3126, S3127, 521, 520, 502, 5342, 309, 340, 354, 9149, 232, 233, S269, S225A, 2127, 144, Boat House 1 & 2, 4205, 4206, 4207, 4213, 503, 5303, 5341, 5339, 5338, Bollards, Fire Hydrants, 5304, 5305, 4210, 3524, 3529, 5126, 5378, 3514, and other ancillary structures.
Foundations S464, 502, 4201, 5126, 5295, 5342.
2017 DU 8 – S-28, S-30 re-ex, Pipe figure P19
2017 DU 7 – Bldg 3502, 3503, 3504 shade cloth
2017 DU 5 – R2 Unit, Figure P17
2017 DU 3 – Housing figure P22, 419 MIS re-ex

Table 2. Soil loads hauled to the R2 for ex situ Maectite® treatment

	Load Totals				
	Hauled to R2 for treatment in R2 cell (# of truck loads)				
Date	Soils (DU9)	Soils (DU8)	Soils (DU7)	Soils (DU5)	Soils (DU3)
09/11/17	0	0	0	0	0
09/12/17	0.2	0	0	0	0
09/13/17	0	0	0	0	0
09/14/17	0	0	0	0	0
09/15/17	.75	0	0	0	0
09/16/17	0	0	0	0	0
Batch loads to treat in R2	.95 loads	0 loads	0 loads	0 loads	0 loads
Total to Date	103.2 loads	34 loads	18.5 loads	0 loads	0 loads

8/14/17 - Batch treatment of all stockpiled "ex situ" loads to date in R2 Cell 1. Entered this data into Table 1 on 8/14/17 for volume and gallon tracking.
8/15/17 - Add "Batch Loads to treat in R2" subtotal that tracks the truck loads placed for treatment. Reset this to zero once treatment event is complete.
8/23/17 – Batch #2 treatment event of all stockpiled "ex situ" loads to date in R2 Cells. Entered this data into Table 1 on 8/23/17 for volume and gallon tracking.
9/12/17 – Batch #3 treatment event of all stockpiled "ex situ" loads to date in R2 Cells. Entered this data into Table 1 on 9/11/17 & 9/12/17 for volume and gallon tracking.

Table 2.1 Soil loads hauled to the R2, non-treated internment

Date	Load Totals				
	Hauled to R2, non-treated soil (# of truck loads)				
	Soils (DU9)	Soils (DU8)	Soils (DU7)	Soils (DU5)	Soils (DU3)
09/11/17	0	0	0	0	0
09/12/17	0	0	0	0	0
09/13/17	0	0	0	0	0
09/14/17	0	0	0	0	0
09/15/17	0	6	0	0	0
09/16/17	0	0	0	0	0
Total to Date	13 loads	10 loads	0 loads	0 loads	9 loads

Table 3. Weekly Load Estimates

Date	Treated Demo Debris Loads to R2	Clean Concrete Loads to Crusher	Metal Debris Loads To Boneyard	Clean Wood Loads	Steel Debris Loaded onto Barge	~
09/11/17	0	0	0	0	0	
09/12/17	0	0	0	0	0	
09/13/17	0	0	0	0	12	
09/14/17	0	0	0	0	0	
09/15/17	0	0	0	0	0	
09/16/17	0	0	0	0	0	
Season Total	3 loads	0 loads	0 loads	4 loads	195 loads	

Table 4. Fire Hydrants, Pedestals and Monuments

Fire Hydrant Soil					Fire Hydrant Soil				
Fire Hydrant ID	Excavate	Sampled Collected FH # X 0-2"	Backfill	Notes-	Fire Hydrant ID	Excavate	Sampled Collected FH # X 0-2"	Backfill	Notes-
1					41				
2					42				
3					43				
4					44				
5					45				
6					46				
7					47				
8					48				
9					49				
10					50				
11	8/31/2017	9/4/2017		FH 11 0-2"	51	9/11/2017	9/11/2017		FH 51 0-2"
12					52	9/11/2017	9/11/2017		FH 52 0-2"
13					53	8/23/2017	8/23/2017		FH 53 0-2"
14					54	9/11/2017	9/11/2017		FH 54 0-2"re-ex
15					54A	8/23/2017	8/23/2017		FH 54A 0-2"
16					55	8/26/2017	8/26/2017		FH 55 0-2"
17					56	8/26/2017	8/30/2017		FH 56 0-2"
18					57	8/26/2017	8/26/2017		FH 57 0-2"
19					58	9/11/2017	9/11/2017		FH 58 0-2"
20					59				
21					60				
22					61				
23					62				
24					63				
25					64				
26					65	8/29/2017	8/30/2017		FH 65 0-2"
27					66	8/26/2017	8/26/2017		FH 66 0-2"
28					67	8/25/2017	8/30/2017		FH 67 0-2"
29					68	8/25/2017	8/30/2017		FH 68 0-2"
30					69				
31					70				
32					71				
33					72	8/29/2017			
34					73	8/29/2017	9/11/2017		FH 73 0-2"
35					74	8/29/2017	8/29/2017		FH 74 0-2"
36					75	8/28/2017	8/29/2017		FH 75 0-2"
37					76				
38					77	8/28/2017	8/29/2017		FH 77 0-2"
39									
40									

Pedestals /Monuments Soil					Pedestals /Monuments Soil				
Feature Unit ID	Excavate	Sampled Collected Unit # X 0-2"	Backfill	Notes-	Feature Unit ID	Excavate	Sampled Collected Unit # X 0-2"	Backfill	Notes-
1	8/29/2017	9/4/2017		1-08 0-2"	23				
2	8/29/2017	9/4/2017		2-08 0-2"	24				
3	8/29/2017	9/4/2017		3-10 0-2"	25				
4	8/29/2017	9/4/2017		4-10 0-2"	26				
5	8/29/2017	9/4/2017		5-11 0-2"	27				
6	9/11/2017	9/11/2017		6-51 0-2"	28				
7	9/11/2017	9/11/2017		7-32 0-2"	29				
8					30				
9					31				
10					32				
11					33				
12					34				
13					35				
14					36				
15					37				
16					38				
17					39				
18					40				
19					41				
20					42				
21					43				

Fire Hydrant ID # per updated DBSI file -Navy Fresh Water Lines, Valves & Hydrants. BSI/DR-0034
Pedestal sample identification is a designated ID number followed by a dash and double-digit number relative to the closest Fire Hydrant ID location. No full prior map of pedestals exists.

Table 5. DU 5 Buttress & Cover - Import Clean Coral Sand

DU 5 IMPORT CLEAN CORAL						
DATE	NORTH Wall Loads	SOUTH Wall Loads	EAST Wall Loads	WEST Wall Loads	Days total loads	Days cubic yardage
9/11/2017	0	0	0	0	0	0
9/12/2017	0	0	0	0	0	0
9/13/2017	0	0	0	0	0	0
9/14/2017	0	0	0	0	0	0
9/15/2017	0	0	0	0	0	0
9/16/2017	0	0	0	0	0	0
Load count per wall	279	0	0	0		
15cuyd estimate per wall	4185	0	0	0		
2017 Total R2 combined clean coral import LOADS				279		
Loads x 15cuyd estimate				4185		

Table 6. Excavation Plots - Import Clean Coral Sand

EXCAVATION PLOTS- IMPORT CLEAN CORAL BACKFILL							
DATE	DU-9 Loads	DU-8 Loads	DU-7 Loads	DU-5 Loads	DU-3 Loads	Days total loads	Days cubic yardage
9/11/2017	0	0	0	0	0	0	0
9/12/2017	2	0	0	0	0	2	30
9/13/2017	0	0	0	0	0	0	0
9/14/2017	0	0	0	0	0	0	0
9/15/2017	0	0	0	0	0	0	0
9/16/2017	3	0	0	0	0	3	45
Load count per column	42	22	9	0	0		
15cuyd estimate per column	630	330	135	0	0		
2017 Total combined clean import Backfill LOADS					73		
Loads x 15cuyd estimate					1095		

NW Demolition and Environmental
A Joint Venture

Daily Field Report

Date: Sunday, September 17, 2017
Prepared by: Scott Wakefield

Project: Removal of Lead-Based Paint from Structures and Lead-Contaminated Soil
Location: Midway Atoll National Wildlife Refuge
Client: US Fish and Wildlife Service

Weather: Cloudy, wind 14 mph. Temperature ~78F

Personnel:

Name	Company	Site Hours
Scott Wakefield	NWDE Field Oversight	10
Jeff James	NWDE Supervisor	0
Mark Stoller	NWDE Supervisor	0
Joel Smith	NWDE Operator	0
Dalton Sullivan	NWDE Labor	0
Antonio Davis	NWDE Labor	0
Jevon Stone	NWDE Operator	0
Jose Ordaz	NWDE Operator	0
Matt Manning	NWDE Operator	0
Chris Fisher	NWDE Labor	0
Alan Phillips	NWDE Operator	0
Kevin Bach	NWDE Labor	0
Lucas Peel	NWDE Labor	0
Tyler Wilson	NWDE Labor	0
Eric Matteson	NWDE Operator	0

Visitors/Additional Site Personnel:

Name	Title
MaryAnn Amann	U.S. FWS

Equipment:

Description	Model No.	Comments / Serial #
Pickup Truck	F350 Service Truck	NWDE
Flatbed Truck	Ford F450	NWDE
Container Truck	Peterbuilt	NWDE
Skid Steer	Bobcat S185	NWDE
Tracked Skid Steer	Bobcat T750	NWDE
Tracked Skid Steer	Bobcat	NWDE
Mini-Excavator	CAT 308	NWDE
Excavator	Volvo EC290BLC	NWDE
Excavator	Volvo EC290BLC	NWDE
Excavator	Volvo EC290	NWDE
Off road Dump Truck	Volvo A30D	NWDE
Off road Dump Truck	Volvo A30D	NWDE
Off road Dump Truck	Volvo A30D	NWDE
Excavator – High reach	Komatsu PC400HD	NWDE
Excavator	Komatsu 450	NWDE

Materials Delivered:

Description	QTY	Condition/Comments
Diesel	0 gallons	
Gasoline	0 gallons	

Description of Work:

0700 – Health and Safety meeting at NAF staging area. Review today's work tasks.

Today will focus on confirmation sampling collection at completed areas. Include non-split duplicates for each.

1730 – Prepping for shipment and COC. The #4 shipment of confirmation samples are expected to depart Midway on Wednesday, September 20th to HNL, then Test America.
Samples that are likely not making the #4 COC will be; 5304 Water Tower, S30, S28, R2 Unit east and west re-ex, percentage of hydrants, percentage of pedestals and monuments. These areas will be in the #5 sample shipment, approximately 2 weeks after Sept 20th flight.

Samples collected today-

3521 P100 0-2"	3126 P103 0-2"	3521 P100 0-2" Dup	3126 P103 0-2" Dup
3521 P101 0-2"	3126 P104 0-2"	3521 P101 0-2" Dup	3126 P104 0-2" Dup
269 P101 0-2" Re-Ex	3126 P105 0-2"	269 P101 0-2" Re-Ex Dup	3126 P105 0-2" Dup
503 P101 0-2" Re-Ex	3127 P100 0-2"	503 P101 0-2" Re-Ex Dup	3127 P100 0-2" Dup
Bollard P100 0-2" Re-Ex	3127 P101 0-2"	Bollard P100 0-2" Re-Ex Dup	3127 P101 0-2" Dup
Pipe P106 0-2" Re-Ex A	3127 P102 0-2"	Pipe P106 0-2" Re-Ex A Dup	3127 P102 0-2" Dup
Pipe P106 0-2" Re-Ex B	3127 P103 0-2"	Pipe P106 0-2" Re-Ex B Dup	3127 P103 0-2" Dup
Pipe P107 0-2" Re-Ex A	3501 P100 0-2"	Pipe P107 0-2" Re-Ex A Dup	3501 P100 0-2" Dup
Pipe P107 0-2" Re-Ex B	3501 P101 0-2"	Pipe P107 0-2" Re-Ex B Dup	3501 P101 0-2" Dup
5378 P100 0-2"	3501 P102 0-2"	5378 P100 0-2" Dup	3501 P102 0-2" Dup
3514 P101 0-2" Re-Ex	3501 P103 0-2"	3514 P101 0-2" Re-Ex Dup	3501 P103 0-2" Dup
3126 P100 0-2"	347 P100 0-2"	3126 P100 0-2" Dup	347 P100 0-2" Dup
3126 P101 0-2"	347 P101 0-2"	3126 P101 0-2" Dup	347 P101 0-2" Dup
3126 P102 0-2"	347 P102 0-2"	3126 P102 0-2" Dup	347 P102 0-2" Dup

NW Demolition and Environmental
A Joint Venture

Daily Field Report

Date: Monday, September 18, 2017
Prepared by: Scott Wakefield

Project: Removal of Lead-Based Paint from Structures and Lead-Contaminated Soil
Location: Midway Atoll National Wildlife Refuge
Client: US Fish and Wildlife Service

Weather: Partly cloudy, wind 10 mph. Temperature ~80F

Personnel:

Name	Company	Site Hours
Scott Wakefield	NWDE Field Oversight	10
Jeff James	NWDE Supervisor	Partial
Mark Stoller	NWDE Supervisor	10
Joel Smith	NWDE Operator	10
Dalton Sullivan	NWDE Labor	0
Antonio Davis	NWDE Labor	10
Jevon Stone	NWDE Operator	10
Jose Ordaz	NWDE Operator	10
Matt Manning	NWDE Operator	0
Chris Fisher	NWDE Labor	10
Alan Phillips	NWDE Operator	0
Kevin Bach	NWDE Labor	10
Lucas Peel	NWDE Labor	10
Tyler Wilson	NWDE Labor	10
Eric Matteson	NWDE Operator	10

Visitors/Additional Site Personnel:

Name	Title
MaryAnn Amann	U.S. FWS

Equipment:

Description	Model No.	Comments / Serial #
Pickup Truck	F350 Service Truck	NWDE
Flatbed Truck	Ford F450	NWDE
Container Truck	Peterbuilt	NWDE
Skid Steer	Bobcat S185	NWDE
Tracked Skid Steer	Bobcat T750	NWDE
Tracked Skid Steer	Bobcat	NWDE
Mini-Excavator	CAT 308	NWDE
Excavator	Volvo EC290BLC	NWDE
Excavator	Volvo EC290BLC	NWDE
Excavator	Volvo EC290	NWDE
Off road Dump Truck	Volvo A30D	NWDE
Off road Dump Truck	Volvo A30D	NWDE
Off road Dump Truck	Volvo A30D	NWDE
Excavator – High reach	Komatsu PC400HD	NWDE
Excavator	Komatsu 450	NWDE

Materials Delivered:

Description	QTY	Condition/Comments
Diesel	0 gallons	
Gasoline	0 gallons	

Description of Work:

0700 – Health and Safety meeting at NAF staging area. Review today's work tasks.

Former Water Tower 5304 soil work will continue today for Maectite® application and mixing. At the days beginning Petrel burrows are inspected. US FWS is also onsite briefly to remove the shearwater chicks from burrows within the excavation work zone. They will be managing the birds during the digging and backfill phase which includes removal and replacement of three young birds in the evenings. Burrow boxes will be placed as needed to provide a shelter location by US FWS staff. Move out additional north section shade cloth ground covering and sandbags from the upcoming soil plots to treat today.

NWDE Vac trailer crew is continuing the small area near Bldg 309 Power Plant that began yesterday. Potholing to locate the live power utility followed by additional vac work to remove the target soil.

At DU-8 Fuel Farm, former S30 AST site re-excavation continues using the 450 with flat edged bucket and two haul trucks. This additional 0.5' cut of native soil is being direct loaded and hauled to the R2 Unit and stockpiled in a long windrow. Trips will continue nonstop through the day as soil is moved.

This morning the tracked skidsteer with claw bucket is moving the heavy HDPE poly liner from staged areas and loading into one haul truck. A partial load of this liner material is taken over to the NAF staging area for an ultimate disposal off island with project general construction debris.

0940 – Vac work northeast of Bldg 309 is wrapping up. The equipment is being moved to the southwest corner of the Power Plant on Branon Ave to begin vac work at the southern excavation limits. This location is suited for the Vac trailer due to in-use utilities, hard surfaces, limited access and stairway placement.

Former Water Tower 5304 is moving along as Maectite® and hydrant water are combined with mechanical mixing within the pre-measured plot areas. The western edge and southwest sections are being treated and prepared for hauling to the R2.

1200 – Lunch

1230 – Returning to each of the site respective tasks.

S30 AST re-excavation is nearing completion. The Komatsu 450 will decon and then mobilize north to S28 AST. Repeating the re-ex work, S28 will be cut an additional 0.5' of native soil from the excavation plot, followed with confirmation sampling collection. This action is to meet confirmation target of <75 mg/kg.

1500 – Vac work near the Power Plant southwest corner utilities is progressing forward. As the system removes soil, it collects and drops from the baghouse into 1 yard supersacks. These bags are then staged for future transporting to the R2 unit for a batch treatment event.

1600 – The Water Tower 5304 soil treatment plots are being loaded out using both the mini excavator and 290 Volvo. Beginning at the southern fall zone area, soil begins to be sent out to the R2 Unit cells.

1730 – Ending the work day. 2017 season volume estimate to date moved or treated is 4600 cuyds.
Water Tower 5304 soil treatment is approximately 85% applied, yet to be hauled to the R2 Unit.
DU-8 S30 re-ex soil hauled to the R2 is 18 loads, sans treatment. Totaling S30 at 42 loads.
DU-8 S28 re-ex soil hauled to the R2 is 9 loads, sans treatment. To continue tomorrow.
DU-9 soil moved to the R2 for future treatment is 0.75 loads.

Photographs:

Photo 01: Water Tower 5304 – View northwest. Maectite® application to pre-measured plot

Photo 02: DU-8 S30 – View east. Re-Excavation of site

Photo 03: DU-8 S30 – View northeast. Re-Excavation of site

Photo 04: DU-8 S28 – View north. Re-Excavation of site

Photo 05: DU-8 S28 – View west. Re-Excavation of site

Photo 06: Water Tower 5304 – View north. Begin hauling treated soil from the fall zone area

Table 1. Maectite and Treated Soil Total Estimates

	Maectite Totals						Treated Soil Totals[1,2]		
	Applied Today (gal)					Total to Date	Excavated and Hauled to R-2 Unit **Today**		Excavated and Hauled to R-2 Unit **Total to Date**
Date	Soils (DU9)	Soils (DU8)	Soils (DU7)	Soils (DU5)	Soils (DU3)	(gal)	Load	^{3}yds[1]	^{3}yds[1]
09/18/17	220.25	0	0	0	0	2591	0	302	3552
09/19/17									
09/20/17									
09/21/17									
09/22/17									
09/23/17									
Total to Date	2233 gallons	205 gallons	153 gallons	0 gallons	0 gallons		223 loads		

Notes:
1. Estimates are based on the number of gallons of Maectite® applied.
2. Soil treatment with Maectite® and hauling to R2 may not occur on the same day.
3. 9/11/17 & 9/12/17– Table 2 loads were batch treated in the R2. Inserted this data into Table 1 for totalizing the volumes and gallons. Reset Table 2 "Batch loads" of 67.6 to zero until next ex-situ stockpile treatment.

2017 DU 9 – Figures P 1-16, 18, 20, 21, 23-27.
Bldg 1124, 1126, 3521, S361, 347, 3501, S3126, S3127, 521, 520, 502, 5342, 309, 340, 354, 9149, 232, 233, S269, S225A, 2127, 144, Boat House 1 & 2, 4205, 4206, 4207, 4213, 503, 5303, 5341, 5339, 5338, Bollards, Fire Hydrants, 5304, 5305, 4210, 3524, 3529, 5126, 5378, 3514, and other ancillary structures.
Foundations S464, 502, 4201, 5126, 5295, 5342.
2017 DU 8 – S-28, S-30 re-ex, Pipe figure P19
2017 DU 7 – Bldg 3502, 3503, 3504 shade cloth
2017 DU 5 – R2 Unit, Figure P17
2017 DU 3 – Housing figure P22, 419 MIS re-ex

Table 2. Soil loads hauled to the R2 for ex situ Maectite® treatment

	Load Totals				
	Hauled to R2 for treatment in R2 cell (# of truck loads)				
Date	Soils (DU9)	Soils (DU8)	Soils (DU7)	Soils (DU5)	Soils (DU3)
09/18/17	.75	0	0	0	0
09/19/17					
09/20/17					
09/21/17					
09/22/17					
09/23/17					
Batch loads to treat in R2	1.7 loads	0 loads	0 loads	0 loads	0 loads
Total to Date	103.8 loads	34 loads	18.5 loads	0 loads	0 loads

8/14/17 - Batch treatment of all stockpiled "ex situ" loads to date in R2 Cell 1. Entered this data into Table 1 on 8/14/17 for volume and gallon tracking.
8/15/17 - Add "Batch Loads to treat in R2" subtotal that tracks the truck loads placed for treatment. Reset this to zero once treatment event is complete.
8/23/17 – Batch #2 treatment event of all stockpiled "ex situ" loads to date in R2 Cells. Entered this data into Table 1 on 8/23/17 for volume and gallon tracking.
9/12/17 – Batch #3 treatment event of all stockpiled "ex situ" loads to date in R2 Cells. Entered this data into Table 1 on 9/11/17 & 9/12/17 for volume and gallon tracking.

Table 2.1 Soil loads hauled to the R2, non-treated internment

Date	Load Totals				
	Hauled to R2, non-treated soil (# of truck loads)				
	Soils (DU9)	Soils (DU8)	Soils (DU7)	Soils (DU5)	Soils (DU3)
09/18/17	0	27 (+18 on 9.16.17)	0	0	0
09/19/17					
09/20/17					
09/21/17					
09/22/17					
09/23/17					
Total to Date	13 loads	55 loads	0 loads	0 loads	9 loads

Table 3. Weekly Load Estimates

Date	Treated Demo Debris Loads to R2	Clean Concrete Loads to Crusher	Metal Debris Loads To Boneyard	Clean Wood Loads	Steel Debris Loaded onto Barge	~
09/18/17	0	0	0	0	0	
09/19/17						
09/20/17						
09/21/17						
09/22/17						
09/23/17						
Season Total	3 loads	0 loads	0 loads	4 loads	195 loads	

Table 4. Fire Hydrants, Pedestals and Monuments

Fire Hydrant Soil					Fire Hydrant Soil				
Fire Hydrant ID	Excavate	Sampled Collected FH # X 0-2"	Backfill	Notes- Red >75mg/kg Green<75mg/kg	Fire Hydrant ID	Excavate	Sampled Collected FH # X 0-2"	Backfill	Notes- Red >75mg/kg Green<75mg/kg
1					41				
2					42				
3					43				
4					44				
5					45				
6					46				
7					47				
8					48				
9					49				
10					50				
11	8/31/2017	9/4/2017		FH 11 0-2"	51	9/11/2017	9/11/2017		FH 51 0-2"
12					52	9/11/2017	9/11/2017		FH 52 0-2"
13					53	8/23/2017	8/23/2017		FH 53 0-2"
14					54	9/11/2017	9/11/2017		FH 54 0-2"re-ex
15					54A	8/23/2017	8/23/2017		FH 54A 0-2"
16					55	8/26/2017	8/26/2017		FH 55 0-2"
17					56	8/26/2017	8/30/2017		FH 56 0-2"
18					57	8/26/2017	8/26/2017		FH 57 0-2"
19					58	9/11/2017	9/11/2017		FH 58 0-2"
20					59				
21					60				
22					61				
23					62				
24					63				
25					64				
26					65	8/29/2017	8/30/2017		FH 65 0-2"
27					66	8/26/2017	8/26/2017		FH 66 0-2"
28					67	8/25/2017	8/30/2017		FH 67 0-2"
29					68	8/25/2017	8/30/2017		FH 68 0-2"
30					69				
31					70				
32					71				
33					72	8/29/2017			
34					73	8/29/2017	9/11/2017		FH 73 0-2"
35					74	8/29/2017	8/29/2017		FH 74 0-2"
36					75	8/28/2017	8/29/2017		FH 75 0-2"
37					76				
38					77	8/28/2017	8/29/2017		FH 77 0-2"
39									
40									

Pedestals /Monuments Soil					Pedestals /Monuments Soil				
Feature Unit ID	Excavate	Sampled Collected Unit # X 0-2"	Backfill	Notes- Red >75mg/kg Green<75mg/kg	Feature Unit ID	Excavate	Sampled Collected Unit # X 0-2"	Backfill	Notes- Red >75mg/kg Green<75mg/kg
1	8/29/2017	9/4/2017		1-08 0-2"	23				
2	8/29/2017	9/4/2017		2-08 0-2"	24				
3	8/29/2017	9/4/2017		3-10 0-2"	25				
4	8/29/2017	9/4/2017		4-10 0-2"	26				
5	8/29/2017	9/4/2017		5-11 0-2"	27				
6	9/11/2017	9/11/2017		6-51 0-2"	28				
7	9/11/2017	9/11/2017		7-32 0-2"	29				
8					30				
9					31				
10					32				
11					33				
12					34				
13					35				
14					36				
15					37				
16					38				
17					39				
18					40				
19					41				
20					42				
21					43				

Fire Hydrant ID # per updated DBSI file -Navy Fresh Water Lines, Valves & Hydrants. BSI/DR-0034
Pedestal sample identification is a designated ID number followed by a dash and double-digit number relative to the closest Fire Hydrant ID location. No full prior map of pedestals exists.

Table 5. DU 5 Buttress & Cover - Import Clean Coral Sand

DU 5 IMPORT CLEAN CORAL						
DATE	NORTH Wall Loads	SOUTH Wall Loads	EAST Wall Loads	WEST Wall Loads	Days total loads	Days cubic yardage
9/18/2017	0	0	0	0	0	0
9/19/2017					0	0
9/20/2017					0	0
9/21/2017					0	0
9/22/2017					0	0
9/23/2017					0	0
Load count per wall	279	0	0	0		
15cuyd estimate per wall	4185	0	0	0		
2017 Total R2 combined clean coral import LOADS				279		
Loads x 15cuyd estimate				4185		

Table 6. Excavation Plots - Import Clean Coral Sand

EXCAVATION PLOTS- IMPORT CLEAN CORAL BACKFILL							
DATE	DU-9 Loads	DU-8 Loads	DU-7 Loads	DU-5 Loads	DU-3 Loads	Days total loads	Days cubic yardage
9/18/2017	0	0	0	0	0	0	0
9/19/2017						0	0
9/20/2017						0	0
9/21/2017						0	0
9/22/2017						0	0
9/23/2017						0	0
Load count per column	42	22	9	0	0		
15cuyd estimate per column	630	330	135	0	0		
2017 Total combined clean import Backfill LOADS					73		
Loads x 15cuyd estimate					1095		

Daily Field Report

Date: Tuesday, September 19, 2017
Prepared by: Scott Wakefield

Project: Removal of Lead-Based Paint from Structures and Lead-Contaminated Soil
Location: Midway Atoll National Wildlife Refuge
Client: US Fish and Wildlife Service

Weather: Partly cloudy, wind 10 mph. Temperature ~80F

Personnel:

Name	Company	Site Hours
Scott Wakefield	NWDE Field Oversight	10
Jeff James	NWDE Supervisor	Partial
Mark Stoller	NWDE Supervisor	10
Darin Leibelt	NWDE Supervisor	-
Joel Smith	NWDE Operator	10
Dalton Sullivan	NWDE Labor	0
Antonio Davis	NWDE Labor	10
Jevon Stone	NWDE Operator	10
Jose Ordaz	NWDE Operator	10
Matt Manning	NWDE Operator	0
Chris Fisher	NWDE Labor	10
Alan Phillips	NWDE Operator	0
Kevin Bach	NWDE Labor	10
Lucas Peel	NWDE Labor	10
Tyler Wilson	NWDE Labor	10
Eric Matteson	NWDE Operator	10

Visitors/Additional Site Personnel:

Name	Title
MaryAnn Amann	U.S. FWS

Equipment:

Description	Model No.	Comments / Serial #
Pickup Truck	F350 Service Truck	NWDE
Flatbed Truck	Ford F450	NWDE
Container Truck	Peterbuilt	NWDE
Skid Steer	Bobcat S185	NWDE
Tracked Skid Steer	Bobcat T750	NWDE
Tracked Skid Steer	Bobcat	NWDE
Mini-Excavator	CAT 308	NWDE
Excavator	Volvo EC290BLC	NWDE
Excavator	Volvo EC290BLC	NWDE
Excavator	Volvo EC290	NWDE
Off road Dump Truck	Volvo A30D	NWDE
Off road Dump Truck	Volvo A30D	NWDE
Off road Dump Truck	Volvo A30D	NWDE
Excavator – High reach	Komatsu PC400HD	NWDE
Excavator	Komatsu 450	NWDE

Materials Delivered:

Description	QTY	Condition/Comments
Diesel	358 gallons	9/19/17
Diesel	98 gallons	9/18/17
Gasoline	0 gallons	

Description of Work:

0700 – Health and Safety meeting at NAF staging area. Review today's work tasks.
Edit – Yesterday's notation at 1730 regarding the Water Tower 5304 Maectite® application progress should have read "*Water Tower 5304 soil treatment is 100% applied, yet to be hauled to the R2 Unit.*"

Former Water Tower 5304 soil excavation and hauling of the treated plots surrounding the removed structure and fall zone work area pick up where left off after yesterday's start. The Volvo haul trucks are being direct loaded with treated soil, driven to the R2 and dumped in Cell 1 and Cell 2 today. This material is relatively sandy coral, free of large rocks or demo debris. Two excavators are in use to cut grade and load in sequence. Two to three A30 trucks are repeating trips through the day.

NWDE Vac trailer crew is positioned at the west wall of Bldg 309 Power Plant for working the area below the generator external steel supports, air filters and exhaust piping. The surface of the ground below the structure has shown to be a hard surface covered with sparse ¾" to 1" minus. As directed by US FWS, the loose materials are being collected and vac'd under this painted steel structure to clear down to the solid surface. Shovels scrape together debris as the vac hose draws the material up and into the collection system. The very limited space work area, backup Cat generator coolant piping and pipe support footings coupled with the hard oiled ground create a variance for the proposed sample/prescriptive 1' excavation plot. The hard surface is limiting petrel activities in this area. The Team is proposing to place a demarcation layer on top of this remaining cleared hard surface prior to clean coral sand backfill.

DU-8 Fuel Farm S28 re-ex began yesterday and will finish out today for the digging task. To be followed up with confirmation sampling.

0800 – Confirmation sample collection at S30 AST. The larger square footage plot is divided into 8 smaller sub plots to collectively define the site once lab result data is processed.

0940 – Cinco Air charter flight arrival at PMDY. D.Leibelt, NWDE has arrived for project work.

1032 – Water Tower 5304 soil excavation of treated materials commenced at the southern 120' x 49' fall zone area, working northward.

1200 – Lunch

1230 - Confirmation sample collection at S28 AST. The larger square footage plot is divided into 6 smaller sub plots to collectively define the site once lab result data is processed.

1400 – Soil excavation work progressed forward at the Water Tower 5304. The shallow 0.5' cut area is complimented with a 1.0' excavation at the impact and steel processing area. Material is removed and loaded out. Inspections area being made of the soil as grade is cut for identifying any debris remenants.

1500 – Bldg 309 Power Plant Vac trailer work continues at the southern side. Target soil is loosened and then vac'd up. Hard surface concrete that is a short containment for Plant tanks is cleared with the vacuum.

1600 – Soil removed at the fall zone of Water Tower 5304 is done. Begin confirmation sampling of the smaller sub plots for the work area. The 130' x 130' tower base region plus the 120' x 49' fall zone have

been divided into 13 areas for sample collection. Today four of the sub plots are ready for collection and are making it out on tomorrow's flight.

Breaking out sub plots of the larger soil excavation area will aid to limit potential soil volume re-ex and placement into the R2 Cells as the R2 final cap work activities and lab result data merge in the next few weeks.

1730 – Ending the work day. 2017 season volume estimate to date moved or treated is 4722 cuyds.
Water Tower 5304 soil excavation is approximately 13% complete.
DU-8 S28 re-ex soil hauled to the R2 is 7 loads, sans treatment.
DU-9 soil moved to the R2 for future treatment is 0.25 loads.

Photographs:

Photo 01: S30 DU-8 Fuel Farm – View south. Re-ex complete

Photo 02: 309 Power Plant – View northeast. Vac trailer work at west wall steel structure

Photo 03: 309 Power Plant – View north. Vac trailer work at west wall steel structure

Photo 04: S28 DU-8 Fuel Farm – View east. Re-ex complete

Photo 05: Water Tower 5304 – View southwest. Progress of hauling treated soil

Photo 06: Water Tower 5304 – View north. Progress of hauling treated soil from fall zone

Table 1. Maectite and Treated Soil Total Estimates

	Maectite Totals						Treated Soil Totals[1,2]		
	Applied Today (gal)					Total to Date	Excavated and Hauled to R-2 Unit **Today**		Excavated and Hauled to R-2 Unit **Total to Date**
Date	Soils (DU9)	Soils (DU8)	Soils (DU7)	Soils (DU5)	Soils (DU3)	(gal)	Load	^{3}yds[1]	^{3}yds[1]
09/18/17	220.25	0	0	0	0	2591	0	302	3552
09/19/17	0	0	0	0	0	2591	35	0	3552
09/20/17									
09/21/17									
09/22/17									
09/23/17									
Total to Date	2233 gallons	205 gallons	153 gallons	0 gallons	0 gallons		258 loads		

Notes:
1. Estimates are based on the number of gallons of Maectite® applied.
2. Soil treatment with Maectite® and hauling to R2 may not occur on the same day.
3. 9/11/17 & 9/12/17– Table 2 loads were batch treated in the R2. Inserted this data into Table 1 for totalizing the volumes and gallons. Reset Table 2 "Batch loads" of 67.6 to zero until next ex-situ stockpile treatment.

2017 DU 9 – Figures P 1-16, 18, 20, 21, 23-27.
Bldg 1124, 1126, 3521, S361, 347, 3501, S3126, S3127, 521, 520, 502, 5342, 309, 340, 354, 9149, 232, 233, S269, S225A, 2127, 144, Boat House 1 & 2, 4205, 4206, 4207, 4213, 503, 5303, 5341, 5339, 5338, Bollards, Fire Hydrants, 5304, 5305, 4210, 3524, 3529, 5126, 5378, 3514, and other ancillary structures.
Foundations S464, 502, 4201, 5126, 5295, 5342.
2017 DU 8 – S-28, S-30 re-ex, Pipe figure P19
2017 DU 7 – Bldg 3502, 3503, 3504 shade cloth
2017 DU 5 – R2 Unit, Figure P17
2017 DU 3 – Housing figure P22, 419 MIS re-ex

Table 2. Soil loads hauled to the R2 for ex situ Maectite® treatment

	Load Totals				
	Hauled to R2 for treatment in R2 cell (# of truck loads)				
Date	Soils (DU9)	Soils (DU8)	Soils (DU7)	Soils (DU5)	Soils (DU3)
09/18/17	.75	0	0	0	0
09/19/17	.25	0	0	0	0
09/20/17					
09/21/17					
09/22/17					
09/23/17					
Batch loads to treat in R2	2 loads	0 loads	0 loads	0 loads	0 loads
Total to Date	103.8 loads	34 loads	18.5 loads	0 loads	0 loads

8/14/17 - Batch treatment of all stockpiled "ex situ" loads to date in R2 Cell 1. Entered this data into Table 1 on 8/14/17 for volume and gallon tracking.
8/15/17 - Add "Batch Loads to treat in R2" subtotal that tracks the truck loads placed for treatment. Reset this to zero once treatment event is complete.
8/23/17 – Batch #2 treatment event of all stockpiled "ex situ" loads to date in R2 Cells. Entered this data into Table 1 on 8/23/17 for volume and gallon tracking.
9/12/17 – Batch #3 treatment event of all stockpiled "ex situ" loads to date in R2 Cells. Entered this data into Table 1 on 9/11/17 & 9/12/17 for volume and gallon tracking.

Table 2.1 Soil loads hauled to the R2, non-treated internment

Date	Load Totals				
	Hauled to R2, non-treated soil (# of truck loads)				
	Soils (DU9)	Soils (DU8)	Soils (DU7)	Soils (DU5)	Soils (DU3)
09/18/17	0	27 (+18 on 9.16.17)	0	0	0
09/19/17	0	10	0	0	0
09/20/17					
09/21/17					
09/22/17					
09/23/17					
Total to Date	13 loads	65 loads	0 loads	0 loads	9 loads

Table 3. Weekly Load Estimates

Date	Treated Demo Debris Loads to R2	Clean Concrete Loads to Crusher	Metal Debris Loads To Boneyard	Clean Wood Loads	Steel Debris Loaded onto Barge	~
09/18/17	0	0	0	0	0	
09/19/17	0	5	0	0	0	
09/20/17						
09/21/17						
09/22/17						
09/23/17						
Season Total	3 loads	5 loads	0 loads	4 loads	195 loads	

Table 4. Fire Hydrants, Pedestals and Monuments

Fire Hydrant Soil					Fire Hydrant Soil				
Fire Hydrant ID	Excavate	Sampled Collected FH # X 0-2"	Backfill	Notes- Red >75mg/kg Green<75mg/kg	Fire Hydrant ID	Excavate	Sampled Collected FH # X 0-2"	Backfill	Notes- Red >75mg/kg Green<75mg/kg
1					41				
2					42				
3					43				
4					44				
5					45				
6					46				
7					47				
8					48				
9					49				
10					50				
11	8/31/2017	9/4/2017		FH 11 0-2"	51	9/11/2017	9/11/2017		FH 51 0-2"
12					52	9/11/2017	9/11/2017		FH 52 0-2"
13					53	8/23/2017	8/23/2017		FH 53 0-2"
14					54	9/11/2017	9/11/2017		FH 54 0-2"re-ex
15					54A	8/23/2017	8/23/2017		FH 54A 0-2"
16					55	8/26/2017	8/26/2017		FH 55 0-2"
17					56	8/26/2017	8/30/2017		FH 56 0-2"
18					57	8/26/2017	8/26/2017		FH 57 0-2"
19					58	9/11/2017	9/11/2017		FH 58 0-2"
20					59				
21					60				
22					61				
23					62				
24					63				
25					64				
26					65	8/29/2017	8/30/2017		FH 65 0-2"
27					66	8/26/2017	8/26/2017		FH 66 0-2"
28					67	8/25/2017	8/30/2017		FH 67 0-2"
29					68	8/25/2017	8/30/2017		FH 68 0-2"
30					69				
31					70				
32					71				
33					72	8/29/2017			
34					73	8/29/2017	9/11/2017		FH 73 0-2"
35					74	8/29/2017	8/29/2017		FH 74 0-2"
36					75	8/28/2017	8/29/2017		FH 75 0-2"
37					76				
38					77	8/28/2017	8/29/2017		FH 77 0-2"
39									
40									

Pedestals /Monuments Soil					Pedestals /Monuments Soil				
Feature Unit ID	Excavate	Sampled Collected Unit # X 0-2"	Backfill	Notes- Red >75mg/kg Green<75mg/kg	Feature Unit ID	Excavate	Sampled Collected Unit # X 0-2"	Backfill	Notes- Red >75mg/kg Green<75mg/kg
1	8/29/2017	9/4/2017		1-08 0-2"	23				
2	8/29/2017	9/4/2017		2-08 0-2"	24				
3	8/29/2017	9/4/2017		3-10 0-2"	25				
4	8/29/2017	9/4/2017		4-10 0-2"	26				
5	8/29/2017	9/4/2017		5-11 0-2"	27				
6	9/11/2017	9/11/2017		6-51 0-2"	28				
7	9/11/2017	9/11/2017		7-32 0-2"	29				
8					30				
9					31				
10					32				
11					33				
12					34				
13					35				
14					36				
15					37				
16					38				
17					39				
18					40				
19					41				
20					42				
21					43				

Fire Hydrant ID # per updated DBSI file -Navy Fresh Water Lines, Valves & Hydrants. BSI/DR-0034
Pedestal sample identification is a designated ID number followed by a dash and double-digit number relative to the closest Fire Hydrant ID location. No full prior map of pedestals exists.

Table 5. DU 5 Buttress & Cover - Import Clean Coral Sand

DU 5 IMPORT CLEAN CORAL						
DATE	NORTH Wall Loads	SOUTH Wall Loads	EAST Wall Loads	WEST Wall Loads	Days total loads	Days cubic yardage
9/18/2017	0	0	0	0	0	0
9/19/2017	0	0	0	0	0	0
9/20/2017					0	0
9/21/2017					0	0
9/22/2017					0	0
9/23/2017					0	0
Load count per wall	279	0	0	0		
15cuyd estimate per wall	4185	0	0	0		
2017 Total R2 combined clean coral import LOADS				279		
Loads x 15cuyd estimate				4185		

Table 6. Excavation Plots - Import Clean Coral Sand

EXCAVATION PLOTS- IMPORT CLEAN CORAL BACKFILL							
DATE	DU-9 Loads	DU-8 Loads	DU-7 Loads	DU-5 Loads	DU-3 Loads	Days total loads	Days cubic yardage
9/18/2017	0	0	0	0	0	0	0
9/19/2017	0	0	0	0	0	0	0
9/20/2017						0	0
9/21/2017						0	0
9/22/2017						0	0
9/23/2017						0	0
Load count per column	42	22	9	0	0		
15cuyd estimate per column	630	330	135	0	0		
2017 Total combined clean import Backfill LOADS					73		
Loads x 15cuyd estimate					1095		

Daily Field Report

Date: Wednesday, September 20, 2017
Prepared by: Scott Wakefield

Project: Removal of Lead-Based Paint from Structures and Lead-Contaminated Soil
Location: Midway Atoll National Wildlife Refuge
Client: US Fish and Wildlife Service

Weather: Partly cloudy, wind 5 mph. Temperature ~79F

Personnel:

Name	Company	Site Hours
Scott Wakefield	NWDE Field Oversight	10
Darin Leibelt	NWDE Supervisor	10
Joel Smith	NWDE Operator	10
Dalton Sullivan	NWDE Labor	Partial
Antonio Davis	NWDE Labor	10
Jevon Stone	NWDE Operator	10
Jose Ordaz	NWDE Operator	10
Matt Manning	NWDE Operator	0
Chris Fisher	NWDE Labor	10
Alan Phillips	NWDE Operator	0
Kevin Bach	NWDE Labor	10
Lucas Peel	NWDE Labor	10
Tyler Wilson	NWDE Labor	10
Eric Matteson	NWDE Operator	10

Visitors/Additional Site Personnel:

Name	Title
MaryAnn Amann	U.S. FWS

Equipment:

Description	Model No.	Comments / Serial #
Pickup Truck	F350 Service Truck	NWDE
Flatbed Truck	Ford F450	NWDE
Container Truck	Peterbuilt	NWDE
Skid Steer	Bobcat S185	NWDE
Tracked Skid Steer	Bobcat T750	NWDE
Tracked Skid Steer	Bobcat	NWDE
Mini-Excavator	CAT 308	NWDE
Excavator	Volvo EC290BLC	NWDE
Excavator	Volvo EC290BLC	NWDE
Excavator	Volvo EC290	NWDE
Off road Dump Truck	Volvo A30D	NWDE
Off road Dump Truck	Volvo A30D	NWDE
Off road Dump Truck	Volvo A30D	NWDE
Excavator – High reach	Komatsu PC400HD	NWDE
Excavator	Komatsu 450	NWDE

Materials Delivered:

Description	QTY	Condition/Comments
Diesel	170 gallons	
Gasoline	0 gallons	

Description of Work:

0700 – Health and Safety meeting at NAF staging area. Review today's work tasks.

Soil excavation continues at the former Water Tower 5304 work site. The 450 Komatsu with flat edged bucket and Cat 308 mini excavator are progressing to load soil into haul trucks headed to the R2, Cell 4. Treated soil loads are positioned in areas with prediction to final placement and rough grade.
US FWS continues management of the two shearwater birds in the western edge of the excavation plot.

NWDE Vac trailer crew is performing soil removal at Bldg 354 Cannon. The southern area plots were previously excavated to 1-2' using the mini excavator. Today the finish up work at limited space areas is being finished using the vac crew machine and hand labor.

Bldg 502 AT&T processed concrete material from the former building foundations is being loaded up with the 290 excavator, toothed bucket and thumb. Clean concrete material is being hauled out to the Boneyard armament pile for upcoming downsize work using the MB crusher bucket.

0930 – Cinco Air charter flight departs with J.James and M.Stoller, NWDE as previously scheduled. Outbound are confirmation samples to the lab.

Water Tower 5304 excavation of treated soil continues nearest the concrete footings. Materials are cut to the target 1.0' grade while both being loaded and slightly stockpiled as work space hurdles become more restrictive.

Concrete removal at Bldg 502 AT&T is complete, excluding the final exit scrape. Bldg 5342 Telephone Switch processed concrete is now being loaded out and hauled to the Boneyard staging area for future downsizing.

1000 – Weekly conference call with Mainland and Hawaii project offices. See NWDE Midway Meeting Agenda for specific detail.

1115 – Vac trailer operations at Bldg 354 Cannon are nearing completion. The northeast plot section has been worked over. Materials removed are collected and moved to the R2 Unit.

1200 - Lunch

1230 – The Vac trailer is picking up equipment and prepping to mobilize to the Water Tower 5304. Fine clearing of potentially impacted soil will be performed with the vac, including but limited to tree stump roots, concrete features and valve box surrounds.

The former Water Tower 5304 concrete footing area is having the final grade and soil removal performed. This includes cleaning materials off the concrete followed by the last cut. The center stem swept 90 el that oriented vertically into the Water Tower is also being hand dug to the 1.0' target removal.

1350 – Concrete loading of the hammered footings has finished out at the Fuel Farm area. Specifically, Bldg S464 Fuel Oil Pump House and 4201 JP-5 Pumping Station. This minimal concrete is the last of the six locations from the 2016 Season foundation footing specified removal task. To follow will be rebar clearing at each site and exit scrape.

1630 – Water Tower 5304 continues having both the final excavation cut at the base area southern plot, with Vac trailer activities occurring on the northern section. Both crews are productive to remove soil.

1730 – Ending the work day.
Water Tower 5304 soil excavation is approximately 85% complete.
DU-9 treated soil moved to the R2 from Water Tower 5304 is 13 loads.
Foundation concrete hauled out is 5 loads.

Photographs:

Photo 01: Confirmation soil samples – Two buckets ship off island to Test America

Photo 02: R2 Cell 3 – View west. Progression of import soil to cells

Photo 03: R2 Cell 2 – View east. Current view of Cell 2 (foreground) Cell 1 (background)

Photo 04: R2 Cell 2 – View south. Current view of Cell 3 and west entrance ramp

Photo 05: R2 Cell 2 – View southeast. Current view of Cell 2 (foreground) Cell 3/4 (background)

Photo 06: Water Tower 5304 – View northwest. Progress excavation and vac work

Photo 07: Water Tower 5304 – View south. Progress excavation and vac work

Table 1. Maectite and Treated Soil Total Estimates

	Maectite Totals						Treated Soil Totals[1,2]		
	Applied Today (gal)					Total to Date	Excavated and Hauled to R-2 Unit **Today**		Excavated and Hauled to R-2 Unit **Total to Date**
Date	Soils (DU9)	Soils (DU8)	Soils (DU7)	Soils (DU5)	Soils (DU3)	(gal)	Load	^{3}yds[1]	^{3}yds[1]
09/18/17	220.25	0	0	0	0	2591	0	302	3552
09/19/17	0	0	0	0	0	2591	35	0	3552
09/20/17	0	0	0	0	0	2591	13	0	3552
09/21/17									
09/22/17									
09/23/17									
Total to Date	2233 gallons	205 gallons	153 gallons	0 gallons	0 gallons		271 loads		

Notes:
1. Estimates are based on the number of gallons of Maectite® applied.
2. Soil treatment with Maectite® and hauling to R2 may not occur on the same day.
3. 9/11/17 & 9/12/17– Table 2 loads were batch treated in the R2. Inserted this data into Table 1 for totalizing the volumes and gallons. Reset Table 2 "Batch loads" of 67.6 to zero until next ex-situ stockpile treatment.

2017 DU 9 – Figures P 1-16, 18, 20, 21, 23-27.
Bldg 1124, 1126, 3521, S361, 347, 3501, S3126, S3127, 521, 520, 502, 5342, 309, 340, 354, 9149, 232, 233, S269, S225A, 2127, 144, Boat House 1 & 2, 4205, 4206, 4207, 4213, 503, 5303, 5341, 5339, 5338, Bollards, Fire Hydrants, 5304, 5305, 4210, 3524, 3529, 5126, 5378, 3514, and other ancillary structures.
Foundations S464, 502, 4201, 5126, 5295, 5342.
2017 DU 8 – S-28, S-30 re-ex, Pipe figure P19
2017 DU 7 – Bldg 3502, 3503, 3504 shade cloth
2017 DU 5 – R2 Unit, Figure P17
2017 DU 3 – Housing figure P22, 419 MIS re-ex

Table 2. Soil loads hauled to the R2 for ex situ Maectite® treatment

	Load Totals				
	Hauled to R2 for treatment in R2 cell (# of truck loads)				
Date	Soils (DU9)	Soils (DU8)	Soils (DU7)	Soils (DU5)	Soils (DU3)
09/18/17	.75	0	0	0	0
09/19/17	.25	0	0	0	0
09/20/17	0	0	0	0	0
09/21/17					
09/22/17					
09/23/17					
Batch loads to treat in R2	2 loads	0 loads	0 loads	0 loads	0 loads
Total to Date	103.8 loads	34 loads	18.5 loads	0 loads	0 loads

8/14/17 - Batch treatment of all stockpiled "ex situ" loads to date in R2 Cell 1. Entered this data into Table 1 on 8/14/17 for volume and gallon tracking.
8/15/17 - Add "Batch Loads to treat in R2" subtotal that tracks the truck loads placed for treatment. Reset this to zero once treatment event is complete.
8/23/17 – Batch #2 treatment event of all stockpiled "ex situ" loads to date in R2 Cells. Entered this data into Table 1 on 8/23/17 for volume and gallon tracking.
9/12/17 – Batch #3 treatment event of all stockpiled "ex situ" loads to date in R2 Cells. Entered this data into Table 1 on 9/11/17 & 9/12/17 for volume and gallon tracking.

Table 2.1 Soil loads hauled to the R2, non-treated internment

Date	Load Totals				
	Hauled to R2, non-treated soil (# of truck loads)				
	Soils (DU9)	Soils (DU8)	Soils (DU7)	Soils (DU5)	Soils (DU3)
09/18/17	0	27 (+18 on 9.16.17)	0	0	0
09/19/17	0	10	0	0	0
09/20/17	2	0	0	0	0
09/21/17					
09/22/17					
09/23/17					
Total to Date	15 loads	65 loads	0 loads	0 loads	9 loads

Table 3. Weekly Load Estimates

Date	Treated Demo Debris Loads to R2	Clean Concrete Loads to Crusher	Metal Debris Loads To Boneyard	Clean Wood Loads	Steel Debris Loaded onto Barge	~
09/18/17	0	0	0	0	0	
09/19/17	0	5	0	0	0	
09/20/17	0	3	0	0	0	
09/21/17						
09/22/17						
09/23/17						
Season Total	3 loads	8 loads	0 loads	4 loads	195 loads	

Table 4. Fire Hydrants, Pedestals and Monuments

Fire Hydrant Soil					Fire Hydrant Soil				
Fire Hydrant ID	Excavate	Sampled Collected FH # X 0-2"	Backfill	Notes- Red >75mg/kg Green<75mg/kg	Fire Hydrant ID	Excavate	Sampled Collected FH # X 0-2"	Backfill	Notes- Red >75mg/kg Green<75mg/kg
1					41				
2					42				
3					43				
4					44				
5					45				
6					46				
7					47				
8					48				
9					49				
10					50				
11	8/31/2017	9/4/2017		FH 11 0-2"	51	9/11/2017	9/11/2017		FH 51 0-2"
12					52	9/11/2017	9/11/2017		FH 52 0-2"
13					53	8/23/2017	8/23/2017		FH 53 0-2"
14					54	9/11/2017	9/11/2017		FH 54 0-2"re-ex
15					54A	8/23/2017	8/23/2017		FH 54A 0-2"
16					55	8/26/2017	8/26/2017		FH 55 0-2"
17					56	8/26/2017	8/30/2017		FH 56 0-2"
18					57	8/26/2017	8/26/2017		FH 57 0-2"
19					58	9/11/2017	9/11/2017		FH 58 0-2"
20					59				
21					60				
22					61				
23					62				
24					63				
25					64				
26					65	8/29/2017	8/30/2017		FH 65 0-2"
27					66	8/26/2017	8/26/2017		FH 66 0-2"
28					67	8/25/2017	8/30/2017		FH 67 0-2"
29					68	8/25/2017	8/30/2017		FH 68 0-2"
30					69				
31					70				
32					71				
33					72	8/29/2017			
34					73	8/29/2017	9/11/2017		FH 73 0-2"
35					74	8/29/2017	8/29/2017		FH 74 0-2"
36					75	8/28/2017	8/29/2017		FH 75 0-2"
37					76				
38					77	8/28/2017	8/29/2017		FH 77 0-2"
39									
40									

Pedestals /Monuments Soil					Pedestals /Monuments Soil				
Feature Unit ID	Excavate	Sampled Collected Unit # X 0-2"	Backfill	Notes- Red >75mg/kg Green<75mg/kg	Feature Unit ID	Excavate	Sampled Collected Unit # X 0-2"	Backfill	Notes- Red >75mg/kg Green<75mg/kg
1	8/29/2017	9/4/2017		1-08 0-2"	23				
2	8/29/2017	9/4/2017		2-08 0-2"	24				
3	8/29/2017	9/4/2017		3-10 0-2"	25				
4	8/29/2017	9/4/2017		4-10 0-2"	26				
5	8/29/2017	9/4/2017		5-11 0-2"	27				
6	9/11/2017	9/11/2017		6-51 0-2"	28				
7	9/11/2017	9/11/2017		7-32 0-2"	29				
8					30				
9					31				
10					32				
11					33				
12					34				
13					35				
14					36				
15					37				
16					38				
17					39				
18					40				
19					41				
20					42				
21					43				

Fire Hydrant ID # per updated DBSI file -Navy Fresh Water Lines, Valves & Hydrants. BSI/DR-0034
Pedestal sample identification is a designated ID number followed by a dash and double-digit number relative to the closest Fire Hydrant ID location. No full prior map of pedestals exists.

Table 5. DU 5 Buttress & Cover - Import Clean Coral Sand

DU 5 IMPORT CLEAN CORAL						
DATE	NORTH Wall Loads	SOUTH Wall Loads	EAST Wall Loads	WEST Wall Loads	Days total loads	Days cubic yardage
9/18/2017	0	0	0	0	0	0
9/19/2017	0	0	0	0	0	0
9/20/2017	0	0	0	0	0	0
9/21/2017					0	0
9/22/2017					0	0
9/23/2017					0	0
Load count per wall	279	0	0	0		
15cuyd estimate per wall	4185	0	0	0		
2017 Total R2 combined clean coral import LOADS				279		
Loads x 15cuyd estimate				4185		

Table 6. Excavation Plots - Import Clean Coral Sand

EXCAVATION PLOTS- IMPORT CLEAN CORAL BACKFILL							
DATE	DU-9 Loads	DU-8 Loads	DU-7 Loads	DU-5 Loads	DU-3 Loads	Days total loads	Days cubic yardage
9/18/2017	0	0	0	0	0	0	0
9/19/2017	0	0	0	0	0	0	0
9/20/2017	0	0	0	0	0	0	0
9/21/2017						0	0
9/22/2017						0	0
9/23/2017						0	0
Load count per column	42	22	9	0	0		
15cuyd estimate per column	630	330	135	0	0		
2017 Total combined clean import Backfill LOADS					73		
Loads x 15cuyd estimate					1095		

Daily Field Report

Date: Thursday, September 21, 2017
Prepared by: Scott Wakefield

Project: Removal of Lead-Based Paint from Structures and Lead-Contaminated Soil
Location: Midway Atoll National Wildlife Refuge
Client: US Fish and Wildlife Service

Weather: Partly cloudy, wind 8 mph. Temperature ~82F

Personnel:

Name	Company	Site Hours
Scott Wakefield	NWDE Field Oversight	10
Darin Leibelt	NWDE Supervisor	Partial
Joel Smith	NWDE Operator	10
Dalton Sullivan	NWDE Labor	Partial
Antonio Davis	NWDE Labor	10
Jevon Stone	NWDE Operator	10
Jose Ordaz	NWDE Operator	10
Matt Manning	NWDE Operator	0
Chris Fisher	NWDE Labor	10
Alan Phillips	NWDE Operator	0
Kevin Bach	NWDE Labor	10
Lucas Peel	NWDE Labor	10
Tyler Wilson	NWDE Labor	10
Eric Matteson	NWDE Operator	10

Visitors/Additional Site Personnel:

Name	Title
MaryAnn Amann	U.S. FWS

Equipment:

Description	Model No.	Comments / Serial #
Pickup Truck	F350 Service Truck	NWDE
Flatbed Truck	Ford F450	NWDE
Container Truck	Peterbuilt	NWDE
Skid Steer	Bobcat S185	NWDE
Tracked Skid Steer	Bobcat T750	NWDE
Tracked Skid Steer	Bobcat	NWDE
Mini-Excavator	CAT 308	NWDE
Excavator	Volvo EC290BLC	NWDE
Excavator	Volvo EC290BLC	NWDE
Excavator	Volvo EC290	NWDE
Off road Dump Truck	Volvo A30D	NWDE
Off road Dump Truck	Volvo A30D	NWDE
Off road Dump Truck	Volvo A30D	NWDE
Excavator – High reach	Komatsu PC400HD	NWDE
Excavator	Komatsu 450	NWDE

Materials Delivered:

Description	QTY	Condition/Comments
Diesel	0 gallons	
Gasoline	0 gallons	

Description of Work:

0700 – Health and Safety meeting at NAF staging area. Review today's work tasks.

Former Water Tower 5304 treated soil excavation work will go forward today with the remaining volume being loaded and hauled to the R2 unit, all cells. Petrel patrol within the access and working areas prior to work beginning. US FWS is also removing the shearwater chicks as part of the management of birds in the work area. Returning the birds after work halts in the evenings.

The Vac trailer crew will divide up this morning. Part of the crew will go to the R2 Unit and begin Batch treatment #4 of material loads within the R2 staged to be processed. The mini 308 Cat will be in use to mix materials, Maectite® and hydrant water. The other part of the crew will return to fire hydrant excavation work using hand shovels on hydrants previously roughed out using the mini excavator.
Additional Vac trailer crew members will be repairing the Vac trailer engine drivetrain that has recently encountered a mechanical breakdown.

At the R2, Cells 1 and 2, the NWDE Cat D3 is on the move to doze materials. This is a roughed-in grade to begin the major forming of the target waste layer design. Currently the R2 Cells 1, 2, 3, 4 have many loads of dumped soil waiting to be knocked down, distributed across the Unit.

0930 – The mini excavator decon at the Water Tower is complete and mobilizing to the R2 Unit for soil treatment. Setting up for Maectite®, stringing out 1.5" fire hose from hydrant #1 to the work area.

1015 – Water Tower 5304 treated soils continue being hauled from the excavation to the R2 Unit. As the excavation's final cut grade is made, the progress is nearing the roadway and active water line utility. Materials are being removed carefully as the work area becomes restrictive.

1200 – Lunch

1230 – Continue hydrant excavations using hand shovels into short totes to collect soil. Materials will be moved to the R2 Unit for future batch treatment of soils within the cells.

Rough grading of the R2 Cells 1 and 2 has continued through the morning and into the afternoon. The tracked dozer is moving the DU-8 and Water Tower soils that are relatively free of debris across the surface in lifts. Material is bladed from the center ridge towards the north. Currently the soil at the north wall intersects roughly at the bottom of the 2' CMU block. This grade will vary as the DU-9 soil inbound this season continues to be hauled in for a final volume.

1500 – Soil batch treatment #4 event is continuing within the R2, Cell 3. The mini excavator is mechanically mixing the reagent and hydrant water with the soil to a consistent mixture.

1630 – The Water Tower 5304 soil excavation has neared the road at the northeast border. Old abandon utility pipes are running parallel to the road shoulder at the bottom of the cut grade. These are being worked across and leaving the pipes in place.

The Vac trailer repair is complete. The machine is moved to the Water Tower 5304 west border area to continue the clearing of soil from around tree roots. The smaller areas not accessible to machinery buckets and limited shoveling are cleared using the hose and air velocity of the vacuum system.

1730 – Ending the work day. 2017 season volume estimate to date moved or treated is 4905 cuyds.
Water Tower 5304 soil excavation is approximately 95% complete.
DU-9 treated soil moved to the R2 from Water Tower 5304 is 30 loads.
Batch treatment #4 is complete within the R2 Unit.

Photographs:

Photo 01: R2 Unit, Cell 1 – View west. Roughing the grade in for progression of final waste layer

Photo 02: R2 Unit, Cell 3 – View east. Progress of soil and dozing waste materials

Photo 03: R2 Cell 3 – View southeast. Batch treatment #4 in progress

Photo 04: Water Tower 5304 – View southwest. Progress excavation nearing roadway

Photo 05: Water Tower 5304 – View south. Progress excavation nearing roadway

Table 1. Maectite and Treated Soil Total Estimates

	Maectite Totals						Treated Soil Totals[1,2]		
	Applied Today (gal)					Total to Date	Excavated and Hauled to R-2 Unit **Today**		Excavated and Hauled to R-2 Unit **Total to Date**
Date	Soils (DU9)	Soils (DU8)	Soils (DU7)	Soils (DU5)	Soils (DU3)	(gal)	Load	^{3}yds[1]	^{3}yds[1]
09/18/17	220.25	0	0	0	0	2591	0	302	3552
09/19/17	0	0	0	0	0	2591	35	0	3552
09/20/17	0	0	0	0	0	2591	13	0	3552
09/21/17	94.5	0	0	0	0	2686	30	0	3683
09/22/17									
09/23/17									
Total to Date	2328 gallons	205 gallons	153 gallons	0 gallons	0 gallons		300 loads		

Notes:
1. Estimates are based on the number of gallons of Maectite® applied.
2. Soil treatment with Maectite® and hauling to R2 may not occur on the same day.
3. 9/11/17 & 9/12/17– Table 2 loads were batch treated in the R2. Inserted this data into Table 1 for totalizing the volumes and gallons. Reset Table 2 "Batch loads" of 67.6 to zero until next ex-situ stockpile treatment.

2017 DU 9 – Figures P 1-16, 18, 20, 21, 23-27.
Bldg 1124, 1126, 3521, S361, 347, 3501, S3126, S3127, 521, 520, 502, 5342, 309, 340, 354, 9149, 232, 233, S269, S225A, 2127, 144, Boat House 1 & 2, 4205, 4206, 4207, 4213, 503, 5303, 5341, 5339, 5338, Bollards, Fire Hydrants, 5304, 5305, 4210, 3524, 3529, 5126, 5378, 3514, and other ancillary structures.
Foundations S464, 502, 4201, 5126, 5295, 5342.
2017 DU 8 – S-28, S-30 re-ex, Pipe figure P19
2017 DU 7 – Bldg 3502, 3503, 3504 shade cloth
2017 DU 5 – R2 Unit, Figure P17
2017 DU 3 – Housing figure P22, 419 MIS re-ex

Table 2. Soil loads hauled to the R2 for ex situ Maectite® treatment

	Load Totals				
	Hauled to R2 for treatment in R2 cell (# of truck loads)				
Date	Soils (DU9)	Soils (DU8)	Soils (DU7)	Soils (DU5)	Soils (DU3)
09/18/17	.75	0	0	0	0
09/19/17	.25	0	0	0	0
09/20/17	0	0	0	0	0
09/21/17	0	0	0	0	0
09/22/17					
09/23/17					
Batch loads to treat in R2	0 loads	0 loads	0 loads	0 loads	0 loads
Total to Date	103.8 loads	34 loads	18.5 loads	0 loads	0 loads

8/14/17 - Batch treatment of all stockpiled "ex situ" loads to date in R2 Cell 1. Entered this data into Table 1 on 8/14/17 for volume and gallon tracking.
8/15/17 - Add "Batch Loads to treat in R2" subtotal that tracks the truck loads placed for treatment. Reset this to zero once treatment event is complete.
8/23/17 – Batch #2 treatment event of all stockpiled "ex situ" loads to date in R2 Cells. Entered this data into Table 1 on 8/23/17 for volume and gallon tracking.
9/12/17 – Batch #3 treatment event of all stockpiled "ex situ" loads to date in R2 Cells. Entered this data into Table 1 on 9/11/17 & 9/12/17 for volume and gallon tracking.
9/21/17 – Batch #4 treatment event of all stockpiled "ex situ" loads to date in R2 Cells. Entered this data into Table 1 on 9/21/17 for volume and gallon tracking.

Table 2.1 Soil loads hauled to the R2, non-treated internment

Date	Load Totals				
	Hauled to R2, non-treated soil (# of truck loads)				
	Soils (DU9)	Soils (DU8)	Soils (DU7)	Soils (DU5)	Soils (DU3)
09/18/17	0	27 (+18 on 9.16.17)	0	0	0
09/19/17	0	10	0	0	0
09/20/17	2	0	0	0	0
09/21/17	0	0	0	0	0
09/22/17					
09/23/17					
Total to Date	15 loads	65 loads	0 loads	0 loads	9 loads

Table 3. Weekly Load Estimates

Date	Treated Demo Debris Loads to R2	Clean Concrete Loads to Crusher	Metal Debris Loads To Boneyard	Clean Wood Loads	Steel Debris Loaded onto Barge	~
09/18/17	0	0	0	0	0	
09/19/17	0	5	0	0	0	
09/20/17	0	3	0	0	0	
09/21/17	0	0	0	0	0	
09/22/17						
09/23/17						
Season Total	3 loads	8 loads	0 loads	4 loads	195 loads	

Table 4. Fire Hydrants, Pedestals and Monuments

Fire Hydrant Soil					Fire Hydrant Soil				
Fire Hydrant ID	Excavate	Sampled Collected FH # X 0-2"	Backfill	Notes- Red >75mg/kg Green<75mg/kg	Fire Hydrant ID	Excavate	Sampled Collected FH # X 0-2"	Backfill	Notes- Red >75mg/kg Green<75mg/kg
1					41				
2					42				
3					43				
4					44				
5					45				
6					46				
7					47				
8					48				
9					49				
10					50				
11	8/31/2017	9/4/2017		FH 11 0-2"	51	9/11/2017	9/11/2017		FH 51 0-2"
12					52	9/11/2017	9/11/2017		FH 52 0-2"
13					53	8/23/2017	8/23/2017		FH 53 0-2"
14					54	9/11/2017	9/11/2017		FH 54 0-2"re-ex
15					54A	8/23/2017	8/23/2017		FH 54A 0-2"
16					55	8/26/2017	8/26/2017		FH 55 0-2"
17					56	8/26/2017	8/30/2017		FH 56 0-2"
18					57	8/26/2017	8/26/2017		FH 57 0-2"
19					58	9/11/2017	9/11/2017		FH 58 0-2"
20					59				
21					60				
22					61				
23					62				
24					63				
25					64				
26					65	8/29/2017	8/30/2017		FH 65 0-2"
27					66	8/26/2017	8/26/2017		FH 66 0-2"
28					67	8/25/2017	8/30/2017		FH 67 0-2"
29					68	8/25/2017	8/30/2017		FH 68 0-2"
30					69				
31					70				
32					71				
33					72	8/29/2017			
34					73	8/29/2017	9/11/2017		FH 73 0-2"
35					74	8/29/2017	8/29/2017		FH 74 0-2"
36					75	8/28/2017	8/29/2017		FH 75 0-2"
37					76				
38					77	8/28/2017	8/29/2017		FH 77 0-2"
39									
40									

Pedestals /Monuments Soil					Pedestals /Monuments Soil				
Feature Unit ID	Excavate	Sampled Collected Unit # X 0-2"	Backfill	Notes- Red >75mg/kg Green<75mg/kg	Feature Unit ID	Excavate	Sampled Collected Unit # X 0-2"	Backfill	Notes- Red >75mg/kg Green<75mg/kg
1	8/29/2017	9/4/2017		1-08 0-2"	23				
2	8/29/2017	9/4/2017		2-08 0-2"	24				
3	8/29/2017	9/4/2017		3-10 0-2"	25				
4	8/29/2017	9/4/2017		4-10 0-2"	26				
5	8/29/2017	9/4/2017		5-11 0-2"	27				
6	9/11/2017	9/11/2017		6-51 0-2"	28				
7	9/11/2017	9/11/2017		7-32 0-2"	29				
8					30				
9					31				
10					32				
11					33				
12					34				
13					35				
14					36				
15					37				
16					38				
17					39				
18					40				
19					41				
20					42				
21					43				

Fire Hydrant ID # per updated DBSI file -Navy Fresh Water Lines, Valves & Hydrants. BSI/DR-0034
Pedestal sample identification is a designated ID number followed by a dash and double-digit number relative to the closest Fire Hydrant ID location. No full prior map of pedestals exists.

Table 5. DU 5 Buttress & Cover - Import Clean Coral Sand

DU 5 IMPORT CLEAN CORAL						
DATE	NORTH Wall Loads	SOUTH Wall Loads	EAST Wall Loads	WEST Wall Loads	Days total loads	Days cubic yardage
9/18/2017	0	0	0	0	0	0
9/19/2017	0	0	0	0	0	0
9/20/2017	0	0	0	0	0	0
9/21/2017	0	0	0	0	0	0
9/22/2017					0	0
9/23/2017					0	0
Load count per wall	279	0	0	0		
15cuyd estimate per wall	4185	0	0	0		
2017 Total R2 combined clean coral import LOADS				279		
Loads x 15cuyd estimate				4185		

Table 6. Excavation Plots - Import Clean Coral Sand

EXCAVATION PLOTS- IMPORT CLEAN CORAL BACKFILL							
DATE	DU-9 Loads	DU-8 Loads	DU-7 Loads	DU-5 Loads	DU-3 Loads	Days total loads	Days cubic yardage
9/18/2017	0	0	0	0	0	0	0
9/19/2017	0	0	0	0	0	0	0
9/20/2017	0	0	0	0	0	0	0
9/21/2017	0	0	0	0	0	0	0
9/22/2017						0	0
9/23/2017						0	0
Load count per column	42	22	9	0	0		
15cuyd estimate per column	630	330	135	0	0		
2017 Total combined clean import Backfill LOADS					73		
Loads x 15cuyd estimate					1095		

NW Demolition and Environmental
A Joint Venture

Daily Field Report

Date: Friday, September 22, 2017
Prepared by: Scott Wakefield

Project: Removal of Lead-Based Paint from Structures and Lead-Contaminated Soil
Location: Midway Atoll National Wildlife Refuge
Client: US Fish and Wildlife Service

Weather: Partly cloudy, wind 5 mph. Temperature ~82F

Personnel:

Name	Company	Site Hours
Scott Wakefield	NWDE Field Oversight	10
Darin Leibelt	NWDE Supervisor	Partial
Joel Smith	NWDE Operator	10
Dalton Sullivan	NWDE Labor	Partial
Antonio Davis	NWDE Labor	10
Jevon Stone	NWDE Operator	0
Jose Ordaz	NWDE Operator	10
Matt Manning	NWDE Operator	0
Chris Fisher	NWDE Labor	10
Alan Phillips	NWDE Operator	0
Kevin Bach	NWDE Labor	10
Lucas Peel	NWDE Labor	10
Tyler Wilson	NWDE Labor	10
Eric Matteson	NWDE Operator	10

Visitors/Additional Site Personnel:

Name	Title
MaryAnn Amann	U.S. FWS

Equipment:

Description	Model No.	Comments / Serial #
Pickup Truck	F350 Service Truck	NWDE
Flatbed Truck	Ford F450	NWDE
Container Truck	Peterbuilt	NWDE
Skid Steer	Bobcat S185	NWDE
Tracked Skid Steer	Bobcat T750	NWDE
Tracked Skid Steer	Bobcat	NWDE
Mini-Excavator	CAT 308	NWDE
Excavator	Volvo EC290BLC	NWDE
Excavator	Volvo EC290BLC	NWDE
Excavator	Volvo EC290	NWDE
Off road Dump Truck	Volvo A30D	NWDE
Off road Dump Truck	Volvo A30D	NWDE
Off road Dump Truck	Volvo A30D	NWDE
Excavator – High reach	Komatsu PC400HD	NWDE
Excavator	Komatsu 450	NWDE

Materials Delivered:

Description	QTY	Condition/Comments
Diesel	50 gallons	
Gasoline	0 gallons	

Description of Work:

0700 – Health and Safety meeting at NAF staging area. Review today's work tasks.

Water Tower 5304 vac trailer work will resume for clearing the bordering tree stumps at the west, north and east edges of the base soil excavation plot. Mobilize the trailer system and towable air compressor into position. Checking the site and access route for fresh ground burrows prior to entry.

Grade work at the R2 Unit 5303 continues today using the NWDE D3 Cat dozer. Northern cells 1 and 2 begin the day to continue blading the waste layer into a rough formed grade. Materials are being worked up to the cast in place concrete wall, repeatedly tracking over as layered lifts are made.

The mini excavator is assisting to position concrete in the southern wall area and including the layering of sand to eliminate voids or bridging. The cast in place wall is having the soil worked up against it. This will be followed up with the dozer making layered passed and multi thin lifts.

0900 – Load up misc HDPE liner from DU-8 that has been separated out at the R2 area. This former S28/S30 liner is cleaned of minimal soil and being loaded into the NWDE container for shipment off island.

1045 – Vac trailer work at the former Water Tower 5304 tree stumps and water valve box vaults is ongoing. Nearest the east side roadway the largest few stumps and valve boxes create obstacles that conventional removal with an excavator or hand shovels is limited. This is due in part to the 16" transite water pipe, valves and irregular tree roots bordering the target dig area.

1200 – Lunch

1230 – Backfill tasks pick up again this afternoon. The 450 Komatsu is preparing to mobilize to the north Cargo Pier Borrow Source area. Inspect and post a biological monitor at the beach work site for observation of wildlife. Radio and visual contact are in use if work should need to stop.

The 290 Volvo excavator has been fitted with the MB crusher bucket. Mobilizing the crusher out to the Boneyard staging area to process clean concrete with steel rebar reinforcement into 3" rap. This will create a small amount of additional yardage that is to cap the final R2 cover this season.

Former Water Tower 5304 roadway section that borders the northeast corner and access routes is being cleared this afternoon. Loose materials and the roadway are scraped and vac'd to remove the minimal loose surface as an exit task. There is still a minimal few loads of soil yet to be loaded out of the northeast corner. A final exit inspection will follow when the soil digging is complete.

1300 – Bldg 3503 Barracks petrel burrows are being worked for clearing the site to access and place clean coral sand in the DU-7 shallow perimeter scape. The access routes and excavated 0.5' plot are prepped for the loads of sand to be dumped and then graded in using the tracked skidsteer. The north, south, east west wall sections receive backfill sand.

1400 – Water Tower 5304 roadway scrape/vac work continues. Today four total collection totes are moved to the R2 and placed for future batch treatment.

1730 – Ending the work day. 2017 season volume estimate to date moved or treated is 4905 cuyds.
Water Tower 5304 soil excavation is approximately 98% complete.
DU-7 clean backfill placed today is 12 loads to Bldg 3503 Barracks and Bldg 3504 Barracks.
DU-9 clean backfill placed today is 1 load to Bldg 502 to finish off previous backfill.

Photographs:

Photo 01: Water Tower 5304 – View northwest. Progress vac excavation nearing roadway

Photo 02: Bldg 3503 – View northwest. Progress of clean backfill at north and west wall of DU-7

Photo 03: Bldg 3503 – View northwest. Progress of clean backfill at east wall of DU-7

Photo 04: Water Tower 5304 – View northwest. Progress vac excavation nearing roadway

Table 1. Maectite and Treated Soil Total Estimates

	Maectite Totals						Treated Soil Totals[1,2]		
	Applied Today (gal)					Total to Date	Excavated and Hauled to R-2 Unit **Today**		Excavated and Hauled to R-2 Unit **Total to Date**
Date	Soils (DU9)	Soils (DU8)	Soils (DU7)	Soils (DU5)	Soils (DU3)	(gal)	Load	^{3}yds[1]	^{3}yds[1]
09/18/17	220.25	0	0	0	0	2591	0	302	3552
09/19/17	0	0	0	0	0	2591	35	0	3552
09/20/17	0	0	0	0	0	2591	13	0	3552
09/21/17	94.5	0	0	0	0	2686	30	0	3683
09/22/17	0	0	0	0	0	2686	0	0	3683
09/23/17									
Total to Date	2328 gallons	205 gallons	153 gallons	0 gallons	0 gallons		300 loads		

Notes:
1. Estimates are based on the number of gallons of Maectite® applied.
2. Soil treatment with Maectite® and hauling to R2 may not occur on the same day.
3. 9/11/17 & 9/12/17– Table 2 loads were batch treated in the R2. Inserted this data into Table 1 for totalizing the volumes and gallons. Reset Table 2 "Batch loads" of 67.6 to zero until next ex-situ stockpile treatment.

2017 DU 9 – Figures P 1-16, 18, 20, 21, 23-27.
Bldg 1124, 1126, 3521, S361, 347, 3501, S3126, S3127, 521, 520, 502, 5342, 309, 340, 354, 9149, 232, 233, S269, S225A, 2127, 144, Boat House 1 & 2, 4205, 4206, 4207, 4213, 503, 5303, 5341, 5339, 5338, Bollards, Fire Hydrants, 5304, 5305, 4210, 3524, 3529, 5126, 5378, 3514, and other ancillary structures.
Foundations S464, 502, 4201, 5126, 5295, 5342.
2017 DU 8 – S-28, S-30 re-ex, Pipe figure P19
2017 DU 7 – Bldg 3502, 3503, 3504 shade cloth
2017 DU 5 – R2 Unit, Figure P17
2017 DU 3 – Housing figure P22, 419 MIS re-ex

Table 2. Soil loads hauled to the R2 for ex situ Maectite® treatment

	Load Totals				
	Hauled to R2 for treatment in R2 cell (# of truck loads)				
Date	Soils (DU9)	Soils (DU8)	Soils (DU7)	Soils (DU5)	Soils (DU3)
09/18/17	.75	0	0	0	0
09/19/17	.25	0	0	0	0
09/20/17	0	0	0	0	0
09/21/17	0	0	0	0	0
09/22/17	0.3	0	0	0	0
09/23/17					
Batch loads to treat in R2	0.3 loads	0 loads	0 loads	0 loads	0 loads
Total to Date	104.3 loads	34 loads	18.5 loads	0 loads	0 loads

8/14/17 - Batch treatment of all stockpiled "ex situ" loads to date in R2 Cell 1. Entered this data into Table 1 on 8/14/17 for volume and gallon tracking.
8/15/17 - Add "Batch Loads to treat in R2" subtotal that tracks the truck loads placed for treatment. Reset this to zero once treatment event is complete.
8/23/17 – Batch #2 treatment event of all stockpiled "ex situ" loads to date in R2 Cells. Entered this data into Table 1 on 8/23/17 for volume and gallon tracking.
9/12/17 – Batch #3 treatment event of all stockpiled "ex situ" loads to date in R2 Cells. Entered this data into Table 1 on 9/11/17 & 9/12/17 for volume and gallon tracking.
9/21/17 – Batch #4 treatment event of all stockpiled "ex situ" loads to date in R2 Cells. Entered this data into Table 1 on 9/21/17 for volume and gallon tracking.

Table 2.1 Soil loads hauled to the R2, non-treated internment

Date	Load Totals				
	Hauled to R2, non-treated soil (# of truck loads)				
	Soils (DU9)	Soils (DU8)	Soils (DU7)	Soils (DU5)	Soils (DU3)
09/18/17	0	27 (+18 on 9.16.17)	0	0	0
09/19/17	0	10	0	0	0
09/20/17	2	0	0	0	0
09/21/17	0	0	0	0	0
09/22/17	0	0	0	0	0
09/23/17					
Total to Date	15 loads	65 loads	0 loads	0 loads	9 loads

Table 3. Weekly Load Estimates

Date	Treated Demo Debris Loads to R2	Clean Concrete Loads to Crusher	Metal Debris Loads To Boneyard	Clean Wood Loads	Steel Debris Loaded onto Barge	~
09/18/17	0	0	0	0	0	
09/19/17	0	5	0	0	0	
09/20/17	0	3	0	0	0	
09/21/17	0	0	0	0	0	
09/22/17	0	0	0	0	0	
09/23/17						
Season Total	3 loads	8 loads	0 loads	4 loads	195 loads	

Table 4. Fire Hydrants, Pedestals and Monuments

Fire Hydrant Soil					Fire Hydrant Soil				
Fire Hydrant ID	Excavate	Sampled Collected FH # X 0-2"	Backfill	Notes- Red >75mg/kg Green<75mg/kg	Fire Hydrant ID	Excavate	Sampled Collected FH # X 0-2"	Backfill	Notes- Red >75mg/kg Green<75mg/kg
1					41				
2					42				
3					43				
4					44				
5					45				
6					46				
7					47				
8					48				
9					49				
10					50				
11	8/31/2017	9/4/2017		FH 11 0-2"	51	9/11/2017	9/11/2017		FH 51 0-2"
12					52	9/11/2017	9/11/2017		FH 52 0-2"
13					53	8/23/2017	8/23/2017		FH 53 0-2"
14					54	9/11/2017	9/11/2017		FH 54 0-2"re-ex
15					54A	8/23/2017	8/23/2017		FH 54A 0-2"
16					55	8/26/2017	8/26/2017		FH 55 0-2"
17					56	8/26/2017	8/30/2017		FH 56 0-2"
18					57	8/26/2017	8/26/2017		FH 57 0-2"
19					58	9/11/2017	9/11/2017		FH 58 0-2"
20					59				
21					60				
22					61				
23					62				
24					63				
25					64				
26					65	8/29/2017	8/30/2017		FH 65 0-2"
27					66	8/26/2017	8/26/2017		FH 66 0-2"
28					67	8/25/2017	8/30/2017		FH 67 0-2"
29					68	8/25/2017	8/30/2017		FH 68 0-2"
30					69				
31					70				
32					71				
33					72	8/29/2017			
34					73	8/29/2017	9/11/2017		FH 73 0-2"
35					74	8/29/2017	8/29/2017		FH 74 0-2"
36					75	8/28/2017	8/29/2017		FH 75 0-2"
37					76				
38					77	8/28/2017	8/29/2017		FH 77 0-2"
39									
40									

Pedestals /Monuments Soil					Pedestals /Monuments Soil				
Feature Unit ID	Excavate	Sampled Collected Unit # X 0-2"	Backfill	Notes- Red >75mg/kg Green<75mg/kg	Feature Unit ID	Excavate	Sampled Collected Unit # X 0-2"	Backfill	Notes- Red >75mg/kg Green<75mg/kg
1	8/29/2017	9/4/2017		1-08 0-2"	23				
2	8/29/2017	9/4/2017		2-08 0-2"	24				
3	8/29/2017	9/4/2017		3-10 0-2"	25				
4	8/29/2017	9/4/2017		4-10 0-2"	26				
5	8/29/2017	9/4/2017		5-11 0-2"	27				
6	9/11/2017	9/11/2017		6-51 0-2"	28				
7	9/11/2017	9/11/2017		7-32 0-2"	29				
8					30				
9					31				
10					32				
11					33				
12					34				
13					35				
14					36				
15					37				
16					38				
17					39				
18					40				
19					41				
20					42				
21					43				

Fire Hydrant ID # per updated DBSI file -Navy Fresh Water Lines, Valves & Hydrants. BSI/DR-0034
Pedestal sample identification is a designated ID number followed by a dash and double-digit number relative to the closest Fire Hydrant ID location. No full prior map of pedestals exists.

Table 5. DU 5 Buttress & Cover - Import Clean Coral Sand

DU 5 IMPORT CLEAN CORAL						
DATE	NORTH Wall Loads	SOUTH Wall Loads	EAST Wall Loads	WEST Wall Loads	Days total loads	Days cubic yardage
9/18/2017	0	0	0	0	0	0
9/19/2017	0	0	0	0	0	0
9/20/2017	0	0	0	0	0	0
9/21/2017	0	0	0	0	0	0
9/22/2017	0	0	0	0	0	0
9/23/2017					0	0
Load count per wall	279	0	0	0		
15cuyd estimate per wall	4185	0	0	0		
2017 Total R2 combined clean coral import LOADS				279		
Loads x 15cuyd estimate				4185		

Table 6. Excavation Plots - Import Clean Coral Sand

EXCAVATION PLOTS- IMPORT CLEAN CORAL BACKFILL							
DATE	DU-9 Loads	DU-8 Loads	DU-7 Loads	DU-5 Loads	DU-3 Loads	Days total loads	Days cubic yardage
9/18/2017	0	0	0	0	0	0	0
9/19/2017	0	0	0	0	0	0	0
9/20/2017	0	0	0	0	0	0	0
9/21/2017	0	0	0	0	0	0	0
9/22/2017	1	0	11	0	0	12	180
9/23/2017						0	0
Load count per column	43	22	20	0	0		
15cuyd estimate per column	645	330	300	0	0		
2017 Total combined clean import Backfill LOADS					85		
Loads x 15cuyd estimate					1275		

Daily Field Report

Date: Saturday, September 23, 2017
Prepared by: Scott Wakefield

Project: Removal of Lead-Based Paint from Structures and Lead-Contaminated Soil
Location: Midway Atoll National Wildlife Refuge
Client: US Fish and Wildlife Service

Weather: Partly cloudy, wind 5 mph. Temperature ~80F, afternoon rain

Personnel:

Name	Company	Site Hours
Scott Wakefield	NWDE Field Oversight	10
Darin Leibelt	NWDE Supervisor	Partial
Joel Smith	NWDE Operator	10
Dalton Sullivan	NWDE Labor	Partial
Antonio Davis	NWDE Labor	10
Jevon Stone	NWDE Operator	0
Jose Ordaz	NWDE Operator	10
Matt Manning	NWDE Operator	0
Chris Fisher	NWDE Labor	10
Alan Phillips	NWDE Operator	0
Kevin Bach	NWDE Labor	10
Lucas Peel	NWDE Labor	10
Tyler Wilson	NWDE Labor	10
Eric Matteson	NWDE Operator	10

Visitors/Additional Site Personnel:

Name	Title
MaryAnn Amann	U.S. FWS
Bob Peyton	U.S. FWS

Equipment:

Description	Model No.	Comments / Serial #
Pickup Truck	F350 Service Truck	NWDE
Flatbed Truck	Ford F450	NWDE
Container Truck	Peterbuilt	NWDE
Skid Steer	Bobcat S185	NWDE
Tracked Skid Steer	Bobcat T750	NWDE
Tracked Skid Steer	Bobcat	NWDE
Mini-Excavator	CAT 308	NWDE
Excavator	Volvo EC290BLC	NWDE
Excavator	Volvo EC290BLC	NWDE
Excavator	Volvo EC290	NWDE
Off road Dump Truck	Volvo A30D	NWDE
Off road Dump Truck	Volvo A30D	NWDE
Off road Dump Truck	Volvo A30D	NWDE
Excavator – High reach	Komatsu PC400HD	NWDE
Excavator	Komatsu 450	NWDE

Materials Delivered:

Description	QTY	Condition/Comments
Diesel	181 gallons	
Gasoline	0 gallons	

Description of Work:

0700 – Health and Safety meeting at NAF staging area. Review today's work tasks.

Vac trailer four person NWDE crew is removing soil from fire hydrants today, targeting 2.0' bgs (flange) and 2' radius minimum at the hydrant. Material is being pulled up with the vac hose, dropped out into the baghouse, totes, then moved to the R2 Unit for future batch treatment. Today, areas being worked are near the former Water Tower 5304 moving southeast on Morrell St.

Clean coral sand backfill tasks are going forward for a limited number of excavated sites that have returned lab results less than 75mg/kg. Today this will include backfilling at; Bldg 144 Submarine Gen, Bldg S361 Pesticide Storage, Bldg S225A Mogas Fueling Station, south plot of Boathouse #1, south plot of Boathouse #2.

For the backfill activities, the Borrow Source beach is inspected for sea and wildlife. The 450 Komatsu and two Volvo haul trucks are moved into position while the beach monitor observes work activities. A partial replenishment of coral sand since September 9th hauling of materials allows this second pass excavation for moving clean coral backfill.

1000 – Fire hydrant progress is moving along in the grassy locations at Morrell St west shoulder. These are undisturbed areas of grass, sod and soil that surround the active painted hydrant. Sod is loosened and removed using shovels and manual labor, while the underlying sands are loosened and vacuumed out.

Bldg 144 Submarine Gen clean coral sand backfill is progressing to be placed and pushed about with the tracked skidsteer. Grade is targeting a minimum +0.33' over native elevation prior to soil excavation work. The concrete building's west side cleaned sumps are backfilled, while the same area concrete slabs remain unchanged, exposed as their previous condition existed.

1100 – At the Boneyard concrete stockpile, the 290 Volvo and MB crusher bucket are downsizing foundation concrete to 3" minus. This processing is to finish off the last of the collected concrete rubble and bulk up the yardage that is slated to cap the R2 final cover. Embedded steel rebar is being separated as the machine processes concrete.

Small plots of clean coral sand are being staged at Fuel Farm area Bldg S225A. A clean up load makes it to Bldg 520 Fire Dept Storage to round off the backfill, and the southern pass plots of both Boathouse #1 and Boathouse #2 are staged with clean sand. The skidsteer is following up to rough in the target grade.

1200 – Lunch

1230 – Clean coral sand hauling off the Cargo Pier beach continues. Loads are moving to the southeast corner of the R2 abutment, in the relieved area where sand in August was moved to the south side of the R2 abutment wall. These loads are simply replenishing the area.

The mini excavator is digging at Bldg 5126 Sewage Pump Station for soil limits per Figure P25. Soil is hauled to the R2 Unit for future batch treatment with Maectite®.

1400 – Vac trailer work continues at hydrants near Mayday St and Cannon Ave. These areas were previously relieved by the mini excavator.

Evaluating the hydrant excavations and application of a barrier to mitigate bonin petrel access near the fire hydrants. Options are to use black Tensar TriAx TX160 geogrid or shade cloth as a subterranean layer to divert ground burrows from forming.

1500 - Onsite discussion with B.Peyton and M.Amann, US FWS and D.Leibelt NWDE at hydrant # 27. Consideration of the buried barrier layer surrounding each hydrant has indicated that shade cloth buried approximately 10" below the hydrant flange will be acceptable to mitigate petrel burrows. The Tensar TriAx TX160 hole spacing by itself poses an underground entanglement hazard to petrels. As directed by US FWS, the excavated hydrants will have a confirmation sample collected, clean coral sand placed appx 10" below the fire hydrant flange. A single piece of shade cloth approximately 5' x 5' will be positioned over and around the hydrant and excavation at 10" below the flange (appx ground surface.) Capping this will be 10" minimum of clean coral sand.

Collect samples for hydrants #28, #27, #18 and #17. Following are backfill and shade cloth tasks. The reason to have excavated, sampled and backfilled these few hydrants today is being near bustling active Laysan duck and duckling's locations, as not to leave an entrapment hazard.

Bldg 5126 Sewage Pump Station soil excavation has been completed. Move and begin the exit scrape of Bldg 5295 Hanger Aux Gen to follow up the concrete footing removal task. Here the demo concrete remnants and surface soil are cut and loaded, hauled to the R2 for non-treatment internment.

1730 – Ending the work day. 2017 season volume estimate to date moved or treated is 4944 cuyds.
Water Tower 5304 soil excavation is approximately 98% complete.
DU-5 R2 abutment clean backfill placed today is 16 loads to the southeast exterior wall.
DU-9 clean backfill placed today is 24 loads.
DU-9 impacted soil loads hauled to the R2 for future batch treatment is 2 loads.
DU-9 exit demo scrape for non-treated material to the R2 is 3 loads.

Photographs:

Photo 01: Fire Hydrant # 17 – View southwest. Excavation of soil

Photo 02: Fire Hydrant # 17 – View southwest. Backfill and shade cloth placement prior to final sand cap

Photo 03: Bldg 144 – View southwest. Progress of clean backfill of DU-9

Photo 04: Bldg 144 – View southwest. Progress of clean backfill of DU-9

Photo 05: Boathouse #1 – View south. Progress of clean backfill of DU-9

Photo 06: Boneyard Stockpile – View east. Progress of crushing final concrete materials

Photo 07: Borrow Source – View west. Loading clean coral sand from the Cargo Pier area

Table 1. Maectite and Treated Soil Total Estimates

	Maectite Totals						Treated Soil Totals[1,2]		
	Applied Today (gal)					Total to Date	Excavated and Hauled to R-2 Unit **Today**		Excavated and Hauled to R-2 Unit **Total to Date**
Date	Soils (DU9)	Soils (DU8)	Soils (DU7)	Soils (DU5)	Soils (DU3)	(gal)	Load	^{3}yds[1]	^{3}yds[1]
09/18/17	220.25	0	0	0	0	2591	0	302	3552
09/19/17	0	0	0	0	0	2591	35	0	3552
09/20/17	0	0	0	0	0	2591	13	0	3552
09/21/17	94.5	0	0	0	0	2686	30	0	3683
09/22/17	0	0	0	0	0	2686	0	0	3683
09/23/17	0	0	0	0	0	2686	0	0	3683
Total to Date	2328 gallons	205 gallons	153 gallons	0 gallons	0 gallons		300 loads		

Notes:
1. Estimates are based on the number of gallons of Maectite® applied.
2. Soil treatment with Maectite® and hauling to R2 may not occur on the same day.
3. 9/11/17 & 9/12/17– Table 2 loads were batch treated in the R2. Inserted this data into Table 1 for totalizing the volumes and gallons. Reset Table 2 "Batch loads" of 67.6 to zero until next ex-situ stockpile treatment.

2017 DU 9 – Figures P 1-16, 18, 20, 21, 23-27.
Bldg 1124, 1126, 3521, S361, 347, 3501, S3126, S3127, 521, 520, 502, 5342, 309, 340, 354, 9149, 232, 233, S269, S225A, 2127, 144, Boat House 1 & 2, 4205, 4206, 4207, 4213, 503, 5303, 5341, 5339, 5338, Bollards, Fire Hydrants, 5304, 5305, 4210, 3524, 3529, 5126, 5378, 3514, and other ancillary structures.
Foundations S464, 502, 4201, 5126, 5295, 5342.
2017 DU 8 – S-28, S-30 re-ex, Pipe figure P19
2017 DU 7 – Bldg 3502, 3503, 3504 shade cloth
2017 DU 5 – R2 Unit, Figure P17
2017 DU 3 – Housing figure P22, 419 MIS re-ex

Table 2. Soil loads hauled to the R2 for ex situ Maectite® treatment

	Load Totals				
	Hauled to R2 for treatment in R2 cell (# of truck loads)				
Date	Soils (DU9)	Soils (DU8)	Soils (DU7)	Soils (DU5)	Soils (DU3)
09/18/17	.75	0	0	0	0
09/19/17	.25	0	0	0	0
09/20/17	0	0	0	0	0
09/21/17	0	0	0	0	0
09/22/17	0.3	0	0	0	0
09/23/17	2	0	0	0	0
Batch loads to treat in R2	2.3 loads	0 loads	0 loads	0 loads	0 loads
Total to Date	106.3 loads	34 loads	18.5 loads	0 loads	0 loads

8/14/17 - Batch treatment of all stockpiled "ex situ" loads to date in R2 Cell 1. Entered this data into Table 1 on 8/14/17 for volume and gallon tracking.
8/15/17 - Add "Batch Loads to treat in R2" subtotal that tracks the truck loads placed for treatment. Reset this to zero once treatment event is complete.
8/23/17 – Batch #2 treatment event of all stockpiled "ex situ" loads to date in R2 Cells. Entered this data into Table 1 on 8/23/17 for volume and gallon tracking.
9/12/17 – Batch #3 treatment event of all stockpiled "ex situ" loads to date in R2 Cells. Entered this data into Table 1 on 9/11/17 & 9/12/17 for volume and gallon tracking.
9/21/17 – Batch #4 treatment event of all stockpiled "ex situ" loads to date in R2 Cells. Entered this data into Table 1 on 9/21/17 for volume and gallon tracking.

Table 2.1 Soil loads hauled to the R2, non-treated internment

Date	Load Totals				
	Hauled to R2, non-treated soil (# of truck loads)				
	Soils (DU9)	Soils (DU8)	Soils (DU7)	Soils (DU5)	Soils (DU3)
09/18/17	0	27 (+18 on 9.16.17)	0	0	0
09/19/17	0	10	0	0	0
09/20/17	2	0	0	0	0
09/21/17	0	0	0	0	0
09/22/17	0	0	0	0	0
09/23/17	3	0	0	0	0
Total to Date	18 loads	65 loads	0 loads	0 loads	9 loads

Table 3. Weekly Load Estimates

Date	Treated Demo Debris Loads to R2	Clean Concrete Loads to Crusher	Metal Debris Loads To Boneyard	Clean Wood Loads	Steel Debris Loaded onto Barge	~
09/18/17	0	0	0	0	0	
09/19/17	0	5	0	0	0	
09/20/17	0	3	0	0	0	
09/21/17	0	0	0	0	0	
09/22/17	0	0	0	0	0	
09/23/17	0	0	0	0	0	
Season Total	3 loads	8 loads	0 loads	4 loads	195 loads	

Table 4. Fire Hydrants, Pedestals and Monuments

Fire Hydrant Soil					Fire Hydrant Soil				
Fire Hydrant ID	Excavate	Sampled Collected FH # X 0-2"	Backfill	Notes- Red >75mg/kg Green<75mg/kg	Fire Hydrant ID	Excavate	Sampled Collected FH # X 0-2"	Backfill	Notes- Red >75mg/kg Green<75mg/kg
1					41				
2					42				
3					43				
4					44				
5					45	9/23/2017			
6					46				
7					47				
8					48				
9					49				
10					50				
11	8/31/2017	9/4/2017		FH 11 0-2"	51	9/11/2017	9/11/2017		FH 51 0-2"
12					52	9/11/2017	9/11/2017		FH 52 0-2"
13					53	8/23/2017	8/23/2017		FH 53 0-2"
14					54	9/11/2017	9/11/2017		FH 54 0-2"re-ex
15					54A	8/23/2017	8/23/2017		FH 54A 0-2"
16	9/23/2017	9/23/2017			55	8/26/2017	8/26/2017		FH 55 0-2"
17	9/23/2017	9/23/2017		FH 17 0-2"	56	8/26/2017	8/30/2017		FH 56 0-2"
18	9/23/2017	9/23/2017		FH 18 0-2"	57	8/26/2017	8/26/2017		FH 57 0-2"
19	9/23/2017	9/23/2017			58	9/11/2017	9/11/2017		FH 58 0-2"
20	9/23/2017	9/23/2017			59				
21					60				
22					61				
23					62				
24					63				
25					64				
26					65	8/29/2017	8/30/2017		FH 65 0-2"
27	9/23/2017	9/23/2017		FH 27 0-2"	66	8/26/2017	8/26/2017		FH 66 0-2"
28	9/23/2017	9/23/2017		FH 28 0-2"	67	8/25/2017	8/30/2017		FH 67 0-2"
29					68	8/25/2017	8/30/2017		FH 68 0-2"
30					69				
31					70				
32					71				
33					72	8/29/2017			
34					73	8/29/2017	9/11/2017		FH 73 0-2"
35					74	8/29/2017	8/29/2017		FH 74 0-2"
36					75	8/28/2017	8/29/2017		FH 75 0-2"
37					76				
38					77	8/28/2017	8/29/2017		FH 77 0-2"
39									
40									

Pedestals /Monuments Soil					Pedestals /Monuments Soil				
Feature Unit ID	Excavate	Sampled Collected Unit # X 0-2"	Backfill	Notes- Red >75mg/kg Green<75mg/kg	Feature Unit ID	Excavate	Sampled Collected Unit # X 0-2"	Backfill	Notes- Red >75mg/kg Green<75mg/kg
1	8/29/2017	9/4/2017		1-08 0-2"	23				
2	8/29/2017	9/4/2017		2-08 0-2"	24				
3	8/29/2017	9/4/2017		3-10 0-2"	25				
4	8/29/2017	9/4/2017		4-10 0-2"	26				
5	8/29/2017	9/4/2017		5-11 0-2"	27				
6	9/11/2017	9/11/2017		6-51 0-2"	28				
7	9/11/2017	9/11/2017		7-32 0-2"	29				
8					30				
9					31				
10					32				
11					33				
12					34				
13					35				
14					36				
15					37				
16					38				
17					39				
18					40				
19					41				
20					42				
21					43				

Fire Hydrant ID # per updated DBSI file -Navy Fresh Water Lines, Valves & Hydrants. BSI/DR-0034
Pedestal sample identification is a designated ID number followed by a dash and double-digit number relative to the closest Fire Hydrant ID location. No full prior map of pedestals exists.

Table 5. DU 5 Buttress & Cover - Import Clean Coral Sand

DU 5 IMPORT CLEAN CORAL						
DATE	NORTH Wall Loads	SOUTH Wall Loads	EAST Wall Loads	WEST Wall Loads	Days total loads	Days cubic yardage
9/18/2017	0	0	0	0	0	0
9/19/2017	0	0	0	0	0	0
9/20/2017	0	0	0	0	0	0
9/21/2017	0	0	0	0	0	0
9/22/2017	0	0	0	0	0	0
9/23/2017	0	0	16	0	16	240
Load count per wall	279	0	16	0		
15cuyd estimate per wall	4185	0	240	0		
2017 Total R2 combined clean coral import LOADS				295		
Loads x 15cuyd estimate				4425		

Table 6. Excavation Plots - Import Clean Coral Sand

EXCAVATION PLOTS- IMPORT CLEAN CORAL BACKFILL							
DATE	DU-9 Loads	DU-8 Loads	DU-7 Loads	DU-5 Loads	DU-3 Loads	Days total loads	Days cubic yardage
9/18/2017	0	0	0	0	0	0	0
9/19/2017	0	0	0	0	0	0	0
9/20/2017	0	0	0	0	0	0	0
9/21/2017	0	0	0	0	0	0	0
9/22/2017	1	0	11	0	0	12	180
9/23/2017	24	0	0	0	0	24	360
Load count per column	67	22	20	0	0		
15cuyd estimate per column	1005	330	300	0	0		
2017 Total combined clean import Backfill LOADS					109		
Loads x 15cuyd estimate					1635		

Daily Field Report

Date: Monday, September 25, 2017
Prepared by: Scott Wakefield

Project: Removal of Lead-Based Paint from Structures and Lead-Contaminated Soil
Location: Midway Atoll National Wildlife Refuge
Client: US Fish and Wildlife Service

Weather: Partly cloudy, wind 5 mph. Temperature ~81F

Personnel:

Name	Company	Site Hours
Scott Wakefield	NWDE Field Oversight	10
Darin Leibelt	NWDE Supervisor	Partial
Joel Smith	NWDE Operator	10
Dalton Sullivan	NWDE Labor	Partial
Antonio Davis	NWDE Labor	10
Jevon Stone	NWDE Operator	0
Jose Ordaz	NWDE Operator	10
Matt Manning	NWDE Operator	0
Chris Fisher	NWDE Labor	10
Alan Phillips	NWDE Operator	0
Kevin Bach	NWDE Labor	10
Lucas Peel	NWDE Labor	10
Tyler Wilson	NWDE Labor	10
Eric Matteson	NWDE Operator	10

Visitors/Additional Site Personnel:

Name	Title
MaryAnn Amann	U.S. FWS
Bob Peyton	U.S. FWS

Equipment:

Description	Model No.	Comments / Serial #
Pickup Truck	F350 Service Truck	NWDE
Flatbed Truck	Ford F450	NWDE
Container Truck	Peterbuilt	NWDE
Skid Steer	Bobcat S185	NWDE
Tracked Skid Steer	Bobcat T750	NWDE
Tracked Skid Steer	Bobcat	NWDE
Mini-Excavator	CAT 308	NWDE
Excavator	Volvo EC290BLC	NWDE
Excavator	Volvo EC290BLC	NWDE
Excavator	Volvo EC290	NWDE
Off road Dump Truck	Volvo A30D	NWDE
Off road Dump Truck	Volvo A30D	NWDE
Off road Dump Truck	Volvo A30D	NWDE
Excavator – High reach	Komatsu PC400HD	NWDE
Excavator	Komatsu 450	NWDE

Materials Delivered:

Description	QTY	Condition/Comments
Diesel	0 gallons	
Gasoline	0 gallons	

Description of Work:

0700 – Health and Safety meeting at NAF staging area. Review today's work tasks.

Today's focus will be soil work at fire hydrants and outstanding excavation sites with recent concrete foundation removal and the Water Tower 5304.

The Cat 308 excavator and one truck are at the Water Tower 5304 to finish up the small remaining square footage near the north and northeast plot edge. This includes harder soil areas at the in-use 16" mainline valves that isolate the removed tower plumbing. Soil will be direct loaded into one Volvo haul truck and moved to the R2 for future batch treatment using Maectite®. Check for petrels and shearwater birds within the working area prior to beginning work.

At the NAF Hanger staging work area, the DU-8 S28/S29 paint chips and debris collection staged within the 20' shipping container is being prepared for additional packaging into the tri-wall boxes. Assemble the boxes to pallets, complete with a primary poly liner. The previously poly bagged DU-8 debris is positioned within the poly lined tri-wall boxes and sealed. 10 boxes will fit in one 20' container.

At the direction of US FWS, the S28/S29 paint chips and debris are being handled for proper disposal with reference to the TCLP lab results (10-28-15, 5.5 mg/L) which is greater than the 5mg/L limit. Subsequent TCLP testing (8-13-17, 1.1mg/L) and (9-4-17, 2.6mg/L) has been collected and considered in the disposal of the bulk waste. The direction is focusing on the initial elevated 5.5 mg/L, requiring the secondary packaging and appropriate receiving facility.

0800 – The Vac trailer is set up at hydrant # 9 for soil work. A key electrical component failure currently is being reviewed and repairs are under way.

0900 – Soil excavation at the former Water Tower 5304 continues as the final cut north of the footings is made. Progress towards the northeast corner and the existing roadway shoulder.

1100 – At the Boneyard concrete stockpile, rebar steel that has been broken out of the sized concrete is being removed and stockpiled. This is in preparation to ready the 3" minus for final capping of the R2 this season.

1200 – Lunch

1230 – Water Tower 5304 clean up loads are nearing completion for the north base area. Hand labor is finishing out the limited space areas at the concrete valve vaults.

1400 – The Vac trailer repair is complete. Resume soil excavation work using the hose and vac system to complete a 4' diameter x 2' deep area at in-use fire hydrants. Soil is being directly placed into the A30 haul truck for staging within the R2 for future Maectite® treatment.

The mini excavator is at Bldg 502 AT&T to load out the exit scrape following the concrete foundation demolition task work. The 0.5' scrape is direct loaded into the one haul truck and placed in the R2 Unit. This material will be directly interned and not receive secondary Maectite® application.

1600 – The mini excavator is traveling northward to pick up fire hydrants along the Radford St and Commodore Dr. Today the mini excavator and one spotter complete six hydrant dig locations.

The Vac trailer continues working fire hydrant areas. In today's limited run after the electrical repair, eight hydrants were completed by the Vac trailer system.

1730 – Ending the work day. 2017 season volume estimate to date moved or treated is 4970 cuyds.
Water Tower 5304 soil excavation is 100% complete.
DU-9 impacted soil loads hauled to the R2 for future batch treatment is 6 loads.
DU-9 exit demo scrape for non-treated material to the R2 is 2 loads.

Photographs:

Photo 01: Fire Hydrant # 9 – View south. Vac excavation of soil

Photo 02: Fire Hydrant # 9 – View southeast. Vac excavation of soil

Photo 03: FH 15 – View southeast. Example of hydrant in prior completed DU-6 unit

Photo 04: Water Tower 5304 – View south. Finalize the soil excavation

Photo 05: Bldg 502 AT&T – View south. Progress of exit scrape following concrete foundation demo

Table 1. Maectite and Treated Soil Total Estimates

	Maectite Totals						Treated Soil Totals[1,2]		
	Applied Today (gal)					Total to Date	Excavated and Hauled to R-2 Unit **Today**		Excavated and Hauled to R-2 Unit **Total to Date**
Date	Soils (DU9)	Soils (DU8)	Soils (DU7)	Soils (DU5)	Soils (DU3)	(gal)	Load	^{3}yds[1]	^{3}yds[1]
09/25/17	0	0	0	0	0	2686	0	0	3683
09/26/17							0	0	
09/27/17							13	0	
09/28/17							30	0	
09/29/17							0	0	
09/30/17							0	0	
Total to Date	2328 gallons	205 gallons	153 gallons	0 gallons	0 gallons		300 loads		

Notes:
1. Estimates are based on the number of gallons of Maectite® applied.
2. Soil treatment with Maectite® and hauling to R2 may not occur on the same day.
3. 9/11/17 & 9/12/17– Table 2 loads were batch treated in the R2. Inserted this data into Table 1 for totalizing the volumes and gallons. Reset Table 2 "Batch loads" of 67.6 to zero until next ex-situ stockpile treatment.

2017 DU 9 – Figures P 1-16, 18, 20, 21, 23-27.
Bldg 1124, 1126, 3521, S361, 347, 3501, S3126, S3127, 521, 520, 502, 5342, 309, 340, 354, 9149, 232, 233, S269, S225A, 2127, 144, Boat House 1 & 2, 4205, 4206, 4207, 4213, 503, 5303, 5341, 5339, 5338, Bollards, Fire Hydrants, 5304, 5305, 4210, 3524, 3529, 5126, 5378, 3514, and other ancillary structures.
Foundations S464, 502, 4201, 5126, 5295, 5342.
2017 DU 8 – S-28, S-30 re-ex, Pipe figure P19
2017 DU 7 – Bldg 3502, 3503, 3504 shade cloth
2017 DU 5 – R2 Unit, Figure P17
2017 DU 3 – Housing figure P22, 419 MIS re-ex

Table 2. Soil loads hauled to the R2 for ex situ Maectite® treatment

	Load Totals				
	Hauled to R2 for treatment in R2 cell (# of truck loads)				
Date	Soils (DU9)	Soils (DU8)	Soils (DU7)	Soils (DU5)	Soils (DU3)
09/25/17	6	0	0	0	0
09/26/17					
09/27/17					
09/28/17					
09/29/17					
09/30/17					
Batch loads to treat in R2	8.3 loads	0 loads	0 loads	0 loads	0 loads
Total to Date	112.3 loads	34 loads	18.5 loads	0 loads	0 loads

8/14/17 - Batch treatment of all stockpiled "ex situ" loads to date in R2 Cell 1. Entered this data into Table 1 on 8/14/17 for volume and gallon tracking.
8/15/17 - Add "Batch Loads to treat in R2" subtotal that tracks the truck loads placed for treatment. Reset this to zero once treatment event is complete.
8/23/17 – Batch #2 treatment event of all stockpiled "ex situ" loads to date in R2 Cells. Entered this data into Table 1 on 8/23/17 for volume and gallon tracking.
9/12/17 – Batch #3 treatment event of all stockpiled "ex situ" loads to date in R2 Cells. Entered this data into Table 1 on 9/11/17 & 9/12/17 for volume and gallon tracking.
9/21/17 – Batch #4 treatment event of all stockpiled "ex situ" loads to date in R2 Cells. Entered this data into Table 1 on 9/21/17 for volume and gallon tracking.

Table 2.1 Soil loads hauled to the R2, non-treated internment

Date	Load Totals				
	Hauled to R2, non-treated soil (# of truck loads)				
	Soils (DU9)	Soils (DU8)	Soils (DU7)	Soils (DU5)	Soils (DU3)
09/25/17	2	0	0	0	0
09/26/17					
09/27/17					
09/28/17					
09/29/17					
09/30/17					
Total to Date	20 loads	65 loads	0 loads	0 loads	9 loads

Table 3. Weekly Load Estimates

Date	Treated Demo Debris Loads to R2	Clean Concrete Loads to Crusher	Metal Debris Loads To Boneyard	Clean Wood Loads	Steel Debris Loaded onto Barge	~
09/25/17	0	0	0	0	0	
09/26/17						
09/27/17						
09/28/17						
09/29/17						
09/30/17						
Season Total	3 loads	8 loads	0 loads	4 loads	195 loads	

Table 4. Fire Hydrants, Pedestals and Monuments

Fire Hydrant Soil					Fire Hydrant Soil				
Fire Hydrant ID	Excavate	Sampled Collected FH # X 0-2"	Backfill	Notes- Red >75mg/kg Green<75mg/kg	Fire Hydrant ID	Excavate	Sampled Collected FH # X 0-2"	Backfill	Notes- Red >75mg/kg Green<75mg/kg
1					41				
2					42	9/25/2017			
3					43				
4					44				
5					45	9/23/2017			
6					46	9/25/2017			
7					47	9/25/2017			
8	9/25/2017				48	9/25/2017			
9	9/25/2017				49				
10	9/25/2017				50				
11	8/31/2017	9/4/2017		FH 11 0-2"	51	9/11/2017	9/11/2017		FH 51 0-2"
12	DU-6	N/A	N/A	Prior excavation	52	9/11/2017	9/11/2017		FH 52 0-2"
13					53	8/23/2017	8/23/2017		FH 53 0-2"
14	DU-6	N/A	N/A	Prior excavation	54	9/11/2017	9/11/2017		FH 54 0-2"re-ex
15	DU-6	N/A	N/A	Prior excavation	54A	8/23/2017	8/23/2017		FH 54A 0-2"
16	9/23/2017	9/23/2017		Prior excavation	55	8/26/2017	8/26/2017		FH 55 0-2"
17	9/23/2017	9/23/2017		FH 17 0-2"	56	8/26/2017	8/30/2017		FH 56 0-2"
18	9/23/2017	9/23/2017		FH 18 0-2"	57	8/26/2017	8/26/2017		FH 57 0-2"
19	9/23/2017	9/23/2017			58	9/11/2017	9/11/2017		FH 58 0-2"
20	9/23/2017	9/23/2017			59				
21					60				
22	9/25/2017				61				
23					62	9/25/2017			
24					63				
25					64				
26					65	8/29/2017	8/30/2017		FH 65 0-2"
27	9/23/2017	9/23/2017		FH 27 0-2"	66	8/26/2017	8/26/2017		FH 66 0-2"
28	9/23/2017	9/23/2017		FH 28 0-2"	67	8/25/2017	8/30/2017		FH 67 0-2"
29					68	8/25/2017	8/30/2017		FH 68 0-2"
30					69	9/25/2017			
31					70	9/25/2017			
32					71	9/25/2017			
33					72	8/29/2017			
34					73	8/29/2017	9/11/2017		FH 73 0-2"
35					74	8/29/2017	8/29/2017		FH 74 0-2"
36					75	8/28/2017	8/29/2017		FH 75 0-2"
37	9/25/2017				76	9/25/2017			
38	9/25/2017				77	8/28/2017	8/29/2017		FH 77 0-2"
39									
40									

Pedestals /Monuments Soil					Pedestals /Monuments Soil				
Feature Unit ID	Excavate	Sampled Collected Unit # X 0-2"	Backfill	Notes- Red >75mg/kg Green<75mg/kg	Feature Unit ID	Excavate	Sampled Collected Unit # X 0-2"	Backfill	Notes- Red >75mg/kg Green<75mg/kg
1	8/29/2017	9/4/2017		1-08 0-2"	23				
2	8/29/2017	9/4/2017		2-08 0-2"	24				
3	8/29/2017	9/4/2017		3-10 0-2"	25				
4	8/29/2017	9/4/2017		4-10 0-2"	26				
5	8/29/2017	9/4/2017		5-11 0-2"	27				
6	9/11/2017	9/11/2017		6-51 0-2"	28				
7	9/11/2017	9/11/2017		7-32 0-2"	29				
8					30				
9					31				
10					32				
11					33				
12					34				
13					35				
14					36				
15					37				
16					38				
17					39				
18					40				
19					41				
20					42				
21					43				

Fire Hydrant ID # per updated DBSI file -Navy Fresh Water Lines, Valves & Hydrants. BSI/DR-0034
Pedestal sample identification is a designated ID number followed by a dash and double-digit number relative to the closest Fire Hydrant ID location. No full prior map of pedestals exists.

Table 5. DU 5 Buttress & Cover - Import Clean Coral Sand

DU 5 IMPORT CLEAN CORAL						
DATE	NORTH Wall Loads	SOUTH Wall Loads	EAST Wall Loads	WEST Wall Loads	Days total loads	Days cubic yardage
9/25/2017	0	0	0	0	0	0
9/26/2017					0	0
9/27/2017					0	0
9/28/2017					0	0
9/29/2017					0	0
9/30/2017					0	0
Load count per wall	279	0	16	0		
15cuyd estimate per wall	4185	0	240	0		
2017 Total R2 combined clean coral import LOADS				295		
Loads x 15cuyd estimate				4425		

Table 6. Excavation Plots - Import Clean Coral Sand

EXCAVATION PLOTS- IMPORT CLEAN CORAL BACKFILL							
DATE	DU-9 Loads	DU-8 Loads	DU-7 Loads	DU-5 Loads	DU-3 Loads	Days total loads	Days cubic yardage
9/25/2017	0	0	0	0	0	0	0
9/26/2017						0	0
9/27/2017						0	0
9/28/2017						0	0
9/29/2017						0	0
9/30/2017						0	0
Load count per column	67	22	20	0	0		
15cuyd estimate per column	1005	330	300	0	0		
2017 Total combined clean import Backfill LOADS					109		
Loads x 15cuyd estimate					1635		

Daily Field Report

Date: Tuesday, September 26, 2017
Prepared by: Scott Wakefield

Project: Removal of Lead-Based Paint from Structures and Lead-Contaminated Soil
Location: Midway Atoll National Wildlife Refuge
Client: US Fish and Wildlife Service

Weather: Sunny, wind 5 mph. Temperature ~82F

Personnel:

Name	Company	Site Hours
Scott Wakefield	NWDE Field Oversight	10
Darin Leibelt	NWDE Supervisor	Partial
Joel Smith	NWDE Operator	10
Dalton Sullivan	NWDE Labor	Partial
Antonio Davis	NWDE Labor	10
Jevon Stone	NWDE Operator	10
Jose Ordaz	NWDE Operator	10
Matt Manning	NWDE Operator	0
Chris Fisher	NWDE Labor	10
Alan Phillips	NWDE Operator	Partial
Kevin Bach	NWDE Labor	10
Lucas Peel	NWDE Labor	10
Tyler Wilson	NWDE Labor	10
Eric Matteson	NWDE Operator	10

Visitors/Additional Site Personnel:

Name	Title
MaryAnn Amann	U.S. FWS

Equipment:

Description	Model No.	Comments / Serial #
Pickup Truck	F350 Service Truck	NWDE
Flatbed Truck	Ford F450	NWDE
Container Truck	Peterbuilt	NWDE
Skid Steer	Bobcat S185	NWDE
Tracked Skid Steer	Bobcat T750	NWDE
Tracked Skid Steer	Bobcat	NWDE
Mini-Excavator	CAT 308	NWDE
Excavator	Volvo EC290BLC	NWDE
Excavator	Volvo EC290BLC	NWDE
Excavator	Volvo EC290	NWDE
Off road Dump Truck	Volvo A30D	NWDE
Off road Dump Truck	Volvo A30D	NWDE
Off road Dump Truck	Volvo A30D	NWDE
Excavator – High reach	Komatsu PC400HD	NWDE
Excavator	Komatsu 450	NWDE

Materials Delivered:

Description	QTY	Condition/Comments
Diesel	0 gallons	
Gasoline	0 gallons	

Description of Work:

0700 – Health and Safety meeting at NAF staging area. Review today's work tasks.

Today's focus will be soil work at fire hydrants, pedestals and outstanding excavation sites.

The Cat 308 excavator and one truck are setting up for working fire hydrant sites today. Beginning south of Housing 424 and east of former Bldg 4213 Ave Maria, the soil is removed at the hydrant. Target removal is 4' x 4' x 2' deep area surrounding the painted hydrant.

The NWDE crew operating the Vac trailer is set up to include five workers, one haul truck and one skidsteer. The group will begin near the Bldg 259 Midway Theater, then working west through housing area.

The NAF Hanger staging area demobilization preparations continue, including the tri-wall packaging of paint and debris noted yesterday. The last few boxes are being loaded with bagged materials, sealing the poly box liner, box flaps, then staging in the shipping containers for future shipment off-island.

0945 – The mini excavator and one haul truck are excavating two pedestals near former Bldg 5342 Telephone Switch.

1000 – Weekly conference call with Mainland and Hawaii project offices. See NWDE Midway Meeting Agenda for specific detail.

1100 - Both excavation crews are carefully removing soil from the hydrant and loading into each haul truck. Materials are being placed in the R2, Cell 2 for future batch treatment event #5.

Soil sample collection at the bottom of fire hydrant excavations using a single 5-point method. The areas that are subject to Laysan duck activities are being sampled first. Backfill will follow for these hydrant excavations, complete with the below grade shade cloth surrounding the cast steel hydrant to remove the potential waterfowl entrapment to ducklings.

1200 – Lunch

1230 – Hydrant work resumes at ID #35 near residential housing and Bldg 416. The Vac trailer group is working hydrants north of Bldg 3521 FWS Office. Continue soil removal to a minimum of 2' bgs surrounding the painted fire hydrant.

Sample collection continues for today's excavated areas.

1330 – Former Bldg 5342 Telephone Switch exit scrap is being performed using the mini excavator. The recently removed concrete foundation has been previously hauled out. Currently the area is receiving the last grade cut that will be followed with backfill sand later this season.

1445 – NWDE has a third work group to precut 5' x 5' shade cloth panels and bring in a load of clean coral sand from the Boneyard stockpile. Begin select hydrant backfill of fire hydrant ID # 22, 23, 32, 33, 30, 31. Each has been sampled, then followed with clean coral sand lift to within 10" of the hydrant base flange. The shade cloth center point is cut and pulled over the hydrant. Edges are oriented downward, followed with a minimum of 10" of clean sand capping the excavated area.

1730 – Ending the work day. 2017 season volume estimate to date moved or treated is 5200 cuyds.
DU-9 impacted soil loads hauled to the R2 for future batch treatment is 5 loads.
DU-9 exit demo scrape for non-treated material to the R2 is 4 loads from Bldg 5342 Telephone Switch.
Features excavated today by Cat 308 is 5 hydrants and 3 pedestals.
Features excavated today by Vac trailer is 17 hydrants and 4 pedestals.
Features backfilled today are six fire hydrants.

Photographs:

Photo 01: Fire Hydrant # 23 – View northeast. Vac excavation of soil

Photo 02: Fire Hydrant # 23 – View northeast. Clean coral sand backfill with shade cloth at 10" bgs

Photo 03: FH 33 – View west. Example of hydrant and shade cloth placement prior to sand cap

Photo 04: Bldg 259 Theater – View north. Vac excavation of hydrant and pedestal

Photo 05: FH 49 – View east. Vac excavation of hydrant

Photo 06: Pedestal – View south. Excavation of a pedestal near Ave Maria

Photo 07: Bldg 5342 Telephone Switch – View north. Exit surface scrape after foundation work

Table 1. Maectite and Treated Soil Total Estimates

	Maectite Totals						Treated Soil Totals[1,2]		
	Applied Today (gal)					Total to Date	Excavated and Hauled to R-2 Unit **Today**		Excavated and Hauled to R-2 Unit **Total to Date**
Date	Soils (DU9)	Soils (DU8)	Soils (DU7)	Soils (DU5)	Soils (DU3)	(gal)	Load	^{3}yds[1]	^{3}yds[1]
09/25/17	0	0	0	0	0	2686	0	0	3683
09/26/17	0	0	0	0	0	2686	0	0	3683
09/27/17									
09/28/17									
09/29/17									
09/30/17									
Total to Date	2328 gallons	205 gallons	153 gallons	0 gallons	0 gallons		300 loads		

Notes:
1. Estimates are based on the number of gallons of Maectite® applied.
2. Soil treatment with Maectite® and hauling to R2 may not occur on the same day.
3. 9/11/17 & 9/12/17– Table 2 loads were batch treated in the R2. Inserted this data into Table 1 for totalizing the volumes and gallons. Reset Table 2 "Batch loads" of 67.6 to zero until next ex-situ stockpile treatment.

2017 DU 9 – Figures P 1-16, 18, 20, 21, 23-27.
Bldg 1124, 1126, 3521, S361, 347, 3501, S3126, S3127, 521, 520, 502, 5342, 309, 340, 354, 9149, 232, 233, S269, S225A, 2127, 144, Boat House 1 & 2, 4205, 4206, 4207, 4213, 503, 5303, 5341, 5339, 5338, Bollards, Fire Hydrants, 5304, 5305, 4210, 3524, 3529, 5126, 5378, 3514, and other ancillary structures.
Foundations S464, 502, 4201, 5126, 5295, 5342.
2017 DU 8 – S-28, S-30 re-ex, Pipe figure P19
2017 DU 7 – Bldg 3502, 3503, 3504 shade cloth
2017 DU 5 – R2 Unit, Figure P17
2017 DU 3 – Housing figure P22, 419 MIS re-ex

Table 2. Soil loads hauled to the R2 for ex situ Maectite® treatment

	Load Totals				
	Hauled to R2 for treatment in R2 cell (# of truck loads)				
Date	Soils (DU9)	Soils (DU8)	Soils (DU7)	Soils (DU5)	Soils (DU3)
09/25/17	6	0	0	0	0
09/26/17	5	0	0	0	0
09/27/17					
09/28/17					
09/29/17					
09/30/17					
Batch loads to treat in R2	13.3 loads	0 loads	0 loads	0 loads	0 loads
Total to Date	117.3 loads	34 loads	18.5 loads	0 loads	0 loads

8/14/17 - Batch treatment of all stockpiled "ex situ" loads to date in R2 Cell 1. Entered this data into Table 1 on 8/14/17 for volume and gallon tracking.
8/15/17 - Add "Batch Loads to treat in R2" subtotal that tracks the truck loads placed for treatment. Reset this to zero once treatment event is complete.
8/23/17 – Batch #2 treatment event of all stockpiled "ex situ" loads to date in R2 Cells. Entered this data into Table 1 on 8/23/17 for volume and gallon tracking.
9/12/17 – Batch #3 treatment event of all stockpiled "ex situ" loads to date in R2 Cells. Entered this data into Table 1 on 9/11/17 & 9/12/17 for volume and gallon tracking.
9/21/17 – Batch #4 treatment event of all stockpiled "ex situ" loads to date in R2 Cells. Entered this data into Table 1 on 9/21/17 for volume and gallon tracking.

Table 2.1 Soil loads hauled to the R2, non-treated internment

Date	Load Totals				
	Hauled to R2, non-treated soil (# of truck loads)				
	Soils (DU9)	Soils (DU8)	Soils (DU7)	Soils (DU5)	Soils (DU3)
09/25/17	2	0	0	0	0
09/26/17	4	0	0	0	0
09/27/17					
09/28/17					
09/29/17					
09/30/17					
Total to Date	24 loads	65 loads	0 loads	0 loads	9 loads

Table 3. Weekly Load Estimates

Date	Treated Demo Debris Loads to R2	Clean Concrete Loads to Crusher	Metal Debris Loads To Boneyard	Clean Wood Loads	Steel Debris Loaded onto Barge	~
09/25/17	0	0	0	0	0	
09/26/17	0	0	0	0	0	
09/27/17						
09/28/17						
09/29/17						
09/30/17						
Season Total	3 loads	8 loads	0 loads	4 loads	195 loads	

Table 4. Fire Hydrants, Pedestals and Monuments

Fire Hydrant Soil					Fire Hydrant Soil				
Fire Hydrant ID	Excavate	Sampled Collected FH # X 0-2"	Backfill	Notes- Red >75mg/kg Green<75mg/kg	Fire Hydrant ID	Excavate	Sampled Collected FH # X 0-2"	Backfill	Notes- Red >75mg/kg Green<75mg/kg
1	9/26/2017				41				
2					42	9/25/2017			
3	9/26/2017	9/26/2017		FH 3 0-2"	43	9/26/2017			
4	9/26/2017	9/26/2017		FH 4 0-2"	44	9/26/2017			
5					45	9/23/2017			
6					46	9/25/2017			
7	9/26/2017	9/26/2017		FH 7 0-2"	47	9/25/2017			
8	9/25/2017				48	9/25/2017			
9	9/25/2017				49	9/26/2017	9/26/2017		FH 49 0-2"
10	9/25/2017				50				
11	8/31/2017	9/4/2017		FH 11 0-2"	51	9/11/2017	9/11/2017		FH 51 0-2"
12	DU-6	N/A	N/A	Prior excavation	52	9/11/2017	9/11/2017		FH 52 0-2"
13					53	8/23/2017	8/23/2017		FH 53 0-2"
14	DU-6	N/A	N/A	Prior excavation	54	9/11/2017	9/11/2017		FH 54 0-2"re-ex
15	DU-6	N/A	N/A	Prior excavation	54A	8/23/2017	8/23/2017		FH 54A 0-2"
16	9/23/2017	9/23/2017		Prior excavation	55	8/26/2017	8/26/2017		FH 55 0-2"
17	9/23/2017	9/23/2017		FH 17 0-2"	56	8/26/2017	8/30/2017		FH 56 0-2"
18	9/23/2017	9/23/2017		FH 18 0-2"	57	8/26/2017	8/26/2017		FH 57 0-2"
19	9/23/2017	9/23/2017			58	9/11/2017	9/11/2017		FH 58 0-2"
20	9/23/2017	9/23/2017			59				
21	9/26/2017				60				
22	9/25/2017	9/26/2017	9/26/2017	FH 22 0-2"	61				
23	9/26/2017	9/26/2017	9/26/2017	FH 23 0-2"	62	9/25/2017			
24	9/26/2017	9/26/2017		FH 24 0-2"	63				
25	9/26/2017	9/26/2017		FH 25 0-2"	64				
26	9/26/2017	9/26/2017		FH 26 0-2"	65	8/29/2017	8/30/2017		FH 65 0-2"
27	9/23/2017	9/23/2017		FH 27 0-2"	66	8/26/2017	8/26/2017		FH 66 0-2"
28	9/23/2017	9/23/2017		FH 28 0-2"	67	8/25/2017	8/30/2017		FH 67 0-2"
29	9/26/2017	9/26/2017		FH 29 0-2"	68	8/25/2017	8/30/2017		FH 68 0-2"
30	9/26/2017	9/26/2017	9/26/2017	FH 30 0-2"	69	9/25/2017			
31	9/26/2017	9/26/2017	9/26/2017	FH 31 0-2"	70	9/25/2017			
32	9/26/2017	9/26/2017	9/26/2017	FH 32 0-2"	71	9/25/2017			
33	9/26/2017	9/26/2017	9/26/2017	FH 33 0-2"	72	8/29/2017			
34	9/26/2017				73	8/29/2017	9/11/2017		FH 73 0-2"
35	9/26/2017				74	8/29/2017	8/29/2017		FH 74 0-2"
36	9/26/2017				75	8/28/2017	8/29/2017		FH 75 0-2"
37	9/25/2017	9/26/2017		FH 37 0-2"	76	9/25/2017			
38					77	8/28/2017	8/29/2017		FH 77 0-2"
39	DU-1	N/A	N/A	Prior excavation					
40									

Pedestals /Monuments Soil					Pedestals /Monuments Soil				
Feature Unit ID	Excavate	Sampled Collected Unit # X 0-2"	Backfill	Notes- Red >75mg/kg Green<75mg/kg	Feature Unit ID	Excavate	Sampled Collected Unit # X 0-2"	Backfill	Notes- Red >75mg/kg Green<75mg/kg
1	8/29/2017	9/4/2017		1-08 0-2"	23				
2	8/29/2017	9/4/2017		2-08 0-2"	24				
3	8/29/2017	9/4/2017		3-10 0-2"	25				
4	8/29/2017	9/4/2017		4-10 0-2"	26				
5	8/29/2017	9/4/2017		5-11 0-2"	27				
6	9/11/2017	9/11/2017		6-51 0-2"	28				
7	9/11/2017	9/11/2017		7-32 0-2"	29				
8					30				
9					31				
10					32				
11					33				
12					34				
13					35				
14					36				
15					37				
16					38				
17					39				
18					40				
19					41				
20					42				
21					43				

Fire Hydrant ID # per updated DBSI file -Navy Fresh Water Lines, Valves & Hydrants. BSI/DR-0034
Pedestal sample identification is a designated ID number followed by a dash and double-digit number relative to the closest Fire Hydrant ID location. No full prior map of pedestals exists.

Table 5. DU 5 Buttress & Cover - Import Clean Coral Sand

DU 5 IMPORT CLEAN CORAL						
DATE	NORTH Wall Loads	SOUTH Wall Loads	EAST Wall Loads	WEST Wall Loads	Days total loads	Days cubic yardage
9/25/2017	0	0	0	0	0	0
9/26/2017	0	0	0	0	0	0
9/27/2017					0	0
9/28/2017					0	0
9/29/2017					0	0
9/30/2017					0	0
Load count per wall	279	0	16	0		
15cuyd estimate per wall	4185	0	240	0		
2017 Total R2 combined clean coral import LOADS				295		
Loads x 15cuyd estimate				4425		

Table 6. Excavation Plots - Import Clean Coral Sand

EXCAVATION PLOTS- IMPORT CLEAN CORAL BACKFILL							
DATE	DU-9 Loads	DU-8 Loads	DU-7 Loads	DU-5 Loads	DU-3 Loads	Days total loads	Days cubic yardage
9/25/2017	0	0	0	0	0	0	0
9/26/2017	1	0	0	0	0	1	15
9/27/2017						0	0
9/28/2017						0	0
9/29/2017						0	0
9/30/2017						0	0
Load count per column	68	22	20	0	0		
15cuyd estimate per column	1020	330	300	0	0		
2017 Total combined clean import Backfill LOADS					110		
Loads x 15cuyd estimate					1650		

NW Demolition and Environmental
A Joint Venture

Daily Field Report

Date: Wednesday, September 27, 2017
Prepared by: Scott Wakefield

Project: Removal of Lead-Based Paint from Structures and Lead-Contaminated Soil
Location: Midway Atoll National Wildlife Refuge
Client: US Fish and Wildlife Service

Weather: Sunny, wind 5 mph. Temperature ~84F

Personnel:

Name	Company	Site Hours
Scott Wakefield	NWDE Field Oversight	10
Darin Leibelt	NWDE Supervisor	Partial
Joel Smith	NWDE Operator	10
Dalton Sullivan	NWDE Labor	Partial
Antonio Davis	NWDE Labor	10
Jevon Stone	NWDE Operator	10
Jose Ordaz	NWDE Operator	Partial
Matt Manning	NWDE Operator	0
Chris Fisher	NWDE Labor	10
Alan Phillips	NWDE Operator	Partial
Kevin Bach	NWDE Labor	10
Lucas Peel	NWDE Labor	10
Tyler Wilson	NWDE Labor	10
Eric Matteson	NWDE Operator	Partial

Visitors/Additional Site Personnel:

Name	Title
MaryAnn Amann	U.S. FWS

Equipment:

Description	Model No.	Comments / Serial #
Pickup Truck	F350 Service Truck	NWDE
Flatbed Truck	Ford F450	NWDE
Container Truck	Peterbuilt	NWDE
Skid Steer	Bobcat S185	NWDE
Tracked Skid Steer	Bobcat T750	NWDE
Tracked Skid Steer	Bobcat	NWDE
Mini-Excavator	CAT 308	NWDE
Excavator	Volvo EC290BLC	NWDE
Excavator	Volvo EC290BLC	NWDE
Excavator	Volvo EC290	NWDE
Off road Dump Truck	Volvo A30D	NWDE
Off road Dump Truck	Volvo A30D	NWDE
Off road Dump Truck	Volvo A30D	NWDE
Excavator – High reach	Komatsu PC400HD	NWDE
Excavator	Komatsu 450	NWDE

Materials Delivered:

Description	QTY	Condition/Comments
Diesel	0 gallons	
Gasoline	0 gallons	

Description of Work:

0700 – Health and Safety meeting at NAF staging area. Review today's work tasks.
Today's focus will be soil work at fire hydrants, pedestals and outstanding excavation sites.

The Cat 308 excavator and one haul truck are moving to the Fuel Farm. Bldg 4201 JP-5 Pumping Station is receiving the exit scape following the concrete foundation demo and removal task. Materials loaded today are moved to the R2 for direct internment.

The Vac trailer group and equipment are continuing the list of hydrants. Pedestals in the route are also being vac'd around the perimeter to gather the soil. Open top abandon pedestals without manhole covers are also having the soil from within the opening removed to 2' below top of vault, to be backfilled with clean coral sand.
Sampling collection at bottom of excavation for excavated fire hydrants.

0930 – Completion of exit scrape for Bldg 4201 JP-5 Pumping Station. Begin the adjacent Bldg S464 Fuel Oil Pump House exit scrape to follow up the concrete foundation removal work. Materials removed are hauled to the R2 for direct internment.

1050 – Vac trailer work of pedestals and hydrants near the former Marine Barracks Bldg 578/579 is moving forward. Hydrants in prior season DU areas already complete are left in place, i.e. FH 39, FH 41 (DU-1.)

The mini excavator has moved to the east end of the harbor pier on Hennessy Road to the Boathouse #1 and Boathouse #2, Figure P14. Bottom of excavation sampling for BH 1 P100 0-2" (9-1-17) has exceeded 75mg/kg from the Test America lab data. Re-excavate the preliminary 2' bgs location at the toe of the hillside slope. The additional excavation depth is encountering a concrete slab near .75'. Clear the soil plot area down to the concrete slab area that has become covered with sand over the years from hillside sand erosion and wind. As directed by US FWS, combine the BH 1 P100 0-2 and BH 1 101 0-2" excavations to remove the limited soil separating the two dig sites.

1200 – Lunch

1230 - At the inner harbor near former S287, the existing ship anchor monument is being excavated at the perimeter of the chain boarder. The 2.0' wide and 0.5' depth is made and direct loaded in the haul truck.

1400 – Vac trailer progress of pedestals is occurring at the south side of Peters Ave, south of Bldg 3502 Navy Dining Hall. The abated and LeadStop® concrete is typical of the pedestal feature. The vac crew is working to remove the perimeter soil excavation within the heavily root bound location near the trees.

1600 – The Cat 308 and one Volvo haul truck are moving up near Bldg 3502 Navy Dining Hall to excavate the perimeter of the ship anchor monument concrete pedestal. Soil is loaded and will be treated within the R2 during the batch treatment #5 event.

1730 – Ending the work day.
DU-9 impacted soil loads hauled to the R2 for future batch treatment is 1.5 loads.
DU-9 exit demo scrape for non-treated material to the R2 is 3.5 loads from Bldg 4201 and Bldg S464.
Features excavated today by Cat 308 is 3 pedestals.
Features excavated today by Vac trailer is 3 hydrants and 4 pedestals.

Photographs:

Photo 01: Fire Hydrant # 39 – View south. Example of hydrant completed during DU-1 work site

Photo 02: Fire Hydrant # 72 – View west. Varying installation methods with non-typical thrust block

Photo 03: FH 59 – View north. Example of hydrant and misc plumbing at excavation

Photo 04: Pedestal – View north. Vac excavation progress of pedestal

Photo 05: Bldg 4201 JP-5 Pumping Station – View north. Exit soil scrape progress

Photo 06: Bldg S464 Fuel Oil – View south. Exit soil scrape progress

Photo 07: Anchor Monument – View west. Perimeter soil excavation progress

Photo 08: Anchor Monument – View north. Perimeter soil excavation progress

Table 1. Maectite and Treated Soil Total Estimates

	Maectite Totals						Treated Soil Totals[1,2]		
	Applied Today (gal)					Total to Date	Excavated and Hauled to R-2 Unit **Today**		Excavated and Hauled to R-2 Unit **Total to Date**
Date	Soils (DU9)	Soils (DU8)	Soils (DU7)	Soils (DU5)	Soils (DU3)	(gal)	Load	^{3}yds[1]	^{3}yds[1]
09/25/17	0	0	0	0	0	2686	0	0	3683
09/26/17	0	0	0	0	0	2686	0	0	3683
09/27/17	0	0	0	0	0	2686	0	0	3683
09/28/17									
09/29/17									
09/30/17									
Total to Date	2328 gallons	205 gallons	153 gallons	0 gallons	0 gallons		300 loads		

Notes:
1. Estimates are based on the number of gallons of Maectite® applied.
2. Soil treatment with Maectite® and hauling to R2 may not occur on the same day.
3. 9/11/17 & 9/12/17– Table 2 loads were batch treated in the R2. Inserted this data into Table 1 for totalizing the volumes and gallons. Reset Table 2 "Batch loads" of 67.6 to zero until next ex-situ stockpile treatment.

2017 DU 9 – Figures P 1-16, 18, 20, 21, 23-27.
Bldg 1124, 1126, 3521, S361, 347, 3501, S3126, S3127, 521, 520, 502, 5342, 309, 340, 354, 9149, 232, 233, S269, S225A, 2127, 144, Boat House 1 & 2, 4205, 4206, 4207, 4213, 503, 5303, 5341, 5339, 5338, Bollards, Fire Hydrants, 5304, 5305, 4210, 3524, 3529, 5126, 5378, 3514, and other ancillary structures.
Foundations S464, 502, 4201, 5126, 5295, 5342.
2017 DU 8 – S-28, S-30 re-ex, Pipe figure P19
2017 DU 7 – Bldg 3502, 3503, 3504 shade cloth
2017 DU 5 – R2 Unit, Figure P17
2017 DU 3 – Housing figure P22, 419 MIS re-ex

Table 2. Soil loads hauled to the R2 for ex situ Maectite® treatment

	Load Totals				
	Hauled to R2 for treatment in R2 cell (# of truck loads)				
Date	Soils (DU9)	Soils (DU8)	Soils (DU7)	Soils (DU5)	Soils (DU3)
09/25/17	6	0	0	0	0
09/26/17	5	0	0	0	0
09/27/17	1.5	0	0	0	0
09/28/17					
09/29/17					
09/30/17					
Batch loads to treat in R2	14.8 loads	0 loads	0 loads	0 loads	0 loads
Total to Date	118.8 loads	34 loads	18.5 loads	0 loads	0 loads

8/14/17 - Batch treatment of all stockpiled "ex situ" loads to date in R2 Cell 1. Entered this data into Table 1 on 8/14/17 for volume and gallon tracking.
8/15/17 - Add "Batch Loads to treat in R2" subtotal that tracks the truck loads placed for treatment. Reset this to zero once treatment event is complete.
8/23/17 – Batch #2 treatment event of all stockpiled "ex situ" loads to date in R2 Cells. Entered this data into Table 1 on 8/23/17 for volume and gallon tracking.
9/12/17 – Batch #3 treatment event of all stockpiled "ex situ" loads to date in R2 Cells. Entered this data into Table 1 on 9/11/17 & 9/12/17 for volume and gallon tracking.
9/21/17 – Batch #4 treatment event of all stockpiled "ex situ" loads to date in R2 Cells. Entered this data into Table 1 on 9/21/17 for volume and gallon tracking.

Table 2.1 Soil loads hauled to the R2, non-treated internment

Date	Load Totals				
	Hauled to R2, non-treated soil (# of truck loads)				
	Soils (DU9)	Soils (DU8)	Soils (DU7)	Soils (DU5)	Soils (DU3)
09/25/17	2	0	0	0	0
09/26/17	4	0	0	0	0
09/27/17	3.5	0	0	0	0
09/28/17					
09/29/17					
09/30/17					
Total to Date	27.5 loads	65 loads	0 loads	0 loads	9 loads

Table 3. Weekly Load Estimates

Date	Treated Demo Debris Loads to R2	Clean Concrete Loads to Crusher	Metal Debris Loads To Boneyard	Clean Wood Loads	Steel Debris Loaded onto Barge	~
09/25/17	0	0	0	0	0	
09/26/17	0	0	0	0	0	
09/27/17	0	0	0	0	0	
09/28/17						
09/29/17						
09/30/17						
Season Total	3 loads	8 loads	0 loads	4 loads	195 loads	

Table 4. Fire Hydrants, Pedestals and Monuments

Fire Hydrant Soil					Fire Hydrant Soil				
Fire Hydrant ID	Excavate	Sampled Collected FH # X 0-2"	Backfill	Notes- Red >75mg/kg Green<75mg/kg	Fire Hydrant ID	Excavate	Sampled Collected FH # X 0-2"	Backfill	Notes- Red >75mg/kg Green<75mg/kg
1	9/26/2017				41	DU-1	N/A	N/A	Prior excavation
2	9/27/2017				42	9/25/2017	9/27/2017		FH 42 0-2"
3	9/26/2017	9/26/2017		FH 3 0-2"	43	9/26/2017			
4	9/26/2017	9/26/2017		FH 4 0-2"	44	9/26/2017			
5	9/27/2017				45	9/23/2017			
6	9/27/2017				46	9/25/2017			
7	9/26/2017	9/26/2017		FH 7 0-2"	47	9/25/2017			
8	9/25/2017				48	9/25/2017			
9	9/25/2017				49	9/26/2017	9/26/2017		FH 49 0-2"
10	9/25/2017				50				
11	8/31/2017	9/4/2017		FH 11 0-2"	51	9/11/2017	9/11/2017		FH 51 0-2"
12	DU-6	N/A	N/A	Prior excavation	52	9/11/2017	9/11/2017		FH 52 0-2"
13					53	8/23/2017	8/23/2017		FH 53 0-2"
14	DU-6	N/A	N/A	Prior excavation	54	9/11/2017	9/11/2017		FH 54 0-2"re-ex
15	DU-6	N/A	N/A	Prior excavation	54A	8/23/2017	8/23/2017		FH 54A 0-2"
16	9/23/2017	9/23/2017		Prior excavation	55	8/26/2017	8/26/2017		FH 55 0-2"
17	9/23/2017	9/23/2017		FH 17 0-2"	56	8/26/2017	8/30/2017		FH 56 0-2"
18	9/23/2017	9/23/2017		FH 18 0-2"	57	8/26/2017	8/26/2017		FH 57 0-2"
19	9/23/2017				58	9/11/2017	9/11/2017		FH 58 0-2"
20	9/23/2017				59	9/26/2017	9/27/2017		FH 59 0-2"
21	9/26/2017	9/27/2017		FH 21 0-2"	60				
22	9/25/2017	9/26/2017	9/26/2017	FH 22 0-2"	61				
23	9/26/2017	9/26/2017	9/26/2017	FH 23 0-2"	62	9/25/2017	9/27/2017		FH 62 0-2"
24	9/26/2017	9/26/2017		FH 24 0-2"	63				
25	9/26/2017	9/26/2017		FH 25 0-2"	64	9/11/2017	9/11/2017		FH 64 0-2"
26	9/26/2017	9/26/2017		FH 26 0-2"	65	8/29/2017	8/30/2017		FH 65 0-2"
27	9/23/2017	9/23/2017		FH 27 0-2"	66	8/26/2017	8/26/2017		FH 66 0-2"
28	9/23/2017	9/23/2017		FH 28 0-2"	67	8/25/2017	8/30/2017		FH 67 0-2"
29	9/26/2017	9/26/2017		FH 29 0-2"	68	8/25/2017	8/30/2017		FH 68 0-2"
30	9/26/2017	9/26/2017	9/26/2017	FH 30 0-2"	69	9/25/2017	9/27/2017		FH 69 0-2"
31	9/26/2017	9/26/2017	9/26/2017	FH 31 0-2"	70	9/25/2017	9/27/2017		FH 69 0-2"
32	9/26/2017	9/26/2017	9/26/2017	FH 32 0-2"	71	9/25/2017	9/27/2017		FH 71 0-2"
33	9/26/2017	9/26/2017	9/26/2017	FH 33 0-2"	72	8/29/2017	9/27/2017		FH 72 0-2"
34	9/26/2017				73	8/29/2017	9/11/2017		FH 73 0-2"
35	9/26/2017				74	8/29/2017	8/29/2017		FH 74 0-2"
36	9/26/2017				75	8/28/2017	8/29/2017		FH 75 0-2"
37	9/25/2017	9/26/2017		FH 37 0-2"	76	9/25/2017			
38	9/26/2017				77	8/28/2017	8/29/2017		FH 77 0-2"
39	DU-1	N/A	N/A	Prior excavation					
40	9/26/2017								

Pedestals /Monuments Soil					Pedestals /Monuments Soil				
Feature Unit ID	Excavate	Sampled Collected Unit # X 0-2"	Backfill	Notes- Red >75mg/kg Green<75mg/kg	Feature Unit ID	Excavate	Sampled Collected Unit # X 0-2"	Backfill	Notes- Red >75mg/kg Green<75mg/kg
1	8/29/2017	9/4/2017		1-08 0-2"	23				
2	8/29/2017	9/4/2017		2-08 0-2"	24				
3	8/29/2017	9/4/2017		3-10 0-2"	25				
4	8/29/2017	9/4/2017		4-10 0-2"	26				
5	8/29/2017	9/4/2017		5-11 0-2"	27				
6	9/11/2017	9/11/2017		6-51 0-2"	28				
7	9/11/2017	9/11/2017		7-32 0-2"	29				
8					30				
9					31				
10					32				
11					33				
12					34				
13					35				
14					36				
15					37				
16					38				
17					39				
18					40				
19					41				
20					42				
21					43				

Fire Hydrant ID # per updated DBSI file -Navy Fresh Water Lines, Valves & Hydrants. BSI/DR-0034
Pedestal sample identification is a designated ID number followed by a dash and double-digit number relative to the closest Fire Hydrant ID location. No full prior map of pedestals exists.

Table 5. DU 5 Buttress & Cover - Import Clean Coral Sand

DU 5 IMPORT CLEAN CORAL						
DATE	NORTH Wall Loads	SOUTH Wall Loads	EAST Wall Loads	WEST Wall Loads	Days total loads	Days cubic yardage
9/25/2017	0	0	0	0	0	0
9/26/2017	0	0	0	0	0	0
9/27/2017	0	0	0	0	0	0
9/28/2017					0	0
9/29/2017					0	0
9/30/2017					0	0
Load count per wall	279	0	16	0		
15cuyd estimate per wall	4185	0	240	0		
2017 Total R2 combined clean coral import LOADS				295		
Loads x 15cuyd estimate				4425		

Table 6. Excavation Plots - Import Clean Coral Sand

EXCAVATION PLOTS- IMPORT CLEAN CORAL BACKFILL							
DATE	DU-9 Loads	DU-8 Loads	DU-7 Loads	DU-5 Loads	DU-3 Loads	Days total loads	Days cubic yardage
9/25/2017	0	0	0	0	0	0	0
9/26/2017	1	0	0	0	0	1	15
9/27/2017	0	0	0	0	0	0	0
9/28/2017						0	0
9/29/2017						0	0
9/30/2017						0	0
Load count per column	68	22	20	0	0		
15cuyd estimate per column	1020	330	300	0	0		
2017 Total combined clean import Backfill LOADS					110		
Loads x 15cuyd estimate					1650		

Daily Field Report

Date: Thursday, September 28, 2017
Prepared by: Scott Wakefield

Project: Removal of Lead-Based Paint from Structures and Lead-Contaminated Soil
Location: Midway Atoll National Wildlife Refuge
Client: US Fish and Wildlife Service

Weather: Sunny, wind 5 mph. Temperature ~84F

Personnel:

Name	Company	Site Hours
Scott Wakefield	NWDE Field Oversight	10
Darin Leibelt	NWDE Supervisor	Partial
Joel Smith	NWDE Operator	10
Dalton Sullivan	NWDE Labor	Partial
Antonio Davis	NWDE Labor	10
Jevon Stone	NWDE Operator	10
Jose Ordaz	NWDE Operator	10
Matt Manning	NWDE Operator	0
Chris Fisher	NWDE Labor	10
Alan Phillips	NWDE Operator	0
Kevin Bach	NWDE Labor	10
Lucas Peel	NWDE Labor	10
Tyler Wilson	NWDE Labor	10
Eric Matteson	NWDE Operator	Partial

Visitors/Additional Site Personnel:

Name	Title
MaryAnn Amann	U.S. FWS

Equipment:

Description	Model No.	Comments / Serial #
Pickup Truck	F350 Service Truck	NWDE
Flatbed Truck	Ford F450	NWDE
Container Truck	Peterbuilt	NWDE
Skid Steer	Bobcat S185	NWDE
Tracked Skid Steer	Bobcat T750	NWDE
Tracked Skid Steer	Bobcat	NWDE
Mini-Excavator	CAT 308	NWDE
Excavator	Volvo EC290BLC	NWDE
Excavator	Volvo EC290BLC	NWDE
Excavator	Volvo EC290	NWDE
Off road Dump Truck	Volvo A30D	NWDE
Off road Dump Truck	Volvo A30D	NWDE
Off road Dump Truck	Volvo A30D	NWDE
Excavator – High reach	Komatsu PC400HD	NWDE
Excavator	Komatsu 450	NWDE

Materials Delivered:

Description	QTY	Condition/Comments
Diesel	121 gallons	9-26-17
Gasoline	0 gallons	

Description of Work:

0700 – Health and Safety meeting at NAF staging area. Review today's work tasks.

Today's focus will be soil work at fire hydrants and pedestals.

The Cat 308 excavator and one haul truck are removing soil at pedestals near the road crossing of Morrell Ave and Peters St. Materials are direct loaded into the haul truck and once full for multiple pedestal sites, it will be staged within the R2 cell for future batch treatment #5.

0830 – At the Fuel Pier seawall, the Vac trailer is setting up for accessing fire hydrant # 61. 150' of 5" dia hose is in use for extending the process connection over to the remotely located fire hydrant. Using this method of hose extension allows low impact access to remove the target soil surrounding the hydrant. Materials are collected at the hopper and placed into the single haul truck.

Following hydrant # 61 is repeating the method to vac hydrant # 63 near the Cargo Pier. Both hydrants have the soil removed successfully in preparation for bottom of excavation sampling and backfill.

1000 – At the NAF Hanger staging area, materials are being prepped and arranged to go into shipping containers. This is working towards the end of the season demobilization from Sand Island this year. General debris continues to be placed in one specific container while equipment and materials are arranged in a separate 20' connex.

The mini excavator has continued to dig around target pedestals to the 2' wide x 2' depth for the concrete features. Worksites for locations of the pedestals are scattered throughout DU-9.

1200 – Lunch

1230 – Vac crew and equipment are at the ship anchor monument nearest Bldg 3514 TOC Housing. Soil is removed using the vac hose from the interior and exterior of the open bottom anchor base.

1330 – Bottom of excavation sampling collection for progression of features being excavated.

The Vac trailer crew is following up on mini excavator hydrants for finish work to close out each excavation. This is for the final 5 hydrants that the excavator bulked out soil from.

1530 – At Mayday St near former Bldg 343 the Vac trailer crew is following the mini excavator for a pedestal site. The underground 2400 vac electrical utility is within 6' of the shallow dig area. The grass sod is removed with the mini excavator, then the Vac trailer equipment follows up to remove the 2' wide x 2' bgs perimeter soil removal. The utility is advised to have 3' of burial and not directly within the excavation plot. However, the precautions are made to work with a wide margin of safety.

1630 – The mini excavator and haul truck are performing the shallow scrape around the anchor monument nearest the Kahana Pier 2401.

1730 – Ending the work day.
DU-9 impacted soil loads hauled to the R2 for future batch treatment is 3 loads.

Photographs:

Photo 01: Pedestal 13-27 – View southwest. Excavation progress of concrete feature

Photo 02: Pedestal 13-27 – View south. Excavation progress of concrete feature

Photo 03: Pedestal 12-28 – View northwest. Excavation progress of concrete feature

Photo 04: Hydrant ID # 61 – View north. Vac excavation using extended hose length

Photo 05: Pedestal – View southeast. Excavation progress of concrete feature

Photo 06: Bldg 353 – View east. Excavation progress of concrete feature

Table 1. Maectite and Treated Soil Total Estimates

	Maectite Totals						Treated Soil Totals[1,2]		
	Applied Today (gal)					Total to Date	Excavated and Hauled to R-2 Unit **Today**		Excavated and Hauled to R-2 Unit **Total to Date**
Date	Soils (DU9)	Soils (DU8)	Soils (DU7)	Soils (DU5)	Soils (DU3)	(gal)	Load	^{3}yds[1]	^{3}yds[1]
09/25/17	0	0	0	0	0	2686	0	0	3683
09/26/17	0	0	0	0	0	2686	0	0	3683
09/27/17	0	0	0	0	0	2686	0	0	3683
09/28/17	0	0	0	0	0	2686	0	0	3683
09/29/17									
09/30/17									
Total to Date	2328 gallons	205 gallons	153 gallons	0 gallons	0 gallons		300 loads		

Notes:
1. Estimates are based on the number of gallons of Maectite® applied.
2. Soil treatment with Maectite® and hauling to R2 may not occur on the same day.
3. 9/11/17 & 9/12/17– Table 2 loads were batch treated in the R2. Inserted this data into Table 1 for totalizing the volumes and gallons. Reset Table 2 "Batch loads" of 67.6 to zero until next ex-situ stockpile treatment.

2017 DU 9 – Figures P 1-16, 18, 20, 21, 23-27.
Bldg 1124, 1126, 3521, S361, 347, 3501, S3126, S3127, 521, 520, 502, 5342, 309, 340, 354, 9149, 232, 233, S269, S225A, 2127, 144, Boat House 1 & 2, 4205, 4206, 4207, 4213, 503, 5303, 5341, 5339, 5338, Bollards, Fire Hydrants, 5304, 5305, 4210, 3524, 3529, 5126, 5378, 3514, and other ancillary structures.
Foundations S464, 502, 4201, 5126, 5295, 5342.
2017 DU 8 – S-28, S-30 re-ex, Pipe figure P19
2017 DU 7 – Bldg 3502, 3503, 3504 shade cloth
2017 DU 5 – R2 Unit, Figure P17
2017 DU 3 – Housing figure P22, 419 MIS re-ex

Table 2. Soil loads hauled to the R2 for ex situ Maectite® treatment

	Load Totals				
	Hauled to R2 for treatment in R2 cell (# of truck loads)				
Date	Soils (DU9)	Soils (DU8)	Soils (DU7)	Soils (DU5)	Soils (DU3)
09/25/17	6	0	0	0	0
09/26/17	5	0	0	0	0
09/27/17	1.5	0	0	0	0
09/28/17	3	0	0	0	0
09/29/17					
09/30/17					
Batch loads to treat in R2	17.8 loads	0 loads	0 loads	0 loads	0 loads
Total to Date	121.8 loads	34 loads	18.5 loads	0 loads	0 loads

8/14/17 - Batch treatment of all stockpiled "ex situ" loads to date in R2 Cell 1. Entered this data into Table 1 on 8/14/17 for volume and gallon tracking.
8/15/17 - Add "Batch Loads to treat in R2" subtotal that tracks the truck loads placed for treatment. Reset this to zero once treatment event is complete.
8/23/17 – Batch #2 treatment event of all stockpiled "ex situ" loads to date in R2 Cells. Entered this data into Table 1 on 8/23/17 for volume and gallon tracking.
9/12/17 – Batch #3 treatment event of all stockpiled "ex situ" loads to date in R2 Cells. Entered this data into Table 1 on 9/11/17 & 9/12/17 for volume and gallon tracking.
9/21/17 – Batch #4 treatment event of all stockpiled "ex situ" loads to date in R2 Cells. Entered this data into Table 1 on 9/21/17 for volume and gallon tracking.

Table 2.1 Soil loads hauled to the R2, non-treated internment

Date	Load Totals				
	Hauled to R2, non-treated soil (# of truck loads)				
	Soils (DU9)	Soils (DU8)	Soils (DU7)	Soils (DU5)	Soils (DU3)
09/25/17	2	0	0	0	0
09/26/17	4	0	0	0	0
09/27/17	3.5	0	0	0	0
09/28/17	0	0	0	0	0
09/29/17					
09/30/17					
Total to Date	27.5 loads	65 loads	0 loads	0 loads	9 loads

Table 3. Weekly Load Estimates

Date	Treated Demo Debris Loads to R2	Clean Concrete Loads to Crusher	Metal Debris Loads To Boneyard	Clean Wood Loads	Steel Debris Loaded onto Barge	~
09/25/17	0	0	0	0	0	
09/26/17	0	0	0	0	0	
09/27/17	0	0	0	0	0	
09/28/17	0	0	0	0	0	
09/29/17						
09/30/17						
Season Total	3 loads	8 loads	0 loads	4 loads	195 loads	

Table 4. Fire Hydrants, Pedestals and Monuments

Fire Hydrant Soil					Fire Hydrant Soil				
Fire Hydrant ID	Excavate	Sampled Collected FH # X 0-2"	Backfill	Notes- Red >75mg/kg Green<75mg/kg	Fire Hydrant ID	Excavate	Sampled Collected FH # X 0-2"	Backfill	Notes- Red >75mg/kg Green<75mg/kg
1	9/26/2017				41	DU-1	N/A	N/A	Prior excavation
2	9/27/2017				42	9/25/2017	9/27/2017		FH 42 0-2"
3	9/26/2017	9/26/2017		FH 3 0-2"	43	9/26/2017			
4	9/26/2017	9/26/2017		FH 4 0-2"	44	9/26/2017			
5	9/27/2017				45	9/23/2017	9/28/2017		FH 45 0-2"
6	9/27/2017				46	9/25/2017			
7	9/26/2017	9/26/2017		FH 7 0-2"	47	9/25/2017			
8	9/25/2017				48	9/25/2017			
9	9/25/2017				49	9/26/2017	9/26/2017		FH 49 0-2"
10	9/25/2017				50				
11	8/31/2017	9/4/2017		FH 11 0-2"	51	9/11/2017	9/11/2017		FH 51 0-2"
12	DU-6	N/A	N/A	Prior excavation	52	9/11/2017	9/11/2017		FH 52 0-2"
13	DU-6	N/A	N/A	Prior excavation	53	8/23/2017	8/23/2017		FH 53 0-2"
14	DU-6	N/A	N/A	Prior excavation	54	9/11/2017	9/11/2017		FH 54 0-2"re-ex
15	DU-6	N/A	N/A	Prior excavation	54A	8/23/2017	8/23/2017		FH 54A 0-2"
16	9/23/2017	9/28/2017		FH 16 0-2"	55	8/26/2017	8/26/2017		FH 55 0-2"
17	9/23/2017	9/23/2017		FH 17 0-2"	56	8/26/2017	8/30/2017		FH 56 0-2"
18	9/23/2017	9/23/2017		FH 18 0-2"	57	8/26/2017	8/26/2017		FH 57 0-2"
19	9/23/2017				58	9/11/2017	9/11/2017		FH 58 0-2"
20	9/23/2017	9/28/2017		FH 20 0-2"	59	9/26/2017	9/27/2017		FH 59 0-2"
21	9/26/2017	9/27/2017		FH 21 0-2"	60				Seawall
22	9/25/2017	9/26/2017	9/26/2017	FH 22 0-2"	61	9/28/2017	9/28/2017		FH 61 0-2"
23	9/26/2017	9/26/2017	9/26/2017	FH 23 0-2"	62	9/25/2017	9/27/2017		FH 62 0-2"
24	9/26/2017	9/26/2017		FH 24 0-2"	63	9/28/2017	9/28/2017		FH 63 0-2"
25	9/26/2017	9/26/2017		FH 25 0-2"	64	9/11/2017	9/11/2017		FH 64 0-2"
26	9/26/2017	9/26/2017		FH 26 0-2"	65	8/29/2017	8/30/2017		FH 65 0-2"
27	9/23/2017	9/23/2017		FH 27 0-2"	66	8/26/2017	8/26/2017		FH 66 0-2"
28	9/23/2017	9/23/2017		FH 28 0-2"	67	8/25/2017	8/30/2017		FH 67 0-2"
29	9/26/2017	9/26/2017		FH 29 0-2"	68	8/25/2017	8/30/2017		FH 68 0-2"
30	9/26/2017	9/26/2017	9/26/2017	FH 30 0-2"	69	9/25/2017	9/27/2017		FH 69 0-2"
31	9/26/2017	9/26/2017	9/26/2017	FH 31 0-2"	70	9/25/2017	9/27/2017		FH 69 0-2"
32	9/26/2017	9/26/2017	9/26/2017	FH 32 0-2"	71	9/25/2017	9/27/2017		FH 71 0-2"
33	9/26/2017	9/26/2017	9/26/2017	FH 33 0-2"	72	8/29/2017	9/27/2017		FH 72 0-2"
34	9/26/2017				73	8/29/2017	9/11/2017		FH 73 0-2"
35	9/26/2017				74	8/29/2017	8/29/2017		FH 74 0-2"
36	9/26/2017				75	8/28/2017	8/29/2017		FH 75 0-2"
37	9/25/2017	9/26/2017		FH 37 0-2"	76	9/25/2017			
38	9/26/2017				77	8/28/2017	8/29/2017		FH 77 0-2"
39	DU-1	N/A	N/A	Prior excavation					
40	9/26/2017								

Pedestals /Monuments Soil					Pedestals /Monuments Soil				
Feature Unit ID	Excavate	Sampled Collected Unit # X 0-2"	Backfill	Notes- Red >75mg/kg Green<75mg/kg	Feature Unit ID	Excavate	Sampled Collected Unit # X 0-2"	Backfill	Notes- Red >75mg/kg Green<75mg/kg
1	8/29/2017	9/4/2017		1-08 0-2"	23				
2	8/29/2017	9/4/2017		2-08 0-2"	24				
3	8/29/2017	9/4/2017		3-10 0-2"	25				
4	8/29/2017	9/4/2017		4-10 0-2"	26				
5	8/29/2017	9/4/2017		5-11 0-2"	27				
6	9/11/2017	9/11/2017		6-51 0-2"	28				
7	9/11/2017	9/11/2017		7-32 0-2"	29				
8	9/5/2017	9/18/2017		8-20 0-2"	30				
9	9/26/2017	9/28/2017		9-33 0-2"	31				
10	9/26/2017	9/28/2017		10-23 0-2"	32				
11	9/26/2017	9/28/2017		11-20 0-2"	33				
12	9/26/2017	9/28/2017		12-28 0-2"	34				
13	9/26/2017	9/28/2017		13-27 0-2"	35				
14	9/26/2017	9/28/2017		14-08 0-2"	36				
15					37				
16					38				
17					39				
18					40				
19					41				
20					42				
21					43				

Fire Hydrant ID # per updated DBSI file -Navy Fresh Water Lines, Valves & Hydrants. BSI/DR-0034
Pedestal sample identification is a designated ID number followed by a dash and double-digit number relative to the closest Fire Hydrant ID location. No full prior map of pedestals exists.

Table 5. DU 5 Buttress & Cover - Import Clean Coral Sand

DU 5 IMPORT CLEAN CORAL						
DATE	NORTH Wall Loads	SOUTH Wall Loads	EAST Wall Loads	WEST Wall Loads	Days total loads	Days cubic yardage
9/25/2017	0	0	0	0	0	0
9/26/2017	0	0	0	0	0	0
9/27/2017	0	0	0	0	0	0
9/28/2017	0	0	0	0	0	0
9/29/2017					0	0
9/30/2017					0	0
Load count per wall	279	0	16	0		
15cuyd estimate per wall	4185	0	240	0		
2017 Total R2 combined clean coral import LOADS				295		
Loads x 15cuyd estimate				4425		

Table 6. Excavation Plots - Import Clean Coral Sand

EXCAVATION PLOTS- IMPORT CLEAN CORAL BACKFILL							
DATE	DU-9 Loads	DU-8 Loads	DU-7 Loads	DU-5 Loads	DU-3 Loads	Days total loads	Days cubic yardage
9/25/2017	0	0	0	0	0	0	0
9/26/2017	1	0	0	0	0	1	15
9/27/2017	0	0	0	0	0	0	0
9/28/2017	0	0	0	0	0	0	0
9/29/2017						0	0
9/30/2017						0	0
Load count per column	68	22	20	0	0		
15cuyd estimate per column	1020	330	300	0	0		
2017 Total combined clean import Backfill LOADS					110		
Loads x 15cuyd estimate					1650		

NW Demolition and Environmental
A Joint Venture

Daily Field Report

Date: Friday, September 29, 2017
Prepared by: Scott Wakefield

Project: Removal of Lead-Based Paint from Structures and Lead-Contaminated Soil
Location: Midway Atoll National Wildlife Refuge
Client: US Fish and Wildlife Service

Weather: Sunny, wind 15 mph. Temperature ~79F

Personnel:

Name	Company	Site Hours
Scott Wakefield	NWDE Field Oversight	10
Darin Leibelt	NWDE Supervisor	Partial
Joel Smith	NWDE Operator	10
Dalton Sullivan	NWDE Labor	Partial
Antonio Davis	NWDE Labor	10
Jevon Stone	NWDE Operator	10
Jose Ordaz	NWDE Operator	10
Matt Manning	NWDE Operator	10
Chris Fisher	NWDE Labor	10
Alan Phillips	NWDE Operator	10
Kevin Bach	NWDE Labor	10
Lucas Peel	NWDE Labor	10
Tyler Wilson	NWDE Labor	10
Eric Matteson	NWDE Operator	10

Visitors/Additional Site Personnel:

Name	Title
MaryAnn Amann	U.S. FWS

Equipment:

Description	Model No.	Comments / Serial #
Pickup Truck	F350 Service Truck	NWDE
Flatbed Truck	Ford F450	NWDE
Container Truck	Peterbuilt	NWDE
Skid Steer	Bobcat S185	NWDE
Tracked Skid Steer	Bobcat T750	NWDE
Tracked Skid Steer	Bobcat	NWDE
Mini-Excavator	CAT 308	NWDE
Excavator	Volvo EC290BLC	NWDE
Excavator	Volvo EC290BLC	NWDE
Excavator	Volvo EC290	NWDE
Off road Dump Truck	Volvo A30D	NWDE
Off road Dump Truck	Volvo A30D	NWDE
Off road Dump Truck	Volvo A30D	NWDE
Excavator – High reach	Komatsu PC400HD	NWDE
Excavator	Komatsu 450	NWDE

Materials Delivered:

Description	QTY	Condition/Comments
Diesel	0 gallons	
Gasoline	0 gallons	

Description of Work:

0700 – Health and Safety meeting at NAF staging area. Review today's work tasks.

Today's focus will be soil work at fire hydrants, pedestals and R2 tasks.

NWDE is getting equipment and supplies ready for the Batch treatment event #5. This is fire hydrant soil materials that have been vac'd out and staged for treatment within the R2 Cell 2. The reagent is being loaded onto the flatbed truck along with the pump and additional work gear.

NWDE tracked dozer is on the R2 waste layer and resumes cutting the general target profile of the repository. The 290 Volvo currently located at the R2 is doing double duty. One, grading staged piles for treatment and two, moving waste layer material to aid the dozer as needed.

The backfill crew is arranging to continue placing clean coral sand into the small hydrants and pedestals. At fire hydrants the layering of sand, shade cloth and sand cap maintains a forward progression. Shade cloth is a minimum of 10" below grade for burial.
Pedestal backfill work is being performed with the shade cloth panels being placed at the bottom of excavation. Place clean sand on top of this with the flange locked against the concrete and soil wall. Target elevation of new sand is a minimum of 0.4' above original native grade.

Batch event #5 for treatment of staged soil within the R2 Cell 1 is continuing for processing the Maectite® and hydrant water. The 290 Volvo with flat edged bucket is mixing the materials to a consistent, uniform mixture. Once the soil is treated, it is intended to be graded out within the R2 interior cells are needed for forming the final waste layer grade.

0900 – A small NWDE crew is clearing up rebar stick ups at the foundation removal sites. The steel is cut and moved to the rebar piles in progress near the 3" minus crushed concrete.

0945 – Sample collection at hydrants and pedestals to continue preparing the features for backfill.

1200 – Lunch

1230 – R2 grade work continues using the D3 dozer for moving the waste layer profile.

1400 – West of the Sea Plane Hanger, backfilling vault 18-13 to cap off the recent soil excavation and sample collection. One haul truck is bringing sand in from the stockpile area while the mini excavator and skidsteer assist to finish each site.

1530 – Prepare for moving to the Borrow Source area and exporting sand for backfill work. A biological monitor is present for pre-inspection and observation during work activities for sea and wildlife conflicts. Today is in preparation to move additional backfill materials to DU-9 excavation sites tomorrow morning. Move a few select loads to the R2 north clean sand staging area and backfilling hydrants.

1730 – Ending the work day.
DU-9 clean coral sand backfill today is 5 loads.
Maectite® application today for Batch Event #5 is 200 gallons.
Backfill 13 hydrants and 4 pedestals today with clean coral sand.

Photographs:

Photo 01: Hydrant ID #20 – View northwest. Backfill with clean sand including shade cloth layer

Photo 02: Pedestal 13-27 – View south. Backfill progress of concrete feature

Photo 03: Pedestal 12-28 – View northwest. Backfill progress of concrete feature

Photo 04: Hydrant ID # 61 – View southwest. Progress of excavation and sampling

Photo 05: Pedestal 18-13 – View southeast. Excavation progress of concrete feature

Photo 06: Pedestal 18-13 – View southeast. Backfill progress of concrete feature

Photo 07: Pedestal 11-20 – View south. Arranging bottom of excavation shade cloth prior to backfill

Photo 08: R2 Cell 2 – View southwest. Maectite® batch treatment event #5 within Cell 2

Photo 09: R2 Unit – View south. Overview of repository

Photo 10: R2 Unit – View southeast. Overview of rough-in grade work

Photo 11: R2 Unit – View south. Overview of rough-in grade work

Table 1. Maectite and Treated Soil Total Estimates

	Maectite Totals						Treated Soil Totals[1,2]		
	Applied Today (gal)					Total to Date	Excavated and Hauled to R-2 Unit **Today**		Excavated and Hauled to R-2 Unit **Total to Date**
Date	Soils (DU9)	Soils (DU8)	Soils (DU7)	Soils (DU5)	Soils (DU3)	(gal)	Load	^{3}yds[1]	^{3}yds[1]
09/25/17	0	0	0	0	0	2686	0	0	3683
09/26/17	0	0	0	0	0	2686	0	0	3683
09/27/17	0	0	0	0	0	2686	0	0	3683
09/28/17	0	0	0	0	0	2686	0	0	3683
09/29/17	200	0	0	0	0	2886	19		3957
09/30/17									
Total to Date	2528 gallons	205 gallons	153 gallons	0 gallons	0 gallons		319 loads		

Notes:
1. Estimates are based on the number of gallons of Maectite® applied.
2. Soil treatment with Maectite® and hauling to R2 may not occur on the same day.
3. 9/29/17– Table 2 loads were batch treated in the R2. Inserted this data into Table 1 for totalizing the volumes and gallons. Reset Table 2 "Batch loads" of 17.8 to zero until next ex-situ stockpile treatment.

2017 DU 9 – Figures P 1-16, 18, 20, 21, 23-27.
Bldg 1124, 1126, 3521, S361, 347, 3501, S3126, S3127, 521, 520, 502, 5342, 309, 340, 354, 9149, 232, 233, S269, S225A, 2127, 144, Boat House 1 & 2, 4205, 4206, 4207, 4213, 503, 5303, 5341, 5339, 5338, Bollards, Fire Hydrants, 5304, 5305, 4210, 3524, 3529, 5126, 5378, 3514, and other ancillary structures.
Foundations S464, 502, 4201, 5126, 5295, 5342.
2017 DU 8 – S-28, S-30 re-ex, Pipe figure P19
2017 DU 7 – Bldg 3502, 3503, 3504 shade cloth
2017 DU 5 – R2 Unit, Figure P17
2017 DU 3 – Housing figure P22, 419 MIS re-ex

Table 2. Soil loads hauled to the R2 for ex situ Maectite® treatment

	Load Totals				
	Hauled to R2 for treatment in R2 cell (# of truck loads)				
Date	Soils (DU9)	Soils (DU8)	Soils (DU7)	Soils (DU5)	Soils (DU3)
09/25/17	6	0	0	0	0
09/26/17	5	0	0	0	0
09/27/17	1.5	0	0	0	0
09/28/17	3	0	0	0	0
09/29/17	0	0	0	0	0
09/30/17					
Batch loads to treat in R2	0 loads	0 loads	0 loads	0 loads	0 loads
Total to Date	121.8 loads	34 loads	18.5 loads	0 loads	0 loads

8/14/17 - Batch treatment of all stockpiled "ex situ" loads to date in R2 Cell 1. Entered this data into Table 1 on 8/14/17 for volume and gallon tracking.
8/15/17 - Add "Batch Loads to treat in R2" subtotal that tracks the truck loads placed for treatment. Reset this to zero once treatment event is complete.
8/23/17 – Batch #2 treatment event of all stockpiled "ex situ" loads to date in R2 Cells. Entered this data into Table 1 on 8/23/17 for volume and gallon tracking.
9/12/17 – Batch #3 treatment event of all stockpiled "ex situ" loads to date in R2 Cells. Entered this data into Table 1 on 9/11/17 & 9/12/17 for volume and gallon tracking.
9/21/17 – Batch #4 treatment event of all stockpiled "ex situ" loads to date in R2 Cells. Entered this data into Table 1 on 9/21/17 for volume and gallon tracking.
9/29/17 – Batch #5 treatment event of all stockpiled "ex situ" loads to date in R2 Cells. Entered this data into Table 1 on 9/29/17 for volume and gallon tracking.

Table 2.1 Soil loads hauled to the R2, non-treated internment

Date	Load Totals				
	Hauled to R2, non-treated soil (# of truck loads)				
	Soils (DU9)	Soils (DU8)	Soils (DU7)	Soils (DU5)	Soils (DU3)
09/25/17	2	0	0	0	0
09/26/17	4	0	0	0	0
09/27/17	3.5	0	0	0	0
09/28/17	0	0	0	0	0
09/29/17	0	0	0	0	0
09/30/17					
Total to Date	27.5 loads	65 loads	0 loads	0 loads	9 loads

Table 3. Weekly Load Estimates

Date	Treated Demo Debris Loads to R2	Clean Concrete Loads to Crusher	Metal Debris Loads To Boneyard	Clean Wood Loads	Steel Debris Loaded onto Barge	~
09/25/17	0	0	0	0	0	
09/26/17	0	0	0	0	0	
09/27/17	0	0	0	0	0	
09/28/17	0	0	0	0	0	
09/29/17	0	0	0	0	0	
09/30/17						
Season Total	3 loads	8 loads	0 loads	4 loads	195 loads	

Table 4. Fire Hydrants, Pedestals and Monuments

Fire Hydrant Soil					Fire Hydrant Soil				
Fire Hydrant ID	Excavate	Sampled Collected FH # X 0-2"	Backfill	Notes- Red >75mg/kg Green<75mg/kg	Fire Hydrant ID	Excavate	Sampled Collected FH # X 0-2"	Backfill	Notes- Red >75mg/kg Green<75mg/kg
1	9/26/2017				41	DU-1	N/A	N/A	Prior excavation
2	9/27/2017				42	9/25/2017	9/27/2017		FH 42 0-2"
3	9/26/2017	9/26/2017		FH 3 0-2"	43	9/26/2017			
4	9/26/2017	9/26/2017		FH 4 0-2"	44	9/26/2017	9/29/2017		
5	9/27/2017				45	9/23/2017	9/28/2017		FH 45 0-2"
6	9/27/2017				46	9/25/2017			
7	9/26/2017	9/26/2017		FH 7 0-2"	47	9/25/2017			
8	9/25/2017				48	9/25/2017			
9	9/25/2017				49	9/26/2017	9/26/2017		FH 49 0-2"
10	9/25/2017				50				
11	8/31/2017	9/4/2017		FH 11 0-2"	51	9/11/2017	9/11/2017		FH 51 0-2"
12	DU-6	N/A	N/A	Prior excavation	52	9/11/2017	9/11/2017		FH 52 0-2"
13	DU-6	N/A	N/A	Prior excavation	53	8/23/2017	8/23/2017		FH 53 0-2"
14	DU-6	N/A	N/A	Prior excavation	54	9/11/2017	9/11/2017		FH 54 0-2"re-ex
15	DU-6	N/A	N/A	Prior excavation	54A	8/23/2017	8/23/2017		FH 54A 0-2"
16	9/23/2017	9/28/2017		FH 16 0-2"	55	8/26/2017	8/26/2017	9/29/2017	FH 55 0-2"
17	9/23/2017	9/23/2017		FH 17 0-2"	56	8/26/2017	8/30/2017		FH 56 0-2"
18	9/23/2017	9/23/2017		FH 18 0-2"	57	8/26/2017	8/26/2017	9/29/2017	FH 57 0-2"
19	9/23/2017	9/29/2017			58	9/11/2017	9/11/2017	9/29/2017	FH 58 0-2"
20	9/23/2017	9/28/2017	9/29/2017	FH 20 0-2"	59	9/26/2017	9/27/2017	9/29/2017	FH 59 0-2"
21	9/26/2017	9/27/2017		FH 21 0-2"	60				Seawall
22	9/25/2017	9/26/2017	9/26/2017	FH 22 0-2"	61	9/28/2017	9/29/2017		FH 61 0-2"
23	9/26/2017	9/26/2017	9/26/2017	FH 23 0-2"	62	9/25/2017	9/27/2017		FH 62 0-2"
24	9/26/2017	9/26/2017	9/29/2017	FH 24 0-2"	63	9/28/2017	9/29/2017		FH 63 0-2"
25	9/26/2017	9/26/2017	9/29/2017	FH 25 0-2"	64	9/11/2017	9/11/2017		FH 64 0-2"
26	9/26/2017	9/26/2017	9/29/2017	FH 26 0-2"	65	8/29/2017	8/30/2017		FH 65 0-2"
27	9/23/2017	9/23/2017		FH 27 0-2"	66	8/26/2017	8/26/2017		FH 66 0-2"
28	9/23/2017	9/23/2017		FH 28 0-2"	67	8/25/2017	8/30/2017	9/29/2017	FH 67 0-2"
29	9/26/2017	9/26/2017		FH 29 0-2"	68	8/25/2017	8/30/2017	9/29/2017	FH 68 0-2"
30	9/26/2017	9/26/2017	9/26/2017	FH 30 0-2"	69	9/25/2017	9/27/2017	9/29/2017	FH 69 0-2"
31	9/26/2017	9/26/2017	9/26/2017	FH 31 0-2"	70	9/25/2017	9/27/2017	9/29/2017	FH 69 0-2"
32	9/26/2017	9/26/2017	9/26/2017	FH 32 0-2"	71	9/25/2017	9/27/2017	9/29/2017	FH 71 0-2"
33	9/26/2017	9/26/2017	9/26/2017	FH 33 0-2"	72	8/29/2017	9/27/2017		FH 72 0-2"
34	9/26/2017	9/29/2017			73	8/29/2017	9/11/2017		FH 73 0-2"
35	9/26/2017				74	8/29/2017	8/29/2017		FH 74 0-2"
36	9/26/2017				75	8/28/2017	8/29/2017		FH 75 0-2"
37	9/25/2017	9/26/2017		FH 37 0-2"	76	9/25/2017			
38	9/26/2017				77	8/28/2017	8/29/2017		FH 77 0-2"
39	DU-1	N/A	N/A	Prior excavation					
40	9/26/2017								

Pedestals /Monuments Soil					Pedestals /Monuments Soil				
Feature Unit ID	Excavate	Sampled Collected ID # X P100 0-2"	Backfill	Notes- Red >75mg/kg Green<75mg/kg	Feature Unit ID	Excavate	Sampled Collected ID # X P100 0-2"	Backfill	Notes- Red >75mg/kg Green<75mg/kg
1	8/29/2017	9/4/2017		1-08 P100 0-2"	23				
2	8/29/2017	9/4/2017		2-08 P100 0-2"	24				
3	8/29/2017	9/4/2017		3-10 P100 0-2"	25				
4	8/29/2017	9/4/2017		4-10 P100 0-2"	26				
5	8/29/2017	9/4/2017		5-11 P100 0-2"	27				
6	9/11/2017	9/11/2017		6-51 P100 0-2"	28				
7	9/11/2017	9/11/2017		7-32 P100 0-2"	29				
8	9/05/2017	9/18/2017		8-20 P100 0-2"	30				
9	9/26/2017	9/28/2017		9-33 P100 0-2"	31				
10	9/26/2017	9/28/2017		10-23 P100 0-2"	32				
11	9/26/2017	9/28/2017	9/29/2017	11-20 P100 0-2"	33				
12	9/26/2017	9/28/2017	9/29/2017	12-28 P100 0-2"	34				
13	9/26/2017	9/28/2017	9/29/2017	13-27 P100 0-2"	35				
14	9/26/2017	9/28/2017		14-08 P100 0-2"	36				
15	9/27/2017	9/29/2017		15-24 P100 0-2"	37				
16	9/27/2017	9/29/2017		16-25 P100 0-2"	38				
17	9/27/2017	9/29/2017		17-25 P100 0-2"	39				
18	9/28/2017	9/29/2017	9/29/2017	18-13 P100 0-2"	40				
19	9/26/2017	9/29/2017		19-44 P100 0-2"	41				
20	9/26/2017	9/29/2017		20-44 P100 0-2"	42				
21	9/26/2017	9/29/2017		21-52 P100 0-2"	43				

Fire Hydrant ID # per updated DBSI file -Navy Fresh Water Lines, Valves & Hydrants. BSI/DR-0034
Pedestal sample identification is a designated ID number followed by a dash and double-digit number relative to the closest Fire Hydrant ID location. No full prior map of pedestals exists.

Table 5. DU 5 Buttress & Cover - Import Clean Coral Sand

DU 5 IMPORT CLEAN CORAL						
DATE	NORTH Wall Loads	SOUTH Wall Loads	EAST Wall Loads	WEST Wall Loads	Days total loads	Days cubic yardage
9/25/2017	0	0	0	0	0	0
9/26/2017	0	0	0	0	0	0
9/27/2017	0	0	0	0	0	0
9/28/2017	0	0	0	0	0	0
9/29/2017	3	0	0	0	3	45
9/30/2017					0	0
Load count per wall	282	0	16	0		
15cuyd estimate per wall	4230	0	240	0		
2017 Total R2 combined clean coral import LOADS				298		
Loads x 15cuyd estimate				4470		

Table 6. Excavation Plots - Import Clean Coral Sand

EXCAVATION PLOTS- IMPORT CLEAN CORAL BACKFILL							
DATE	DU-9 Loads	DU-8 Loads	DU-7 Loads	DU-5 Loads	DU-3 Loads	Days total loads	Days cubic yardage
9/25/2017	0	0	0	0	0	0	0
9/26/2017	1	0	0	0	0	1	15
9/27/2017	0	0	0	0	0	0	0
9/28/2017	0	0	0	0	0	0	0
9/29/2017	5	0	0	0	0	5	75
9/30/2017						0	0
Load count per column	73	22	20	0	0		
15cuyd estimate per column	1095	330	300	0	0		
2017 Total combined clean import Backfill LOADS					115		
Loads x 15cuyd estimate					1725		

Daily Field Report

Date: Saturday, September 30, 2017
Prepared by: Scott Wakefield

Project: Removal of Lead-Based Paint from Structures and Lead-Contaminated Soil
Location: Midway Atoll National Wildlife Refuge
Client: US Fish and Wildlife Service

Weather: High clouds, wind 13 mph. Temperature ~78F

Personnel:

Name	Company	Site Hours
Scott Wakefield	NWDE Field Oversight	10
Darin Leibelt	NWDE Supervisor	10
Joel Smith	NWDE Operator	10
Dalton Sullivan	NWDE Labor	10
Antonio Davis	NWDE Labor	10
Jevon Stone	NWDE Operator	10
Jose Ordaz	NWDE Operator	10
Matt Manning	NWDE Operator	10
Chris Fisher	NWDE Labor	10
Alan Phillips	NWDE Operator	10
Kevin Bach	NWDE Labor	10
Lucas Peel	NWDE Labor	10
Tyler Wilson	NWDE Labor	10
Eric Matteson	NWDE Operator	10

Visitors/Additional Site Personnel:

Name	Title
MaryAnn Amann	U.S. FWS

Equipment:

Description	Model No.	Comments / Serial #
Pickup Truck	F350 Service Truck	NWDE
Flatbed Truck	Ford F450	NWDE
Container Truck	Peterbuilt	NWDE
Skid Steer	Bobcat S185	NWDE
Tracked Skid Steer	Bobcat T750	NWDE
Tracked Skid Steer	Bobcat	NWDE
Mini-Excavator	CAT 308	NWDE
Excavator	Volvo EC290BLC	NWDE
Excavator	Volvo EC290BLC	NWDE
Excavator	Volvo EC290	NWDE
Off road Dump Truck	Volvo A30D	NWDE
Off road Dump Truck	Volvo A30D	NWDE
Off road Dump Truck	Volvo A30D	NWDE
Excavator – High reach	Komatsu PC400HD	NWDE
Excavator	Komatsu 450	NWDE

Materials Delivered:

Description	QTY	Condition/Comments
Diesel	170 gallons	9/28/17
Diesel	185 gallons	9/29/17
Diesel	359 gallons	9/30/17
Gasoline	0 gallons	

Description of Work:

0700 – Health and Safety meeting at NAF staging area. Review today's work tasks.

Today's focus will be soil work at fire hydrants, pedestals and R2 tasks.

NWDE hydrant and pedestal backfill work resumes. Clean coral sand is being placed at fire hydrants up to 10" bgs. Shade cloth panels are placed and fitted tight to the feature edges, then positioned and capped with a minimum of 14" of sand backfill. The mini excavator, one haul truck and one tracked skidsteer make the rounds to keep backfill tasks going through the day.

At the Borrow Source Cargo Pier beach, the crew has inspected and access the area to begin loading out clean coral sand. Backfill of former Navy Water Tower 5305 will occur today in select areas. Two of the eight sub plots for the Water Tower are pending lab results for the second re-excavation. The other six plots have returned analytical <75mg/kg. Today, only the passing sub plots are being backfilled and leaving 5305 P104 0-2" Re-Ex A & B and 5305 P106 0-2" Re-Ex A & B open, pending the lab analysis results.

As clean backfill is brought in, the tracked skidsteer is placing materials within the area. Prior to access and material placement, petrel burrows are inspected and cleared for the work area.

0900 – At Bldg 5303 R2 Unit, NWDE is beginning the reference staking to cut grade on the R2 waste layer per Geosyntec drawing PNG 0616-04B-07B sheet 7 of 9, rev D. Top of waste ridge line is marked and worked downward with the 2% slope to the R2 exterior walls. Currently the 2' of CMU block remains in place on top of the cast in place concrete R2 walls. As the initial rough backfill grade of the R2 waste layer begins to form to bring up low areas, the determination of final elevations based on imported waste volume can be made. To follow, the anticipated removal of the CMU block on top of the cast in place concrete wall will be addressed.

1100 – Hydrant and pedestal backfill work is ongoing. Beginning at the Fuel Farm hydrant ID #52, working southward past the Midway Bowl and Navy Dining Hall roadways. The areas to backfill at the road shoulders continue to receive sand, shadecloth and sand cap. Pedestals continue to receive shadecloth at the bottom of excavation, capped with clean sand.

1200 – Lunch

1230 – R2 grade work with the Cat D3 progresses as the east/west ridgeline cut is established. Following a center cut towards the north is made at two blade widths. These reference cuts to grade stakes are beginning to shape the waste layer. The heaviest cut is 0.48' at the ridge and tapering off to -0.75 nearest the wall at the north area above Cell 1 and Cell 2 division wall.

Continue reference grade staking for Cell 3 and Cell 4 southern 2% slope.

1500 – At the R2 Unit, layout and grade staking the east 2% slope and intersect to the north 2% slope oriented from the ridge to the northeast corner of the R2 exterior wall. Repeat the layout for the ridge to the southeast corner. The Cat dozer is following to cut the initial reference lines at the east slope.

1600 – Continue grade staking for the west 2% slope and intersect to the north 2% slope oriented from the ridge to the northwest corner of the R2 exterior wall. Repeat the layout for the ridge to the southwest corner.

Hydrant progress and pedestal backfill work has made it past hydrant ID #11, the southern side of Bldg 309 Power Plant and north to hydrant ID #16.

Backfill with clean coral sand at former Navy Water Tower 5305 has made near target grade for the sub plot areas that have lab results less than 75 mg/kg. The two remaining plots remain accessible, awaiting results.

1730 – Ending the work day. 2017 season volume estimate to date moved or treated is 5340 cuyds.
DU-9 clean coral sand backfill today is 7 loads to hydrants and pedestals.
Backfill 5 hydrants and 14 pedestals today with clean coral sand.
DU-9 clean coral sand backfill today is 28 loads to former Navy Water Tower 5305.

Photographs:

Photo 01: Navy Water Tower 5305 – View west. Backfill progress with clean sand

Photo 02: Navy Water Tower 5305 – View east. Backfill progress with clean sand

Photo 03: Bldg 5303 R2 Unit – View west. Initial grade work progress

Photo 04: Bldg 5303 R2 Unit – View east. Initial grade work progress

Photo 05: Bldg 5303 R2 Unit – View east. Initial grade work progress

Photo 06: Bldg 5303 R2 Unit – View northeast. Initial grade work progress

Photo 07: 1-08 – View north. Clean sand backfill

Photo 08: 2-51 – View northeast. Clean sand backfill

Photo 09: 15-24 – View southwest. Clean sand backfill

Table 1. Maectite and Treated Soil Total Estimates

	Maectite Totals						Treated Soil Totals[1,2]		
	Applied Today (gal)					Total to Date	Excavated and Hauled to R-2 Unit **Today**		Excavated and Hauled to R-2 Unit **Total to Date**
Date	Soils (DU9)	Soils (DU8)	Soils (DU7)	Soils (DU5)	Soils (DU3)	(gal)	Load	^{3}yds[1]	^{3}yds[1]
09/25/17	0	0	0	0	0	2686	0	0	3683
09/26/17	0	0	0	0	0	2686	0	0	3683
09/27/17	0	0	0	0	0	2686	0	0	3683
09/28/17	0	0	0	0	0	2686	0	0	3683
09/29/17	200	0	0	0	0	2886	19	274	3957
09/30/17	0	0	0	0	0	2886	0	0	3957
Total to Date	2528 gallons	205 gallons	153 gallons	0 gallons	0 gallons		319 loads		

Notes:
1. Estimates are based on the number of gallons of Maectite® applied.
2. Soil treatment with Maectite® and hauling to R2 may not occur on the same day.
3. 9/29/17– Table 2 loads were batch treated in the R2. Inserted this data into Table 1 for totalizing the volumes and gallons. Reset Table 2 "Batch loads" of 17.8 to zero until next ex-situ stockpile treatment.

2017 DU 9 – Figures P 1-16, 18, 20, 21, 23-27.
Bldg 1124, 1126, 3521, S361, 347, 3501, S3126, S3127, 521, 520, 502, 5342, 309, 340, 354, 9149, 232, 233, S269, S225A, 2127, 144, Boat House 1 & 2, 4205, 4206, 4207, 4213, 503, 5303, 5341, 5339, 5338, Bollards, Fire Hydrants, 5304, 5305, 4210, 3524, 3529, 5126, 5378, 3514, and other ancillary structures.
Foundations S464, 502, 4201, 5126, 5295, 5342.
2017 DU 8 – S-28, S-30 re-ex, Pipe figure P19
2017 DU 7 – Bldg 3502, 3503, 3504 shade cloth
2017 DU 5 – R2 Unit, Figure P17
2017 DU 3 – Housing figure P22, 419 MIS re-ex

Table 2. Soil loads hauled to the R2 for ex situ Maectite® treatment

	Load Totals				
	Hauled to R2 for treatment in R2 cell (# of truck loads)				
Date	Soils (DU9)	Soils (DU8)	Soils (DU7)	Soils (DU5)	Soils (DU3)
09/25/17	6	0	0	0	0
09/26/17	5	0	0	0	0
09/27/17	1.5	0	0	0	0
09/28/17	3	0	0	0	0
09/29/17	0	0	0	0	0
09/30/17	0	0	0	0	0
Batch loads to treat in R2	0 loads	0 loads	0 loads	0 loads	0 loads
Total to Date	121.8 loads	34 loads	18.5 loads	0 loads	0 loads

8/14/17 - Batch treatment of all stockpiled "ex situ" loads to date in R2 Cell 1. Entered this data into Table 1 on 8/14/17 for volume and gallon tracking.
8/15/17 - Add "Batch Loads to treat in R2" subtotal that tracks the truck loads placed for treatment. Reset this to zero once treatment event is complete.
8/23/17 – Batch #2 treatment event of all stockpiled "ex situ" loads to date in R2 Cells. Entered this data into Table 1 on 8/23/17 for volume and gallon tracking.
9/12/17 – Batch #3 treatment event of all stockpiled "ex situ" loads to date in R2 Cells. Entered this data into Table 1 on 9/11/17 & 9/12/17 for volume and gallon tracking.
9/21/17 – Batch #4 treatment event of all stockpiled "ex situ" loads to date in R2 Cells. Entered this data into Table 1 on 9/21/17 for volume and gallon tracking.
9/29/17 – Batch #5 treatment event of all stockpiled "ex situ" loads to date in R2 Cells. Entered this data into Table 1 on 9/29/17 for volume and gallon tracking.

Table 2.1 Soil loads hauled to the R2, non-treated internment

Date	Load Totals				
	Hauled to R2, non-treated soil (# of truck loads)				
	Soils (DU9)	Soils (DU8)	Soils (DU7)	Soils (DU5)	Soils (DU3)
09/25/17	2	0	0	0	0
09/26/17	4	0	0	0	0
09/27/17	3.5	0	0	0	0
09/28/17	0	0	0	0	0
09/29/17	0	0	0	0	0
09/30/17	0	0	0	0	0
Total to Date	27.5 loads	65 loads	0 loads	0 loads	9 loads

Table 3. Weekly Load Estimates

Date	Treated Demo Debris Loads to R2	Clean Concrete Loads to Crusher	Metal Debris Loads To Boneyard	Clean Wood Loads	Steel Debris Loaded onto Barge	~
09/25/17	0	0	0	0	0	
09/26/17	0	0	0	0	0	
09/27/17	0	0	0	0	0	
09/28/17	0	0	0	0	0	
09/29/17	0	0	0	0	0	
09/30/17	0	0	0	0	0	
Season Total	3 loads	8 loads	0 loads	4 loads	195 loads	

Table 4. Fire Hydrants, Pedestals and Monuments

Fire Hydrant Soil					Fire Hydrant Soil				
Fire Hydrant ID	Excavate	Sampled Collected FH # X 0-2"	Backfill	Notes- Red >75mg/kg Green<75mg/kg	Fire Hydrant ID	Excavate	Sampled Collected FH # X 0-2"	Backfill	Notes- Red >75mg/kg Green<75mg/kg
1	9/26/2017				41	DU-1	N/A	N/A	Prior excavation
2	9/27/2017				42	9/25/2017	9/27/2017		FH 42 0-2"
3	9/26/2017	9/26/2017		FH 3 0-2"	43	9/26/2017			
4	9/26/2017	9/26/2017		FH 4 0-2"	44	9/26/2017	9/29/2017		
5	9/27/2017				45	9/23/2017	9/28/2017		FH 45 0-2"
6	9/27/2017				46	9/25/2017			
7	9/26/2017	9/26/2017		FH 7 0-2"	47	9/25/2017			
8	9/25/2017				48	9/25/2017			
9	9/25/2017				49	9/26/2017	9/26/2017		FH 49 0-2"
10	9/25/2017				50				
11	8/31/2017	9/4/2017	9/30/2017	FH 11 0-2"	51	9/11/2017	9/11/2017	9/30/2017	FH 51 0-2"
12	DU-6	N/A	N/A	Prior excavation	52	9/11/2017	9/11/2017	9/30/2017	FH 52 0-2"
13	DU-6	N/A	N/A	Prior excavation	53	8/23/2017	8/23/2017		FH 53 0-2"
14	DU-6	N/A	N/A	Prior excavation	54	9/11/2017	9/11/2017		FH 54 0-2"re-ex
15	DU-6	N/A	N/A	Prior excavation	54A	8/23/2017	8/23/2017		FH 54A 0-2"
16	9/23/2017	9/28/2017		FH 16 0-2"	55	8/26/2017	8/26/2017	9/29/2017	FH 55 0-2"
17	9/23/2017	9/23/2017		FH 17 0-2"	56	8/26/2017	8/30/2017		FH 56 0-2"
18	9/23/2017	9/23/2017		FH 18 0-2"	57	8/26/2017	8/26/2017	9/29/2017	FH 57 0-2"
19	9/23/2017	9/29/2017			58	9/11/2017	9/11/2017	9/29/2017	FH 58 0-2"
20	9/23/2017	9/28/2017	9/29/2017	FH 20 0-2"	59	9/26/2017	9/27/2017	9/29/2017	FH 59 0-2"
21	9/26/2017	9/27/2017		FH 21 0-2"	60				Seawall
22	9/25/2017	9/26/2017	9/26/2017	FH 22 0-2"	61	9/28/2017	9/29/2017		FH 61 0-2"
23	9/26/2017	9/26/2017	9/26/2017	FH 23 0-2"	62	9/25/2017	9/27/2017		FH 62 0-2"
24	9/26/2017	9/26/2017	9/29/2017	FH 24 0-2"	63	9/28/2017	9/29/2017		FH 63 0-2"
25	9/26/2017	9/26/2017	9/29/2017	FH 25 0-2"	64	9/11/2017	9/11/2017		FH 64 0-2"
26	9/26/2017	9/26/2017	9/29/2017	FH 26 0-2"	65	8/29/2017	8/30/2017		FH 65 0-2"
27	9/23/2017	9/23/2017		FH 27 0-2"	66	8/26/2017	8/26/2017		FH 66 0-2"
28	9/23/2017	9/23/2017	9/30/2017	FH 28 0-2"	67	8/25/2017	8/30/2017	9/29/2017	FH 67 0-2"
29	9/26/2017	9/26/2017		FH 29 0-2"	68	8/25/2017	8/30/2017	9/29/2017	FH 68 0-2"
30	9/26/2017	9/26/2017	9/26/2017	FH 30 0-2"	69	9/25/2017	9/27/2017	9/29/2017	FH 69 0-2"
31	9/26/2017	9/26/2017	9/26/2017	FH 31 0-2"	70	9/25/2017	9/27/2017	9/29/2017	FH 69 0-2"
32	9/26/2017	9/26/2017	9/26/2017	FH 32 0-2"	71	9/25/2017	9/27/2017	9/29/2017	FH 71 0-2"
33	9/26/2017	9/26/2017	9/26/2017	FH 33 0-2"	72	8/29/2017	9/27/2017		FH 72 0-2"
34	9/26/2017	9/29/2017	9/30/2017	FH 34 0-2"	73	8/29/2017	9/11/2017		FH 73 0-2"
35	9/26/2017				74	8/29/2017	8/29/2017		FH 74 0-2"
36	9/26/2017				75	8/28/2017	8/29/2017		FH 75 0-2"
37	9/25/2017	9/26/2017		FH 37 0-2"	76	9/25/2017			
38	9/26/2017				77	8/28/2017	8/29/2017		FH 77 0-2"
39	DU-1	N/A	N/A	Prior excavation					
40	9/26/2017								

Pedestals /Monuments Soil					Pedestals /Monuments Soil				
Feature Unit ID	Excavate	Sampled Collected ID # X P100 0-2"	Backfill	Notes- Red >75mg/kg Green<75mg/kg	Feature Unit ID	Excavate	Sampled Collected ID # X P100 0-2"	Backfill	Notes- Red >75mg/kg Green<75mg/kg
1	8/29/2017	9/4/2017	9/30/2017	1-08 P100 0-2"	23				
2	8/29/2017	9/4/2017	9/30/2017	2-08 P100 0-2"	24				
3	8/29/2017	9/4/2017	9/30/2017	3-10 P100 0-2"	25				
4	8/29/2017	9/4/2017	9/30/2017	4-10 P100 0-2"	26				
5	8/29/2017	9/4/2017	9/30/2017	5-11 P100 0-2"	27				
6	9/11/2017	9/11/2017	9/30/2017	6-51 P100 0-2"	28				
7	9/11/2017	9/11/2017	9/30/2017	7-32 P100 0-2"	29				
8	9/05/2017	9/18/2017		8-20 P100 0-2"	30				
9	9/26/2017	9/28/2017	9/30/2017	9-33 P100 0-2"	31				
10	9/26/2017	9/28/2017	9/30/2017	10-23 P100 0-2"	32				
11	9/26/2017	9/28/2017	9/29/2017	11-20 P100 0-2"	33				
12	9/26/2017	9/28/2017	9/29/2017	12-28 P100 0-2"	34				
13	9/26/2017	9/28/2017	9/29/2017	13-27 P100 0-2"	35				
14	9/26/2017	9/28/2017	9/30/2017	14-08 P100 0-2"	36				
15	9/27/2017	9/29/2017	9/30/2017	15-24 P100 0-2"	37				
16	9/27/2017	9/29/2017	9/30/2017	16-25 P100 0-2"	38				
17	9/27/2017	9/29/2017	9/30/2017	17-25 P100 0-2"	39				
18	9/28/2017	9/29/2017	9/29/2017	18-13 P100 0-2"	40				
19	9/26/2017	9/29/2017		19-44 P100 0-2"	41				
20	9/26/2017	9/29/2017		20-44 P100 0-2"	42				
21	9/26/2017	9/29/2017	9/30/2017	21-52 P100 0-2"	43				

Fire Hydrant ID # per updated DBSI file -Navy Fresh Water Lines, Valves & Hydrants. BSI/DR-0034
Pedestal sample identification is a designated ID number followed by a dash and double-digit number relative to the closest Fire Hydrant ID location. No full prior map of pedestals exists.

Table 5. DU 5 Buttress & Cover - Import Clean Coral Sand

DU 5 IMPORT CLEAN CORAL						
DATE	NORTH Wall Loads	SOUTH Wall Loads	EAST Wall Loads	WEST Wall Loads	Days total loads	Days cubic yardage
9/25/2017	0	0	0	0	0	0
9/26/2017	0	0	0	0	0	0
9/27/2017	0	0	0	0	0	0
9/28/2017	0	0	0	0	0	0
9/29/2017	3	0	0	0	3	45
9/30/2017	0	0	0	0	0	0
Load count per wall	282	0	16	0		
15cuyd estimate per wall	4230	0	240	0		
2017 Total R2 combined clean coral import LOADS				298		
Loads x 15cuyd estimate				4470		

Table 6. Excavation Plots - Import Clean Coral Sand

EXCAVATION PLOTS- IMPORT CLEAN CORAL BACKFILL							
DATE	DU-9 Loads	DU-8 Loads	DU-7 Loads	DU-5 Loads	DU-3 Loads	Days total loads	Days cubic yardage
9/25/2017	0	0	0	0	0	0	0
9/26/2017	1	0	0	0	0	1	15
9/27/2017	0	0	0	0	0	0	0
9/28/2017	0	0	0	0	0	0	0
9/29/2017	5	0	0	0	0	5	75
9/30/2017	0	0	0	0	0	0	0
Load count per column	73	22	20	0	0		
15cuyd estimate per column	1095	330	300	0	0		
2017 Total combined clean import Backfill LOADS					115		
Loads x 15cuyd estimate					1725		

NW Demolition and Environmental
A Joint Venture

Daily Field Report

Date: Monday, October 2, 2017
Prepared by: Scott Wakefield

Project: Removal of Lead-Based Paint from Structures and Lead-Contaminated Soil
Location: Midway Atoll National Wildlife Refuge
Client: US Fish and Wildlife Service

Weather: High clouds, wind 12 mph. Temperature ~79F

Personnel:

Name	Company	Site Hours
Scott Wakefield	NWDE Field Oversight	10
Darin Leibelt	NWDE Supervisor	10
Joel Smith	NWDE Operator	10
Dalton Sullivan	NWDE Labor	10
Antonio Davis	NWDE Labor	10
Jevon Stone	NWDE Operator	10
Jose Ordaz	NWDE Operator	10
Matt Manning	NWDE Operator	10
Chris Fisher	NWDE Labor	10
Alan Phillips	NWDE Operator	10
Kevin Bach	NWDE Labor	10
Lucas Peel	NWDE Labor	10
Tyler Wilson	NWDE Labor	10
Eric Matteson	NWDE Operator	10

Visitors/Additional Site Personnel:

Name	Title
MaryAnn Amann	U.S. FWS

Equipment:

Description	Model No.	Comments / Serial #
Pickup Truck	F350 Service Truck	NWDE
Flatbed Truck	Ford F450	NWDE
Container Truck	Peterbuilt	NWDE
Skid Steer	Bobcat S185	NWDE
Tracked Skid Steer	Bobcat T750	NWDE
Tracked Skid Steer	Bobcat	NWDE
Mini-Excavator	CAT 308	NWDE
Excavator	Volvo EC290BLC	NWDE
Excavator	Volvo EC290BLC	NWDE
Excavator	Volvo EC290	NWDE
Off road Dump Truck	Volvo A30D	NWDE
Off road Dump Truck	Volvo A30D	NWDE
Off road Dump Truck	Volvo A30D	NWDE
Excavator – High reach	Komatsu PC400HD	NWDE
Excavator	Komatsu 450	NWDE

Materials Delivered:

Description	QTY	Condition/Comments
Diesel	0 gallons	
Gasoline	0 gallons	

Description of Work:

0700 – Health and Safety meeting at NAF staging area. Review today's work tasks.

Today's focus will be soil work at fire hydrants, pedestals and R2 tasks.

NWDE hydrant and pedestal backfill work is ongoing from last week. Clean coral sand is being placed at fire hydrants up to 10" bgs. Shade cloth panels are placed and fitted tight to the feature edges, then positioned and capped with a minimum of 14" of sand backfill. The mini excavator, one haul truck and one tracked skidsteer make the rounds to keep backfill tasks going through the day.

As pedestals are encountered that also have been sampled at the bottom of the excavation, backfill work is taking place. Cloth is positioned in the bottom of the excavation and then capped with clean coral sand.

At the Borrow Source, beach inspection and access allows clean sand to continue being hauled from between the Cargo Pier and the Fuel Pier location. The available sand volume at this location by days end is diminishing. Time will be needed for the wave action to recharge and bulk up the Borrow Source in this area. Anticipate that the available permitted clean sand source east of the Cargo Pier will begin being loaded out this week for large volume excavation backfill.

A biological monitor has inspected the work area and is present for observation of animals and birds during machinery operation.

NWDE R2 work site is picking up to resume the initial grade work of the waste layer. The D3 dozer is making the north side 2% slope in relation to the staked elevations. Through the morning the elevation cuts are made and material moved from centerline outward towards the exterior cast-in-place concrete wall. The 3-block 2.0' CMU wall topper currently remains in place.

0800 - The Boathouse #1 and Boathouse #2, Figure P14 re-excavation (BH 1 P100 0-2") work is noted to be primarily an intact concrete slab at the bottom of excavation. The area is being finalized this morning to clean up the access route and work area. With the solid concrete surface, no bottom of excavation sample is available to collect.

Bldg 5295 Hanger Aux Gen and Bldg 5342 Telephone Switch are being prepared for clean coral sand backfill into the removed soil plot. These buildings prescriptive excavations completed and sampled last year had waited for the concrete footings to be demo'd and removed. Today, the prescriptive area and the original footprint of the building are receiving clean sand. Following the stockpile of loads a tracked skidsteer is in use to achieve grade.

0900 – Test America lab results for the COC 9/19/17 are available. Review for determination of areas to backfill or address further.

1000 – Hydrant backfill is progressing from ID # 45, incrementing upward to #46, #48, etc on Halsey Drive.

1230 – Backfill clean sand into Bldg 502 AT&T prescriptive excavation and foundation removal. The area has been prepped for work with clearing of burrows and removal of rebar, wire and abandon utility pipes. Sand is staged, to be followed with the skidsteer for grading.

The R2 Unit waste layer grade work is continuing as the east 2% slope work is built outward. Workers are maintaining reference using the laser level and receiver. Stakes remain in place and flagged while the dozer moves material. Cuts do not exceed 0.5'.

1400 – Recently arrived analytical indicates the PIPE, Figure P19, 106 and 107 Re-Ex sub plots are less than 75mg/kg. Prep for trucks to begin hauling sand today from the Cargo beach to the PIPE run.

1530 – Hydrant excavation backfill work is routed towards the Inner Harbor on Hennessy Ave. Clean sand and shade cloth panels continue to be in use for finalizing the fire hydrant backfill task.

1630 – Clean backfill sand is ongoing into the DU-8 PIPE run area. Bldg S464 and Bldg 4201 at the Fuel Farm are being prepped for backfill and expected to begin this task tomorrow.

1730 – Ending the work day. 2017 season volume estimate to date moved or treated is 5340 cuyds.
DU-9 clean coral sand backfill today is 5 loads to hydrants and pedestals.
Backfill 13 hydrants, 5 pedestals and 2 anchor memorials today with clean coral sand.
DU-9 clean coral sand backfill today is 23 loads to DU-9 buildings.
DU-8 clean coral sand backfill today is 6 loads to PIPE.

Photographs:

Photo 01: FH 19 – View west. Backfill progress with clean sand

Photo 02: Boathouse #2 – View west. Concrete slab at bottom of excavation

Photo 03: Boathouse #2 – View north. Concrete slab at bottom of excavation

Photo 04: Pedestal 22-49 – View north. Excavation, sampling, ready for shade cloth and clean sand

Photo 05: Bldg 5303 R2 Unit – View south. Initial grade work progress at Cell 1 (front) Cell 3 (back)

Photo 06: Bldg 5295 Hanger Aux Gen – View north. Clean sand backfill progress

Photo 07: Anchor-Kahana – View north. Excavation progress

Table 1. Maectite and Treated Soil Total Estimates

	Maectite Totals						Treated Soil Totals[1,2]		
	Applied Today (gal)					Total to Date	Excavated and Hauled to R-2 Unit **Today**		Excavated and Hauled to R-2 Unit **Total to Date**
Date	Soils (DU9)	Soils (DU8)	Soils (DU7)	Soils (DU5)	Soils (DU3)	(gal)	Load	^{3}yds[1]	^{3}yds[1]
10/02/17	0	0	0	0	0	2886	0	0	3957
10/03/17									
10/04/17									
10/05/17									
10/06/17									
10/07/17									
Total to Date	2528 gallons	205 gallons	153 gallons	0 gallons	0 gallons		319 loads		

Notes:
1. Estimates are based on the number of gallons of Maectite® applied.
2. Soil treatment with Maectite® and hauling to R2 may not occur on the same day.
3. 9/29/17– Table 2 loads were batch treated in the R2. Inserted this data into Table 1 for totalizing the volumes and gallons. Reset Table 2 "Batch loads" of 17.8 to zero until next ex-situ stockpile treatment.

2017 DU 9 – Figures P 1-16, 18, 20, 21, 23-27.
Bldg 1124, 1126, 3521, S361, 347, 3501, S3126, S3127, 521, 520, 502, 5342, 309, 340, 354, 9149, 232, 233, S269, S225A, 2127, 144, Boat House 1 & 2, 4205, 4206, 4207, 4213, 503, 5303, 5341, 5339, 5338, Bollards, Fire Hydrants, 5304, 5305, 4210, 3524, 3529, 5126, 5378, 3514, and other ancillary structures.
Foundations S464, 502, 4201, 5126, 5295, 5342.
2017 DU 8 – S-28, S-30 re-ex, Pipe figure P19
2017 DU 7 – Bldg 3502, 3503, 3504 shade cloth
2017 DU 5 – R2 Unit, Figure P17
2017 DU 3 – Housing figure P22, 419 MIS re-ex

Table 2. Soil loads hauled to the R2 for ex situ Maectite® treatment

	Load Totals				
	Hauled to R2 for treatment in R2 cell (# of truck loads)				
Date	Soils (DU9)	Soils (DU8)	Soils (DU7)	Soils (DU5)	Soils (DU3)
10/02/17	0	0	0	0	0
10/03/17					
10/04/17					
10/05/17					
10/06/17					
10/07/17					
Batch loads to treat in R2	0 loads	0 loads	0 loads	0 loads	0 loads
Total to Date	121.8 loads	34 loads	18.5 loads	0 loads	0 loads

8/14/17 - Batch treatment of all stockpiled "ex situ" loads to date in R2 Cell 1. Entered this data into Table 1 on 8/14/17 for volume and gallon tracking.
8/15/17 - Add "Batch Loads to treat in R2" subtotal that tracks the truck loads placed for treatment. Reset this to zero once treatment event is complete.
8/23/17 – Batch #2 treatment event of all stockpiled "ex situ" loads to date in R2 Cells. Entered this data into Table 1 on 8/23/17 for volume and gallon tracking.
9/12/17 – Batch #3 treatment event of all stockpiled "ex situ" loads to date in R2 Cells. Entered this data into Table 1 on 9/11/17 & 9/12/17 for volume and gallon tracking.
9/21/17 – Batch #4 treatment event of all stockpiled "ex situ" loads to date in R2 Cells. Entered this data into Table 1 on 9/21/17 for volume and gallon tracking.
9/29/17 – Batch #5 treatment event of all stockpiled "ex situ" loads to date in R2 Cells. Entered this data into Table 1 on 9/29/17 for volume and gallon tracking.

Table 2.1 Soil loads hauled to the R2, non-treated internment

Date	Load Totals				
	Hauled to R2, non-treated soil (# of truck loads)				
	Soils (DU9)	Soils (DU8)	Soils (DU7)	Soils (DU5)	Soils (DU3)
10/02/17	0	0	0	0	0
10/03/17					
10/04/17					
10/05/17					
10/06/17					
10/07/17					
Total to Date	27.5 loads	65 loads	0 loads	0 loads	9 loads

Table 3. Weekly Load Estimates

Date	Treated Demo Debris Loads to R2	Clean Concrete Loads to Crusher	Metal Debris Loads To Boneyard	Clean Wood Loads	Steel Debris Loaded onto Barge	~
10/02/17	0	0	0	0	0	
10/03/17	0	0	0	0	0	
10/04/17	0	0	0	0	0	
10/05/17	0	0	0	0	0	
10/06/17	0	0	0	0	0	
10/07/17	0	0	0	0	0	
Season Total	3 loads	8 loads	0 loads	4 loads	195 loads	

Table 4. Fire Hydrants, Pedestals and Monuments

Fire Hydrant Soil					Fire Hydrant Soil				
Fire Hydrant ID	Excavate	Sampled Collected FH # X 0-2"	Backfill	Notes- Red >75mg/kg Green<75mg/kg	Fire Hydrant ID	Excavate	Sampled Collected FH # X 0-2"	Backfill	Notes- Red >75mg/kg Green<75mg/kg
1	9/26/2017				41	DU-1	N/A	N/A	Prior excavation
2	9/27/2017				42	9/25/2017	9/27/2017	10/2/2017	FH 42 0-2"
3	9/26/2017	9/26/2017		FH 3 0-2"	43	9/26/2017			
4	9/26/2017	9/26/2017		FH 4 0-2"	44	9/26/2017	9/29/2017	10/2/2017	FH 44 0-2"
5	9/27/2017				45	9/23/2017	9/28/2017		FH 45 0-2"
6	9/27/2017				46	9/25/2017			
7	9/26/2017	9/26/2017		FH 7 0-2"	47	9/25/2017			
8	9/25/2017				48	9/25/2017			
9	9/25/2017				49	9/26/2017	9/26/2017		FH 49 0-2"
10	9/25/2017				50				
11	8/31/2017	9/4/2017	9/30/2017	FH 11 0-2"	51	9/11/2017	9/11/2017	9/30/2017	FH 51 0-2"
12	DU-6	N/A	N/A	Prior excavation	52	9/11/2017	9/11/2017	9/30/2017	FH 52 0-2"
13	DU-6	N/A	N/A	Prior excavation	53	8/23/2017	8/23/2017		FH 53 0-2"
14	DU-6	N/A	N/A	Prior excavation	54	9/11/2017	9/11/2017		FH 54 0-2"re-ex
15	DU-6	N/A	N/A	Prior excavation	54A	8/23/2017	8/23/2017		FH 54A 0-2"
16	9/23/2017	9/28/2017		FH 16 0-2"	55	8/26/2017	8/26/2017	9/29/2017	FH 55 0-2"
17	9/23/2017	9/23/2017		FH 17 0-2"	56	8/26/2017	8/30/2017	10/2/2017	FH 56 0-2"
18	9/23/2017	9/23/2017		FH 18 0-2"	57	8/26/2017	8/26/2017	9/29/2017	FH 57 0-2"
19	9/23/2017	9/29/2017	10/2/2017	FH 19 0-2"	58	9/11/2017	9/11/2017	9/29/2017	FH 58 0-2"
20	9/23/2017	9/28/2017	9/29/2017	FH 20 0-2"	59	9/26/2017	9/27/2017	9/29/2017	FH 59 0-2"
21	9/26/2017	9/27/2017		FH 21 0-2"	60				Seawall
22	9/25/2017	9/26/2017	9/26/2017	FH 22 0-2"	61	9/28/2017	9/29/2017		FH 61 0-2"
23	9/26/2017	9/26/2017	9/26/2017	FH 23 0-2"	62	9/25/2017	9/27/2017		FH 62 0-2"
24	9/26/2017	9/26/2017	9/29/2017	FH 24 0-2"	63	9/28/2017	9/29/2017		FH 63 0-2"
25	9/26/2017	9/26/2017	9/29/2017	FH 25 0-2"	64	9/11/2017	9/11/2017		FH 64 0-2"
26	9/26/2017	9/26/2017	9/29/2017	FH 26 0-2"	65	8/29/2017	8/30/2017	10/30/2017	FH 65 0-2"
27	9/23/2017	9/23/2017		FH 27 0-2"	66	8/26/2017	8/26/2017		FH 66 0-2"
28	9/23/2017	9/23/2017	9/30/2017	FH 28 0-2"	67	8/25/2017	8/30/2017	9/29/2017	FH 67 0-2"
29	9/26/2017	9/26/2017	10/2/2017	FH 29 0-2"	68	8/25/2017	8/30/2017	9/29/2017	FH 68 0-2"
30	9/26/2017	9/26/2017	9/26/2017	FH 30 0-2"	69	9/25/2017	9/27/2017	9/29/2017	FH 69 0-2"
31	9/26/2017	9/26/2017	9/26/2017	FH 31 0-2"	70	9/25/2017	9/27/2017	9/29/2017	FH 69 0-2"
32	9/26/2017	9/26/2017	9/26/2017	FH 32 0-2"	71	9/25/2017	9/27/2017	9/29/2017	FH 71 0-2"
33	9/26/2017	9/26/2017	9/26/2017	FH 33 0-2"	72	8/29/2017	9/27/2017		FH 72 0-2"
34	9/26/2017	9/29/2017	9/30/2017	FH 34 0-2"	73	8/29/2017	9/11/2017	10/2/2017	FH 73 0-2"
35	9/26/2017				74	8/29/2017	8/29/2017	10/2/2017	FH 74 0-2"
36	9/26/2017				75	8/28/2017	8/29/2017	10/2/2017	FH 75 0-2"
37	9/25/2017	9/26/2017	10/2/2017	FH 37 0-2"	76	9/25/2017	9/29/2017	10/2/2017	FH 76 0-2"
38	9/26/2017	10/2/2017	10/2/2017	FH 38 0-2"	77	8/28/2017	8/29/2017		FH 77 0-2"
39	DU-1	N/A	N/A	Prior excavation					
40	9/26/2017	9/27/2017	10/2/2017	FH 40 0-2"					

Pedestals /Monuments Soil					Pedestals /Monuments Soil				
Feature Unit ID	Excavate	Sampled Collected ID # X P100 0-2"	Backfill	Notes- Red >75mg/kg Green<75mg/kg	Feature Unit ID	Excavate	Sampled Collected ID # X P100 0-2"	Backfill	Notes- Red >75mg/kg Green<75mg/kg
1	8/29/2017	9/4/2017	9/30/2017	1-08 P100 0-2"	23	9/29/2017	10/2/2017	10/2/2017	23-44 P100 0-2"
2	8/29/2017	9/4/2017	9/30/2017	2-08 P100 0-2"	24	9/29/2017	10/2/2017	10/2/2017	24-42 P100 0-2"
3	8/29/2017	9/4/2017	9/30/2017	3-10 P100 0-2"	25	9/29/2017	10/2/2017	10/2/2017	25-38 P100 0-2"
4	8/29/2017	9/4/2017	9/30/2017	4-10 P100 0-2"	26				
5	8/29/2017	9/4/2017	9/30/2017	5-11 P100 0-2"	27				
6	9/11/2017	9/11/2017	9/30/2017	6-51 P100 0-2"	28				
7	9/11/2017	9/11/2017	9/30/2017	7-32 P100 0-2"	29				
8	9/05/2017	9/18/2017		8-20 P100 0-2"	30				
9	9/26/2017	9/28/2017	9/30/2017	9-33 P100 0-2"	31				
10	9/26/2017	9/28/2017	9/30/2017	10-23 P100 0-2"	32				
11	9/26/2017	9/28/2017	9/29/2017	11-20 P100 0-2"	33				
12	9/26/2017	9/28/2017	9/29/2017	12-28 P100 0-2"	34				
13	9/26/2017	9/28/2017	9/29/2017	13-27 P100 0-2"	35				
14	9/26/2017	9/28/2017	9/30/2017	14-08 P100 0-2"	36				
15	9/27/2017	9/29/2017	9/30/2017	15-24 P100 0-2"	37				
16	9/27/2017	9/29/2017	9/30/2017	16-25 P100 0-2"	38				
17	9/27/2017	9/29/2017	9/30/2017	17-25 P100 0-2"	39				
18	9/28/2017	9/29/2017	9/29/2017	18-13 P100 0-2"	40				
19	9/26/2017	9/29/2017	10/2/2017	19-44 P100 0-2"	41				
20	9/26/2017	9/29/2017	10/2/2017	20-44 P100 0-2"	42				
21	9/26/2017	9/29/2017	9/30/2017	21-52 P100 0-2"	43				

Fire Hydrant ID # per updated DBSI file -Navy Fresh Water Lines, Valves & Hydrants. BSI/DR-0034
Pedestal sample identification is a designated ID number followed by a dash and double-digit number relative to the closest Fire Hydrant ID location. No full prior map of pedestals exists.

Table 5. DU 5 Buttress & Cover - Import Clean Coral Sand

DU 5 IMPORT CLEAN CORAL						
DATE	NORTH Wall Loads	SOUTH Wall Loads	EAST Wall Loads	WEST Wall Loads	Days total loads	Days cubic yardage
10/2/2017	0	0	0	0	0	0
10/3/2017					0	0
10/4/2017					0	0
10/5/2017					0	0
10/6/2017					0	0
10/7/2017					0	0
Load count per wall	282	0	16	0		
15cuyd estimate per wall	4230	0	240	0		
2017 Total R2 combined clean coral import LOADS				298		
Loads x 15cuyd estimate				4470		

Table 6. Excavation Plots - Import Clean Coral Sand

EXCAVATION PLOTS- IMPORT CLEAN CORAL BACKFILL							
DATE	DU-9 Loads	DU-8 Loads	DU-7 Loads	DU-5 Loads	DU-3 Loads	Days total loads	Days cubic yardage
10/2/2017	23	6	0	0	0	29	435
10/3/2017						0	0
10/4/2017						0	0
10/5/2017						0	0
10/6/2017						0	0
10/7/2017						0	0
Load count per column	96	28	20	0	0		
15cuyd estimate per column	1440	420	300	0	0		
2017 Total combined clean import Backfill LOADS					144		
Loads x 15cuyd estimate					2160		

NW Demolition and Environmental
A Joint Venture

Daily Field Report

Date: Tuesday, October 3, 2017
Prepared by: Scott Wakefield

Project: Removal of Lead-Based Paint from Structures and Lead-Contaminated Soil
Location: Midway Atoll National Wildlife Refuge
Client: US Fish and Wildlife Service

Weather: High clouds, wind 22 mph. Temperature ~78F

Personnel:

Name	Company	Site Hours
Scott Wakefield	NWDE Field Oversight	10
Darin Leibelt	NWDE Supervisor	10
Joel Smith	NWDE Operator	10
Dalton Sullivan	NWDE Labor	10
Antonio Davis	NWDE Labor	10
Jevon Stone	NWDE Operator	10
Jose Ordaz	NWDE Operator	10
Matt Manning	NWDE Operator	10
Chris Fisher	NWDE Labor	10
Alan Phillips	NWDE Supervisor	10
Kevin Bach	NWDE Labor	10
Lucas Peel	NWDE Labor	10
Tyler Wilson	NWDE Labor	10
Eric Matteson	NWDE Operator	10

Visitors/Additional Site Personnel:

Name	Title
MaryAnn Amann	U.S. FWS

Equipment:

Description	Model No.	Comments / Serial #
Pickup Truck	F350 Service Truck	NWDE
Flatbed Truck	Ford F450	NWDE
Container Truck	Peterbuilt	NWDE
Skid Steer	Bobcat S185	NWDE
Tracked Skid Steer	Bobcat T750	NWDE
Tracked Skid Steer	Bobcat	NWDE
Mini-Excavator	CAT 308	NWDE
Excavator	Volvo EC290BLC	NWDE
Excavator	Volvo EC290BLC	NWDE
Excavator	Volvo EC290	NWDE
Off road Dump Truck	Volvo A30D	NWDE
Off road Dump Truck	Volvo A30D	NWDE
Off road Dump Truck	Volvo A30D	NWDE
Excavator – High reach	Komatsu PC400HD	NWDE
Excavator	Komatsu 450	NWDE

Materials Delivered:

Description	QTY	Condition/Comments
Diesel	252 gallons	
Gasoline	0 gallons	

Description of Work:

0700 – Health and Safety meeting at NAF staging area. Review today's work tasks.

Today's focus will be soil work at fire hydrants, pedestals and R2 tasks.

NWDE hydrant and pedestal backfill work continues from yesterday. Clean coral sand is being placed at fire hydrants up to 10" bgs. Shade cloth panels are placed and fitted tight to the feature edges, then positioned and capped with a minimum of 14" of sand backfill. The mini excavator and one haul truck make the rounds to keep backfill tasks going through the day.

As pedestals are encountered that also have been sampled at the bottom of the excavation, backfill work is taking place. Cloth is positioned in the bottom of the excavation and then capped with clean coral sand.

The shipment for the last two weeks of bottom of excavation samples are packaged and signed over to Darin Leibelt, NWDE. They will depart today on the scheduled charter flight, then be forwarded onto Test America for analysis.

0800 - The R2 Unit progress and grading has reached the milestone to remove the three course CMU block from the top of the cast-in-place exterior wall. This additional 2.0' height is being removed due to the current waste volume and 2% slope projected to intersect correctly with CIP wall. There is no rebar imbedded tie-in or J-bolts for the CMU to CIP interface. Mortar that was set at the horizontal joints separates cleanly when pulled inward with the 290 Volvo excavator. Block cavities are generally void of mortar and the materials are positioned and tracked over to further process the material into waste fill.

At the Cargo Pier Borrow Source area, the beach access and work area is reviewed to continue clean sand export tasks. A biological monitor is posted for oversight of the work area for sea and wildlife potential interactions. Sand continues being loaded into A30 haul trucks and routed to the excavations designated for backfill. Currently in the Fuel Farm the DU-8 PIPE run is being finished off for the PIPE Re-Ex location at the northeast end of the dig. Additional loads of sand are staged at the adjacent DU-9 Bldg 4201 JP-5 Pumping Station and Bldg S464 Fuel Oil Pumphouse.

0940 – The scheduled charter flight arrival at PMDY lands. Some mechanical parts are arriving for pending repair of onsite equipment today. As the ground crew unloads and then prepares to depart, D.Leibelt, NWDE is boarding to depart Midway.

NWDE has a partial crew at the NAF Hanger staging area to prepare inventory of shade cloth for bottom of excavation placement in select areas. Locations identified to have >75 mg/kg lead analytical results at the bottom of this season's excavations will have a demarcation layer of shade cloth placed prior to backfill with clean coral sand.

1100 – The R2 CMU block is progressing for removal on the perimeter wall. The south and east wall sections of CMU have been pulled inward and are to be processed and layered below the top of waste.

1200 – Lunch

1230 – Table 4 fire hydrants, pedestals and monuments clean sand and shade cloth backfill work continues. This morning the route traveled was nearest the Kahana Pier, heading west. Currently the group has made

it to the south side of Bldg 309 for sampled hydrants. One haul truck provides sand from the Borrow Source for the work crew. Bottom of excavation collection continues to clear the last few hydrants and features as backfill work for features is drawing near a close.

1330 – Two additional A30 Volvo haul trucks are continuing the afternoon effort to load at the beach and place clean coral sand into the former Bldg 4201 and Bldg S464 plots. Clean sand will also go forward to be placed at the former Navy Water Tower 5305. Recent analytical results indicate that the sub plot re-excavation is satisfactory to be backfilled.

1600 – The tracked skidsteer has been grading out sand that was stockpile at backfill locations. Currently the clean sand arriving into finalize the former Navy Water Tower 5305 and is being positioned.
Sampling hydrant excavation continues in front of the backfill crew.

At the west side of the R2 Unit, begin moving clean abutment sand ramp out of position. This is in preparation to process the treatment plots and re-ex per Figure P17.

1730 – Ending the work day. 2017 season volume estimate to date moved or treated is 5340 cuyds.
DU-9 clean coral sand backfill today is 3 loads to hydrants and pedestals.
Backfill 17 hydrants, 2 pedestals and 2 anchor memorials today with clean coral sand.
DU-9 clean coral sand backfill today is 16 loads to DU-9 buildings.
DU-8 clean coral sand backfill today is 4 loads to PIPE.

Photographs:

Photo 01: Cargo Pier – View west. Loading clean coral sand from Borrow Source

Photo 02: Anchor-Kahana – View south. Backfill progress

Photo 03: Anchor-170 – View west. Backfill progress

Photo 04: Fire Hydrant # 77 – View south. Backfill progress

Photo 05: Fire Hydrant # 76 – View southwest. Backfill progress

Photo 06: Bldg 5303 R2 Unit – View west. Removal of CMU wall blocks

Photo 07: Bldg 5303 R2 Unit – View southeast. Initial grade work progress

Table 1. Maectite and Treated Soil Total Estimates

	Maectite Totals						Treated Soil Totals[1,2]		
	Applied Today (gal)					Total to Date	Excavated and Hauled to R-2 Unit **Today**		Excavated and Hauled to R-2 Unit **Total to Date**
Date	Soils (DU9)	Soils (DU8)	Soils (DU7)	Soils (DU5)	Soils (DU3)	(gal)	Load	^{3}yds[1]	^{3}yds[1]
10/02/17	0	0	0	0	0	2886	0	0	3957
10/03/17	0	0	0	0	0	2886	0	0	3957
10/04/17									
10/05/17									
10/06/17									
10/07/17									
Total to Date	2528 gallons	205 gallons	153 gallons	0 gallons	0 gallons		319 loads		

Notes:
1. Estimates are based on the number of gallons of Maectite® applied.
2. Soil treatment with Maectite® and hauling to R2 may not occur on the same day.
3. 9/29/17– Table 2 loads were batch treated in the R2. Inserted this data into Table 1 for totalizing the volumes and gallons. Reset Table 2 "Batch loads" of 17.8 to zero until next ex-situ stockpile treatment.

2017 DU 9 – Figures P 1-16, 18, 20, 21, 23-27.
Bldg 1124, 1126, 3521, S361, 347, 3501, S3126, S3127, 521, 520, 502, 5342, 309, 340, 354, 9149, 232, 233, S269, S225A, 2127, 144, Boat House 1 & 2, 4205, 4206, 4207, 4213, 503, 5303, 5341, 5339, 5338, Bollards, Fire Hydrants, 5304, 5305, 4210, 3524, 3529, 5126, 5378, 3514, and other ancillary structures.
Foundations S464, 502, 4201, 5126, 5295, 5342.
2017 DU 8 – S-28, S-30 re-ex, Pipe figure P19
2017 DU 7 – Bldg 3502, 3503, 3504 shade cloth
2017 DU 5 – R2 Unit, Figure P17
2017 DU 3 – Housing figure P22, 419 MIS re-ex

Table 2. Soil loads hauled to the R2 for ex situ Maectite® treatment

	Load Totals				
	Hauled to R2 for treatment in R2 cell (# of truck loads)				
Date	Soils (DU9)	Soils (DU8)	Soils (DU7)	Soils (DU5)	Soils (DU3)
10/02/17	0	0	0	0	0
10/03/17	0	0	0	0	0
10/04/17					
10/05/17					
10/06/17					
10/07/17					
Batch loads to treat in R2	0 loads	0 loads	0 loads	0 loads	0 loads
Total to Date	121.8 loads	34 loads	18.5 loads	0 loads	0 loads

8/14/17 - Batch treatment of all stockpiled "ex situ" loads to date in R2 Cell 1. Entered this data into Table 1 on 8/14/17 for volume and gallon tracking.
8/15/17 - Add "Batch Loads to treat in R2" subtotal that tracks the truck loads placed for treatment. Reset this to zero once treatment event is complete.
8/23/17 – Batch #2 treatment event of all stockpiled "ex situ" loads to date in R2 Cells. Entered this data into Table 1 on 8/23/17 for volume and gallon tracking.
9/12/17 – Batch #3 treatment event of all stockpiled "ex situ" loads to date in R2 Cells. Entered this data into Table 1 on 9/11/17 & 9/12/17 for volume and gallon tracking.
9/21/17 – Batch #4 treatment event of all stockpiled "ex situ" loads to date in R2 Cells. Entered this data into Table 1 on 9/21/17 for volume and gallon tracking.
9/29/17 – Batch #5 treatment event of all stockpiled "ex situ" loads to date in R2 Cells. Entered this data into Table 1 on 9/29/17 for volume and gallon tracking.

Table 2.1 Soil loads hauled to the R2, non-treated internment

Date	Load Totals				
	Hauled to R2, non-treated soil (# of truck loads)				
	Soils (DU9)	Soils (DU8)	Soils (DU7)	Soils (DU5)	Soils (DU3)
10/02/17	0	0	0	0	0
10/03/17	0	0	0	0	0
10/04/17					
10/05/17					
10/06/17					
10/07/17					
Total to Date	27.5 loads	65 loads	0 loads	0 loads	9 loads

Table 3. Weekly Load Estimates

Date	Treated Demo Debris Loads to R2	Clean Concrete Loads to Crusher	Metal Debris Loads To Boneyard	Clean Wood Loads	Steel Debris Loaded onto Barge	~
10/02/17	0	0	0	0	0	
10/03/17	0	0	0	0	0	
10/04/17	0	0	0	0	0	
10/05/17	0	0	0	0	0	
10/06/17	0	0	0	0	0	
10/07/17	0	0	0	0	0	
Season Total	3 loads	8 loads	0 loads	4 loads	195 loads	

Table 4. Fire Hydrants, Pedestals and Monuments

Fire Hydrant Soil					Fire Hydrant Soil				
Fire Hydrant ID	Excavate	Sampled Collected FH # X 0-2"	Backfill	Notes- Red >75mg/kg Green<75mg/kg	Fire Hydrant ID	Excavate	Sampled Collected FH # X 0-2"	Backfill	Notes- Red >75mg/kg Green<75mg/kg
1	9/26/2017	10/3/2017	10/3/2017	FH 1 0-2"	41	DU-1	N/A	N/A	Prior excavation
2	9/27/2017	10/3/2017	10/3/2017	FH 2 0-2"	42	9/25/2017	9/27/2017	10/2/2017	FH 42 0-2"
3	9/26/2017	9/26/2017	10/3/2017	FH 3 0-2"	43	9/26/2017			
4	9/26/2017	9/26/2017	10/3/2017	FH 4 0-2"	44	9/26/2017	9/29/2017	10/2/2017	FH 44 0-2"
5	9/27/2017	10/3/2017	10/3/2017	FH 5 0-2"	45	9/23/2017	9/28/2017		FH 45 0-2"
6	9/27/2017	10/3/2017	10/3/2017	FH 6 0-2"	46	9/25/2017			
7	9/26/2017	9/26/2017	10/3/2017	FH 7 0-2"	47	9/25/2017			
8	9/25/2017	10/3/2017	10/3/2017	FH 8 0-2"	48	9/25/2017			
9	9/25/2017	10/3/2017	10/3/2017	FH 9 0-2"	49	9/26/2017	9/26/2017		FH 49 0-2"
10	9/25/2017	10/3/2017	10/3/2017	FH 10 0-2"	50				
11	8/31/2017	9/4/2017	9/30/2017	FH 11 0-2"	51	9/11/2017	9/11/2017	9/30/2017	FH 51 0-2"
12	DU-6	N/A	N/A	Prior excavation	52	9/11/2017	9/11/2017	9/30/2017	FH 52 0-2"
13	DU-6	N/A	N/A	Prior excavation	53	8/23/2017	8/23/2017		FH 53 0-2"
14	DU-6	N/A	N/A	Prior excavation	54	9/11/2017	9/11/2017		FH 54 0-2"re-ex
15	DU-6	N/A	N/A	Prior excavation	54A	8/23/2017	8/23/2017		FH 54A 0-2"
16	9/23/2017	9/28/2017		FH 16 0-2"	55	8/26/2017	8/26/2017	9/29/2017	FH 55 0-2"
17	9/23/2017	9/23/2017		FH 17 0-2"	56	8/26/2017	8/30/2017	10/2/2017	FH 56 0-2"
18	9/23/2017	9/23/2017		FH 18 0-2"	57	8/26/2017	8/26/2017	9/29/2017	FH 57 0-2"
19	9/23/2017	9/29/2017	10/2/2017	FH 19 0-2"	58	9/11/2017	9/11/2017	9/29/2017	FH 58 0-2"
20	9/23/2017	9/28/2017	9/29/2017	FH 20 0-2"	59	9/26/2017	9/27/2017	9/29/2017	FH 59 0-2"
21	9/26/2017	9/27/2017		FH 21 0-2"	60				Seawall
22	9/25/2017	9/26/2017	9/26/2017	FH 22 0-2"	61	9/28/2017	9/29/2017	10/3/2017	FH 61 0-2"
23	9/26/2017	9/26/2017	9/26/2017	FH 23 0-2"	62	9/25/2017	9/27/2017	10/3/2017	FH 62 0-2"
24	9/26/2017	9/26/2017	9/29/2017	FH 24 0-2"	63	9/28/2017	9/29/2017	10/3/2017	FH 63 0-2"
25	9/26/2017	9/26/2017	9/29/2017	FH 25 0-2"	64	9/11/2017	9/11/2017		FH 64 0-2"
26	9/26/2017	9/26/2017	9/29/2017	FH 26 0-2"	65	8/29/2017	8/30/2017	10/30/2017	FH 65 0-2"
27	9/23/2017	9/23/2017	9/30/2017	FH 27 0-2"	66	8/26/2017	8/26/2017	10/3/2017	FH 66 0-2"
28	9/23/2017	9/23/2017	9/30/2017	FH 28 0-2"	67	8/25/2017	8/30/2017	9/29/2017	FH 67 0-2"
29	9/26/2017	9/26/2017	10/2/2017	FH 29 0-2"	68	8/25/2017	8/30/2017	9/29/2017	FH 68 0-2"
30	9/26/2017	9/26/2017	9/26/2017	FH 30 0-2"	69	9/25/2017	9/27/2017	9/29/2017	FH 69 0-2"
31	9/26/2017	9/26/2017	9/26/2017	FH 31 0-2"	70	9/25/2017	9/27/2017	9/29/2017	FH 69 0-2"
32	9/26/2017	9/26/2017	9/26/2017	FH 32 0-2"	71	9/25/2017	9/27/2017	9/29/2017	FH 71 0-2"
33	9/26/2017	9/26/2017	9/26/2017	FH 33 0-2"	72	8/29/2017	9/27/2017	10/3/2017	FH 72 0-2"
34	9/26/2017	9/29/2017	9/30/2017	FH 34 0-2"	73	8/29/2017	9/11/2017	10/2/2017	FH 73 0-2"
35	9/26/2017				74	8/29/2017	8/29/2017	10/2/2017	FH 74 0-2"
36	9/26/2017				75	8/28/2017	8/29/2017	10/2/2017	FH 75 0-2"
37	9/25/2017	9/26/2017	10/2/2017	FH 37 0-2"	76	9/25/2017	9/29/2017	10/2/2017	FH 76 0-2"
38	9/26/2017	10/2/2017	10/2/2017	FH 38 0-2"	77	8/28/2017	8/29/2017	10/3/2017	FH 77 0-2"
39	DU-1	N/A	N/A	Prior excavation					
40	9/26/2017	9/27/2017	10/2/2017	FH 40 0-2"					

Pedestals /Monuments Soil					Pedestals /Monuments Soil				
Feature Unit ID	Excavate	Sampled Collected ID # X P100 0-2"	Backfill	Notes- Red >75mg/kg Green<75mg/kg	Feature Unit ID	Excavate	Sampled Collected ID # X P100 0-2"	Backfill	Notes- Red >75mg/kg Green<75mg/kg
1	8/29/2017	9/4/2017	9/30/2017	1-08 P100 0-2"	23	9/29/2017	10/2/2017	10/2/2017	23-44 P100 0-2"
2	8/29/2017	9/4/2017	9/30/2017	2-08 P100 0-2"	24	9/29/2017	10/2/2017	10/2/2017	24-42 P100 0-2"
3	8/29/2017	9/4/2017	9/30/2017	3-10 P100 0-2"	25	9/29/2017	10/2/2017	10/2/2017	25-38 P100 0-2"
4	8/29/2017	9/4/2017	9/30/2017	4-10 P100 0-2"	26	9/25/2017	10/3/2017	10/3/2017	26-07 P100 0-2"
5	8/29/2017	9/4/2017	9/30/2017	5-11 P100 0-2"	27	10/26/2017	10/3/2017	10/3/2017	27-03 P100 0-2"
6	9/11/2017	9/11/2017	9/30/2017	6-51 P100 0-2"	28				
7	9/11/2017	9/11/2017	9/30/2017	7-32 P100 0-2"	29				
8	9/05/2017	9/18/2017		8-20 P100 0-2"	30				
9	9/26/2017	9/28/2017	9/30/2017	9-33 P100 0-2"	31				
10	9/26/2017	9/28/2017	9/30/2017	10-23 P100 0-2"	32				
11	9/26/2017	9/28/2017	9/29/2017	11-20 P100 0-2"	33				
12	9/26/2017	9/28/2017	9/29/2017	12-28 P100 0-2"	34				
13	9/26/2017	9/28/2017	9/29/2017	13-27 P100 0-2"	35				
14	9/26/2017	9/28/2017	9/30/2017	14-08 P100 0-2"	36				
15	9/27/2017	9/29/2017	9/30/2017	15-24 P100 0-2"	37				
16	9/27/2017	9/29/2017	9/30/2017	16-25 P100 0-2"	38				
17	9/27/2017	9/29/2017	9/30/2017	17-25 P100 0-2"	39				
18	9/28/2017	9/29/2017	9/29/2017	18-13 P100 0-2"	40				
19	9/26/2017	9/29/2017	10/2/2017	19-44 P100 0-2"	41				
20	9/26/2017	9/29/2017	10/2/2017	20-44 P100 0-2"	42				
21	9/26/2017	9/29/2017	9/30/2017	21-52 P100 0-2"	43				

Fire Hydrant ID # per updated DBSI file -Navy Fresh Water Lines, Valves & Hydrants. BSI/DR-0034
Pedestal sample identification is a designated ID number followed by a dash and double-digit number relative to the closest Fire Hydrant ID location. No full prior map of pedestals exists.

Table 5. DU 5 Buttress & Cover - Import Clean Coral Sand

DU 5 IMPORT CLEAN CORAL						
DATE	NORTH Wall Loads	SOUTH Wall Loads	EAST Wall Loads	WEST Wall Loads	Days total loads	Days cubic yardage
10/2/2017	0	0	0	0	0	0
10/3/2017	0	0	0	0	0	0
10/4/2017					0	0
10/5/2017					0	0
10/6/2017					0	0
10/7/2017					0	0
Load count per wall	282	0	16	0		
15cuyd estimate per wall	4230	0	240	0		
2017 Total R2 combined clean coral import LOADS				298		
Loads x 15cuyd estimate				4470		

Table 6. Excavation Plots - Import Clean Coral Sand

EXCAVATION PLOTS- IMPORT CLEAN CORAL BACKFILL							
DATE	DU-9 Loads	DU-8 Loads	DU-7 Loads	DU-5 Loads	DU-3 Loads	Days total loads	Days cubic yardage
10/2/2017	23	6	0	0	0	29	435
10/3/2017	14	4	0	0	0	18	270
10/4/2017						0	0
10/5/2017						0	0
10/6/2017						0	0
10/7/2017						0	0
Load count per column	96	32	20	0	0		
15cuyd estimate per column	1440	480	300	0	0		
2017 Total combined clean import Backfill LOADS					148		
Loads x 15cuyd estimate					2220		

Daily Field Report

Date: Wednesday, October 4, 2017
Prepared by: Scott Wakefield

Project: Removal of Lead-Based Paint from Structures and Lead-Contaminated Soil
Location: Midway Atoll National Wildlife Refuge
Client: US Fish and Wildlife Service

Weather: High clouds, wind 22-24 mph. Temperature ~78F

Personnel:

Name	Company	Site Hours
Scott Wakefield	NWDE Field Oversight	10
Alan Phillips	NWDE Supervisor	10
Joel Smith	NWDE Operator	10
Dalton Sullivan	NWDE Labor	10
Antonio Davis	NWDE Labor	10
Jevon Stone	NWDE Operator	10
Jose Ordaz	NWDE Operator	10
Matt Manning	NWDE Operator	10
Chris Fisher	NWDE Labor	10
Kevin Bach	NWDE Labor	10
Lucas Peel	NWDE Labor	10
Tyler Wilson	NWDE Labor	10
Eric Matteson	NWDE Operator	10

Visitors/Additional Site Personnel:

Name	Title
MaryAnn Amann	U.S. FWS
Bob Peyton	U.S. FWS
Deisha Norwood	U.S. FWS

Equipment:

Description	Model No.	Comments / Serial #
Pickup Truck	F350 Service Truck	NWDE
Flatbed Truck	Ford F450	NWDE
Container Truck	Peterbuilt	NWDE
Skid Steer	Bobcat S185	NWDE
Tracked Skid Steer	Bobcat T750	NWDE
Tracked Skid Steer	Bobcat	NWDE
Mini-Excavator	CAT 308	NWDE
Excavator	Volvo EC290BLC	NWDE
Excavator	Volvo EC290BLC	NWDE
Excavator	Volvo EC290	NWDE
Off road Dump Truck	Volvo A30D	NWDE
Off road Dump Truck	Volvo A30D	NWDE
Off road Dump Truck	Volvo A30D	NWDE
Excavator – High reach	Komatsu PC400HD	NWDE
Excavator	Komatsu 450	NWDE

Materials Delivered:

Description	QTY	Condition/Comments
Diesel	0 gallons	
Gasoline	0 gallons	

Description of Work:

0700 – Health and Safety meeting at NAF staging area. Review today's work tasks.

Today's focus will be soil work at fire hydrants, pedestals and R2 tasks.

NWDE hydrant and pedestal backfill work continues from yesterday. Clean coral sand is being placed at fire hydrants up to 10" bgs. Shade cloth panels are placed and fitted tight to the feature edges, then positioned and capped with a minimum of 14" of sand backfill. The mini excavator and one haul truck make the rounds to keep backfill tasks going through the day.

As pedestals are encountered that also have been sampled at the bottom of the excavation, backfill work is taking place. Cloth is positioned in the bottom of the excavation and then capped with clean coral sand.

Sample collection at hydrants and features to allow the backfill crew to continue the work route.

The Cargo Pier beach begins another day of moving sand from the permitted Borrow Source area to completed excavation plots that have been sampled and returned results less than 75mg/kg. The access and work areas are inspected and a biological monitor positioned for the day. Loads moved this morning are bound for placement at former Navy Water Tower 5305 to finish off the large excavation area.

The R2 Unit work crew will continue grade work for the north and south 2% slope to project towards the top of the CIP roof structure pads. Working outward from the established top east/west centerline, the grading continues. Elevations of the waste layer toe edge are aligning with the roof structure pads. With the expected last volumes of impacted soil from DU-9 moving in soon, supplemented with minimal clean coral sand against the CIP and leveling off the elevated pads, the waste layer is shaping up. It is expectant that the liner will maintain the 2% slope, clear the CIP wall and extend the minimum 2' beyond the exterior wall. The D3 dozer and tracked skidsteer are working the material as needed.

Mark out and begin task work to excavate the impacted soil beneath the current R2 west side ramp. Also, the northwest corner re-ex for 30'-45' buffer is marked in preparation for digging, Figure P17.

1000 – Weekly conference call with Mainland and Hawaii project offices. See NWDE Midway Meeting Agenda for specific detail.

1115 – At the Cargo Pier work site, NWDE is advised by Bob Peyton, refuge manager and Deisha Norwood, deputy refuge manager to stop hauling clean coral sand from the beach in response to a wildlife situation that occurred yesterday. That 9am situation is that while excavating the clean coral sand north of the Cargo Pier near the waterline, the 290 excavator bucket unearthed buried eggs that were unknowingly buried approximately 1.5' deep in sand. These are presumed to be a nest of turtle eggs. At that moment of discovery, the NWDE operator immediately stop and notified the working chain of command. The damaged nest area was secured with US FWS oversight to prevent additional effects from wave actions. Markers were added to restrict pedestrian access. After reporting and response from the Monument, this morning's issued directive to stop clean sand mining from the beach is being followed.

Currently there is an 80% deficit of clean sand to backfill excavated areas with the abrupt halt for Borrow Source access. The LBP Project team and US FWS are working to consider the options available for the outstanding backfill tasks.

Note that the R2 Unit final cover clean sand lift and abutment volume is buffered with stockpiled sand at or near the R2. This sand has been several seasons of abutment material stockpiled in addition to the

large volume staged this fall north of the R2. Still lacking though are larger excavations and alternate sizes to be backfilled including; Water Tower 5304, Bldg 309 Power Plant, S-28 Re-Ex, S30 Re-Ex, Water Plant 347, 3501, S3126, S3127, Bldg 3521, Bldg 503, Bldg S269, Bollards, Bldg 5126, Bldg 5378, Bldg 3514, Bldg 5341, Bldg 5339.

1200 – Lunch

1230 – NWDE crew continues working at fire hydrant backfill sites with the remaining available clean sand for finishing out the last of the hydrants today.

A newly formed NWDE workgroup of shade cloth specialists are moving over to the Midway Water Plant. M.Amann advises that bottom of excavation sampling that is greater than 75 mg/kg will receive a demarcation layer, followed with available clean sand backfill. The areas that meet this exceedance are marked out. Shade cloth is cut and placed in preparation for limited volume of available backfill.

1330 – Water Plant area preparations are made to get the small sub plots covered with shade cloth and weighted down with partial available sand. This includes half the perimeter of S3126 and a select number of the sub plots.

1545 – The R2 west ramp excavation area is progressing. Soils are being loaded and placed within the R2 for future Maectite® application prior to final south area grade work.

1730 – Ending the work day. 2017 season volume estimate to date moved or treated is 5340 cuyds.
DU-9 clean coral sand backfill today is 3 loads to hydrants and pedestals.
Backfill 8 hydrants, 2 pedestals and 2 anchor memorials today with clean coral sand.
DU-9 clean coral sand backfill today is 17 loads to DU-9 buildings.

Photographs:

Photo 01: 5305 Navy Water Tower – View west. Backfill progress

Photo 02: Cargo Pier – View west. Location of incident with buried eggs at the pier's edge.

Photo 03: 5303 R2 Unit – View north. Excavation of soil below the R2 construction ramp

Photo 04: 5303 R2 Unit – View south. Re-ex at the NW corner, 30-45' buffer, (ID # NW A)

Photo 05: Bldg R2 Unit 5303 – View east. Grading progress nearing buffer to CIP features

Photo 06: Bldg 5303 R2 Unit – View west. Progress of southern grade work

Photo 07: S3126 Reservoir – View north. Shade cloth placement with backfill atop >75mg/kg.

Table 1. Maectite and Treated Soil Total Estimates

	Maectite Totals						Treated Soil Totals[1,2]		
	Applied Today (gal)					Total to Date	Excavated and Hauled to R-2 Unit **Today**		Excavated and Hauled to R-2 Unit **Total to Date**
Date	Soils (DU9)	Soils (DU8)	Soils (DU7)	Soils (DU5)	Soils (DU3)	(gal)	Load	^{3}yds[1]	^{3}yds[1]
10/02/17	0	0	0	0	0	2886	0	0	3957
10/03/17	0	0	0	0	0	2886	0	0	3957
10/04/17	0	0	0	0	0	2886	0	0	3957
10/05/17									
10/06/17									
10/07/17									
Total to Date	2528 gallons	205 gallons	153 gallons	0 gallons	0 gallons		319 loads		

Notes:
1. Estimates are based on the number of gallons of Maectite® applied.
2. Soil treatment with Maectite® and hauling to R2 may not occur on the same day.
3. 9/29/17– Table 2 loads were batch treated in the R2. Inserted this data into Table 1 for totalizing the volumes and gallons. Reset Table 2 "Batch loads" of 17.8 to zero until next ex-situ stockpile treatment.

2017 DU 9 – Figures P 1-16, 18, 20, 21, 23-27.
Bldg 1124, 1126, 3521, S361, 347, 3501, S3126, S3127, 521, 520, 502, 5342, 309, 340, 354, 9149, 232, 233, S269, S225A, 2127, 144, Boat House 1 & 2, 4205, 4206, 4207, 4213, 503, 5303, 5341, 5339, 5338, Bollards, Fire Hydrants, 5304, 5305, 4210, 3524, 3529, 5126, 5378, 3514, and other ancillary structures.
Foundations S464, 502, 4201, 5126, 5295, 5342.
2017 DU 8 – S-28, S-30 re-ex, Pipe figure P19
2017 DU 7 – Bldg 3502, 3503, 3504 shade cloth
2017 DU 5 – R2 Unit, Figure P17
2017 DU 3 – Housing figure P22, 419 MIS re-ex

Table 2. Soil loads hauled to the R2 for ex situ Maectite® treatment

	Load Totals				
	Hauled to R2 for treatment in R2 cell (# of truck loads)				
Date	Soils (DU9)	Soils (DU8)	Soils (DU7)	Soils (DU5)	Soils (DU3)
10/02/17	0	0	0	0	0
10/03/17	0	0	0	0	0
10/04/17	5	0	0	0	0
10/05/17					
10/06/17					
10/07/17					
Batch loads to treat in R2	5 loads	0 loads	0 loads	0 loads	0 loads
Total to Date	126.8 loads	34 loads	18.5 loads	0 loads	0 loads

8/14/17 - Batch treatment of all stockpiled "ex situ" loads to date in R2 Cell 1. Entered this data into Table 1 on 8/14/17 for volume and gallon tracking.
8/15/17 - Add "Batch Loads to treat in R2" subtotal that tracks the truck loads placed for treatment. Reset this to zero once treatment event is complete.
8/23/17 – Batch #2 treatment event of all stockpiled "ex situ" loads to date in R2 Cells. Entered this data into Table 1 on 8/23/17 for volume and gallon tracking.
9/12/17 – Batch #3 treatment event of all stockpiled "ex situ" loads to date in R2 Cells. Entered this data into Table 1 on 9/11/17 & 9/12/17 for volume and gallon tracking.
9/21/17 – Batch #4 treatment event of all stockpiled "ex situ" loads to date in R2 Cells. Entered this data into Table 1 on 9/21/17 for volume and gallon tracking.
9/29/17 – Batch #5 treatment event of all stockpiled "ex situ" loads to date in R2 Cells. Entered this data into Table 1 on 9/29/17 for volume and gallon tracking.

Table 2.1 Soil loads hauled to the R2, non-treated internment

Date	Load Totals				
	Hauled to R2, non-treated soil (# of truck loads)				
	Soils (DU9)	Soils (DU8)	Soils (DU7)	Soils (DU5)	Soils (DU3)
10/02/17	0	0	0	0	0
10/03/17	0	0	0	0	0
10/04/17	2	0	0	0	0
10/05/17					
10/06/17					
10/07/17					
Total to Date	29.5 loads	65 loads	0 loads	0 loads	9 loads

Table 3. Weekly Load Estimates

Date	Treated Demo Debris Loads to R2	Clean Concrete Loads to Crusher	Metal Debris Loads To Boneyard	Clean Wood Loads	Steel Debris Loaded onto Barge	~
10/02/17	0	0	0	0	0	
10/03/17	0	0	0	0	0	
10/04/17	0	0	0	0	0	
10/05/17						
10/06/17						
10/07/17						
Season Total	3 loads	8 loads	0 loads	4 loads	195 loads	

Table 4. Fire Hydrants, Pedestals and Monuments

Fire Hydrant Soil					Fire Hydrant Soil				
Fire Hydrant ID	Excavate	Sampled Collected FH # X 0-2"	Backfill	Notes- Red >75mg/kg Green<75mg/kg	Fire Hydrant ID	Excavate	Sampled Collected FH # X 0-2"	Backfill	Notes- Red >75mg/kg Green<75mg/kg
1	9/26/2017	10/3/2017	10/3/2017	FH 1 0-2"	41	DU-1	N/A	N/A	Prior excavation
2	9/27/2017	10/3/2017	10/3/2017	FH 2 0-2"	42	9/25/2017	9/27/2017	10/2/2017	FH 42 0-2"
3	9/26/2017	9/26/2017	10/3/2017	FH 3 0-2"	43	9/26/2017	10/2/2017	10/3/2017	FH 43 0-2"
4	9/26/2017	9/26/2017	10/3/2017	FH 4 0-2"	44	9/26/2017	9/29/2017	10/2/2017	FH 44 0-2"
5	9/27/2017	10/3/2017	10/3/2017	FH 5 0-2"	45	9/23/2017	9/28/2017	10/4/2017	FH 45 0-2"
6	9/27/2017	10/3/2017	10/3/2017	FH 6 0-2"	46	9/25/2017	10/3/2017	10/4/2017	FH 46 0-2"
7	9/26/2017	9/26/2017	10/3/2017	FH 7 0-2"	47	9/25/2017	10/4/2017	10/4/2017	FH 47 0-2"
8	9/25/2017	10/3/2017	10/3/2017	FH 8 0-2"	48	9/25/2017	10/3/2017	10/4/2017	FH 48 0-2"
9	9/25/2017	10/3/2017	10/3/2017	FH 9 0-2"	49	9/26/2017	9/26/2017	10/4/2017	FH 49 0-2"
10	9/25/2017	10/3/2017	10/3/2017	FH 10 0-2"	50	9/28/2017	10/3/2017	10/4/2017	FH 50 0-2"
11	8/31/2017	9/4/2017	9/30/2017	FH 11 0-2"	51	9/11/2017	9/11/2017	9/30/2017	FH 51 0-2"
12	DU-6	N/A	N/A	Prior excavation	52	9/11/2017	9/11/2017	9/30/2017	FH 52 0-2"
13	DU-6	N/A	N/A	Prior excavation	53	8/23/2017	8/23/2017		FH 53 0-2"
14	DU-6	N/A	N/A	Prior excavation	54	9/11/2017	9/11/2017		FH 54 0-2"re-ex
15	DU-6	N/A	N/A	Prior excavation	54A	8/23/2017	8/23/2017		FH 54A 0-2"
16	9/23/2017	9/28/2017	9/29/2017	FH 16 0-2"	55	8/26/2017	8/26/2017	9/29/2017	FH 55 0-2"
17	9/23/2017	9/23/2017	9/23/2017	FH 17 0-2"	56	8/26/2017	8/30/2017	10/2/2017	FH 56 0-2"
18	9/23/2017	9/23/2017	9/23/2017	FH 18 0-2"	57	8/26/2017	8/26/2017	9/29/2017	FH 57 0-2"
19	9/23/2017	9/29/2017	10/2/2017	FH 19 0-2"	58	9/11/2017	9/11/2017	9/29/2017	FH 58 0-2"
20	9/23/2017	9/28/2017	9/29/2017	FH 20 0-2"	59	9/26/2017	9/27/2017	9/29/2017	FH 59 0-2"
21	9/26/2017	9/27/2017		FH 21 0-2"	60				Seawall
22	9/25/2017	9/26/2017	9/26/2017	FH 22 0-2"	61	9/28/2017	9/29/2017	10/3/2017	FH 61 0-2"
23	9/26/2017	9/26/2017	9/26/2017	FH 23 0-2"	62	9/25/2017	9/27/2017	10/3/2017	FH 62 0-2"
24	9/26/2017	9/26/2017	9/29/2017	FH 24 0-2"	63	9/28/2017	9/29/2017	10/3/2017	FH 63 0-2"
25	9/26/2017	9/26/2017	9/29/2017	FH 25 0-2"	64	9/11/2017	9/11/2017		FH 64 0-2"
26	9/26/2017	9/26/2017	9/29/2017	FH 26 0-2"	65	8/29/2017	8/30/2017	10/30/2017	FH 65 0-2"
27	9/23/2017	9/23/2017	9/30/2017	FH 27 0-2"	66	8/26/2017	8/26/2017	10/3/2017	FH 66 0-2"
28	9/23/2017	9/23/2017	9/30/2017	FH 28 0-2"	67	8/25/2017	8/30/2017	9/29/2017	FH 67 0-2"
29	9/26/2017	9/26/2017	10/2/2017	FH 29 0-2"	68	8/25/2017	8/30/2017	9/29/2017	FH 68 0-2"
30	9/26/2017	9/26/2017	9/26/2017	FH 30 0-2"	69	9/25/2017	9/27/2017	9/29/2017	FH 69 0-2"
31	9/26/2017	9/26/2017	9/26/2017	FH 31 0-2"	70	9/25/2017	9/27/2017	9/29/2017	FH 69 0-2"
32	9/26/2017	9/26/2017	9/26/2017	FH 32 0-2"	71	9/25/2017	9/27/2017	9/29/2017	FH 71 0-2"
33	9/26/2017	9/26/2017	9/26/2017	FH 33 0-2"	72	8/29/2017	9/27/2017	10/3/2017	FH 72 0-2"
34	9/26/2017	9/29/2017	9/30/2017	FH 34 0-2"	73	8/29/2017	9/11/2017	10/2/2017	FH 73 0-2"
35	9/26/2017	10/4/2017	10/4/2017	FH 35 0-2"	74	8/29/2017	8/29/2017	10/2/2017	FH 74 0-2"
36	9/26/2017	10/4/2017	10/4/2017	FH 36 0-2"	75	8/28/2017	8/29/2017	10/2/2017	FH 75 0-2"
37	9/25/2017	9/26/2017	10/2/2017	FH 37 0-2"	76	9/25/2017	9/29/2017	10/2/2017	FH 76 0-2"
38	9/26/2017	10/2/2017	10/2/2017	FH 38 0-2"	77	8/28/2017	8/29/2017	10/3/2017	FH 77 0-2"
39	DU-1	N/A	N/A	Prior excavation					
40	9/26/2017	9/27/2017	10/2/2017	FH 40 0-2"					

Pedestals /Monuments Soil					Pedestals /Monuments Soil				
Feature Unit ID	Excavate	Sampled Collected ID # X P100 0-2"	Backfill	Notes- Red >75mg/kg Green<75mg/kg	Feature Unit ID	Excavate	Sampled Collected ID # X P100 0-2"	Backfill	Notes- Red >75mg/kg Green<75mg/kg
1	8/29/2017	9/4/2017	9/30/2017	1-08 P100 0-2"	23	9/29/2017	10/2/2017	10/2/2017	23-44 P100 0-2"
2	8/29/2017	9/4/2017	9/30/2017	2-08 P100 0-2"	24	9/29/2017	10/2/2017	10/2/2017	24-42 P100 0-2"
3	8/29/2017	9/4/2017	9/30/2017	3-10 P100 0-2"	25	9/29/2017	10/2/2017	10/2/2017	25-38 P100 0-2"
4	8/29/2017	9/4/2017	9/30/2017	4-10 P100 0-2"	26	9/25/2017	10/3/2017	10/3/2017	26-07 P100 0-2"
5	8/29/2017	9/4/2017	9/30/2017	5-11 P100 0-2"	27	10/26/2017	10/3/2017	10/3/2017	27-03 P100 0-2"
6	9/11/2017	9/11/2017	9/30/2017	6-51 P100 0-2"	28	9/26/2017	10/4/2017	10/4/2017	28-30 P100 0-2"
7	9/11/2017	9/11/2017	9/30/2017	7-32 P100 0-2"	29				
8	9/05/2017	9/18/2017	10/3/2017	8-20 P100 0-2"	30				
9	9/26/2017	9/28/2017	9/30/2017	9-33 P100 0-2"	31				
10	9/26/2017	9/28/2017	9/30/2017	10-23 P100 0-2"	32				
11	9/26/2017	9/28/2017	9/29/2017	11-20 P100 0-2"	33				
12	9/26/2017	9/28/2017	9/29/2017	12-28 P100 0-2"	34				
13	9/26/2017	9/28/2017	9/29/2017	13-27 P100 0-2"	35				
14	9/26/2017	9/28/2017	9/30/2017	14-08 P100 0-2"	36				
15	9/27/2017	9/29/2017	9/30/2017	15-24 P100 0-2"	37				
16	9/27/2017	9/29/2017	9/30/2017	16-25 P100 0-2"	38				
17	9/27/2017	9/29/2017	9/30/2017	17-25 P100 0-2"	39				
18	9/28/2017	9/29/2017	9/29/2017	18-13 P100 0-2"	40				
19	9/26/2017	9/29/2017	10/2/2017	19-44 P100 0-2"	41				
20	9/26/2017	9/29/2017	10/2/2017	20-44 P100 0-2"	42				
21	9/26/2017	9/29/2017	9/30/2017	21-52 P100 0-2"	43				
22	9/26/2017	10/2/2017	10/4/2017	22-49 P100 0-2"					

Fire Hydrant ID # per updated DBSI file -Navy Fresh Water Lines, Valves & Hydrants. BSI/DR-0034
Pedestal sample identification is a designated ID number followed by a dash and double-digit number relative to the closest Fire Hydrant ID location. No full prior map of pedestals exists.

Table 5. DU 5 Buttress & Cover - Import Clean Coral Sand

DU 5 IMPORT CLEAN CORAL						
DATE	NORTH Wall Loads	SOUTH Wall Loads	EAST Wall Loads	WEST Wall Loads	Days total loads	Days cubic yardage
10/2/2017	0	0	0	0	0	0
10/3/2017	0	0	0	0	0	0
10/4/2017	0	0	0	0	0	0
10/5/2017					0	0
10/6/2017					0	0
10/7/2017					0	0
Load count per wall	282	0	16	0		
15cuyd estimate per wall	4230	0	240	0		
2017 Total R2 combined clean coral import LOADS				298		
Loads x 15cuyd estimate				4470		

Table 6. Excavation Plots - Import Clean Coral Sand

EXCAVATION PLOTS- IMPORT CLEAN CORAL BACKFILL							
DATE	DU-9 Loads	DU-8 Loads	DU-7 Loads	DU-5 Loads	DU-3 Loads	Days total loads	Days cubic yardage
10/2/2017	23	6	0	0	0	29	435
10/3/2017	14	4	0	0	0	18	270
10/4/2017	20	0	0	0	0	20	300
10/5/2017						0	0
10/6/2017						0	0
10/7/2017						0	0
Load count per column	116	32	20	0	0		
15cuyd estimate per column	1740	480	300	0	0		
2017 Total combined clean import Backfill LOADS					168		
Loads x 15cuyd estimate					2520		

NW Demolition and Environmental
A Joint Venture

Daily Field Report

Date: Thursday, October 5, 2017
Prepared by: Scott Wakefield

Project: Removal of Lead-Based Paint from Structures and Lead-Contaminated Soil
Location: Midway Atoll National Wildlife Refuge
Client: US Fish and Wildlife Service

Weather: Clouds, wind 22-24 mph. Temperature ~78F

Personnel:

Name	Company	Site Hours
Scott Wakefield	NWDE Field Oversight	10
Alan Phillips	NWDE Supervisor	10
Joel Smith	NWDE Operator	10
Dalton Sullivan	NWDE Labor	10
Antonio Davis	NWDE Labor	10
Jevon Stone	NWDE Operator	10
Jose Ordaz	NWDE Operator	10
Matt Manning	NWDE Operator	10
Chris Fisher	NWDE Labor	10
Kevin Bach	NWDE Labor	10
Lucas Peel	NWDE Labor	10
Tyler Wilson	NWDE Labor	10
Eric Matteson	NWDE Operator	10

Visitors/Additional Site Personnel:

Name	Title
MaryAnn Amann	U.S. FWS

Equipment:

Description	Model No.	Comments / Serial #
Pickup Truck	F350 Service Truck	NWDE
Flatbed Truck	Ford F450	NWDE
Container Truck	Peterbuilt	NWDE
Skid Steer	Bobcat S185	NWDE
Tracked Skid Steer	Bobcat T750	NWDE
Tracked Skid Steer	Bobcat	NWDE
Mini-Excavator	CAT 308	NWDE
Excavator	Volvo EC290BLC	NWDE
Excavator	Volvo EC290BLC	NWDE
Excavator	Volvo EC290	NWDE
Off road Dump Truck	Volvo A30D	NWDE
Off road Dump Truck	Volvo A30D	NWDE
Off road Dump Truck	Volvo A30D	NWDE
Excavator – High reach	Komatsu PC400HD	NWDE
Excavator	Komatsu 450	NWDE

Materials Delivered:

Description	QTY	Condition/Comments
Diesel	111 gallons	
Gasoline	0 gallons	

Description of Work:

0700 – Health and Safety meeting at NAF staging area. Review today's work tasks.

Today's focus will be soil work at pedestals, backfill Water Plant and the grade preparations at the R2. Weather is ongoing with uniquely higher winds today to challenge work tasks.

NWDE pedestal work continues from yesterday. Nearing the last of the pedestals to dig, sample and backfill, the last remaining concrete features are excavated today. This includes ID # 29-R1 near the airfield, the north side of the Water Plant excavated area for ID# 30-20 and near the Power Plant pedestal ID# 31-15. The balance of pedestals are within previously excavated Decision Units or exclude digging due to notations and will be documented within Table 4.

0800 – At the R2 Unit, grade work continues for final elevations of the waste layer. The toe of the waste soil arriving near the top of the cast-in-place wall, then adjusted with clean sand for the elevation intersecting the top of the roof support concrete pads is worked. The tracked skidsteer, 290 excavator and D3 dozer are all in use for grade work.

Backfill task work for the Water Plant, Bldg 347, Bldg 3501, 3126 Reservoir and 3127 Reservoir pushes forward. With the recent directive of the Monument and Refuge to stop hauling clean sand from the Cargo Pier beach, the backfill materials on hand are carefully considered to where they will be placed across both DU-8 and DU-9. Given that the Water Plant infrastructure, importance to human health, fire safety and communications conduits being exposed, the facility complex is being backfilled with clean coral sand up to original grade. The few areas that exceeded 75 mg/kg are capped with shade cloth as a demarcation layer, secured and topped with clean sand. Through the day sand is brought in, then pushed into place using the skid steer and excavator.

0900 – The last monument anchor is excavated near Bldg 1126 Harbor Office. The total of five anchors have been excavated, sampled and capped off with clean sand their perimeter.

1030 – The last of two re-excavations is occurring at the R2, external to the west and east sides. The original excavations were dug, demarcated or moved into the R2 last season, Oct 21-22, 2016. This week, the overburden of clean coral sand stockpiling is pulled back, then the 5303 NW A 0-2" (completed yesterday) and 5303 E A 0-2" plots re-excavated and additional 0.5' minimum. Once sampled, the plots receive shade cloth demarcation layer and 1' of clean sand backfill. These are nearest to the tow of the final R2 cover

1200 – Lunch

1230 – Water Plant backfill work continues for filling in along the building foundations and carefully working atop the in-use utilities. 6" foil marker tape is re-positioned above the utility lines as the visual marker. Hand working along the tighter areas includes the northwest corner of exposed piping, conduits and concrete footings. Clean sand is brought from the seawall drift at the cargo beach, as noted to be allowed by Bob Peyton, refuge manager. The minimal available sand allowed is this drift and the short seawall ramps.

1500 – R2 re-excavation areas have the demarcation layer in position and are being backfilled. The target backfill grade is a rough working elevation and will be adjusted once the final R2 cap is underway.

At the R2 waste layer grading, the toe adjustment and 2% areas are being worked as material shapes up for the design spec. Surface materials are increasingly free of demo debris, sharps, concrete rubble and rebar in preparation for the capping membrane soon to be placed on the waste layer.

1730 – Ending the work day.
Backfill 4 pedestals and 1 anchor memorial today with clean coral sand.
DU-9 clean coral sand backfill today is 19 loads to the Water Plant.
R2 waste layer toe adjustment sand brought into the cells today is 12 loads.

Photographs:

Photo 01: Water Plant – View northwest. Backfill progress

Photo 02: Water Plant – View south. Backfill progress

Photo 03: Water Plant – View northeast. Backfill progress

Photo 04: Water Plant – View northeast. Backfill progress

Photo 05: Bldg R2 Unit 5303 – View southwest. Demarcation layer progress atop ramp plot

Photo 06: Bldg 5303 R2 Unit – View east. Progress of northern grade work

Photo 07: 29-R1 – View northwest. Pedestal excavation, sample, shade cloth and backfill

Table 1. Maectite and Treated Soil Total Estimates

	Maectite Totals						Treated Soil Totals[1,2]		
	Applied Today (gal)					Total to Date	Excavated and Hauled to R-2 Unit **Today**		Excavated and Hauled to R-2 Unit **Total to Date**
Date	Soils (DU9)	Soils (DU8)	Soils (DU7)	Soils (DU5)	Soils (DU3)	(gal)	Load	^{3}yds[1]	^{3}yds[1]
10/02/17	0	0	0	0	0	2886	0	0	3957
10/03/17	0	0	0	0	0	2886	0	0	3957
10/04/17	0	0	0	0	0	2886	0	0	3957
10/05/17	95	0	0	0	0	2981	9	130	4087
10/06/17									
10/07/17									
Total to Date	2623 gallons	205 gallons	153 gallons	0 gallons	0 gallons		328 loads		

Notes:
1. Estimates are based on the number of gallons of Maectite® applied.
2. Soil treatment with Maectite® and hauling to R2 may not occur on the same day.
3. 10/5/17– Table 2 loads were batch treated in the R2. Inserted this data into Table 1 for totalizing the volumes and gallons. Reset Table 2 "Batch loads" of 9 to zero until next ex-situ stockpile treatment.

2017 DU 9 – Figures P 1-16, 18, 20, 21, 23-27.
Bldg 1124, 1126, 3521, S361, 347, 3501, S3126, S3127, 521, 520, 502, 5342, 309, 340, 354, 9149, 232, 233, S269, S225A, 2127, 144, Boat House 1 & 2, 4205, 4206, 4207, 4213, 503, 5303, 5341, 5339, 5338, Bollards, Fire Hydrants, 5304, 5305, 4210, 3524, 3529, 5126, 5378, 3514, and other ancillary structures.
Foundations S464, 502, 4201, 5126, 5295, 5342.
2017 DU 8 – S-28, S-30 re-ex, Pipe figure P19
2017 DU 7 – Bldg 3502, 3503, 3504 shade cloth
2017 DU 5 – R2 Unit, Figure P17
2017 DU 3 – Housing figure P22, 419 MIS re-ex

Table 2. Soil loads hauled to the R2 for ex situ Maectite® treatment

	Load Totals				
	Hauled to R2 for treatment in R2 cell (# of truck loads)				
Date	Soils (DU9)	Soils (DU8)	Soils (DU7)	Soils (DU5)	Soils (DU3)
10/02/17	0	0	0	0	0
10/03/17	0	0	0	0	0
10/04/17	5	0	0	0	0
10/05/17	4	0	0	0	0
10/06/17					
10/07/17					
Batch loads to treat in R2	9 loads	0 loads	0 loads	0 loads	0 loads
Total to Date	130.8 loads	34 loads	18.5 loads	0 loads	0 loads

8/14/17 - Batch treatment of all stockpiled "ex situ" loads to date in R2 Cell 1. Entered this data into Table 1 on 8/14/17 for volume and gallon tracking.
8/15/17 - Add "Batch Loads to treat in R2" subtotal that tracks the truck loads placed for treatment. Reset this to zero once treatment event is complete.
8/23/17 – Batch #2 treatment event of all stockpiled "ex situ" loads to date in R2 Cells. Entered this data into Table 1 on 8/23/17 for volume and gallon tracking.
9/12/17 – Batch #3 treatment event of all stockpiled "ex situ" loads to date in R2 Cells. Entered this data into Table 1 on 9/11/17 & 9/12/17 for volume and gallon tracking.
9/21/17 – Batch #4 treatment event of all stockpiled "ex situ" loads to date in R2 Cells. Entered this data into Table 1 on 9/21/17 for volume and gallon tracking.
9/29/17 – Batch #5 treatment event of all stockpiled "ex situ" loads to date in R2 Cells. Entered this data into Table 1 on 9/29/17 for volume and gallon tracking.
10/5/17 – Batch #6 treatment event of all stockpiled "ex situ" loads to date in R2 Cells. Entered this data into Table 1 on 10/5/17 for volume and gallon tracking.

Table 2.1 Soil loads hauled to the R2, non-treated internment

Date	Load Totals				
	Hauled to R2, non-treated soil (# of truck loads)				
	Soils (DU9)	Soils (DU8)	Soils (DU7)	Soils (DU5)	Soils (DU3)
10/02/17	0	0	0	0	0
10/03/17	0	0	0	0	0
10/04/17	2	0	0	0	0
10/05/17	0	0	0	0	0
10/06/17					
10/07/17					
Total to Date	29.5 loads	65 loads	0 loads	0 loads	9 loads

Table 3. Weekly Load Estimates

Date	Treated Demo Debris Loads to R2	Clean Concrete Loads to Crusher	Metal Debris Loads To Boneyard	Clean Wood Loads	Steel Debris Loaded onto Barge	R2 waste layer toe adjustment sand
10/02/17	0	0	0	0	0	
10/03/17	0	0	0	0	0	
10/04/17	0	0	0	0	0	
10/05/17	0	0	0	0	0	12
10/06/17						
10/07/17						
Season Total	3 loads	8 loads	0 loads	4 loads	195 loads	12 loads

Table 4. Fire Hydrants, Pedestals and Monuments

Fire Hydrant Soil					Fire Hydrant Soil				
Fire Hydrant ID	Excavate	Sampled Collected FH # X 0-2"	Backfill	Notes- Red >75mg/kg Green<75mg/kg	Fire Hydrant ID	Excavate	Sampled Collected FH # X 0-2"	Backfill	Notes- Red >75mg/kg Green<75mg/kg
1	9/26/2017	10/3/2017	10/3/2017	FH 1 0-2"	41	DU-1	N/A	N/A	Prior excavation
2	9/27/2017	10/3/2017	10/3/2017	FH 2 0-2"	42	9/25/2017	9/27/2017	10/2/2017	FH 42 0-2"
3	9/26/2017	9/26/2017	10/3/2017	FH 3 0-2"	43	9/26/2017	10/2/2017	10/3/2017	FH 43 0-2"
4	9/26/2017	9/26/2017	10/3/2017	FH 4 0-2"	44	9/26/2017	9/29/2017	10/2/2017	FH 44 0-2"
5	9/27/2017	10/3/2017	10/3/2017	FH 5 0-2"	45	9/23/2017	9/28/2017	10/4/2017	FH 45 0-2"
6	9/27/2017	10/3/2017	10/3/2017	FH 6 0-2"	46	9/25/2017	10/3/2017	10/4/2017	FH 46 0-2"
7	9/26/2017	9/26/2017	10/3/2017	FH 7 0-2"	47	9/25/2017	10/4/2017	10/4/2017	FH 47 0-2"
8	9/25/2017	10/3/2017	10/3/2017	FH 8 0-2"	48	9/25/2017	10/3/2017	10/4/2017	FH 48 0-2"
9	9/25/2017	10/3/2017	10/3/2017	FH 9 0-2"	49	9/26/2017	9/26/2017	10/4/2017	FH 49 0-2"
10	9/25/2017	10/3/2017	10/3/2017	FH 10 0-2"	50	9/28/2017	10/3/2017	10/4/2017	FH 50 0-2"
11	8/31/2017	9/4/2017	9/30/2017	FH 11 0-2"	51	9/11/2017	9/11/2017	9/30/2017	FH 51 0-2"
12	DU-6	N/A	N/A	Prior excavation	52	9/11/2017	9/11/2017	9/30/2017	FH 52 0-2"
13	DU-6	N/A	N/A	Prior excavation	53	8/23/2017	8/23/2017		FH 53 0-2"
14	DU-6	N/A	N/A	Prior excavation	54	9/11/2017	9/11/2017		FH 54 0-2"re-ex
15	DU-6	N/A	N/A	Prior excavation	54A	8/23/2017	8/23/2017		FH 54A 0-2"
16	9/23/2017	9/28/2017	9/29/2017	FH 16 0-2"	55	8/26/2017	8/26/2017	9/29/2017	FH 55 0-2"
17	9/23/2017	9/23/2017	9/23/2017	FH 17 0-2"	56	8/26/2017	8/30/2017	10/2/2017	FH 56 0-2"
18	9/23/2017	9/23/2017	9/23/2017	FH 18 0-2"	57	8/26/2017	8/26/2017	9/29/2017	FH 57 0-2"
19	9/23/2017	9/29/2017	10/2/2017	FH 19 0-2"	58	9/11/2017	9/11/2017	9/29/2017	FH 58 0-2"
20	9/23/2017	9/28/2017	9/29/2017	FH 20 0-2"	59	9/26/2017	9/27/2017	9/29/2017	FH 59 0-2"
21	9/26/2017	9/27/2017		FH 21 0-2"	60				Seawall
22	9/25/2017	9/26/2017	9/26/2017	FH 22 0-2"	61	9/28/2017	9/29/2017	10/3/2017	FH 61 0-2"
23	9/26/2017	9/26/2017	9/26/2017	FH 23 0-2"	62	9/25/2017	9/27/2017	10/3/2017	FH 62 0-2"
24	9/26/2017	9/26/2017	9/29/2017	FH 24 0-2"	63	9/28/2017	9/29/2017	10/3/2017	FH 63 0-2"
25	9/26/2017	9/26/2017	9/29/2017	FH 25 0-2"	64	9/11/2017	9/11/2017		FH 64 0-2"
26	9/26/2017	9/26/2017	9/29/2017	FH 26 0-2"	65	8/29/2017	8/30/2017	10/30/2017	FH 65 0-2"
27	9/23/2017	9/23/2017	9/30/2017	FH 27 0-2"	66	8/26/2017	8/26/2017	10/3/2017	FH 66 0-2"
28	9/23/2017	9/23/2017	9/30/2017	FH 28 0-2"	67	8/25/2017	8/30/2017	9/29/2017	FH 67 0-2"
29	9/26/2017	9/26/2017	10/2/2017	FH 29 0-2"	68	8/25/2017	8/30/2017	9/29/2017	FH 68 0-2"
30	9/26/2017	9/26/2017	9/26/2017	FH 30 0-2"	69	9/25/2017	9/27/2017	9/29/2017	FH 69 0-2"
31	9/26/2017	9/26/2017	9/26/2017	FH 31 0-2"	70	9/25/2017	9/27/2017	9/29/2017	FH 69 0-2"
32	9/26/2017	9/26/2017	9/26/2017	FH 32 0-2"	71	9/25/2017	9/27/2017	9/29/2017	FH 71 0-2"
33	9/26/2017	9/26/2017	9/26/2017	FH 33 0-2"	72	8/29/2017	9/27/2017	10/3/2017	FH 72 0-2"
34	9/26/2017	9/29/2017	9/30/2017	FH 34 0-2"	73	8/29/2017	9/11/2017	10/2/2017	FH 73 0-2"
35	9/26/2017	10/4/2017	10/4/2017	FH 35 0-2"	74	8/29/2017	8/29/2017	10/2/2017	FH 74 0-2"
36	9/26/2017	10/4/2017	10/4/2017	FH 36 0-2"	75	8/28/2017	8/29/2017	10/2/2017	FH 75 0-2"
37	9/25/2017	9/26/2017	10/2/2017	FH 37 0-2"	76	9/25/2017	9/29/2017	10/2/2017	FH 76 0-2"
38	9/26/2017	10/2/2017	10/2/2017	FH 38 0-2"	77	8/28/2017	8/29/2017	10/3/2017	FH 77 0-2"
39	DU-1	N/A	N/A	Prior excavation					
40	9/26/2017	9/27/2017	10/2/2017	FH 40 0-2"					

Pedestals /Monuments Soil					Pedestals /Monuments Soil				
Feature Unit ID	Excavate	Sampled Collected ID # X P100 0-2"	Backfill	Notes- Red >75mg/kg Green<75mg/kg	Feature Unit ID	Excavate	Sampled Collected ID # X P100 0-2"	Backfill	Notes- Red >75mg/kg Green<75mg/kg
1	8/29/2017	9/4/2017	9/30/2017	1-08 P100 0-2"	23	9/29/2017	10/2/2017	10/2/2017	23-44 P100 0-2"
2	8/29/2017	9/4/2017	9/30/2017	2-08 P100 0-2"	24	9/29/2017	10/2/2017	10/2/2017	24-42 P100 0-2"
3	8/29/2017	9/4/2017	9/30/2017	3-10 P100 0-2"	25	9/29/2017	10/2/2017	10/2/2017	25-38 P100 0-2"
4	8/29/2017	9/4/2017	9/30/2017	4-10 P100 0-2"	26	9/25/2017	10/3/2017	10/3/2017	26-07 P100 0-2"
5	8/29/2017	9/4/2017	9/30/2017	5-11 P100 0-2"	27	10/26/2017	10/3/2017	10/3/2017	27-03 P100 0-2"
6	9/11/2017	9/11/2017	9/30/2017	6-51 P100 0-2"	28	9/26/2017	10/4/2017	10/4/2017	28-30 P100 0-2"
7	9/11/2017	9/11/2017	9/30/2017	7-32 P100 0-2"	29	10/5/2017	10/5/2017	10/5/2017	29-R1 P100 0-2"
8	9/05/2017	9/18/2017	10/3/2017	8-20 P100 0-2"	30	10/5/2017	10/5/2017	10/5/2017	30-20 P100 0-2"
9	9/26/2017	9/28/2017	9/30/2017	9-33 P100 0-2"	31	10/5/2017	10/5/2017	10/5/2017	31-15 P100 0-2"
10	9/26/2017	9/28/2017	9/30/2017	10-23 P100 0-2"	32				
11	9/26/2017	9/28/2017	9/29/2017	11-20 P100 0-2"	33				
12	9/26/2017	9/28/2017	9/29/2017	12-28 P100 0-2"	34				
13	9/26/2017	9/28/2017	9/29/2017	13-27 P100 0-2"	35				
14	9/26/2017	9/28/2017	9/30/2017	14-08 P100 0-2"	36				
15	9/27/2017	9/29/2017	9/30/2017	15-24 P100 0-2"	37				
16	9/27/2017	9/29/2017	9/30/2017	16-25 P100 0-2"	38				
17	9/27/2017	9/29/2017	9/30/2017	17-25 P100 0-2"	39				
18	9/28/2017	9/29/2017	9/29/2017	18-13 P100 0-2"	40				
19	9/26/2017	9/29/2017	10/2/2017	19-44 P100 0-2"	41				
20	9/26/2017	9/29/2017	10/2/2017	20-44 P100 0-2"	42				
21	9/26/2017	9/29/2017	9/30/2017	21-52 P100 0-2"	43				
22	9/26/2017	10/2/2017	10/4/2017	22-49 P100 0-2"					

Fire Hydrant ID # per updated DBSI file -Navy Fresh Water Lines, Valves & Hydrants. BSI/DR-0034
Pedestal sample identification is a designated ID number followed by a dash and double-digit number relative to the closest Fire Hydrant ID location. No full prior map of pedestals exists.

Table 5. DU 5 Buttress & Cover - Import Clean Coral Sand

DU 5 IMPORT CLEAN CORAL						
DATE	NORTH Wall Loads	SOUTH Wall Loads	EAST Wall Loads	WEST Wall Loads	Days total loads	Days cubic yardage
10/2/2017	0	0	0	0	0	0
10/3/2017	0	0	0	0	0	0
10/4/2017	0	0	0	0	0	0
10/5/2017	0	0	0	0	0	0
10/6/2017					0	0
10/7/2017					0	0
Load count per wall	282	0	16	0		
15cuyd estimate per wall	4230	0	240	0		
2017 Total R2 combined clean coral import LOADS				298		
Loads x 15cuyd estimate				4470		

Table 6. Excavation Plots - Import Clean Coral Sand

EXCAVATION PLOTS- IMPORT CLEAN CORAL BACKFILL							
DATE	DU-9 Loads	DU-8 Loads	DU-7 Loads	DU-5 Loads	DU-3 Loads	Days total loads	Days cubic yardage
10/2/2017	23	6	0	0	0	29	435
10/3/2017	14	4	0	0	0	18	270
10/4/2017	20	0	0	0	0	20	300
10/5/2017	19	0	0	0	0	19	285
10/6/2017						0	0
10/7/2017						0	0
Load count per column	135	32	20	0	0		
15cuyd estimate per column	2025	480	300	0	0		
2017 Total combined clean import Backfill LOADS					187		
Loads x 15cuyd estimate					2805		

Daily Field Report

Date: Friday, October 6, 2017
Prepared by: Scott Wakefield

Project: Removal of Lead-Based Paint from Structures and Lead-Contaminated Soil
Location: Midway Atoll National Wildlife Refuge
Client: US Fish and Wildlife Service

Weather: Clouds, wind 16-20 mph, rain. Temperature ~79F

Personnel:

Name	Company	Site Hours
Scott Wakefield	NWDE Field Oversight	10
Alan Phillips	NWDE Supervisor	10
Joel Smith	NWDE Operator	10
Dalton Sullivan	NWDE Labor	10
Antonio Davis	NWDE Labor	10
Jevon Stone	NWDE Operator	10
Jose Ordaz	NWDE Operator	10
Matt Manning	NWDE Operator	10
Chris Fisher	NWDE Labor	10
Kevin Bach	NWDE Labor	10
Lucas Peel	NWDE Labor	10
Tyler Wilson	NWDE Labor	10
Eric Matteson	NWDE Operator	10

Visitors/Additional Site Personnel:

Name	Title
MaryAnn Amann	U.S. FWS

Equipment:

Description	Model No.	Comments / Serial #
Pickup Truck	F350 Service Truck	NWDE
Flatbed Truck	Ford F450	NWDE
Container Truck	Peterbuilt	NWDE
Skid Steer	Bobcat S185	NWDE
Tracked Skid Steer	Bobcat T750	NWDE
Tracked Skid Steer	Bobcat	NWDE
Mini-Excavator	CAT 308	NWDE
Excavator	Volvo EC290BLC	NWDE
Excavator	Volvo EC290BLC	NWDE
Excavator	Volvo EC290	NWDE
Off road Dump Truck	Volvo A30D	NWDE
Off road Dump Truck	Volvo A30D	NWDE
Off road Dump Truck	Volvo A30D	NWDE
Excavator – High reach	Komatsu PC400HD	NWDE
Excavator	Komatsu 450	NWDE

Materials Delivered:

Description	QTY	Condition/Comments
Diesel	90 gallons	
Gasoline	11 gallons	

Description of Work:

0700 – Health and Safety meeting at NAF staging area. Review today's work tasks.

Today's focus will be Water Plant backfill, shade cloth installation at DU-8 and the grade preparations at the R2. Morning weather is rain and high winds.

The Cat 308 and tracked skidsteer are finishing up the backfill grading at the Water Plant complex. Narrow edges and foundation corners, sidewalk, piping, tree stumps and pedestals are being finalized for the clean coral sand backfill placement.

The perimeter of reservoirs 3126W and 3127E that did not receive shade cloth and clean coral sand backfill due to excavation soil sampling being favorably less than 75mg/kg, will be slightly graded. The 5' wide excavated run is being thinned out to the native grade. As directed by US FWS, clean backfill in this 0.5' preliminary excavation is excluded due to the recent closure of the Borrow Source area and lack of backfill material.

0800 – Marking out S28 and S30 ASTs at the Fuel Farm, DU-8. The sub plots soil analysis lab results exceeding 75 mg/kg are being staked out to identify the square footage that will be covered with shade cloth. This material is being placed at the bottom of the excavation, then covered with the adjacent available clean sand that had been pulled off earlier this season prior to the re-excavation.

NWDE work crew has the mini excavator and one haul truck onsite. As directed by US FWS, the perimeter shade cloth edges are trenched in vertically to approximately 1.5' below bottom of excavation. The cloth will be positioned and staked, edges aligned into the trench and edges backfilled. The field of fabric will then be capped with the available DU-8 stockpiled sand. The recent closure of the Borrow Source area for providing clean coral sand backfill will limit the DU-8 shade cloth soil lift thickness.

The R2 Unit grading work continues at the southwest corner and southern edge of the repository. Grade checks with the Spectra LL300 laser level keep the machinery on point to target the 2% slope to the break line, hinge point A. The field adjustable hinge point A to hinge point C is being worked with the skidsteer. Previously the waste was graded to top of CIP wall, contained within the cell. Currently, clean sand in the toe of the adjustment is bringing up grade from top of CIP wall to top of the concrete roof pads. These integral roof pads were originally the load bearing points for the former roof structure beams. They sit higher than the top of the CIP wall by approximately one CMU block height, (appx 0.67'). Clean sand at the top of the concrete roof pads will allow the hydraulic membrane to clear the R2 exterior wall as intended.

1000 – DU-8 shade cloth trenching is progressing at S28 and S30. The spoils of the trench typically would elevate the shade cloth elevation as they would be cast to remain below the cloth. With the R2 volume able to receive materials to bulk up small areas of the 2% slope, the adjustment is made to direct load DU-8 shade cloth trenching material into a haul truck and place within the R2. This reduced volume of soil beneath the shade cloth retains the target elevation of the cloth at the bottom of finished excavation.

1200 – Lunch

1230 – At the R2 Unit, southwest corner the existing valve vault is soon to be backfilled. Earlier this season the electric motors and steel vault covers were removed. The rising stem gate valves have been turned off presumably when the R2 Unit was taken off line from a functioning water treatment component. With the valves off, the piping remains bolted up. No blind flanges are in use. The plumbing is being sanded in and water jetted for compaction to envelope the steel pipe and valves.

1500 – NWDE is moving the shipping container of R2 hydraulic membrane from the NAF Hanger staging area to the R2 work site. This afternoon the preparations are being made to get the large rolls carefully unloaded from within the container. The rolls are nearly 2000 lbs each, total of four and near the width of the container including the center spool hub.

1700 – Shade cloth at S28 is in position and capped with adjacent clean coral sand. S30 AST shade cloth progress is near 50% for the field. Trenching perimeter for S30 is near 70%.

1730 – Ending the work day.
DU-8 re-ex soil from trenching at S28 and S30 hauled to the R2 is 4 loads for direct internment.
Backfill for the DU-9 Water Plant is complete with clean coral sand.
R2 waste layer toe adjustment sand brought into the cells today is 10 loads from north stockpile.

Photographs:

Photo 01: Water Plant – View northwest. Backfill nearing completion

Photo 02: Water Plant – View south. Backfill progress

Photo 03: Water Plant 3126 W– View southwest. Perimeter grade excluding backfill

Photo 04: Water Plant 3127E – View south. Perimeter grade excluding backfill

Photo 05: S28 – View north. Demarcation layer progress atop subplot

Photo 06: S30 AST – View southeast. Progress of shade cloth demarcation layer

Photo 07: R2 Unit – View north. Southwest corner vault for former valve and pumps to received backfill

Photo 08: R2 Unit – View north. Backfill of out-of-service vault. Temp stickups for R1 pipe valve cans

Photo 09: R2 Unit – View east. Progression of grading at south wall

Table 1. Maectite and Treated Soil Total Estimates

	Maectite Totals						Treated Soil Totals[1,2]		
	Applied Today (gal)					Total to Date	Excavated and Hauled to R-2 Unit **Today**		Excavated and Hauled to R-2 Unit **Total to Date**
Date	Soils (DU9)	Soils (DU8)	Soils (DU7)	Soils (DU5)	Soils (DU3)	(gal)	Load	^{3}yds[1]	^{3}yds[1]
10/02/17	0	0	0	0	0	2886	0	0	3957
10/03/17	0	0	0	0	0	2886	0	0	3957
10/04/17	0	0	0	0	0	2886	0	0	3957
10/05/17	95	0	0	0	0	2981	9	130	4087
10/06/17	0	0	0	0	0	2981	0	0	4087
10/07/17									
Total to Date	2623 gallons	205 gallons	153 gallons	0 gallons	0 gallons		328 loads		

Notes:
1. Estimates are based on the number of gallons of Maectite® applied.
2. Soil treatment with Maectite® and hauling to R2 may not occur on the same day.
3. 10/5/17– Table 2 loads were batch treated in the R2. Inserted this data into Table 1 for totalizing the volumes and gallons. Reset Table 2 "Batch loads" of 9 to zero until next ex-situ stockpile treatment.

2017 DU 9 – Figures P 1-16, 18, 20, 21, 23-27.
Bldg 1124, 1126, 3521, S361, 347, 3501, S3126, S3127, 521, 520, 502, 5342, 309, 340, 354, 9149, 232, 233, S269, S225A, 2127, 144, Boat House 1 & 2, 4205, 4206, 4207, 4213, 503, 5303, 5341, 5339, 5338, Bollards, Fire Hydrants, 5304, 5305, 4210, 3524, 3529, 5126, 5378, 3514, and other ancillary structures.
Foundations S464, 502, 4201, 5126, 5295, 5342.
2017 DU 8 – S-28, S-30 re-ex, Pipe figure P19
2017 DU 7 – Bldg 3502, 3503, 3504 shade cloth
2017 DU 5 – R2 Unit, Figure P17
2017 DU 3 – Housing figure P22, 419 MIS re-ex

Table 2. Soil loads hauled to the R2 for ex situ Maectite® treatment

	Load Totals				
	Hauled to R2 for treatment in R2 cell (# of truck loads)				
Date	Soils (DU9)	Soils (DU8)	Soils (DU7)	Soils (DU5)	Soils (DU3)
10/02/17	0	0	0	0	0
10/03/17	0	0	0	0	0
10/04/17	5	0	0	0	0
10/05/17	4	0	0	0	0
10/06/17	0	0	0	0	0
10/07/17					
Batch loads to treat in R2	0 loads	0 loads	0 loads	0 loads	0 loads
Total to Date	130.8 loads	34 loads	18.5 loads	0 loads	0 loads

8/14/17 - Batch treatment of all stockpiled "ex situ" loads to date in R2 Cell 1. Entered this data into Table 1 on 8/14/17 for volume and gallon tracking.
8/15/17 - Add "Batch Loads to treat in R2" subtotal that tracks the truck loads placed for treatment. Reset this to zero once treatment event is complete.
8/23/17 – Batch #2 treatment event of all stockpiled "ex situ" loads to date in R2 Cells. Entered this data into Table 1 on 8/23/17 for volume and gallon tracking.
9/12/17 – Batch #3 treatment event of all stockpiled "ex situ" loads to date in R2 Cells. Entered this data into Table 1 on 9/11/17 & 9/12/17 for volume and gallon tracking.
9/21/17 – Batch #4 treatment event of all stockpiled "ex situ" loads to date in R2 Cells. Entered this data into Table 1 on 9/21/17 for volume and gallon tracking.
9/29/17 – Batch #5 treatment event of all stockpiled "ex situ" loads to date in R2 Cells. Entered this data into Table 1 on 9/29/17 for volume and gallon tracking.
10/5/17 – Batch #6 treatment event of all stockpiled "ex situ" loads to date in R2 Cells. Entered this data into Table 1 on 10/5/17 for volume and gallon tracking.

Table 2.1 Soil loads hauled to the R2, non-treated internment

Date	Load Totals				
	Hauled to R2, non-treated soil (# of truck loads)				
	Soils (DU9)	Soils (DU8)	Soils (DU7)	Soils (DU5)	Soils (DU3)
10/02/17	0	0	0	0	0
10/03/17	0	0	0	0	0
10/04/17	2	0	0	0	0
10/05/17	0	0	0	0	0
10/06/17	0	4	0	0	0
10/07/17					
Total to Date	29.5 loads	69 loads	0 loads	0 loads	9 loads

Table 3. Weekly Load Estimates

Date	Treated Demo Debris Loads to R2	Clean Concrete Loads to Crusher	Metal Debris Loads To Boneyard	Clean Wood Loads	Steel Debris Loaded onto Barge	R2 waste layer toe adjustment sand
10/02/17	0	0	0	0	0	
10/03/17	0	0	0	0	0	
10/04/17	0	0	0	0	0	
10/05/17	0	0	0	0	0	12
10/06/17	0	0	0	0	0	10
10/07/17						
Season Total	3 loads	8 loads	0 loads	4 loads	195 loads	22 loads

Table 4. Fire Hydrants, Pedestals and Monuments

Fire Hydrant Soil					Fire Hydrant Soil				
Fire Hydrant ID	Excavate	Sampled Collected FH # X 0-2"	Backfill	Notes- Red >75mg/kg Green<75mg/kg	Fire Hydrant ID	Excavate	Sampled Collected FH # X 0-2"	Backfill	Notes- Red >75mg/kg Green<75mg/kg
1	9/26/2017	10/3/2017	10/3/2017	FH 1 0-2"	41	DU-1	N/A	N/A	Prior excavation
2	9/27/2017	10/3/2017	10/3/2017	FH 2 0-2"	42	9/25/2017	9/27/2017	10/2/2017	FH 42 0-2"
3	9/26/2017	9/26/2017	10/3/2017	FH 3 0-2"	43	9/26/2017	10/2/2017	10/3/2017	FH 43 0-2"
4	9/26/2017	9/26/2017	10/3/2017	FH 4 0-2"	44	9/26/2017	9/29/2017	10/2/2017	FH 44 0-2"
5	9/27/2017	10/3/2017	10/3/2017	FH 5 0-2"	45	9/23/2017	9/28/2017	10/4/2017	FH 45 0-2"
6	9/27/2017	10/3/2017	10/3/2017	FH 6 0-2"	46	9/25/2017	10/3/2017	10/4/2017	FH 46 0-2"
7	9/26/2017	9/26/2017	10/3/2017	FH 7 0-2"	47	9/25/2017	10/4/2017	10/4/2017	FH 47 0-2"
8	9/25/2017	10/3/2017	10/3/2017	FH 8 0-2"	48	9/25/2017	10/3/2017	10/4/2017	FH 48 0-2"
9	9/25/2017	10/3/2017	10/3/2017	FH 9 0-2"	49	9/26/2017	9/26/2017	10/4/2017	FH 49 0-2"
10	9/25/2017	10/3/2017	10/3/2017	FH 10 0-2"	50	9/28/2017	10/3/2017	10/4/2017	FH 50 0-2"
11	8/31/2017	9/4/2017	9/30/2017	FH 11 0-2"	51	9/11/2017	9/11/2017	9/30/2017	FH 51 0-2"
12	DU-6	N/A	N/A	Prior excavation	52	9/11/2017	9/11/2017	9/30/2017	FH 52 0-2"
13	DU-6	N/A	N/A	Prior excavation	53	8/23/2017	8/23/2017	10/6/2017	FH 53 0-2"
14	DU-6	N/A	N/A	Prior excavation	54	9/11/2017	9/11/2017	10/6/2017	FH 54 0-2"re-ex
15	DU-6	N/A	N/A	Prior excavation	54A	8/23/2017	8/23/2017	10/6/2017	FH 54A 0-2"
16	9/23/2017	9/28/2017	9/29/2017	FH 16 0-2"	55	8/26/2017	8/26/2017	9/29/2017	FH 55 0-2"
17	9/23/2017	9/23/2017	9/23/2017	FH 17 0-2"	56	8/26/2017	8/30/2017	10/2/2017	FH 56 0-2"
18	9/23/2017	9/23/2017	9/23/2017	FH 18 0-2"	57	8/26/2017	8/26/2017	9/29/2017	FH 57 0-2"
19	9/23/2017	9/29/2017	10/2/2017	FH 19 0-2"	58	9/11/2017	9/11/2017	9/29/2017	FH 58 0-2"
20	9/23/2017	9/28/2017	9/29/2017	FH 20 0-2"	59	9/26/2017	9/27/2017	9/29/2017	FH 59 0-2"
21	9/26/2017	9/27/2017	9/30/2017	FH 21 0-2"	60				Seawall
22	9/25/2017	9/26/2017	9/26/2017	FH 22 0-2"	61	9/28/2017	9/29/2017	10/3/2017	FH 61 0-2"
23	9/26/2017	9/26/2017	9/26/2017	FH 23 0-2"	62	9/25/2017	9/27/2017	10/3/2017	FH 62 0-2"
24	9/26/2017	9/26/2017	9/29/2017	FH 24 0-2"	63	9/28/2017	9/29/2017	10/3/2017	FH 63 0-2"
25	9/26/2017	9/26/2017	9/29/2017	FH 25 0-2"	64	9/11/2017	9/11/2017		FH 64 0-2"
26	9/26/2017	9/26/2017	9/29/2017	FH 26 0-2"	65	8/29/2017	8/30/2017	10/30/2017	FH 65 0-2"
27	9/23/2017	9/23/2017	9/30/2017	FH 27 0-2"	66	8/26/2017	8/26/2017	10/3/2017	FH 66 0-2"
28	9/23/2017	9/23/2017	9/30/2017	FH 28 0-2"	67	8/25/2017	8/30/2017	9/29/2017	FH 67 0-2"
29	9/26/2017	9/26/2017	10/2/2017	FH 29 0-2"	68	8/25/2017	8/30/2017	9/29/2017	FH 68 0-2"
30	9/26/2017	9/26/2017	9/26/2017	FH 30 0-2"	69	9/25/2017	9/27/2017	9/29/2017	FH 69 0-2"
31	9/26/2017	9/26/2017	9/26/2017	FH 31 0-2"	70	9/25/2017	9/27/2017	9/29/2017	FH 69 0-2"
32	9/26/2017	9/26/2017	9/26/2017	FH 32 0-2"	71	9/25/2017	9/27/2017	9/29/2017	FH 71 0-2"
33	9/26/2017	9/26/2017	9/26/2017	FH 33 0-2"	72	8/29/2017	9/27/2017	10/3/2017	FH 72 0-2"
34	9/26/2017	9/29/2017	9/30/2017	FH 34 0-2"	73	8/29/2017	9/11/2017	10/2/2017	FH 73 0-2"
35	9/26/2017	10/4/2017	10/4/2017	FH 35 0-2"	74	8/29/2017	8/29/2017	10/2/2017	FH 74 0-2"
36	9/26/2017	10/4/2017	10/4/2017	FH 36 0-2"	75	8/28/2017	8/29/2017	10/2/2017	FH 75 0-2"
37	9/25/2017	9/26/2017	10/2/2017	FH 37 0-2"	76	9/25/2017	9/29/2017	10/2/2017	FH 76 0-2"
38	9/26/2017	10/2/2017	10/2/2017	FH 38 0-2"	77	8/28/2017	8/29/2017	10/3/2017	FH 77 0-2"
39	DU-1	N/A	N/A	Prior excavation					
40	9/26/2017	9/27/2017	10/2/2017	FH 40 0-2"					

Pedestals /Monuments Soil					Pedestals /Monuments Soil				
Feature Unit ID	Excavate	Sampled Collected ID # X P100 0-2"	Backfill	Notes- Red >75mg/kg Green<75mg/kg	Feature Unit ID	Excavate	Sampled Collected ID # X P100 0-2"	Backfill	Notes- Red >75mg/kg Green<75mg/kg
1	8/29/2017	9/4/2017	9/30/2017	1-08 P100 0-2"	23	9/29/2017	10/2/2017	10/2/2017	23-44 P100 0-2"
2	8/29/2017	9/4/2017	9/30/2017	2-08 P100 0-2"	24	9/29/2017	10/2/2017	10/2/2017	24-42 P100 0-2"
3	8/29/2017	9/4/2017	9/30/2017	3-10 P100 0-2"	25	9/29/2017	10/2/2017	10/2/2017	25-38 P100 0-2"
4	8/29/2017	9/4/2017	9/30/2017	4-10 P100 0-2"	26	9/25/2017	10/3/2017	10/3/2017	26-07 P100 0-2"
5	8/29/2017	9/4/2017	9/30/2017	5-11 P100 0-2"	27	10/26/2017	10/3/2017	10/3/2017	27-03 P100 0-2"
6	9/11/2017	9/11/2017	9/30/2017	6-51 P100 0-2"	28	9/26/2017	10/4/2017	10/4/2017	28-30 P100 0-2"
7	9/11/2017	9/11/2017	9/30/2017	7-32 P100 0-2"	29	10/5/2017	10/5/2017	10/5/2017	29-R1 P100 0-2"
8	9/05/2017	9/18/2017	10/3/2017	8-20 P100 0-2"	30	10/5/2017	10/5/2017	10/5/2017	30-20 P100 0-2"
9	9/26/2017	9/28/2017	9/30/2017	9-33 P100 0-2"	31	10/5/2017	10/5/2017	10/5/2017	31-15 P100 0-2"
10	9/26/2017	9/28/2017	9/30/2017	10-23 P100 0-2"	32				
11	9/26/2017	9/28/2017	9/29/2017	11-20 P100 0-2"	33				
12	9/26/2017	9/28/2017	9/29/2017	12-28 P100 0-2"	34				
13	9/26/2017	9/28/2017	9/29/2017	13-27 P100 0-2"	35				
14	9/26/2017	9/28/2017	9/30/2017	14-08 P100 0-2"	36				
15	9/27/2017	9/29/2017	9/30/2017	15-24 P100 0-2"	37				
16	9/27/2017	9/29/2017	9/30/2017	16-25 P100 0-2"	38				
17	9/27/2017	9/29/2017	9/30/2017	17-25 P100 0-2"	39				
18	9/28/2017	9/29/2017	9/29/2017	18-13 P100 0-2"	40				
19	9/26/2017	9/29/2017	10/2/2017	19-44 P100 0-2"	41				
20	9/26/2017	9/29/2017	10/2/2017	20-44 P100 0-2"	42				
21	9/26/2017	9/29/2017	9/30/2017	21-52 P100 0-2"	43				
22	9/26/2017	10/2/2017	10/4/2017	22-49 P100 0-2"					

Fire Hydrant ID # per updated DBSI file -Navy Fresh Water Lines, Valves & Hydrants. BSI/DR-0034
Pedestal sample identification is a designated ID number followed by a dash and double-digit number relative to the closest Fire Hydrant ID location. No full prior map of pedestals exists.

Table 5. DU 5 Buttress & Cover - Import Clean Coral Sand

DU 5 IMPORT CLEAN CORAL						
DATE	NORTH Wall Loads	SOUTH Wall Loads	EAST Wall Loads	WEST Wall Loads	Days total loads	Days cubic yardage
10/2/2017	0	0	0	0	0	0
10/3/2017	0	0	0	0	0	0
10/4/2017	0	0	0	0	0	0
10/5/2017	0	0	0	0	0	0
10/6/2017	0	0	0	0	0	0
10/7/2017					0	0
Load count per wall	282	0	16	0		
15cuyd estimate per wall	4230	0	240	0		
2017 Total R2 combined clean coral import LOADS				298		
Loads x 15cuyd estimate				4470		

Table 6. Excavation Plots - Import Clean Coral Sand

EXCAVATION PLOTS- IMPORT CLEAN CORAL BACKFILL							
DATE	DU-9 Loads	DU-8 Loads	DU-7 Loads	DU-5 Loads	DU-3 Loads	Days total loads	Days cubic yardage
10/2/2017	23	6	0	0	0	29	435
10/3/2017	14	4	0	0	0	18	270
10/4/2017	20	0	0	0	0	20	300
10/5/2017	19	0	0	0	0	19	285
10/6/2017	0	0	0	0	0	0	0
10/7/2017						0	0
Load count per column	135	32	20	0	0		
15cuyd estimate per column	2025	480	300	0	0		
2017 Total combined clean import Backfill LOADS					187		
Loads x 15cuyd estimate					2805		

Daily Field Report

Date: Saturday, October 7, 2017
Prepared by: Scott Wakefield

Project: Removal of Lead-Based Paint from Structures and Lead-Contaminated Soil
Location: Midway Atoll National Wildlife Refuge
Client: US Fish and Wildlife Service

Weather: Cloudy, wind 13 mph. Temperature ~79F

Personnel:

Name	Company	Site Hours
Scott Wakefield	NWDE Field Oversight	10
Alan Phillips	NWDE Supervisor	10
Joel Smith	NWDE Operator	10
Dalton Sullivan	NWDE Labor	10
Antonio Davis	NWDE Labor	10
Jevon Stone	NWDE Operator	10
Jose Ordaz	NWDE Operator	10
Matt Manning	NWDE Operator	10
Chris Fisher	NWDE Labor	10
Kevin Bach	NWDE Labor	10
Lucas Peel	NWDE Labor	10
Tyler Wilson	NWDE Labor	10
Eric Matteson	NWDE Operator	10

Visitors/Additional Site Personnel:

Name	Title
MaryAnn Amann	U.S. FWS
Matt Wasson	PND Engineering

Equipment:

Description	Model No.	Comments / Serial #
Pickup Truck	F350 Service Truck	NWDE
Flatbed Truck	Ford F450	NWDE
Container Truck	Peterbuilt	NWDE
Skid Steer	Bobcat S185	NWDE
Tracked Skid Steer	Bobcat T750	NWDE
Tracked Skid Steer	Bobcat	NWDE
Mini-Excavator	CAT 308	NWDE
Excavator	Volvo EC290BLC	NWDE
Excavator	Volvo EC290BLC	NWDE
Excavator	Volvo EC290	NWDE
Off road Dump Truck	Volvo A30D	NWDE
Off road Dump Truck	Volvo A30D	NWDE
Off road Dump Truck	Volvo A30D	NWDE
Excavator – High reach	Komatsu PC400HD	NWDE
Excavator	Komatsu 450	NWDE

Materials Delivered:

Description	QTY	Condition/Comments
Diesel	240 gallons	
Gasoline	0 gallons	

Description of Work:

0700 – Health and Safety meeting at NAF staging area. Review today's work tasks.

Today's focus will be shade cloth installation at DU-8 and waste grading preparations at the R2.

DU-8 S-30 AST demarcation layer installation is continuing at the east side of the former AST pad. The perimeter edge is trenched using the 1' wide bucket on the mini excavator. Soil is loaded in to the A30 Volvo haul truck and placed within the R2 Unit for direct internment. Cloth panels are lain flat, edges draped within the vertical trench and staked in place in preparation for sand backfill. Material that will be used to cover the shade cloth will be limited to the adjacent stockpile of DU-8 clean sand backfill previously removed this season prior to the re-ex task.

0800 – At the R2 Unit, the grade work intersecting the top of target roof support pads at top of R2 wall unit goes forward. This work continues around the perimeter of the R2 to prepare the waste grading layer for upcoming hydraulic membrane placement.

Three rolls of membrane within the shipping container are being unloaded this morning to be staged next to roll #1 of 4. The packaged liner rolls are carefully moved as not to damage the materials. A steel pipe is inserted within the paper arbor to complete lifting tasks to properly lift and move the heavy rolls.

1000 – The R2 northwest and southwest waste layer areas are receiving a final grading to maintain the 2% slope contour. Continuing to grade with the Spectra LL300 laser level for vertical elevations. Adjustment sand from the north stockpile is used sparingly to bring the final grade targets together as materials are build up towards the finished elevation for the membrane.

1200 - Lunch

1230 – At the R2, begin initial field survey using a Trimble RTK base and rover with M.Wasson, PND Engineering. Setup and collect data for the centerline of the R2 wall corners, top of CIP (waste intersect), top of concrete roof pads (membrane intersect), waste ridge points, top of two valve nuts for R1 transite pipe run at southwest corner and three Rainstore® monitoring wells at east exterior wall.

1300 – At the Fuel Farm, S30 shade cloth work continues. The trenching work for the perimeter is being positioned with the cloth sections, followed with addition staking within the cloth field. Adjacent clean sand piles are placed as a lift to cover the demarcation layer. There is a shortage of available sand for backfilling to meet original grade and to cap with a target 12" of cover over the entire cloth area. Currently the available DU-8 stockpiles of sand will be placed through the day, with a determination of additional material required as the stockpiles are depleted. The US FWS directive to close the Borrow Source area limits the available clean coral sand backfill. The closure is associated with turtle activity at the Cargo Pier.

1400 – NWDE grade work at the R2 has included the abutment cut, exterior of the CIP wall. In progress, this abutment continues to be graded and will support the 2' extended edge of the upcoming hydraulic membrane when positioned. The southwest and northwest corners for the R2 exterior grade have been shaping up with clean coral sand. Elevation from the lower native grade requires the supplement of clean coral sand to meet the target fill. The 290 excavator, tracked skidsteer and D3 dozer are making headway to finish shape the R2 materials.

1600 – S30 AST shade cloth work backfill is near to reaching the end of available sand capping for the cloth. The sand cover is less than the 1' minimum cover. Areas without the shade cloth layer are excluded in the backfill task and remain at the re-ex cut grade.

The R2 west side is getting the abutment shaped up with the dozer. At the R2 east side, the 290 is making grade work near the northeast region of the exterior wall.

1730 – Ending the work day.
DU-8 re-ex soil from trenching at S30 hauled to the R2 is 6 loads for direct internment.
R2 waste layer toe adjustment sand brought into the cells today is 13 loads from north stockpile.

1800 – R2 field survey work continues for collecting additional points and an initial topo of the waste layer.

1930 – Pick up survey equipment and finish for the day.

Photographs:

Photo 01: S30 AST – View east. Progress of demarcation layer installation

Photo 02: R2 Unit– View south. Unloading the hydraulic membrane rolls

Photo 03: R2 Unit – View west. Perimeter grade progress of south wall

Photo 04: S28 AST – View east. Progress of demarcation layer installation with backfill

Photo 05: S30 AST – View southeast. Progress of demarcation layer installation

Table 1. Maectite and Treated Soil Total Estimates

	Maectite Totals						Treated Soil Totals[1,2]		
	Applied Today (gal)					Total to Date	Excavated and Hauled to R-2 Unit **Today**		Excavated and Hauled to R-2 Unit **Total to Date**
Date	Soils (DU9)	Soils (DU8)	Soils (DU7)	Soils (DU5)	Soils (DU3)	(gal)	Load	^{3}yds[1]	^{3}yds[1]
10/02/17	0	0	0	0	0	2886	0	0	3957
10/03/17	0	0	0	0	0	2886	0	0	3957
10/04/17	0	0	0	0	0	2886	0	0	3957
10/05/17	95	0	0	0	0	2981	9	130	4087
10/06/17	0	0	0	0	0	2981	0	0	4087
10/07/17	0	0	0	0	0	2981	0	0	4087
Total to Date	2623 gallons	205 gallons	153 gallons	0 gallons	0 gallons		328 loads		

Notes:
1. Estimates are based on the number of gallons of Maectite® applied.
2. Soil treatment with Maectite® and hauling to R2 may not occur on the same day.
3. 10/5/17– Table 2 loads were batch treated in the R2. Inserted this data into Table 1 for totalizing the volumes and gallons. Reset Table 2 "Batch loads" of 9 to zero until next ex-situ stockpile treatment.

2017 DU 9 – Figures P 1-16, 18, 20, 21, 23-27.
Bldg 1124, 1126, 3521, S361, 347, 3501, S3126, S3127, 521, 520, 502, 5342, 309, 340, 354, 9149, 232, 233, S269, S225A, 2127, 144, Boat House 1 & 2, 4205, 4206, 4207, 4213, 503, 5303, 5341, 5339, 5338, Bollards, Fire Hydrants, 5304, 5305, 4210, 3524, 3529, 5126, 5378, 3514, and other ancillary structures.
Foundations S464, 502, 4201, 5126, 5295, 5342.
2017 DU 8 – S-28, S-30 re-ex, Pipe figure P19
2017 DU 7 – Bldg 3502, 3503, 3504 shade cloth
2017 DU 5 – R2 Unit, Figure P17
2017 DU 3 – Housing figure P22, 419 MIS re-ex

Table 2. Soil loads hauled to the R2 for ex situ Maectite® treatment

	Load Totals				
	Hauled to R2 for treatment in R2 cell (# of truck loads)				
Date	Soils (DU9)	Soils (DU8)	Soils (DU7)	Soils (DU5)	Soils (DU3)
10/02/17	0	0	0	0	0
10/03/17	0	0	0	0	0
10/04/17	5	0	0	0	0
10/05/17	4	0	0	0	0
10/06/17	0	0	0	0	0
10/07/17	0	0	0	0	0
Batch loads to treat in R2	0 loads	0 loads	0 loads	0 loads	0 loads
Total to Date	130.8 loads	34 loads	18.5 loads	0 loads	0 loads

8/14/17 - Batch treatment of all stockpiled "ex situ" loads to date in R2 Cell 1. Entered this data into Table 1 on 8/14/17 for volume and gallon tracking.
8/15/17 - Add "Batch Loads to treat in R2" subtotal that tracks the truck loads placed for treatment. Reset this to zero once treatment event is complete.
8/23/17 – Batch #2 treatment event of all stockpiled "ex situ" loads to date in R2 Cells. Entered this data into Table 1 on 8/23/17 for volume and gallon tracking.
9/12/17 – Batch #3 treatment event of all stockpiled "ex situ" loads to date in R2 Cells. Entered this data into Table 1 on 9/11/17 & 9/12/17 for volume and gallon tracking.
9/21/17 – Batch #4 treatment event of all stockpiled "ex situ" loads to date in R2 Cells. Entered this data into Table 1 on 9/21/17 for volume and gallon tracking.
9/29/17 – Batch #5 treatment event of all stockpiled "ex situ" loads to date in R2 Cells. Entered this data into Table 1 on 9/29/17 for volume and gallon tracking.
10/5/17 – Batch #6 treatment event of all stockpiled "ex situ" loads to date in R2 Cells. Entered this data into Table 1 on 10/5/17 for volume and gallon tracking.

Table 2.1 Soil loads hauled to the R2, non-treated internment

Date	Load Totals				
	Hauled to R2, non-treated soil (# of truck loads)				
	Soils (DU9)	Soils (DU8)	Soils (DU7)	Soils (DU5)	Soils (DU3)
10/02/17	0	0	0	0	0
10/03/17	0	0	0	0	0
10/04/17	2	0	0	0	0
10/05/17	0	0	0	0	0
10/06/17	0	4	0	0	0
10/07/17	0	6	0	0	0
Total to Date	29.5 loads	75 loads	0 loads	0 loads	9 loads

Table 3. Weekly Load Estimates

Date	Treated Demo Debris Loads to R2	Clean Concrete Loads to Crusher	Metal Debris Loads To Boneyard	Clean Wood Loads	Steel Debris Loaded onto Barge	R2 waste layer toe adjustment sand
10/02/17	0	0	0	0	0	
10/03/17	0	0	0	0	0	
10/04/17	0	0	0	0	0	
10/05/17	0	0	0	0	0	12
10/06/17	0	0	0	0	0	10
10/07/17	0	0	0	0	0	13
Season Total	3 loads	8 loads	0 loads	4 loads	195 loads	35 loads

Table 4. Fire Hydrants, Pedestals and Monuments

Fire Hydrant Soil					Fire Hydrant Soil				
Fire Hydrant ID	Excavate	Sampled Collected FH # X 0-2"	Backfill	Notes- Red >75mg/kg Green<75mg/kg	Fire Hydrant ID	Excavate	Sampled Collected FH # X 0-2"	Backfill	Notes- Red >75mg/kg Green<75mg/kg
1	9/26/2017	10/3/2017	10/3/2017	FH 1 0-2"	41	DU-1	N/A	N/A	Prior excavation
2	9/27/2017	10/3/2017	10/3/2017	FH 2 0-2"	42	9/25/2017	9/27/2017	10/2/2017	FH 42 0-2"
3	9/26/2017	9/26/2017	10/3/2017	FH 3 0-2"	43	9/26/2017	10/2/2017	10/3/2017	FH 43 0-2"
4	9/26/2017	9/26/2017	10/3/2017	FH 4 0-2"	44	9/26/2017	9/29/2017	10/2/2017	FH 44 0-2"
5	9/27/2017	10/3/2017	10/3/2017	FH 5 0-2"	45	9/23/2017	9/28/2017	10/4/2017	FH 45 0-2"
6	9/27/2017	10/3/2017	10/3/2017	FH 6 0-2"	46	9/25/2017	10/3/2017	10/4/2017	FH 46 0-2"
7	9/26/2017	9/26/2017	10/3/2017	FH 7 0-2"	47	9/25/2017	10/4/2017	10/4/2017	FH 47 0-2"
8	9/25/2017	10/3/2017	10/3/2017	FH 8 0-2"	48	9/25/2017	10/3/2017	10/4/2017	FH 48 0-2"
9	9/25/2017	10/3/2017	10/3/2017	FH 9 0-2"	49	9/26/2017	9/26/2017	10/4/2017	FH 49 0-2"
10	9/25/2017	10/3/2017	10/3/2017	FH 10 0-2"	50	9/28/2017	10/3/2017	10/4/2017	FH 50 0-2"
11	8/31/2017	9/4/2017	9/30/2017	FH 11 0-2"	51	9/11/2017	9/11/2017	9/30/2017	FH 51 0-2"
12	DU-6	N/A	N/A	Prior excavation	52	9/11/2017	9/11/2017	9/30/2017	FH 52 0-2"
13	DU-6	N/A	N/A	Prior excavation	53	8/23/2017	8/23/2017	10/6/2017	FH 53 0-2"
14	DU-6	N/A	N/A	Prior excavation	54	9/11/2017	9/11/2017	10/6/2017	FH 54 0-2"re-ex
15	DU-6	N/A	N/A	Prior excavation	54A	8/23/2017	8/23/2017	10/6/2017	FH 54A 0-2"
16	9/23/2017	9/28/2017	9/29/2017	FH 16 0-2"	55	8/26/2017	8/26/2017	9/29/2017	FH 55 0-2"
17	9/23/2017	9/23/2017	9/23/2017	FH 17 0-2"	56	8/26/2017	8/30/2017	10/2/2017	FH 56 0-2"
18	9/23/2017	9/23/2017	9/23/2017	FH 18 0-2"	57	8/26/2017	8/26/2017	9/29/2017	FH 57 0-2"
19	9/23/2017	9/29/2017	10/2/2017	FH 19 0-2"	58	9/11/2017	9/11/2017	9/29/2017	FH 58 0-2"
20	9/23/2017	9/28/2017	9/29/2017	FH 20 0-2"	59	9/26/2017	9/27/2017	9/29/2017	FH 59 0-2"
21	9/26/2017	9/27/2017	9/30/2017	FH 21 0-2"	60				Seawall
22	9/25/2017	9/26/2017	9/26/2017	FH 22 0-2"	61	9/28/2017	9/29/2017	10/3/2017	FH 61 0-2"
23	9/26/2017	9/26/2017	9/26/2017	FH 23 0-2"	62	9/25/2017	9/27/2017	10/3/2017	FH 62 0-2"
24	9/26/2017	9/26/2017	9/29/2017	FH 24 0-2"	63	9/28/2017	9/29/2017	10/3/2017	FH 63 0-2"
25	9/26/2017	9/26/2017	9/29/2017	FH 25 0-2"	64	9/11/2017	9/11/2017		FH 64 0-2"
26	9/26/2017	9/26/2017	9/29/2017	FH 26 0-2"	65	8/29/2017	8/30/2017	10/30/2017	FH 65 0-2"
27	9/23/2017	9/23/2017	9/30/2017	FH 27 0-2"	66	8/26/2017	8/26/2017	10/3/2017	FH 66 0-2"
28	9/23/2017	9/23/2017	9/30/2017	FH 28 0-2"	67	8/25/2017	8/30/2017	9/29/2017	FH 67 0-2"
29	9/26/2017	9/26/2017	10/2/2017	FH 29 0-2"	68	8/25/2017	8/30/2017	9/29/2017	FH 68 0-2"
30	9/26/2017	9/26/2017	9/26/2017	FH 30 0-2"	69	9/25/2017	9/27/2017	9/29/2017	FH 69 0-2"
31	9/26/2017	9/26/2017	9/26/2017	FH 31 0-2"	70	9/25/2017	9/27/2017	9/29/2017	FH 69 0-2"
32	9/26/2017	9/26/2017	9/26/2017	FH 32 0-2"	71	9/25/2017	9/27/2017	9/29/2017	FH 71 0-2"
33	9/26/2017	9/26/2017	9/26/2017	FH 33 0-2"	72	8/29/2017	9/27/2017	10/3/2017	FH 72 0-2"
34	9/26/2017	9/29/2017	9/30/2017	FH 34 0-2"	73	8/29/2017	9/11/2017	10/2/2017	FH 73 0-2"
35	9/26/2017	10/4/2017	10/4/2017	FH 35 0-2"	74	8/29/2017	8/29/2017	10/2/2017	FH 74 0-2"
36	9/26/2017	10/4/2017	10/4/2017	FH 36 0-2"	75	8/28/2017	8/29/2017	10/2/2017	FH 75 0-2"
37	9/25/2017	9/26/2017	10/2/2017	FH 37 0-2"	76	9/25/2017	9/29/2017	10/2/2017	FH 76 0-2"
38	9/26/2017	10/2/2017	10/2/2017	FH 38 0-2"	77	8/28/2017	8/29/2017	10/3/2017	FH 77 0-2"
39	DU-1	N/A	N/A	Prior excavation					
40	9/26/2017	9/27/2017	10/2/2017	FH 40 0-2"					

Pedestals /Monuments Soil					Pedestals /Monuments Soil				
Feature Unit ID	Excavate	Sampled Collected ID # X P100 0-2"	Backfill	Notes- Red >75mg/kg Green<75mg/kg	Feature Unit ID	Excavate	Sampled Collected ID # X P100 0-2"	Backfill	Notes- Red >75mg/kg Green<75mg/kg
1	8/29/2017	9/4/2017	9/30/2017	1-08 P100 0-2"	23	9/29/2017	10/2/2017	10/2/2017	23-44 P100 0-2"
2	8/29/2017	9/4/2017	9/30/2017	2-08 P100 0-2"	24	9/29/2017	10/2/2017	10/2/2017	24-42 P100 0-2"
3	8/29/2017	9/4/2017	9/30/2017	3-10 P100 0-2"	25	9/29/2017	10/2/2017	10/2/2017	25-38 P100 0-2"
4	8/29/2017	9/4/2017	9/30/2017	4-10 P100 0-2"	26	9/25/2017	10/3/2017	10/3/2017	26-07 P100 0-2"
5	8/29/2017	9/4/2017	9/30/2017	5-11 P100 0-2"	27	10/26/2017	10/3/2017	10/3/2017	27-03 P100 0-2"
6	9/11/2017	9/11/2017	9/30/2017	6-51 P100 0-2"	28	9/26/2017	10/4/2017	10/4/2017	28-30 P100 0-2"
7	9/11/2017	9/11/2017	9/30/2017	7-32 P100 0-2"	29	10/5/2017	10/5/2017	10/5/2017	29-R1 P100 0-2"
8	9/05/2017	9/18/2017	10/3/2017	8-20 P100 0-2"	30	10/5/2017	10/5/2017	10/5/2017	30-20 P100 0-2"
9	9/26/2017	9/28/2017	9/30/2017	9-33 P100 0-2"	31	10/5/2017	10/5/2017	10/5/2017	31-15 P100 0-2"
10	9/26/2017	9/28/2017	9/30/2017	10-23 P100 0-2"	32				
11	9/26/2017	9/28/2017	9/29/2017	11-20 P100 0-2"	33				
12	9/26/2017	9/28/2017	9/29/2017	12-28 P100 0-2"	34				
13	9/26/2017	9/28/2017	9/29/2017	13-27 P100 0-2"	35				
14	9/26/2017	9/28/2017	9/30/2017	14-08 P100 0-2"	36				
15	9/27/2017	9/29/2017	9/30/2017	15-24 P100 0-2"	37				
16	9/27/2017	9/29/2017	9/30/2017	16-25 P100 0-2"	38				
17	9/27/2017	9/29/2017	9/30/2017	17-25 P100 0-2"	39				
18	9/28/2017	9/29/2017	9/29/2017	18-13 P100 0-2"	40				
19	9/26/2017	9/29/2017	10/2/2017	19-44 P100 0-2"	41				
20	9/26/2017	9/29/2017	10/2/2017	20-44 P100 0-2"	42				
21	9/26/2017	9/29/2017	9/30/2017	21-52 P100 0-2"	43				
22	9/26/2017	10/2/2017	10/4/2017	22-49 P100 0-2"					

Fire Hydrant ID # per updated DBSI file -Navy Fresh Water Lines, Valves & Hydrants. BSI/DR-0034
Pedestal sample identification is a designated ID number followed by a dash and double-digit number relative to the closest Fire Hydrant ID location. No full prior map of pedestals exists.

Table 5. DU 5 Buttress & Cover - Import Clean Coral Sand

DU 5 IMPORT CLEAN CORAL						
DATE	NORTH Wall Loads	SOUTH Wall Loads	EAST Wall Loads	WEST Wall Loads	Days total loads	Days cubic yardage
10/2/2017	0	0	0	0	0	0
10/3/2017	0	0	0	0	0	0
10/4/2017	0	0	0	0	0	0
10/5/2017	0	0	0	0	0	0
10/6/2017	0	0	0	0	0	0
10/7/2017	0	0	0	0	0	0
Load count per wall	282	0	16	0		
15cuyd estimate per wall	4230	0	240	0		
2017 Total R2 combined clean coral import LOADS				298		
Loads x 15cuyd estimate				4470		

Table 6. Excavation Plots - Import Clean Coral Sand

EXCAVATION PLOTS- IMPORT CLEAN CORAL BACKFILL							
DATE	DU-9 Loads	DU-8 Loads	DU-7 Loads	DU-5 Loads	DU-3 Loads	Days total loads	Days cubic yardage
10/2/2017	23	6	0	0	0	29	435
10/3/2017	14	4	0	0	0	18	270
10/4/2017	20	0	0	0	0	20	300
10/5/2017	19	0	0	0	0	19	285
10/6/2017	0	0	0	0	0	0	0
10/7/2017	0	5	0	0	0	5	75
Load count per column	135	37	20	0	0		
15cuyd estimate per column	2025	555	300	0	0		
2017 Total combined clean import Backfill LOADS					192		
Loads x 15cuyd estimate					2880		

Daily Field Report

Date: Sunday, October 8, 2017
Prepared by: Scott Wakefield

Project: Removal of Lead-Based Paint from Structures and Lead-Contaminated Soil
Location: Midway Atoll National Wildlife Refuge
Client: US Fish and Wildlife Service

Weather: Cloudy, wind 14 mph. Temperature ~81F

Personnel:

Name	Company	Site Hours
Scott Wakefield	NWDE Field Oversight	10
Alan Phillips	NWDE Supervisor	10
Joel Smith	NWDE Operator	10
Dalton Sullivan	NWDE Labor	10
Antonio Davis	NWDE Labor	10
Jevon Stone	NWDE Operator	10
Jose Ordaz	NWDE Operator	10
Matt Manning	NWDE Operator	10
Chris Fisher	NWDE Labor	10
Kevin Bach	NWDE Labor	10
Lucas Peel	NWDE Labor	10
Tyler Wilson	NWDE Labor	10
Eric Matteson	NWDE Operator	10

Visitors/Additional Site Personnel:

Name	Title
MaryAnn Amann	U.S. FWS

Equipment:

Description	Model No.	Comments / Serial #
Pickup Truck	F350 Service Truck	NWDE
Flatbed Truck	Ford F450	NWDE
Container Truck	Peterbuilt	NWDE
Skid Steer	Bobcat S185	NWDE
Tracked Skid Steer	Bobcat T750	NWDE
Tracked Skid Steer	Bobcat	NWDE
Mini-Excavator	CAT 308	NWDE
Excavator	Volvo EC290BLC	NWDE
Excavator	Volvo EC290BLC	NWDE
Excavator	Volvo EC290	NWDE
Off road Dump Truck	Volvo A30D	NWDE
Off road Dump Truck	Volvo A30D	NWDE
Off road Dump Truck	Volvo A30D	NWDE
Excavator – High reach	Komatsu PC400HD	NWDE
Excavator	Komatsu 450	NWDE

Materials Delivered:

Description	QTY	Condition/Comments
Diesel	0 gallons	
Gasoline	0 gallons	

Description of Work:

0700 – Health and Safety meeting at NAF staging area. Review today's work tasks.

Today's focus will be DU-9 shade cloth installation and waste grading preparations at the R2.

The topo survey of the R2 waste layer information is showing that the ridge outward slope is satisfactorily at the 2% target. The corners of the R2 are the only adjustments needed to complete the finish grade work in preparation to set hydraulic membrane liner today. The edges are being adjusted and worked to completion. Small irregularities are bladed out. The crew is walking the waste layer and picking out surface irregular rocks and materials that could pose a danger to damaging the membrane placement.

The R2 exterior wall offset of 2.0' is flagged. This is the minimum membrane flap that will extend beyond the R2 exterior wall. Visual aids will be in use to align the membrane during unrolling and positioning.

A small crew at the Fuel Farm is continuing work for shade cloth placement at the bottom of S30 subplots. The limited backfill is being moved around to cap the shade cloth square footage.

Following the S30 tank, shade cloth is set at Bldg 354 Cannon in the excavated areas of Figure P10. The materials are positioned at the bottom of excavation over the in-use fuel lines for Bldg 309 Power Plant generators. Finish off the area with clean coral sand.

1000 – All hands are gathered at the R2 Unit. The first of four rolls of membrane are being positioned near the southeast corner of the R2 unit. Using the 290 excavator to pick up the roll by means of a hollow axle pipe and chain, the membrane roll is rigged up to the excavator bucket. The blue protective shipping cover and second pvc wrap are being removed.

1045 – Brunch

1115 - Work begins while the roll is positioned on the overlap line, set and temporarily sandbagged to maintain the anchored flap.

Rolling out the accordion folded liner (325' x 70') the material is positioned and prepped to pull outward. With the east and southern reference lines landed at with the sandbagged liner edge, the spaced-out crew is manually pulling the deployed liner into position. Once a satisfactory positioning is complete, additional sandbags are added to lock down the sheeting.

The membrane southern section #1 of 4 is fully positioned with a minimum 2' of extension beyond the R2 exterior wall surface. NWDE is placing clean coral sand in the mid-field of the panel to assist in anchoring the materials. Today's light wind is remindful to secure materials immediately to prevent unfurling of the folded liner unexpectedly.

1420 – Moving R2 membrane #2 of 4 into position at the east exterior wall. The end is temporarily secured and then the excavator proceeds to unroll east to west the membrane. The minimum 2' overlap and shingle layering of the second liner roll is aligned and anchored using sand bags. Once positioned, the membrane accordion fold is pulled north to place the full width of the 70'.

1550 – Roll #2 of 4 is receiving clean coral sand placed mid point in addition to the sand bags.

1615 – Roll #3 of 4 has been brought in, rigged and positioned at the R2 east end. The alignment layout markings aid to unroll the liner near the folded back north edge of roll #2 of 4. The folded back edge of #2 will shingle over roll #3 at completion.

1730 – Ending the work day.
Deployed # 2 of 4 rolls, pull out sheeting and anchor with sandbags.
Deploy roll #3 of 4. Align, leave folded up, sandbag anchors.
Backfill DU-9 at Bldg 354 Cannon.
Backfill is ongoing at DU-8, S30.

Photographs:

Photo 01: R2 Unit – View northeast. Preparing the final grade

Photo 02: R2 Unit– View northwest. Walk inspection for waste layer prior to placement of liner.

Photo 03: R2 Unit – View east. Membrane #1 of 4, initial placement

Photo 04: R2 Unit – View northeast. Progress of deploying waste covering hydraulic membrane

Photo 05: R2 Unit – View east. Progress of deploying waste covering hydraulic membrane

Photo 06: R2 Unit – View south. Days end progress of deploying waste covering hydraulic membrane

Photo 07: Bldg 354 Cannon – View northeast. Days end progress of shade cloth and backfill

Table 1. Maectite and Treated Soil Total Estimates

	Maectite Totals						Treated Soil Totals[1,2]		
	Applied Today (gal)					Total to Date	Excavated and Hauled to R-2 Unit **Today**		Excavated and Hauled to R-2 Unit **Total to Date**
Date	Soils (DU9)	Soils (DU8)	Soils (DU7)	Soils (DU5)	Soils (DU3)	(gal)	Load	^{3}yds[1]	^{3}yds[1]
10/02/17	0	0	0	0	0	2886	0	0	3957
10/03/17	0	0	0	0	0	2886	0	0	3957
10/04/17	0	0	0	0	0	2886	0	0	3957
10/05/17	95	0	0	0	0	2981	9	130	4087
10/06/17	0	0	0	0	0	2981	0	0	4087
10/07/17	0	0	0	0	0	2981	0	0	4087
10/08/17	0	0	0	0	0	2981	0	0	4087
Total to Date	2623 gallons	205 gallons	153 gallons	0 gallons	0 gallons		328 loads		

Notes:
1. Estimates are based on the number of gallons of Maectite® applied.
2. Soil treatment with Maectite® and hauling to R2 may not occur on the same day.
3. 10/5/17– Table 2 loads were batch treated in the R2. Inserted this data into Table 1 for totalizing the volumes and gallons. Reset Table 2 "Batch loads" of 9 to zero until next ex-situ stockpile treatment.

2017 DU 9 – Figures P 1-16, 18, 20, 21, 23-27.
Bldg 1124, 1126, 3521, S361, 347, 3501, S3126, S3127, 521, 520, 502, 5342, 309, 340, 354, 9149, 232, 233, S269, S225A, 2127, 144, Boat House 1 & 2, 4205, 4206, 4207, 4213, 503, 5303, 5341, 5339, 5338, Bollards, Fire Hydrants, 5304, 5305, 4210, 3524, 3529, 5126, 5378, 3514, and other ancillary structures.
Foundations S464, 502, 4201, 5126, 5295, 5342.
2017 DU 8 – S-28, S-30 re-ex, Pipe figure P19
2017 DU 7 – Bldg 3502, 3503, 3504 shade cloth
2017 DU 5 – R2 Unit, Figure P17
2017 DU 3 – Housing figure P22, 419 MIS re-ex

Table 2. Soil loads hauled to the R2 for ex situ Maectite® treatment

	Load Totals				
	Hauled to R2 for treatment in R2 cell (# of truck loads)				
Date	Soils (DU9)	Soils (DU8)	Soils (DU7)	Soils (DU5)	Soils (DU3)
10/03/17	0	0	0	0	0
10/04/17	5	0	0	0	0
10/05/17	4	0	0	0	0
10/06/17	0	0	0	0	0
10/07/17	0	0	0	0	0
10/08/17	0	0	0	0	0
Batch loads to treat in R2	0 loads	0 loads	0 loads	0 loads	0 loads
Total to Date	130.8 loads	34 loads	18.5 loads	0 loads	0 loads

8/14/17 - Batch treatment of all stockpiled "ex situ" loads to date in R2 Cell 1. Entered this data into Table 1 on 8/14/17 for volume and gallon tracking.
8/15/17 - Add "Batch Loads to treat in R2" subtotal that tracks the truck loads placed for treatment. Reset this to zero once treatment event is complete.
8/23/17 – Batch #2 treatment event of all stockpiled "ex situ" loads to date in R2 Cells. Entered this data into Table 1 on 8/23/17 for volume and gallon tracking.
9/12/17 – Batch #3 treatment event of all stockpiled "ex situ" loads to date in R2 Cells. Entered this data into Table 1 on 9/11/17 & 9/12/17 for volume and gallon tracking.
9/21/17 – Batch #4 treatment event of all stockpiled "ex situ" loads to date in R2 Cells. Entered this data into Table 1 on 9/21/17 for volume and gallon tracking.
9/29/17 – Batch #5 treatment event of all stockpiled "ex situ" loads to date in R2 Cells. Entered this data into Table 1 on 9/29/17 for volume and gallon tracking.
10/5/17 – Batch #6 treatment event of all stockpiled "ex situ" loads to date in R2 Cells. Entered this data into Table 1 on 10/5/17 for volume and gallon tracking.

Table 2.1 Soil loads hauled to the R2, non-treated internment

Date	Load Totals				
	Hauled to R2, non-treated soil (# of truck loads)				
	Soils (DU9)	Soils (DU8)	Soils (DU7)	Soils (DU5)	Soils (DU3)
10/03/17	0	0	0	0	0
10/04/17	2	0	0	0	0
10/05/17	0	0	0	0	0
10/06/17	0	4	0	0	0
10/07/17	0	6	0	0	0
10/08/17	0	0	0	0	0
Total to Date	29.5 loads	75 loads	0 loads	0 loads	9 loads

Table 3. Weekly Load Estimates

Date	Treated Demo Debris Loads to R2	Clean Concrete Loads to Crusher	Metal Debris Loads To Boneyard	Clean Wood Loads	Steel Debris Loaded onto Barge	R2 waste layer toe adjustment sand
10/02/17	0	0	0	0	0	
10/03/17	0	0	0	0	0	
10/04/17	0	0	0	0	0	
10/05/17	0	0	0	0	0	12
10/06/17	0	0	0	0	0	10
10/07/17	0	0	0	0	0	13
10/08/17	0	0	0	0	0	0
Season Total	3 loads	8 loads	0 loads	4 loads	195 loads	35 loads

Table 4. Fire Hydrants, Pedestals and Monuments

Fire Hydrant Soil					Fire Hydrant Soil				
Fire Hydrant ID	Excavate	Sampled Collected FH # X 0-2"	Backfill	Notes- Red >75mg/kg Green<75mg/kg	Fire Hydrant ID	Excavate	Sampled Collected FH # X 0-2"	Backfill	Notes- Red >75mg/kg Green<75mg/kg
1	9/26/2017	10/3/2017	10/3/2017	FH 1 0-2"	41	DU-1	N/A	N/A	Prior excavation
2	9/27/2017	10/3/2017	10/3/2017	FH 2 0-2"	42	9/25/2017	9/27/2017	10/2/2017	FH 42 0-2"
3	9/26/2017	9/26/2017	10/3/2017	FH 3 0-2"	43	9/26/2017	10/2/2017	10/3/2017	FH 43 0-2"
4	9/26/2017	9/26/2017	10/3/2017	FH 4 0-2"	44	9/26/2017	9/29/2017	10/2/2017	FH 44 0-2"
5	9/27/2017	10/3/2017	10/3/2017	FH 5 0-2"	45	9/23/2017	9/28/2017	10/4/2017	FH 45 0-2"
6	9/27/2017	10/3/2017	10/3/2017	FH 6 0-2"	46	9/25/2017	10/3/2017	10/4/2017	FH 46 0-2"
7	9/26/2017	9/26/2017	10/3/2017	FH 7 0-2"	47	9/25/2017	10/4/2017	10/4/2017	FH 47 0-2"
8	9/25/2017	10/3/2017	10/3/2017	FH 8 0-2"	48	9/25/2017	10/3/2017	10/4/2017	FH 48 0-2"
9	9/25/2017	10/3/2017	10/3/2017	FH 9 0-2"	49	9/26/2017	9/26/2017	10/4/2017	FH 49 0-2"
10	9/25/2017	10/3/2017	10/3/2017	FH 10 0-2"	50	9/28/2017	10/3/2017	10/4/2017	FH 50 0-2"
11	8/31/2017	9/4/2017	9/30/2017	FH 11 0-2"	51	9/11/2017	9/11/2017	9/30/2017	FH 51 0-2"
12	DU-6	N/A	N/A	Prior excavation	52	9/11/2017	9/11/2017	9/30/2017	FH 52 0-2"
13	DU-6	N/A	N/A	Prior excavation	53	8/23/2017	8/23/2017	10/6/2017	FH 53 0-2"
14	DU-6	N/A	N/A	Prior excavation	54	9/11/2017	9/11/2017	10/6/2017	FH 54 0-2"re-ex
15	DU-6	N/A	N/A	Prior excavation	54A	8/23/2017	8/23/2017	10/6/2017	FH 54A 0-2"
16	9/23/2017	9/28/2017	9/29/2017	FH 16 0-2"	55	8/26/2017	8/26/2017	9/29/2017	FH 55 0-2"
17	9/23/2017	9/23/2017	9/23/2017	FH 17 0-2"	56	8/26/2017	8/30/2017	10/2/2017	FH 56 0-2"
18	9/23/2017	9/23/2017	9/23/2017	FH 18 0-2"	57	8/26/2017	8/26/2017	9/29/2017	FH 57 0-2"
19	9/23/2017	9/29/2017	10/2/2017	FH 19 0-2"	58	9/11/2017	9/11/2017	9/29/2017	FH 58 0-2"
20	9/23/2017	9/28/2017	9/29/2017	FH 20 0-2"	59	9/26/2017	9/27/2017	9/29/2017	FH 59 0-2"
21	9/26/2017	9/27/2017	9/30/2017	FH 21 0-2"	60				Seawall
22	9/25/2017	9/26/2017	9/26/2017	FH 22 0-2"	61	9/28/2017	9/29/2017	10/3/2017	FH 61 0-2"
23	9/26/2017	9/26/2017	9/26/2017	FH 23 0-2"	62	9/25/2017	9/27/2017	10/3/2017	FH 62 0-2"
24	9/26/2017	9/26/2017	9/29/2017	FH 24 0-2"	63	9/28/2017	9/29/2017	10/3/2017	FH 63 0-2"
25	9/26/2017	9/26/2017	9/29/2017	FH 25 0-2"	64	9/11/2017	9/11/2017		FH 64 0-2"
26	9/26/2017	9/26/2017	9/29/2017	FH 26 0-2"	65	8/29/2017	8/30/2017	10/30/2017	FH 65 0-2"
27	9/23/2017	9/23/2017	9/30/2017	FH 27 0-2"	66	8/26/2017	8/26/2017	10/3/2017	FH 66 0-2"
28	9/23/2017	9/23/2017	9/30/2017	FH 28 0-2"	67	8/25/2017	8/30/2017	9/29/2017	FH 67 0-2"
29	9/26/2017	9/26/2017	10/2/2017	FH 29 0-2"	68	8/25/2017	8/30/2017	9/29/2017	FH 68 0-2"
30	9/26/2017	9/26/2017	9/26/2017	FH 30 0-2"	69	9/25/2017	9/27/2017	9/29/2017	FH 69 0-2"
31	9/26/2017	9/26/2017	9/26/2017	FH 31 0-2"	70	9/25/2017	9/27/2017	9/29/2017	FH 69 0-2"
32	9/26/2017	9/26/2017	9/26/2017	FH 32 0-2"	71	9/25/2017	9/27/2017	9/29/2017	FH 71 0-2"
33	9/26/2017	9/26/2017	9/26/2017	FH 33 0-2"	72	8/29/2017	9/27/2017	10/3/2017	FH 72 0-2"
34	9/26/2017	9/29/2017	9/30/2017	FH 34 0-2"	73	8/29/2017	9/11/2017	10/2/2017	FH 73 0-2"
35	9/26/2017	10/4/2017	10/4/2017	FH 35 0-2"	74	8/29/2017	8/29/2017	10/2/2017	FH 74 0-2"
36	9/26/2017	10/4/2017	10/4/2017	FH 36 0-2"	75	8/28/2017	8/29/2017	10/2/2017	FH 75 0-2"
37	9/25/2017	9/26/2017	10/2/2017	FH 37 0-2"	76	9/25/2017	9/29/2017	10/2/2017	FH 76 0-2"
38	9/26/2017	10/2/2017	10/2/2017	FH 38 0-2"	77	8/28/2017	8/29/2017	10/3/2017	FH 77 0-2"
39	DU-1	N/A	N/A	Prior excavation					
40	9/26/2017	9/27/2017	10/2/2017	FH 40 0-2"					

Pedestals /Monuments Soil					Pedestals /Monuments Soil				
Feature Unit ID	Excavate	Sampled Collected ID # X P100 0-2"	Backfill	Notes- Red >75mg/kg Green<75mg/kg	Feature Unit ID	Excavate	Sampled Collected ID # X P100 0-2"	Backfill	Notes- Red >75mg/kg Green<75mg/kg
1	8/29/2017	9/4/2017	9/30/2017	1-08 P100 0-2"	23	9/29/2017	10/2/2017	10/2/2017	23-44 P100 0-2"
2	8/29/2017	9/4/2017	9/30/2017	2-08 P100 0-2"	24	9/29/2017	10/2/2017	10/2/2017	24-42 P100 0-2"
3	8/29/2017	9/4/2017	9/30/2017	3-10 P100 0-2"	25	9/29/2017	10/2/2017	10/2/2017	25-38 P100 0-2"
4	8/29/2017	9/4/2017	9/30/2017	4-10 P100 0-2"	26	9/25/2017	10/3/2017	10/3/2017	26-07 P100 0-2"
5	8/29/2017	9/4/2017	9/30/2017	5-11 P100 0-2"	27	10/26/2017	10/3/2017	10/3/2017	27-03 P100 0-2"
6	9/11/2017	9/11/2017	9/30/2017	6-51 P100 0-2"	28	9/26/2017	10/4/2017	10/4/2017	28-30 P100 0-2"
7	9/11/2017	9/11/2017	9/30/2017	7-32 P100 0-2"	29	10/5/2017	10/5/2017	10/5/2017	29-R1 P100 0-2"
8	9/05/2017	9/18/2017	10/3/2017	8-20 P100 0-2"	30	10/5/2017	10/5/2017	10/5/2017	30-20 P100 0-2"
9	9/26/2017	9/28/2017	9/30/2017	9-33 P100 0-2"	31	10/5/2017	10/5/2017	10/5/2017	31-15 P100 0-2"
10	9/26/2017	9/28/2017	9/30/2017	10-23 P100 0-2"	32				
11	9/26/2017	9/28/2017	9/29/2017	11-20 P100 0-2"	33				
12	9/26/2017	9/28/2017	9/29/2017	12-28 P100 0-2"	34				
13	9/26/2017	9/28/2017	9/29/2017	13-27 P100 0-2"	35				
14	9/26/2017	9/28/2017	9/30/2017	14-08 P100 0-2"	36				
15	9/27/2017	9/29/2017	9/30/2017	15-24 P100 0-2"	37				
16	9/27/2017	9/29/2017	9/30/2017	16-25 P100 0-2"	38				
17	9/27/2017	9/29/2017	9/30/2017	17-25 P100 0-2"	39				
18	9/28/2017	9/29/2017	9/29/2017	18-13 P100 0-2"	40				
19	9/26/2017	9/29/2017	10/2/2017	19-44 P100 0-2"	41				
20	9/26/2017	9/29/2017	10/2/2017	20-44 P100 0-2"	42				
21	9/26/2017	9/29/2017	9/30/2017	21-52 P100 0-2"	43				
22	9/26/2017	10/2/2017	10/4/2017	22-49 P100 0-2"					

Fire Hydrant ID # per updated DBSI file -Navy Fresh Water Lines, Valves & Hydrants. BSI/DR-0034
Pedestal sample identification is a designated ID number followed by a dash and double-digit number relative to the closest Fire Hydrant ID location. No full prior map of pedestals exists.

Table 5. DU 5 Buttress & Cover - Import Clean Coral Sand

DU 5 IMPORT CLEAN CORAL						
DATE	NORTH Wall Loads	SOUTH Wall Loads	EAST Wall Loads	WEST Wall Loads	Days total loads	Days cubic yardage
10/2/2017	0	0	0	0	0	0
10/3/2017	0	0	0	0	0	0
10/4/2017	0	0	0	0	0	0
10/5/2017	0	0	0	0	0	0
10/6/2017	0	0	0	0	0	0
10/7/2017	0	0	0	0	0	0
10/8/2017	0	0	0	0	0	0
Load count per wall	282	0	16	0		
15cuyd estimate per wall	4230	0	240	0		
2017 Total R2 combined clean coral import LOADS				298		
Loads x 15cuyd estimate				4470		

Table 6. Excavation Plots - Import Clean Coral Sand

EXCAVATION PLOTS- IMPORT CLEAN CORAL BACKFILL							
DATE	DU-9 Loads	DU-8 Loads	DU-7 Loads	DU-5 Loads	DU-3 Loads	Days total loads	Days cubic yardage
10/2/2017	23	6	0	0	0	29	435
10/3/2017	14	4	0	0	0	18	270
10/4/2017	20	0	0	0	0	20	300
10/5/2017	19	0	0	0	0	19	285
10/6/2017	0	0	0	0	0	0	0
10/7/2017	0	5	0	0	0	5	75
10/8/2017	0	0	0	0	0	0	0
Load count per column	135	37	20	0	0		
15cuyd estimate per column	2025	555	300	0	0		
2017 Total combined clean import Backfill LOADS					192		
Loads x 15cuyd estimate					2880		

NW Demolition and Environmental
A Joint Venture

Daily Field Report

Date: Monday, October 9, 2017
Prepared by: Scott Wakefield

Project: Removal of Lead-Based Paint from Structures and Lead-Contaminated Soil
Location: Midway Atoll National Wildlife Refuge
Client: US Fish and Wildlife Service

Weather: Cloudy, wind 13 mph. Temperature ~82F

Personnel:

Name	Company	Site Hours
Scott Wakefield	NWDE Field Oversight	10
Alan Phillips	NWDE Supervisor	10
Joel Smith	NWDE Operator	10
Dalton Sullivan	NWDE Labor	10
Antonio Davis	NWDE Labor	10
Jevon Stone	NWDE Operator	10
Jose Ordaz	NWDE Operator	10
Matt Manning	NWDE Operator	10
Chris Fisher	NWDE Labor	10
Kevin Bach	NWDE Labor	10
Lucas Peel	NWDE Labor	10
Tyler Wilson	NWDE Labor	10
Eric Matteson	NWDE Operator	10

Visitors/Additional Site Personnel:

Name	Title
MaryAnn Amann	U.S. FWS

Equipment:

Description	Model No.	Comments / Serial #
Pickup Truck	F350 Service Truck	NWDE
Flatbed Truck	Ford F450	NWDE
Container Truck	Peterbuilt	NWDE
Skid Steer	Bobcat S185	NWDE
Tracked Skid Steer	Bobcat T750	NWDE
Tracked Skid Steer	Bobcat	NWDE
Mini-Excavator	CAT 308	NWDE
Excavator	Volvo EC290BLC	NWDE
Excavator	Volvo EC290BLC	NWDE
Excavator	Volvo EC290	NWDE
Off road Dump Truck	Volvo A30D	NWDE
Off road Dump Truck	Volvo A30D	NWDE
Off road Dump Truck	Volvo A30D	NWDE
Excavator – High reach	Komatsu PC400HD	NWDE
Excavator	Komatsu 450	NWDE

Materials Delivered:

Description	QTY	Condition/Comments
Diesel	380 gallons	
Gasoline	0 gallons	

Description of Work:

0700 – Health and Safety meeting at NAF staging area. Review today's work tasks.

Today's focus will be DU-9 shade cloth installation and membrane installation at the R2.

The R2 work crew is preparing to deploy the #3 of 4 membrane that was unrolled yesterday afternoon. The south edge has been shingled below the #2 of 4 panel that covers the E/W ridge break line. Sandbags temporarily anchor the south edge of liner #3 while the group pulls the materials north by hand to unfold it. Pin flags and string line continue to be in use for target alignment of the edge runs. Overlap beyond the exterior of the R2 CIP wall is in excess of 2' around the perimeter of the R2 Unit.

Grade staking the southern R2 wall offsets for the abutment toe with M.Wasson. Lath is being set at 10' offsets on lines, 10' and 20' offsets at the corners of the R2 for the grade break line. Stockpiles clean sand on the east, west and north sides are indicated to be used up first for R2 sand cover to achieve a useable area to stake the toe of the clean sand layer.

1030 - Roll #4 of 4 at the north side is positioned using the excavator slinging the roll to reel out. Once it is placed, the excess membrane is cut parallel to the R2 northern wall, leaving the external overlapping flap. The liner flap extends 3' beyond the north wall. The liner flap extension beyond the west, south and east exterior R2 wall surfaces is < 2.2', clearing the CIP roof support pads on a target grade bed of sand.

A small backfill work crew is moving to the DU-8 S-30 location. Adjacent sand piles from the earlier staging of overburden before the re-ex is being cleaned up for use in the S-28 backfill location. This sand will attempt to meet the 1' cover of shade cloth for this area. Use of the mini excavator and dump truck are collecting the residual sand piles. Nearby Bldg S269 D-1 tank AST containment is being backfilled today as well with clean DU-8 stockpiles sand.

Recently arrived lab data for expedited samples is being reviewed. Bldg 5304 Water Tower area sub plots are identified to all be less than 75mg/kg. This opens the task up to backfill the former Water Tower area and fall zone with limited available Borrow Source clean sand.

1200 – Lunch

1230 – Clean sand backfill that began just before lunch is continuing to be placed from the north R2 stockpile location. The 450 excavator is loading two haul trucks, then moving to dump the sand near the backfill location. The two tracked skidsteers then knock down the piles and maintain a 12" lift of clean sand. All work and equipment remains on top of the 1.0' minimum clean sand. No direct driving on top of the black membrane material.

1530 – Staking offset references for the R2's four sides is wrapping up for the day.
Clean coral sand from the adjacent north stockpile continues being loaded into trucks and shuttled to the recently placed north section of membrane.

1730 – Ending the work day.
Deployed # 3 and #4 of 4 rolls, pull out sheeting and anchor with sandbags. Liner placement complete.
Backfill is ongoing at DU-8, S30, nearing completion.
Clean sand moved from the north stockpile to on top of the R2 membrane today is 75 loads.

Photographs:

Photo 01: R2 Unit – View west. Setting up to roll out #4 of 4 membrane at north side

Photo 02: R2 Unit – View west. Progress of clean sand 1' lift placement

Photo 03: R2 Unit – View west. Trimble survey grade staking the toe and offsets

Photo 04: R2 Unit – View north. Progress of membrane 1.0' minimum sand cover

Photo 05: R2 Unit – View east. Progress of clean sand layer over hydraulic membrane

Photo 06: R2 Unit – View west. Days end progress of clean sand cover atop the hydraulic membrane

Table 1. Maectite and Treated Soil Total Estimates

	Maectite Totals						Treated Soil Totals[1,2]		
	Applied Today (gal)					Total to Date	Excavated and Hauled to R-2 Unit **Today**		Excavated and Hauled to R-2 Unit **Total to Date**
Date	Soils (DU9)	Soils (DU8)	Soils (DU7)	Soils (DU5)	Soils (DU3)	(gal)	Load	^{3}yds[1]	^{3}yds[1]
10/09/17	0	0	0	0	0	2981	0	0	4087
10/10/17									
10/11/17									
10/12/17									
10/13/17									
10/14/17									
10/15/17									
Total to Date	2623 gallons	205 gallons	153 gallons	0 gallons	0 gallons		328 loads		

Notes:
1. Estimates are based on the number of gallons of Maectite® applied.
2. Soil treatment with Maectite® and hauling to R2 may not occur on the same day.
3. 10/5/17– Table 2 loads were batch treated in the R2. Inserted this data into Table 1 for totalizing the volumes and gallons. Reset Table 2 "Batch loads" of 9 to zero until next ex-situ stockpile treatment.

2017 DU 9 – Figures P 1-16, 18, 20, 21, 23-27.
Bldg 1124, 1126, 3521, S361, 347, 3501, S3126, S3127, 521, 520, 502, 5342, 309, 340, 354, 9149, 232, 233, S269, S225A, 2127, 144, Boat House 1 & 2, 4205, 4206, 4207, 4213, 503, 5303, 5341, 5339, 5338, Bollards, Fire Hydrants, 5304, 5305, 4210, 3524, 3529, 5126, 5378, 3514, and other ancillary structures.
Foundations S464, 502, 4201, 5126, 5295, 5342.
2017 DU 8 – S-28, S-30 re-ex, Pipe figure P19
2017 DU 7 – Bldg 3502, 3503, 3504 shade cloth
2017 DU 5 – R2 Unit, Figure P17
2017 DU 3 – Housing figure P22, 419 MIS re-ex

Table 2. Soil loads hauled to the R2 for ex situ Maectite® treatment

	Load Totals				
	Hauled to R2 for treatment in R2 cell (# of truck loads)				
Date	Soils (DU9)	Soils (DU8)	Soils (DU7)	Soils (DU5)	Soils (DU3)
10/09/17	0	0	0	0	0
10/10/17					
10/11/17					
10/12/17					
10/13/17					
10/14/17					
Batch loads to treat in R2	0 loads	0 loads	0 loads	0 loads	0 loads
Total to Date	130.8 loads	34 loads	18.5 loads	0 loads	0 loads

8/14/17 - Batch treatment of all stockpiled "ex situ" loads to date in R2 Cell 1. Entered this data into Table 1 on 8/14/17 for volume and gallon tracking.
8/15/17 - Add "Batch Loads to treat in R2" subtotal that tracks the truck loads placed for treatment. Reset this to zero once treatment event is complete.
8/23/17 – Batch #2 treatment event of all stockpiled "ex situ" loads to date in R2 Cells. Entered this data into Table 1 on 8/23/17 for volume and gallon tracking.
9/12/17 – Batch #3 treatment event of all stockpiled "ex situ" loads to date in R2 Cells. Entered this data into Table 1 on 9/11/17 & 9/12/17 for volume and gallon tracking.
9/21/17 – Batch #4 treatment event of all stockpiled "ex situ" loads to date in R2 Cells. Entered this data into Table 1 on 9/21/17 for volume and gallon tracking.
9/29/17 – Batch #5 treatment event of all stockpiled "ex situ" loads to date in R2 Cells. Entered this data into Table 1 on 9/29/17 for volume and gallon tracking.
10/5/17 – Batch #6 treatment event of all stockpiled "ex situ" loads to date in R2 Cells. Entered this data into Table 1 on 10/5/17 for volume and gallon tracking.

Table 2.1 Soil loads hauled to the R2, non-treated internment

Date	Load Totals				
	Hauled to R2, non-treated soil (# of truck loads)				
	Soils (DU9)	Soils (DU8)	Soils (DU7)	Soils (DU5)	Soils (DU3)
10/09/17	0	0	0	0	0
10/10/17					
10/11/17					
10/12/17					
10/13/17					
10/14/17					
Total to Date	29.5 loads	75 loads	0 loads	0 loads	9 loads

Table 3. Weekly Load Estimates

Date	Treated Demo Debris Loads to R2	Clean Concrete Loads to Crusher	Metal Debris Loads To Boneyard	Clean Wood Loads	Steel Debris Loaded onto Barge	R2 waste layer toe adjustment sand
10/9/17	0	0	0	0	0	0
10/10/17						
10/11/17						
10/12/17						
10/13/17						
10/14/17						
10/15/17						
Season Total	3 loads	8 loads	0 loads	4 loads	195 loads	35 loads

Table 4. Fire Hydrants, Pedestals and Monuments

Fire Hydrant Soil					Fire Hydrant Soil				
Fire Hydrant ID	Excavate	Sampled Collected FH # X 0-2"	Backfill	Notes- Red >75mg/kg Green<75mg/kg	Fire Hydrant ID	Excavate	Sampled Collected FH # X 0-2"	Backfill	Notes- Red >75mg/kg Green<75mg/kg
1	9/26/2017	10/3/2017	10/3/2017	FH 1 0-2"	41	DU-1	N/A	N/A	Prior excavation
2	9/27/2017	10/3/2017	10/3/2017	FH 2 0-2"	42	9/25/2017	9/27/2017	10/2/2017	FH 42 0-2"
3	9/26/2017	9/26/2017	10/3/2017	FH 3 0-2"	43	9/26/2017	10/2/2017	10/3/2017	FH 43 0-2"
4	9/26/2017	9/26/2017	10/3/2017	FH 4 0-2"	44	9/26/2017	9/29/2017	10/2/2017	FH 44 0-2"
5	9/27/2017	10/3/2017	10/3/2017	FH 5 0-2"	45	9/23/2017	9/28/2017	10/4/2017	FH 45 0-2"
6	9/27/2017	10/3/2017	10/3/2017	FH 6 0-2"	46	9/25/2017	10/3/2017	10/4/2017	FH 46 0-2"
7	9/26/2017	9/26/2017	10/3/2017	FH 7 0-2"	47	9/25/2017	10/4/2017	10/4/2017	FH 47 0-2"
8	9/25/2017	10/3/2017	10/3/2017	FH 8 0-2"	48	9/25/2017	10/3/2017	10/4/2017	FH 48 0-2"
9	9/25/2017	10/3/2017	10/3/2017	FH 9 0-2"	49	9/26/2017	9/26/2017	10/4/2017	FH 49 0-2"
10	9/25/2017	10/3/2017	10/3/2017	FH 10 0-2"	50	9/28/2017	10/3/2017	10/4/2017	FH 50 0-2"
11	8/31/2017	9/4/2017	9/30/2017	FH 11 0-2"	51	9/11/2017	9/11/2017	9/30/2017	FH 51 0-2"
12	DU-6	N/A	N/A	Prior excavation	52	9/11/2017	9/11/2017	9/30/2017	FH 52 0-2"
13	DU-6	N/A	N/A	Prior excavation	53	8/23/2017	8/23/2017	10/6/2017	FH 53 0-2"
14	DU-6	N/A	N/A	Prior excavation	54	9/11/2017	9/11/2017	10/6/2017	FH 54 0-2"re-ex
15	DU-6	N/A	N/A	Prior excavation	54A	8/23/2017	8/23/2017	10/6/2017	FH 54A 0-2"
16	9/23/2017	9/28/2017	9/29/2017	FH 16 0-2"	55	8/26/2017	8/26/2017	9/29/2017	FH 55 0-2"
17	9/23/2017	9/23/2017	9/23/2017	FH 17 0-2"	56	8/26/2017	8/30/2017	10/2/2017	FH 56 0-2"
18	9/23/2017	9/23/2017	9/23/2017	FH 18 0-2"	57	8/26/2017	8/26/2017	9/29/2017	FH 57 0-2"
19	9/23/2017	9/29/2017	10/2/2017	FH 19 0-2"	58	9/11/2017	9/11/2017	9/29/2017	FH 58 0-2"
20	9/23/2017	9/28/2017	9/29/2017	FH 20 0-2"	59	9/26/2017	9/27/2017	9/29/2017	FH 59 0-2"
21	9/26/2017	9/27/2017	9/30/2017	FH 21 0-2"	60				Seawall
22	9/25/2017	9/26/2017	9/26/2017	FH 22 0-2"	61	9/28/2017	9/29/2017	10/3/2017	FH 61 0-2"
23	9/26/2017	9/26/2017	9/26/2017	FH 23 0-2"	62	9/25/2017	9/27/2017	10/3/2017	FH 62 0-2"
24	9/26/2017	9/26/2017	9/29/2017	FH 24 0-2"	63	9/28/2017	9/29/2017	10/3/2017	FH 63 0-2"
25	9/26/2017	9/26/2017	9/29/2017	FH 25 0-2"	64	9/11/2017	9/11/2017		FH 64 0-2"
26	9/26/2017	9/26/2017	9/29/2017	FH 26 0-2"	65	8/29/2017	8/30/2017	10/30/2017	FH 65 0-2"
27	9/23/2017	9/23/2017	9/30/2017	FH 27 0-2"	66	8/26/2017	8/26/2017	10/3/2017	FH 66 0-2"
28	9/23/2017	9/23/2017	9/30/2017	FH 28 0-2"	67	8/25/2017	8/30/2017	9/29/2017	FH 67 0-2"
29	9/26/2017	9/26/2017	10/2/2017	FH 29 0-2"	68	8/25/2017	8/30/2017	9/29/2017	FH 68 0-2"
30	9/26/2017	9/26/2017	9/26/2017	FH 30 0-2"	69	9/25/2017	9/27/2017	9/29/2017	FH 69 0-2"
31	9/26/2017	9/26/2017	9/26/2017	FH 31 0-2"	70	9/25/2017	9/27/2017	9/29/2017	FH 69 0-2"
32	9/26/2017	9/26/2017	9/26/2017	FH 32 0-2"	71	9/25/2017	9/27/2017	9/29/2017	FH 71 0-2"
33	9/26/2017	9/26/2017	9/26/2017	FH 33 0-2"	72	8/29/2017	9/27/2017	10/3/2017	FH 72 0-2"
34	9/26/2017	9/29/2017	9/30/2017	FH 34 0-2"	73	8/29/2017	9/11/2017	10/2/2017	FH 73 0-2"
35	9/26/2017	10/4/2017	10/4/2017	FH 35 0-2"	74	8/29/2017	8/29/2017	10/2/2017	FH 74 0-2"
36	9/26/2017	10/4/2017	10/4/2017	FH 36 0-2"	75	8/28/2017	8/29/2017	10/2/2017	FH 75 0-2"
37	9/25/2017	9/26/2017	10/2/2017	FH 37 0-2"	76	9/25/2017	9/29/2017	10/2/2017	FH 76 0-2"
38	9/26/2017	10/2/2017	10/2/2017	FH 38 0-2"	77	8/28/2017	8/29/2017	10/3/2017	FH 77 0-2"
39	DU-1	N/A	N/A	Prior excavation					
40	9/26/2017	9/27/2017	10/2/2017	FH 40 0-2"					

Pedestals /Monuments Soil					Pedestals /Monuments Soil				
Feature Unit ID	Excavate	Sampled Collected ID # X P100 0-2"	Backfill	Notes- Red >75mg/kg Green<75mg/kg	Feature Unit ID	Excavate	Sampled Collected ID # X P100 0-2"	Backfill	Notes- Red >75mg/kg Green<75mg/kg
1	8/29/2017	9/4/2017	9/30/2017	1-08 P100 0-2"	23	9/29/2017	10/2/2017	10/2/2017	23-44 P100 0-2"
2	8/29/2017	9/4/2017	9/30/2017	2-08 P100 0-2"	24	9/29/2017	10/2/2017	10/2/2017	24-42 P100 0-2"
3	8/29/2017	9/4/2017	9/30/2017	3-10 P100 0-2"	25	9/29/2017	10/2/2017	10/2/2017	25-38 P100 0-2"
4	8/29/2017	9/4/2017	9/30/2017	4-10 P100 0-2"	26	9/25/2017	10/3/2017	10/3/2017	26-07 P100 0-2"
5	8/29/2017	9/4/2017	9/30/2017	5-11 P100 0-2"	27	10/26/2017	10/3/2017	10/3/2017	27-03 P100 0-2"
6	9/11/2017	9/11/2017	9/30/2017	6-51 P100 0-2"	28	9/26/2017	10/4/2017	10/4/2017	28-30 P100 0-2"
7	9/11/2017	9/11/2017	9/30/2017	7-32 P100 0-2"	29	10/5/2017	10/5/2017	10/5/2017	29-R1 P100 0-2"
8	9/05/2017	9/18/2017	10/3/2017	8-20 P100 0-2"	30	10/5/2017	10/5/2017	10/5/2017	30-20 P100 0-2"
9	9/26/2017	9/28/2017	9/30/2017	9-33 P100 0-2"	31	10/5/2017	10/5/2017	10/5/2017	31-15 P100 0-2"
10	9/26/2017	9/28/2017	9/30/2017	10-23 P100 0-2"	32				
11	9/26/2017	9/28/2017	9/29/2017	11-20 P100 0-2"	33				
12	9/26/2017	9/28/2017	9/29/2017	12-28 P100 0-2"	34				
13	9/26/2017	9/28/2017	9/29/2017	13-27 P100 0-2"	35				
14	9/26/2017	9/28/2017	9/30/2017	14-08 P100 0-2"	36				
15	9/27/2017	9/29/2017	9/30/2017	15-24 P100 0-2"	37				
16	9/27/2017	9/29/2017	9/30/2017	16-25 P100 0-2"	38				
17	9/27/2017	9/29/2017	9/30/2017	17-25 P100 0-2"	39				
18	9/28/2017	9/29/2017	9/29/2017	18-13 P100 0-2"	40				
19	9/26/2017	9/29/2017	10/2/2017	19-44 P100 0-2"	41				
20	9/26/2017	9/29/2017	10/2/2017	20-44 P100 0-2"	42				
21	9/26/2017	9/29/2017	9/30/2017	21-52 P100 0-2"	43				
22	9/26/2017	10/2/2017	10/4/2017	22-49 P100 0-2"					

Fire Hydrant ID # per updated DBSI file -Navy Fresh Water Lines, Valves & Hydrants. BSI/DR-0034
Pedestal sample identification is a designated ID number followed by a dash and double-digit number relative to the closest Fire Hydrant ID location. No full prior map of pedestals exists.

Table 5. DU 5 Buttress & Cover - Import Clean Coral Sand

DU 5 IMPORT CLEAN CORAL						
DATE	NORTH Wall Loads	SOUTH Wall Loads	EAST Wall Loads	WEST Wall Loads	Days total loads	Days cubic yardage
10/9/2017	0	0	0	0	0	0
10/10/2017					0	0
10/11/2017					0	0
10/12/2017					0	0
10/13/2017					0	0
10/14/2017					0	0
10/15/2017					0	0
Load count per wall	282	0	16	0		
15cuyd estimate per wall	4230	0	240	0		
2017 Total R2 combined clean coral import LOADS				298		
Loads x 15cuyd estimate				4470		

Table 6. Excavation Plots - Import Clean Coral Sand

EXCAVATION PLOTS- IMPORT CLEAN CORAL BACKFILL							
DATE	DU-9 Loads	DU-8 Loads	DU-7 Loads	DU-5 Loads	DU-3 Loads	Days total loads	Days cubic yardage
10/9/2017	0.5	2.5	0	0	0	3	45
10/10/2017						0	0
10/11/2017						0	0
10/12/2017						0	0
10/13/2017						0	0
10/14/2017						0	0
10/15/2017						0	0
Load count per column	135.5	39.5	20	0	0		
15cuyd estimate per column	2032.5	592.5	300	0	0		
2017 Total combined clean import Backfill LOADS					195		
Loads x 15cuyd estimate					2925		

NW Demolition and Environmental
A Joint Venture

Daily Field Report

Date: Tuesday, October 10, 2017
Prepared by: Scott Wakefield

Project: Removal of Lead-Based Paint from Structures and Lead-Contaminated Soil
Location: Midway Atoll National Wildlife Refuge
Client: US Fish and Wildlife Service

Weather: High clouds, wind 10 mph. Temperature ~82F

Personnel:

Name	Company	Site Hours
Scott Wakefield	NWDE Field Oversight	10
Alan Phillips	NWDE Supervisor	10
Joel Smith	NWDE Operator	10
Dalton Sullivan	NWDE Labor	10
Antonio Davis	NWDE Labor	10
Jevon Stone	NWDE Operator	10
Jose Ordaz	NWDE Operator	10
Matt Manning	NWDE Operator	10
Chris Fisher	NWDE Labor	10
Kevin Bach	NWDE Labor	10
Lucas Peel	NWDE Labor	10
Tyler Wilson	NWDE Labor	10
Eric Matteson	NWDE Operator	10

Visitors/Additional Site Personnel:

Name	Title
MaryAnn Amann	U.S. FWS

Equipment:

Description	Model No.	Comments / Serial #
Pickup Truck	F350 Service Truck	NWDE
Flatbed Truck	Ford F450	NWDE
Container Truck	Peterbuilt	NWDE
Skid Steer	Bobcat S185	NWDE
Tracked Skid Steer	Bobcat T750	NWDE
Tracked Skid Steer	Bobcat	NWDE
Mini-Excavator	CAT 308	NWDE
Excavator	Volvo EC290BLC	NWDE
Excavator	Volvo EC290BLC	NWDE
Excavator	Volvo EC290	NWDE
Off road Dump Truck	Volvo A30D	NWDE
Off road Dump Truck	Volvo A30D	NWDE
Off road Dump Truck	Volvo A30D	NWDE
Excavator – High reach	Komatsu PC400HD	NWDE
Excavator	Komatsu 450	NWDE

Materials Delivered:

Description	QTY	Condition/Comments
Diesel	353 gallons	
Gasoline	0 gallons	

Description of Work:

0700 – Health and Safety meeting at NAF staging area. Review today's work tasks.

Today's focus will be DU-9 backfill and sand layer over hydraulic membrane at the R2.

The R2 sand layer continues being brought in from the adjacent north clean sand stockpile. The 450 excavator flat edged bucket is loading two A30 haul trucks, which quickly access the north side of the R2 sand ramp and place material working south. By mid-morning the coverage of the liner is reaching 60% for the 1'+ lift of clean sand.

Two tracked skid steers are in use for roughing in the sand alongside the D3 Cat dozer. Grade checking is continuous as the sand is placed and pushed out, maintaining the 1' minimum initial fill. Tires and tracks remain atop the sand lift covered liner.

0900 – DU-9 backfill with clean sand is occurring at Bldg 309 Power Plant. Plots that exceed 75 mg/kg are being covered with a demarcation layer of shade cloth. Figure 10, sub plots P100, P103, P104, P106 (west side of building) are being covered and cloth anchored. The sub plot area P107 under the steel structure support and generator inlet filter / exhaust pipe lab data is less than 75 mg/kg. With this info, the area beneath the silver steel structure does not required cloth over the hard surface.

1000 – Weekly conference call with Mainland and Hawaii project offices. See NWDE Midway Meeting Agenda for specific detail.

1115 – Water Tower 5304 backfill work is progressing within the fall zone area and near the roadway shoulder. The lowest elevation cuts are being filled in with clean coral sand to eliminate collection of water. At the road, the shoulder is being bulked up to taper west into the excavated area. Pending the final available sand volumes for DU-9 backfill, the Water Tower plot will be adjusted. Currently the Borrow Source area remains closed due to wildlife.

1200 – Lunch

1230 – The short load and haul routine is ongoing through the afternoon to move sand from the north stockpile to on top of the liner. As the sand is backed to dump, rolling compaction is occurring with the haul truck. Overlapping tire track method is addressing the R2 sand surface intentionally for compaction.

1530 – Access Bldg 3521 US FWS office for backfill of the Figure 3. Inspection for seabirds and ducks in the equipment routes. Place clean coral sand from the seawall ramps that US FWS has directed to be available. The sand material is a limited volume of the ramps at the east and west sides of the Cargo Pier.

1645 – Backfill sand is worked into the demarcation areas at the west side of Bldg Power Plant. Capping fill is approximately 1.0' and includes sand over the fiber optic pvc duct.

1730 – Ending the work day.
Clean sand from seawall ramp to DU-9 excavations is 21 loads.
Clean sand moved from the north stockpile to on top of the R2 membrane today is 113 loads.

Photographs:

Photo 01: R2 Unit – View north. Progress of clean sand cap over hydraulic membrane

Photo 02: R2 Unit – View west. Progress of clean sand 1' lift placement

Photo 03: Water Tower 5304 – View southwest. Backfill progress of lower elevations

Photo 04: Bldg 309 Power Plant – View east. Progress of clean sand backfill

Photo 05: Bldg 309 Power Plant – View south. Demarcation layer at west side of building

Photo 06: R2 Unit – View southeast. Progress of sand cap and truck rolling compaction

Table 1. Maectite and Treated Soil Total Estimates

	Maectite Totals						Treated Soil Totals[1,2]		
	Applied Today (gal)					Total to Date	Excavated and Hauled to R-2 Unit **Today**		Excavated and Hauled to R-2 Unit **Total to Date**
Date	Soils (DU9)	Soils (DU8)	Soils (DU7)	Soils (DU5)	Soils (DU3)	(gal)	Load	^{3}yds[1]	^{3}yds[1]
10/09/17	0	0	0	0	0	2981	0	0	4087
10/10/17	0	0	0	0	0	2981	0	0	4087
10/11/17									
10/12/17									
10/13/17									
10/14/17									
10/15/17									
Total to Date	2623 gallons	205 gallons	153 gallons	0 gallons	0 gallons		328 loads		

Notes:
1. Estimates are based on the number of gallons of Maectite® applied.
2. Soil treatment with Maectite® and hauling to R2 may not occur on the same day.
3. 10/5/17– Table 2 loads were batch treated in the R2. Inserted this data into Table 1 for totalizing the volumes and gallons. Reset Table 2 "Batch loads" of 9 to zero until next ex-situ stockpile treatment.

2017 DU 9 – Figures P 1-16, 18, 20, 21, 23-27.
Bldg 1124, 1126, 3521, S361, 347, 3501, S3126, S3127, 521, 520, 502, 5342, 309, 340, 354, 9149, 232, 233, S269, S225A, 2127, 144, Boat House 1 & 2, 4205, 4206, 4207, 4213, 503, 5303, 5341, 5339, 5338, Bollards, Fire Hydrants, 5304, 5305, 4210, 3524, 3529, 5126, 5378, 3514, and other ancillary structures.
Foundations S464, 502, 4201, 5126, 5295, 5342.
2017 DU 8 – S-28, S-30 re-ex, Pipe figure P19
2017 DU 7 – Bldg 3502, 3503, 3504 shade cloth
2017 DU 5 – R2 Unit, Figure P17
2017 DU 3 – Housing figure P22, 419 MIS re-ex

Table 2. Soil loads hauled to the R2 for ex situ Maectite® treatment

	Load Totals				
	Hauled to R2 for treatment in R2 cell (# of truck loads)				
Date	Soils (DU9)	Soils (DU8)	Soils (DU7)	Soils (DU5)	Soils (DU3)
10/09/17	0	0	0	0	0
10/10/17	0	0	0	0	0
10/11/17					
10/12/17					
10/13/17					
10/14/17					
Batch loads to treat in R2	0 loads	0 loads	0 loads	0 loads	0 loads
Total to Date	130.8 loads	34 loads	18.5 loads	0 loads	0 loads

8/14/17 - Batch treatment of all stockpiled "ex situ" loads to date in R2 Cell 1. Entered this data into Table 1 on 8/14/17 for volume and gallon tracking.
8/15/17 - Add "Batch Loads to treat in R2" subtotal that tracks the truck loads placed for treatment. Reset this to zero once treatment event is complete.
8/23/17 – Batch #2 treatment event of all stockpiled "ex situ" loads to date in R2 Cells. Entered this data into Table 1 on 8/23/17 for volume and gallon tracking.
9/12/17 – Batch #3 treatment event of all stockpiled "ex situ" loads to date in R2 Cells. Entered this data into Table 1 on 9/11/17 & 9/12/17 for volume and gallon tracking.
9/21/17 – Batch #4 treatment event of all stockpiled "ex situ" loads to date in R2 Cells. Entered this data into Table 1 on 9/21/17 for volume and gallon tracking.
9/29/17 – Batch #5 treatment event of all stockpiled "ex situ" loads to date in R2 Cells. Entered this data into Table 1 on 9/29/17 for volume and gallon tracking.
10/5/17 – Batch #6 treatment event of all stockpiled "ex situ" loads to date in R2 Cells. Entered this data into Table 1 on 10/5/17 for volume and gallon tracking.

Table 2.1 Soil loads hauled to the R2, non-treated internment

Date	Load Totals				
	Hauled to R2, non-treated soil (# of truck loads)				
	Soils (DU9)	Soils (DU8)	Soils (DU7)	Soils (DU5)	Soils (DU3)
10/09/17	0	0	0	0	0
10/10/17	0	0	0	0	0
10/11/17					
10/12/17					
10/13/17					
10/14/17					
Total to Date	29.5 loads	75 loads	0 loads	0 loads	9 loads

Table 3. Weekly Load Estimates

Date	Treated Demo Debris Loads to R2	Clean Concrete Loads to Crusher	Metal Debris Loads To Boneyard	Clean Wood Loads	Steel Debris Loaded onto Barge	R2 waste layer toe adjustment sand
10/9/17	0	0	0	0	0	0
10/10/17	0	0	0	0	0	0
10/11/17						
10/12/17						
10/13/17						
10/14/17						
10/15/17						
Season Total	3 loads	8 loads	0 loads	4 loads	195 loads	35 loads

Table 4. Fire Hydrants, Pedestals and Monuments

Fire Hydrant Soil					Fire Hydrant Soil				
Fire Hydrant ID	Excavate	Sampled Collected FH # X 0-2"	Backfill	Notes- Red >75mg/kg Green<75mg/kg	Fire Hydrant ID	Excavate	Sampled Collected FH # X 0-2"	Backfill	Notes- Red >75mg/kg Green<75mg/kg
1	9/26/2017	10/3/2017	10/3/2017	FH 1 0-2"	41	DU-1	N/A	N/A	Prior excavation
2	9/27/2017	10/3/2017	10/3/2017	FH 2 0-2"	42	9/25/2017	9/27/2017	10/2/2017	FH 42 0-2"
3	9/26/2017	9/26/2017	10/3/2017	FH 3 0-2"	43	9/26/2017	10/2/2017	10/3/2017	FH 43 0-2"
4	9/26/2017	9/26/2017	10/3/2017	FH 4 0-2"	44	9/26/2017	9/29/2017	10/2/2017	FH 44 0-2"
5	9/27/2017	10/3/2017	10/3/2017	FH 5 0-2"	45	9/23/2017	9/28/2017	10/4/2017	FH 45 0-2"
6	9/27/2017	10/3/2017	10/3/2017	FH 6 0-2"	46	9/25/2017	10/3/2017	10/4/2017	FH 46 0-2"
7	9/26/2017	9/26/2017	10/3/2017	FH 7 0-2"	47	9/25/2017	10/4/2017	10/4/2017	FH 47 0-2"
8	9/25/2017	10/3/2017	10/3/2017	FH 8 0-2"	48	9/25/2017	10/3/2017	10/4/2017	FH 48 0-2"
9	9/25/2017	10/3/2017	10/3/2017	FH 9 0-2"	49	9/26/2017	9/26/2017	10/4/2017	FH 49 0-2"
10	9/25/2017	10/3/2017	10/3/2017	FH 10 0-2"	50	9/28/2017	10/3/2017	10/4/2017	FH 50 0-2"
11	8/31/2017	9/4/2017	9/30/2017	FH 11 0-2"	51	9/11/2017	9/11/2017	9/30/2017	FH 51 0-2"
12	DU-6	N/A	N/A	Prior excavation	52	9/11/2017	9/11/2017	9/30/2017	FH 52 0-2"
13	DU-6	N/A	N/A	Prior excavation	53	8/23/2017	8/23/2017	10/6/2017	FH 53 0-2"
14	DU-6	N/A	N/A	Prior excavation	54	9/11/2017	9/11/2017	10/6/2017	FH 54 0-2"re-ex
15	DU-6	N/A	N/A	Prior excavation	54A	8/23/2017	8/23/2017	10/6/2017	FH 54A 0-2"
16	9/23/2017	9/28/2017	9/29/2017	FH 16 0-2"	55	8/26/2017	8/26/2017	9/29/2017	FH 55 0-2"
17	9/23/2017	9/23/2017	9/23/2017	FH 17 0-2"	56	8/26/2017	8/30/2017	10/2/2017	FH 56 0-2"
18	9/23/2017	9/23/2017	9/23/2017	FH 18 0-2"	57	8/26/2017	8/26/2017	9/29/2017	FH 57 0-2"
19	9/23/2017	9/29/2017	10/2/2017	FH 19 0-2"	58	9/11/2017	9/11/2017	9/29/2017	FH 58 0-2"
20	9/23/2017	9/28/2017	9/29/2017	FH 20 0-2"	59	9/26/2017	9/27/2017	9/29/2017	FH 59 0-2"
21	9/26/2017	9/27/2017	9/30/2017	FH 21 0-2"	60				Seawall
22	9/25/2017	9/26/2017	9/26/2017	FH 22 0-2"	61	9/28/2017	9/29/2017	10/3/2017	FH 61 0-2"
23	9/26/2017	9/26/2017	9/26/2017	FH 23 0-2"	62	9/25/2017	9/27/2017	10/3/2017	FH 62 0-2"
24	9/26/2017	9/26/2017	9/29/2017	FH 24 0-2"	63	9/28/2017	9/29/2017	10/3/2017	FH 63 0-2"
25	9/26/2017	9/26/2017	9/29/2017	FH 25 0-2"	64	9/11/2017	9/11/2017		FH 64 0-2"
26	9/26/2017	9/26/2017	9/29/2017	FH 26 0-2"	65	8/29/2017	8/30/2017	10/30/2017	FH 65 0-2"
27	9/23/2017	9/23/2017	9/30/2017	FH 27 0-2"	66	8/26/2017	8/26/2017	10/3/2017	FH 66 0-2"
28	9/23/2017	9/23/2017	9/30/2017	FH 28 0-2"	67	8/25/2017	8/30/2017	9/29/2017	FH 67 0-2"
29	9/26/2017	9/26/2017	10/2/2017	FH 29 0-2"	68	8/25/2017	8/30/2017	9/29/2017	FH 68 0-2"
30	9/26/2017	9/26/2017	9/26/2017	FH 30 0-2"	69	9/25/2017	9/27/2017	9/29/2017	FH 69 0-2"
31	9/26/2017	9/26/2017	9/26/2017	FH 31 0-2"	70	9/25/2017	9/27/2017	9/29/2017	FH 69 0-2"
32	9/26/2017	9/26/2017	9/26/2017	FH 32 0-2"	71	9/25/2017	9/27/2017	9/29/2017	FH 71 0-2"
33	9/26/2017	9/26/2017	9/26/2017	FH 33 0-2"	72	8/29/2017	9/27/2017	10/3/2017	FH 72 0-2"
34	9/26/2017	9/29/2017	9/30/2017	FH 34 0-2"	73	8/29/2017	9/11/2017	10/2/2017	FH 73 0-2"
35	9/26/2017	10/4/2017	10/4/2017	FH 35 0-2"	74	8/29/2017	8/29/2017	10/2/2017	FH 74 0-2"
36	9/26/2017	10/4/2017	10/4/2017	FH 36 0-2"	75	8/28/2017	8/29/2017	10/2/2017	FH 75 0-2"
37	9/25/2017	9/26/2017	10/2/2017	FH 37 0-2"	76	9/25/2017	9/29/2017	10/2/2017	FH 76 0-2"
38	9/26/2017	10/2/2017	10/2/2017	FH 38 0-2"	77	8/28/2017	8/29/2017	10/3/2017	FH 77 0-2"
39	DU-1	N/A	N/A	Prior excavation					
40	9/26/2017	9/27/2017	10/2/2017	FH 40 0-2"					

Pedestals /Monuments Soil					Pedestals /Monuments Soil				
Feature Unit ID	Excavate	Sampled Collected ID # X P100 0-2"	Backfill	Notes- Red >75mg/kg Green<75mg/kg	Feature Unit ID	Excavate	Sampled Collected ID # X P100 0-2"	Backfill	Notes- Red >75mg/kg Green<75mg/kg
1	8/29/2017	9/4/2017	9/30/2017	1-08 P100 0-2"	23	9/29/2017	10/2/2017	10/2/2017	23-44 P100 0-2"
2	8/29/2017	9/4/2017	9/30/2017	2-08 P100 0-2"	24	9/29/2017	10/2/2017	10/2/2017	24-42 P100 0-2"
3	8/29/2017	9/4/2017	9/30/2017	3-10 P100 0-2"	25	9/29/2017	10/2/2017	10/2/2017	25-38 P100 0-2"
4	8/29/2017	9/4/2017	9/30/2017	4-10 P100 0-2"	26	9/25/2017	10/3/2017	10/3/2017	26-07 P100 0-2"
5	8/29/2017	9/4/2017	9/30/2017	5-11 P100 0-2"	27	10/26/2017	10/3/2017	10/3/2017	27-03 P100 0-2"
6	9/11/2017	9/11/2017	9/30/2017	6-51 P100 0-2"	28	9/26/2017	10/4/2017	10/4/2017	28-30 P100 0-2"
7	9/11/2017	9/11/2017	9/30/2017	7-32 P100 0-2"	29	10/5/2017	10/5/2017	10/5/2017	29-R1 P100 0-2"
8	9/05/2017	9/18/2017	10/3/2017	8-20 P100 0-2"	30	10/5/2017	10/5/2017	10/5/2017	30-20 P100 0-2"
9	9/26/2017	9/28/2017	9/30/2017	9-33 P100 0-2"	31	10/5/2017	10/5/2017	10/5/2017	31-15 P100 0-2"
10	9/26/2017	9/28/2017	9/30/2017	10-23 P100 0-2"	32				
11	9/26/2017	9/28/2017	9/29/2017	11-20 P100 0-2"	33				
12	9/26/2017	9/28/2017	9/29/2017	12-28 P100 0-2"	34				
13	9/26/2017	9/28/2017	9/29/2017	13-27 P100 0-2"	35				
14	9/26/2017	9/28/2017	9/30/2017	14-08 P100 0-2"	36				
15	9/27/2017	9/29/2017	9/30/2017	15-24 P100 0-2"	37				
16	9/27/2017	9/29/2017	9/30/2017	16-25 P100 0-2"	38				
17	9/27/2017	9/29/2017	9/30/2017	17-25 P100 0-2"	39				
18	9/28/2017	9/29/2017	9/29/2017	18-13 P100 0-2"	40				
19	9/26/2017	9/29/2017	10/2/2017	19-44 P100 0-2"	41				
20	9/26/2017	9/29/2017	10/2/2017	20-44 P100 0-2"	42				
21	9/26/2017	9/29/2017	9/30/2017	21-52 P100 0-2"	43				
22	9/26/2017	10/2/2017	10/4/2017	22-49 P100 0-2"					

Fire Hydrant ID # per updated DBSI file -Navy Fresh Water Lines, Valves & Hydrants. BSI/DR-0034
Pedestal sample identification is a designated ID number followed by a dash and double-digit number relative to the closest Fire Hydrant ID location. No full prior map of pedestals exists.

Table 5. DU 5 Buttress & Cover - Import Clean Coral Sand

DU 5 IMPORT CLEAN CORAL						
DATE	NORTH Wall Loads	SOUTH Wall Loads	EAST Wall Loads	WEST Wall Loads	Days total loads	Days cubic yardage
10/9/2017	0	0	0	0	0	0
10/10/2017	0	0	0	0	0	0
10/11/2017					0	0
10/12/2017					0	0
10/13/2017					0	0
10/14/2017					0	0
10/15/2017					0	0
Load count per wall	282	0	16	0		
15cuyd estimate per wall	4230	0	240	0		
2017 Total R2 combined clean coral import LOADS				298		
Loads x 15cuyd estimate				4470		

Table 6. Excavation Plots - Import Clean Coral Sand

EXCAVATION PLOTS- IMPORT CLEAN CORAL BACKFILL							
DATE	DU-9 Loads	DU-8 Loads	DU-7 Loads	DU-5 Loads	DU-3 Loads	Days total loads	Days cubic yardage
10/9/2017	0.5	2.5	0	0	0	3	45
10/10/2017	21	0	0	0	0	21	315
10/11/2017						0	0
10/12/2017						0	0
10/13/2017						0	0
10/14/2017						0	0
10/15/2017						0	0
Load count per column	156.5	39.5	20	0	0		
15cuyd estimate per column	2347.5	592.5	300	0	0		
2017 Total combined clean import Backfill LOADS					216		
Loads x 15cuyd estimate					3240		

Daily Field Report

Date: Wednesday, October 11, 2017
Prepared by: Scott Wakefield

Project: Removal of Lead-Based Paint from Structures and Lead-Contaminated Soil
Location: Midway Atoll National Wildlife Refuge
Client: US Fish and Wildlife Service

Weather: Partly cloudy, wind 12 mph. Temperature ~81F

Personnel:

Name	Company	Site Hours
Scott Wakefield	NWDE Field Oversight	10
Alan Phillips	NWDE Supervisor	10
Joel Smith	NWDE Operator	10
Dalton Sullivan	NWDE Labor	10
Antonio Davis	NWDE Labor	10
Jevon Stone	NWDE Operator	10
Jose Ordaz	NWDE Operator	10
Matt Manning	NWDE Operator	10
Chris Fisher	NWDE Labor	10
Kevin Bach	NWDE Labor	10
Lucas Peel	NWDE Labor	10
Tyler Wilson	NWDE Labor	10
Eric Matteson	NWDE Operator	10

Visitors/Additional Site Personnel:

Name	Title
MaryAnn Amann	U.S. FWS
Matt Wasson	PND Engineering

Equipment:

Description	Model No.	Comments / Serial #
Pickup Truck	F350 Service Truck	NWDE
Flatbed Truck	Ford F450	NWDE
Container Truck	Peterbuilt	NWDE
Skid Steer	Bobcat S185	NWDE
Tracked Skid Steer	Bobcat T750	NWDE
Tracked Skid Steer	Bobcat	NWDE
Mini-Excavator	CAT 308	NWDE
Excavator	Volvo EC290BLC	NWDE
Excavator	Volvo EC290BLC	NWDE
Excavator	Volvo EC290	NWDE
Off road Dump Truck	Volvo A30D	NWDE
Off road Dump Truck	Volvo A30D	NWDE
Off road Dump Truck	Volvo A30D	NWDE
Excavator – High reach	Komatsu PC400HD	NWDE
Excavator	Komatsu 450	NWDE

Materials Delivered:

Description	QTY	Condition/Comments
Diesel	0 gallons	
Gasoline	0 gallons	

Description of Work:

0700 – Health and Safety meeting at NAF staging area. Review today's work tasks.

Today's focus will be DU-9 backfill and sand layer over hydraulic membrane at the R2.

R2 sand capping of the liner continues today. Clean materials are being moved from the nearby north stockpile via A30 haul truck and dumped onto the liner. The D3 dozer and two tracked skidsteers rough in the sand to near target grade to keep access for continued truck loads of sand. The loaded haul trucks are performing compaction as they drive and overlap tire tracks. Target sand lift remains 12" over the hydraulic liner.

Set up for staking survey with M.Wasson, PND. Using the Trimble RTK R8-4, align with brass cap near the R1 water tanks. Horizontal datum: WGS84, UTM 1N. Vertical datum: MLLW. Defense Mapping Agency, survey mark 11855, Year 1989. Stake out R2 for grade break line, corners, cut & fill.

1000 - A visual estimate of the north clean coral sand stockpile indicates that a percentage of material can go towards DU-9 backfill areas. Two haul trucks are doing round trips to the Water Tower 5304 from the R2 area north stockpile to further broaden the backfill in that area, working from the road towards the southwest.

1130 – Fine target grading with the D3 dozer is progressing for the sand lift 2% slope. Skidsteer work continues to work the sand edges near the grade break to further shape out the edges.

1200 – Lunch

1230 – Resume grade work with dozer and the Spectra laser level with grade checker walking the work area. Cut & fill are painted out for reference to grade.

1530 – Setting up the equipment to apply Maectite® to the concrete pedestals at former Water Tower 5304 and former Navy Water Tower 5305. The reagent is applied to the 5304 painted footings, center stem column thrust block, painted pipe, two adjacent concrete valve vaults. 5305 painted footings and center stem column thrust block are treated in the same manner. Concrete is exposed and treated down to ~2.0' bgs.

1730 – Ending the work day.
Clean sand from seawall ramp to DU-9 excavations is 26 loads.
Clean sand moved from the north R2 stockpile to DU-9 excavations is 16 loads.
Clean sand moved from the north R2 stockpile to on top of the R2 membrane today is 16 loads.

Photographs:

Photo 01: R2 Unit – View southwest. Progress of clean sand cap over hydraulic membrane

Photo 02: R2 Unit – View west. Progress of clean sand 1' lift placement, rolling compaction

Photo 03: R2 Unit – View south. Progress of clean sand 1' lift placement

Photo 04: R2 Unit – View east. Progress of clean sand 1' lift placement at south side

Table 1. Maectite and Treated Soil Total Estimates

	Maectite Totals						Treated Soil Totals[1,2]		
	Applied Today (gal)					Total to Date	Excavated and Hauled to R-2 Unit **Today**		Excavated and Hauled to R-2 Unit **Total to Date**
Date	Soils (DU9)	Soils (DU8)	Soils (DU7)	Soils (DU5)	Soils (DU3)	(gal)	Load	^{3}yds[1]	^{3}yds[1]
10/09/17	0	0	0	0	0	2981	0	0	4087
10/10/17	0	0	0	0	0	2981	0	0	4087
~End~	-	-	-	-	-	-	-	-	-
Total to Date	2623 gallons	205 gallons	153 gallons	0 gallons	0 gallons		328 loads		

Notes:
1. Estimates are based on the number of gallons of Maectite® applied.
2. Soil treatment with Maectite® and hauling to R2 may not occur on the same day.
3. 10/5/17– Table 2 loads were batch treated in the R2. Inserted this data into Table 1 for totalizing the volumes and gallons. Reset Table 2 "Batch loads" of 9 to zero until next ex-situ stockpile treatment.

2017 DU 9 – Figures P 1-16, 18, 20, 21, 23-27.
Bldg 1124, 1126, 3521, S361, 347, 3501, S3126, S3127, 521, 520, 502, 5342, 309, 340, 354, 9149, 232, 233, S269, S225A, 2127, 144, Boat House 1 & 2, 4205, 4206, 4207, 4213, 503, 5303, 5341, 5339, 5338, Bollards, Fire Hydrants, 5304, 5305, 4210, 3524, 3529, 5126, 5378, 3514, and other ancillary structures.
Foundations S464, 502, 4201, 5126, 5295, 5342.
2017 DU 8 – S-28, S-30 re-ex, Pipe figure P19
2017 DU 7 – Bldg 3502, 3503, 3504 shade cloth
2017 DU 5 – R2 Unit, Figure P17
2017 DU 3 – Housing figure P22, 419 MIS re-ex

Table 2. Soil loads hauled to the R2 for ex situ Maectite® treatment

	Load Totals				
	Hauled to R2 for treatment in R2 cell (# of truck loads)				
Date	Soils (DU9)	Soils (DU8)	Soils (DU7)	Soils (DU5)	Soils (DU3)
10/09/17	0	0	0	0	0
10/10/17	0	0	0	0	0
~End~	-	-	-	-	-
Batch loads to treat in R2	0 loads	0 loads	0 loads	0 loads	0 loads
Total to Date	130.8 loads	34 loads	18.5 loads	0 loads	0 loads

8/14/17 - Batch treatment of all stockpiled "ex situ" loads to date in R2 Cell 1. Entered this data into Table 1 on 8/14/17 for volume and gallon tracking.
8/15/17 - Add "Batch Loads to treat in R2" subtotal that tracks the truck loads placed for treatment. Reset this to zero once treatment event is complete.
8/23/17 – Batch #2 treatment event of all stockpiled "ex situ" loads to date in R2 Cells. Entered this data into Table 1 on 8/23/17 for volume and gallon tracking.
9/12/17 – Batch #3 treatment event of all stockpiled "ex situ" loads to date in R2 Cells. Entered this data into Table 1 on 9/11/17 & 9/12/17 for volume and gallon tracking.
9/21/17 – Batch #4 treatment event of all stockpiled "ex situ" loads to date in R2 Cells. Entered this data into Table 1 on 9/21/17 for volume and gallon tracking.
9/29/17 – Batch #5 treatment event of all stockpiled "ex situ" loads to date in R2 Cells. Entered this data into Table 1 on 9/29/17 for volume and gallon tracking.
10/5/17 – Batch #6 treatment event of all stockpiled "ex situ" loads to date in R2 Cells. Entered this data into Table 1 on 10/5/17 for volume and gallon tracking.

Table 2.1 Soil loads hauled to the R2, non-treated internment

Date	Load Totals				
	Hauled to R2, non-treated soil (# of truck loads)				
	Soils (DU9)	Soils (DU8)	Soils (DU7)	Soils (DU5)	Soils (DU3)
10/09/17	0	0	0	0	0
10/10/17	0	0	0	0	0
~End~	-	-	-	-	-
Total to Date	29.5 loads	75 loads	0 loads	0 loads	9 loads

Table 3. Weekly Load Estimates

Date	Treated Demo Debris Loads to R2	Clean Concrete Loads to Crusher	Metal Debris Loads To Boneyard	Clean Wood Loads	Steel Debris Loaded onto Barge	R2 waste layer toe adjustment sand
10/9/17	0	0	0	0	0	0
10/10/17	0	0	0	0	0	0
~End~	-	-	-	-	-	-
Season Total	3 loads	8 loads	0 loads	4 loads	195 loads	35 loads

Table 4. Fire Hydrants, Pedestals and Monuments

Fire Hydrant Soil					Fire Hydrant Soil				
Fire Hydrant ID	Excavate	Sampled Collected FH # X 0-2"	Backfill	Notes- Red >75mg/kg Green<75mg/kg	Fire Hydrant ID	Excavate	Sampled Collected FH # X 0-2"	Backfill	Notes- Red >75mg/kg Green<75mg/kg
1	9/26/2017	10/3/2017	10/3/2017	FH 1 0-2"	41	DU-1	N/A	N/A	Prior excavation
2	9/27/2017	10/3/2017	10/3/2017	FH 2 0-2"	42	9/25/2017	9/27/2017	10/2/2017	FH 42 0-2"
3	9/26/2017	9/26/2017	10/3/2017	FH 3 0-2"	43	9/26/2017	10/2/2017	10/3/2017	FH 43 0-2"
4	9/26/2017	9/26/2017	10/3/2017	FH 4 0-2"	44	9/26/2017	9/29/2017	10/2/2017	FH 44 0-2"
5	9/27/2017	10/3/2017	10/3/2017	FH 5 0-2"	45	9/23/2017	9/28/2017	10/4/2017	FH 45 0-2"
6	9/27/2017	10/3/2017	10/3/2017	FH 6 0-2"	46	9/25/2017	10/3/2017	10/4/2017	FH 46 0-2"
7	9/26/2017	9/26/2017	10/3/2017	FH 7 0-2"	47	9/25/2017	10/4/2017	10/4/2017	FH 47 0-2"
8	9/25/2017	10/3/2017	10/3/2017	FH 8 0-2"	48	9/25/2017	10/3/2017	10/4/2017	FH 48 0-2"
9	9/25/2017	10/3/2017	10/3/2017	FH 9 0-2"	49	9/26/2017	9/26/2017	10/4/2017	FH 49 0-2"
10	9/25/2017	10/3/2017	10/3/2017	FH 10 0-2"	50	9/28/2017	10/3/2017	10/4/2017	FH 50 0-2"
11	8/31/2017	9/4/2017	9/30/2017	FH 11 0-2"	51	9/11/2017	9/11/2017	9/30/2017	FH 51 0-2"
12	DU-6	N/A	N/A	Prior excavation	52	9/11/2017	9/11/2017	9/30/2017	FH 52 0-2"
13	DU-6	N/A	N/A	Prior excavation	53	8/23/2017	8/23/2017	10/6/2017	FH 53 0-2"
14	DU-6	N/A	N/A	Prior excavation	54	9/11/2017	9/11/2017	10/6/2017	FH 54 0-2"re-ex
15	DU-6	N/A	N/A	Prior excavation	54A	8/23/2017	8/23/2017	10/6/2017	FH 54A 0-2"
16	9/23/2017	9/28/2017	9/29/2017	FH 16 0-2"	55	8/26/2017	8/26/2017	9/29/2017	FH 55 0-2"
17	9/23/2017	9/23/2017	9/23/2017	FH 17 0-2"	56	8/26/2017	8/30/2017	10/2/2017	FH 56 0-2"
18	9/23/2017	9/23/2017	9/23/2017	FH 18 0-2"	57	8/26/2017	8/26/2017	9/29/2017	FH 57 0-2"
19	9/23/2017	9/29/2017	10/2/2017	FH 19 0-2"	58	9/11/2017	9/11/2017	9/29/2017	FH 58 0-2"
20	9/23/2017	9/28/2017	9/29/2017	FH 20 0-2"	59	9/26/2017	9/27/2017	9/29/2017	FH 59 0-2"
21	9/26/2017	9/27/2017	9/30/2017	FH 21 0-2"	60	10/11/2017	10/11/2017	10/11/2017	FH 60 0-2"
22	9/25/2017	9/26/2017	9/26/2017	FH 22 0-2"	61	9/28/2017	9/29/2017	10/3/2017	FH 61 0-2"
23	9/26/2017	9/26/2017	9/26/2017	FH 23 0-2"	62	9/25/2017	9/27/2017	10/3/2017	FH 62 0-2"
24	9/26/2017	9/26/2017	9/29/2017	FH 24 0-2"	63	9/28/2017	9/29/2017	10/3/2017	FH 63 0-2"
25	9/26/2017	9/26/2017	9/29/2017	FH 25 0-2"	64	9/11/2017	9/11/2017	10/30/2017	FH 64 0-2"
26	9/26/2017	9/26/2017	9/29/2017	FH 26 0-2"	65	8/29/2017	8/30/2017	10/30/2017	FH 65 0-2"
27	9/23/2017	9/23/2017	9/30/2017	FH 27 0-2"	66	8/26/2017	8/26/2017	10/3/2017	FH 66 0-2"
28	9/23/2017	9/23/2017	9/30/2017	FH 28 0-2"	67	8/25/2017	8/30/2017	9/29/2017	FH 67 0-2"
29	9/26/2017	9/26/2017	10/2/2017	FH 29 0-2"	68	8/25/2017	8/30/2017	9/29/2017	FH 68 0-2"
30	9/26/2017	9/26/2017	9/26/2017	FH 30 0-2"	69	9/25/2017	9/27/2017	9/29/2017	FH 69 0-2"
31	9/26/2017	9/26/2017	9/26/2017	FH 31 0-2"	70	9/25/2017	9/27/2017	9/29/2017	FH 69 0-2"
32	9/26/2017	9/26/2017	9/26/2017	FH 32 0-2"	71	9/25/2017	9/27/2017	9/29/2017	FH 71 0-2"
33	9/26/2017	9/26/2017	9/26/2017	FH 33 0-2"	72	8/29/2017	9/27/2017	10/3/2017	FH 72 0-2"
34	9/26/2017	9/29/2017	9/30/2017	FH 34 0-2"	73	8/29/2017	9/11/2017	10/2/2017	FH 73 0-2"
35	9/26/2017	10/4/2017	10/4/2017	FH 35 0-2"	74	8/29/2017	8/29/2017	10/2/2017	FH 74 0-2"
36	9/26/2017	10/4/2017	10/4/2017	FH 36 0-2"	75	8/28/2017	8/29/2017	10/2/2017	FH 75 0-2"
37	9/25/2017	9/26/2017	10/2/2017	FH 37 0-2"	76	9/25/2017	9/29/2017	10/2/2017	FH 76 0-2"
38	9/26/2017	10/2/2017	10/2/2017	FH 38 0-2"	77	8/28/2017	8/29/2017	10/3/2017	FH 77 0-2"
39	DU-1	N/A	N/A	Prior excavation					
40	9/26/2017	9/27/2017	10/2/2017	FH 40 0-2"					

Pedestals /Monuments Soil					Pedestals /Monuments Soil				
Feature Unit ID	Excavate	Sampled Collected ID # X P100 0-2"	Backfill	Notes- Red >75mg/kg Green<75mg/kg	Feature Unit ID	Excavate	Sampled Collected ID # X P100 0-2"	Backfill	Notes- Red >75mg/kg Green<75mg/kg
1	8/29/2017	9/4/2017	9/30/2017	1-08 P100 0-2"	23	9/29/2017	10/2/2017	10/2/2017	23-44 P100 0-2"
2	8/29/2017	9/4/2017	9/30/2017	2-08 P100 0-2"	24	9/29/2017	10/2/2017	10/2/2017	24-42 P100 0-2"
3	8/29/2017	9/4/2017	9/30/2017	3-10 P100 0-2"	25	9/29/2017	10/2/2017	10/2/2017	25-38 P100 0-2"
4	8/29/2017	9/4/2017	9/30/2017	4-10 P100 0-2"	26	9/25/2017	10/3/2017	10/3/2017	26-07 P100 0-2"
5	8/29/2017	9/4/2017	9/30/2017	5-11 P100 0-2"	27	10/26/2017	10/3/2017	10/3/2017	27-03 P100 0-2"
6	9/11/2017	9/11/2017	9/30/2017	6-51 P100 0-2"	28	9/26/2017	10/4/2017	10/4/2017	28-30 P100 0-2"
7	9/11/2017	9/11/2017	9/30/2017	7-32 P100 0-2"	29	10/5/2017	10/5/2017	10/5/2017	29-R1 P100 0-2"
8	9/05/2017	9/18/2017	10/3/2017	8-20 P100 0-2"	30	10/5/2017	10/5/2017	10/5/2017	30-20 P100 0-2"
9	9/26/2017	9/28/2017	9/30/2017	9-33 P100 0-2"	31	10/5/2017	10/5/2017	10/5/2017	31-15 P100 0-2"
10	9/26/2017	9/28/2017	9/30/2017	10-23 P100 0-2"	32-71	DU-6	N/A	N/A	Prior excavation
11	9/26/2017	9/28/2017	9/29/2017	11-20 P100 0-2"	33-12	DU-6	N/A	N/A	Prior excavation
12	9/26/2017	9/28/2017	9/29/2017	12-28 P100 0-2"	34-15	DU-6	N/A	N/A	Prior excavation
13	9/26/2017	9/28/2017	9/29/2017	13-27 P100 0-2"	35-15	DU-6	N/A	N/A	Prior excavation
14	9/26/2017	9/28/2017	9/30/2017	14-08 P100 0-2"	36-14	DU-6	N/A	N/A	Prior excavation
15	9/27/2017	9/29/2017	9/30/2017	15-24 P100 0-2"	37-Cross	Abated	N/A	N/A	Maintained
16	9/27/2017	9/29/2017	9/30/2017	16-25 P100 0-2"	38-59	DU-8	N/A	N/A	Prior excavation
17	9/27/2017	9/29/2017	9/30/2017	17-25 P100 0-2"	39-59	DU-8	N/A	N/A	Prior excavation
18	9/28/2017	9/29/2017	9/29/2017	18-13 P100 0-2"	40-Ave Maria	Abated	N/A	N/A	Maintained
19	9/26/2017	9/29/2017	10/2/2017	19-44 P100 0-2"	41-Golf				
20	9/26/2017	9/29/2017	10/2/2017	20-44 P100 0-2"	42-R1	Abated	N/A	N/A	Concrete apron
21	9/26/2017	9/29/2017	9/30/2017	21-52 P100 0-2"	43-R1	Abated	N/A	N/A	Concrete apron
22	9/26/2017	10/2/2017	10/4/2017	22-49 P100 0-2"					

Fire Hydrant ID # per updated DBSI file -Navy Fresh Water Lines, Valves & Hydrants. BSI/DR-0034
Pedestal sample identification is a designated ID number followed by a dash and double-digit number relative to the closest Fire Hydrant ID location. No full prior map of pedestals exists.

Table 5. DU 5 Buttress & Cover - Import Clean Coral Sand

DU 5 IMPORT CLEAN CORAL						
DATE	NORTH Wall Loads	SOUTH Wall Loads	EAST Wall Loads	WEST Wall Loads	Days total loads	Days cubic yardage
10/9/2017	0	0	0	0	0	0
10/10/2017	0	0	0	0	0	0
10/11/2017	0	0	0	0	0	0
10/12/2017					0	0
10/13/2017					0	0
10/14/2017					0	0
10/15/2017					0	0
Load count per wall	282	0	16	0		
15cuyd estimate per wall	4230	0	240	0		
2017 Total R2 combined clean coral import LOADS				298		
Loads x 15cuyd estimate				4470		

Table 6. Excavation Plots - Import Clean Coral Sand

EXCAVATION PLOTS- IMPORT CLEAN CORAL BACKFILL							
DATE	DU-9 Loads	DU-8 Loads	DU-7 Loads	DU-5 Loads	DU-3 Loads	Days total loads	Days cubic yardage
10/9/2017	0.5	2.5	0	0	0	3	45
10/10/2017	21	0	0	0	0	21	315
10/11/2017	42	0	0	0	0	42	630
10/12/2017						0	0
10/13/2017						0	0
10/14/2017						0	0
10/15/2017						0	0
Load count per column	198.5	39.5	20	0	0		
15cuyd estimate per column	2977.5	592.5	300	0	0		
2017 Total combined clean import Backfill LOADS					258		
Loads x 15cuyd estimate					3870		

NW Demolition and Environmental
A Joint Venture

Daily Field Report

Date: Thursday, October 12, 2017
Prepared by: Scott Wakefield

Project: Removal of Lead-Based Paint from Structures and Lead-Contaminated Soil
Location: Midway Atoll National Wildlife Refuge
Client: US Fish and Wildlife Service

Weather: Partly cloudy, wind 11 mph. Temperature ~81F

Personnel:

Name	Company	Site Hours
Scott Wakefield	NWDE Field Oversight	10
Alan Phillips	NWDE Supervisor	Partial
Joel Smith	NWDE Operator	10
Dalton Sullivan	NWDE Labor	10
Antonio Davis	NWDE Labor	Partial
Jevon Stone	NWDE Operator	10
Jose Ordaz	NWDE Operator	Partial
Matt Manning	NWDE Operator	10
Chris Fisher	NWDE Labor	Partial
Kevin Bach	NWDE Labor	Partial
Lucas Peel	NWDE Labor	10
Tyler Wilson	NWDE Labor	10
Eric Matteson	NWDE Operator	Partial
Jeff James	NWDE Supervisor	Partial

Visitors/Additional Site Personnel:

Name	Title
MaryAnn Amann	U.S. FWS

Equipment:

Description	Model No.	Comments / Serial #
Pickup Truck	F350 Service Truck	NWDE
Flatbed Truck	Ford F450	NWDE
Container Truck	Peterbuilt	NWDE
Skid Steer	Bobcat S185	NWDE
Tracked Skid Steer	Bobcat T750	NWDE
Tracked Skid Steer	Bobcat	NWDE
Mini-Excavator	CAT 308	NWDE
Excavator	Volvo EC290BLC	NWDE
Excavator	Volvo EC290BLC	NWDE
Excavator	Volvo EC290	NWDE
Off road Dump Truck	Volvo A30D	NWDE
Off road Dump Truck	Volvo A30D	NWDE
Off road Dump Truck	Volvo A30D	NWDE
Excavator – High reach	Komatsu PC400HD	NWDE
Excavator	Komatsu 450	NWDE

Materials Delivered:

Description	QTY	Condition/Comments
Diesel	0 gallons	
Gasoline	0 gallons	

Description of Work:

0700 – Health and Safety meeting at NAF staging area. Review today's work tasks.

Today's focus will be grading the sand layer over hydraulic membrane at the R2.

The R2 sand capping lift is progressing to the final target 2% grade, working outwards to fully fill in at the grade break. Clean sand adjustments are also being added to the 3:1 slope, targeting the staked locations.

Demobilization work pushes forward to condense supplies, small equipment, and project materials that have closed out. These items are being arranged and loaded into select shipping containers in preparation for this month's barge arrival and final exit from the project.

0940 – Scheduled Cinco Air charter flight lands, returning J.James, NWDE for finishing out the 2017 season.

1030 – Scheduled departure for six of the NWDE LBP crew, returning to HNL. The remaining personnel will be finishing off the R2 and demobilizing the 2017 season.
Outbound shipment of confirmation samples departs as cargo, bound for Test America for analysis.

Sand grading R2 at the SE corner, progressing across the top. Continual use of the Spectra laser level and stick to maintain the target surface elevation.

1200 – Lunch

1230 – The R2 north side begins being worked to gather up the former clean coral stockpile. This material is being fully removed to regain the initial elevation surface to create the workspace for the north slope toe of the R2. The stockpile is reducing in size, separating to the north as clean sand is moved into the R2.

To the remaining pedestals for label and photo documentation. Pedestals ID #32 - #43 were exceptions to excavation work this season, primarily having been located in prior DU units and being excavated at that time. Other pedestals are excluded due to the location in hard surfaced areas, i.e. concrete and asphalt.

1515 – Supplies and equipment loading of the shipping containers continues at the NAF Staging area.

1630 – R2 clean sand grade work currently has progressed to the west section of the unit. Continue the finer cuts of the top surface elevation.

1730 – Ending the work day.
Clean sand moved from the north R2 stockpile to on top of the R2 membrane today is 13 loads.

Photographs:

Photo 01: R2 Unit – View east. Progress of north side cut to grade in preparation for slope work

Photo 02: R2 Unit – View southeast. Progress of north side cut to grade in preparation for slope work

Photo 03: R2 Unit – View south. Progress of north side cut to grade in preparation for slope work

Photo 04: R2 Unit – View west. Progress of clean sand 1' lift placement at south side

Photo 05: R2 Unit – View west. Progress of clean sand at SE corner

Photo 06: NAF Hanger – Loading up geotextile rolls for upcoming R2 witness layer installation

Photo 07: 33-12 – View southwest. Example of pedestal in prior season DU Unit

Photo 08: 35-15 – View southwest. Example of pedestal in prior season DU Unit

Table 1. Maectite and Treated Soil Total Estimates

	Maectite Totals						Treated Soil Totals[1,2]		
	Applied Today (gal)					Total to Date	Excavated and Hauled to R-2 Unit **Today**		Excavated and Hauled to R-2 Unit **Total to Date**
Date	Soils (DU9)	Soils (DU8)	Soils (DU7)	Soils (DU5)	Soils (DU3)	(gal)	Load	^{3}yds[1]	^{3}yds[1]
10/09/17	0	0	0	0	0	2981	0	0	4087
10/10/17	0	0	0	0	0	2981	0	0	4087
~End~	-	-	-	-	-	-	-	-	-
Total to Date	2623 gallons	205 gallons	153 gallons	0 gallons	0 gallons		328 loads		

Notes:
1. Estimates are based on the number of gallons of Maectite® applied.
2. Soil treatment with Maectite® and hauling to R2 may not occur on the same day.
3. 10/5/17– Table 2 loads were batch treated in the R2. Inserted this data into Table 1 for totalizing the volumes and gallons. Reset Table 2 "Batch loads" of 9 to zero until next ex-situ stockpile treatment.

2017 DU 9 – Figures P 1-16, 18, 20, 21, 23-27.
Bldg 1124, 1126, 3521, S361, 347, 3501, S3126, S3127, 521, 520, 502, 5342, 309, 340, 354, 9149, 232, 233, S269, S225A, 2127, 144, Boat House 1 & 2, 4205, 4206, 4207, 4213, 503, 5303, 5341, 5339, 5338, Bollards, Fire Hydrants, 5304, 5305, 4210, 3524, 3529, 5126, 5378, 3514, and other ancillary structures.
Foundations S464, 502, 4201, 5126, 5295, 5342.
2017 DU 8 – S-28, S-30 re-ex, Pipe figure P19
2017 DU 7 – Bldg 3502, 3503, 3504 shade cloth
2017 DU 5 – R2 Unit, Figure P17
2017 DU 3 – Housing figure P22, 419 MIS re-ex

Table 2. Soil loads hauled to the R2 for ex situ Maectite® treatment

	Load Totals				
	Hauled to R2 for treatment in R2 cell (# of truck loads)				
Date	Soils (DU9)	Soils (DU8)	Soils (DU7)	Soils (DU5)	Soils (DU3)
10/09/17	0	0	0	0	0
10/10/17	0	0	0	0	0
~End~	-	-	-	-	-
Batch loads to treat in R2	0 loads	0 loads	0 loads	0 loads	0 loads
Total to Date	130.8 loads	34 loads	18.5 loads	0 loads	0 loads

8/14/17 - Batch treatment of all stockpiled "ex situ" loads to date in R2 Cell 1. Entered this data into Table 1 on 8/14/17 for volume and gallon tracking.
8/15/17 - Add "Batch Loads to treat in R2" subtotal that tracks the truck loads placed for treatment. Reset this to zero once treatment event is complete.
8/23/17 – Batch #2 treatment event of all stockpiled "ex situ" loads to date in R2 Cells. Entered this data into Table 1 on 8/23/17 for volume and gallon tracking.
9/12/17 – Batch #3 treatment event of all stockpiled "ex situ" loads to date in R2 Cells. Entered this data into Table 1 on 9/11/17 & 9/12/17 for volume and gallon tracking.
9/21/17 – Batch #4 treatment event of all stockpiled "ex situ" loads to date in R2 Cells. Entered this data into Table 1 on 9/21/17 for volume and gallon tracking.
9/29/17 – Batch #5 treatment event of all stockpiled "ex situ" loads to date in R2 Cells. Entered this data into Table 1 on 9/29/17 for volume and gallon tracking.
10/5/17 – Batch #6 treatment event of all stockpiled "ex situ" loads to date in R2 Cells. Entered this data into Table 1 on 10/5/17 for volume and gallon tracking.

Table 2.1 Soil loads hauled to the R2, non-treated internment

Date	Load Totals				
	Hauled to R2, non-treated soil (# of truck loads)				
	Soils (DU9)	Soils (DU8)	Soils (DU7)	Soils (DU5)	Soils (DU3)
10/09/17	0	0	0	0	0
10/10/17	0	0	0	0	0
~End~	-	-	-	-	-
Total to Date	29.5 loads	75 loads	0 loads	0 loads	9 loads

Table 3. Weekly Load Estimates

Date	Treated Demo Debris Loads to R2	Clean Concrete Loads to Crusher	Metal Debris Loads To Boneyard	Clean Wood Loads	Steel Debris Loaded onto Barge	R2 waste layer toe adjustment sand
10/9/17	0	0	0	0	0	0
10/10/17	0	0	0	0	0	0
~End~	-	-	-	-	-	-
Season Total	3 loads	8 loads	0 loads	4 loads	195 loads	35 loads

Table 4. Fire Hydrants, Pedestals and Monuments

Fire Hydrant Soil					Fire Hydrant Soil				
Fire Hydrant ID	Excavate	Sampled Collected FH # X 0-2"	Backfill	Notes- Red >75mg/kg Green<75mg/kg	Fire Hydrant ID	Excavate	Sampled Collected FH # X 0-2"	Backfill	Notes- Red >75mg/kg Green<75mg/kg
1	9/26/2017	10/3/2017	10/3/2017	FH 1 0-2"	41	DU-1	N/A	N/A	Prior excavation
2	9/27/2017	10/3/2017	10/3/2017	FH 2 0-2"	42	9/25/2017	9/27/2017	10/2/2017	FH 42 0-2"
3	9/26/2017	9/26/2017	10/3/2017	FH 3 0-2"	43	9/26/2017	10/2/2017	10/3/2017	FH 43 0-2"
4	9/26/2017	9/26/2017	10/3/2017	FH 4 0-2"	44	9/26/2017	9/29/2017	10/2/2017	FH 44 0-2"
5	9/27/2017	10/3/2017	10/3/2017	FH 5 0-2"	45	9/23/2017	9/28/2017	10/4/2017	FH 45 0-2"
6	9/27/2017	10/3/2017	10/3/2017	FH 6 0-2"	46	9/25/2017	10/3/2017	10/4/2017	FH 46 0-2"
7	9/26/2017	9/26/2017	10/3/2017	FH 7 0-2"	47	9/25/2017	10/4/2017	10/4/2017	FH 47 0-2"
8	9/25/2017	10/3/2017	10/3/2017	FH 8 0-2"	48	9/25/2017	10/3/2017	10/4/2017	FH 48 0-2"
9	9/25/2017	10/3/2017	10/3/2017	FH 9 0-2"	49	9/26/2017	9/26/2017	10/4/2017	FH 49 0-2"
10	9/25/2017	10/3/2017	10/3/2017	FH 10 0-2"	50	9/28/2017	10/3/2017	10/4/2017	FH 50 0-2"
11	8/31/2017	9/4/2017	9/30/2017	FH 11 0-2"	51	9/11/2017	9/11/2017	9/30/2017	FH 51 0-2"
12	DU-6	N/A	N/A	Prior excavation	52	9/11/2017	9/11/2017	9/30/2017	FH 52 0-2"
13	DU-6	N/A	N/A	Prior excavation	53	8/23/2017	8/23/2017	10/6/2017	FH 53 0-2"
14	DU-6	N/A	N/A	Prior excavation	54	9/11/2017	9/11/2017	10/6/2017	FH 54 0-2"re-ex
15	DU-6	N/A	N/A	Prior excavation	54A	8/23/2017	8/23/2017	10/6/2017	FH 54A 0-2"
16	9/23/2017	9/28/2017	9/29/2017	FH 16 0-2"	55	8/26/2017	8/26/2017	9/29/2017	FH 55 0-2"
17	9/23/2017	9/23/2017	9/23/2017	FH 17 0-2"	56	8/26/2017	8/30/2017	10/2/2017	FH 56 0-2"
18	9/23/2017	9/23/2017	9/23/2017	FH 18 0-2"	57	8/26/2017	8/26/2017	9/29/2017	FH 57 0-2"
19	9/23/2017	9/29/2017	10/2/2017	FH 19 0-2"	58	9/11/2017	9/11/2017	9/29/2017	FH 58 0-2"
20	9/23/2017	9/28/2017	9/29/2017	FH 20 0-2"	59	9/26/2017	9/27/2017	9/29/2017	FH 59 0-2"
21	9/26/2017	9/27/2017	9/30/2017	FH 21 0-2"	60	10/11/2017	10/11/2017	10/11/2017	FH 60 0-2"
22	9/25/2017	9/26/2017	9/26/2017	FH 22 0-2"	61	9/28/2017	9/29/2017	10/3/2017	FH 61 0-2"
23	9/26/2017	9/26/2017	9/26/2017	FH 23 0-2"	62	9/25/2017	9/27/2017	10/3/2017	FH 62 0-2"
24	9/26/2017	9/26/2017	9/29/2017	FH 24 0-2"	63	9/28/2017	9/29/2017	10/3/2017	FH 63 0-2"
25	9/26/2017	9/26/2017	9/29/2017	FH 25 0-2"	64	9/11/2017	9/11/2017	10/30/2017	FH 64 0-2"
26	9/26/2017	9/26/2017	9/29/2017	FH 26 0-2"	65	8/29/2017	8/30/2017	10/30/2017	FH 65 0-2"
27	9/23/2017	9/23/2017	9/30/2017	FH 27 0-2"	66	8/26/2017	8/26/2017	10/3/2017	FH 66 0-2"
28	9/23/2017	9/23/2017	9/30/2017	FH 28 0-2"	67	8/25/2017	8/30/2017	9/29/2017	FH 67 0-2"
29	9/26/2017	9/26/2017	10/2/2017	FH 29 0-2"	68	8/25/2017	8/30/2017	9/29/2017	FH 68 0-2"
30	9/26/2017	9/26/2017	9/26/2017	FH 30 0-2"	69	9/25/2017	9/27/2017	9/29/2017	FH 69 0-2"
31	9/26/2017	9/26/2017	9/26/2017	FH 31 0-2"	70	9/25/2017	9/27/2017	9/29/2017	FH 69 0-2"
32	9/26/2017	9/26/2017	9/26/2017	FH 32 0-2"	71	9/25/2017	9/27/2017	9/29/2017	FH 71 0-2"
33	9/26/2017	9/26/2017	9/26/2017	FH 33 0-2"	72	8/29/2017	9/27/2017	10/3/2017	FH 72 0-2"
34	9/26/2017	9/29/2017	9/30/2017	FH 34 0-2"	73	8/29/2017	9/11/2017	10/2/2017	FH 73 0-2"
35	9/26/2017	10/4/2017	10/4/2017	FH 35 0-2"	74	8/29/2017	8/29/2017	10/2/2017	FH 74 0-2"
36	9/26/2017	10/4/2017	10/4/2017	FH 36 0-2"	75	8/28/2017	8/29/2017	10/2/2017	FH 75 0-2"
37	9/25/2017	9/26/2017	10/2/2017	FH 37 0-2"	76	9/25/2017	9/29/2017	10/2/2017	FH 76 0-2"
38	9/26/2017	10/2/2017	10/2/2017	FH 38 0-2"	77	8/28/2017	8/29/2017	10/3/2017	FH 77 0-2"
39	DU-1	N/A	N/A	Prior excavation					
40	9/26/2017	9/27/2017	10/2/2017	FH 40 0-2"					

Pedestals /Monuments Soil					Pedestals /Monuments Soil				
Feature Unit ID	Excavate	Sampled Collected ID # X P100 0-2"	Backfill	Notes- Red >75mg/kg Green<75mg/kg	Feature Unit ID	Excavate	Sampled Collected ID # X P100 0-2"	Backfill	Notes- Red >75mg/kg Green<75mg/kg
1	8/29/2017	9/4/2017	9/30/2017	1-08 P100 0-2"	23	9/29/2017	10/2/2017	10/2/2017	23-44 P100 0-2"
2	8/29/2017	9/4/2017	9/30/2017	2-08 P100 0-2"	24	9/29/2017	10/2/2017	10/2/2017	24-42 P100 0-2"
3	8/29/2017	9/4/2017	9/30/2017	3-10 P100 0-2"	25	9/29/2017	10/2/2017	10/2/2017	25-38 P100 0-2"
4	8/29/2017	9/4/2017	9/30/2017	4-10 P100 0-2"	26	9/25/2017	10/3/2017	10/3/2017	26-07 P100 0-2"
5	8/29/2017	9/4/2017	9/30/2017	5-11 P100 0-2"	27	10/26/2017	10/3/2017	10/3/2017	27-03 P100 0-2"
6	9/11/2017	9/11/2017	9/30/2017	6-51 P100 0-2"	28	9/26/2017	10/4/2017	10/4/2017	28-30 P100 0-2"
7	9/11/2017	9/11/2017	9/30/2017	7-32 P100 0-2"	29	10/5/2017	10/5/2017	10/5/2017	29-R1 P100 0-2"
8	9/05/2017	9/18/2017	10/3/2017	8-20 P100 0-2"	30	10/5/2017	10/5/2017	10/5/2017	30-20 P100 0-2"
9	9/26/2017	9/28/2017	9/30/2017	9-33 P100 0-2"	31	10/5/2017	10/5/2017	10/5/2017	31-15 P100 0-2"
10	9/26/2017	9/28/2017	9/30/2017	10-23 P100 0-2"	32-71	DU-6	N/A	N/A	Prior excavation
11	9/26/2017	9/28/2017	9/29/2017	11-20 P100 0-2"	33-12	DU-6	N/A	N/A	Prior excavation
12	9/26/2017	9/28/2017	9/29/2017	12-28 P100 0-2"	34-15	DU-6	N/A	N/A	Prior excavation
13	9/26/2017	9/28/2017	9/29/2017	13-27 P100 0-2"	35-15	DU-6	N/A	N/A	Prior excavation
14	9/26/2017	9/28/2017	9/30/2017	14-08 P100 0-2"	36-14	DU-6	N/A	N/A	Prior excavation
15	9/27/2017	9/29/2017	9/30/2017	15-24 P100 0-2"	37-Cross	Abated	N/A	N/A	Maintained
16	9/27/2017	9/29/2017	9/30/2017	16-25 P100 0-2"	38-59	DU-8	N/A	N/A	Prior excavation
17	9/27/2017	9/29/2017	9/30/2017	17-25 P100 0-2"	39-59	DU-8	N/A	N/A	Prior excavation
18	9/28/2017	9/29/2017	9/29/2017	18-13 P100 0-2"	40-Ave Maria	Abated	N/A	N/A	Maintained
19	9/26/2017	9/29/2017	10/2/2017	19-44 P100 0-2"	41-Golf				
20	9/26/2017	9/29/2017	10/2/2017	20-44 P100 0-2"	42-R1	Abated	N/A	N/A	Concrete apron
21	9/26/2017	9/29/2017	9/30/2017	21-52 P100 0-2"	43-R1	Abated	N/A	N/A	Concrete apron
22	9/26/2017	10/2/2017	10/4/2017	22-49 P100 0-2"					

Fire Hydrant ID # per updated DBSI file -Navy Fresh Water Lines, Valves & Hydrants. BSI/DR-0034
Pedestal sample identification is a designated ID number followed by a dash and double-digit number relative to the closest Fire Hydrant ID location. No full prior map of pedestals exists.

Table 5. DU 5 Buttress & Cover - Import Clean Coral Sand

DU 5 IMPORT CLEAN CORAL						
DATE	NORTH Wall Loads	SOUTH Wall Loads	EAST Wall Loads	WEST Wall Loads	Days total loads	Days cubic yardage
10/9/2017	0	0	0	0	0	0
10/10/2017	0	0	0	0	0	0
10/11/2017	0	0	0	0	0	0
10/12/2017	0	0	0	0	0	0
10/13/2017					0	0
10/14/2017					0	0
10/15/2017					0	0
Load count per wall	282	0	16	0		
15cuyd estimate per wall	4230	0	240	0		
2017 Total R2 combined clean coral import LOADS				298		
Loads x 15cuyd estimate				4470		

Table 6. Excavation Plots - Import Clean Coral Sand

EXCAVATION PLOTS- IMPORT CLEAN CORAL BACKFILL							
DATE	DU-9 Loads	DU-8 Loads	DU-7 Loads	DU-5 Loads	DU-3 Loads	Days total loads	Days cubic yardage
10/9/2017	0.5	2.5	0	0	0	3	45
10/10/2017	21	0	0	0	0	21	315
10/11/2017	42	0	0	0	0	42	630
10/12/2017	0	0	0	0	0	0	0
10/13/2017						0	0
10/14/2017						0	0
10/15/2017						0	0
Load count per column	198.5	39.5	20	0	0		
15cuyd estimate per column	2977.5	592.5	300	0	0		
2017 Total combined clean import Backfill LOADS					258		
Loads x 15cuyd estimate					3870		

NW Demolition and Environmental
A Joint Venture

Daily Field Report

Date: Friday, October 13, 2017
Prepared by: Scott Wakefield

Project: Removal of Lead-Based Paint from Structures and Lead-Contaminated Soil
Location: Midway Atoll National Wildlife Refuge
Client: US Fish and Wildlife Service

Weather: Partly cloudy, wind 15-20 mph. Temperature ~80F

Personnel:

Name	Company	Site Hours
Scott Wakefield	NWDE Field Oversight	10
Jeff James	NWDE Supervisor	10
Joel Smith	NWDE Operator	10
Dalton Sullivan	NWDE Labor	10
Jevon Stone	NWDE Operator	10
Matt Manning	NWDE Operator	10
Lucas Peel	NWDE Labor	10
Tyler Wilson	NWDE Labor	10

Visitors/Additional Site Personnel:

Name	Title
MaryAnn Amann	U.S. FWS

Equipment:

Description	Model No.	Comments / Serial #
Pickup Truck	F350 Service Truck	NWDE
Flatbed Truck	Ford F450	NWDE
Container Truck	Peterbuilt	NWDE
Skid Steer	Bobcat S185	NWDE
Tracked Skid Steer	Bobcat T750	NWDE
Tracked Skid Steer	Bobcat	NWDE
Mini-Excavator	CAT 308	NWDE
Excavator	Volvo EC290BLC	NWDE
Excavator	Volvo EC290BLC	NWDE
Excavator	Volvo EC290	NWDE
Off road Dump Truck	Volvo A30D	NWDE
Off road Dump Truck	Volvo A30D	NWDE
Off road Dump Truck	Volvo A30D	NWDE
Excavator – High reach	Komatsu PC400HD	NWDE
Excavator	Komatsu 450	NWDE

Materials Delivered:

Description	QTY	Condition/Comments
Diesel	0 gallons	
Gasoline	0 gallons	

Description of Work:

0700 – Health and Safety meeting at NAF staging area. Review today's work tasks.

Today's focus will be grading the sand layer slope at the R2.

R2 grade work for the target 3:1 slope is beginning. The staked 10' offset lathes are transferred over to indicate the approximate toe of the slope. The upper grade break of 2% to the 3:1 has been previously staked. The 290 excavator is working the southeast corner to get material oriented to form the angle with use of grade check / spotter.

The north 3:1 slope task at the northeast corner commences. The 450 Komatsu works to achieve the target angle with use of grade checker / spotter. At the north wall mid-point, an access ramp exists and will remain during construction for bringing in the 3" minus crushed concrete. As the armament material is finished, the ramp will be removed and completed per spec.

0930 - At the NAF Hanger staging area, demobilization work continues as materials and tools are prepped and loaded into shipping containers. General debris also has continued to be collected and packed into a shipping container that will depart on this month's barge. The staging area is being downsized with nonessential work materials being collected and packed up.

1030 – Slope work at the north and east sides of the R2 continue. The northeast corner is receiving additional clean sand to fill out the shape and the descending hip ridge to the toe corner.

1200 – Lunch

1230 - R2 east slope work resumes for the clean coral sand. The materials are being amended with hydrant water on the slope, followed with the shaping and bucket compaction. The clean coral sand is binding better with a higher moisture content. The 290 excavator continues working to the south as the angle is formed. Grade spot checking with the slope stick maintains the target 3:1.

1400 – The north side of the R2 slope has progressed while material is removed and cut from grade break to the toe. Excess materials are being moved back to the adjacent north clean stockpile.

The Maectite® equipment is being set up in preparation to apply reagent to the concrete features of the mini golf location.

1730 – Ending the work day.
Clean sand moved from the north R2 stockpile to the edges of the R2 today is 23 loads.

Photographs:

Photo 01: R2 Unit – View south. Progress of southeast corner preparation for slope work

Photo 02: R2 Unit – View north. Current view of the west side prior to working the 3:1 slope

Photo 03: R2 Unit – View west. Progress of southeast corner work

Photo 04: R2 Unit – View south. East side slope work with hydrant water amendment

Table 1. Maectite and Treated Soil Total Estimates

	Maectite Totals						Treated Soil Totals[1,2]		
	Applied Today (gal)					Total to Date	Excavated and Hauled to R-2 Unit **Today**		Excavated and Hauled to R-2 Unit **Total to Date**
Date	Soils (DU9)	Soils (DU8)	Soils (DU7)	Soils (DU5)	Soils (DU3)	(gal)	Load	^{3}yds[1]	^{3}yds[1]
10/09/17	0	0	0	0	0	2981	0	0	4087
10/10/17	0	0	0	0	0	2981	0	0	4087
~End~	-	-	-	-	-	-	-	-	-
Total to Date	2623 gallons	205 gallons	153 gallons	0 gallons	0 gallons		328 loads		

Notes:
1. Estimates are based on the number of gallons of Maectite® applied.
2. Soil treatment with Maectite® and hauling to R2 may not occur on the same day.
3. 10/5/17– Table 2 loads were batch treated in the R2. Inserted this data into Table 1 for totalizing the volumes and gallons. Reset Table 2 "Batch loads" of 9 to zero until next ex-situ stockpile treatment.

2017 DU 9 – Figures P 1-16, 18, 20, 21, 23-27.
Bldg 1124, 1126, 3521, S361, 347, 3501, S3126, S3127, 521, 520, 502, 5342, 309, 340, 354, 9149, 232, 233, S269, S225A, 2127, 144, Boat House 1 & 2, 4205, 4206, 4207, 4213, 503, 5303, 5341, 5339, 5338, Bollards, Fire Hydrants, 5304, 5305, 4210, 3524, 3529, 5126, 5378, 3514, and other ancillary structures.
Foundations S464, 502, 4201, 5126, 5295, 5342.
2017 DU 8 – S-28, S-30 re-ex, Pipe figure P19
2017 DU 7 – Bldg 3502, 3503, 3504 shade cloth
2017 DU 5 – R2 Unit, Figure P17
2017 DU 3 – Housing figure P22, 419 MIS re-ex

Table 2. Soil loads hauled to the R2 for ex situ Maectite® treatment

	Load Totals				
	Hauled to R2 for treatment in R2 cell (# of truck loads)				
Date	Soils (DU9)	Soils (DU8)	Soils (DU7)	Soils (DU5)	Soils (DU3)
10/09/17	0	0	0	0	0
10/10/17	0	0	0	0	0
~End~	-	-	-	-	-
Batch loads to treat in R2	0 loads	0 loads	0 loads	0 loads	0 loads
Total to Date	130.8 loads	34 loads	18.5 loads	0 loads	0 loads

8/14/17 - Batch treatment of all stockpiled "ex situ" loads to date in R2 Cell 1. Entered this data into Table 1 on 8/14/17 for volume and gallon tracking.
8/15/17 - Add "Batch Loads to treat in R2" subtotal that tracks the truck loads placed for treatment. Reset this to zero once treatment event is complete.
8/23/17 – Batch #2 treatment event of all stockpiled "ex situ" loads to date in R2 Cells. Entered this data into Table 1 on 8/23/17 for volume and gallon tracking.
9/12/17 – Batch #3 treatment event of all stockpiled "ex situ" loads to date in R2 Cells. Entered this data into Table 1 on 9/11/17 & 9/12/17 for volume and gallon tracking.
9/21/17 – Batch #4 treatment event of all stockpiled "ex situ" loads to date in R2 Cells. Entered this data into Table 1 on 9/21/17 for volume and gallon tracking.
9/29/17 – Batch #5 treatment event of all stockpiled "ex situ" loads to date in R2 Cells. Entered this data into Table 1 on 9/29/17 for volume and gallon tracking.
10/5/17 – Batch #6 treatment event of all stockpiled "ex situ" loads to date in R2 Cells. Entered this data into Table 1 on 10/5/17 for volume and gallon tracking.

Table 2.1 Soil loads hauled to the R2, non-treated internment

Date	Load Totals				
	Hauled to R2, non-treated soil (# of truck loads)				
	Soils (DU9)	Soils (DU8)	Soils (DU7)	Soils (DU5)	Soils (DU3)
10/09/17	0	0	0	0	0
10/10/17	0	0	0	0	0
~End~	-	-	-	-	-
Total to Date	29.5 loads	75 loads	0 loads	0 loads	9 loads

Table 3. Weekly Load Estimates

Date	Treated Demo Debris Loads to R2	Clean Concrete Loads to Crusher	Metal Debris Loads To Boneyard	Clean Wood Loads	Steel Debris Loaded onto Barge	R2 waste layer toe adjustment sand
10/9/17	0	0	0	0	0	0
10/10/17	0	0	0	0	0	0
~End~	-	-	-	-	-	-
Season Total	3 loads	8 loads	0 loads	4 loads	195 loads	35 loads

Table 4. Fire Hydrants, Pedestals and Monuments

Fire Hydrant Soil					Fire Hydrant Soil				
Fire Hydrant ID	Excavate	Sampled Collected FH # X 0-2"	Backfill	Notes- Red >75mg/kg Green<75mg/kg	Fire Hydrant ID	Excavate	Sampled Collected FH # X 0-2"	Backfill	Notes- Red >75mg/kg Green<75mg/kg
1	9/26/2017	10/3/2017	10/3/2017	FH 1 0-2"	41	DU-1	N/A	N/A	Prior excavation
2	9/27/2017	10/3/2017	10/3/2017	FH 2 0-2"	42	9/25/2017	9/27/2017	10/2/2017	FH 42 0-2"
3	9/26/2017	9/26/2017	10/3/2017	FH 3 0-2"	43	9/26/2017	10/2/2017	10/3/2017	FH 43 0-2"
4	9/26/2017	9/26/2017	10/3/2017	FH 4 0-2"	44	9/26/2017	9/29/2017	10/2/2017	FH 44 0-2"
5	9/27/2017	10/3/2017	10/3/2017	FH 5 0-2"	45	9/23/2017	9/28/2017	10/4/2017	FH 45 0-2"
6	9/27/2017	10/3/2017	10/3/2017	FH 6 0-2"	46	9/25/2017	10/3/2017	10/4/2017	FH 46 0-2"
7	9/26/2017	9/26/2017	10/3/2017	FH 7 0-2"	47	9/25/2017	10/4/2017	10/4/2017	FH 47 0-2"
8	9/25/2017	10/3/2017	10/3/2017	FH 8 0-2"	48	9/25/2017	10/3/2017	10/4/2017	FH 48 0-2"
9	9/25/2017	10/3/2017	10/3/2017	FH 9 0-2"	49	9/26/2017	9/26/2017	10/4/2017	FH 49 0-2"
10	9/25/2017	10/3/2017	10/3/2017	FH 10 0-2"	50	9/28/2017	10/3/2017	10/4/2017	FH 50 0-2"
11	8/31/2017	9/4/2017	9/30/2017	FH 11 0-2"	51	9/11/2017	9/11/2017	9/30/2017	FH 51 0-2"
12	DU-6	N/A	N/A	Prior excavation	52	9/11/2017	9/11/2017	9/30/2017	FH 52 0-2"
13	DU-6	N/A	N/A	Prior excavation	53	8/23/2017	8/23/2017	10/6/2017	FH 53 0-2"
14	DU-6	N/A	N/A	Prior excavation	54	9/11/2017	9/11/2017	10/6/2017	FH 54 0-2"re-ex
15	DU-6	N/A	N/A	Prior excavation	54A	8/23/2017	8/23/2017	10/6/2017	FH 54A 0-2"
16	9/23/2017	9/28/2017	9/29/2017	FH 16 0-2"	55	8/26/2017	8/26/2017	9/29/2017	FH 55 0-2"
17	9/23/2017	9/23/2017	9/23/2017	FH 17 0-2"	56	8/26/2017	8/30/2017	10/2/2017	FH 56 0-2"
18	9/23/2017	9/23/2017	9/23/2017	FH 18 0-2"	57	8/26/2017	8/26/2017	9/29/2017	FH 57 0-2"
19	9/23/2017	9/29/2017	10/2/2017	FH 19 0-2"	58	9/11/2017	9/11/2017	9/29/2017	FH 58 0-2"
20	9/23/2017	9/28/2017	9/29/2017	FH 20 0-2"	59	9/26/2017	9/27/2017	9/29/2017	FH 59 0-2"
21	9/26/2017	9/27/2017	9/30/2017	FH 21 0-2"	60	10/11/2017	10/11/2017	10/11/2017	FH 60 0-2"
22	9/25/2017	9/26/2017	9/26/2017	FH 22 0-2"	61	9/28/2017	9/29/2017	10/3/2017	FH 61 0-2"
23	9/26/2017	9/26/2017	9/26/2017	FH 23 0-2"	62	9/25/2017	9/27/2017	10/3/2017	FH 62 0-2"
24	9/26/2017	9/26/2017	9/29/2017	FH 24 0-2"	63	9/28/2017	9/29/2017	10/3/2017	FH 63 0-2"
25	9/26/2017	9/26/2017	9/29/2017	FH 25 0-2"	64	9/11/2017	9/11/2017	10/30/2017	FH 64 0-2"
26	9/26/2017	9/26/2017	9/29/2017	FH 26 0-2"	65	8/29/2017	8/30/2017	10/30/2017	FH 65 0-2"
27	9/23/2017	9/23/2017	9/30/2017	FH 27 0-2"	66	8/26/2017	8/26/2017	10/3/2017	FH 66 0-2"
28	9/23/2017	9/23/2017	9/30/2017	FH 28 0-2"	67	8/25/2017	8/30/2017	9/29/2017	FH 67 0-2"
29	9/26/2017	9/26/2017	10/2/2017	FH 29 0-2"	68	8/25/2017	8/30/2017	9/29/2017	FH 68 0-2"
30	9/26/2017	9/26/2017	9/26/2017	FH 30 0-2"	69	9/25/2017	9/27/2017	9/29/2017	FH 69 0-2"
31	9/26/2017	9/26/2017	9/26/2017	FH 31 0-2"	70	9/25/2017	9/27/2017	9/29/2017	FH 69 0-2"
32	9/26/2017	9/26/2017	9/26/2017	FH 32 0-2"	71	9/25/2017	9/27/2017	9/29/2017	FH 71 0-2"
33	9/26/2017	9/26/2017	9/26/2017	FH 33 0-2"	72	8/29/2017	9/27/2017	10/3/2017	FH 72 0-2"
34	9/26/2017	9/29/2017	9/30/2017	FH 34 0-2"	73	8/29/2017	9/11/2017	10/2/2017	FH 73 0-2"
35	9/26/2017	10/4/2017	10/4/2017	FH 35 0-2"	74	8/29/2017	8/29/2017	10/2/2017	FH 74 0-2"
36	9/26/2017	10/4/2017	10/4/2017	FH 36 0-2"	75	8/28/2017	8/29/2017	10/2/2017	FH 75 0-2"
37	9/25/2017	9/26/2017	10/2/2017	FH 37 0-2"	76	9/25/2017	9/29/2017	10/2/2017	FH 76 0-2"
38	9/26/2017	10/2/2017	10/2/2017	FH 38 0-2"	77	8/28/2017	8/29/2017	10/3/2017	FH 77 0-2"
39	DU-1	N/A	N/A	Prior excavation					
40	9/26/2017	9/27/2017	10/2/2017	FH 40 0-2"					

Pedestals /Monuments Soil					Pedestals /Monuments Soil				
Feature Unit ID	Excavate	Sampled Collected ID # X P100 0-2"	Backfill	Notes- Red >75mg/kg Green<75mg/kg	Feature Unit ID	Excavate	Sampled Collected ID # X P100 0-2"	Backfill	Notes- Red >75mg/kg Green<75mg/kg
1	8/29/2017	9/4/2017	9/30/2017	1-08 P100 0-2"	23	9/29/2017	10/2/2017	10/2/2017	23-44 P100 0-2"
2	8/29/2017	9/4/2017	9/30/2017	2-08 P100 0-2"	24	9/29/2017	10/2/2017	10/2/2017	24-42 P100 0-2"
3	8/29/2017	9/4/2017	9/30/2017	3-10 P100 0-2"	25	9/29/2017	10/2/2017	10/2/2017	25-38 P100 0-2"
4	8/29/2017	9/4/2017	9/30/2017	4-10 P100 0-2"	26	9/25/2017	10/3/2017	10/3/2017	26-07 P100 0-2"
5	8/29/2017	9/4/2017	9/30/2017	5-11 P100 0-2"	27	10/26/2017	10/3/2017	10/3/2017	27-03 P100 0-2"
6	9/11/2017	9/11/2017	9/30/2017	6-51 P100 0-2"	28	9/26/2017	10/4/2017	10/4/2017	28-30 P100 0-2"
7	9/11/2017	9/11/2017	9/30/2017	7-32 P100 0-2"	29	10/5/2017	10/5/2017	10/5/2017	29-R1 P100 0-2"
8	9/05/2017	9/18/2017	10/3/2017	8-20 P100 0-2"	30	10/5/2017	10/5/2017	10/5/2017	30-20 P100 0-2"
9	9/26/2017	9/28/2017	9/30/2017	9-33 P100 0-2"	31	10/5/2017	10/5/2017	10/5/2017	31-15 P100 0-2"
10	9/26/2017	9/28/2017	9/30/2017	10-23 P100 0-2"	32-71	DU-6	N/A	N/A	Prior excavation
11	9/26/2017	9/28/2017	9/29/2017	11-20 P100 0-2"	33-12	DU-6	N/A	N/A	Prior excavation
12	9/26/2017	9/28/2017	9/29/2017	12-28 P100 0-2"	34-15	DU-6	N/A	N/A	Prior excavation
13	9/26/2017	9/28/2017	9/29/2017	13-27 P100 0-2"	35-15	DU-6	N/A	N/A	Prior excavation
14	9/26/2017	9/28/2017	9/30/2017	14-08 P100 0-2"	36-14	DU-6	N/A	N/A	Prior excavation
15	9/27/2017	9/29/2017	9/30/2017	15-24 P100 0-2"	37-Cross	Abated	N/A	N/A	Maintained
16	9/27/2017	9/29/2017	9/30/2017	16-25 P100 0-2"	38-59	DU-8	N/A	N/A	Prior excavation
17	9/27/2017	9/29/2017	9/30/2017	17-25 P100 0-2"	39-59	DU-8	N/A	N/A	Prior excavation
18	9/28/2017	9/29/2017	9/29/2017	18-13 P100 0-2"	40-Ave Maria	Abated	N/A	N/A	Maintained
19	9/26/2017	9/29/2017	10/2/2017	19-44 P100 0-2"	41-Golf				
20	9/26/2017	9/29/2017	10/2/2017	20-44 P100 0-2"	42-R1	Abated	N/A	N/A	Concrete apron
21	9/26/2017	9/29/2017	9/30/2017	21-52 P100 0-2"	43-R1	Abated	N/A	N/A	Concrete apron
22	9/26/2017	10/2/2017	10/4/2017	22-49 P100 0-2"					

Fire Hydrant ID # per updated DBSI file -Navy Fresh Water Lines, Valves & Hydrants. BSI/DR-0034
Pedestal sample identification is a designated ID number followed by a dash and double-digit number relative to the closest Fire Hydrant ID location. No full prior map of pedestals exists.

Table 5. DU 5 Buttress & Cover - Import Clean Coral Sand

DU 5 IMPORT CLEAN CORAL						
DATE	NORTH Wall Loads	SOUTH Wall Loads	EAST Wall Loads	WEST Wall Loads	Days total loads	Days cubic yardage
10/9/2017	0	0	0	0	0	0
10/10/2017	0	0	0	0	0	0
10/11/2017	0	0	0	0	0	0
10/12/2017	0	0	0	0	0	0
10/13/2017	0	0	0	0	0	0
10/14/2017					0	0
10/15/2017					0	0
Load count per wall	282	0	16	0		
15cuyd estimate per wall	4230	0	240	0		
2017 Total R2 combined clean coral import LOADS				298		
Loads x 15cuyd estimate				4470		

Table 6. Excavation Plots - Import Clean Coral Sand

EXCAVATION PLOTS- IMPORT CLEAN CORAL BACKFILL							
DATE	DU-9 Loads	DU-8 Loads	DU-7 Loads	DU-5 Loads	DU-3 Loads	Days total loads	Days cubic yardage
10/9/2017	0.5	2.5	0	0	0	3	45
10/10/2017	21	0	0	0	0	21	315
10/11/2017	42	0	0	0	0	42	630
10/12/2017	0	0	0	0	0	0	0
10/13/2017	0	0	0	0	0	0	0
10/14/2017						0	0
10/15/2017						0	0
Load count per column	198.5	39.5	20	0	0		
15cuyd estimate per column	2977.5	592.5	300	0	0		
2017 Total combined clean import Backfill LOADS					258		
Loads x 15cuyd estimate					3870		

NW Demolition and Environmental
A Joint Venture

Daily Field Report

Date: Saturday, October 14, 2017
Prepared by: Scott Wakefield

Project: Removal of Lead-Based Paint from Structures and Lead-Contaminated Soil
Location: Midway Atoll National Wildlife Refuge
Client: US Fish and Wildlife Service

Weather: Partly cloudy, wind 15-20 mph. Temperature ~82F

Personnel:

Name	Company	Site Hours
Scott Wakefield	NWDE Field Oversight	10
Jeff James	NWDE Supervisor	10
Joel Smith	NWDE Operator	10
Dalton Sullivan	NWDE Labor	10
Jevon Stone	NWDE Operator	10
Matt Manning	NWDE Operator	10
Lucas Peel	NWDE Labor	10
Tyler Wilson	NWDE Labor	10

Visitors/Additional Site Personnel:

Name	Title
MaryAnn Amann	U.S. FWS

Equipment:

Description	Model No.	Comments / Serial #
Pickup Truck	F350 Service Truck	NWDE
Flatbed Truck	Ford F450	NWDE
Container Truck	Peterbuilt	NWDE
Skid Steer	Bobcat S185	NWDE
Tracked Skid Steer	Bobcat T750	NWDE
Tracked Skid Steer	Bobcat	NWDE
Mini-Excavator	CAT 308	NWDE
Excavator	Volvo EC290BLC	NWDE
Excavator	Volvo EC290BLC	NWDE
Excavator	Volvo EC290	NWDE
Off road Dump Truck	Volvo A30D	NWDE
Off road Dump Truck	Volvo A30D	NWDE
Off road Dump Truck	Volvo A30D	NWDE
Excavator – High reach	Komatsu PC400HD	NWDE
Excavator	Komatsu 450	NWDE

Materials Delivered:

Description	QTY	Condition/Comments
Diesel	231 gallons	10/13/17
Gasoline	0 gallons	

Description of Work:

0700 – Health and Safety meeting at NAF staging area. Review today's work tasks.

Today's focus will be grading the sand layer slope and begin the witness layer placement at the R2.

R2 grade work for the target 3:1 slope picks back up from yesterday's endpoint. The north side mid point is being roughed in with the 450 Komatsu and straight edged bucket. The northeast area slope is being progressively compacted and final shape made using the narrower heavy bucket. Hydrant water is added and mixed into the clean sand surface, then the 290 Volvo bucket makes a repeated pattern of impact compressions. The result is a 3:1 slope that is consistently firm.

The compacted sand layer lift for the 2% cap and the 3:1 sloped sides are being comparatively tested using a soil penetrometer. The field instrument push rod and direct read gauge are in use to gather field readings for the abutment and cover lift. Set at 6", the direct push values are 200 to 300 units. In known loose sand piles, direct push values are zero. The field measurements are conducted along the slope in multiple locations and across the 2% area. The 6" depth setting and awareness of the liner at 12" is carefully observed during field testing.

0830 – At the east side mid point, adjust toe and slope per design to maintain the separation for the Rainstore^3® cell. The target is ending the gravel layer toe at 4' short of the edge of the below grade cell.

The tracked skidsteer and bucket are finishing the grade break edges and detail work behind the 290 Volvo as the slope work advances. The target grade is maintained and irregular surface flattened.

1015 – Slope grade and compaction continues 100' west of the southeast corner. Hydrant water amendment and use of the slope stick along with the excavator are producing the 3:1 angle towards the tow. The second excavator has advanced to the west at the northwest side of the R2, producing the initial cut and rough angle at the abutment.

1200 – Lunch

1230 – The east end of the R2 and ~150 ft of abutment on the north and south sides have been shaped and compacted. Begin the task to place the orange witness layer material onto the 1' clean sand lift layer. Each roll of the orange permeable geotextile TenCate Mirafi is 300' in length by 15' in width. Overlap of edges will remain a 2' minimum. Orientation of the rolls is north to south, beginning 8.5' west of the R2 east side grade break line.

The orange geotextile is positioned and weighted with black sandbags. The rolls are beginning at the north side slope toe, up the 3:1, then south across the 2% slopes. Once a roll is positioned and advanced, the next full roll is aligned for a 2' overlap. Then the process is repeated. Shingling of the geotextile is oriented away from the direction that the haul trucks will be dumping rock to stop geotextile shifting.

1530 – Eight rolls of orange geotextile have been aligned, rolled south and anchored for 152' across the northeast corner of Cell 1. The Volvo A30 haul truck arrives to begin placing the 3" minus crushed concrete from the Boneyard stockpile area. Two trucks are making round trips to move the processed material on top of the R2. The D3 dozer is roughing in the piles to the target 1' lift of armament. Tracks and tires are held to staying only on the covered sections of 3" minus over the geotextile. Inspect and remove steel rebar from the crushed material as required. Sandbag anchors on the orange rolls are being dumped in place, the empty bags collected for general debris disposal off island.

1640 – Processed 3" minus continues being hauled and placed onto the geotextile. The Cat dozer is keeping up with leveling off the piles at the target elevation. Grade checks are being made with the Spectra laser level and stick.

The 450 Komatsu excavator has continued to rough grade the southwest corner of the R2 this afternoon. This is providing the initial 3:1 slope, to be followed up with water amendment and compaction.

1730 – Ending the work day.
Clean sand moved from the north R2 stockpile to the edges of the R2 today is 14 loads.
3" minus processed concrete material from the Boneyard to the R2 final cap is 14 loads.

Photographs:

Photo 01: R2 Unit – View west. Progress of southeast corner final pass slope work

Photo 02: R2 Unit – View west. Progress of detail work in preparation for witness layer installation

Photo 03: R2 Unit – View west. Progress of southeast corner work

Photo 04: R2 Unit – View east. East side slope work

Photo 05: R2 Unit – View south. Clean sand lift progress (photo skewed)

Photo 06: R2 Unit – View northeast. Rolling out geotextile witness layer

Photo 07: R2 Unit – View south. Geotextile progress and begin 3” minus placement

Photo 08: R2 Unit – View southeast. Geotextile and 3” minus placement progress

Photo 09: R2 Unit – View southwest. Geotextile and 3” minus placement progress

Table 1. Maectite and Treated Soil Total Estimates

	Maectite Totals						Treated Soil Totals[1,2]		
	Applied Today (gal)					Total to Date	Excavated and Hauled to R-2 Unit **Today**		Excavated and Hauled to R-2 Unit **Total to Date**
Date	Soils (DU9)	Soils (DU8)	Soils (DU7)	Soils (DU5)	Soils (DU3)	(gal)	Load	^{3}yds[1]	^{3}yds[1]
10/09/17	0	0	0	0	0	2981	0	0	4087
10/10/17	0	0	0	0	0	2981	0	0	4087
~End~	-	-	-	-	-	-	-	-	-
Total to Date	2623 gallons	205 gallons	153 gallons	0 gallons	0 gallons		328 loads		

Notes:
1. Estimates are based on the number of gallons of Maectite® applied.
2. Soil treatment with Maectite® and hauling to R2 may not occur on the same day.
3. 10/5/17– Table 2 loads were batch treated in the R2. Inserted this data into Table 1 for totalizing the volumes and gallons. Reset Table 2 "Batch loads" of 9 to zero until next ex-situ stockpile treatment.

2017 DU 9 – Figures P 1-16, 18, 20, 21, 23-27.
Bldg 1124, 1126, 3521, S361, 347, 3501, S3126, S3127, 521, 520, 502, 5342, 309, 340, 354, 9149, 232, 233, S269, S225A, 2127, 144, Boat House 1 & 2, 4205, 4206, 4207, 4213, 503, 5303, 5341, 5339, 5338, Bollards, Fire Hydrants, 5304, 5305, 4210, 3524, 3529, 5126, 5378, 3514, and other ancillary structures.
Foundations S464, 502, 4201, 5126, 5295, 5342.
2017 DU 8 – S-28, S-30 re-ex, Pipe figure P19
2017 DU 7 – Bldg 3502, 3503, 3504 shade cloth
2017 DU 5 – R2 Unit, Figure P17
2017 DU 3 – Housing figure P22, 419 MIS re-ex

Table 2. Soil loads hauled to the R2 for ex situ Maectite® treatment

	Load Totals				
	Hauled to R2 for treatment in R2 cell (# of truck loads)				
Date	Soils (DU9)	Soils (DU8)	Soils (DU7)	Soils (DU5)	Soils (DU3)
10/09/17	0	0	0	0	0
10/10/17	0	0	0	0	0
~End~	-	-	-	-	-
Batch loads to treat in R2	0 loads	0 loads	0 loads	0 loads	0 loads
Total to Date	130.8 loads	34 loads	18.5 loads	0 loads	0 loads

8/14/17 - Batch treatment of all stockpiled "ex situ" loads to date in R2 Cell 1. Entered this data into Table 1 on 8/14/17 for volume and gallon tracking.
8/15/17 - Add "Batch Loads to treat in R2" subtotal that tracks the truck loads placed for treatment. Reset this to zero once treatment event is complete.
8/23/17 – Batch #2 treatment event of all stockpiled "ex situ" loads to date in R2 Cells. Entered this data into Table 1 on 8/23/17 for volume and gallon tracking.
9/12/17 – Batch #3 treatment event of all stockpiled "ex situ" loads to date in R2 Cells. Entered this data into Table 1 on 9/11/17 & 9/12/17 for volume and gallon tracking.
9/21/17 – Batch #4 treatment event of all stockpiled "ex situ" loads to date in R2 Cells. Entered this data into Table 1 on 9/21/17 for volume and gallon tracking.
9/29/17 – Batch #5 treatment event of all stockpiled "ex situ" loads to date in R2 Cells. Entered this data into Table 1 on 9/29/17 for volume and gallon tracking.
10/5/17 – Batch #6 treatment event of all stockpiled "ex situ" loads to date in R2 Cells. Entered this data into Table 1 on 10/5/17 for volume and gallon tracking.

Table 2.1 Soil loads hauled to the R2, non-treated internment

Date	Load Totals				
	Hauled to R2, non-treated soil (# of truck loads)				
	Soils (DU9)	Soils (DU8)	Soils (DU7)	Soils (DU5)	Soils (DU3)
10/09/17	0	0	0	0	0
10/10/17	0	0	0	0	0
~End~	-	-	-	-	-
Total to Date	29.5 loads	75 loads	0 loads	0 loads	9 loads

Table 3. Weekly Load Estimates

Date	Treated Demo Debris Loads to R2	Clean Concrete Loads to Crusher	Metal Debris Loads To Boneyard	Clean Wood Loads	Steel Debris Loaded onto Barge	R2 waste layer toe adjustment sand
10/9/17	0	0	0	0	0	0
10/10/17	0	0	0	0	0	0
~End~	-	-	-	-	-	-
Season Total	3 loads	8 loads	0 loads	4 loads	195 loads	35 loads

Table 4. Fire Hydrants, Pedestals and Monuments

Fire Hydrant Soil					Fire Hydrant Soil				
Fire Hydrant ID	Excavate	Sampled Collected FH # X 0-2"	Backfill	Notes- Red >75mg/kg Green<75mg/kg	Fire Hydrant ID	Excavate	Sampled Collected FH # X 0-2"	Backfill	Notes- Red >75mg/kg Green<75mg/kg
1	9/26/2017	10/3/2017	10/3/2017	FH 1 0-2"	41	DU-1	N/A	N/A	Prior excavation
2	9/27/2017	10/3/2017	10/3/2017	FH 2 0-2"	42	9/25/2017	9/27/2017	10/2/2017	FH 42 0-2"
3	9/26/2017	9/26/2017	10/3/2017	FH 3 0-2"	43	9/26/2017	10/2/2017	10/3/2017	FH 43 0-2"
4	9/26/2017	9/26/2017	10/3/2017	FH 4 0-2"	44	9/26/2017	9/29/2017	10/2/2017	FH 44 0-2"
5	9/27/2017	10/3/2017	10/3/2017	FH 5 0-2"	45	9/23/2017	9/28/2017	10/4/2017	FH 45 0-2"
6	9/27/2017	10/3/2017	10/3/2017	FH 6 0-2"	46	9/25/2017	10/3/2017	10/4/2017	FH 46 0-2"
7	9/26/2017	9/26/2017	10/3/2017	FH 7 0-2"	47	9/25/2017	10/4/2017	10/4/2017	FH 47 0-2"
8	9/25/2017	10/3/2017	10/3/2017	FH 8 0-2"	48	9/25/2017	10/3/2017	10/4/2017	FH 48 0-2"
9	9/25/2017	10/3/2017	10/3/2017	FH 9 0-2"	49	9/26/2017	9/26/2017	10/4/2017	FH 49 0-2"
10	9/25/2017	10/3/2017	10/3/2017	FH 10 0-2"	50	9/28/2017	10/3/2017	10/4/2017	FH 50 0-2"
11	8/31/2017	9/4/2017	9/30/2017	FH 11 0-2"	51	9/11/2017	9/11/2017	9/30/2017	FH 51 0-2"
12	DU-6	N/A	N/A	Prior excavation	52	9/11/2017	9/11/2017	9/30/2017	FH 52 0-2"
13	DU-6	N/A	N/A	Prior excavation	53	8/23/2017	8/23/2017	10/6/2017	FH 53 0-2"
14	DU-6	N/A	N/A	Prior excavation	54	9/11/2017	9/11/2017	10/6/2017	FH 54 0-2"re-ex
15	DU-6	N/A	N/A	Prior excavation	54A	8/23/2017	8/23/2017	10/6/2017	FH 54A 0-2"
16	9/23/2017	9/28/2017	9/29/2017	FH 16 0-2"	55	8/26/2017	8/26/2017	9/29/2017	FH 55 0-2"
17	9/23/2017	9/23/2017	9/23/2017	FH 17 0-2"	56	8/26/2017	8/30/2017	10/2/2017	FH 56 0-2"
18	9/23/2017	9/23/2017	9/23/2017	FH 18 0-2"	57	8/26/2017	8/26/2017	9/29/2017	FH 57 0-2"
19	9/23/2017	9/29/2017	10/2/2017	FH 19 0-2"	58	9/11/2017	9/11/2017	9/29/2017	FH 58 0-2"
20	9/23/2017	9/28/2017	9/29/2017	FH 20 0-2"	59	9/26/2017	9/27/2017	9/29/2017	FH 59 0-2"
21	9/26/2017	9/27/2017	9/30/2017	FH 21 0-2"	60	10/11/2017	10/11/2017	10/11/2017	FH 60 0-2"
22	9/25/2017	9/26/2017	9/26/2017	FH 22 0-2"	61	9/28/2017	9/29/2017	10/3/2017	FH 61 0-2"
23	9/26/2017	9/26/2017	9/26/2017	FH 23 0-2"	62	9/25/2017	9/27/2017	10/3/2017	FH 62 0-2"
24	9/26/2017	9/26/2017	9/29/2017	FH 24 0-2"	63	9/28/2017	9/29/2017	10/3/2017	FH 63 0-2"
25	9/26/2017	9/26/2017	9/29/2017	FH 25 0-2"	64	9/11/2017	9/11/2017	10/30/2017	FH 64 0-2"
26	9/26/2017	9/26/2017	9/29/2017	FH 26 0-2"	65	8/29/2017	8/30/2017	10/30/2017	FH 65 0-2"
27	9/23/2017	9/23/2017	9/30/2017	FH 27 0-2"	66	8/26/2017	8/26/2017	10/3/2017	FH 66 0-2"
28	9/23/2017	9/23/2017	9/30/2017	FH 28 0-2"	67	8/25/2017	8/30/2017	9/29/2017	FH 67 0-2"
29	9/26/2017	9/26/2017	10/2/2017	FH 29 0-2"	68	8/25/2017	8/30/2017	9/29/2017	FH 68 0-2"
30	9/26/2017	9/26/2017	9/26/2017	FH 30 0-2"	69	9/25/2017	9/27/2017	9/29/2017	FH 69 0-2"
31	9/26/2017	9/26/2017	9/26/2017	FH 31 0-2"	70	9/25/2017	9/27/2017	9/29/2017	FH 69 0-2"
32	9/26/2017	9/26/2017	9/26/2017	FH 32 0-2"	71	9/25/2017	9/27/2017	9/29/2017	FH 71 0-2"
33	9/26/2017	9/26/2017	9/26/2017	FH 33 0-2"	72	8/29/2017	9/27/2017	10/3/2017	FH 72 0-2"
34	9/26/2017	9/29/2017	9/30/2017	FH 34 0-2"	73	8/29/2017	9/11/2017	10/2/2017	FH 73 0-2"
35	9/26/2017	10/4/2017	10/4/2017	FH 35 0-2"	74	8/29/2017	8/29/2017	10/2/2017	FH 74 0-2"
36	9/26/2017	10/4/2017	10/4/2017	FH 36 0-2"	75	8/28/2017	8/29/2017	10/2/2017	FH 75 0-2"
37	9/25/2017	9/26/2017	10/2/2017	FH 37 0-2"	76	9/25/2017	9/29/2017	10/2/2017	FH 76 0-2"
38	9/26/2017	10/2/2017	10/2/2017	FH 38 0-2"	77	8/28/2017	8/29/2017	10/3/2017	FH 77 0-2"
39	DU-1	N/A	N/A	Prior excavation					
40	9/26/2017	9/27/2017	10/2/2017	FH 40 0-2"					

Pedestals /Monuments Soil					Pedestals /Monuments Soil				
Feature Unit ID	Excavate	Sampled Collected ID # X P100 0-2"	Backfill	Notes- Red >75mg/kg Green<75mg/kg	Feature Unit ID	Excavate	Sampled Collected ID # X P100 0-2"	Backfill	Notes- Red >75mg/kg Green<75mg/kg
1	8/29/2017	9/4/2017	9/30/2017	1-08 P100 0-2"	23	9/29/2017	10/2/2017	10/2/2017	23-44 P100 0-2"
2	8/29/2017	9/4/2017	9/30/2017	2-08 P100 0-2"	24	9/29/2017	10/2/2017	10/2/2017	24-42 P100 0-2"
3	8/29/2017	9/4/2017	9/30/2017	3-10 P100 0-2"	25	9/29/2017	10/2/2017	10/2/2017	25-38 P100 0-2"
4	8/29/2017	9/4/2017	9/30/2017	4-10 P100 0-2"	26	9/25/2017	10/3/2017	10/3/2017	26-07 P100 0-2"
5	8/29/2017	9/4/2017	9/30/2017	5-11 P100 0-2"	27	10/26/2017	10/3/2017	10/3/2017	27-03 P100 0-2"
6	9/11/2017	9/11/2017	9/30/2017	6-51 P100 0-2"	28	9/26/2017	10/4/2017	10/4/2017	28-30 P100 0-2"
7	9/11/2017	9/11/2017	9/30/2017	7-32 P100 0-2"	29	10/5/2017	10/5/2017	10/5/2017	29-R1 P100 0-2"
8	9/05/2017	9/18/2017	10/3/2017	8-20 P100 0-2"	30	10/5/2017	10/5/2017	10/5/2017	30-20 P100 0-2"
9	9/26/2017	9/28/2017	9/30/2017	9-33 P100 0-2"	31	10/5/2017	10/5/2017	10/5/2017	31-15 P100 0-2"
10	9/26/2017	9/28/2017	9/30/2017	10-23 P100 0-2"	32-71	DU-6	N/A	N/A	Prior excavation
11	9/26/2017	9/28/2017	9/29/2017	11-20 P100 0-2"	33-12	DU-6	N/A	N/A	Prior excavation
12	9/26/2017	9/28/2017	9/29/2017	12-28 P100 0-2"	34-15	DU-6	N/A	N/A	Prior excavation
13	9/26/2017	9/28/2017	9/29/2017	13-27 P100 0-2"	35-15	DU-6	N/A	N/A	Prior excavation
14	9/26/2017	9/28/2017	9/30/2017	14-08 P100 0-2"	36-14	DU-6	N/A	N/A	Prior excavation
15	9/27/2017	9/29/2017	9/30/2017	15-24 P100 0-2"	37-Cross	Abated	N/A	N/A	Maintained
16	9/27/2017	9/29/2017	9/30/2017	16-25 P100 0-2"	38-59	DU-8	N/A	N/A	Prior excavation
17	9/27/2017	9/29/2017	9/30/2017	17-25 P100 0-2"	39-59	DU-8	N/A	N/A	Prior excavation
18	9/28/2017	9/29/2017	9/29/2017	18-13 P100 0-2"	40-Ave Maria	Abated	N/A	N/A	Maintained
19	9/26/2017	9/29/2017	10/2/2017	19-44 P100 0-2"	41-Golf				
20	9/26/2017	9/29/2017	10/2/2017	20-44 P100 0-2"	42-R1	Abated	N/A	N/A	Concrete apron
21	9/26/2017	9/29/2017	9/30/2017	21-52 P100 0-2"	43-R1	Abated	N/A	N/A	Concrete apron
22	9/26/2017	10/2/2017	10/4/2017	22-49 P100 0-2"					

Fire Hydrant ID # per updated DBSI file -Navy Fresh Water Lines, Valves & Hydrants. BSI/DR-0034
Pedestal sample identification is a designated ID number followed by a dash and double-digit number relative to the closest Fire Hydrant ID location. No full prior map of pedestals exists.

Table 5. DU 5 Buttress & Cover - Import Clean Coral Sand

DU 5 IMPORT CLEAN CORAL						
DATE	NORTH Wall Loads	SOUTH Wall Loads	EAST Wall Loads	WEST Wall Loads	Days total loads	Days cubic yardage
10/9/2017	0	0	0	0	0	0
10/10/2017	0	0	0	0	0	0
10/11/2017	0	0	0	0	0	0
10/12/2017	0	0	0	0	0	0
10/13/2017	0	0	0	0	0	0
10/14/2017	0	0	0	0	0	0
10/15/2017					0	0
Load count per wall	282	0	16	0		
15cuyd estimate per wall	4230	0	240	0		
2017 Total R2 combined clean coral import LOADS				298		
Loads x 15cuyd estimate				4470		

Table 6. Excavation Plots - Import Clean Coral Sand

EXCAVATION PLOTS- IMPORT CLEAN CORAL BACKFILL							
DATE	DU-9 Loads	DU-8 Loads	DU-7 Loads	DU-5 Loads	DU-3 Loads	Days total loads	Days cubic yardage
10/9/2017	0.5	2.5	0	0	0	3	45
10/10/2017	21	0	0	0	0	21	315
10/11/2017	42	0	0	0	0	42	630
10/12/2017	0	0	0	0	0	0	0
10/13/2017	0	0	0	0	0	0	0
10/14/2017	0	0	0	0	0	0	0
10/15/2017						0	0
Load count per column	198.5	39.5	20	0	0		
15cuyd estimate per column	2977.5	592.5	300	0	0		
2017 Total combined clean import Backfill LOADS					258		
Loads x 15cuyd estimate					3870		

Daily Field Report

Date: Sunday, October 15, 2017
Prepared by: Scott Wakefield

Project: Removal of Lead-Based Paint from Structures and Lead-Contaminated Soil
Location: Midway Atoll National Wildlife Refuge
Client: US Fish and Wildlife Service

Weather: Partly cloudy, wind 18-20 mph. Temperature ~82F

Personnel:

Name	Company	Site Hours
Scott Wakefield	NWDE Field Oversight	5
Jeff James	NWDE Supervisor	5
Joel Smith	NWDE Operator	5
Dalton Sullivan	NWDE Labor	5
Jevon Stone	NWDE Operator	5
Matt Manning	NWDE Operator	5
Lucas Peel	NWDE Labor	5
Tyler Wilson	NWDE Labor	5

Visitors/Additional Site Personnel:

Name	Title
MaryAnn Amann	U.S. FWS

Equipment:

Description	Model No.	Comments / Serial #
Pickup Truck	F350 Service Truck	NWDE
Flatbed Truck	Ford F450	NWDE
Container Truck	Peterbuilt	NWDE
Skid Steer	Bobcat S185	NWDE
Tracked Skid Steer	Bobcat T750	NWDE
Tracked Skid Steer	Bobcat	NWDE
Mini-Excavator	CAT 308	NWDE
Excavator	Volvo EC290BLC	NWDE
Excavator	Volvo EC290BLC	NWDE
Excavator	Volvo EC290	NWDE
Off road Dump Truck	Volvo A30D	NWDE
Off road Dump Truck	Volvo A30D	NWDE
Off road Dump Truck	Volvo A30D	NWDE
Excavator – High reach	Komatsu PC400HD	NWDE
Excavator	Komatsu 450	NWDE

Materials Delivered:

Description	QTY	Condition/Comments
Diesel	301 gallons	
Gasoline	0 gallons	

Description of Work:

1000 – Health and Safety meeting at NAF staging area. Review today's work tasks.

Today's focus will be witness layer and cover rock placement at the R2.

The R2 final cover work resumes for a partial day of hauling 3" minus crushed concrete. Two haul trucks are operating round trips from the boneyard stockpile area to the R2. A toothed bucket 290 excavator at the stockpile loads. At the R2 materials are directly dumped onto the orange witness layer geotextile. The D3 Cat continues to blade out materials at a target 1' lift on top of the geotextile.

Rock is being placed on the rolled out material placed yesterday to finish the cover before positioning more cloth in today's brisk wind. The northeast slope, west of the northeast corner is having rock positioned close to the grade break and then pushed over slowly with the dozer. Rock is added to make the 1' cover on the slope, ending at the staked toe.

At the southwest center section of the south wall, grade incline continues using the Volvo 290 and toothed bucket. Hydrant water is in use to prep the sand before final shape and compaction with the bucket.

1115 - A few loads of clean coral sand from the north stockpile are loaded using the 450 excavator, then hauled to the southwest and northwest corners of the 3:1 slope in preparation to finish the west side.

1200 – Expand the geotextile area to the south, rolling out the remaining length of each 15' roll with a 2' overlap to the adjoining spool. Sandbags are placed to maintain position in the wind, including on the inclined edge.

Import rock continues with two A30 trucks as the additional geotextile is being rolled to the south, progressing to the west. The Spectra laser level is in use for maintaining the cover and 2% target grade.

1350 – Sandbags continue to be in use for the anchoring of the orange witness layer geotextile. In preparation for rock as the work area shifts, the bags are emptied of the clean sand and the black bags contained in supersacks for general debris disposal.

1500 – Ending the work day.
Clean sand moved from the north R2 stockpile to the edges of the R2 today is 4 loads.
3" minus processed concrete material from the Boneyard to the R2 final cap is 28 loads.

Photographs:

Photo 01: R2 Unit – View southwest. Morning status (photo skewed)

Photo 02: R2 Unit – View west. Progress of cap over witness layer at northeast end

Photo 03: R2 Unit – View east. Progress of southeast corner work

Photo 04: R2 Unit – View west. Hauling material for final cap

Photo 05: R2 Unit – View north. Progress of 3” minus over geotextile

Photo 06: R2 Unit – View northeast. Days end progress of geotextile and 3” minus

Table 1. Maectite and Treated Soil Total Estimates

	Maectite Totals						Treated Soil Totals[1,2]		
	Applied Today (gal)					Total to Date	Excavated and Hauled to R-2 Unit **Today**		Excavated and Hauled to R-2 Unit **Total to Date**
Date	Soils (DU9)	Soils (DU8)	Soils (DU7)	Soils (DU5)	Soils (DU3)	(gal)	Load	^{3}yds[1]	^{3}yds[1]
10/09/17	0	0	0	0	0	2981	0	0	4087
10/10/17	0	0	0	0	0	2981	0	0	4087
~End~	-	-	-	-	-	-	-	-	-
Total to Date	2623 gallons	205 gallons	153 gallons	0 gallons	0 gallons		328 loads		

Notes:
1. Estimates are based on the number of gallons of Maectite® applied.
2. Soil treatment with Maectite® and hauling to R2 may not occur on the same day.
3. 10/5/17– Table 2 loads were batch treated in the R2. Inserted this data into Table 1 for totalizing the volumes and gallons. Reset Table 2 "Batch loads" of 9 to zero until next ex-situ stockpile treatment.

2017 DU 9 – Figures P 1-16, 18, 20, 21, 23-27.
Bldg 1124, 1126, 3521, S361, 347, 3501, S3126, S3127, 521, 520, 502, 5342, 309, 340, 354, 9149, 232, 233, S269, S225A, 2127, 144, Boat House 1 & 2, 4205, 4206, 4207, 4213, 503, 5303, 5341, 5339, 5338, Bollards, Fire Hydrants, 5304, 5305, 4210, 3524, 3529, 5126, 5378, 3514, and other ancillary structures.
Foundations S464, 502, 4201, 5126, 5295, 5342.
2017 DU 8 – S-28, S-30 re-ex, Pipe figure P19
2017 DU 7 – Bldg 3502, 3503, 3504 shade cloth
2017 DU 5 – R2 Unit, Figure P17
2017 DU 3 – Housing figure P22, 419 MIS re-ex

Table 2. Soil loads hauled to the R2 for ex situ Maectite® treatment

	Load Totals				
	Hauled to R2 for treatment in R2 cell (# of truck loads)				
Date	Soils (DU9)	Soils (DU8)	Soils (DU7)	Soils (DU5)	Soils (DU3)
10/09/17	0	0	0	0	0
10/10/17	0	0	0	0	0
~End~	-	-	-	-	-
Batch loads to treat in R2	0 loads	0 loads	0 loads	0 loads	0 loads
Total to Date	130.8 loads	34 loads	18.5 loads	0 loads	0 loads

8/14/17 - Batch treatment of all stockpiled "ex situ" loads to date in R2 Cell 1. Entered this data into Table 1 on 8/14/17 for volume and gallon tracking.
8/15/17 - Add "Batch Loads to treat in R2" subtotal that tracks the truck loads placed for treatment. Reset this to zero once treatment event is complete.
8/23/17 – Batch #2 treatment event of all stockpiled "ex situ" loads to date in R2 Cells. Entered this data into Table 1 on 8/23/17 for volume and gallon tracking.
9/12/17 – Batch #3 treatment event of all stockpiled "ex situ" loads to date in R2 Cells. Entered this data into Table 1 on 9/11/17 & 9/12/17 for volume and gallon tracking.
9/21/17 – Batch #4 treatment event of all stockpiled "ex situ" loads to date in R2 Cells. Entered this data into Table 1 on 9/21/17 for volume and gallon tracking.
9/29/17 – Batch #5 treatment event of all stockpiled "ex situ" loads to date in R2 Cells. Entered this data into Table 1 on 9/29/17 for volume and gallon tracking.
10/5/17 – Batch #6 treatment event of all stockpiled "ex situ" loads to date in R2 Cells. Entered this data into Table 1 on 10/5/17 for volume and gallon tracking.

Table 2.1 Soil loads hauled to the R2, non-treated internment

Date	Load Totals				
	Hauled to R2, non-treated soil (# of truck loads)				
	Soils (DU9)	Soils (DU8)	Soils (DU7)	Soils (DU5)	Soils (DU3)
10/09/17	0	0	0	0	0
10/10/17	0	0	0	0	0
~End~	-	-	-	-	-
Total to Date	29.5 loads	75 loads	0 loads	0 loads	9 loads

Table 3. Weekly Load Estimates

Date	Treated Demo Debris Loads to R2	Clean Concrete Loads to Crusher	Metal Debris Loads To Boneyard	Clean Wood Loads	Steel Debris Loaded onto Barge	R2 waste layer toe adjustment sand
10/9/17	0	0	0	0	0	0
10/10/17	0	0	0	0	0	0
~End~	-	-	-	-	-	-
Season Total	3 loads	8 loads	0 loads	4 loads	195 loads	35 loads

Table 3.1 Weekly Load Estimates

Date	R2 final cover- 3" minus concrete
10/9/17	0
10/10/17	0
10/11/17	0
10/12/17	0
10/13/17	0
10/14/15	14
10/15/17	28
Season Total	42 loads

Table 4. Fire Hydrants, Pedestals and Monuments

Fire Hydrant Soil					Fire Hydrant Soil				
Fire Hydrant ID	Excavate	Sampled Collected FH # X 0-2"	Backfill	Notes- Red >75mg/kg Green<75mg/kg	Fire Hydrant ID	Excavate	Sampled Collected FH # X 0-2"	Backfill	Notes- Red >75mg/kg Green<75mg/kg
1	9/26/2017	10/3/2017	10/3/2017	FH 1 0-2"	41	DU-1	N/A	N/A	Prior excavation
2	9/27/2017	10/3/2017	10/3/2017	FH 2 0-2"	42	9/25/2017	9/27/2017	10/2/2017	FH 42 0-2"
3	9/26/2017	9/26/2017	10/3/2017	FH 3 0-2"	43	9/26/2017	10/2/2017	10/3/2017	FH 43 0-2"
4	9/26/2017	9/26/2017	10/3/2017	FH 4 0-2"	44	9/26/2017	9/29/2017	10/2/2017	FH 44 0-2"
5	9/27/2017	10/3/2017	10/3/2017	FH 5 0-2"	45	9/23/2017	9/28/2017	10/4/2017	FH 45 0-2"
6	9/27/2017	10/3/2017	10/3/2017	FH 6 0-2"	46	9/25/2017	10/3/2017	10/4/2017	FH 46 0-2"
7	9/26/2017	9/26/2017	10/3/2017	FH 7 0-2"	47	9/25/2017	10/4/2017	10/4/2017	FH 47 0-2"
8	9/25/2017	10/3/2017	10/3/2017	FH 8 0-2"	48	9/25/2017	10/3/2017	10/4/2017	FH 48 0-2"
9	9/25/2017	10/3/2017	10/3/2017	FH 9 0-2"	49	9/26/2017	9/26/2017	10/4/2017	FH 49 0-2"
10	9/25/2017	10/3/2017	10/3/2017	FH 10 0-2"	50	9/28/2017	10/3/2017	10/4/2017	FH 50 0-2"
11	8/31/2017	9/4/2017	9/30/2017	FH 11 0-2"	51	9/11/2017	9/11/2017	9/30/2017	FH 51 0-2"
12	DU-6	N/A	N/A	Prior excavation	52	9/11/2017	9/11/2017	9/30/2017	FH 52 0-2"
13	DU-6	N/A	N/A	Prior excavation	53	8/23/2017	8/23/2017	10/6/2017	FH 53 0-2"
14	DU-6	N/A	N/A	Prior excavation	54	9/11/2017	9/11/2017	10/6/2017	FH 54 0-2"re-ex
15	DU-6	N/A	N/A	Prior excavation	54A	8/23/2017	8/23/2017	10/6/2017	FH 54A 0-2"
16	9/23/2017	9/28/2017	9/29/2017	FH 16 0-2"	55	8/26/2017	8/26/2017	9/29/2017	FH 55 0-2"
17	9/23/2017	9/23/2017	9/23/2017	FH 17 0-2"	56	8/26/2017	8/30/2017	10/2/2017	FH 56 0-2"
18	9/23/2017	9/23/2017	9/23/2017	FH 18 0-2"	57	8/26/2017	8/26/2017	9/29/2017	FH 57 0-2"
19	9/23/2017	9/29/2017	10/2/2017	FH 19 0-2"	58	9/11/2017	9/11/2017	9/29/2017	FH 58 0-2"
20	9/23/2017	9/28/2017	9/29/2017	FH 20 0-2"	59	9/26/2017	9/27/2017	9/29/2017	FH 59 0-2"
21	9/26/2017	9/27/2017	9/30/2017	FH 21 0-2"	60	10/11/2017	10/11/2017	10/11/2017	FH 60 0-2"
22	9/25/2017	9/26/2017	9/26/2017	FH 22 0-2"	61	9/28/2017	9/29/2017	10/3/2017	FH 61 0-2"
23	9/26/2017	9/26/2017	9/26/2017	FH 23 0-2"	62	9/25/2017	9/27/2017	10/3/2017	FH 62 0-2"
24	9/26/2017	9/26/2017	9/29/2017	FH 24 0-2"	63	9/28/2017	9/29/2017	10/3/2017	FH 63 0-2"
25	9/26/2017	9/26/2017	9/29/2017	FH 25 0-2"	64	9/11/2017	9/11/2017	10/30/2017	FH 64 0-2"
26	9/26/2017	9/26/2017	9/29/2017	FH 26 0-2"	65	8/29/2017	8/30/2017	10/30/2017	FH 65 0-2"
27	9/23/2017	9/23/2017	9/30/2017	FH 27 0-2"	66	8/26/2017	8/26/2017	10/3/2017	FH 66 0-2"
28	9/23/2017	9/23/2017	9/30/2017	FH 28 0-2"	67	8/25/2017	8/30/2017	9/29/2017	FH 67 0-2"
29	9/26/2017	9/26/2017	10/2/2017	FH 29 0-2"	68	8/25/2017	8/30/2017	9/29/2017	FH 68 0-2"
30	9/26/2017	9/26/2017	9/26/2017	FH 30 0-2"	69	9/25/2017	9/27/2017	9/29/2017	FH 69 0-2"
31	9/26/2017	9/26/2017	9/26/2017	FH 31 0-2"	70	9/25/2017	9/27/2017	9/29/2017	FH 69 0-2"
32	9/26/2017	9/26/2017	9/26/2017	FH 32 0-2"	71	9/25/2017	9/27/2017	9/29/2017	FH 71 0-2"
33	9/26/2017	9/26/2017	9/26/2017	FH 33 0-2"	72	8/29/2017	9/27/2017	10/3/2017	FH 72 0-2"
34	9/26/2017	9/29/2017	9/30/2017	FH 34 0-2"	73	8/29/2017	9/11/2017	10/2/2017	FH 73 0-2"
35	9/26/2017	10/4/2017	10/4/2017	FH 35 0-2"	74	8/29/2017	8/29/2017	10/2/2017	FH 74 0-2"
36	9/26/2017	10/4/2017	10/4/2017	FH 36 0-2"	75	8/28/2017	8/29/2017	10/2/2017	FH 75 0-2"
37	9/25/2017	9/26/2017	10/2/2017	FH 37 0-2"	76	9/25/2017	9/29/2017	10/2/2017	FH 76 0-2"
38	9/26/2017	10/2/2017	10/2/2017	FH 38 0-2"	77	8/28/2017	8/29/2017	10/3/2017	FH 77 0-2"
39	DU-1	N/A	N/A	Prior excavation					
40	9/26/2017	9/27/2017	10/2/2017	FH 40 0-2"					

Pedestals /Monuments Soil					Pedestals /Monuments Soil				
Feature Unit ID	Excavate	Sampled Collected ID # X P100 0-2"	Backfill	Notes- Red >75mg/kg Green<75mg/kg	Feature Unit ID	Excavate	Sampled Collected ID # X P100 0-2"	Backfill	Notes- Red >75mg/kg Green<75mg/kg
1	8/29/2017	9/4/2017	9/30/2017	1-08 P100 0-2"	23	9/29/2017	10/2/2017	10/2/2017	23-44 P100 0-2"
2	8/29/2017	9/4/2017	9/30/2017	2-08 P100 0-2"	24	9/29/2017	10/2/2017	10/2/2017	24-42 P100 0-2"
3	8/29/2017	9/4/2017	9/30/2017	3-10 P100 0-2"	25	9/29/2017	10/2/2017	10/2/2017	25-38 P100 0-2"
4	8/29/2017	9/4/2017	9/30/2017	4-10 P100 0-2"	26	9/25/2017	10/3/2017	10/3/2017	26-07 P100 0-2"
5	8/29/2017	9/4/2017	9/30/2017	5-11 P100 0-2"	27	10/26/2017	10/3/2017	10/3/2017	27-03 P100 0-2"
6	9/11/2017	9/11/2017	9/30/2017	6-51 P100 0-2"	28	9/26/2017	10/4/2017	10/4/2017	28-30 P100 0-2"
7	9/11/2017	9/11/2017	9/30/2017	7-32 P100 0-2"	29	10/5/2017	10/5/2017	10/5/2017	29-R1 P100 0-2"
8	9/05/2017	9/18/2017	10/3/2017	8-20 P100 0-2"	30	10/5/2017	10/5/2017	10/5/2017	30-20 P100 0-2"
9	9/26/2017	9/28/2017	9/30/2017	9-33 P100 0-2"	31	10/5/2017	10/5/2017	10/5/2017	31-15 P100 0-2"
10	9/26/2017	9/28/2017	9/30/2017	10-23 P100 0-2"	32-71	DU-6	N/A	N/A	Prior excavation
11	9/26/2017	9/28/2017	9/29/2017	11-20 P100 0-2"	33-12	DU-6	N/A	N/A	Prior excavation
12	9/26/2017	9/28/2017	9/29/2017	12-28 P100 0-2"	34-15	DU-6	N/A	N/A	Prior excavation
13	9/26/2017	9/28/2017	9/29/2017	13-27 P100 0-2"	35-15	DU-6	N/A	N/A	Prior excavation
14	9/26/2017	9/28/2017	9/30/2017	14-08 P100 0-2"	36-14	DU-6	N/A	N/A	Prior excavation
15	9/27/2017	9/29/2017	9/30/2017	15-24 P100 0-2"	37-Cross	Abated	N/A	N/A	Maintained
16	9/27/2017	9/29/2017	9/30/2017	16-25 P100 0-2"	38-59	DU-8	N/A	N/A	Prior excavation
17	9/27/2017	9/29/2017	9/30/2017	17-25 P100 0-2"	39-59	DU-8	N/A	N/A	Prior excavation
18	9/28/2017	9/29/2017	9/29/2017	18-13 P100 0-2"	40-Ave Maria	Abated	N/A	N/A	Maintained
19	9/26/2017	9/29/2017	10/2/2017	19-44 P100 0-2"	41-Golf				
20	9/26/2017	9/29/2017	10/2/2017	20-44 P100 0-2"	42-R1	Abated	N/A	N/A	Concrete apron
21	9/26/2017	9/29/2017	9/30/2017	21-52 P100 0-2"	43-R1	Abated	N/A	N/A	Concrete apron
22	9/26/2017	10/2/2017	10/4/2017	22-49 P100 0-2"					

Fire Hydrant ID # per updated DBSI file -Navy Fresh Water Lines, Valves & Hydrants. BSI/DR-0034
Pedestal sample identification is a designated ID number followed by a dash and double-digit number relative to the closest Fire Hydrant ID location. No full prior map of pedestals exists.

Table 5. DU 5 Buttress & Cover - Import Clean Coral Sand

DU 5 IMPORT CLEAN CORAL						
DATE	NORTH Wall Loads	SOUTH Wall Loads	EAST Wall Loads	WEST Wall Loads	Days total loads	Days cubic yardage
10/9/2017	0	0	0	0	0	0
10/10/2017	0	0	0	0	0	0
10/11/2017	0	0	0	0	0	0
10/12/2017	0	0	0	0	0	0
10/13/2017	0	0	0	0	0	0
10/14/2017	0	0	0	0	0	0
10/15/2017	End	End	End	End	0	0
Load count per wall	282	0	16	0		
15cuyd estimate per wall	4230	0	240	0		
2017 Total R2 combined clean coral import LOADS				298		
Loads x 15cuyd estimate				4470		
R2 North Stockpile distribution-						
Truck loads into R2 cap & abutment				293		
Loads x 15cuyd estimate				4395		
Stockpile loads to DU-9 backfill				16		
Loads x 15cuyd estimate				240		

The R2 North Stockpile of clean coral sand for 2017 is 298 truck loads. The same north side abutment stockpile in 2016 is comingled, producing a larger available yardage than 2017 alone.
DU-9 distribution is noted in Table 5 for the R2 North stockpile. However, Table 6 indicates the project total DU-9 backfill yardage for 2017, regardless of where the clean sand originated (Borrow Source or the R2 North Stockpile)

Table 6. Excavation Plots - Import Clean Coral Sand

EXCAVATION PLOTS- IMPORT CLEAN CORAL BACKFILL							
DATE	DU-9 Loads	DU-8 Loads	DU-7 Loads	DU-5 Loads	DU-3 Loads	Days total loads	Days cubic yardage
10/9/2017	0.5	2.5	0	0	0	3	45
10/10/2017	21	0	0	0	0	21	315
10/11/2017	42	0	0	0	0	42	630
10/12/2017	0	0	0	0	0	0	0
10/13/2017	0	0	0	0	0	0	0
10/14/2017	0	0	0	0	0	0	0
10/15/2017	0	0	0	0	0	0	0
Load count per column	198.5	39.5	20	0	0		
15cuyd estimate per column	2977.5	592.5	300	0	0		
2017 Total combined clean import Backfill LOADS					258		
Loads x 15cuyd estimate					3870		

NW Demolition and Environmental
A Joint Venture

Daily Field Report

Date: Monday, October 16, 2017
Prepared by: Scott Wakefield

Project: Removal of Lead-Based Paint from Structures and Lead-Contaminated Soil
Location: Midway Atoll National Wildlife Refuge
Client: US Fish and Wildlife Service

Weather: Partly cloudy, wind 21-24 mph. Temperature ~81F

Personnel:

Name	Company	Site Hours
Scott Wakefield	NWDE Field Oversight	10
Jeff James	NWDE Supervisor	10
Joel Smith	NWDE Operator	10
Dalton Sullivan	NWDE Labor	10
Jevon Stone	NWDE Operator	10
Matt Manning	NWDE Operator	10
Lucas Peel	NWDE Labor	10
Tyler Wilson	NWDE Labor	10

Visitors/Additional Site Personnel:

Name	Title
MaryAnn Amann	U.S. FWS

Equipment:

Description	Model No.	Comments / Serial #
Pickup Truck	F350 Service Truck	NWDE
Flatbed Truck	Ford F450	NWDE
Container Truck	Peterbuilt	NWDE
Skid Steer	Bobcat S185	NWDE
Tracked Skid Steer	Bobcat T750	NWDE
Tracked Skid Steer	Bobcat	NWDE
Mini-Excavator	CAT 308	NWDE
Excavator	Volvo EC290BLC	NWDE
Excavator	Volvo EC290BLC	NWDE
Excavator	Volvo EC290	NWDE
Off road Dump Truck	Volvo A30D	NWDE
Off road Dump Truck	Volvo A30D	NWDE
Off road Dump Truck	Volvo A30D	NWDE
Excavator – High reach	Komatsu PC400HD	NWDE
Excavator	Komatsu 450	NWDE

Materials Delivered:

Description	QTY	Condition/Comments
Diesel	0 gallons	
Gasoline	0 gallons	

Description of Work:

0700 – Health and Safety meeting at NAF staging area. Review today's work tasks.

Today's focus will be witness layer and cover rock placement at the R2.

The R2 final cover work resumes for another day of hauling 3" minus crushed concrete. Two haul trucks are operating round trips from the boneyard stockpile area to the R2. At the R2 materials are directly dumped onto the orange witness layer geotextile. The D3 Cat continues to blade out materials at a target 1' lift on top of the geotextile.

The southwest side of the R2 exterior slope is being worked with the 290 excavator for angle and compaction. Hydrant water is added to amend the coral sand while compaction is occurring. At the east end of the south wall the rolled out orange geotextile ends are being trimmed to length, terminating at the toe of the 3:1.

0830 – The mid point of the R2 north side is being shaped and compacted for the 3:1 slope. Working towards the west, the angle is being constructed with the same means of added hydrant water and the 290 compaction. The resulting slope compaction is consistent with the finished sand cover R2 areas using the agraTronix penetrometer.

0930 – The center section of the R2 is prepped for setting in an additional 8 rolls of orange TenCate Mirafi geotextile. The layout from west to east is positioned to maintain the 2' overlap at all seam edges. Sandbags are in use to anchor the geotextile in the steadily brisk paced wind out of the east.

While the rolls of geotextile are set and placed, the crushed 3" minus concrete has continued to be brought in with trucks and bladed out in the southeast region. Materials are being graded over the southern slope area in the targeted 1' lift.

1200 – Lunch

1230 – The eight rolls of geotextile fabric are progressing northward to the midpoint ridge of the R2 and pointed onward for the north wall slope. The recent south ends of geotextile are having rock material being pushed onto it in the target lift.

1500 – Crushed concrete continues being hauled inbound to the R2 with the two haul trucks. The eight rolls of orange fabris have made it from the southern toe to the northern grade break. Sand bags are anchoring the materials as 3" minus is dozed into the prepared areas for final cover.

The northwest corner section of the slope abutment is finish graded and compacted with the Volvo 290. Working around the corner, then heading south the continue finalizing the west side slope. Hydrant water is in use to amend the clean coral sand as compaction forms the 3:1 slope.

1730 – Ending the work day.
Clean sand moved from the north R2 stockpile to the edges of the R2 today is 1 load.
3" minus processed concrete material from the Boneyard to the R2 final cap is 46 loads.

Photographs:

Photo 01: R2 Unit – View south. Crushed concrete being placed on today's placed geotextile

Photo 02: R2 Unit – View west. Progress of final cap

Photo 03: R2 Unit – View northeast. South side showing sand, geotextile and 3” minus progress on slope

Photo 04: R2 Unit – View southeast. Afternoon progress of geotextile and 3” minus concrete

Table 1. Maectite and Treated Soil Total Estimates

	Maectite Totals						Treated Soil Totals[1,2]		
	Applied Today (gal)					Total to Date	Excavated and Hauled to R-2 Unit **Today**		Excavated and Hauled to R-2 Unit **Total to Date**
Date	Soils (DU9)	Soils (DU8)	Soils (DU7)	Soils (DU5)	Soils (DU3)	(gal)	Load	^{3}yds[1]	^{3}yds[1]
10/09/17	0	0	0	0	0	2981	0	0	4087
10/10/17	0	0	0	0	0	2981	0	0	4087
~End~	-	-	-	-	-	-	-	-	-
Total to Date	2623 gallons	205 gallons	153 gallons	0 gallons	0 gallons		328 loads		

Notes:
1. Estimates are based on the number of gallons of Maectite® applied.
2. Soil treatment with Maectite® and hauling to R2 may not occur on the same day.
3. 10/5/17– Table 2 loads were batch treated in the R2. Inserted this data into Table 1 for totalizing the volumes and gallons. Reset Table 2 "Batch loads" of 9 to zero until next ex-situ stockpile treatment.

2017 DU 9 – Figures P 1-16, 18, 20, 21, 23-27.
Bldg 1124, 1126, 3521, S361, 347, 3501, S3126, S3127, 521, 520, 502, 5342, 309, 340, 354, 9149, 232, 233, S269, S225A, 2127, 144, Boat House 1 & 2, 4205, 4206, 4207, 4213, 503, 5303, 5341, 5339, 5338, Bollards, Fire Hydrants, 5304, 5305, 4210, 3524, 3529, 5126, 5378, 3514, and other ancillary structures.
Foundations S464, 502, 4201, 5126, 5295, 5342.
2017 DU 8 – S-28, S-30 re-ex, Pipe figure P19
2017 DU 7 – Bldg 3502, 3503, 3504 shade cloth
2017 DU 5 – R2 Unit, Figure P17
2017 DU 3 – Housing figure P22, 419 MIS re-ex

Table 2. Soil loads hauled to the R2 for ex situ Maectite® treatment

	Load Totals				
	Hauled to R2 for treatment in R2 cell (# of truck loads)				
Date	Soils (DU9)	Soils (DU8)	Soils (DU7)	Soils (DU5)	Soils (DU3)
10/09/17	0	0	0	0	0
10/10/17	0	0	0	0	0
~End~	-	-	-	-	-
Batch loads to treat in R2	0 loads	0 loads	0 loads	0 loads	0 loads
Total to Date	130.8 loads	34 loads	18.5 loads	0 loads	0 loads

8/14/17 - Batch treatment of all stockpiled "ex situ" loads to date in R2 Cell 1. Entered this data into Table 1 on 8/14/17 for volume and gallon tracking.
8/15/17 - Add "Batch Loads to treat in R2" subtotal that tracks the truck loads placed for treatment. Reset this to zero once treatment event is complete.
8/23/17 – Batch #2 treatment event of all stockpiled "ex situ" loads to date in R2 Cells. Entered this data into Table 1 on 8/23/17 for volume and gallon tracking.
9/12/17 – Batch #3 treatment event of all stockpiled "ex situ" loads to date in R2 Cells. Entered this data into Table 1 on 9/11/17 & 9/12/17 for volume and gallon tracking.
9/21/17 – Batch #4 treatment event of all stockpiled "ex situ" loads to date in R2 Cells. Entered this data into Table 1 on 9/21/17 for volume and gallon tracking.
9/29/17 – Batch #5 treatment event of all stockpiled "ex situ" loads to date in R2 Cells. Entered this data into Table 1 on 9/29/17 for volume and gallon tracking.
10/5/17 – Batch #6 treatment event of all stockpiled "ex situ" loads to date in R2 Cells. Entered this data into Table 1 on 10/5/17 for volume and gallon tracking.

Table 2.1 Soil loads hauled to the R2, non-treated internment

Date	Load Totals				
	Hauled to R2, non-treated soil (# of truck loads)				
	Soils (DU9)	Soils (DU8)	Soils (DU7)	Soils (DU5)	Soils (DU3)
10/09/17	0	0	0	0	0
10/10/17	0	0	0	0	0
~End~	-	-	-	-	-
Total to Date	29.5 loads	75 loads	0 loads	0 loads	9 loads

Table 3. Weekly Load Estimates

Date	Treated Demo Debris Loads to R2	Clean Concrete Loads to Crusher	Metal Debris Loads To Boneyard	Clean Wood Loads	Steel Debris Loaded onto Barge	R2 waste layer toe adjustment sand
10/9/17	0	0	0	0	0	0
10/10/17	0	0	0	0	0	0
~End~	-	-	-	-	-	-
Season Total	3 loads	8 loads	0 loads	4 loads	195 loads	35 loads

Table 3.1 Weekly Load Estimates

Date	R2 final cover- 3" minus concrete
10/16/17	46
10/17/17	
10/18/17	
10/19/17	
10/20/17	
10/21/15	
10/22/17	
Season Total	88 loads

Table 4. Fire Hydrants, Pedestals and Monuments

Fire Hydrant Soil					Fire Hydrant Soil				
Fire Hydrant ID	Excavate	Sampled Collected FH # X 0-2"	Backfill	Notes- Red >75mg/kg Green<75mg/kg	Fire Hydrant ID	Excavate	Sampled Collected FH # X 0-2"	Backfill	Notes- Red >75mg/kg Green<75mg/kg
1	9/26/2017	10/3/2017	10/3/2017	FH 1 0-2"	41	DU-1	N/A	N/A	Prior excavation
2	9/27/2017	10/3/2017	10/3/2017	FH 2 0-2"	42	9/25/2017	9/27/2017	10/2/2017	FH 42 0-2"
3	9/26/2017	9/26/2017	10/3/2017	FH 3 0-2"	43	9/26/2017	10/2/2017	10/3/2017	FH 43 0-2"
4	9/26/2017	9/26/2017	10/3/2017	FH 4 0-2"	44	9/26/2017	9/29/2017	10/2/2017	FH 44 0-2"
5	9/27/2017	10/3/2017	10/3/2017	FH 5 0-2"	45	9/23/2017	9/28/2017	10/4/2017	FH 45 0-2"
6	9/27/2017	10/3/2017	10/3/2017	FH 6 0-2"	46	9/25/2017	10/3/2017	10/4/2017	FH 46 0-2"
7	9/26/2017	9/26/2017	10/3/2017	FH 7 0-2"	47	9/25/2017	10/4/2017	10/4/2017	FH 47 0-2"
8	9/25/2017	10/3/2017	10/3/2017	FH 8 0-2"	48	9/25/2017	10/3/2017	10/4/2017	FH 48 0-2"
9	9/25/2017	10/3/2017	10/3/2017	FH 9 0-2"	49	9/26/2017	9/26/2017	10/4/2017	FH 49 0-2"
10	9/25/2017	10/3/2017	10/3/2017	FH 10 0-2"	50	9/28/2017	10/3/2017	10/4/2017	FH 50 0-2"
11	8/31/2017	9/4/2017	9/30/2017	FH 11 0-2"	51	9/11/2017	9/11/2017	9/30/2017	FH 51 0-2"
12	DU-6	N/A	N/A	Prior excavation	52	9/11/2017	9/11/2017	9/30/2017	FH 52 0-2"
13	DU-6	N/A	N/A	Prior excavation	53	8/23/2017	8/23/2017	10/6/2017	FH 53 0-2"
14	DU-6	N/A	N/A	Prior excavation	54	9/11/2017	9/11/2017	10/6/2017	FH 54 0-2"re-ex
15	DU-6	N/A	N/A	Prior excavation	54A	8/23/2017	8/23/2017	10/6/2017	FH 54A 0-2"
16	9/23/2017	9/28/2017	9/29/2017	FH 16 0-2"	55	8/26/2017	8/26/2017	9/29/2017	FH 55 0-2"
17	9/23/2017	9/23/2017	9/23/2017	FH 17 0-2"	56	8/26/2017	8/30/2017	10/2/2017	FH 56 0-2"
18	9/23/2017	9/23/2017	9/23/2017	FH 18 0-2"	57	8/26/2017	8/26/2017	9/29/2017	FH 57 0-2"
19	9/23/2017	9/29/2017	10/2/2017	FH 19 0-2"	58	9/11/2017	9/11/2017	9/29/2017	FH 58 0-2"
20	9/23/2017	9/28/2017	9/29/2017	FH 20 0-2"	59	9/26/2017	9/27/2017	9/29/2017	FH 59 0-2"
21	9/26/2017	9/27/2017	9/30/2017	FH 21 0-2"	60	10/11/2017	10/11/2017	10/11/2017	FH 60 0-2"
22	9/25/2017	9/26/2017	9/26/2017	FH 22 0-2"	61	9/28/2017	9/29/2017	10/3/2017	FH 61 0-2"
23	9/26/2017	9/26/2017	9/26/2017	FH 23 0-2"	62	9/25/2017	9/27/2017	10/3/2017	FH 62 0-2"
24	9/26/2017	9/26/2017	9/29/2017	FH 24 0-2"	63	9/28/2017	9/29/2017	10/3/2017	FH 63 0-2"
25	9/26/2017	9/26/2017	9/29/2017	FH 25 0-2"	64	9/11/2017	9/11/2017	10/30/2017	FH 64 0-2"
26	9/26/2017	9/26/2017	9/29/2017	FH 26 0-2"	65	8/29/2017	8/30/2017	10/30/2017	FH 65 0-2"
27	9/23/2017	9/23/2017	9/30/2017	FH 27 0-2"	66	8/26/2017	8/26/2017	10/3/2017	FH 66 0-2"
28	9/23/2017	9/23/2017	9/30/2017	FH 28 0-2"	67	8/25/2017	8/30/2017	9/29/2017	FH 67 0-2"
29	9/26/2017	9/26/2017	10/2/2017	FH 29 0-2"	68	8/25/2017	8/30/2017	9/29/2017	FH 68 0-2"
30	9/26/2017	9/26/2017	9/26/2017	FH 30 0-2"	69	9/25/2017	9/27/2017	9/29/2017	FH 69 0-2"
31	9/26/2017	9/26/2017	9/26/2017	FH 31 0-2"	70	9/25/2017	9/27/2017	9/29/2017	FH 69 0-2"
32	9/26/2017	9/26/2017	9/26/2017	FH 32 0-2"	71	9/25/2017	9/27/2017	9/29/2017	FH 71 0-2"
33	9/26/2017	9/26/2017	9/26/2017	FH 33 0-2"	72	8/29/2017	9/27/2017	10/3/2017	FH 72 0-2"
34	9/26/2017	9/29/2017	9/30/2017	FH 34 0-2"	73	8/29/2017	9/11/2017	10/2/2017	FH 73 0-2"
35	9/26/2017	10/4/2017	10/4/2017	FH 35 0-2"	74	8/29/2017	8/29/2017	10/2/2017	FH 74 0-2"
36	9/26/2017	10/4/2017	10/4/2017	FH 36 0-2"	75	8/28/2017	8/29/2017	10/2/2017	FH 75 0-2"
37	9/25/2017	9/26/2017	10/2/2017	FH 37 0-2"	76	9/25/2017	9/29/2017	10/2/2017	FH 76 0-2"
38	9/26/2017	10/2/2017	10/2/2017	FH 38 0-2"	77	8/28/2017	8/29/2017	10/3/2017	FH 77 0-2"
39	DU-1	N/A	N/A	Prior excavation					
40	9/26/2017	9/27/2017	10/2/2017	FH 40 0-2"					

Pedestals /Monuments Soil					Pedestals /Monuments Soil				
Feature Unit ID	Excavate	Sampled Collected ID # X P100 0-2"	Backfill	Notes- Red >75mg/kg Green<75mg/kg	Feature Unit ID	Excavate	Sampled Collected ID # X P100 0-2"	Backfill	Notes- Red >75mg/kg Green<75mg/kg
1	8/29/2017	9/4/2017	9/30/2017	1-08 P100 0-2"	23	9/29/2017	10/2/2017	10/2/2017	23-44 P100 0-2"
2	8/29/2017	9/4/2017	9/30/2017	2-08 P100 0-2"	24	9/29/2017	10/2/2017	10/2/2017	24-42 P100 0-2"
3	8/29/2017	9/4/2017	9/30/2017	3-10 P100 0-2"	25	9/29/2017	10/2/2017	10/2/2017	25-38 P100 0-2"
4	8/29/2017	9/4/2017	9/30/2017	4-10 P100 0-2"	26	9/25/2017	10/3/2017	10/3/2017	26-07 P100 0-2"
5	8/29/2017	9/4/2017	9/30/2017	5-11P100 0-2"	27	10/26/2017	10/3/2017	10/3/2017	27-03 P100 0-2"
6	9/11/2017	9/11/2017	9/30/2017	6-51P100 0-2"	28	9/26/2017	10/4/2017	10/4/2017	28-30 P100 0-2"
7	9/11/2017	9/11/2017	9/30/2017	7-32 P100 0-2"	29	10/5/2017	10/5/2017	10/5/2017	29-R1P100 0-2"
8	9/05/2017	9/18/2017	10/3/2017	8-20 P100 0-2"	30	10/5/2017	10/5/2017	10/5/2017	30-20 P100 0-2"
9	9/26/2017	9/28/2017	9/30/2017	9-33 P100 0-2"	31	10/5/2017	10/5/2017	10/5/2017	31-15 P100 0-2"
10	9/26/2017	9/28/2017	9/30/2017	10-23 P100 0-2"	32-71	DU-6	N/A	N/A	Prior excavation
11	9/26/2017	9/28/2017	9/29/2017	11-20 P100 0-2"	33-12	DU-6	N/A	N/A	Prior excavation
12	9/26/2017	9/28/2017	9/29/2017	12-28 P100 0-2"	34-15	DU-6	N/A	N/A	Prior excavation
13	9/26/2017	9/28/2017	9/29/2017	13-27 P100 0-2"	35-15	DU-6	N/A	N/A	Prior excavation
14	9/26/2017	9/28/2017	9/30/2017	14-08 P100 0-2"	36-14	DU-6	N/A	N/A	Prior excavation
15	9/27/2017	9/29/2017	9/30/2017	15-24 P100 0-2"	37-Cross	Abated	N/A	N/A	Maintained
16	9/27/2017	9/29/2017	9/30/2017	16-25 P100 0-2"	38-59	DU-8	N/A	N/A	Prior excavation
17	9/27/2017	9/29/2017	9/30/2017	17-25 P100 0-2"	39-59	DU-8	N/A	N/A	Prior excavation
18	9/28/2017	9/29/2017	9/29/2017	18-13 P100 0-2"	40-Ave Maria	Abated	N/A	N/A	Maintained
19	9/26/2017	9/29/2017	10/2/2017	19-44 P100 0-2"	41-Golf				
20	9/26/2017	9/29/2017	10/2/2017	20-44 P100 0-2"	42-R1	Abated	N/A	N/A	Concrete apron
21	9/26/2017	9/29/2017	9/30/2017	21-52 P100 0-2"	43-R1	Abated	N/A	N/A	Concrete apron
22	9/26/2017	10/2/2017	10/4/2017	22-49 P100 0-2"					

Fire Hydrant ID # per updated DBSI file -Navy Fresh Water Lines, Valves & Hydrants. BSI/DR-0034
Pedestal sample identification is a designated ID number followed by a dash and double-digit number relative to the closest Fire Hydrant ID location. No full prior map of pedestals exists.

Table 5. DU 5 Buttress & Cover - Import Clean Coral Sand

DU 5 IMPORT CLEAN CORAL						
DATE	NORTH Wall Loads	SOUTH Wall Loads	EAST Wall Loads	WEST Wall Loads	Days total loads	Days cubic yardage
10/9/2017	0	0	0	0	0	0
10/10/2017	0	0	0	0	0	0
10/11/2017	0	0	0	0	0	0
10/12/2017	0	0	0	0	0	0
10/13/2017	0	0	0	0	0	0
10/14/2017	0	0	0	0	0	0
10/15/2017	End	End	End	End	0	0
Load count per wall	282	0	16	0		
15cuyd estimate per wall	4230	0	240	0		
2017 Total R2 combined clean coral import LOADS				298		
Loads x 15cuyd estimate				4470		
R2 North Stockpile distribution-						
Truck loads into R2 cap & abutment				294		
Loads x 15cuyd estimate				4410		
Stockpile loads to DU-9 backfill				16		
Loads x 15cuyd estimate				240		

The R2 North Stockpile of clean coral sand for 2017 is 298 truck loads. The same north side abutment stockpile in 2016 is comingled, producing a larger available yardage than 2017 alone.
DU-9 distribution is noted in Table 5 for the R2 North stockpile. However, Table 6 indicates the project total DU-9 backfill yardage for 2017, regardless of where the clean sand originated (Borrow Source or the R2 North Stockpile)

Table 6. Excavation Plots - Import Clean Coral Sand

EXCAVATION PLOTS- IMPORT CLEAN CORAL BACKFILL							
DATE	DU-9 Loads	DU-8 Loads	DU-7 Loads	DU-5 Loads	DU-3 Loads	Days total loads	Days cubic yardage
10/16/2017	0	0	0	0	0	0	0
10/17/2017						0	0
10/18/2017						0	0
10/19/2017						0	0
10/20/2017						0	0
10/21/2017						0	0
10/22/2017						0	0
Load count per column	198.5	39.5	20	0	0		
15cuyd estimate per column	2977.5	592.5	300	0	0		
2017 Total combined clean import Backfill LOADS					258		
Loads x 15cuyd estimate					3870		

NW Demolition and Environmental
A Joint Venture

Daily Field Report

Date: Tuesday, October 17, 2017
Prepared by: Scott Wakefield

Project: Removal of Lead-Based Paint from Structures and Lead-Contaminated Soil
Location: Midway Atoll National Wildlife Refuge
Client: US Fish and Wildlife Service

Weather: Partly cloudy, wind 22 mph. Temperature ~82F

Personnel:

Name	Company	Site Hours
Scott Wakefield	NWDE Field Oversight	10
Jeff James	NWDE Supervisor	10
Joel Smith	NWDE Operator	10
Dalton Sullivan	NWDE Labor	10
Jevon Stone	NWDE Operator	10
Matt Manning	NWDE Operator	10
Lucas Peel	NWDE Labor	10
Tyler Wilson	NWDE Labor	10

Visitors/Additional Site Personnel:

Name	Title
MaryAnn Amann	U.S. FWS

Equipment:

Description	Model No.	Comments / Serial #
Pickup Truck	F350 Service Truck	NWDE
Flatbed Truck	Ford F450	NWDE
Container Truck	Peterbuilt	NWDE
Skid Steer	Bobcat S185	NWDE
Tracked Skid Steer	Bobcat T750	NWDE
Tracked Skid Steer	Bobcat	NWDE
Mini-Excavator	CAT 308	NWDE
Excavator	Volvo EC290BLC	NWDE
Excavator	Volvo EC290BLC	NWDE
Excavator	Volvo EC290	NWDE
Off road Dump Truck	Volvo A30D	NWDE
Off road Dump Truck	Volvo A30D	NWDE
Off road Dump Truck	Volvo A30D	NWDE
Excavator – High reach	Komatsu PC400HD	NWDE
Excavator	Komatsu 450	NWDE

Materials Delivered:

Description	QTY	Condition/Comments
Diesel	296 gallons	
Gasoline	0 gallons	

Description of Work:

0700 – Health and Safety meeting at NAF staging area. Review today's work tasks.

Today's focus will be witness layer and cover rock placement at the R2.

The R2 final cover work resumes for another day of hauling 3" minus crushed concrete. Two haul trucks are operating round trips from the boneyard stockpile area to the R2. At the R2 materials are directly dumped onto the orange witness layer geotextile. The D3 Cat continues to blade out materials at a target 1' lift on top of the geotextile.

91' of the west end of the R2 is being prepared for seven rolls of orange geotextile. This will span north to south and cover from the previous day's ending geotextile to near the west grade break line. Layout and align the rolls, working west to east. The shingling 2' overlap of materials are predominantly positioned so that rock being moved in and dumped will go over the lapped orange material and not lift the edge. Today's steady wind requires significant sand bag anchors on the materials east edge to maintain position.

0900 – Rock hauling beginning this morning has continued non stop as 3" minus concrete is placed and bladed with the D3 tracked dozer. Grade stick and Specta laser level are in use for lift and grade reference.

1000 – Weekly conference call with Mainland and Hawaii project offices. See NWDE Midway Meeting Agenda for specific detail.

1030 – Orange geotextile is positioned for the southern half of the west end. Continue placing crushed concrete across the area. Steel rebar debris is being hand picked and stockpiled for removal.

The clean coral sand stockpile at the R2 north side is excess of the R2 final cap requirement. Begin loading sand into one A30 haul truck to be placed in select excavations, primarily DU-9 locations. Today, small plots that receive clean sand are Bldg 5126 Sewer Pump Station, Bldg 5378 Metal Shed, Bldg 3514 Security Storage, 3126E Reservoir and 3127W Reservoir. The balance of clean sand is destined for Water Tower 5304 as material runs short. Currently the Borrow Source clean sand area at the Cargo Pier remains closed as noted in previous weeks DFR's due to wildlife.

1100 – Crushed concrete blading is currently on the south slope approximately 100' from the southwest corner. Material continues to be placed at the target lift on top of the orange geotextile.

1200 – Lunch

1230 – Resume rolling out the second half of today's seven rolls across the vast R2. Edges are being sandbagged to keep the position correct and maintain the 2' overlap edges.

1530 - The seven 300' x 15' rolls have reached the north toe of the abutment. Cut off the excess and move the drop pieces to the northeast slope corner and begin aligning panels onto the slope. Work southward, progressing to near the Rainstore^3 inspection monuments.

1730 – Ending the work day.
Clean sand moved from the north R2 stockpile to excavation backfill areas are 22 loads.
3" minus processed concrete material from the Boneyard to the R2 final cap is 52 loads.

Photographs:

Photo 01: R2 Unit – View northeast. Morning status

Photo 02: R2 Unit – View west. Placing 7 rolls of orange TenCate Mirafi geotextile at the west end

Photo 03: R2 Unit – View north. Southwest corner slope and valve can extensions

Photo 04: R2 Unit – View east. Southwest corner slope and valve can extensions

Photo 05: R2 Unit – View west. Northwest area sand, geotextile and 3” minus progress on slope

Photo 06: R2 Unit – View south. Progress of geotextile placement

Photo 07: R2 Unit – View north. Dwindling clean coral sand stockpile bound for DU-9 excavations

Photo 08: R2 Unit – Boneyard 3" minus concrete status at the end of the day

Photo 09: R2 Unit – View north. Overview of R2 final cover progress

Photo 10: R2 Unit – View south. Afternoon overview of R2 final cover progress

Table 1. Maectite and Treated Soil Total Estimates

	Maectite Totals						Treated Soil Totals[1,2]		
	Applied Today (gal)					Total to Date	Excavated and Hauled to R-2 Unit **Today**		Excavated and Hauled to R-2 Unit **Total to Date**
Date	Soils (DU9)	Soils (DU8)	Soils (DU7)	Soils (DU5)	Soils (DU3)	(gal)	Load	^{3}yds[1]	^{3}yds[1]
10/09/17	0	0	0	0	0	2981	0	0	4087
10/10/17	0	0	0	0	0	2981	0	0	4087
~End~	-	-	-	-	-	-	-	-	-
Total to Date	2623 gallons	205 gallons	153 gallons	0 gallons	0 gallons		328 loads		

Notes:
1. Estimates are based on the number of gallons of Maectite® applied.
2. Soil treatment with Maectite® and hauling to R2 may not occur on the same day.
3. 10/5/17– Table 2 loads were batch treated in the R2. Inserted this data into Table 1 for totalizing the volumes and gallons. Reset Table 2 "Batch loads" of 9 to zero until next ex-situ stockpile treatment.

2017 DU 9 – Figures P 1-16, 18, 20, 21, 23-27.
Bldg 1124, 1126, 3521, S361, 347, 3501, S3126, S3127, 521, 520, 502, 5342, 309, 340, 354, 9149, 232, 233, S269, S225A, 2127, 144, Boat House 1 & 2, 4205, 4206, 4207, 4213, 503, 5303, 5341, 5339, 5338, Bollards, Fire Hydrants, 5304, 5305, 4210, 3524, 3529, 5126, 5378, 3514, and other ancillary structures.
Foundations S464, 502, 4201, 5126, 5295, 5342.
2017 DU 8 – S-28, S-30 re-ex, Pipe figure P19
2017 DU 7 – Bldg 3502, 3503, 3504 shade cloth
2017 DU 5 – R2 Unit, Figure P17
2017 DU 3 – Housing figure P22, 419 MIS re-ex

Table 2. Soil loads hauled to the R2 for ex situ Maectite® treatment

	Load Totals				
	Hauled to R2 for treatment in R2 cell (# of truck loads)				
Date	Soils (DU9)	Soils (DU8)	Soils (DU7)	Soils (DU5)	Soils (DU3)
10/09/17	0	0	0	0	0
10/10/17	0	0	0	0	0
~End~	-	-	-	-	-
Batch loads to treat in R2	0 loads	0 loads	0 loads	0 loads	0 loads
Total to Date	130.8 loads	34 loads	18.5 loads	0 loads	0 loads

8/14/17 - Batch treatment of all stockpiled "ex situ" loads to date in R2 Cell 1. Entered this data into Table 1 on 8/14/17 for volume and gallon tracking.
8/15/17 - Add "Batch Loads to treat in R2" subtotal that tracks the truck loads placed for treatment. Reset this to zero once treatment event is complete.
8/23/17 – Batch #2 treatment event of all stockpiled "ex situ" loads to date in R2 Cells. Entered this data into Table 1 on 8/23/17 for volume and gallon tracking.
9/12/17 – Batch #3 treatment event of all stockpiled "ex situ" loads to date in R2 Cells. Entered this data into Table 1 on 9/11/17 & 9/12/17 for volume and gallon tracking.
9/21/17 – Batch #4 treatment event of all stockpiled "ex situ" loads to date in R2 Cells. Entered this data into Table 1 on 9/21/17 for volume and gallon tracking.
9/29/17 – Batch #5 treatment event of all stockpiled "ex situ" loads to date in R2 Cells. Entered this data into Table 1 on 9/29/17 for volume and gallon tracking.
10/5/17 – Batch #6 treatment event of all stockpiled "ex situ" loads to date in R2 Cells. Entered this data into Table 1 on 10/5/17 for volume and gallon tracking.

Table 2.1 Soil loads hauled to the R2, non-treated internment

Date	Load Totals				
	Hauled to R2, non-treated soil (# of truck loads)				
	Soils (DU9)	Soils (DU8)	Soils (DU7)	Soils (DU5)	Soils (DU3)
10/09/17	0	0	0	0	0
10/10/17	0	0	0	0	0
~End~	-	-	-	-	-
Total to Date	29.5 loads	75 loads	0 loads	0 loads	9 loads

Table 3. Weekly Load Estimates

Date	Treated Demo Debris Loads to R2	Clean Concrete Loads to Crusher	Metal Debris Loads To Boneyard	Clean Wood Loads	Steel Debris Loaded onto Barge	R2 waste layer toe adjustment sand
10/9/17	0	0	0	0	0	0
10/10/17	0	0	0	0	0	0
~End~	-	-	-	-	-	-
Season Total	3 loads	8 loads	0 loads	4 loads	195 loads	35 loads

Table 3.1 Weekly Load Estimates

Date	R2 final cover- 3" minus concrete
10/16/17	46
10/17/17	52
10/18/17	
10/19/17	
10/20/17	
10/21/15	
10/22/17	
Season Total	140 loads

Table 4. Fire Hydrants, Pedestals and Monuments

Fire Hydrant Soil					Fire Hydrant Soil				
Fire Hydrant ID	Excavate	Sampled Collected FH # X 0-2"	Backfill	Notes- Red >75mg/kg Green<75mg/kg	Fire Hydrant ID	Excavate	Sampled Collected FH # X 0-2"	Backfill	Notes- Red >75mg/kg Green<75mg/kg
1	9/26/2017	10/3/2017	10/3/2017	FH 1 0-2"	41	DU-1	N/A	N/A	Prior excavation
2	9/27/2017	10/3/2017	10/3/2017	FH 2 0-2"	42	9/25/2017	9/27/2017	10/2/2017	FH 42 0-2"
3	9/26/2017	9/26/2017	10/3/2017	FH 3 0-2"	43	9/26/2017	10/2/2017	10/3/2017	FH 43 0-2"
4	9/26/2017	9/26/2017	10/3/2017	FH 4 0-2"	44	9/26/2017	9/29/2017	10/2/2017	FH 44 0-2"
5	9/27/2017	10/3/2017	10/3/2017	FH 5 0-2"	45	9/23/2017	9/28/2017	10/4/2017	FH 45 0-2"
6	9/27/2017	10/3/2017	10/3/2017	FH 6 0-2"	46	9/25/2017	10/3/2017	10/4/2017	FH 46 0-2"
7	9/26/2017	9/26/2017	10/3/2017	FH 7 0-2"	47	9/25/2017	10/4/2017	10/4/2017	FH 47 0-2"
8	9/25/2017	10/3/2017	10/3/2017	FH 8 0-2"	48	9/25/2017	10/3/2017	10/4/2017	FH 48 0-2"
9	9/25/2017	10/3/2017	10/3/2017	FH 9 0-2"	49	9/26/2017	9/26/2017	10/4/2017	FH 49 0-2"
10	9/25/2017	10/3/2017	10/3/2017	FH 10 0-2"	50	9/28/2017	10/3/2017	10/4/2017	FH 50 0-2"
11	8/31/2017	9/4/2017	9/30/2017	FH 11 0-2"	51	9/11/2017	9/11/2017	9/30/2017	FH 51 0-2"
12	DU-6	N/A	N/A	Prior excavation	52	9/11/2017	9/11/2017	9/30/2017	FH 52 0-2"
13	DU-6	N/A	N/A	Prior excavation	53	8/23/2017	8/23/2017	10/6/2017	FH 53 0-2"
14	DU-6	N/A	N/A	Prior excavation	54	9/11/2017	9/11/2017	10/6/2017	FH 54 0-2"re-ex
15	DU-6	N/A	N/A	Prior excavation	54A	8/23/2017	8/23/2017	10/6/2017	FH 54A 0-2"
16	9/23/2017	9/28/2017	9/29/2017	FH 16 0-2"	55	8/26/2017	8/26/2017	9/29/2017	FH 55 0-2"
17	9/23/2017	9/23/2017	9/23/2017	FH 17 0-2"	56	8/26/2017	8/30/2017	10/2/2017	FH 56 0-2"
18	9/23/2017	9/23/2017	9/23/2017	FH 18 0-2"	57	8/26/2017	8/26/2017	9/29/2017	FH 57 0-2"
19	9/23/2017	9/29/2017	10/2/2017	FH 19 0-2"	58	9/11/2017	9/11/2017	9/29/2017	FH 58 0-2"
20	9/23/2017	9/28/2017	9/29/2017	FH 20 0-2"	59	9/26/2017	9/27/2017	9/29/2017	FH 59 0-2"
21	9/26/2017	9/27/2017	9/30/2017	FH 21 0-2"	60	10/11/2017	10/11/2017	10/11/2017	FH 60 0-2"
22	9/25/2017	9/26/2017	9/26/2017	FH 22 0-2"	61	9/28/2017	9/29/2017	10/3/2017	FH 61 0-2"
23	9/26/2017	9/26/2017	9/26/2017	FH 23 0-2"	62	9/25/2017	9/27/2017	10/3/2017	FH 62 0-2"
24	9/26/2017	9/26/2017	9/29/2017	FH 24 0-2"	63	9/28/2017	9/29/2017	10/3/2017	FH 63 0-2"
25	9/26/2017	9/26/2017	9/29/2017	FH 25 0-2"	64	9/11/2017	9/11/2017	10/30/2017	FH 64 0-2"
26	9/26/2017	9/26/2017	9/29/2017	FH 26 0-2"	65	8/29/2017	8/30/2017	10/30/2017	FH 65 0-2"
27	9/23/2017	9/23/2017	9/30/2017	FH 27 0-2"	66	8/26/2017	8/26/2017	10/3/2017	FH 66 0-2"
28	9/23/2017	9/23/2017	9/30/2017	FH 28 0-2"	67	8/25/2017	8/30/2017	9/29/2017	FH 67 0-2"
29	9/26/2017	9/26/2017	10/2/2017	FH 29 0-2"	68	8/25/2017	8/30/2017	9/29/2017	FH 68 0-2"
30	9/26/2017	9/26/2017	9/26/2017	FH 30 0-2"	69	9/25/2017	9/27/2017	9/29/2017	FH 69 0-2"
31	9/26/2017	9/26/2017	9/26/2017	FH 31 0-2"	70	9/25/2017	9/27/2017	9/29/2017	FH 69 0-2"
32	9/26/2017	9/26/2017	9/26/2017	FH 32 0-2"	71	9/25/2017	9/27/2017	9/29/2017	FH 71 0-2"
33	9/26/2017	9/26/2017	9/26/2017	FH 33 0-2"	72	8/29/2017	9/27/2017	10/3/2017	FH 72 0-2"
34	9/26/2017	9/29/2017	9/30/2017	FH 34 0-2"	73	8/29/2017	9/11/2017	10/2/2017	FH 73 0-2"
35	9/26/2017	10/4/2017	10/4/2017	FH 35 0-2"	74	8/29/2017	8/29/2017	10/2/2017	FH 74 0-2"
36	9/26/2017	10/4/2017	10/4/2017	FH 36 0-2"	75	8/28/2017	8/29/2017	10/2/2017	FH 75 0-2"
37	9/25/2017	9/26/2017	10/2/2017	FH 37 0-2"	76	9/25/2017	9/29/2017	10/2/2017	FH 76 0-2"
38	9/26/2017	10/2/2017	10/2/2017	FH 38 0-2"	77	8/28/2017	8/29/2017	10/3/2017	FH 77 0-2"
39	DU-1	N/A	N/A	Prior excavation					
40	9/26/2017	9/27/2017	10/2/2017	FH 40 0-2"					

Pedestals /Monuments Soil					Pedestals /Monuments Soil				
Feature Unit ID	Excavate	Sampled Collected ID # X P100 0-2"	Backfill	Notes- Red >75mg/kg Green<75mg/kg	Feature Unit ID	Excavate	Sampled Collected ID # X P100 0-2"	Backfill	Notes- Red >75mg/kg Green<75mg/kg
1	8/29/2017	9/4/2017	9/30/2017	1-08 P100 0-2"	23	9/29/2017	10/2/2017	10/2/2017	23-44 P100 0-2"
2	8/29/2017	9/4/2017	9/30/2017	2-08 P100 0-2"	24	9/29/2017	10/2/2017	10/2/2017	24-42 P100 0-2"
3	8/29/2017	9/4/2017	9/30/2017	3-10 P100 0-2"	25	9/29/2017	10/2/2017	10/2/2017	25-38 P100 0-2"
4	8/29/2017	9/4/2017	9/30/2017	4-10 P100 0-2"	26	9/25/2017	10/3/2017	10/3/2017	26-07 P100 0-2"
5	8/29/2017	9/4/2017	9/30/2017	5-11P100 0-2"	27	10/26/2017	10/3/2017	10/3/2017	27-03 P100 0-2"
6	9/11/2017	9/11/2017	9/30/2017	6-51P100 0-2"	28	9/26/2017	10/4/2017	10/4/2017	28-30 P100 0-2"
7	9/11/2017	9/11/2017	9/30/2017	7-32 P100 0-2"	29	10/5/2017	10/5/2017	10/5/2017	29-R1P100 0-2"
8	9/05/2017	9/18/2017	10/3/2017	8-20 P100 0-2"	30	10/5/2017	10/5/2017	10/5/2017	30-20 P100 0-2"
9	9/26/2017	9/28/2017	9/30/2017	9-33 P100 0-2"	31	10/5/2017	10/5/2017	10/5/2017	31-15 P100 0-2"
10	9/26/2017	9/28/2017	9/30/2017	10-23 P100 0-2"	32-71	DU-6	N/A	N/A	Prior excavation
11	9/26/2017	9/28/2017	9/29/2017	11-20 P100 0-2"	33-12	DU-6	N/A	N/A	Prior excavation
12	9/26/2017	9/28/2017	9/29/2017	12-28 P100 0-2"	34-15	DU-6	N/A	N/A	Prior excavation
13	9/26/2017	9/28/2017	9/29/2017	13-27 P100 0-2"	35-15	DU-6	N/A	N/A	Prior excavation
14	9/26/2017	9/28/2017	9/30/2017	14-08 P100 0-2"	36-14	DU-6	N/A	N/A	Prior excavation
15	9/27/2017	9/29/2017	9/30/2017	15-24 P100 0-2"	37-Cross	Abated	N/A	N/A	Maintained
16	9/27/2017	9/29/2017	9/30/2017	16-25 P100 0-2"	38-59	DU-8	N/A	N/A	Prior excavation
17	9/27/2017	9/29/2017	9/30/2017	17-25 P100 0-2"	39-59	DU-8	N/A	N/A	Prior excavation
18	9/28/2017	9/29/2017	9/29/2017	18-13 P100 0-2"	40-Ave Maria	Abated	N/A	N/A	Maintained
19	9/26/2017	9/29/2017	10/2/2017	19-44 P100 0-2"	41-Golf				
20	9/26/2017	9/29/2017	10/2/2017	20-44 P100 0-2"	42-R1	Abated	N/A	N/A	Concrete apron
21	9/26/2017	9/29/2017	9/30/2017	21-52 P100 0-2"	43-R1	Abated	N/A	N/A	Concrete apron
22	9/26/2017	10/2/2017	10/4/2017	22-49 P100 0-2"					

Fire Hydrant ID # per updated DBSI file -Navy Fresh Water Lines, Valves & Hydrants. BSI/DR-0034
Pedestal sample identification is a designated ID number followed by a dash and double-digit number relative to the closest Fire Hydrant ID location. No full prior map of pedestals exists.

Table 5. DU 5 Buttress & Cover - Import Clean Coral Sand

DU 5 IMPORT CLEAN CORAL						
DATE	NORTH Wall Loads	SOUTH Wall Loads	EAST Wall Loads	WEST Wall Loads	Days total loads	Days cubic yardage
10/9/2017	0	0	0	0	0	0
10/10/2017	0	0	0	0	0	0
10/11/2017	0	0	0	0	0	0
10/12/2017	0	0	0	0	0	0
10/13/2017	0	0	0	0	0	0
10/14/2017	0	0	0	0	0	0
10/15/2017	End	End	End	End	0	0
Load count per wall	282	0	16	0		
15cuyd estimate per wall	4230	0	240	0		
2017 Total R2 combined clean coral import LOADS				298		
Loads x 15cuyd estimate				4470		
R2 North Stockpile distribution-						
Truck loads into R2 cap & abutment				294		
Loads x 15cuyd estimate				4410		
Stockpile loads to DU-9 backfill				38		
Loads x 15cuyd estimate				570		

The R2 North Stockpile of clean coral sand for 2017 is 298 truck loads. The same north side abutment stockpile in 2016 is comingled, producing a larger available yardage than 2017 alone.
DU-9 distribution is noted in Table 5 for the R2 North stockpile. However, Table 6 indicates the project total DU-9 backfill yardage for 2017, regardless of where the clean sand originated (Borrow Source or the R2 North Stockpile)

Table 6. Excavation Plots - Import Clean Coral Sand

EXCAVATION PLOTS- IMPORT CLEAN CORAL BACKFILL							
DATE	DU-9 Loads	DU-8 Loads	DU-7 Loads	DU-5 Loads	DU-3 Loads	Days total loads	Days cubic yardage
10/16/2017	0	0	0	0	0	0	0
10/17/2017	21	1	0	0	0	22	330
10/18/2017						0	0
10/19/2017						0	0
10/20/2017						0	0
10/21/2017						0	0
10/22/2017						0	0
Load count per column	219.5	40.5	20	0	0		
15cuyd estimate per column	3292.5	607.5	300	0	0		
2017 Total combined clean import Backfill LOADS					280		
Loads x 15cuyd estimate					4200		

NW Demolition and Environmental
A Joint Venture

Daily Field Report

Date: Wednesday, October 18, 2017
Prepared by: Scott Wakefield

Project: Removal of Lead-Based Paint from Structures and Lead-Contaminated Soil
Location: Midway Atoll National Wildlife Refuge
Client: US Fish and Wildlife Service

Weather: Cloudy, wind 21-22 mph. Temperature ~82F

Personnel:

Name	Company	Site Hours
Scott Wakefield	NWDE Field Oversight	10
Jeff James	NWDE Supervisor	10
Joel Smith	NWDE Operator	10
Dalton Sullivan	NWDE Labor	10
Jevon Stone	NWDE Operator	10
Matt Manning	NWDE Operator	10
Lucas Peel	NWDE Labor	10
Tyler Wilson	NWDE Labor	10

Visitors/Additional Site Personnel:

Name	Title
MaryAnn Amann	U.S. FWS

Equipment:

Description	Model No.	Comments / Serial #
Pickup Truck	F350 Service Truck	NWDE
Flatbed Truck	Ford F450	NWDE
Container Truck	Peterbuilt	NWDE
Skid Steer	Bobcat S185	NWDE
Tracked Skid Steer	Bobcat T750	NWDE
Tracked Skid Steer	Bobcat	NWDE
Mini-Excavator	CAT 308	NWDE
Excavator	Volvo EC290BLC	NWDE
Excavator	Volvo EC290BLC	NWDE
Excavator	Volvo EC290	NWDE
Off road Dump Truck	Volvo A30D	NWDE
Off road Dump Truck	Volvo A30D	NWDE
Off road Dump Truck	Volvo A30D	NWDE
Excavator – High reach	Komatsu PC400HD	NWDE
Excavator	Komatsu 450	NWDE

Materials Delivered:

Description	QTY	Condition/Comments
Diesel	0 gallons	
Gasoline	0 gallons	

Description of Work:

0700 – Health and Safety meeting at NAF staging area. Review today's work tasks.

Today's focus will be witness layer and cover rock placement at the R2.

The R2 final cover work resumes for another day of hauling 3" minus crushed concrete. Two haul trucks are operating round trips from the boneyard stockpile area to the R2. At the R2 materials are directly dumped onto the orange witness layer geotextile. The D3 Cat continues to blade out materials at a target 1' lift on top of the geotextile.

At the east side of the R2, the 3:1 slope is going forward to complete the orange geotextile placement. 15' wide partial rolls are being placed with the 2' overlap vertical seam, anchored with sandbags from above the grade break line to the toe. Then the east shoulder of the slope is finished off with one full north/south roll of cloth to fully cover and overlap the area, ready for 3" minus.

Set up and maintain staking on the ridge and grade break lines of the R2 with the Trimble. Elevations are consistent with the target design of the final capping layer.

0930 – The dozer and trucks currently are placing crushed concrete at the southeast corner, working to fully lock in the geotextile and move material to the toe of the R2.

DU-9 backfill work continues through the day as locations are being graded with the mini excavator.

1145 – The east side slope is approximately 80% complete with the lift of 3" minus concrete. The Rainstore^3 inspection ports have retained the setback to keep the final cap clear of the below ground cell while maintaining the target lift of final cover.

1200 – Lunch

1230 – At the R2 west side, the slope area is being rolled out with geotextile to cover the last remaining sand layer. Full rolls are positioned north/south to shingle over at the 2' overlap.

Staking continues for the toe of the slope for a line to end the rock cover. Following this line is the 450 excavator along the slope to fine grade and compact the slope using the bucket. The existing sand slope angle is maintained. The northeast corner 3" minus is placed using the excavator as well rather than use of the tracked dozer.

1430 – 3" minus concrete is being positioned at the southwest corner nearest the extended valve can pvc stickups. Material continue to be dumped and bladed to the west to cover the longest length of slope that the R2 Unit has. The elevation difference from grade break to existing ground surface is the greatest distance of all four sides of the repository. This is also the last side to complete and fully cover the orange geotextile with the final 3" minus concrete.

The stockpile of processed concrete at the Boneyard is adequate to complete the layering of the R2 final cap. Materials will continue to be brought in tomorrow and finish up the final detail work for the toe and top grade as needed. Currently the R2 is 99% capped with 3" minus and the west slope nearly complete.

1730 – Ending the work day.
Clean sand moved from the north R2 stockpile to excavation backfill areas are 5 loads.
3" minus processed concrete material from the Boneyard to the R2 final cap is 54 loads.

Photographs:

Photo 01: R2 Unit – View northwest. Placing 3” minus at the east side slope

Photo 02: R2 Unit – View south. Placing 3” minus at the east side slope

Photo 03: Bldg 5378 – View southwest. Backfill of excavation with clean coral sand

Photo 04: R2 Unit – View south. Placing 3” minus at the east side slope, northeast corner

Photo 05: R2 Unit – View south. Geotextile placement on the west side slope

Photo 06: R2 Unit – View northwest. Progress of final 3” minus cap at south and east sides

Table 1. Maectite and Treated Soil Total Estimates

	Maectite Totals						Treated Soil Totals[1,2]		
	Applied Today (gal)					Total to Date	Excavated and Hauled to R-2 Unit **Today**		Excavated and Hauled to R-2 Unit **Total to Date**
Date	Soils (DU9)	Soils (DU8)	Soils (DU7)	Soils (DU5)	Soils (DU3)	(gal)	Load	^{3}yds[1]	^{3}yds[1]
10/09/17	0	0	0	0	0	2981	0	0	4087
10/10/17	0	0	0	0	0	2981	0	0	4087
~End~	-	-	-	-	-	-	-	-	-
Total to Date	2623 gallons	205 gallons	153 gallons	0 gallons	0 gallons		328 loads		

Notes:
1. Estimates are based on the number of gallons of Maectite® applied.
2. Soil treatment with Maectite® and hauling to R2 may not occur on the same day.
3. 10/5/17– Table 2 loads were batch treated in the R2. Inserted this data into Table 1 for totalizing the volumes and gallons. Reset Table 2 "Batch loads" of 9 to zero until next ex-situ stockpile treatment.

2017 DU 9 – Figures P 1-16, 18, 20, 21, 23-27.
Bldg 1124, 1126, 3521, S361, 347, 3501, S3126, S3127, 521, 520, 502, 5342, 309, 340, 354, 9149, 232, 233, S269, S225A, 2127, 144, Boat House 1 & 2, 4205, 4206, 4207, 4213, 503, 5303, 5341, 5339, 5338, Bollards, Fire Hydrants, 5304, 5305, 4210, 3524, 3529, 5126, 5378, 3514, and other ancillary structures.
Foundations S464, 502, 4201, 5126, 5295, 5342.
2017 DU 8 – S-28, S-30 re-ex, Pipe figure P19
2017 DU 7 – Bldg 3502, 3503, 3504 shade cloth
2017 DU 5 – R2 Unit, Figure P17
2017 DU 3 – Housing figure P22, 419 MIS re-ex

Table 2. Soil loads hauled to the R2 for ex situ Maectite® treatment

	Load Totals				
	Hauled to R2 for treatment in R2 cell (# of truck loads)				
Date	Soils (DU9)	Soils (DU8)	Soils (DU7)	Soils (DU5)	Soils (DU3)
10/09/17	0	0	0	0	0
10/10/17	0	0	0	0	0
~End~	-	-	-	-	-
Batch loads to treat in R2	0 loads	0 loads	0 loads	0 loads	0 loads
Total to Date	130.8 loads	34 loads	18.5 loads	0 loads	0 loads

8/14/17 - Batch treatment of all stockpiled "ex situ" loads to date in R2 Cell 1. Entered this data into Table 1 on 8/14/17 for volume and gallon tracking.
8/15/17 - Add "Batch Loads to treat in R2" subtotal that tracks the truck loads placed for treatment. Reset this to zero once treatment event is complete.
8/23/17 – Batch #2 treatment event of all stockpiled "ex situ" loads to date in R2 Cells. Entered this data into Table 1 on 8/23/17 for volume and gallon tracking.
9/12/17 – Batch #3 treatment event of all stockpiled "ex situ" loads to date in R2 Cells. Entered this data into Table 1 on 9/11/17 & 9/12/17 for volume and gallon tracking.
9/21/17 – Batch #4 treatment event of all stockpiled "ex situ" loads to date in R2 Cells. Entered this data into Table 1 on 9/21/17 for volume and gallon tracking.
9/29/17 – Batch #5 treatment event of all stockpiled "ex situ" loads to date in R2 Cells. Entered this data into Table 1 on 9/29/17 for volume and gallon tracking.
10/5/17 – Batch #6 treatment event of all stockpiled "ex situ" loads to date in R2 Cells. Entered this data into Table 1 on 10/5/17 for volume and gallon tracking.

Table 2.1 Soil loads hauled to the R2, non-treated internment

Date	Load Totals				
	Hauled to R2, non-treated soil (# of truck loads)				
	Soils (DU9)	Soils (DU8)	Soils (DU7)	Soils (DU5)	Soils (DU3)
10/09/17	0	0	0	0	0
10/10/17	0	0	0	0	0
~End~	-	-	-	-	-
Total to Date	29.5 loads	75 loads	0 loads	0 loads	9 loads

Table 3. Weekly Load Estimates

Date	Treated Demo Debris Loads to R2	Clean Concrete Loads to Crusher	Metal Debris Loads To Boneyard	Clean Wood Loads	Steel Debris Loaded onto Barge	R2 waste layer toe adjustment sand
10/9/17	0	0	0	0	0	0
10/10/17	0	0	0	0	0	0
~End~	-	-	-	-	-	-
Season Total	3 loads	8 loads	0 loads	4 loads	195 loads	35 loads

Table 3.1 Weekly Load Estimates

Date	R2 final cover- 3" minus concrete
10/16/17	46
10/17/17	52
10/18/17	54
10/19/17	
10/20/17	
10/21/15	
10/22/17	
Season Total	194 loads

Table 4. Fire Hydrants, Pedestals and Monuments

Fire Hydrant Soil					Fire Hydrant Soil				
Fire Hydrant ID	Excavate	Sampled Collected FH # X 0-2"	Backfill	Notes- Red >75mg/kg Green<75mg/kg	Fire Hydrant ID	Excavate	Sampled Collected FH # X 0-2"	Backfill	Notes- Red >75mg/kg Green<75mg/kg
1	9/26/2017	10/3/2017	10/3/2017	FH 1 0-2"	41	DU-1	N/A	N/A	Prior excavation
2	9/27/2017	10/3/2017	10/3/2017	FH 2 0-2"	42	9/25/2017	9/27/2017	10/2/2017	FH 42 0-2"
3	9/26/2017	9/26/2017	10/3/2017	FH 3 0-2"	43	9/26/2017	10/2/2017	10/3/2017	FH 43 0-2"
4	9/26/2017	9/26/2017	10/3/2017	FH 4 0-2"	44	9/26/2017	9/29/2017	10/2/2017	FH 44 0-2"
5	9/27/2017	10/3/2017	10/3/2017	FH 5 0-2"	45	9/23/2017	9/28/2017	10/4/2017	FH 45 0-2"
6	9/27/2017	10/3/2017	10/3/2017	FH 6 0-2"	46	9/25/2017	10/3/2017	10/4/2017	FH 46 0-2"
7	9/26/2017	9/26/2017	10/3/2017	FH 7 0-2"	47	9/25/2017	10/4/2017	10/4/2017	FH 47 0-2"
8	9/25/2017	10/3/2017	10/3/2017	FH 8 0-2"	48	9/25/2017	10/3/2017	10/4/2017	FH 48 0-2"
9	9/25/2017	10/3/2017	10/3/2017	FH 9 0-2"	49	9/26/2017	9/26/2017	10/4/2017	FH 49 0-2"
10	9/25/2017	10/3/2017	10/3/2017	FH 10 0-2"	50	9/28/2017	10/3/2017	10/4/2017	FH 50 0-2"
11	8/31/2017	9/4/2017	9/30/2017	FH 11 0-2"	51	9/11/2017	9/11/2017	9/30/2017	FH 51 0-2"
12	DU-6	N/A	N/A	Prior excavation	52	9/11/2017	9/11/2017	9/30/2017	FH 52 0-2"
13	DU-6	N/A	N/A	Prior excavation	53	8/23/2017	8/23/2017	10/6/2017	FH 53 0-2"
14	DU-6	N/A	N/A	Prior excavation	54	9/11/2017	9/11/2017	10/6/2017	FH 54 0-2"re-ex
15	DU-6	N/A	N/A	Prior excavation	54A	8/23/2017	8/23/2017	10/6/2017	FH 54A 0-2"
16	9/23/2017	9/28/2017	9/29/2017	FH 16 0-2"	55	8/26/2017	8/26/2017	9/29/2017	FH 55 0-2"
17	9/23/2017	9/23/2017	9/23/2017	FH 17 0-2"	56	8/26/2017	8/30/2017	10/2/2017	FH 56 0-2"
18	9/23/2017	9/23/2017	9/23/2017	FH 18 0-2"	57	8/26/2017	8/26/2017	9/29/2017	FH 57 0-2"
19	9/23/2017	9/29/2017	10/2/2017	FH 19 0-2"	58	9/11/2017	9/11/2017	9/29/2017	FH 58 0-2"
20	9/23/2017	9/28/2017	9/29/2017	FH 20 0-2"	59	9/26/2017	9/27/2017	9/29/2017	FH 59 0-2"
21	9/26/2017	9/27/2017	9/30/2017	FH 21 0-2"	60	10/11/2017	10/11/2017	10/11/2017	FH 60 0-2"
22	9/25/2017	9/26/2017	9/26/2017	FH 22 0-2"	61	9/28/2017	9/29/2017	10/3/2017	FH 61 0-2"
23	9/26/2017	9/26/2017	9/26/2017	FH 23 0-2"	62	9/25/2017	9/27/2017	10/3/2017	FH 62 0-2"
24	9/26/2017	9/26/2017	9/29/2017	FH 24 0-2"	63	9/28/2017	9/29/2017	10/3/2017	FH 63 0-2"
25	9/26/2017	9/26/2017	9/29/2017	FH 25 0-2"	64	9/11/2017	9/11/2017	10/30/2017	FH 64 0-2"
26	9/26/2017	9/26/2017	9/29/2017	FH 26 0-2"	65	8/29/2017	8/30/2017	10/30/2017	FH 65 0-2"
27	9/23/2017	9/23/2017	9/30/2017	FH 27 0-2"	66	8/26/2017	8/26/2017	10/3/2017	FH 66 0-2"
28	9/23/2017	9/23/2017	9/30/2017	FH 28 0-2"	67	8/25/2017	8/30/2017	9/29/2017	FH 67 0-2"
29	9/26/2017	9/26/2017	10/2/2017	FH 29 0-2"	68	8/25/2017	8/30/2017	9/29/2017	FH 68 0-2"
30	9/26/2017	9/26/2017	9/26/2017	FH 30 0-2"	69	9/25/2017	9/27/2017	9/29/2017	FH 69 0-2"
31	9/26/2017	9/26/2017	9/26/2017	FH 31 0-2"	70	9/25/2017	9/27/2017	9/29/2017	FH 69 0-2"
32	9/26/2017	9/26/2017	9/26/2017	FH 32 0-2"	71	9/25/2017	9/27/2017	9/29/2017	FH 71 0-2"
33	9/26/2017	9/26/2017	9/26/2017	FH 33 0-2"	72	8/29/2017	9/27/2017	10/3/2017	FH 72 0-2"
34	9/26/2017	9/29/2017	9/30/2017	FH 34 0-2"	73	8/29/2017	9/11/2017	10/2/2017	FH 73 0-2"
35	9/26/2017	10/4/2017	10/4/2017	FH 35 0-2"	74	8/29/2017	8/29/2017	10/2/2017	FH 74 0-2"
36	9/26/2017	10/4/2017	10/4/2017	FH 36 0-2"	75	8/28/2017	8/29/2017	10/2/2017	FH 75 0-2"
37	9/25/2017	9/26/2017	10/2/2017	FH 37 0-2"	76	9/25/2017	9/29/2017	10/2/2017	FH 76 0-2"
38	9/26/2017	10/2/2017	10/2/2017	FH 38 0-2"	77	8/28/2017	8/29/2017	10/3/2017	FH 77 0-2"
39	DU-1	N/A	N/A	Prior excavation					
40	9/26/2017	9/27/2017	10/2/2017	FH 40 0-2"					

Pedestals /Monuments Soil					Pedestals /Monuments Soil				
Feature Unit ID	Excavate	Sampled Collected ID # X P100 0-2"	Backfill	Notes- Red >75mg/kg Green<75mg/kg	Feature Unit ID	Excavate	Sampled Collected ID # X P100 0-2"	Backfill	Notes- Red >75mg/kg Green<75mg/kg
1	8/29/2017	9/4/2017	9/30/2017	1-08 P100 0-2"	23	9/29/2017	10/2/2017	10/2/2017	23-44 P100 0-2"
2	8/29/2017	9/4/2017	9/30/2017	2-08 P100 0-2"	24	9/29/2017	10/2/2017	10/2/2017	24-42 P100 0-2"
3	8/29/2017	9/4/2017	9/30/2017	3-10 P100 0-2"	25	9/29/2017	10/2/2017	10/2/2017	25-38 P100 0-2"
4	8/29/2017	9/4/2017	9/30/2017	4-10 P100 0-2"	26	9/25/2017	10/3/2017	10/3/2017	26-07 P100 0-2"
5	8/29/2017	9/4/2017	9/30/2017	5-11P100 0-2"	27	10/26/2017	10/3/2017	10/3/2017	27-03 P100 0-2"
6	9/11/2017	9/11/2017	9/30/2017	6-51P100 0-2"	28	9/26/2017	10/4/2017	10/4/2017	28-30 P100 0-2"
7	9/11/2017	9/11/2017	9/30/2017	7-32 P100 0-2"	29	10/5/2017	10/5/2017	10/5/2017	29-R1P100 0-2"
8	9/05/2017	9/18/2017	10/3/2017	8-20 P100 0-2"	30	10/5/2017	10/5/2017	10/5/2017	30-20 P100 0-2"
9	9/26/2017	9/28/2017	9/30/2017	9-33 P100 0-2"	31	10/5/2017	10/5/2017	10/5/2017	31-15 P100 0-2"
10	9/26/2017	9/28/2017	9/30/2017	10-23 P100 0-2"	32-71	DU-6	N/A	N/A	Prior excavation
11	9/26/2017	9/28/2017	9/29/2017	11-20 P100 0-2"	33-12	DU-6	N/A	N/A	Prior excavation
12	9/26/2017	9/28/2017	9/29/2017	12-28 P100 0-2"	34-15	DU-6	N/A	N/A	Prior excavation
13	9/26/2017	9/28/2017	9/29/2017	13-27 P100 0-2"	35-15	DU-6	N/A	N/A	Prior excavation
14	9/26/2017	9/28/2017	9/30/2017	14-08 P100 0-2"	36-14	DU-6	N/A	N/A	Prior excavation
15	9/27/2017	9/29/2017	9/30/2017	15-24 P100 0-2"	37-Cross	Abated	N/A	N/A	Maintained
16	9/27/2017	9/29/2017	9/30/2017	16-25 P100 0-2"	38-59	DU-8	N/A	N/A	Prior excavation
17	9/27/2017	9/29/2017	9/30/2017	17-25 P100 0-2"	39-59	DU-8	N/A	N/A	Prior excavation
18	9/28/2017	9/29/2017	9/29/2017	18-13 P100 0-2"	40-Ave Maria	Abated	N/A	N/A	Maintained
19	9/26/2017	9/29/2017	10/2/2017	19-44 P100 0-2"	41-Golf				
20	9/26/2017	9/29/2017	10/2/2017	20-44 P100 0-2"	42-R1	Abated	N/A	N/A	Concrete apron
21	9/26/2017	9/29/2017	9/30/2017	21-52 P100 0-2"	43-R1	Abated	N/A	N/A	Concrete apron
22	9/26/2017	10/2/2017	10/4/2017	22-49 P100 0-2"					

Fire Hydrant ID # per updated DBSI file -Navy Fresh Water Lines, Valves & Hydrants. BSI/DR-0034
Pedestal sample identification is a designated ID number followed by a dash and double-digit number relative to the closest Fire Hydrant ID location. No full prior map of pedestals exists.

Table 5. DU 5 Buttress & Cover - Import Clean Coral Sand

DU 5 IMPORT CLEAN CORAL						
DATE	NORTH Wall Loads	SOUTH Wall Loads	EAST Wall Loads	WEST Wall Loads	Days total loads	Days cubic yardage
10/9/2017	0	0	0	0	0	0
10/10/2017	0	0	0	0	0	0
10/11/2017	0	0	0	0	0	0
10/12/2017	0	0	0	0	0	0
10/13/2017	0	0	0	0	0	0
10/14/2017	0	0	0	0	0	0
10/15/2017	End	End	End	End	0	0
Load count per wall	282	0	16	0		
15cuyd estimate per wall	4230	0	240	0		
2017 Total R2 combined clean coral import LOADS				298		
Loads x 15cuyd estimate				4470		
R2 North Stockpile distribution-						
Truck loads into R2 cap & abutment				294		
Loads x 15cuyd estimate				4410		
Stockpile loads to DU-9 backfill				43		
Loads x 15cuyd estimate				645		

The R2 North Stockpile of clean coral sand for 2017 is 298 truck loads. The same north side abutment stockpile in 2016 is comingled, producing a larger available yardage than 2017 alone.
DU-9 distribution is noted in Table 5 for the R2 North stockpile. However, Table 6 indicates the project total DU-9 backfill yardage for 2017, regardless of where the clean sand originated (Borrow Source or the R2 North Stockpile)

Table 6. Excavation Plots - Import Clean Coral Sand

EXCAVATION PLOTS- IMPORT CLEAN CORAL BACKFILL							
DATE	DU-9 Loads	DU-8 Loads	DU-7 Loads	DU-5 Loads	DU-3 Loads	Days total loads	Days cubic yardage
10/16/2017	0	0	0	0	0	0	0
10/17/2017	21	1	0	0	0	22	330
10/18/2017	5	0	0	0	0	5	75
10/19/2017						0	0
10/20/2017						0	0
10/21/2017						0	0
10/22/2017						0	0
Load count per column	224.5	40.5	20	0	0		
15cuyd estimate per column	3367.5	607.5	300	0	0		
2017 Total combined clean import Backfill LOADS					285		
Loads x 15cuyd estimate					4275		

NW Demolition and Environmental
A Joint Venture

Daily Field Report

Date: Thursday, October 19, 2017
Prepared by: Scott Wakefield

Project: Removal of Lead-Based Paint from Structures and Lead-Contaminated Soil
Location: Midway Atoll National Wildlife Refuge
Client: US Fish and Wildlife Service

Weather: Partly cloudy, wind 15 mph. Temperature ~82F

Personnel:

Name	Company	Site Hours
Scott Wakefield	NWDE Field Oversight	10
Jeff James	NWDE Supervisor	10
Joel Smith	NWDE Operator	10
Dalton Sullivan	NWDE Labor	10
Jevon Stone	NWDE Operator	10
Matt Manning	NWDE Operator	10
Lucas Peel	NWDE Labor	10
Tyler Wilson	NWDE Labor	10

Visitors/Additional Site Personnel:

Name	Title
MaryAnn Amann	U.S. FWS

Equipment:

Description	Model No.	Comments / Serial #
Pickup Truck	F350 Service Truck	NWDE
Flatbed Truck	Ford F450	NWDE
Container Truck	Peterbuilt	NWDE
Skid Steer	Bobcat S185	NWDE
Tracked Skid Steer	Bobcat T750	NWDE
Tracked Skid Steer	Bobcat	NWDE
Mini-Excavator	CAT 308	NWDE
Excavator	Volvo EC290BLC	NWDE
Excavator	Volvo EC290BLC	NWDE
Excavator	Volvo EC290	NWDE
Off road Dump Truck	Volvo A30D	NWDE
Off road Dump Truck	Volvo A30D	NWDE
Off road Dump Truck	Volvo A30D	NWDE
Excavator – High reach	Komatsu PC400HD	NWDE
Excavator	Komatsu 450	NWDE

Materials Delivered:

Description	QTY	Condition/Comments
Diesel	0 gallons	
Gasoline	0 gallons	

Description of Work:

0700 – Health and Safety meeting at NAF staging area. Review today's work tasks.

Today's focus will be cover rock placement at the R2.

The R2 final cover work resumes to finish out hauling 3" minus crushed concrete this morning. Two haul trucks are operating round trips from the boneyard stockpile area to the R2. The 3" minus stockpile is nearing the end, having been completely moved to the R2 Unit. The D3 Cat is blading out materials.

At the south side of the R2, the 3:1 slope is being fine graded and compacted using the 450 Komatsu and bucket. The toe of the slope is aligned and adjusted with crushed concrete to finish the grade.

0930 – The 3" minus processed concrete has reached the end of the stockpile and is placed at the R2. This morning's last few loads are staged for adjustment areas of the slope work. Remaining loads are dumped near the ridgeline and planned for being bladed in to the final pass of the surface.

Five additional truck loads of the ¾" minus crushed concrete are also moved from the Boneyard stockpile area and placed on top of the R2. This material will also be included in the final pass of the surface. The former stockpile on the concrete apron is being cleaned up with the skidsteer and loaded out to the R2.

1000 – The Cat D3 dozer is working to make the final push of material across the R2 surface. Currently the north mid section grade break area is being worked. Through the morning the tracked dozer keeps working the areas aided with the spotter and laser level to create a final cover of the R2.

At the NAF Staging area, demobilization tasks are moving forward. Equipment and supplies continue to be arranged into 20' shipping containers in preparation for being loaded onto the barge that arrives Friday. One container is also accepting general construction debris that will be shipped off island.

NWDE equipment that is no longer in use is begin staged at the Boneyard area and will be cleaned prior to loading onto the barge next week.

1200 – Lunch

1230 – At the R2, the temporary 3" minus concrete access ramp is being removed. Material is shifted as needed for slope and toe adjustments along the north side. Where the ramp once was the 3:1 target angle is established and compacted to finish the graded section.

The 450 excavator is finishing the northwest corner area and progressing to the east. Following this, the west side toe area is being adjusted and finalized. Construction debris staged at the work area is being collected and moved to the NAF Hanger staging area and moved into the respective container locations for off island disposal. Remnant steel debris collected is staged with the small rebar pile that is slated to go out on the barge during the demobilization.

1400 – At the R2 southwest corner, the water line valve extension cans and existing cast steel monument are positioned and cut to target grade. These cast steel surround and lid are leveled, then bedded in rock within the final R2 cover. This retains access to the R1 water line valves as needed.

1730 – Ending the work day. The D3 dozer is moved off the R2 and over to the NAF Hanger.
3" minus processed concrete material from the Boneyard to the R2 final cap is 8 loads.
¾" minus processed concrete material from the Boneyard to the R2 final cap is 5 loads.

Photographs:

Photo 01: R2 Unit – View west. Progress of the south side slope

Photo 02: R2 Unit – View west. Progress of the south side slope

Photo 03: R2 Unit – View north. Progress of the east side slope

Photo 04: R2 Unit – View northwest. Final grading at north side

Photo 05: R2 Unit – View west. Removal of the temporary access ramp

Photo 06: R2 Unit – View east. Removal of the temporary access ramp and finished slope

Photo 07: R2 Unit – Water line valve access extensions

Photo 08: R2 Unit – View east. Water line valve access extensions

Photo 09: R2 Unit – View south. Distant overview of the north and west sides

Photo 10: R2 Unit – View northeast. Distant overview of the west and south sides

Table 1. Maectite and Treated Soil Total Estimates

	Maectite Totals						Treated Soil Totals[1,2]		
	Applied Today (gal)					Total to Date	Excavated and Hauled to R-2 Unit **Today**		Excavated and Hauled to R-2 Unit **Total to Date**
Date	Soils (DU9)	Soils (DU8)	Soils (DU7)	Soils (DU5)	Soils (DU3)	(gal)	Load	^{3}yds[1]	^{3}yds[1]
10/09/17	0	0	0	0	0	2981	0	0	4087
10/10/17	0	0	0	0	0	2981	0	0	4087
~End~	-	-	-	-	-	-	-	-	-
Total to Date	2623 gallons	205 gallons	153 gallons	0 gallons	0 gallons		328 loads		

Notes:
1. Estimates are based on the number of gallons of Maectite® applied.
2. Soil treatment with Maectite® and hauling to R2 may not occur on the same day.
3. 10/5/17– Table 2 loads were batch treated in the R2. Inserted this data into Table 1 for totalizing the volumes and gallons. Reset Table 2 "Batch loads" of 9 to zero until next ex-situ stockpile treatment.

2017 DU 9 – Figures P 1-16, 18, 20, 21, 23-27.
Bldg 1124, 1126, 3521, S361, 347, 3501, S3126, S3127, 521, 520, 502, 5342, 309, 340, 354, 9149, 232, 233, S269, S225A, 2127, 144, Boat House 1 & 2, 4205, 4206, 4207, 4213, 503, 5303, 5341, 5339, 5338, Bollards, Fire Hydrants, 5304, 5305, 4210, 3524, 3529, 5126, 5378, 3514, and other ancillary structures.
Foundations S464, 502, 4201, 5126, 5295, 5342.
2017 DU 8 – S-28, S-30 re-ex, Pipe figure P19
2017 DU 7 – Bldg 3502, 3503, 3504 shade cloth
2017 DU 5 – R2 Unit, Figure P17
2017 DU 3 – Housing figure P22, 419 MIS re-ex

Table 2. Soil loads hauled to the R2 for ex situ Maectite® treatment

	Load Totals				
	Hauled to R2 for treatment in R2 cell (# of truck loads)				
Date	Soils (DU9)	Soils (DU8)	Soils (DU7)	Soils (DU5)	Soils (DU3)
10/09/17	0	0	0	0	0
10/10/17	0	0	0	0	0
~End~	-	-	-	-	-
Batch loads to treat in R2	0 loads	0 loads	0 loads	0 loads	0 loads
Total to Date	130.8 loads	34 loads	18.5 loads	0 loads	0 loads

8/14/17 - Batch treatment of all stockpiled "ex situ" loads to date in R2 Cell 1. Entered this data into Table 1 on 8/14/17 for volume and gallon tracking.
8/15/17 - Add "Batch Loads to treat in R2" subtotal that tracks the truck loads placed for treatment. Reset this to zero once treatment event is complete.
8/23/17 – Batch #2 treatment event of all stockpiled "ex situ" loads to date in R2 Cells. Entered this data into Table 1 on 8/23/17 for volume and gallon tracking.
9/12/17 – Batch #3 treatment event of all stockpiled "ex situ" loads to date in R2 Cells. Entered this data into Table 1 on 9/11/17 & 9/12/17 for volume and gallon tracking.
9/21/17 – Batch #4 treatment event of all stockpiled "ex situ" loads to date in R2 Cells. Entered this data into Table 1 on 9/21/17 for volume and gallon tracking.
9/29/17 – Batch #5 treatment event of all stockpiled "ex situ" loads to date in R2 Cells. Entered this data into Table 1 on 9/29/17 for volume and gallon tracking.
10/5/17 – Batch #6 treatment event of all stockpiled "ex situ" loads to date in R2 Cells. Entered this data into Table 1 on 10/5/17 for volume and gallon tracking.

Table 2.1 Soil loads hauled to the R2, non-treated internment

Date	Load Totals				
	Hauled to R2, non-treated soil (# of truck loads)				
	Soils (DU9)	Soils (DU8)	Soils (DU7)	Soils (DU5)	Soils (DU3)
10/09/17	0	0	0	0	0
10/10/17	0	0	0	0	0
~End~	-	-	-	-	-
Total to Date	29.5 loads	75 loads	0 loads	0 loads	9 loads

Table 3. Weekly Load Estimates

Date	Treated Demo Debris Loads to R2	Clean Concrete Loads to Crusher	Metal Debris Loads To Boneyard	Clean Wood Loads	Steel Debris Loaded onto Barge	R2 waste layer toe adjustment sand
10/9/17	0	0	0	0	0	0
10/10/17	0	0	0	0	0	0
~End~	-	-	-	-	-	-
Season Total	3 loads	8 loads	0 loads	4 loads	195 loads	35 loads

Table 3.1 Weekly Load Estimates

Date	R2 final cover- 3" minus concrete
10/16/17	46
10/17/17	52
10/18/17	54
10/19/17	13
10/20/17	~End~
10/21/15	-
10/22/17	-
Season Total	207 loads

Table 4. Fire Hydrants, Pedestals and Monuments

Fire Hydrant Soil					Fire Hydrant Soil				
Fire Hydrant ID	Excavate	Sampled Collected FH # X 0-2"	Backfill	Notes- Red >75mg/kg Green<75mg/kg	Fire Hydrant ID	Excavate	Sampled Collected FH # X 0-2"	Backfill	Notes- Red >75mg/kg Green<75mg/kg
1	9/26/2017	10/3/2017	10/3/2017	FH 1 0-2"	41	DU-1	N/A	N/A	Prior excavation
2	9/27/2017	10/3/2017	10/3/2017	FH 2 0-2"	42	9/25/2017	9/27/2017	10/2/2017	FH 42 0-2"
3	9/26/2017	9/26/2017	10/3/2017	FH 3 0-2"	43	9/26/2017	10/2/2017	10/3/2017	FH 43 0-2"
4	9/26/2017	9/26/2017	10/3/2017	FH 4 0-2"	44	9/26/2017	9/29/2017	10/2/2017	FH 44 0-2"
5	9/27/2017	10/3/2017	10/3/2017	FH 5 0-2"	45	9/23/2017	9/28/2017	10/4/2017	FH 45 0-2"
6	9/27/2017	10/3/2017	10/3/2017	FH 6 0-2"	46	9/25/2017	10/3/2017	10/4/2017	FH 46 0-2"
7	9/26/2017	9/26/2017	10/3/2017	FH 7 0-2"	47	9/25/2017	10/4/2017	10/4/2017	FH 47 0-2"
8	9/25/2017	10/3/2017	10/3/2017	FH 8 0-2"	48	9/25/2017	10/3/2017	10/4/2017	FH 48 0-2"
9	9/25/2017	10/3/2017	10/3/2017	FH 9 0-2"	49	9/26/2017	9/26/2017	10/4/2017	FH 49 0-2"
10	9/25/2017	10/3/2017	10/3/2017	FH 10 0-2"	50	9/28/2017	10/3/2017	10/4/2017	FH 50 0-2"
11	8/31/2017	9/4/2017	9/30/2017	FH 11 0-2"	51	9/11/2017	9/11/2017	9/30/2017	FH 51 0-2"
12	DU-6	N/A	N/A	Prior excavation	52	9/11/2017	9/11/2017	9/30/2017	FH 52 0-2"
13	DU-6	N/A	N/A	Prior excavation	53	8/23/2017	8/23/2017	10/6/2017	FH 53 0-2"
14	DU-6	N/A	N/A	Prior excavation	54	9/11/2017	9/11/2017	10/6/2017	FH 54 0-2"re-ex
15	DU-6	N/A	N/A	Prior excavation	54A	8/23/2017	8/23/2017	10/6/2017	FH 54A 0-2"
16	9/23/2017	9/28/2017	9/29/2017	FH 16 0-2"	55	8/26/2017	8/26/2017	9/29/2017	FH 55 0-2"
17	9/23/2017	9/23/2017	9/23/2017	FH 17 0-2"	56	8/26/2017	8/30/2017	10/2/2017	FH 56 0-2"
18	9/23/2017	9/23/2017	9/23/2017	FH 18 0-2"	57	8/26/2017	8/26/2017	9/29/2017	FH 57 0-2"
19	9/23/2017	9/29/2017	10/2/2017	FH 19 0-2"	58	9/11/2017	9/11/2017	9/29/2017	FH 58 0-2"
20	9/23/2017	9/28/2017	9/29/2017	FH 20 0-2"	59	9/26/2017	9/27/2017	9/29/2017	FH 59 0-2"
21	9/26/2017	9/27/2017	9/30/2017	FH 21 0-2"	60	10/11/2017	10/11/2017	10/11/2017	FH 60 0-2"
22	9/25/2017	9/26/2017	9/26/2017	FH 22 0-2"	61	9/28/2017	9/29/2017	10/3/2017	FH 61 0-2"
23	9/26/2017	9/26/2017	9/26/2017	FH 23 0-2"	62	9/25/2017	9/27/2017	10/3/2017	FH 62 0-2"
24	9/26/2017	9/26/2017	9/29/2017	FH 24 0-2"	63	9/28/2017	9/29/2017	10/3/2017	FH 63 0-2"
25	9/26/2017	9/26/2017	9/29/2017	FH 25 0-2"	64	9/11/2017	9/11/2017	10/30/2017	FH 64 0-2"
26	9/26/2017	9/26/2017	9/29/2017	FH 26 0-2"	65	8/29/2017	8/30/2017	10/30/2017	FH 65 0-2"
27	9/23/2017	9/23/2017	9/30/2017	FH 27 0-2"	66	8/26/2017	8/26/2017	10/3/2017	FH 66 0-2"
28	9/23/2017	9/23/2017	9/30/2017	FH 28 0-2"	67	8/25/2017	8/30/2017	9/29/2017	FH 67 0-2"
29	9/26/2017	9/26/2017	10/2/2017	FH 29 0-2"	68	8/25/2017	8/30/2017	9/29/2017	FH 68 0-2"
30	9/26/2017	9/26/2017	9/26/2017	FH 30 0-2"	69	9/25/2017	9/27/2017	9/29/2017	FH 69 0-2"
31	9/26/2017	9/26/2017	9/26/2017	FH 31 0-2"	70	9/25/2017	9/27/2017	9/29/2017	FH 69 0-2"
32	9/26/2017	9/26/2017	9/26/2017	FH 32 0-2"	71	9/25/2017	9/27/2017	9/29/2017	FH 71 0-2"
33	9/26/2017	9/26/2017	9/26/2017	FH 33 0-2"	72	8/29/2017	9/27/2017	10/3/2017	FH 72 0-2"
34	9/26/2017	9/29/2017	9/30/2017	FH 34 0-2"	73	8/29/2017	9/11/2017	10/2/2017	FH 73 0-2"
35	9/26/2017	10/4/2017	10/4/2017	FH 35 0-2"	74	8/29/2017	8/29/2017	10/2/2017	FH 74 0-2"
36	9/26/2017	10/4/2017	10/4/2017	FH 36 0-2"	75	8/28/2017	8/29/2017	10/2/2017	FH 75 0-2"
37	9/25/2017	9/26/2017	10/2/2017	FH 37 0-2"	76	9/25/2017	9/29/2017	10/2/2017	FH 76 0-2"
38	9/26/2017	10/2/2017	10/2/2017	FH 38 0-2"	77	8/28/2017	8/29/2017	10/3/2017	FH 77 0-2"
39	DU-1	N/A	N/A	Prior excavation					
40	9/26/2017	9/27/2017	10/2/2017	FH 40 0-2"					

Pedestals /Monuments Soil					Pedestals /Monuments Soil				
Feature Unit ID	Excavate	Sampled Collected ID # X P100 0-2"	Backfill	Notes- Red >75mg/kg Green<75mg/kg	Feature Unit ID	Excavate	Sampled Collected ID # X P100 0-2"	Backfill	Notes- Red >75mg/kg Green<75mg/kg
1	8/29/2017	9/4/2017	9/30/2017	1-08 P100 0-2"	23	9/29/2017	10/2/2017	10/2/2017	23-44 P100 0-2"
2	8/29/2017	9/4/2017	9/30/2017	2-08 P100 0-2"	24	9/29/2017	10/2/2017	10/2/2017	24-42 P100 0-2"
3	8/29/2017	9/4/2017	9/30/2017	3-10 P100 0-2"	25	9/29/2017	10/2/2017	10/2/2017	25-38 P100 0-2"
4	8/29/2017	9/4/2017	9/30/2017	4-10 P100 0-2"	26	9/25/2017	10/3/2017	10/3/2017	26-07 P100 0-2"
5	8/29/2017	9/4/2017	9/30/2017	5-11P100 0-2"	27	10/26/2017	10/3/2017	10/3/2017	27-03 P100 0-2"
6	9/11/2017	9/11/2017	9/30/2017	6-51P100 0-2"	28	9/26/2017	10/4/2017	10/4/2017	28-30 P100 0-2"
7	9/11/2017	9/11/2017	9/30/2017	7-32 P100 0-2"	29	10/5/2017	10/5/2017	10/5/2017	29-R1P100 0-2"
8	9/05/2017	9/18/2017	10/3/2017	8-20 P100 0-2"	30	10/5/2017	10/5/2017	10/5/2017	30-20 P100 0-2"
9	9/26/2017	9/28/2017	9/30/2017	9-33 P100 0-2"	31	10/5/2017	10/5/2017	10/5/2017	31-15 P100 0-2"
10	9/26/2017	9/28/2017	9/30/2017	10-23 P100 0-2"	32-71	DU-6	N/A	N/A	Prior excavation
11	9/26/2017	9/28/2017	9/29/2017	11-20 P100 0-2"	33-12	DU-6	N/A	N/A	Prior excavation
12	9/26/2017	9/28/2017	9/29/2017	12-28 P100 0-2"	34-15	DU-6	N/A	N/A	Prior excavation
13	9/26/2017	9/28/2017	9/29/2017	13-27 P100 0-2"	35-15	DU-6	N/A	N/A	Prior excavation
14	9/26/2017	9/28/2017	9/30/2017	14-08 P100 0-2"	36-14	DU-6	N/A	N/A	Prior excavation
15	9/27/2017	9/29/2017	9/30/2017	15-24 P100 0-2"	37-Cross	Abated	N/A	N/A	Maintained
16	9/27/2017	9/29/2017	9/30/2017	16-25 P100 0-2"	38-59	DU-8	N/A	N/A	Prior excavation
17	9/27/2017	9/29/2017	9/30/2017	17-25 P100 0-2"	39-59	DU-8	N/A	N/A	Prior excavation
18	9/28/2017	9/29/2017	9/29/2017	18-13 P100 0-2"	40-Ave Maria	Abated	N/A	N/A	Maintained
19	9/26/2017	9/29/2017	10/2/2017	19-44 P100 0-2"	41-Golf				
20	9/26/2017	9/29/2017	10/2/2017	20-44 P100 0-2"	42-R1	Abated	N/A	N/A	Concrete apron
21	9/26/2017	9/29/2017	9/30/2017	21-52 P100 0-2"	43-R1	Abated	N/A	N/A	Concrete apron
22	9/26/2017	10/2/2017	10/4/2017	22-49 P100 0-2"					

Fire Hydrant ID # per updated DBSI file -Navy Fresh Water Lines, Valves & Hydrants. BSI/DR-0034
Pedestal sample identification is a designated ID number followed by a dash and double-digit number relative to the closest Fire Hydrant ID location. No full prior map of pedestals exists.

Table 5. DU 5 Buttress & Cover - Import Clean Coral Sand

DU 5 IMPORT CLEAN CORAL						
DATE	NORTH Wall Loads	SOUTH Wall Loads	EAST Wall Loads	WEST Wall Loads	Days total loads	Days cubic yardage
10/9/2017	0	0	0	0	0	0
10/10/2017	0	0	0	0	0	0
10/11/2017	0	0	0	0	0	0
10/12/2017	0	0	0	0	0	0
10/13/2017	0	0	0	0	0	0
10/14/2017	0	0	0	0	0	0
10/15/2017	End	End	End	End	0	0
Load count per wall	282	0	16	0		
15cuyd estimate per wall	4230	0	240	0		
2017 Total R2 combined clean coral import LOADS				298		
Loads x 15cuyd estimate				4470		
R2 North Stockpile distribution-						
Truck loads into R2 cap & abutment				294		
Loads x 15cuyd estimate				4410		
Stockpile loads to DU-9 backfill				43		
Loads x 15cuyd estimate				645		

The R2 North Stockpile of clean coral sand for 2017 is 298 truck loads. The same north side abutment stockpile in 2016 is comingled, producing a larger available yardage than 2017 alone.
DU-9 distribution is noted in Table 5 for the R2 North stockpile. However, Table 6 indicates the project total DU-9 backfill yardage for 2017, regardless of where the clean sand originated (Borrow Source or the R2 North Stockpile)

Table 6. Excavation Plots - Import Clean Coral Sand

EXCAVATION PLOTS- IMPORT CLEAN CORAL BACKFILL							
DATE	DU-9 Loads	DU-8 Loads	DU-7 Loads	DU-5 Loads	DU-3 Loads	Days total loads	Days cubic yardage
10/16/2017	0	0	0	0	0	0	0
10/17/2017	21	1	0	0	0	22	330
10/18/2017	5	0	0	0	0	5	75
10/19/2017	0	0	0	0	0	0	0
10/20/2017						0	0
10/21/2017						0	0
10/22/2017						0	0
Load count per column	224.5	40.5	20	0	0		
15cuyd estimate per column	3367.5	607.5	300	0	0		
2017 Total combined clean import Backfill LOADS					285		
Loads x 15cuyd estimate					4275		

NW Demolition and Environmental
A Joint Venture

Daily Field Report

Date: Friday, October 20, 2017
Prepared by: Scott Wakefield

Project: Removal of Lead-Based Paint from Structures and Lead-Contaminated Soil
Location: Midway Atoll National Wildlife Refuge
Client: US Fish and Wildlife Service

Weather: Partly cloudy, wind 8 mph. Temperature ~82F

Personnel:

Name	Company	Site Hours
Scott Wakefield	NWDE Field Oversight	10
Jeff James	NWDE Supervisor	10
Joel Smith	NWDE Operator	10
Dalton Sullivan	NWDE Labor	10
Jevon Stone	NWDE Operator	10
Matt Manning	NWDE Operator	10
Lucas Peel	NWDE Labor	10
Tyler Wilson	NWDE Labor	10

Visitors/Additional Site Personnel:

Name	Title
MaryAnn Amann	U.S. FWS

Equipment:

Description	Model No.	Comments / Serial #
Pickup Truck	F350 Service Truck	NWDE
Flatbed Truck	Ford F450	NWDE
Container Truck	Peterbuilt	NWDE
Skid Steer	Bobcat S185	NWDE
Tracked Skid Steer	Bobcat T750	NWDE
Tracked Skid Steer	Bobcat	NWDE
Mini-Excavator	CAT 308	NWDE
Excavator	Volvo EC290BLC	NWDE
Excavator	Volvo EC290BLC	NWDE
Excavator	Volvo EC290	NWDE
Off road Dump Truck	Volvo A30D	NWDE
Off road Dump Truck	Volvo A30D	NWDE
Off road Dump Truck	Volvo A30D	NWDE
Excavator – High reach	Komatsu PC400HD	NWDE
Excavator	Komatsu 450	NWDE

Materials Delivered:

Description	QTY	Condition/Comments
Diesel	0 gallons	
Gasoline	0 gallons	

Description of Work:

0700 – Health and Safety meeting at NAF staging area. Review today's work tasks.

Today's focus will be punch list items to close out the project.

The D3 Cat dozer is moving to the former Water Tower 5304 for leveling off the clean coral sand that has been placed within the excavation area. The sand is pushed out to the southern fall area and the extents of the plot to finalize the backfill. Detail work against the pillars will be followed up with the tracked skidsteer. The center concrete stem and remaining blinded off steel water line is hand shoveled to even the grade within the concrete feature.

North of the R2, the recently removed clean sand stockpile is beginning the task to clear off the hard surface area. The materials are being moved towards the south and will be leveled out to finish off the existing grade nearest the toe of the R2 slope.

The truck and tote are headed to the 41-Golf feature to apply Maectite® to the mini golf painted surfaces. The horizontal and vertical surfaces are treated. Following a four hour wait time the surfaces are rinsed with hydrant water and allowed to dry.

1000 – Grade at the former Water Tower 5304 and Navy Water Tower 5305 are being finished off with the tracked skidsteer. The available sand for both sites is adequate to backfill the tower excavation areas, even with the Borrow Source beach closure that is still pending this season.

Locations that lack full native grade of clean sand backfill due to the Cargo Beach closure are; partial backfill of the Fuel Farm area S28 and S30, partial area at Bldg 309 Power Plant west wall, partial area at 3126E Reservoir, partial area 3127W Reservoir.

Staged clean sand is being leveled out at Bldg 3514 Security behind the TOC housing. This small excavation is now backfilled to native grade. This site joins the completion of Bldg 503 Barracks Substation, Bldg 5126 Sewage Pump Station and Bldg 5378 Metal Shed with clean sand to grade.

1100 – Clean up activities continue around the north side of the R2 unit for the clean sand stockpile footprint.

1200 – Lunch

1230 – At the R2 west exterior side, construction materials and sandbags are being collected and handled for disposal. Sand bags are being emptied, with the clean sand to be worked into the west side finished native grade. The black bags are collected in supersacks for disposal.

1530 – The American Contender and barge arrive into the Midway Atoll waterway. This empty barge is returning for the third trip this season to complete a full equipment demobilization as the project is completed and closed out. The barge is guided to the Kahana Pier 2401 and tied off to the east side for the evening.

The NAF Hanger Staging area continues to be busy with progress to load and inventory supplies and equipment into the 20' shipping containers. There are 12 units that will be loaded onto the barge once loading begins, followed by the mobile equipment and machinery.

1730 – Ending the work day.

Photographs:

Photo 01: Water Tower 5304 – View west. Progress of grading clean sand backfill

Photo 02: Water Tower 5304 – View south. Progress of grading clean sand backfill

Photo 03: Water Tower 5304 – View north. Progress of grading clean sand backfill in the fall zone

Photo 04: 41-Golf – View northeast. Maectite® application to the mini golf feature

Photo 05: Former 3514 Security Storage – View west. Clean sand backfill of the excavation

Photo 06: Former Bldg 503 Barracks Substation – View west. Clean sand backfill of the excavation

Photo 07: R2 Unit – View southeast. Overview of R2 final cover

Photo 08: R2 Unit – View west. Overview of R2 final cover

Table 1. Maectite and Treated Soil Total Estimates

	Maectite Totals						Treated Soil Totals[1,2]		
	Applied Today (gal)					Total to Date	Excavated and Hauled to R-2 Unit **Today**		Excavated and Hauled to R-2 Unit **Total to Date**
Date	Soils (DU9)	Soils (DU8)	Soils (DU7)	Soils (DU5)	Soils (DU3)	(gal)	Load	^{3}yds[1]	^{3}yds[1]
10/09/17	0	0	0	0	0	2981	0	0	4087
10/10/17	0	0	0	0	0	2981	0	0	4087
~End~	-	-	-	-	-	-	-	-	-
Total to Date	2623 gallons	205 gallons	153 gallons	0 gallons	0 gallons		328 loads		

Notes:
1. Estimates are based on the number of gallons of Maectite® applied.
2. Soil treatment with Maectite® and hauling to R2 may not occur on the same day.
3. 10/5/17– Table 2 loads were batch treated in the R2. Inserted this data into Table 1 for totalizing the volumes and gallons. Reset Table 2 "Batch loads" of 9 to zero until next ex-situ stockpile treatment.

2017 DU 9 – Figures P 1-16, 18, 20, 21, 23-27.
Bldg 1124, 1126, 3521, S361, 347, 3501, S3126, S3127, 521, 520, 502, 5342, 309, 340, 354, 9149, 232, 233, S269, S225A, 2127, 144, Boat House 1 & 2, 4205, 4206, 4207, 4213, 503, 5303, 5341, 5339, 5338, Bollards, Fire Hydrants, 5304, 5305, 4210, 3524, 3529, 5126, 5378, 3514, and other ancillary structures.
Foundations S464, 502, 4201, 5126, 5295, 5342.
2017 DU 8 – S-28, S-30 re-ex, Pipe figure P19
2017 DU 7 – Bldg 3502, 3503, 3504 shade cloth
2017 DU 5 – R2 Unit, Figure P17
2017 DU 3 – Housing figure P22, 419 MIS re-ex

Table 2. Soil loads hauled to the R2 for ex situ Maectite® treatment

	Load Totals				
	Hauled to R2 for treatment in R2 cell (# of truck loads)				
Date	Soils (DU9)	Soils (DU8)	Soils (DU7)	Soils (DU5)	Soils (DU3)
10/09/17	0	0	0	0	0
10/10/17	0	0	0	0	0
~End~	-	-	-	-	-
Batch loads to treat in R2	0 loads	0 loads	0 loads	0 loads	0 loads
Total to Date	130.8 loads	34 loads	18.5 loads	0 loads	0 loads

8/14/17 - Batch treatment of all stockpiled "ex situ" loads to date in R2 Cell 1. Entered this data into Table 1 on 8/14/17 for volume and gallon tracking.
8/15/17 - Add "Batch Loads to treat in R2" subtotal that tracks the truck loads placed for treatment. Reset this to zero once treatment event is complete.
8/23/17 – Batch #2 treatment event of all stockpiled "ex situ" loads to date in R2 Cells. Entered this data into Table 1 on 8/23/17 for volume and gallon tracking.
9/12/17 – Batch #3 treatment event of all stockpiled "ex situ" loads to date in R2 Cells. Entered this data into Table 1 on 9/11/17 & 9/12/17 for volume and gallon tracking.
9/21/17 – Batch #4 treatment event of all stockpiled "ex situ" loads to date in R2 Cells. Entered this data into Table 1 on 9/21/17 for volume and gallon tracking.
9/29/17 – Batch #5 treatment event of all stockpiled "ex situ" loads to date in R2 Cells. Entered this data into Table 1 on 9/29/17 for volume and gallon tracking.
10/5/17 – Batch #6 treatment event of all stockpiled "ex situ" loads to date in R2 Cells. Entered this data into Table 1 on 10/5/17 for volume and gallon tracking.

Table 2.1 Soil loads hauled to the R2, non-treated internment

Date	Load Totals				
	Hauled to R2, non-treated soil (# of truck loads)				
	Soils (DU9)	Soils (DU8)	Soils (DU7)	Soils (DU5)	Soils (DU3)
10/09/17	0	0	0	0	0
10/10/17	0	0	0	0	0
~End~	-	-	-	-	-
Total to Date	29.5 loads	75 loads	0 loads	0 loads	9 loads

Table 3. Weekly Load Estimates

Date	Treated Demo Debris Loads to R2	Clean Concrete Loads to Crusher	Metal Debris Loads To Boneyard	Clean Wood Loads	Steel Debris Loaded onto Barge	R2 waste layer toe adjustment sand
10/9/17	0	0	0	0	0	0
10/10/17	0	0	0	0	0	0
~End~	-	-	-	-	-	-
Season Total	3 loads	8 loads	0 loads	4 loads	195 loads	35 loads

Table 3.1 Weekly Load Estimates

Date	R2 final cover- 3" minus concrete
10/16/17	46
10/17/17	52
10/18/17	54
10/19/17	13
10/20/17	~End~
10/21/15	-
10/22/17	-
Season Total	207 loads

Table 4. Fire Hydrants, Pedestals and Monuments

Fire Hydrant Soil					Fire Hydrant Soil				
Fire Hydrant ID	Excavate	Sampled Collected FH # X 0-2"	Backfill	Notes- Red >75mg/kg Green<75mg/kg	Fire Hydrant ID	Excavate	Sampled Collected FH # X 0-2"	Backfill	Notes- Red >75mg/kg Green<75mg/kg
1	9/26/2017	10/3/2017	10/3/2017	FH 1 0-2"	41	DU-1	N/A	N/A	Prior excavation
2	9/27/2017	10/3/2017	10/3/2017	FH 2 0-2"	42	9/25/2017	9/27/2017	10/2/2017	FH 42 0-2"
3	9/26/2017	9/26/2017	10/3/2017	FH 3 0-2"	43	9/26/2017	10/2/2017	10/3/2017	FH 43 0-2"
4	9/26/2017	9/26/2017	10/3/2017	FH 4 0-2"	44	9/26/2017	9/29/2017	10/2/2017	FH 44 0-2"
5	9/27/2017	10/3/2017	10/3/2017	FH 5 0-2"	45	9/23/2017	9/28/2017	10/4/2017	FH 45 0-2"
6	9/27/2017	10/3/2017	10/3/2017	FH 6 0-2"	46	9/25/2017	10/3/2017	10/4/2017	FH 46 0-2"
7	9/26/2017	9/26/2017	10/3/2017	FH 7 0-2"	47	9/25/2017	10/4/2017	10/4/2017	FH 47 0-2"
8	9/25/2017	10/3/2017	10/3/2017	FH 8 0-2"	48	9/25/2017	10/3/2017	10/4/2017	FH 48 0-2"
9	9/25/2017	10/3/2017	10/3/2017	FH 9 0-2"	49	9/26/2017	9/26/2017	10/4/2017	FH 49 0-2"
10	9/25/2017	10/3/2017	10/3/2017	FH 10 0-2"	50	9/28/2017	10/3/2017	10/4/2017	FH 50 0-2"
11	8/31/2017	9/4/2017	9/30/2017	FH 11 0-2"	51	9/11/2017	9/11/2017	9/30/2017	FH 51 0-2"
12	DU-6	N/A	N/A	Prior excavation	52	9/11/2017	9/11/2017	9/30/2017	FH 52 0-2"
13	DU-6	N/A	N/A	Prior excavation	53	8/23/2017	8/23/2017	10/6/2017	FH 53 0-2"
14	DU-6	N/A	N/A	Prior excavation	54	9/11/2017	9/11/2017	10/6/2017	FH 54 0-2"re-ex
15	DU-6	N/A	N/A	Prior excavation	54A	8/23/2017	8/23/2017	10/6/2017	FH 54A 0-2"
16	9/23/2017	9/28/2017	9/29/2017	FH 16 0-2"	55	8/26/2017	8/26/2017	9/29/2017	FH 55 0-2"
17	9/23/2017	9/23/2017	9/23/2017	FH 17 0-2"	56	8/26/2017	8/30/2017	10/2/2017	FH 56 0-2"
18	9/23/2017	9/23/2017	9/23/2017	FH 18 0-2"	57	8/26/2017	8/26/2017	9/29/2017	FH 57 0-2"
19	9/23/2017	9/29/2017	10/2/2017	FH 19 0-2"	58	9/11/2017	9/11/2017	9/29/2017	FH 58 0-2"
20	9/23/2017	9/28/2017	9/29/2017	FH 20 0-2"	59	9/26/2017	9/27/2017	9/29/2017	FH 59 0-2"
21	9/26/2017	9/27/2017	9/30/2017	FH 21 0-2"	60	10/11/2017	10/11/2017	10/11/2017	FH 60 0-2"
22	9/25/2017	9/26/2017	9/26/2017	FH 22 0-2"	61	9/28/2017	9/29/2017	10/3/2017	FH 61 0-2"
23	9/26/2017	9/26/2017	9/26/2017	FH 23 0-2"	62	9/25/2017	9/27/2017	10/3/2017	FH 62 0-2"
24	9/26/2017	9/26/2017	9/29/2017	FH 24 0-2"	63	9/28/2017	9/29/2017	10/3/2017	FH 63 0-2"
25	9/26/2017	9/26/2017	9/29/2017	FH 25 0-2"	64	9/11/2017	9/11/2017	10/30/2017	FH 64 0-2"
26	9/26/2017	9/26/2017	9/29/2017	FH 26 0-2"	65	8/29/2017	8/30/2017	10/30/2017	FH 65 0-2"
27	9/23/2017	9/23/2017	9/30/2017	FH 27 0-2"	66	8/26/2017	8/26/2017	10/3/2017	FH 66 0-2"
28	9/23/2017	9/23/2017	9/30/2017	FH 28 0-2"	67	8/25/2017	8/30/2017	9/29/2017	FH 67 0-2"
29	9/26/2017	9/26/2017	10/2/2017	FH 29 0-2"	68	8/25/2017	8/30/2017	9/29/2017	FH 68 0-2"
30	9/26/2017	9/26/2017	9/26/2017	FH 30 0-2"	69	9/25/2017	9/27/2017	9/29/2017	FH 69 0-2"
31	9/26/2017	9/26/2017	9/26/2017	FH 31 0-2"	70	9/25/2017	9/27/2017	9/29/2017	FH 69 0-2"
32	9/26/2017	9/26/2017	9/26/2017	FH 32 0-2"	71	9/25/2017	9/27/2017	9/29/2017	FH 71 0-2"
33	9/26/2017	9/26/2017	9/26/2017	FH 33 0-2"	72	8/29/2017	9/27/2017	10/3/2017	FH 72 0-2"
34	9/26/2017	9/29/2017	9/30/2017	FH 34 0-2"	73	8/29/2017	9/11/2017	10/2/2017	FH 73 0-2"
35	9/26/2017	10/4/2017	10/4/2017	FH 35 0-2"	74	8/29/2017	8/29/2017	10/2/2017	FH 74 0-2"
36	9/26/2017	10/4/2017	10/4/2017	FH 36 0-2"	75	8/28/2017	8/29/2017	10/2/2017	FH 75 0-2"
37	9/25/2017	9/26/2017	10/2/2017	FH 37 0-2"	76	9/25/2017	9/29/2017	10/2/2017	FH 76 0-2"
38	9/26/2017	10/2/2017	10/2/2017	FH 38 0-2"	77	8/28/2017	8/29/2017	10/3/2017	FH 77 0-2"
39	DU-1	N/A	N/A	Prior excavation					
40	9/26/2017	9/27/2017	10/2/2017	FH 40 0-2"					

Pedestals /Monuments Soil					Pedestals /Monuments Soil				
Feature Unit ID	Excavate	Sampled Collected ID # X P100 0-2"	Backfill	Notes- Red >75mg/kg Green<75mg/kg	Feature Unit ID	Excavate	Sampled Collected ID # X P100 0-2"	Backfill	Notes- Red >75mg/kg Green<75mg/kg
1	8/29/2017	9/4/2017	9/30/2017	1-08 P100 0-2"	23	9/29/2017	10/2/2017	10/2/2017	23-44 P100 0-2"
2	8/29/2017	9/4/2017	9/30/2017	2-08 P100 0-2"	24	9/29/2017	10/2/2017	10/2/2017	24-42 P100 0-2"
3	8/29/2017	9/4/2017	9/30/2017	3-10 P100 0-2"	25	9/29/2017	10/2/2017	10/2/2017	25-38 P100 0-2"
4	8/29/2017	9/4/2017	9/30/2017	4-10 P100 0-2"	26	9/25/2017	10/3/2017	10/3/2017	26-07 P100 0-2"
5	8/29/2017	9/4/2017	9/30/2017	5-11 P100 0-2"	27	10/26/2017	10/3/2017	10/3/2017	27-03 P100 0-2"
6	9/11/2017	9/11/2017	9/30/2017	6-51 P100 0-2"	28	9/26/2017	10/4/2017	10/4/2017	28-30 P100 0-2"
7	9/11/2017	9/11/2017	9/30/2017	7-32 P100 0-2"	29	10/5/2017	10/5/2017	10/5/2017	29-R1 P100 0-2"
8	9/05/2017	9/18/2017	10/3/2017	8-20 P100 0-2"	30	10/5/2017	10/5/2017	10/5/2017	30-20 P100 0-2"
9	9/26/2017	9/28/2017	9/30/2017	9-33 P100 0-2"	31	10/5/2017	10/5/2017	10/5/2017	31-15 P100 0-2"
10	9/26/2017	9/28/2017	9/30/2017	10-23 P100 0-2"	32-71	DU-6	N/A	N/A	Prior excavation
11	9/26/2017	9/28/2017	9/29/2017	11-20 P100 0-2"	33-12	DU-6	N/A	N/A	Prior excavation
12	9/26/2017	9/28/2017	9/29/2017	12-28 P100 0-2"	34-15	DU-6	N/A	N/A	Prior excavation
13	9/26/2017	9/28/2017	9/29/2017	13-27 P100 0-2"	35-15	DU-6	N/A	N/A	Prior excavation
14	9/26/2017	9/28/2017	9/30/2017	14-08 P100 0-2"	36-14	DU-6	N/A	N/A	Prior excavation
15	9/27/2017	9/29/2017	9/30/2017	15-24 P100 0-2"	37-Cross	Abated	N/A	N/A	Maintained
16	9/27/2017	9/29/2017	9/30/2017	16-25 P100 0-2"	38-58	DU-8	N/A	N/A	Prior excavation
17	9/27/2017	9/29/2017	9/30/2017	17-25 P100 0-2"	39-58	DU-8	N/A	N/A	Prior excavation
18	9/28/2017	9/29/2017	9/29/2017	18-13 P100 0-2"	40-Ave Maria	Abated	N/A	N/A	Maintained
19	9/26/2017	9/29/2017	10/2/2017	19-44 P100 0-2"	41-Golf	Abated	N/A	N/A	Spray
20	9/26/2017	9/29/2017	10/2/2017	20-44 P100 0-2"	42-R1	Abated	N/A	N/A	Concrete apron
21	9/26/2017	9/29/2017	9/30/2017	21-52 P100 0-2"	43-R1	Abated	N/A	N/A	Concrete apron
22	9/26/2017	10/2/2017	10/4/2017	22-49 P100 0-2"					

Fire Hydrant ID # per updated DBSI file -Navy Fresh Water Lines, Valves & Hydrants. BSI/DR-0034
Pedestal sample identification is a designated ID number followed by a dash and double-digit number relative to the closest Fire Hydrant ID location. No full prior map of pedestals exists.

Table 5. DU 5 Buttress & Cover - Import Clean Coral Sand

DU 5 IMPORT CLEAN CORAL						
DATE	NORTH Wall Loads	SOUTH Wall Loads	EAST Wall Loads	WEST Wall Loads	Days total loads	Days cubic yardage
10/9/2017	0	0	0	0	0	0
10/10/2017	0	0	0	0	0	0
10/11/2017	0	0	0	0	0	0
10/12/2017	0	0	0	0	0	0
10/13/2017	0	0	0	0	0	0
10/14/2017	0	0	0	0	0	0
10/15/2017	End	End	End	End	0	0
Load count per wall	282	0	16	0		
15cuyd estimate per wall	4230	0	240	0		
2017 Total R2 combined clean coral import LOADS				298		
Loads x 15cuyd estimate				4470		
R2 North Stockpile distribution-						
Truck loads into R2 cap & abutment				294		
Loads x 15cuyd estimate				4410		
Stockpile loads to DU-9 backfill				43		
Loads x 15cuyd estimate				645		

The R2 North Stockpile of clean coral sand for 2017 is 298 truck loads. The same north side abutment stockpile in 2016 is comingled, producing a larger available yardage than 2017 alone.
DU-9 distribution is noted in Table 5 for the R2 North stockpile. However, Table 6 indicates the project total DU-9 backfill yardage for 2017, regardless of where the clean sand originated (Borrow Source or the R2 North Stockpile)

Table 6. Excavation Plots - Import Clean Coral Sand

EXCAVATION PLOTS- IMPORT CLEAN CORAL BACKFILL							
DATE	DU-9 Loads	DU-8 Loads	DU-7 Loads	DU-5 Loads	DU-3 Loads	Days total loads	Days cubic yardage
10/16/2017	0	0	0	0	0	0	0
10/17/2017	21	1	0	0	0	22	330
10/18/2017	5	0	0	0	0	5	75
10/19/2017	0	0	0	0	0	0	0
10/20/2017	~End~	~End~	~End~	~End~	~End~	0	0
10/21/2017						0	0
10/22/2017						0	0
Load count per column	224.5	40.5	20	0	0		
15cuyd estimate per column	3367.5	607.5	300	0	0		
2017 Total combined clean import Backfill LOADS					285		
Loads x 15cuyd estimate					4275		

NW Demolition and Environmental
A Joint Venture

Daily Field Report

Date: Saturday, October 21, 2017
Prepared by: Scott Wakefield

Project: Removal of Lead-Based Paint from Structures and Lead-Contaminated Soil
Location: Midway Atoll National Wildlife Refuge
Client: US Fish and Wildlife Service

Weather: Partly cloudy, wind 7 mph. Temperature ~81F

Personnel:

Name	Company	Site Hours
Scott Wakefield	NWDE Field Oversight	10
Jeff James	NWDE Supervisor	10
Joel Smith	NWDE Operator	10
Dalton Sullivan	NWDE Labor	10
Jevon Stone	NWDE Operator	10
Matt Manning	NWDE Operator	10
Lucas Peel	NWDE Labor	10
Tyler Wilson	NWDE Labor	10

Visitors/Additional Site Personnel:

Name	Title
MaryAnn Amann	U.S. FWS

Equipment:

Description	Model No.	Comments / Serial #
Pickup Truck	F350 Service Truck	NWDE
Flatbed Truck	Ford F450	NWDE
Container Truck	Peterbuilt	NWDE
Skid Steer	Bobcat S185	NWDE
Tracked Skid Steer	Bobcat T750	NWDE
Tracked Skid Steer	Bobcat	NWDE
Mini-Excavator	CAT 308	NWDE
Excavator	Volvo EC290BLC	NWDE
Excavator	Volvo EC290BLC	NWDE
Excavator	Volvo EC290	NWDE
Off road Dump Truck	Volvo A30D	NWDE
Off road Dump Truck	Volvo A30D	NWDE
Off road Dump Truck	Volvo A30D	NWDE
Excavator – High reach	Komatsu PC400HD	NWDE
Excavator	Komatsu 450	NWDE

Materials Delivered:

Description	QTY	Condition/Comments
Diesel	0 gallons	
Gasoline	0 gallons	

Description of Work:

0700 – Health and Safety meeting at NAF staging area. Review today's work tasks.

Today's focus will be punch list items to close out the project.

This morning the recently arrived barge will be positioned for alignment to land the deck ramps. Using the excavator and tug, the barge is tied out from the pier and moored in position.
Deckhands are preparing for the two piece equipment ramp to be lifted and set into position. The crew works to get the ramp carefully configured from the barge stern to the sea wall.

At the multi excavation sites punchlist items are being picked up and small debris removed to finish off each site. Flagging and abandon utility remnants are collected for disposal off island.

The NAF Hanger Staging area crew is pushing forward to load containers with large non-essential equipment. The second buggy, skidsteer, excavation buckets and supplies are staged in the shipping containers. The goal today is to get most all items loaded and containers closed up.

At the Boneyard wash area, NWDE equipment is being cleaned of soil, sand and dirt in preparation of loading onto the barge Monday. The pressure washer is in use. The interior cab, compartments, undercarriage and tracks are being cleaned. Machines are then staged at the Boneyard apron.

1030 – The barge ramps have been set and are ready for Monday's major loading event.

The Volvo A30 haul trucks are being fitted with weld on D-rings to lash large excavator attachments in the beds with chain. The MB Crusher bucket, UP-40 jaws, thumbed buckets, etc are prepped to go into the three haul trucks.

1200 – Lunch

1230 – Prepare the two 20' shipping containers and finish loading the project triwall box paint chips that will ship off island. These are being shipped to HNL for forwarding and disposal as HazWaste UN 3077, solid, N.O.S. (debris with lead) 9, PGIII. Material S28/S30 Paint + Debris is being disposed of relative to the analytical ID #580-54921-133, 5.5mg/L TCLP results as directed by US FWS.

Through the afternoon equipment washing continues at the Boneyard for the Cat dozer, multiple excavators, the Cat mini 308 and the NWDE service truck.

1430 - At the NAF Hanger, the progress to keep loading shipping containers and closing them up is ongoing. The afternoon wraps up with the majority of the large heavy attachments being lashed down, stowed away and prepared for a Monday barge loading event.

At the R2 Unit, the final cover rock is being inspected and metal rebar is being hand picked and removed. This steel will go into the recyclable volume that is being shipped off island next week on the barge.

1730 – Ending the work day.

Photographs:

Photo 01: Kahana Pier – View east. Positioning and mooring the barge

Photo 02: NAF Hanger Staging Area – View northwest. Progress of demobilization

Photo 03: NAF Hanger Staging Area – View southeast. Progress of demobilization

Photo 04: Boneyard – View northwest. Equipment cleaning tasks

Photo 05: Boneyard – View east. Overview of removed 3” minus stockpile

Photo 06: Boneyard – View northeast. Remaining materials are US FWS stockpiles

Photo 07: NAF Hanger Staging Area – View west. Progress of demobilization

Photo 08: Boneyard – View northwest. Equipment cleaning tasks

Table 1. Maectite and Treated Soil Total Estimates

	Maectite Totals						Treated Soil Totals[1,2]		
	Applied Today (gal)					Total to Date	Excavated and Hauled to R-2 Unit **Today**		Excavated and Hauled to R-2 Unit **Total to Date**
Date	Soils (DU9)	Soils (DU8)	Soils (DU7)	Soils (DU5)	Soils (DU3)	(gal)	Load	^{3}yds[1]	^{3}yds[1]
10/09/17	0	0	0	0	0	2981	0	0	4087
10/10/17	0	0	0	0	0	2981	0	0	4087
~End~	-	-	-	-	-	-	-	-	-
Total to Date	2623 gallons	205 gallons	153 gallons	0 gallons	0 gallons		328 loads		

Notes:
1. Estimates are based on the number of gallons of Maectite® applied.
2. Soil treatment with Maectite® and hauling to R2 may not occur on the same day.
3. 10/5/17– Table 2 loads were batch treated in the R2. Inserted this data into Table 1 for totalizing the volumes and gallons. Reset Table 2 "Batch loads" of 9 to zero until next ex-situ stockpile treatment.

2017 DU 9 – Figures P 1-16, 18, 20, 21, 23-27.
Bldg 1124, 1126, 3521, S361, 347, 3501, S3126, S3127, 521, 520, 502, 5342, 309, 340, 354, 9149, 232, 233, S269, S225A, 2127, 144, Boat House 1 & 2, 4205, 4206, 4207, 4213, 503, 5303, 5341, 5339, 5338, Bollards, Fire Hydrants, 5304, 5305, 4210, 3524, 3529, 5126, 5378, 3514, and other ancillary structures.
Foundations S464, 502, 4201, 5126, 5295, 5342.
2017 DU 8 – S-28, S-30 re-ex, Pipe figure P19
2017 DU 7 – Bldg 3502, 3503, 3504 shade cloth
2017 DU 5 – R2 Unit, Figure P17
2017 DU 3 – Housing figure P22, 419 MIS re-ex

Table 2. Soil loads hauled to the R2 for ex situ Maectite® treatment

	Load Totals				
	Hauled to R2 for treatment in R2 cell (# of truck loads)				
Date	Soils (DU9)	Soils (DU8)	Soils (DU7)	Soils (DU5)	Soils (DU3)
10/09/17	0	0	0	0	0
10/10/17	0	0	0	0	0
~End~	-	-	-	-	-
Batch loads to treat in R2	0 loads	0 loads	0 loads	0 loads	0 loads
Total to Date	130.8 loads	34 loads	18.5 loads	0 loads	0 loads

8/14/17 - Batch treatment of all stockpiled "ex situ" loads to date in R2 Cell 1. Entered this data into Table 1 on 8/14/17 for volume and gallon tracking.
8/15/17 - Add "Batch Loads to treat in R2" subtotal that tracks the truck loads placed for treatment. Reset this to zero once treatment event is complete.
8/23/17 – Batch #2 treatment event of all stockpiled "ex situ" loads to date in R2 Cells. Entered this data into Table 1 on 8/23/17 for volume and gallon tracking.
9/12/17 – Batch #3 treatment event of all stockpiled "ex situ" loads to date in R2 Cells. Entered this data into Table 1 on 9/11/17 & 9/12/17 for volume and gallon tracking.
9/21/17 – Batch #4 treatment event of all stockpiled "ex situ" loads to date in R2 Cells. Entered this data into Table 1 on 9/21/17 for volume and gallon tracking.
9/29/17 – Batch #5 treatment event of all stockpiled "ex situ" loads to date in R2 Cells. Entered this data into Table 1 on 9/29/17 for volume and gallon tracking.
10/5/17 – Batch #6 treatment event of all stockpiled "ex situ" loads to date in R2 Cells. Entered this data into Table 1 on 10/5/17 for volume and gallon tracking.

Table 2.1 Soil loads hauled to the R2, non-treated internment

Date	Load Totals				
	Hauled to R2, non-treated soil (# of truck loads)				
	Soils (DU9)	Soils (DU8)	Soils (DU7)	Soils (DU5)	Soils (DU3)
10/09/17	0	0	0	0	0
10/10/17	0	0	0	0	0
~End~	-	-	-	-	-
Total to Date	29.5 loads	75 loads	0 loads	0 loads	9 loads

Table 3. Weekly Load Estimates

Date	Treated Demo Debris Loads to R2	Clean Concrete Loads to Crusher	Metal Debris Loads To Boneyard	Clean Wood Loads	Steel Debris Loaded onto Barge	R2 waste layer toe adjustment sand
10/9/17	0	0	0	0	0	0
10/10/17	0	0	0	0	0	0
~End~	-	-	-	-	-	-
Season Total	3 loads	8 loads	0 loads	4 loads	195 loads	35 loads

Table 3.1 Weekly Load Estimates

Date	R2 final cover- 3" minus concrete
10/16/17	46
10/17/17	52
10/18/17	54
10/19/17	13
10/20/17	~End~
10/21/15	-
10/22/17	-
Season Total	207 loads

Table 4. Fire Hydrants, Pedestals and Monuments

Fire Hydrant Soil					Fire Hydrant Soil				
Fire Hydrant ID	Excavate	Sampled Collected FH # X 0-2"	Backfill	Notes- Red >75mg/kg Green<75mg/kg	Fire Hydrant ID	Excavate	Sampled Collected FH # X 0-2"	Backfill	Notes- Red >75mg/kg Green<75mg/kg
1	9/26/2017	10/3/2017	10/3/2017	FH 1 0-2"	41	DU-1	N/A	N/A	Prior excavation
2	9/27/2017	10/3/2017	10/3/2017	FH 2 0-2"	42	9/25/2017	9/27/2017	10/2/2017	FH 42 0-2"
3	9/26/2017	9/26/2017	10/3/2017	FH 3 0-2"	43	9/26/2017	10/2/2017	10/3/2017	FH 43 0-2"
4	9/26/2017	9/26/2017	10/3/2017	FH 4 0-2"	44	9/26/2017	9/29/2017	10/2/2017	FH 44 0-2"
5	9/27/2017	10/3/2017	10/3/2017	FH 5 0-2"	45	9/23/2017	9/28/2017	10/4/2017	FH 45 0-2"
6	9/27/2017	10/3/2017	10/3/2017	FH 6 0-2"	46	9/25/2017	10/3/2017	10/4/2017	FH 46 0-2"
7	9/26/2017	9/26/2017	10/3/2017	FH 7 0-2"	47	9/25/2017	10/4/2017	10/4/2017	FH 47 0-2"
8	9/25/2017	10/3/2017	10/3/2017	FH 8 0-2"	48	9/25/2017	10/3/2017	10/4/2017	FH 48 0-2"
9	9/25/2017	10/3/2017	10/3/2017	FH 9 0-2"	49	9/26/2017	9/26/2017	10/4/2017	FH 49 0-2"
10	9/25/2017	10/3/2017	10/3/2017	FH 10 0-2"	50	9/28/2017	10/3/2017	10/4/2017	FH 50 0-2"
11	8/31/2017	9/4/2017	9/30/2017	FH 11 0-2"	51	9/11/2017	9/11/2017	9/30/2017	FH 51 0-2"
12	DU-6	N/A	N/A	Prior excavation	52	9/11/2017	9/11/2017	9/30/2017	FH 52 0-2"
13	DU-6	N/A	N/A	Prior excavation	53	8/23/2017	8/23/2017	10/6/2017	FH 53 0-2"
14	DU-6	N/A	N/A	Prior excavation	54	9/11/2017	9/11/2017	10/6/2017	FH 54 0-2"re-ex
15	DU-6	N/A	N/A	Prior excavation	54A	8/23/2017	8/23/2017	10/6/2017	FH 54A 0-2"
16	9/23/2017	9/28/2017	9/29/2017	FH 16 0-2"	55	8/26/2017	8/26/2017	9/29/2017	FH 55 0-2"
17	9/23/2017	9/23/2017	9/23/2017	FH 17 0-2"	56	8/26/2017	8/30/2017	10/2/2017	FH 56 0-2"
18	9/23/2017	9/23/2017	9/23/2017	FH 18 0-2"	57	8/26/2017	8/26/2017	9/29/2017	FH 57 0-2"
19	9/23/2017	9/29/2017	10/2/2017	FH 19 0-2"	58	9/11/2017	9/11/2017	9/29/2017	FH 58 0-2"
20	9/23/2017	9/28/2017	9/29/2017	FH 20 0-2"	59	9/26/2017	9/27/2017	9/29/2017	FH 59 0-2"
21	9/26/2017	9/27/2017	9/30/2017	FH 21 0-2"	60	10/11/2017	10/11/2017	10/11/2017	FH 60 0-2"
22	9/25/2017	9/26/2017	9/26/2017	FH 22 0-2"	61	9/28/2017	9/29/2017	10/3/2017	FH 61 0-2"
23	9/26/2017	9/26/2017	9/26/2017	FH 23 0-2"	62	9/25/2017	9/27/2017	10/3/2017	FH 62 0-2"
24	9/26/2017	9/26/2017	9/29/2017	FH 24 0-2"	63	9/28/2017	9/29/2017	10/3/2017	FH 63 0-2"
25	9/26/2017	9/26/2017	9/29/2017	FH 25 0-2"	64	9/11/2017	9/11/2017	10/30/2017	FH 64 0-2"
26	9/26/2017	9/26/2017	9/29/2017	FH 26 0-2"	65	8/29/2017	8/30/2017	10/30/2017	FH 65 0-2"
27	9/23/2017	9/23/2017	9/30/2017	FH 27 0-2"	66	8/26/2017	8/26/2017	10/3/2017	FH 66 0-2"
28	9/23/2017	9/23/2017	9/30/2017	FH 28 0-2"	67	8/25/2017	8/30/2017	9/29/2017	FH 67 0-2"
29	9/26/2017	9/26/2017	10/2/2017	FH 29 0-2"	68	8/25/2017	8/30/2017	9/29/2017	FH 68 0-2"
30	9/26/2017	9/26/2017	9/26/2017	FH 30 0-2"	69	9/25/2017	9/27/2017	9/29/2017	FH 69 0-2"
31	9/26/2017	9/26/2017	9/26/2017	FH 31 0-2"	70	9/25/2017	9/27/2017	9/29/2017	FH 69 0-2"
32	9/26/2017	9/26/2017	9/26/2017	FH 32 0-2"	71	9/25/2017	9/27/2017	9/29/2017	FH 71 0-2"
33	9/26/2017	9/26/2017	9/26/2017	FH 33 0-2"	72	8/29/2017	9/27/2017	10/3/2017	FH 72 0-2"
34	9/26/2017	9/29/2017	9/30/2017	FH 34 0-2"	73	8/29/2017	9/11/2017	10/2/2017	FH 73 0-2"
35	9/26/2017	10/4/2017	10/4/2017	FH 35 0-2"	74	8/29/2017	8/29/2017	10/2/2017	FH 74 0-2"
36	9/26/2017	10/4/2017	10/4/2017	FH 36 0-2"	75	8/28/2017	8/29/2017	10/2/2017	FH 75 0-2"
37	9/25/2017	9/26/2017	10/2/2017	FH 37 0-2"	76	9/25/2017	9/29/2017	10/2/2017	FH 76 0-2"
38	9/26/2017	10/2/2017	10/2/2017	FH 38 0-2"	77	8/28/2017	8/29/2017	10/3/2017	FH 77 0-2"
39	DU-1	N/A	N/A	Prior excavation					
40	9/26/2017	9/27/2017	10/2/2017	FH 40 0-2"					

Pedestals /Monuments Soil					Pedestals /Monuments Soil				
Feature Unit ID	Excavate	Sampled Collected ID # X P100 0-2"	Backfill	Notes- Red >75mg/kg Green<75mg/kg	Feature Unit ID	Excavate	Sampled Collected ID # X P100 0-2"	Backfill	Notes- Red >75mg/kg Green<75mg/kg
1	8/29/2017	9/4/2017	9/30/2017	1-08 P100 0-2"	23	9/29/2017	10/2/2017	10/2/2017	23-44 P100 0-2"
2	8/29/2017	9/4/2017	9/30/2017	2-08 P100 0-2"	24	9/29/2017	10/2/2017	10/2/2017	24-42 P100 0-2"
3	8/29/2017	9/4/2017	9/30/2017	3-10 P100 0-2"	25	9/29/2017	10/2/2017	10/2/2017	25-38 P100 0-2"
4	8/29/2017	9/4/2017	9/30/2017	4-10 P100 0-2"	26	9/25/2017	10/3/2017	10/3/2017	26-07 P100 0-2"
5	8/29/2017	9/4/2017	9/30/2017	5-11 P100 0-2"	27	10/26/2017	10/3/2017	10/3/2017	27-03 P100 0-2"
6	9/11/2017	9/11/2017	9/30/2017	6-51 P100 0-2"	28	9/26/2017	10/4/2017	10/4/2017	28-30 P100 0-2"
7	9/11/2017	9/11/2017	9/30/2017	7-32 P100 0-2"	29	10/5/2017	10/5/2017	10/5/2017	29-R1 P100 0-2"
8	9/05/2017	9/18/2017	10/3/2017	8-20 P100 0-2"	30	10/5/2017	10/5/2017	10/5/2017	30-20 P100 0-2"
9	9/26/2017	9/28/2017	9/30/2017	9-33 P100 0-2"	31	10/5/2017	10/5/2017	10/5/2017	31-15 P100 0-2"
10	9/26/2017	9/28/2017	9/30/2017	10-23 P100 0-2"	32-71	DU-6	N/A	N/A	Prior excavation
11	9/26/2017	9/28/2017	9/29/2017	11-20 P100 0-2"	33-12	DU-6	N/A	N/A	Prior excavation
12	9/26/2017	9/28/2017	9/29/2017	12-28 P100 0-2"	34-15	DU-6	N/A	N/A	Prior excavation
13	9/26/2017	9/28/2017	9/29/2017	13-27 P100 0-2"	35-15	DU-6	N/A	N/A	Prior excavation
14	9/26/2017	9/28/2017	9/30/2017	14-08 P100 0-2"	36-14	DU-6	N/A	N/A	Prior excavation
15	9/27/2017	9/29/2017	9/30/2017	15-24 P100 0-2"	37-Cross	Abated	N/A	N/A	Maintained
16	9/27/2017	9/29/2017	9/30/2017	16-25 P100 0-2"	38-58	DU-8	N/A	N/A	Prior excavation
17	9/27/2017	9/29/2017	9/30/2017	17-25 P100 0-2"	39-58	DU-8	N/A	N/A	Prior excavation
18	9/28/2017	9/29/2017	9/29/2017	18-13 P100 0-2"	40-Ave Maria	Abated	N/A	N/A	Maintained
19	9/26/2017	9/29/2017	10/2/2017	19-44 P100 0-2"	41-Golf	Abated	N/A	N/A	Spray
20	9/26/2017	9/29/2017	10/2/2017	20-44 P100 0-2"	42-R1	Abated	N/A	N/A	Concrete apron
21	9/26/2017	9/29/2017	9/30/2017	21-52 P100 0-2"	43-R1	Abated	N/A	N/A	Concrete apron
22	9/26/2017	10/2/2017	10/4/2017	22-49 P100 0-2"					

Fire Hydrant ID # per updated DBSI file -Navy Fresh Water Lines, Valves & Hydrants. BSI/DR-0034
Pedestal sample identification is a designated ID number followed by a dash and double-digit number relative to the closest Fire Hydrant ID location. No full prior map of pedestals exists.

Table 5. DU 5 Buttress & Cover - Import Clean Coral Sand

DU 5 IMPORT CLEAN CORAL						
DATE	NORTH Wall Loads	SOUTH Wall Loads	EAST Wall Loads	WEST Wall Loads	Days total loads	Days cubic yardage
10/9/2017	0	0	0	0	0	0
10/10/2017	0	0	0	0	0	0
10/11/2017	0	0	0	0	0	0
10/12/2017	0	0	0	0	0	0
10/13/2017	0	0	0	0	0	0
10/14/2017	0	0	0	0	0	0
10/15/2017	End	End	End	End	0	0
Load count per wall	282	0	16	0		
15cuyd estimate per wall	4230	0	240	0		
2017 Total R2 combined clean coral import LOADS				298		
Loads x 15cuyd estimate				4470		
R2 North Stockpile distribution-						
Truck loads into R2 cap & abutment				294		
Loads x 15cuyd estimate				4410		
Stockpile loads to DU-9 backfill				43		
Loads x 15cuyd estimate				645		

The R2 North Stockpile of clean coral sand for 2017 is 298 truck loads. The same north side abutment stockpile in 2016 is comingled, producing a larger available yardage than 2017 alone.
DU-9 distribution is noted in Table 5 for the R2 North stockpile. However, Table 6 indicates the project total DU-9 backfill yardage for 2017, regardless of where the clean sand originated (Borrow Source or the R2 North Stockpile)

Table 6. Excavation Plots - Import Clean Coral Sand

EXCAVATION PLOTS- IMPORT CLEAN CORAL BACKFILL							
DATE	DU-9 Loads	DU-8 Loads	DU-7 Loads	DU-5 Loads	DU-3 Loads	Days total loads	Days cubic yardage
10/16/2017	0	0	0	0	0	0	0
10/17/2017	21	1	0	0	0	22	330
10/18/2017	5	0	0	0	0	5	75
10/19/2017	0	0	0	0	0	0	0
10/20/2017	~End~	~End~	~End~	~End~	~End~	0	0
10/21/2017						0	0
10/22/2017						0	0
Load count per column	224.5	40.5	20	0	0		
15cuyd estimate per column	3367.5	607.5	300	0	0		
2017 Total combined clean import Backfill LOADS					285		
Loads x 15cuyd estimate					4275		

NW Demolition and Environmental
A Joint Venture

Daily Field Report

Date: Monday, October 23, 2017
Prepared by: Scott Wakefield

Project: Removal of Lead-Based Paint from Structures and Lead-Contaminated Soil
Location: Midway Atoll National Wildlife Refuge
Client: US Fish and Wildlife Service

Weather: Partly cloudy, wind 17-24 mph. Temperature ~72F

Personnel:

Name	Company	Site Hours
Scott Wakefield	NWDE Field Oversight	10
Jeff James	NWDE Supervisor	10
Joel Smith	NWDE Operator	10
Dalton Sullivan	NWDE Labor	10
Jevon Stone	NWDE Operator	10
Matt Manning	NWDE Operator	10
Lucas Peel	NWDE Labor	10
Tyler Wilson	NWDE Labor	10

Visitors/Additional Site Personnel:

Name	Title
MaryAnn Amann	U.S. FWS

Equipment:

Description	Model No.	Comments / Serial #
Pickup Truck	F350 Service Truck	NWDE
Flatbed Truck	Ford F450	NWDE
Container Truck	Peterbuilt	NWDE
Skid Steer	Bobcat S185	NWDE
Tracked Skid Steer	Bobcat T750	NWDE
Tracked Skid Steer	Bobcat	NWDE
Mini-Excavator	CAT 308	NWDE
Excavator	Volvo EC290BLC	NWDE
Excavator	Volvo EC290BLC	NWDE
Excavator	Volvo EC290	NWDE
Off road Dump Truck	Volvo A30D	NWDE
Off road Dump Truck	Volvo A30D	NWDE
Off road Dump Truck	Volvo A30D	NWDE
Excavator – High reach	Komatsu PC400HD	NWDE
Excavator	Komatsu 450	NWDE

Materials Delivered:

Description	QTY	Condition/Comments
Diesel	0 gallons	
Gasoline	0 gallons	

Description of Work:

0700 – Health and Safety meeting at NAF staging area. Review today's work tasks.

Today's focus will be loading containers onto the barge and punch list items to close out the project.

This morning's tasks continue to load shipping containers with supplies and equipment at the NAF Hanger staging area. General debris is separated into one defined 20' container while other items are inventoried and placed in specific units.

Sandbags that have yet to be emptied are being moved to the Water Plant area, specifically S3127E Reservoir where they will be emptied of the clean coral sand at the water reservoir perimeter shallow excavation.

This season excavation plots are being inspected for a final pickup of construction materials and remnant demo debris. General debris is placed at the trash connex. Steel materials are placed into the recycle shipping container. Both will be shipped off-island this week.

1100 – Preparations are made to begin moving shipping containers from the NAF Hanger staging area across Sand Island to the inner harbor onto the barge. The arrival of the barge brought a Cat 966 with forks to Midway for loading out the 20' shipping containers. These will be stacked two units high, cross chained and corner locked at the bow of the steel barge deck.

1200 – Lunch

1230 – The Cat front end loader is moving containers with a pilot vehicle to the barge. They are driven onto the barge deck using the American Marine provided purpose built loading ramps. The ramps are touching down north of the sea wall, nearly aligned between Bldg 1126 Harbor Office and Bldg 1124 HazMat Storage. This is the same as prior season barge orientation load/unloading. The shipping containers are moved throughout the afternoon from the NAF to the barge and oriented to be lashed down.

Boneyard work tasks are moving separated steel rebar that has been accumulated this fall into a second 20' standard height connex. The tracked skidsteer with claw bucket is placing materials into the container. Equipment cleaning continues for the Cat 308 mini and 450 Komatsu excavators.

1445 – At the R2 east side, inspect and gauge TD of the three Rainstore® 6" pvc inspection casings located within the steel flush mount monuments. The floor feels firm, bounced with a weighted tape.

10-23-17 Total Depth measurement (inspection)	10-20-16 Total Depth measurement (installation)
South – 9.55' TD btoc	South – 9.43' TD btoc
Middle – 9.54' TD btoc	Middle – 9.50' TD btoc
North – 9.55' TD btoc	North – 9.41' TD btoc

1600 – Containers continue to be moved and placed with the Cat 966 loader onto the barge.

1730 – Ending the work day. Nearly all the containers have been moved onto or near the barge. Expecting to resume to place the last few shipping containers onto the steel deck in the morning and begin loading excavators, haul trucks, dozer and support vehicles.

Photographs:

Photo 01: NAF Hanger Staging Area – View east. Progress of demobilization

Photo 02: Seaplane Hanger – View southwest. Moving containers towards the harbor

Photo 03: American Marine barge – Lashing down shipping containers

Photo 04: American Marine barge – Loading containers up the ramp

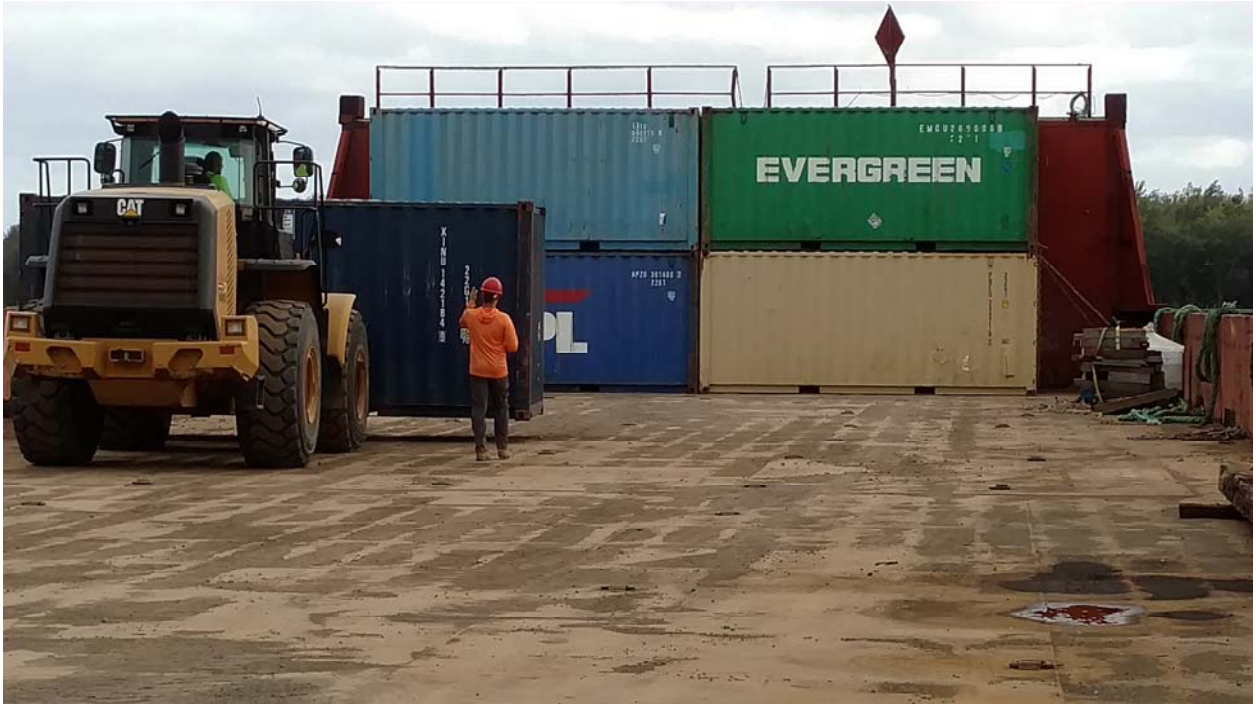


Photo 05: American Marine barge – Progress of loading shipping containers

Photo 06: Boneyard – Project steel rebar and metal recyclables loaded into shipping container

Photo 07: Boneyard – View east. Progress of cleaning and demobilization staging

Photo 08: Boneyard – View east. Progress of cleaning and demobilization staging

Table 1. Maectite and Treated Soil Total Estimates

	Maectite Totals						Treated Soil Totals[1,2]		
	Applied Today (gal)					Total to Date	Excavated and Hauled to R-2 Unit **Today**		Excavated and Hauled to R-2 Unit **Total to Date**
Date	Soils (DU9)	Soils (DU8)	Soils (DU7)	Soils (DU5)	Soils (DU3)	(gal)	Load	^{3}yds[1]	^{3}yds[1]
10/09/17	0	0	0	0	0	2981	0	0	4087
10/10/17	0	0	0	0	0	2981	0	0	4087
~End~	-	-	-	-	-	-	-	-	-
Total to Date	2623 gallons	205 gallons	153 gallons	0 gallons	0 gallons		328 loads		

Notes:
1. Estimates are based on the number of gallons of Maectite® applied.
2. Soil treatment with Maectite® and hauling to R2 may not occur on the same day.
3. 10/5/17– Table 2 loads were batch treated in the R2. Inserted this data into Table 1 for totalizing the volumes and gallons. Reset Table 2 "Batch loads" of 9 to zero until next ex-situ stockpile treatment.

2017 DU 9 – Figures P 1-16, 18, 20, 21, 23-27.
Bldg 1124, 1126, 3521, S361, 347, 3501, S3126, S3127, 521, 520, 502, 5342, 309, 340, 354, 9149, 232, 233, S269, S225A, 2127, 144, Boat House 1 & 2, 4205, 4206, 4207, 4213, 503, 5303, 5341, 5339, 5338, Bollards, Fire Hydrants, 5304, 5305, 4210, 3524, 3529, 5126, 5378, 3514, and other ancillary structures.
Foundations S464, 502, 4201, 5126, 5295, 5342.
2017 DU 8 – S-28, S-30 re-ex, Pipe figure P19
2017 DU 7 – Bldg 3502, 3503, 3504 shade cloth
2017 DU 5 – R2 Unit, Figure P17
2017 DU 3 – Housing figure P22, 419 MIS re-ex

Table 2. Soil loads hauled to the R2 for ex situ Maectite® treatment

	Load Totals				
	Hauled to R2 for treatment in R2 cell (# of truck loads)				
Date	Soils (DU9)	Soils (DU8)	Soils (DU7)	Soils (DU5)	Soils (DU3)
10/09/17	0	0	0	0	0
10/10/17	0	0	0	0	0
~End~	-	-	-	-	-
Batch loads to treat in R2	0 loads	0 loads	0 loads	0 loads	0 loads
Total to Date	130.8 loads	34 loads	18.5 loads	0 loads	0 loads

8/14/17 - Batch treatment of all stockpiled "ex situ" loads to date in R2 Cell 1. Entered this data into Table 1 on 8/14/17 for volume and gallon tracking.
8/15/17 - Add "Batch Loads to treat in R2" subtotal that tracks the truck loads placed for treatment. Reset this to zero once treatment event is complete.
8/23/17 – Batch #2 treatment event of all stockpiled "ex situ" loads to date in R2 Cells. Entered this data into Table 1 on 8/23/17 for volume and gallon tracking.
9/12/17 – Batch #3 treatment event of all stockpiled "ex situ" loads to date in R2 Cells. Entered this data into Table 1 on 9/11/17 & 9/12/17 for volume and gallon tracking.
9/21/17 – Batch #4 treatment event of all stockpiled "ex situ" loads to date in R2 Cells. Entered this data into Table 1 on 9/21/17 for volume and gallon tracking.
9/29/17 – Batch #5 treatment event of all stockpiled "ex situ" loads to date in R2 Cells. Entered this data into Table 1 on 9/29/17 for volume and gallon tracking.
10/5/17 – Batch #6 treatment event of all stockpiled "ex situ" loads to date in R2 Cells. Entered this data into Table 1 on 10/5/17 for volume and gallon tracking.

Table 2.1 Soil loads hauled to the R2, non-treated internment

Date	Load Totals				
	Hauled to R2, non-treated soil (# of truck loads)				
	Soils (DU9)	Soils (DU8)	Soils (DU7)	Soils (DU5)	Soils (DU3)
10/09/17	0	0	0	0	0
10/10/17	0	0	0	0	0
~End~	-	-	-	-	-
Total to Date	29.5 loads	75 loads	0 loads	0 loads	9 loads

Table 3. Weekly Load Estimates

Date	Treated Demo Debris Loads to R2	Clean Concrete Loads to Crusher	Metal Debris Loads To Boneyard	Clean Wood Loads	Steel Debris Loaded onto Barge	R2 waste layer toe adjustment sand
10/9/17	0	0	0	0	0	0
10/10/17	0	0	0	0	0	0
~End~	-	-	-	-	-	-
Season Total	3 loads	8 loads	0 loads	4 loads	195 loads	35 loads

Table 3.1 Weekly Load Estimates

Date	R2 final cover- 3" minus concrete
10/16/17	46
10/17/17	52
10/18/17	54
10/19/17	13
10/20/17	~End~
10/21/15	-
10/22/17	-
Season Total	207 loads

Table 4. Fire Hydrants, Pedestals and Monuments

Fire Hydrant Soil					Fire Hydrant Soil				
Fire Hydrant ID	Excavate	Sampled Collected FH # X 0-2"	Backfill	Notes- Red >75mg/kg Green<75mg/kg	Fire Hydrant ID	Excavate	Sampled Collected FH # X 0-2"	Backfill	Notes- Red >75mg/kg Green<75mg/kg
1	9/26/2017	10/3/2017	10/3/2017	FH 1 0-2"	41	DU-1	N/A	N/A	Prior excavation
2	9/27/2017	10/3/2017	10/3/2017	FH 2 0-2"	42	9/25/2017	9/27/2017	10/2/2017	FH 42 0-2"
3	9/26/2017	9/26/2017	10/3/2017	FH 3 0-2"	43	9/26/2017	10/2/2017	10/3/2017	FH 43 0-2"
4	9/26/2017	9/26/2017	10/3/2017	FH 4 0-2"	44	9/26/2017	9/29/2017	10/2/2017	FH 44 0-2"
5	9/27/2017	10/3/2017	10/3/2017	FH 5 0-2"	45	9/23/2017	9/28/2017	10/4/2017	FH 45 0-2"
6	9/27/2017	10/3/2017	10/3/2017	FH 6 0-2"	46	9/25/2017	10/3/2017	10/4/2017	FH 46 0-2"
7	9/26/2017	9/26/2017	10/3/2017	FH 7 0-2"	47	9/25/2017	10/4/2017	10/4/2017	FH 47 0-2"
8	9/25/2017	10/3/2017	10/3/2017	FH 8 0-2"	48	9/25/2017	10/3/2017	10/4/2017	FH 48 0-2"
9	9/25/2017	10/3/2017	10/3/2017	FH 9 0-2"	49	9/26/2017	9/26/2017	10/4/2017	FH 49 0-2"
10	9/25/2017	10/3/2017	10/3/2017	FH 10 0-2"	50	9/28/2017	10/3/2017	10/4/2017	FH 50 0-2"
11	8/31/2017	9/4/2017	9/30/2017	FH 11 0-2"	51	9/11/2017	9/11/2017	9/30/2017	FH 51 0-2"
12	DU-6	N/A	N/A	Prior excavation	52	9/11/2017	9/11/2017	9/30/2017	FH 52 0-2"
13	DU-6	N/A	N/A	Prior excavation	53	8/23/2017	8/23/2017	10/6/2017	FH 53 0-2"
14	DU-6	N/A	N/A	Prior excavation	54	9/11/2017	9/11/2017	10/6/2017	FH 54 0-2"re-ex
15	DU-6	N/A	N/A	Prior excavation	54A	8/23/2017	8/23/2017	10/6/2017	FH 54A 0-2"
16	9/23/2017	9/28/2017	9/29/2017	FH 16 0-2"	55	8/26/2017	8/26/2017	9/29/2017	FH 55 0-2"
17	9/23/2017	9/23/2017	9/23/2017	FH 17 0-2"	56	8/26/2017	8/30/2017	10/2/2017	FH 56 0-2"
18	9/23/2017	9/23/2017	9/23/2017	FH 18 0-2"	57	8/26/2017	8/26/2017	9/29/2017	FH 57 0-2"
19	9/23/2017	9/29/2017	10/2/2017	FH 19 0-2"	58	9/11/2017	9/11/2017	9/29/2017	FH 58 0-2"
20	9/23/2017	9/28/2017	9/29/2017	FH 20 0-2"	59	9/26/2017	9/27/2017	9/29/2017	FH 59 0-2"
21	9/26/2017	9/27/2017	9/30/2017	FH 21 0-2"	60	10/11/2017	10/11/2017	10/11/2017	FH 60 0-2"
22	9/25/2017	9/26/2017	9/26/2017	FH 22 0-2"	61	9/28/2017	9/29/2017	10/3/2017	FH 61 0-2"
23	9/26/2017	9/26/2017	9/26/2017	FH 23 0-2"	62	9/25/2017	9/27/2017	10/3/2017	FH 62 0-2"
24	9/26/2017	9/26/2017	9/29/2017	FH 24 0-2"	63	9/28/2017	9/29/2017	10/3/2017	FH 63 0-2"
25	9/26/2017	9/26/2017	9/29/2017	FH 25 0-2"	64	9/11/2017	9/11/2017	10/30/2017	FH 64 0-2"
26	9/26/2017	9/26/2017	9/29/2017	FH 26 0-2"	65	8/29/2017	8/30/2017	10/30/2017	FH 65 0-2"
27	9/23/2017	9/23/2017	9/30/2017	FH 27 0-2"	66	8/26/2017	8/26/2017	10/3/2017	FH 66 0-2"
28	9/23/2017	9/23/2017	9/30/2017	FH 28 0-2"	67	8/25/2017	8/30/2017	9/29/2017	FH 67 0-2"
29	9/26/2017	9/26/2017	10/2/2017	FH 29 0-2"	68	8/25/2017	8/30/2017	9/29/2017	FH 68 0-2"
30	9/26/2017	9/26/2017	9/26/2017	FH 30 0-2"	69	9/25/2017	9/27/2017	9/29/2017	FH 69 0-2"
31	9/26/2017	9/26/2017	9/26/2017	FH 31 0-2"	70	9/25/2017	9/27/2017	9/29/2017	FH 69 0-2"
32	9/26/2017	9/26/2017	9/26/2017	FH 32 0-2"	71	9/25/2017	9/27/2017	9/29/2017	FH 71 0-2"
33	9/26/2017	9/26/2017	9/26/2017	FH 33 0-2"	72	8/29/2017	9/27/2017	10/3/2017	FH 72 0-2"
34	9/26/2017	9/29/2017	9/30/2017	FH 34 0-2"	73	8/29/2017	9/11/2017	10/2/2017	FH 73 0-2"
35	9/26/2017	10/4/2017	10/4/2017	FH 35 0-2"	74	8/29/2017	8/29/2017	10/2/2017	FH 74 0-2"
36	9/26/2017	10/4/2017	10/4/2017	FH 36 0-2"	75	8/28/2017	8/29/2017	10/2/2017	FH 75 0-2"
37	9/25/2017	9/26/2017	10/2/2017	FH 37 0-2"	76	9/25/2017	9/29/2017	10/2/2017	FH 76 0-2"
38	9/26/2017	10/2/2017	10/2/2017	FH 38 0-2"	77	8/28/2017	8/29/2017	10/3/2017	FH 77 0-2"
39	DU-1	N/A	N/A	Prior excavation					
40	9/26/2017	9/27/2017	10/2/2017	FH 40 0-2"					

Pedestals /Monuments Soil					Pedestals /Monuments Soil				
Feature Unit ID	Excavate	Sampled Collected ID # X P100 0-2"	Backfill	Notes- Red >75mg/kg Green<75mg/kg	Feature Unit ID	Excavate	Sampled Collected ID # X P100 0-2"	Backfill	Notes- Red >75mg/kg Green<75mg/kg
1	8/29/2017	9/4/2017	9/30/2017	1-08 P100 0-2"	23	9/29/2017	10/2/2017	10/2/2017	23-44 P100 0-2"
2	8/29/2017	9/4/2017	9/30/2017	2-08 P100 0-2"	24	9/29/2017	10/2/2017	10/2/2017	24-42 P100 0-2"
3	8/29/2017	9/4/2017	9/30/2017	3-10 P100 0-2"	25	9/29/2017	10/2/2017	10/2/2017	25-38 P100 0-2"
4	8/29/2017	9/4/2017	9/30/2017	4-10 P100 0-2"	26	9/25/2017	10/3/2017	10/3/2017	26-07 P100 0-2"
5	8/29/2017	9/4/2017	9/30/2017	5-11 P100 0-2"	27	10/26/2017	10/3/2017	10/3/2017	27-03 P100 0-2"
6	9/11/2017	9/11/2017	9/30/2017	6-51 P100 0-2"	28	9/26/2017	10/4/2017	10/4/2017	28-30 P100 0-2"
7	9/11/2017	9/11/2017	9/30/2017	7-32 P100 0-2"	29	10/5/2017	10/5/2017	10/5/2017	29-R1 P100 0-2"
8	9/05/2017	9/18/2017	10/3/2017	8-20 P100 0-2"	30	10/5/2017	10/5/2017	10/5/2017	30-20 P100 0-2"
9	9/26/2017	9/28/2017	9/30/2017	9-33 P100 0-2"	31	10/5/2017	10/5/2017	10/5/2017	31-15 P100 0-2"
10	9/26/2017	9/28/2017	9/30/2017	10-23 P100 0-2"	32-71	DU-6	N/A	N/A	Prior excavation
11	9/26/2017	9/28/2017	9/29/2017	11-20 P100 0-2"	33-12	DU-6	N/A	N/A	Prior excavation
12	9/26/2017	9/28/2017	9/29/2017	12-28 P100 0-2"	34-15	DU-6	N/A	N/A	Prior excavation
13	9/26/2017	9/28/2017	9/29/2017	13-27 P100 0-2"	35-15	DU-6	N/A	N/A	Prior excavation
14	9/26/2017	9/28/2017	9/30/2017	14-08 P100 0-2"	36-14	DU-6	N/A	N/A	Prior excavation
15	9/27/2017	9/29/2017	9/30/2017	15-24 P100 0-2"	37-Cross	Abated	N/A	N/A	Maintained
16	9/27/2017	9/29/2017	9/30/2017	16-25 P100 0-2"	38-58	DU-8	N/A	N/A	Prior excavation
17	9/27/2017	9/29/2017	9/30/2017	17-25 P100 0-2"	39-58	DU-8	N/A	N/A	Prior excavation
18	9/28/2017	9/29/2017	9/29/2017	18-13 P100 0-2"	40-Ave Maria	Abated	N/A	N/A	Maintained
19	9/26/2017	9/29/2017	10/2/2017	19-44 P100 0-2"	41-Golf	Abated	N/A	N/A	Spray
20	9/26/2017	9/29/2017	10/2/2017	20-44 P100 0-2"	42-R1	Abated	N/A	N/A	Concrete apron
21	9/26/2017	9/29/2017	9/30/2017	21-52 P100 0-2"	43-R1	Abated	N/A	N/A	Concrete apron
22	9/26/2017	10/2/2017	10/4/2017	22-49 P100 0-2"					

Fire Hydrant ID # per updated DBSI file -Navy Fresh Water Lines, Valves & Hydrants. BSI/DR-0034
Pedestal sample identification is a designated ID number followed by a dash and double-digit number relative to the closest Fire Hydrant ID location. No full prior map of pedestals exists.

Table 5. DU 5 Buttress & Cover - Import Clean Coral Sand

DU 5 IMPORT CLEAN CORAL						
DATE	NORTH Wall Loads	SOUTH Wall Loads	EAST Wall Loads	WEST Wall Loads	Days total loads	Days cubic yardage
10/9/2017	0	0	0	0	0	0
10/10/2017	0	0	0	0	0	0
10/11/2017	0	0	0	0	0	0
10/12/2017	0	0	0	0	0	0
10/13/2017	0	0	0	0	0	0
10/14/2017	0	0	0	0	0	0
10/15/2017	End	End	End	End	0	0
Load count per wall	282	0	16	0		
15cuyd estimate per wall	4230	0	240	0		
2017 Total R2 combined clean coral import LOADS				298		
Loads x 15cuyd estimate				4470		
R2 North Stockpile distribution-						
Truck loads into R2 cap & abutment				294		
Loads x 15cuyd estimate				4410		
Stockpile loads to DU-9 backfill				43		
Loads x 15cuyd estimate				645		

The R2 North Stockpile of clean coral sand for 2017 is 298 truck loads. The same north side abutment stockpile in 2016 is comingled, producing a larger available yardage than 2017 alone.
DU-9 distribution is noted in Table 5 for the R2 North stockpile. However, Table 6 indicates the project total DU-9 backfill yardage for 2017, regardless of where the clean sand originated (Borrow Source or the R2 North Stockpile)

Table 6. Excavation Plots - Import Clean Coral Sand

EXCAVATION PLOTS- IMPORT CLEAN CORAL BACKFILL							
DATE	DU-9 Loads	DU-8 Loads	DU-7 Loads	DU-5 Loads	DU-3 Loads	Days total loads	Days cubic yardage
10/16/2017	0	0	0	0	0	0	0
10/17/2017	21	1	0	0	0	22	330
10/18/2017	5	0	0	0	0	5	75
10/19/2017	0	0	0	0	0	0	0
10/20/2017	~End~	~End~	~End~	~End~	~End~	0	0
10/21/2017						0	0
10/22/2017						0	0
Load count per column	224.5	40.5	20	0	0		
15cuyd estimate per column	3367.5	607.5	300	0	0		
2017 Total combined clean import Backfill LOADS					285		
Loads x 15cuyd estimate					4275		

NW Demolition and Environmental
A Joint Venture

Daily Field Report

Date: Tuesday, October 24, 2017
Prepared by: Scott Wakefield

Project: Removal of Lead-Based Paint from Structures and Lead-Contaminated Soil
Location: Midway Atoll National Wildlife Refuge
Client: US Fish and Wildlife Service

Weather: Sunny, wind 7 mph. Temperature ~76F

Personnel:

Name	Company	Site Hours
Scott Wakefield	NWDE Field Oversight	10
Jeff James	NWDE Supervisor	10
Joel Smith	NWDE Operator	10
Dalton Sullivan	NWDE Labor	10
Jevon Stone	NWDE Operator	10
Matt Manning	NWDE Operator	10
Lucas Peel	NWDE Labor	10
Tyler Wilson	NWDE Labor	10

Visitors/Additional Site Personnel:

Name	Title
MaryAnn Amann	U.S. FWS

Equipment:

Description	Model No.	Comments / Serial #
Pickup Truck	F350 Service Truck	NWDE
Flatbed Truck	Ford F450	NWDE
Container Truck	Peterbuilt	NWDE
Skid Steer	Bobcat S185	NWDE
Tracked Skid Steer	Bobcat T750	NWDE
Tracked Skid Steer	Bobcat	NWDE
Mini-Excavator	CAT 308	NWDE
Excavator	Volvo EC290BLC	NWDE
Excavator	Volvo EC290BLC	NWDE
Excavator	Volvo EC290	NWDE
Off road Dump Truck	Volvo A30D	NWDE
Off road Dump Truck	Volvo A30D	NWDE
Off road Dump Truck	Volvo A30D	NWDE
Excavator – High reach	Komatsu PC400HD	NWDE
Excavator	Komatsu 450	NWDE

Materials Delivered:

Description	QTY	Condition/Comments
Diesel	0 gallons	
Gasoline	0 gallons	

Description of Work:

0700 – Health and Safety meeting at NAF staging area. Review today's work tasks.

Today's focus will be loading equipment onto the barge and punch list items to close out the project.

At the NAF Hanger the last few bulk items are being loaded into the single remaining shipping container. This Job Box will be loaded onto the barge deck with access to the doors. The last items to be loaded into it will be the Kubota buggy at the end of the day.

The remaining 20' shipping containers to be loaded onto the barge are being picked with the NWDE Cat loader and moved up the loading ramp. Units are placed per the predetermined loading footprint, situated to be chained and lashed to the steel deck.

Chain, turnbuckles and weld on D-rings are placed and prepped for welding the anchor points. Equipment is being cross chained and tightened to secure each machine and container in place.

0930 – Lashing on the barge continues while the first two Volvo 290 excavators are tracked from the Boneyard to the harbor pier 2401. These machines then drive up the barge ramp to the deck, moving into position at the stern. The Cat D3 dozer has been positioned towards the bow. To follow are the remaining equipment including the F350 service truck, F450 support truck, vac trailer, Cat 308 mini excavator, Volvo 290 excavator, three A30 Volvo haul trucks, 450 Komatsu excavator, 400 Komatsu high reach, Cat 966 loader, Sullair 185 towable compressor and T750 tracked skidsteer. The S185 skidsteer, second tracked skidsteer and #2 buggy are stored inside shipping containers already on board. Through the morning machines are moved, positioned and prepared to be anchored in place with chain and turnbuckles.

1000 – Weekly conference call with Mainland and Hawaii project offices. See NWDE Midway Meeting Agenda for specific detail.

1010 – The G3 charter flight arrives at Henderson Airfield as scheduled. This Cinco Air aircraft is arranged to depart this week on Thursday to demobilize the remaining project personnel to close out the field work.

Finalize the Uniform Hazardous Waste Manifest, EPA Form 8700-22 with the American Marine tug. Manifests 002628357GBF and 002628358GBF for the triwall boxed LBP waste divided amongst two 20' shipping container have been signed by the Refuge Manager and the American Contender captain. These two closed 20' containers have external/internal placard markings and have been loaded onto the barge.

1200 – Lunch

1230 – The last two excavators are positioned at the ramp to be loaded. A 290 excavator used as an anchor to position the barge is being swapped out with the DBSI D6 Cat dozer. This excavator and the 450 Komatsu are then free to track up the ramp.
Through the afternoon, rigging follows to begin picking the two piece ramps/toe and hoist them onto the barge. The heavy steel is carefully raised and placed onto the steel deck using the two excavators. Lashing of equipment continues through the afternoon to prepare the barge for the Midway Atoll to Honolulu voyage.

Set up the Trimble equipment, begin collecting the final survey data of the R2 rock covered surface.

1730 – Ending the work day. The barge has been loaded, ramps collected and the barge moored back to the pier.

Photographs:

Photo 01: NAF Hanger Staging Area – View west. Progress of demobilization

Photo 02: American Marine barge – Lashing down shipping containers

Photo 03: American Marine barge – Loading excavators

Photo 04: American Marine barge – Loading and positioning equipment progress

Photo 05: American Marine barge – Progress of loading equipment

Photo 06: American Marine barge – Progress of loading equipment

Photo 07: American Marine barge – Progress of loading equipment

Photo 08: American Marine barge – Barge loaded and moored at the Kahana pier

Photo 09: Bldg 8105 – View east. Trimble base set at brass cap 11855. R2 final cover (background)

Photo 10: R2 Unit – View west. Survey data collection of final R2 cover

Table 1. Maectite and Treated Soil Total Estimates

	Maectite Totals						Treated Soil Totals[1,2]		
	Applied Today (gal)					Total to Date	Excavated and Hauled to R-2 Unit **Today**		Excavated and Hauled to R-2 Unit **Total to Date**
Date	Soils (DU9)	Soils (DU8)	Soils (DU7)	Soils (DU5)	Soils (DU3)	(gal)	Load	^{3}yds[1]	^{3}yds[1]
10/09/17	0	0	0	0	0	2981	0	0	4087
10/10/17	0	0	0	0	0	2981	0	0	4087
~End~	-	-	-	-	-	-	-	-	-
Total to Date	2623 gallons	205 gallons	153 gallons	0 gallons	0 gallons		328 loads		

Notes:
1. Estimates are based on the number of gallons of Maectite® applied.
2. Soil treatment with Maectite® and hauling to R2 may not occur on the same day.
3. 10/5/17– Table 2 loads were batch treated in the R2. Inserted this data into Table 1 for totalizing the volumes and gallons. Reset Table 2 "Batch loads" of 9 to zero until next ex-situ stockpile treatment.

2017 DU 9 – Figures P 1-16, 18, 20, 21, 23-27.
Bldg 1124, 1126, 3521, S361, 347, 3501, S3126, S3127, 521, 520, 502, 5342, 309, 340, 354, 9149, 232, 233, S269, S225A, 2127, 144, Boat House 1 & 2, 4205, 4206, 4207, 4213, 503, 5303, 5341, 5339, 5338, Bollards, Fire Hydrants, 5304, 5305, 4210, 3524, 3529, 5126, 5378, 3514, and other ancillary structures.
Foundations S464, 502, 4201, 5126, 5295, 5342.
2017 DU 8 – S-28, S-30 re-ex, Pipe figure P19
2017 DU 7 – Bldg 3502, 3503, 3504 shade cloth
2017 DU 5 – R2 Unit, Figure P17
2017 DU 3 – Housing figure P22, 419 MIS re-ex

Table 2. Soil loads hauled to the R2 for ex situ Maectite® treatment

	Load Totals				
	Hauled to R2 for treatment in R2 cell (# of truck loads)				
Date	Soils (DU9)	Soils (DU8)	Soils (DU7)	Soils (DU5)	Soils (DU3)
10/09/17	0	0	0	0	0
10/10/17	0	0	0	0	0
~End~	-	-	-	-	-
Batch loads to treat in R2	0 loads	0 loads	0 loads	0 loads	0 loads
Total to Date	130.8 loads	34 loads	18.5 loads	0 loads	0 loads

8/14/17 - Batch treatment of all stockpiled "ex situ" loads to date in R2 Cell 1. Entered this data into Table 1 on 8/14/17 for volume and gallon tracking.
8/15/17 - Add "Batch Loads to treat in R2" subtotal that tracks the truck loads placed for treatment. Reset this to zero once treatment event is complete.
8/23/17 – Batch #2 treatment event of all stockpiled "ex situ" loads to date in R2 Cells. Entered this data into Table 1 on 8/23/17 for volume and gallon tracking.
9/12/17 – Batch #3 treatment event of all stockpiled "ex situ" loads to date in R2 Cells. Entered this data into Table 1 on 9/11/17 & 9/12/17 for volume and gallon tracking.
9/21/17 – Batch #4 treatment event of all stockpiled "ex situ" loads to date in R2 Cells. Entered this data into Table 1 on 9/21/17 for volume and gallon tracking.
9/29/17 – Batch #5 treatment event of all stockpiled "ex situ" loads to date in R2 Cells. Entered this data into Table 1 on 9/29/17 for volume and gallon tracking.
10/5/17 – Batch #6 treatment event of all stockpiled "ex situ" loads to date in R2 Cells. Entered this data into Table 1 on 10/5/17 for volume and gallon tracking.

Table 2.1 Soil loads hauled to the R2, non-treated internment

Date	Load Totals				
	Hauled to R2, non-treated soil (# of truck loads)				
	Soils (DU9)	Soils (DU8)	Soils (DU7)	Soils (DU5)	Soils (DU3)
10/09/17	0	0	0	0	0
10/10/17	0	0	0	0	0
~End~	-	-	-	-	-
Total to Date	29.5 loads	75 loads	0 loads	0 loads	9 loads

Table 3. Weekly Load Estimates

Date	Treated Demo Debris Loads to R2	Clean Concrete Loads to Crusher	Metal Debris Loads To Boneyard	Clean Wood Loads	Steel Debris Loaded onto Barge	R2 waste layer toe adjustment sand
10/9/17	0	0	0	0	0	0
10/10/17	0	0	0	0	0	0
~End~	-	-	-	-	-	-
Season Total	3 loads	8 loads	0 loads	4 loads	195 loads	35 loads

Table 3.1 Weekly Load Estimates

Date	R2 final cover- 3" minus concrete
10/16/17	46
10/17/17	52
10/18/17	54
10/19/17	13
10/20/17	~End~
10/21/15	-
10/22/17	-
Season Total	207 loads

Table 4. Fire Hydrants, Pedestals and Monuments

Fire Hydrant Soil					Fire Hydrant Soil				
Fire Hydrant ID	Excavate	Sampled Collected FH # X 0-2"	Backfill	Notes- Red >75mg/kg Green<75mg/kg	Fire Hydrant ID	Excavate	Sampled Collected FH # X 0-2"	Backfill	Notes- Red >75mg/kg Green<75mg/kg
1	9/26/2017	10/3/2017	10/3/2017	FH 1 0-2"	41	DU-1	N/A	N/A	Prior excavation
2	9/27/2017	10/3/2017	10/3/2017	FH 2 0-2"	42	9/25/2017	9/27/2017	10/2/2017	FH 42 0-2"
3	9/26/2017	9/26/2017	10/3/2017	FH 3 0-2"	43	9/26/2017	10/2/2017	10/3/2017	FH 43 0-2"
4	9/26/2017	9/26/2017	10/3/2017	FH 4 0-2"	44	9/26/2017	9/29/2017	10/2/2017	FH 44 0-2"
5	9/27/2017	10/3/2017	10/3/2017	FH 5 0-2"	45	9/23/2017	9/28/2017	10/4/2017	FH 45 0-2"
6	9/27/2017	10/3/2017	10/3/2017	FH 6 0-2"	46	9/25/2017	10/3/2017	10/4/2017	FH 46 0-2"
7	9/26/2017	9/26/2017	10/3/2017	FH 7 0-2"	47	9/25/2017	10/4/2017	10/4/2017	FH 47 0-2"
8	9/25/2017	10/3/2017	10/3/2017	FH 8 0-2"	48	9/25/2017	10/3/2017	10/4/2017	FH 48 0-2"
9	9/25/2017	10/3/2017	10/3/2017	FH 9 0-2"	49	9/26/2017	9/26/2017	10/4/2017	FH 49 0-2"
10	9/25/2017	10/3/2017	10/3/2017	FH 10 0-2"	50	9/28/2017	10/3/2017	10/4/2017	FH 50 0-2"
11	8/31/2017	9/4/2017	9/30/2017	FH 11 0-2"	51	9/11/2017	9/11/2017	9/30/2017	FH 51 0-2"
12	DU-6	N/A	N/A	Prior excavation	52	9/11/2017	9/11/2017	9/30/2017	FH 52 0-2"
13	DU-6	N/A	N/A	Prior excavation	53	8/23/2017	8/23/2017	10/6/2017	FH 53 0-2"
14	DU-6	N/A	N/A	Prior excavation	54	9/11/2017	9/11/2017	10/6/2017	FH 54 0-2"re-ex
15	DU-6	N/A	N/A	Prior excavation	54A	8/23/2017	8/23/2017	10/6/2017	FH 54A 0-2"
16	9/23/2017	9/28/2017	9/29/2017	FH 16 0-2"	55	8/26/2017	8/26/2017	9/29/2017	FH 55 0-2"
17	9/23/2017	9/23/2017	9/23/2017	FH 17 0-2"	56	8/26/2017	8/30/2017	10/2/2017	FH 56 0-2"
18	9/23/2017	9/23/2017	9/23/2017	FH 18 0-2"	57	8/26/2017	8/26/2017	9/29/2017	FH 57 0-2"
19	9/23/2017	9/29/2017	10/2/2017	FH 19 0-2"	58	9/11/2017	9/11/2017	9/29/2017	FH 58 0-2"
20	9/23/2017	9/28/2017	9/29/2017	FH 20 0-2"	59	9/26/2017	9/27/2017	9/29/2017	FH 59 0-2"
21	9/26/2017	9/27/2017	9/30/2017	FH 21 0-2"	60	10/11/2017	10/11/2017	10/11/2017	FH 60 0-2"
22	9/25/2017	9/26/2017	9/26/2017	FH 22 0-2"	61	9/28/2017	9/29/2017	10/3/2017	FH 61 0-2"
23	9/26/2017	9/26/2017	9/26/2017	FH 23 0-2"	62	9/25/2017	9/27/2017	10/3/2017	FH 62 0-2"
24	9/26/2017	9/26/2017	9/29/2017	FH 24 0-2"	63	9/28/2017	9/29/2017	10/3/2017	FH 63 0-2"
25	9/26/2017	9/26/2017	9/29/2017	FH 25 0-2"	64	9/11/2017	9/11/2017	10/30/2017	FH 64 0-2"
26	9/26/2017	9/26/2017	9/29/2017	FH 26 0-2"	65	8/29/2017	8/30/2017	10/30/2017	FH 65 0-2"
27	9/23/2017	9/23/2017	9/30/2017	FH 27 0-2"	66	8/26/2017	8/26/2017	10/3/2017	FH 66 0-2"
28	9/23/2017	9/23/2017	9/30/2017	FH 28 0-2"	67	8/25/2017	8/30/2017	9/29/2017	FH 67 0-2"
29	9/26/2017	9/26/2017	10/2/2017	FH 29 0-2"	68	8/25/2017	8/30/2017	9/29/2017	FH 68 0-2"
30	9/26/2017	9/26/2017	9/26/2017	FH 30 0-2"	69	9/25/2017	9/27/2017	9/29/2017	FH 69 0-2"
31	9/26/2017	9/26/2017	9/26/2017	FH 31 0-2"	70	9/25/2017	9/27/2017	9/29/2017	FH 69 0-2"
32	9/26/2017	9/26/2017	9/26/2017	FH 32 0-2"	71	9/25/2017	9/27/2017	9/29/2017	FH 71 0-2"
33	9/26/2017	9/26/2017	9/26/2017	FH 33 0-2"	72	8/29/2017	9/27/2017	10/3/2017	FH 72 0-2"
34	9/26/2017	9/29/2017	9/30/2017	FH 34 0-2"	73	8/29/2017	9/11/2017	10/2/2017	FH 73 0-2"
35	9/26/2017	10/4/2017	10/4/2017	FH 35 0-2"	74	8/29/2017	8/29/2017	10/2/2017	FH 74 0-2"
36	9/26/2017	10/4/2017	10/4/2017	FH 36 0-2"	75	8/28/2017	8/29/2017	10/2/2017	FH 75 0-2"
37	9/25/2017	9/26/2017	10/2/2017	FH 37 0-2"	76	9/25/2017	9/29/2017	10/2/2017	FH 76 0-2"
38	9/26/2017	10/2/2017	10/2/2017	FH 38 0-2"	77	8/28/2017	8/29/2017	10/3/2017	FH 77 0-2"
39	DU-1	N/A	N/A	Prior excavation					
40	9/26/2017	9/27/2017	10/2/2017	FH 40 0-2"					

Pedestals /Monuments Soil					Pedestals /Monuments Soil				
Feature Unit ID	Excavate	Sampled Collected ID # X P100 0-2"	Backfill	Notes- Red >75mg/kg Green<75mg/kg	Feature Unit ID	Excavate	Sampled Collected ID # X P100 0-2"	Backfill	Notes- Red >75mg/kg Green<75mg/kg
1	8/29/2017	9/4/2017	9/30/2017	1-08 P100 0-2"	23	9/29/2017	10/2/2017	10/2/2017	23-44 P100 0-2"
2	8/29/2017	9/4/2017	9/30/2017	2-08 P100 0-2"	24	9/29/2017	10/2/2017	10/2/2017	24-42 P100 0-2"
3	8/29/2017	9/4/2017	9/30/2017	3-10 P100 0-2"	25	9/29/2017	10/2/2017	10/2/2017	25-38 P100 0-2"
4	8/29/2017	9/4/2017	9/30/2017	4-10 P100 0-2"	26	9/25/2017	10/3/2017	10/3/2017	26-07 P100 0-2"
5	8/29/2017	9/4/2017	9/30/2017	5-11 P100 0-2"	27	10/26/2017	10/3/2017	10/3/2017	27-03 P100 0-2"
6	9/11/2017	9/11/2017	9/30/2017	6-51 P100 0-2"	28	9/26/2017	10/4/2017	10/4/2017	28-30 P100 0-2"
7	9/11/2017	9/11/2017	9/30/2017	7-32 P100 0-2"	29	10/5/2017	10/5/2017	10/5/2017	29-R1 P100 0-2"
8	9/05/2017	9/18/2017	10/3/2017	8-20 P100 0-2"	30	10/5/2017	10/5/2017	10/5/2017	30-20 P100 0-2"
9	9/26/2017	9/28/2017	9/30/2017	9-33 P100 0-2"	31	10/5/2017	10/5/2017	10/5/2017	31-15 P100 0-2"
10	9/26/2017	9/28/2017	9/30/2017	10-23 P100 0-2"	32-71	DU-6	N/A	N/A	Prior excavation
11	9/26/2017	9/28/2017	9/29/2017	11-20 P100 0-2"	33-12	DU-6	N/A	N/A	Prior excavation
12	9/26/2017	9/28/2017	9/29/2017	12-28 P100 0-2"	34-15	DU-6	N/A	N/A	Prior excavation
13	9/26/2017	9/28/2017	9/29/2017	13-27 P100 0-2"	35-15	DU-6	N/A	N/A	Prior excavation
14	9/26/2017	9/28/2017	9/30/2017	14-08 P100 0-2"	36-14	DU-6	N/A	N/A	Prior excavation
15	9/27/2017	9/29/2017	9/30/2017	15-24 P100 0-2"	37-Cross	Abated	N/A	N/A	Maintained
16	9/27/2017	9/29/2017	9/30/2017	16-25 P100 0-2"	38-58	DU-8	N/A	N/A	Prior excavation
17	9/27/2017	9/29/2017	9/30/2017	17-25 P100 0-2"	39-58	DU-8	N/A	N/A	Prior excavation
18	9/28/2017	9/29/2017	9/29/2017	18-13 P100 0-2"	40-Ave Maria	Abated	N/A	N/A	Maintained
19	9/26/2017	9/29/2017	10/2/2017	19-44 P100 0-2"	41-Golf	Abated	N/A	N/A	Spray
20	9/26/2017	9/29/2017	10/2/2017	20-44 P100 0-2"	42-R1	Abated	N/A	N/A	Concrete apron
21	9/26/2017	9/29/2017	9/30/2017	21-52 P100 0-2"	43-R1	Abated	N/A	N/A	Concrete apron
22	9/26/2017	10/2/2017	10/4/2017	22-49 P100 0-2"	Anchor-3502	10/4/2017	10/4/2017	10/5/2017	Anchor-3502
Anchor-Kahana	10/2/2017	10/2/2017	10/5/2017	Anchor-Kahana	Anchor-3514	10/4/2017	10/4/2017	10/5/2017	Anchor-3514
Anchor-170	10/2/2017	10/2/2017	10/2/2017	Anchor-170	Anchor-1126	10/5/2017	10/5/2017	10/5/2017	Anchor-1126

Fire Hydrant ID # per updated DBSI file -Navy Fresh Water Lines, Valves & Hydrants. BSI/DR-0034
Pedestal sample identification is a designated ID number followed by a dash and double-digit number relative to the closest Fire Hydrant ID location. No full prior map of pedestals exists.

Table 5. DU 5 Buttress & Cover - Import Clean Coral Sand

DU 5 IMPORT CLEAN CORAL						
DATE	NORTH Wall Loads	SOUTH Wall Loads	EAST Wall Loads	WEST Wall Loads	Days total loads	Days cubic yardage
10/9/2017	0	0	0	0	0	0
10/10/2017	0	0	0	0	0	0
10/11/2017	0	0	0	0	0	0
10/12/2017	0	0	0	0	0	0
10/13/2017	0	0	0	0	0	0
10/14/2017	0	0	0	0	0	0
10/15/2017	End	End	End	End	0	0
Load count per wall	282	0	16	0		
15cuyd estimate per wall	4230	0	240	0		
2017 Total R2 combined clean coral import LOADS				298		
Loads x 15cuyd estimate				4470		
R2 North Stockpile distribution-						
Truck loads into R2 cap & abutment				294		
Loads x 15cuyd estimate				4410		
Stockpile loads to DU-9 backfill				43		
Loads x 15cuyd estimate				645		

The R2 North Stockpile of clean coral sand for 2017 is 298 truck loads. The same north side abutment stockpile in 2016 is comingled, producing a larger available yardage than 2017 alone.
DU-9 distribution is noted in Table 5 for the R2 North stockpile. However, Table 6 indicates the project total DU-9 backfill yardage for 2017, regardless of where the clean sand originated (Borrow Source or the R2 North Stockpile)

Table 6. Excavation Plots - Import Clean Coral Sand

EXCAVATION PLOTS- IMPORT CLEAN CORAL BACKFILL							
DATE	DU-9 Loads	DU-8 Loads	DU-7 Loads	DU-5 Loads	DU-3 Loads	Days total loads	Days cubic yardage
10/16/2017	0	0	0	0	0	0	0
10/17/2017	21	1	0	0	0	22	330
10/18/2017	5	0	0	0	0	5	75
10/19/2017	0	0	0	0	0	0	0
10/20/2017	~End~	~End~	~End~	~End~	~End~	0	0
10/21/2017						0	0
10/22/2017						0	0
Load count per column	224.5	40.5	20	0	0		
15cuyd estimate per column	3367.5	607.5	300	0	0		
2017 Total combined clean import Backfill LOADS					285		
Loads x 15cuyd estimate					4275		

Daily Field Report

Date: Wednesday, October 25, 2017
Prepared by: Scott Wakefield

Project: Removal of Lead-Based Paint from Structures and Lead-Contaminated Soil
Location: Midway Atoll National Wildlife Refuge
Client: US Fish and Wildlife Service

Weather: Partly cloudy, wind 5 mph. Temperature ~75F

Personnel:

Name	Company	Site Hours
Scott Wakefield	NWDE Field Oversight	8
Jeff James	NWDE Supervisor	8
Joel Smith	NWDE Operator	8
Dalton Sullivan	NWDE Labor	8
Jevon Stone	NWDE Operator	8
Matt Manning	NWDE Operator	8
Lucas Peel	NWDE Labor	8
Tyler Wilson	NWDE Labor	8

Visitors/Additional Site Personnel:

Name	Title
MaryAnn Amann	U.S. FWS

Equipment:

Description	Model No.	Comments / Serial #
Pickup Truck	F350 Service Truck	NWDE
Flatbed Truck	Ford F450	NWDE
Container Truck	Peterbuilt	NWDE
Skid Steer	Bobcat S185	NWDE
Tracked Skid Steer	Bobcat T750	NWDE
Tracked Skid Steer	Bobcat	NWDE
Mini-Excavator	CAT 308	NWDE
Excavator	Volvo EC290BLC	NWDE
Excavator	Volvo EC290BLC	NWDE
Excavator	Volvo EC290	NWDE
Off road Dump Truck	Volvo A30D	NWDE
Off road Dump Truck	Volvo A30D	NWDE
Off road Dump Truck	Volvo A30D	NWDE
Excavator – High reach	Komatsu PC400HD	NWDE
Excavator	Komatsu 450	NWDE

Materials Delivered:

Description	QTY	Condition/Comments
Diesel	0 gallons	
Gasoline	0 gallons	

Description of Work:

0700 – Health and Safety meeting. Review today's work tasks.

Today's focus will be finalizing the barge lashing and punch list items to close out the project.

Equipment on the American Marine barge is being secured this morning with the final steps of tightening and wiring the turnbuckles across the deck. Anchor D-rings, clevises, threaded turnbuckles and chains are finalized and confirmed to be ready for the barge trip to Honolulu with the project equipment and supplies.

The American Contender tugboat is getting ready for the tow, preparing chain and line that will be in use for connecting to the barge. The crews are working to get a mid morning departure.

0830 – The R2 Unit final cover is being walked and inspected for debris in the final 3" minus cap. The slope and surrounding area has been collected of construction materials, sandbags and staged items over the past few days. The immediate grade at the toe of the R2 rock cover has been leveled off on each end of the R2.

1030 – The barge load of equipment and containers are secured on the deck. The tugboat has been positioned, connected for towing and is headed out of the inner harbor. This is the full demobilization of all remaining NWDE machinery and supplies departing the finished project area.

Water Plant area S3127E Reservoir has the crew working to empty the staged black sandbags of clean coral sand along the shallow perimeter excavation. Bags are being opened and the sand dumped. The bags are then contained within large poly liners, tops twisted and secured. The bagged plastic is then staged at the Boneyard. Previously during loading of NWDE shipping containers, US FWS agreed to general plastic marine debris sacks being loaded for shipment off island in exchange of leaving a fewer number of the bagged empty sandbag sacks.

Sand along the water reservoir is leveled off to rough grade after the sacks have been emptied.

1200 – Lunch

1230 – Emptying sandbags continues as the work is near to reaching an end.

At the NAF Hanger staging area, final clean up and sweeping is being completed on the concrete and asphalt surfaces. This area is prepared to be turned back over for island use. Since late summer of 2011, this southeast section of the NAF Hanger has been the base of operations for NWDE and the LBP project.

1320 – Clean up tasks and punch list items continue across the island. At feature Anchor-1126, the shallow perimeter excavation is being trimmed with 6-8" rock for discouraging bird burrows at depth.

The north side of the R2 former clean sand staging area is being cleared off for the final task to removed bulk clean sand from the hard surface. Misc debris is picked up to close out this work area.

A final inspection and walk of the R2 Unit final cover is made. The repository has been constructed and completed to the intended design, drawings and specifications. US FWS inspection is in agreement that the R2 Unit construction is complete.

1530 - Ending the work day. The field work of the LBP project is complete.

Photographs:

Photo 01: NAF Hanger Staging Area – View west. Final demobilization and clean up

Photo 02: American Marine barge – Preparing for departure with the NWDE project equipment

Photo 03: S3127E Reservoir – View south. Staged clean sandbag sacks to be emptied

Photo 04: S3127E Reservoir – View south. Leveling off the clean sandbag sand

Photo 05: Kahana Pier – View southeast. Barge loading ramp area picked up and cloth repositioned

Photo 06: Anchor-1126 – View north. Rock surround of the monuments shallow excavation

Table 1. Maectite and Treated Soil Total Estimates

	Maectite Totals						Treated Soil Totals[1,2]		
	Applied Today (gal)					Total to Date	Excavated and Hauled to R-2 Unit **Today**		Excavated and Hauled to R-2 Unit **Total to Date**
Date	Soils (DU9)	Soils (DU8)	Soils (DU7)	Soils (DU5)	Soils (DU3)	(gal)	Load	^{3}yds[1]	^{3}yds[1]
10/09/17	0	0	0	0	0	2981	0	0	4087
10/10/17	0	0	0	0	0	2981	0	0	4087
~End~	-	-	-	-	-	-	-	-	-
Total to Date	2623 gallons	205 gallons	153 gallons	0 gallons	0 gallons		328 loads		

Notes:
1. Estimates are based on the number of gallons of Maectite® applied.
2. Soil treatment with Maectite® and hauling to R2 may not occur on the same day.
3. 10/5/17– Table 2 loads were batch treated in the R2. Inserted this data into Table 1 for totalizing the volumes and gallons. Reset Table 2 "Batch loads" of 9 to zero until next ex-situ stockpile treatment.

2017 DU 9 – Figures P 1-16, 18, 20, 21, 23-27.
Bldg 1124, 1126, 3521, S361, 347, 3501, S3126, S3127, 521, 520, 502, 5342, 309, 340, 354, 9149, 232, 233, S269, S225A, 2127, 144, Boat House 1 & 2, 4205, 4206, 4207, 4213, 503, 5303, 5341, 5339, 5338, Bollards, Fire Hydrants, 5304, 5305, 4210, 3524, 3529, 5126, 5378, 3514, and other ancillary structures.
Foundations S464, 502, 4201, 5126, 5295, 5342.
2017 DU 8 – S-28, S-30 re-ex, Pipe figure P19
2017 DU 7 – Bldg 3502, 3503, 3504 shade cloth
2017 DU 5 – R2 Unit, Figure P17
2017 DU 3 – Housing figure P22, 419 MIS re-ex

Table 2. Soil loads hauled to the R2 for ex situ Maectite® treatment

	Load Totals				
	Hauled to R2 for treatment in R2 cell (# of truck loads)				
Date	Soils (DU9)	Soils (DU8)	Soils (DU7)	Soils (DU5)	Soils (DU3)
10/09/17	0	0	0	0	0
10/10/17	0	0	0	0	0
~End~	-	-	-	-	-
Batch loads to treat in R2	0 loads	0 loads	0 loads	0 loads	0 loads
Total to Date	130.8 loads	34 loads	18.5 loads	0 loads	0 loads

8/14/17 - Batch treatment of all stockpiled "ex situ" loads to date in R2 Cell 1. Entered this data into Table 1 on 8/14/17 for volume and gallon tracking.
8/15/17 - Add "Batch Loads to treat in R2" subtotal that tracks the truck loads placed for treatment. Reset this to zero once treatment event is complete.
8/23/17 – Batch #2 treatment event of all stockpiled "ex situ" loads to date in R2 Cells. Entered this data into Table 1 on 8/23/17 for volume and gallon tracking.
9/12/17 – Batch #3 treatment event of all stockpiled "ex situ" loads to date in R2 Cells. Entered this data into Table 1 on 9/11/17 & 9/12/17 for volume and gallon tracking.
9/21/17 – Batch #4 treatment event of all stockpiled "ex situ" loads to date in R2 Cells. Entered this data into Table 1 on 9/21/17 for volume and gallon tracking.
9/29/17 – Batch #5 treatment event of all stockpiled "ex situ" loads to date in R2 Cells. Entered this data into Table 1 on 9/29/17 for volume and gallon tracking.
10/5/17 – Batch #6 treatment event of all stockpiled "ex situ" loads to date in R2 Cells. Entered this data into Table 1 on 10/5/17 for volume and gallon tracking.

Table 2.1 Soil loads hauled to the R2, non-treated internment

Date	Load Totals				
	Hauled to R2, non-treated soil (# of truck loads)				
	Soils (DU9)	Soils (DU8)	Soils (DU7)	Soils (DU5)	Soils (DU3)
10/09/17	0	0	0	0	0
10/10/17	0	0	0	0	0
~End~	-	-	-	-	-
Total to Date	29.5 loads	75 loads	0 loads	0 loads	9 loads

Table 3. Weekly Load Estimates

Date	Treated Demo Debris Loads to R2	Clean Concrete Loads to Crusher	Metal Debris Loads To Boneyard	Clean Wood Loads	Steel Debris Loaded onto Barge	R2 waste layer toe adjustment sand
10/9/17	0	0	0	0	0	0
10/10/17	0	0	0	0	0	0
~End~	-	-	-	-	-	-
Season Total	3 loads	8 loads	0 loads	4 loads	195 loads	35 loads

Table 3.1 Weekly Load Estimates

Date	R2 final cover- 3" minus concrete
10/16/17	46
10/17/17	52
10/18/17	54
10/19/17	13
10/20/17	~End~
10/21/15	-
10/22/17	-
Season Total	207 loads

Table 4. Fire Hydrants, Pedestals and Monuments

Fire Hydrant Soil					Fire Hydrant Soil				
Fire Hydrant ID	Excavate	Sampled Collected FH # X 0-2"	Backfill	Notes- Red >75mg/kg Green<75mg/kg	Fire Hydrant ID	Excavate	Sampled Collected FH # X 0-2"	Backfill	Notes- Red >75mg/kg Green<75mg/kg
1	9/26/2017	10/3/2017	10/3/2017	FH 1 0-2"	41	DU-1	N/A	N/A	Prior excavation
2	9/27/2017	10/3/2017	10/3/2017	FH 2 0-2"	42	9/25/2017	9/27/2017	10/2/2017	FH 42 0-2"
3	9/26/2017	9/26/2017	10/3/2017	FH 3 0-2"	43	9/26/2017	10/2/2017	10/3/2017	FH 43 0-2"
4	9/26/2017	9/26/2017	10/3/2017	FH 4 0-2"	44	9/26/2017	9/29/2017	10/2/2017	FH 44 0-2"
5	9/27/2017	10/3/2017	10/3/2017	FH 5 0-2"	45	9/23/2017	9/28/2017	10/4/2017	FH 45 0-2"
6	9/27/2017	10/3/2017	10/3/2017	FH 6 0-2"	46	9/25/2017	10/3/2017	10/4/2017	FH 46 0-2"
7	9/26/2017	9/26/2017	10/3/2017	FH 7 0-2"	47	9/25/2017	10/4/2017	10/4/2017	FH 47 0-2"
8	9/25/2017	10/3/2017	10/3/2017	FH 8 0-2"	48	9/25/2017	10/3/2017	10/4/2017	FH 48 0-2"
9	9/25/2017	10/3/2017	10/3/2017	FH 9 0-2"	49	9/26/2017	9/26/2017	10/4/2017	FH 49 0-2"
10	9/25/2017	10/3/2017	10/3/2017	FH 10 0-2"	50	9/28/2017	10/3/2017	10/4/2017	FH 50 0-2"
11	8/31/2017	9/4/2017	9/30/2017	FH 11 0-2"	51	9/11/2017	9/11/2017	9/30/2017	FH 51 0-2"
12	DU-6	N/A	N/A	Prior excavation	52	9/11/2017	9/11/2017	9/30/2017	FH 52 0-2"
13	DU-6	N/A	N/A	Prior excavation	53	8/23/2017	8/23/2017	10/6/2017	FH 53 0-2"
14	DU-6	N/A	N/A	Prior excavation	54	9/11/2017	9/11/2017	10/6/2017	FH 54 0-2"re-ex
15	DU-6	N/A	N/A	Prior excavation	54A	8/23/2017	8/23/2017	10/6/2017	FH 54A 0-2"
16	9/23/2017	9/28/2017	9/29/2017	FH 16 0-2"	55	8/26/2017	8/26/2017	9/29/2017	FH 55 0-2"
17	9/23/2017	9/23/2017	9/23/2017	FH 17 0-2"	56	8/26/2017	8/30/2017	10/2/2017	FH 56 0-2"
18	9/23/2017	9/23/2017	9/23/2017	FH 18 0-2"	57	8/26/2017	8/26/2017	9/29/2017	FH 57 0-2"
19	9/23/2017	9/29/2017	10/2/2017	FH 19 0-2"	58	9/11/2017	9/11/2017	9/29/2017	FH 58 0-2"
20	9/23/2017	9/28/2017	9/29/2017	FH 20 0-2"	59	9/26/2017	9/27/2017	9/29/2017	FH 59 0-2"
21	9/26/2017	9/27/2017	9/30/2017	FH 21 0-2"	60	10/11/2017	10/11/2017	10/11/2017	FH 60 0-2"
22	9/25/2017	9/26/2017	9/26/2017	FH 22 0-2"	61	9/28/2017	9/29/2017	10/3/2017	FH 61 0-2"
23	9/26/2017	9/26/2017	9/26/2017	FH 23 0-2"	62	9/25/2017	9/27/2017	10/3/2017	FH 62 0-2"
24	9/26/2017	9/26/2017	9/29/2017	FH 24 0-2"	63	9/28/2017	9/29/2017	10/3/2017	FH 63 0-2"
25	9/26/2017	9/26/2017	9/29/2017	FH 25 0-2"	64	9/11/2017	9/11/2017	10/30/2017	FH 64 0-2"
26	9/26/2017	9/26/2017	9/29/2017	FH 26 0-2"	65	8/29/2017	8/30/2017	10/30/2017	FH 65 0-2"
27	9/23/2017	9/23/2017	9/30/2017	FH 27 0-2"	66	8/26/2017	8/26/2017	10/3/2017	FH 66 0-2"
28	9/23/2017	9/23/2017	9/30/2017	FH 28 0-2"	67	8/25/2017	8/30/2017	9/29/2017	FH 67 0-2"
29	9/26/2017	9/26/2017	10/2/2017	FH 29 0-2"	68	8/25/2017	8/30/2017	9/29/2017	FH 68 0-2"
30	9/26/2017	9/26/2017	9/26/2017	FH 30 0-2"	69	9/25/2017	9/27/2017	9/29/2017	FH 69 0-2"
31	9/26/2017	9/26/2017	9/26/2017	FH 31 0-2"	70	9/25/2017	9/27/2017	9/29/2017	FH 69 0-2"
32	9/26/2017	9/26/2017	9/26/2017	FH 32 0-2"	71	9/25/2017	9/27/2017	9/29/2017	FH 71 0-2"
33	9/26/2017	9/26/2017	9/26/2017	FH 33 0-2"	72	8/29/2017	9/27/2017	10/3/2017	FH 72 0-2"
34	9/26/2017	9/29/2017	9/30/2017	FH 34 0-2"	73	8/29/2017	9/11/2017	10/2/2017	FH 73 0-2"
35	9/26/2017	10/4/2017	10/4/2017	FH 35 0-2"	74	8/29/2017	8/29/2017	10/2/2017	FH 74 0-2"
36	9/26/2017	10/4/2017	10/4/2017	FH 36 0-2"	75	8/28/2017	8/29/2017	10/2/2017	FH 75 0-2"
37	9/25/2017	9/26/2017	10/2/2017	FH 37 0-2"	76	9/25/2017	9/29/2017	10/2/2017	FH 76 0-2"
38	9/26/2017	10/2/2017	10/2/2017	FH 38 0-2"	77	8/28/2017	8/29/2017	10/3/2017	FH 77 0-2"
39	DU-1	N/A	N/A	Prior excavation					
40	9/26/2017	9/27/2017	10/2/2017	FH 40 0-2"					

Pedestals /Monuments Soil					Pedestals /Monuments Soil				
Feature Unit ID	Excavate	Sampled Collected ID # X P100 0-2"	Backfill	Notes- Red >75mg/kg Green<75mg/kg	Feature Unit ID	Excavate	Sampled Collected ID # X P100 0-2"	Backfill	Notes- Red >75mg/kg Green<75mg/kg
1	8/29/2017	9/4/2017	9/30/2017	1-08 P100 0-2"	23	9/29/2017	10/2/2017	10/2/2017	23-44 P100 0-2"
2	8/29/2017	9/4/2017	9/30/2017	2-08 P100 0-2"	24	9/29/2017	10/2/2017	10/2/2017	24-42 P100 0-2"
3	8/29/2017	9/4/2017	9/30/2017	3-10 P100 0-2"	25	9/29/2017	10/2/2017	10/2/2017	25-38 P100 0-2"
4	8/29/2017	9/4/2017	9/30/2017	4-10 P100 0-2"	26	9/25/2017	10/3/2017	10/3/2017	26-07 P100 0-2"
5	8/29/2017	9/4/2017	9/30/2017	5-11 P100 0-2"	27	10/26/2017	10/3/2017	10/3/2017	27-03 P100 0-2"
6	9/11/2017	9/11/2017	9/30/2017	6-51 P100 0-2"	28	9/26/2017	10/4/2017	10/4/2017	28-30 P100 0-2"
7	9/11/2017	9/11/2017	9/30/2017	7-32 P100 0-2"	29	10/5/2017	10/5/2017	10/5/2017	29-R1 P100 0-2"
8	9/05/2017	9/18/2017	10/3/2017	8-20 P100 0-2"	30	10/5/2017	10/5/2017	10/5/2017	30-20 P100 0-2"
9	9/26/2017	9/28/2017	9/30/2017	9-33 P100 0-2"	31	10/5/2017	10/5/2017	10/5/2017	31-15 P100 0-2"
10	9/26/2017	9/28/2017	9/30/2017	10-23 P100 0-2"	32-71	DU-6	N/A	N/A	Prior excavation
11	9/26/2017	9/28/2017	9/29/2017	11-20 P100 0-2"	33-12	DU-6	N/A	N/A	Prior excavation
12	9/26/2017	9/28/2017	9/29/2017	12-28 P100 0-2"	34-15	DU-6	N/A	N/A	Prior excavation
13	9/26/2017	9/28/2017	9/29/2017	13-27 P100 0-2"	35-15	DU-6	N/A	N/A	Prior excavation
14	9/26/2017	9/28/2017	9/30/2017	14-08 P100 0-2"	36-14	DU-6	N/A	N/A	Prior excavation
15	9/27/2017	9/29/2017	9/30/2017	15-24 P100 0-2"	37-Cross	Abated	N/A	N/A	Maintained
16	9/27/2017	9/29/2017	9/30/2017	16-25 P100 0-2"	38-58	DU-8	N/A	N/A	Prior excavation
17	9/27/2017	9/29/2017	9/30/2017	17-25 P100 0-2"	39-58	DU-8	N/A	N/A	Prior excavation
18	9/28/2017	9/29/2017	9/29/2017	18-13 P100 0-2"	40-Ave Maria	Abated	N/A	N/A	Maintained
19	9/26/2017	9/29/2017	10/2/2017	19-44 P100 0-2"	41-Golf	Abated	N/A	N/A	Spray
20	9/26/2017	9/29/2017	10/2/2017	20-44 P100 0-2"	42-R1	Abated	N/A	N/A	Concrete apron
21	9/26/2017	9/29/2017	9/30/2017	21-52 P100 0-2"	43-R1	Abated	N/A	N/A	Concrete apron
22	9/26/2017	10/2/2017	10/4/2017	22-49 P100 0-2"	Anchor-3502	10/4/2017	10/4/2017	10/5/2017	Anchor-3502
Anchor-Kahana	10/2/2017	10/2/2017	10/5/2017	Anchor-Kahana	Anchor-3514	10/4/2017	10/4/2017	10/5/2017	Anchor-3514
Anchor-170	10/2/2017	10/2/2017	10/2/2017	Anchor-170	Anchor-1126	10/5/2017	10/5/2017	10/5/2017	Anchor-1126

Fire Hydrant ID # per updated DBSI file -Navy Fresh Water Lines, Valves & Hydrants. BSI/DR-0034
Pedestal sample identification is a designated ID number followed by a dash and double-digit number relative to the closest Fire Hydrant ID location. No full prior map of pedestals exists.

Table 5. DU 5 Buttress & Cover - Import Clean Coral Sand

DU 5 IMPORT CLEAN CORAL						
DATE	NORTH Wall Loads	SOUTH Wall Loads	EAST Wall Loads	WEST Wall Loads	Days total loads	Days cubic yardage
10/9/2017	0	0	0	0	0	0
10/10/2017	0	0	0	0	0	0
10/11/2017	0	0	0	0	0	0
10/12/2017	0	0	0	0	0	0
10/13/2017	0	0	0	0	0	0
10/14/2017	0	0	0	0	0	0
10/15/2017	End	End	End	End	0	0
Load count per wall	282	0	16	0		
15cuyd estimate per wall	4230	0	240	0		
2017 Total R2 combined clean coral import LOADS				298		
Loads x 15cuyd estimate				4470		
R2 North Stockpile distribution-						
Truck loads into R2 cap & abutment				294		
Loads x 15cuyd estimate				4410		
Stockpile loads to DU-9 backfill				43		
Loads x 15cuyd estimate				645		

The R2 North Stockpile of clean coral sand for 2017 is 298 truck loads. The same north side abutment stockpile in 2016 is comingled, producing a larger available yardage than 2017 alone.
DU-9 distribution is noted in Table 5 for the R2 North stockpile. However, Table 6 indicates the project total DU-9 backfill yardage for 2017, regardless of where the clean sand originated (Borrow Source or the R2 North Stockpile)

Table 6. Excavation Plots - Import Clean Coral Sand

EXCAVATION PLOTS- IMPORT CLEAN CORAL BACKFILL							
DATE	DU-9 Loads	DU-8 Loads	DU-7 Loads	DU-5 Loads	DU-3 Loads	Days total loads	Days cubic yardage
10/16/2017	0	0	0	0	0	0	0
10/17/2017	21	1	0	0	0	22	330
10/18/2017	5	0	0	0	0	5	75
10/19/2017	0	0	0	0	0	0	0
10/20/2017	~End~	~End~	~End~	~End~	~End~	0	0
10/21/2017						0	0
10/22/2017						0	0
Load count per column	224.5	40.5	20	0	0		
15cuyd estimate per column	3367.5	607.5	300	0	0		
2017 Total combined clean import Backfill LOADS					285		
Loads x 15cuyd estimate					4275		

NW Demolition and Environmental
A Joint Venture

Daily Field Report

Date: Thursday, October 26, 2017
Prepared by: Scott Wakefield

Project: Removal of Lead-Based Paint from Structures and Lead-Contaminated Soil
Location: Midway Atoll National Wildlife Refuge
Client: US Fish and Wildlife Service

Weather: Sunny, wind 5 mph. Temperature ~78F

Personnel:

Name	Company	Site Hours
Scott Wakefield	NWDE Field Oversight	-
Jeff James	NWDE Supervisor	-
Joel Smith	NWDE Operator	-
Dalton Sullivan	NWDE Labor	-
Jevon Stone	NWDE Operator	-
Matt Manning	NWDE Operator	-
Lucas Peel	NWDE Labor	-
Tyler Wilson	NWDE Labor	-

Visitors/Additional Site Personnel:

Name	Title
MaryAnn Amann	U.S. FWS

Equipment:

Description	Model No.	Comments / Serial #
Pickup Truck	F350 Service Truck	NWDE
Flatbed Truck	Ford F450	NWDE
Container Truck	Peterbuilt	NWDE
Skid Steer	Bobcat S185	NWDE
Tracked Skid Steer	Bobcat T750	NWDE
Tracked Skid Steer	Bobcat	NWDE
Mini-Excavator	CAT 308	NWDE
Excavator	Volvo EC290BLC	NWDE
Excavator	Volvo EC290BLC	NWDE
Excavator	Volvo EC290	NWDE
Off road Dump Truck	Volvo A30D	NWDE
Off road Dump Truck	Volvo A30D	NWDE
Off road Dump Truck	Volvo A30D	NWDE
Excavator – High reach	Komatsu PC400HD	NWDE
Excavator	Komatsu 450	NWDE

Description of Work:

1030 – Today mark's the final departure for the NWDE crew having completed the seven year project on Midway Atoll. Cinco Air charter flight has been loaded up with cargo and passengers. The Gulfstream III jet departs Henderson Airfield, transporting the LBP field team off-island to end the 2017 season and close the chapter of field work on Midway Atoll. This project has contributed to the improvement of the island's environment status and health of birds in the world's largest Albatross nesting colony. The team at Northwest Demolition, Iniki Enterprises and US Fish & Wildlife accomplished a successful outcome with the efforts put forth.

Finishing off the daily field reports are a few photos of Midway images that makes the atoll extraordinary unique.

Photographs:

Photo 01: Midway Atoll NWR – Laysan Albatross, juvenile

Photo 02: Midway Atoll – View west. Partial overview of the project work areas

Photo 03: Midway Atoll NWR– View west. Completed R2 Unit located north (right) of the runway

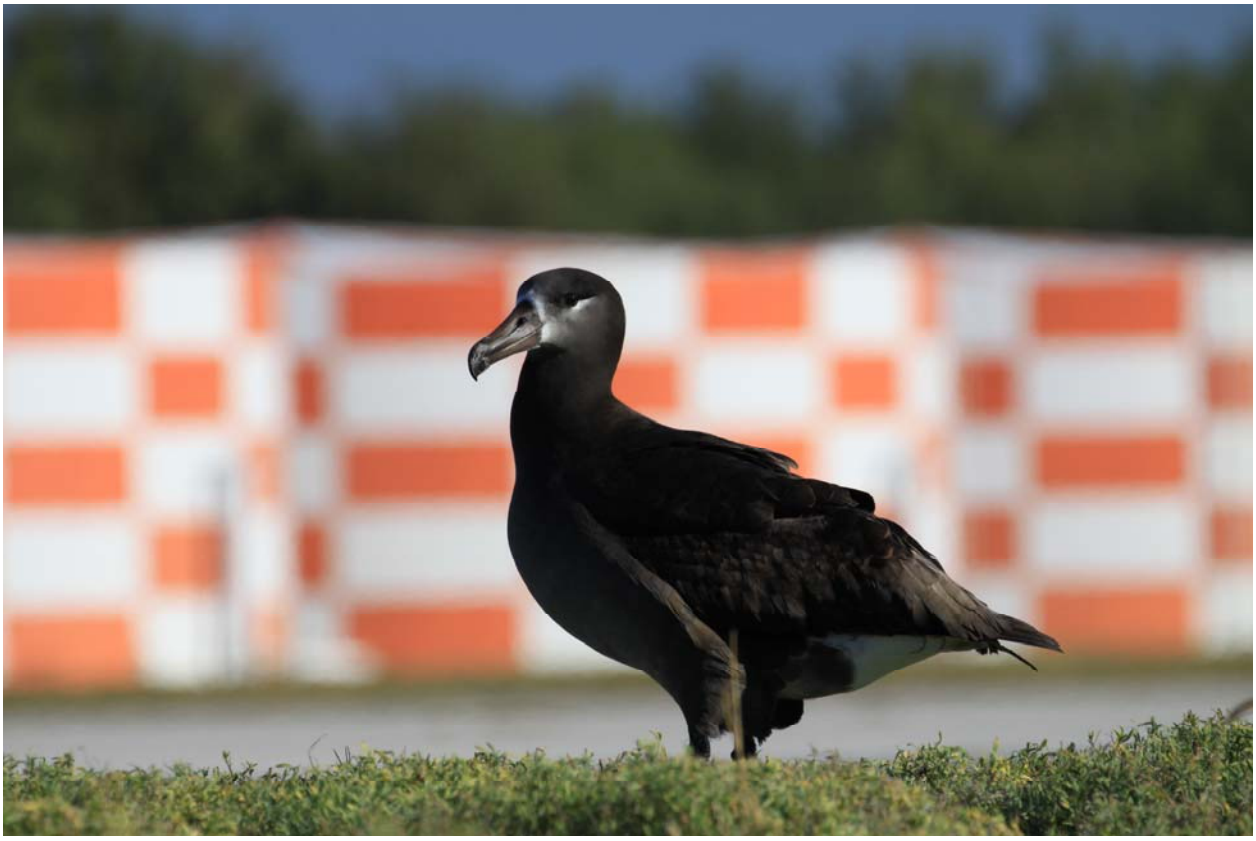


Photo 04: Midway Atoll NWR – Black-footed Albatross

Photo 05: Midway Atoll NWR – Laysan Albatross in flight

Photo 06: Midway Atoll NWR – Red-tailed Tropicbird

Photo 07: Midway Atoll NWR – Laysan Albatross, juvenile

Photo 08: Midway Atoll NWR – Red-footed Booby

Photo 9: Midway Atoll NWR – White Tern

Photo 10: Midway Atoll NWR – White Tern chick

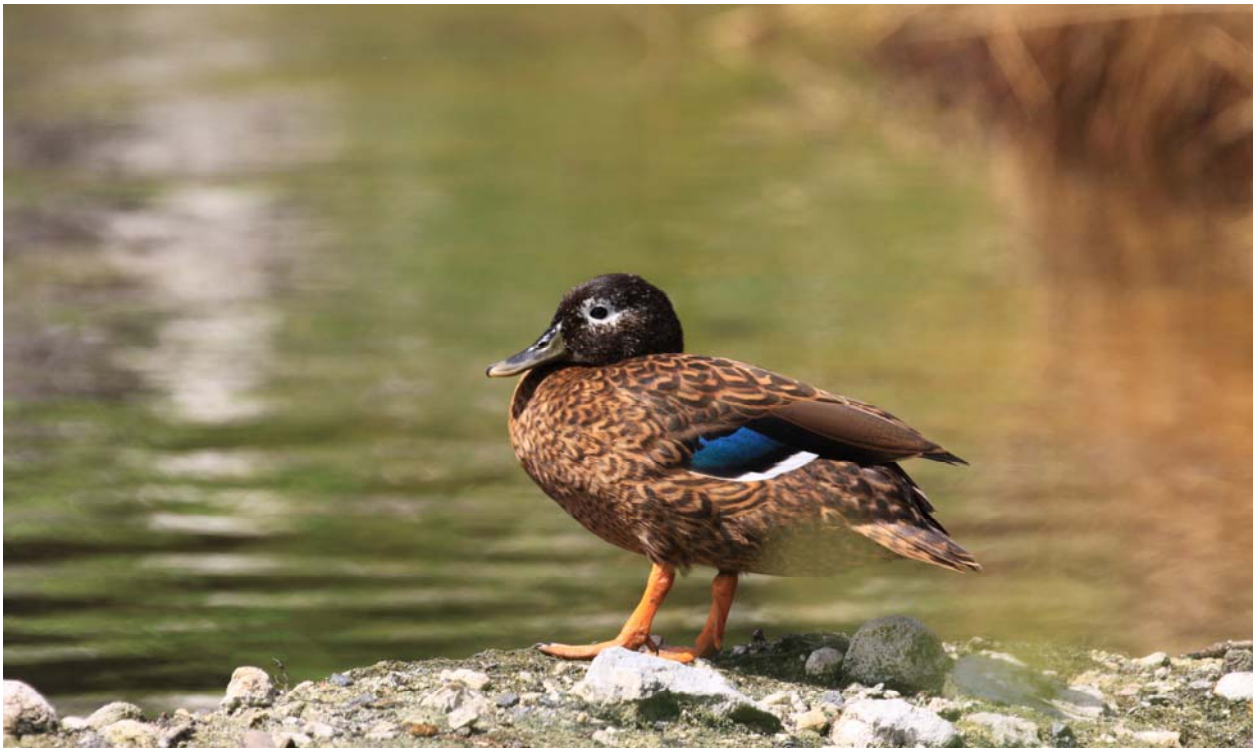


Photo 11: Midway Atoll NWR – Laysan Duck

Photo 12: Midway Atoll NWR – Noddies

Photo 13: Midway Atoll NWR – Short-tail Albatross

Photo 14: Midway Atoll NWR – Laysan Albatross, juvenile

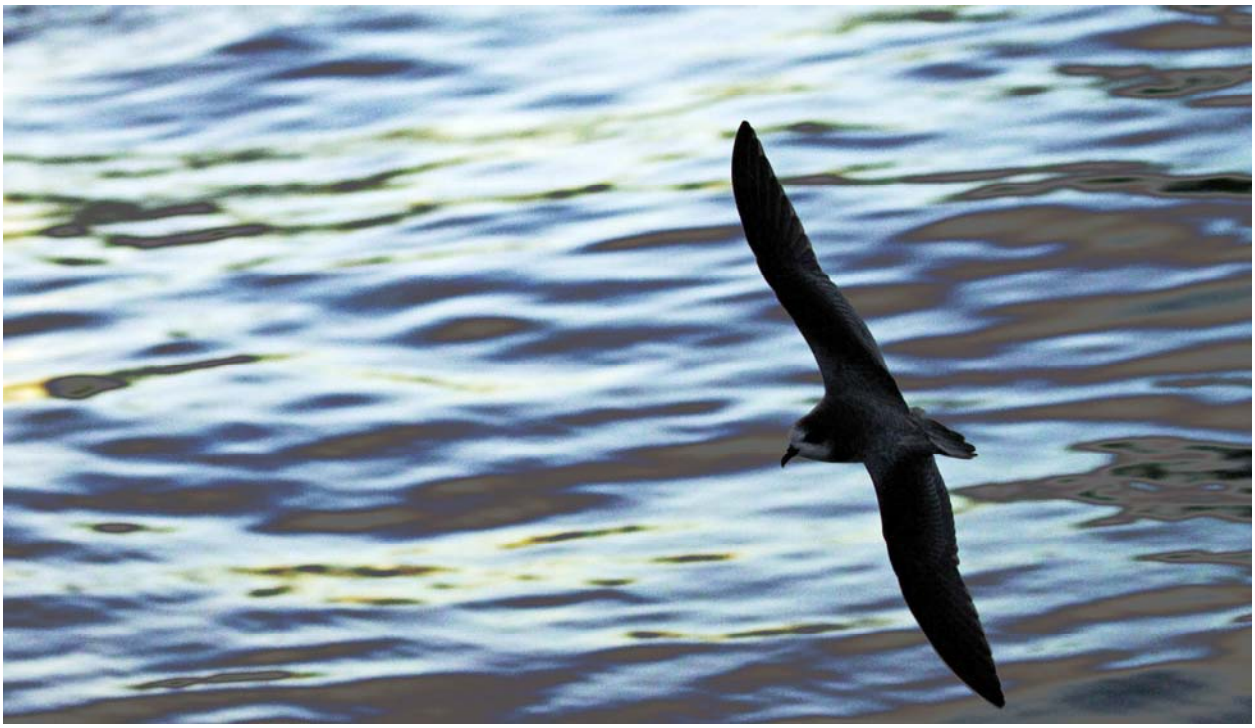


Photo 15: Midway Atoll NWR – Bonin Petrel

Photo 16: Midway Atoll NWR – Bristle-thighed Curlew

Photo 17: Midway Atoll NWR – Sunset

APPENDIX H

SELECT SITE PHOTOGRAPHS AND SITE PHOTOGRAPH SUMMARY DVD

Photo 01: View southwest – Bldg 144 Sub Gen. pre excavation

Photo 02: View southwest – Bldg 144 Sub Gen. post excavation

Photo 03: View southwest – Bldg 144 Sub Gen. progress of encountered concrete

Photo 04: View north – Bldg 144 Sub Gen. post excavation, west side

Photo 05: View southwest – Bldg 309 Power Plant, backfill of north side

Photo 06: View south – Bldg 309 Power Plant, backfill at west side

Photo 07: View southwest – Bldg 309 Power Plant, backfill at southwest corner

Photo 08: View southwest – Bldg 309 Power Plant, backfill at south side

Photo 09: View west – Bldg 521 Communication Center excavation progress, south side

Photo 10: View west – Bldg 521 Communication Center, backfill of west side

Photo 11: View east – Bldg 347 Water Plant excavation progress

Photo 12: View south – Bldg 347 Water Plant excavation progress

Photo 13: View north – Bldg 3501 Main Freshwater Pump Station excavation progress

Photo 14: View south – Bldg 3501 Main Freshwater Pump Station backfill progress

Photo 15: View south –3501 Main Freshwater Pump Station backfill progress

Photo 16: View south – Bldg S3126 Reservoir backfill progress

Photo 17: View west – Bldg S3127 Reservoir backfill progress

Photo 18: View northwest – Tugboat for inbound and outbound project materials and equipment

Photo 19: View southeast – Barge for inbound and outbound project materials and equipment

Photo 20: View north – 5304 Water Tower

Photo 21: View north – 5304 Water Tower demo progress

Photo 22: View north – 5304 Water Tower demo progress

Photo 23: View north – 5304 Water Tower soil excavation progress

Photo 24: View north – 5304 Water Tower excavation backfill

Photo 25: View east – R2 prior to construction (circa 2011)

Photo 26: View east – R2 abutment stockpile (left) waste soil progress backfill (right)

Photo 27: View east – R2 waste cover hydraulic membrane progress

Photo 28: View west – R2 hydraulic membrane clean sand cover layer progress

Photo 29: View west – Excavator bucket compaction and water amendment (background)
Compaction testing using the agriTronix soil tester (foreground)

Photo 30: View west – Progress of final soil cover sand compaction pattern using the loaded A30 Volvo haul truck

Photo 31: View south – R2 geotextile placement progress

Photo 32: View south – R2 final 3” minus erosion layer progress

Photo 33: View south – R2 final 3” minus erosion layer progress

Photo 34: View west – Slope compaction using the Komatsu 450 excavator (90,000 lb machine)

Photo 35: View west – R2 final 3” minus erosion layer complete

~Blank~

Photo 1-08

Photo 2-08

Photo 3-10

Photo 4-10

Photo 5-11

Photo 6-51

Photo 7-32

Photo 8-20

Photo 9-33

Photo 10-23

Photo 11-20

Photo 12-28

Photo 13-27

Photo 14-08

Photo 15-24

Photo 16-25

Photo 17-25

Photo 18-13

Photo 19-44

Photo 20-44

Photo 21-52

Photo 22-49

Photo 23-44

Photo 24-42

Photo 25-38

Photo 26-07

Photo 27-03

Photo 28-30

Photo 29-R1

Photo 30-20

Photo 31-15

Photo 32-71

Photo 33-12

Photo 34-15

Photo 35-15

Photo 36-14

Photo 37-Cross

Photo 38-58

Photo 39-58

Photo 40-Ave Maria

Photo 41-Golf

Photo 42-R1

Photo 43-R1

Photo Anchor-Kahana

Photo Anchor-170

Photo Anchor-3502

Photo Anchor-3514

Photo Anchor-1126

Photo FH 1

Photo FH 2

Photo FH 3

Photo FH 4

Photo FH 5

Photo FH 6

Photo FH 7

Photo FH 8

Photo FH 9

Photo FH 10

Photo 11

Photo FH 12

Photo FH 13

Photo FH 14

Photo FH 15

Photo FH 16

Photo FH 17

Photo FH 18

Photo FH 19

Photo FH 20

Photo FH 21

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Photo FH 27

Photo FH 28

Photo FH 29

Photo FH 30

Photo FH 31

Photo FH 32

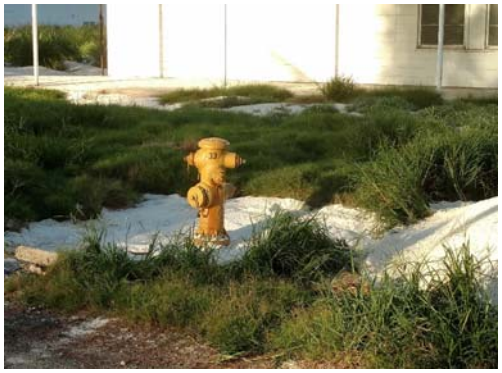


Photo FH 33

Photo FH 34

Photo FH 35

Photo FH 36

Photo FH 37

Photo FH 38

Photo FH 39

Photo FH 40

Photo FH 41

Photo FH 42

Photo FH 43

Photo FH 44

Photo FH 45

Photo FH 46

Photo FH 47

Photo FH 48

Photo FH 49

Photo FH 50

Photo FH 51

Photo FH 52

Photo FH 53

Photo FH 54

Photo FH 54A

Photo FH 55

Photo FH 56

Photo FH 57

Photo FH 58

Photo FH 59

Photo FH 60

Photo FH 61

Photo FH 62

Photo FH 63

Photo FH 64

Photo FH 65

Photo FH 66

Photo FH 67

Photo FH 68

Photo FH 69

Photo FH 70

Photo FH 71

Photo FH 72

Photo FH 73

Photo FH 74

Photo FH 75

Photo FH 76

Photo FH 77

~End~

APPENDIX I

ANALYTICAL REPORTS AND QUALITY ASSURANCE REPORTS

APPENDIX I

ANALYTICAL REPORTS AND QUALITY ASSURANCE REPORTS

Data quality for field sampling methods was based on measurement quality criteria listed in the Work Plan and were checked using analytical results of field duplicate samples. For chemical analyses, established precision and accuracy protocols, combined with those outlined in the Quality Assurance Project Plan (QAPP) suffice for analytical data quality. The laboratory's QA manager was responsible for maintaining the method-defined and QAPP-defined quality assurance/quality control (QA/QC) criteria.

Samples

All samples obtained for chemical analysis were transferred into clean sample containers. Soil samples were collected in plastic Whirl-Pak® bags. Whirl-Pak® bags are equipped with a built-in wire for self-closing, and they include a puncture-proof tab. The bags are also designed with a built-in write-on strip for labeling purposes. In addition, pre-printed labels were used for sample identification.

Sufficient sample volume was obtained for the laboratory to complete the method-specific quality control (QC) analyses. Possession of the samples was documented by the chain-of-custody. The chain-of-custody forms were signed and dated in the appropriate places by parties involved with a transfer of custody. Each container was labeled by the field technician to avoid the possibility of misidentification. Each sample label contained the project name, project number, field sample identification, and sample date and sample time.

Upon receipt at the analytical laboratory, each sample was logged into the tracking system. Each sample was assigned a unique laboratory identification number used by the laboratory for analysis assignment, sample tracking, and data reporting. Upon receipt of the samples at the laboratory, the following procedures were followed. The custody seals were broken, the chain-of-custody form was signed by the laboratory personnel, and the conditions of the samples were recorded on the form. The original chain-of-custody form remained with the laboratory, and copies were returned to the relinquishing party.

Field Quality Control

Field quality control measures included the collection of replicate samples as well as documentation of field measurements and observations and field instrument calibration.

Field Replicate Samples

Following excavation, replicate 5-point composite samples were collected in most soil sampling plots. In total, 173 replicate samples were collected during the 2017 field activities.

Several confirmation sampling strategies were utilized over the course of this project including multiple incremental sampling (MIS), composite sampling and discrete sampling. Below is a brief summary of the sampling methods employed and the quality control samples collected.

- The 2012, 2013 and 2014, confirmation sampling used MIS methods which included a primary sample, a replicate sample (labeled Dup-01) and triplicate sample (labeled Dup-02).
- In 2013 and 2014, discrete soil samples and duplicates were collected for characterization purposes.
- In 2015, the confirmation samples from portions of DU3, all of DU5 and all of DU8 were collected using MIS methods (same as 2012, 2013 and 2014). In an effort to minimize re-excavation plot sizes, excavations around some structures in DU3 (Building 422, 423 424 and 4208) were sampled using a 5-point composite. The quality control samples from these buildings consisted of a replicate sample (second 5-point composite collected in close proximity to the original. However, the 2015 samples were inadvertently labeled as "Dup" and should have been labeled as a replicate.
- In 2016, both discrete and 5-point composite samples were collected for characterization purposes. The confirmation soil samples from 2016 were collected using only a 5-point composite. The confirmation soil samples from 2016 that were labeled as DUP but should be considered replicate samples.
- In 2017, the 5-pont composite method was used. Samples labeled duplicates should be considered replicate samples.

Replicate samples were collected to provide an estimate of variability within the sampling grids and were used to measure variability/precision. The replicate samples (labeled as DUP in the field) were analyzed by the same analytical methods used for primary samples. Relative percent differences (RPDs) for replicates were calculated to assess the potential variability caused by sample handling. Table 5 summarizes the RPDs.

The RPDs between the primary and field replicate soil samples range from zero percent to 191 percent. Precision is normally considered acceptable when the RPD is less than 30 percent. While some of the RPDs were above these criteria, this is not unexpected because of the potential for a "nugget effect" when sampling soils contaminated with

lead-based paint. In addition, higher RPDs are normally seen when evaluating lower detected concentrations.

The primary source of lead in the soils at Midway is associated with flaking lead-based paint. As such, samples in (replicates) may have higher RPDs due to the presence/absence of paint chips in a sample.

Documentation of Field Activities

Daily field activities, including observations, measurement data, and variations in field procedures were recorded on appropriate field forms. The original field forms are maintained in the Geosyntec office files. Copies of the completed forms are maintained in a binder and sequentially numbered field file for reference during field activities. Indelible ink was used for all documentation. Photographic documentation of field activities was performed as appropriate. The FWS was provided with copies of each daily field report and the photographic log.

Laboratory Quality Assurance

Analytical methods that were used for this project included total lead by EPA Method 6020 and EPA Method 1320 (multiple extraction procedure) for lead.

Laboratory Quality Control

The laboratory maintains an internal quality assurance program as documented in its laboratory quality assurance manual. The laboratory uses a combination of blanks, surrogate recoveries, duplicates, matrix spike recoveries, matrix spike duplicate recoveries, blank spike recoveries, and blank spike duplicate recoveries to evaluate the analytical results. The laboratory also uses data quality goals for individual chemicals or groups of chemicals based on the long-term performance of the test methods. The project team reviewed each analytical data packet and completed a QA/QC checklist for each analytical data packet. Overall, the data were of usable quality and no quality control issues were identified. A copy of the data review checklist is included in this Appendix.

Data Quality Review

In order to apply the requisite data qualifiers, TestAmerica Analytical Reports 580-70807-1, 580-70843-1, 580-71130-1, 580-71130-2, 580-71470-1, 580-71821-1, 580-71821-2, 580-71821-3, 580-71821-4, 580-72108-1 and 580-72108-2 were reviewed based on USEPA Contract Laboratory Program National Functional Guidelines for Inorganic Data Review, January 2017 (EPA, 2017), as well as by the pertinent method referenced by the data packages and professional and technical judgment.

262 samples were analyzed for total lead using EPA method 6010C. The analyses were conducted in 33 sample preparation batches. A batch is defined as not more than 20 samples extracted/prepared at one time with the appropriate laboratory QC samples. The

samples must be extracted together within a 24-hour period. Total lead was not detected in the 33 method blanks that were reported.

Thirty-three laboratory control samples (LCSs) and laboratory control sample duplicates (LCSDs) were analyzed by the laboratory. All 33 LCS/LCSD recoveries were within the method- and laboratory-specified acceptance criteria. Additionally, the relative percent differences (RPDs) between the LCS and LCSD for every LCS/LCSD pair were within the method- and laboratory-specified acceptance criteria. None of the data flagged by the laboratory was associated with the LCS/LCSD results.

Of the twenty-five matrix spike (MS)/ matrix spike duplicate (MSD) pairs analyzed, two results exceeded the laboratory acceptance criteria. The laboratory data were flagged accordingly with the F1 flag for MS/MSD recovery exceedances and the F2 flag for MS/MSD RPD exceedances. These flags were valid, and the MS/MSD exceedances resulted in one client sample being J- qualified as estimated with a low bias and one client sample being J-qualified as estimated. The data are usable within the limitations of the qualifications, and the bias should be noted. One additional MS/MSD pair exceeded the laboratory acceptance criteria for MS/MSD recovery; however, the concentration of lead in the original sample was more than four times the spike amount. The laboratory data were flagged accordingly with the "4" flag to indicate that the analyte was present at more than four times the spike concentration; therefore, the recovery limits are not applicable. These flags were valid, and the MS/MSD exceedances would not result in validation qualifications, based on technical and professional judgement.

Twenty-four client sample set-specific laboratory duplicates were analyzed using the same parent samples as the MS/MSDs analyses. Five laboratory duplicate RPDs were high and outside of the laboratory-specified acceptance criteria and were flagged by the laboratory with F3. These flags do not indicate that the data are unusable but indicate that the sample results should be noted for further assessment by the data user. These flags were replaced with J qualifications of the affected samples to indicate that the results are estimated.

One hundred seventy-one field replicates were collected with the sample set. Seventy-eight field replicates pair RPDs exceeded the project specified RPD of 30%. The validator calculated the field replicate RPDs, and therefore, the field replicates RPD exceedances are not flagged in the laboratory report. The field replicates RPD exceedances resulted in 78 original samples and 78 field replicates samples being J-qualified as estimated.

While there are numerous laboratory flags reported with the client samples, the majority of the laboratory flags are J-flags, indicating that the sample result is an estimated value less than the RL, but greater than the MDL. These laboratory flags do not indicate quality control issues, and do not result in data qualification.

Based on the Stage 2A validation, it is determined that 100% of the data are usable for meeting the project objectives.

APPENDIX J

FIELD PROCEDURES

APPENDIX J

FIELD PROCEDURES

This appendix describes the field procedures, field quality assurance/quality control (QA/QC) protocol, and the chemical testing program t implemented during the 2017 field activities. The field activities included the following activities:

- Collection of soil samples from hand tools;
- Location control;
- Decontamination procedures; and
- Handling of Investigation Derived Waste (IDW).

Collection of Soil Samples Using Hand Tools

Soil samples were collected from near-surface using tools such as spades, shovels, trowels, and scoops. At each sample location, hand tools were used to remove surface soil until the desired sample depth interval was reached. At that depth, a sample was collected using a stainless steel or plastic scoop. Chrome-plated tools were not used.

If the soil sample was a discrete sample, the sample was collected using a clean/decontaminated stainless-steel or plastic spoon. Composite soil samples were collected using a stainless-steel or plastic spoon and transferred to new 1-gallon Ziploc bags. The samples were mixed to make a single sample. Standard chain-of-custody procedures were observed during transport of the samples to the laboratory.

Location Control

Geosyntec recorded the position of each exploration by measuring the location to known site features.

Decontamination Procedures

The objective of the decontamination procedure was to minimize the potential for cross contamination between exploration locations and between individual samples within a specific exploration. Sampling equipment was decontaminated in accordance with the following procedures before each sampling attempt or measurement.

- Brush equipment with a wire brush, if necessary, to remove large particulate matter;
- Rinse with potable tap water;
- Wash with non-phosphate low pH solution of Citrinox® detergent and potable tap water; and
- Rinse with potable tap water.

Handling of Investigation-Derived Waste

IDW generated during the project included soil cuttings and decontamination water. Soil cuttings were placed back in the exploration in the order removed. Purge water was also discharge back to an area of the Decision Unit that is set for excavation. Disposable items, such as sample bags, gloves, and protective overalls and paper towels, were placed in plastic bags after use and stored on-site until the final demobilization. At that time, the IDW was transported off-site for disposal.

Laboratory Analytical Plan

Laboratory analyses were conducted in accordance with EPA-approved methods. The project utilized the laboratories' accepted method detection limits as our reporting goals. All samples were analyzed for total lead in soil using EPA Method 6010 and multiple extraction procedure (EPA Method 1320) for lead.

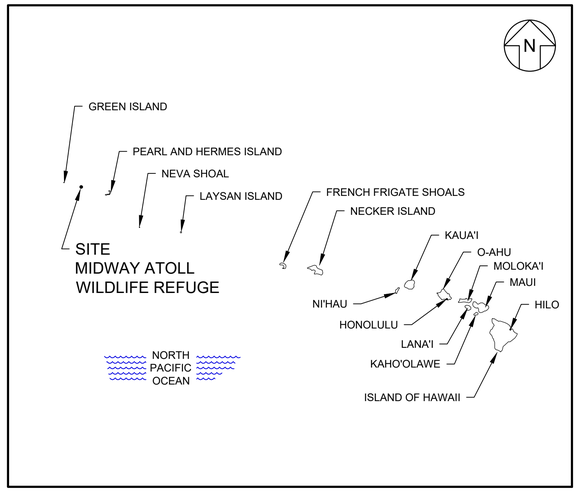
APPENDIX K

R2 FINAL DESIGN

FINAL AS-BUILT DRAWINGS

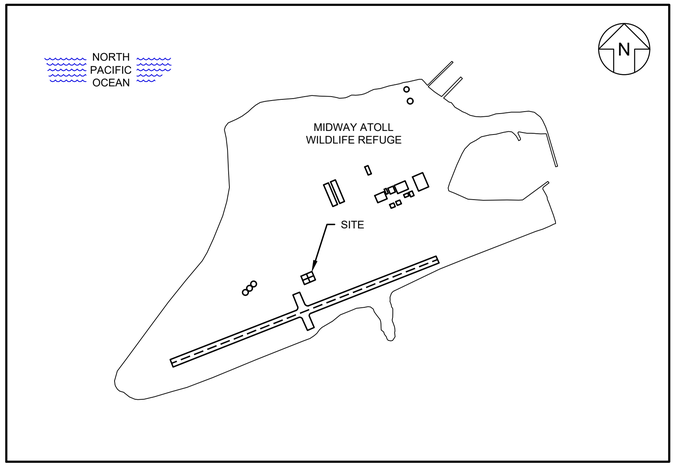
MIDWAY ATOLL REMEDIATION PROJECT, R-2 UNIT
MIDWAY ATOLL NATIONAL WILDLIFE REFUGE

DECEMBER 2017

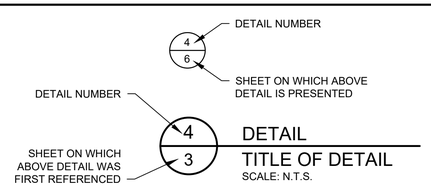


VICINITY MAP
1" = 1,800 MILES

SHEET INDEX	
SHEET NO.	SHEET TITLE
1	TITLE SHEET
2	EXISTING CONDITIONS
3	DEMOLITION PLAN
4	TOP OF WASTE GRADING PLAN
5	TOP OF FINAL COVER PLAN
6	PROFILES I
7	PROFILES II
8	DETAILS I
9	DETAILS II
10	DETAILS III



LOCATION MAP
1" = 2,000'



EXAMPLE: DETAIL NUMBER 4 PRESENTED ON SHEET NO. 6 WAS REFERENCED ON SHEET NO. 3.

DETAIL IDENTIFICATION LEGEND

(ABOVE SYSTEM ALSO APPLIES TO SECTION IDENTIFICATIONS, HOWEVER, LETTERS ARE USED INSTEAD OF NUMBERS.)

PREPARED FOR:

US FISH AND WILDLIFE SERVICE

PREPARED BY:

Geosyntec consultants
16644 WEST BERNARDO DRIVE, SUITE 300
SAN DIEGO, CALIFORNIA 92127, USA
PHONE: 858.674.6559

REV	DATE	DESCRIPTION	DRN	APP
E	12/12/17	FINAL AS-BUILTS	MMC	GTC
D	9/29/17	ADDED DETAIL	SLB	GTC
C	5/27/15	REVISED FINAL DESIGN	MMC	GTC
B	5/21/12	FINAL DESIGN	MMC	GTC
A	5/1/12	DRAFT FINAL DESIGN SUBMITTAL	MMC	GTC

Geosyntec consultants
16644 WEST BERNARDO DRIVE, SUITE 300
SAN DIEGO, CA 92127
PHONE: 858.674.6559

TITLE: TITLE SHEET

PROJECT: MIDWAY ATOLL REMEDIATION PROJECT, R-2 UNIT

SITE: MIDWAY ATOLL NATIONAL WILDLIFE REFUGE

THIS DRAWING MAY NOT BE ISSUED FOR PROJECT TENDER OR CONSTRUCTION, UNLESS SEALED.

SIGNATURE

DATE

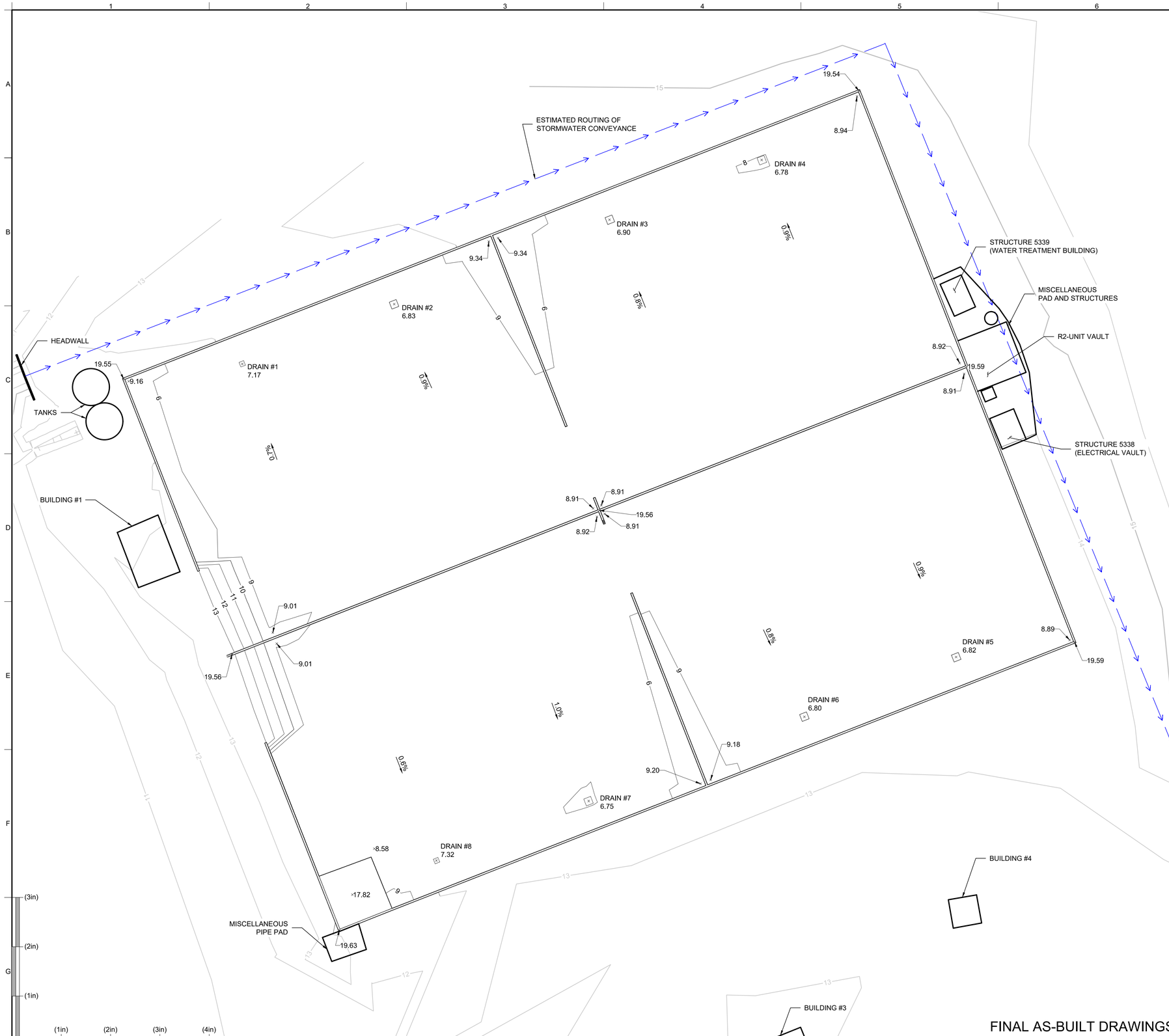
REGISTERED PROFESSIONAL ENGINEER GREGORY T. CORCORAN No. C 58876 Exp. CIVIL STATE OF CALIFORNIA

DESIGN BY:	GTC	DATE:	MAY 2015
DRAWN BY:	MMC	PROJECT NO.:	PNG0759
CHECKED BY:	JLN	FILE:	PNG0616-01
REVIEWED BY:	GTC	DRAWING NO.:	1 OF 10
APPROVED BY:	GTC		

FINAL AS-BUILT DRAWINGS

SCALE IS BASED ON 22" X 34" NON-REDUCED SHEET SIZE (BORDER = 21" X 32")

P:\PR\USDCad\CADD\PNG0616 - MIDWAY R2 UNIT\Plansets_Current Set\PNG0616-01.dwg Last Edited by: MCarlson on 12/19/2017 10:21 AM



SITE LOCATION

0 800' 1600'
AERIAL SCALE IN FEET

LEGEND

10	EXISTING GROUND MAJOR CONTOUR (5')
11	EXISTING GROUND MINOR CONTOUR (1')
10	R-2 UNIT AS-BUILT MAJOR CONTOURS (5')
9	R-2 UNIT AS-BUILT MINOR CONTOURS (1')
× 8.71	R-2 UNIT AS-BUILT SPOT ELEVATION (FEET)

0 20' 40'
SCALE IN FEET

NOTES:

1. EXISTING TOPOGRAPHIC SURVEY DATA COLLECTED BY GEOSYNTEC IN NOVEMBER, 2011.
2. HORIZONTAL COORDINATE SYSTEM BASED UPON NAD83 (1993), UTM (ZONE 01).
3. VERTICAL DATUM BASED UPON EGM 96 AT NGS SURVEY MONUMENT "MIDWAY 11855" (SEE SITE LOCATION INSERT FOR LOCATION).
4. AERIAL PHOTOGRAPHY PROVIDED BY DIGITALGLOBE-GEOEYE, 2011.

REV	DATE	DESCRIPTION	DRN	APP
E	12/12/17	FINAL AS-BUILTS	MMC	GTC
D	9/29/17	ADDED DETAIL	SLB	GTC
C	5/27/15	REVISED FINAL DESIGN	MMC	GTC
B	5/21/12	FINAL DESIGN	MMC	GTC
A	5/1/12	DRAFT FINAL DESIGN SUBMITTAL	MMC	GTC

Geosyntec consultants
16644 WEST BERNARDO DRIVE, SUITE 300
SAN DIEGO, CA 92127
PHONE: 858.674.6559

U.S. FISH & WILDLIFE SERVICE

TITLE: EXISTING CONDITIONS

PROJECT: MIDWAY ATOLL REMEDIATION PROJECT, R-2 UNIT

SITE: MIDWAY ATOLL NATIONAL WILDLIFE REFUGE

THIS DRAWING MAY NOT BE ISSUED FOR PROJECT TENDER OR CONSTRUCTION, UNLESS SEALED.

SIGNATURE

DATE

REGISTERED PROFESSIONAL ENGINEER GREGORY T. CORCORAN No. C 58876 Exp. CIVIL STATE OF CALIFORNIA

DESIGN BY:	GTC	DATE:	MAY 2015
DRAWN BY:	MMC	PROJECT NO.:	PNG0759
CHECKED BY:	JLN	FILE:	PNG0616-02
REVIEWED BY:	GTC	DRAWING NO.:	2 OF 10
APPROVED BY:	GTC		

FINAL AS-BUILT DRAWINGS

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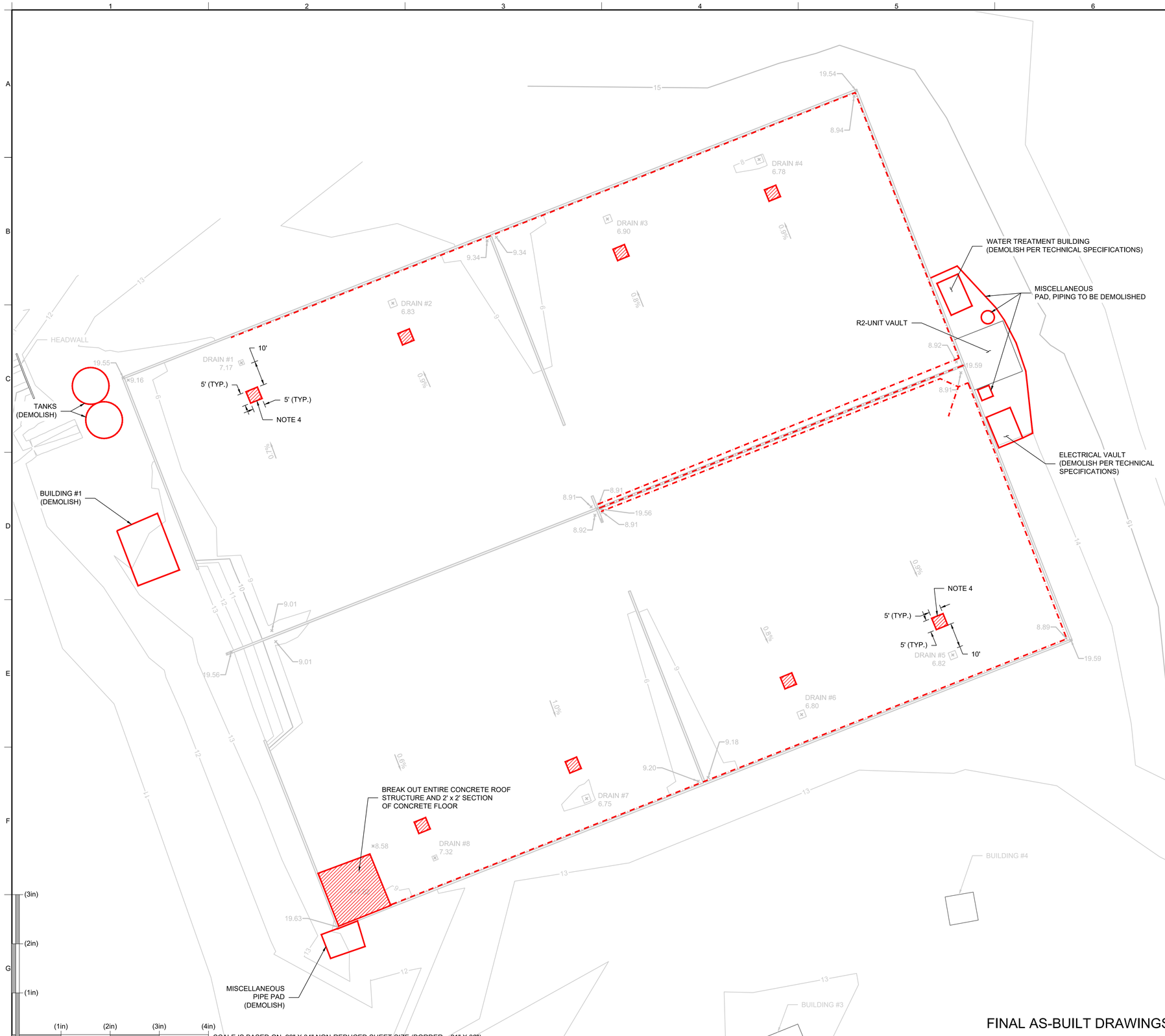
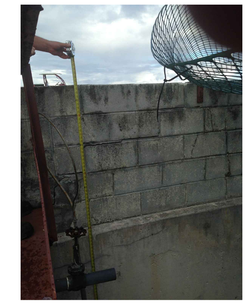


LEGEND

10	EXISTING GROUND / R-2 UNIT AS-BUILT MAJOR CONTOUR (5')
9	EXISTING GROUND / R-2 UNIT AS-BUILT MINOR CONTOUR (1')
× 8.71	R-2 UNIT AS-BUILT SPOT ELEVATION (FEET)
	ABOVE GRADE PIPING TO BE ABANDONED IN PLACE
	STRUCTURES TO BE DEMOLISHED
	CONCRETE REMOVAL (NOTE 4)

R2-UNIT VAULT



R2-UNIT VAULT WALL

ELECTRICAL VAULT

WATER TREATMENT BUILDING

0 20' 40'

SCALE IN FEET

NOTES:

1. EXISTING TOPOGRAPHIC SURVEY DATA COLLECTED BY GEOSYNTEC IN NOVEMBER, 2011.
2. HORIZONTAL COORDINATE SYSTEM BASED UPON NAD83 (1993), UTM (ZONE 01).
3. VERTICAL DATUM BASED UPON EGM 96 AT NGS SURVEY MONUMENT "MIDWAY 11855" (SEE SITE LOCATION INSERT FOR LOCATION).
4. REMOVE CONCRETE (BREAK OUT) AT EACH LOCATION, ENTIRE THICKNESS. DISPOSE OF CONCRETE WITHIN R-2 UNIT. REMOVE CONCRETE TO PROVIDE DRAINAGE FROM R-2 UNIT TO SUBSURFACE.

REV	DATE	DESCRIPTION	DRN	APP
E	12/12/17	FINAL AS-BUILTS	MMC	GTC
D	9/29/17	ADDED DETAIL	SLB	GTC
C	5/27/15	REVISED FINAL DESIGN	MMC	GTC
B	5/21/12	FINAL DESIGN	MMC	GTC
A	5/1/12	DRAFT FINAL DESIGN SUBMITTAL	MMC	GTC

Geosyntec consultants
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PHONE: 858.674.6559

U.S. FISH & WILDLIFE SERVICE

TITLE:

DEMOLITION PLAN

PROJECT:

MIDWAY ATOLL REMEDIATION PROJECT, R-2 UNIT

SITE:

MIDWAY ATOLL NATIONAL WILDLIFE REFUGE

THIS DRAWING MAY NOT BE ISSUED FOR PROJECT TENDER OR CONSTRUCTION, UNLESS SEALED.

SIGNATURE

DATE

REGISTERED PROFESSIONAL ENGINEER GREGORY T. CORCORAN No. C 58876 Exp. CIVIL STATE OF CALIFORNIA

DESIGN BY:	GTC	DATE:	MAY 2015
DRAWN BY:	MMC	PROJECT NO.:	PNG0759
CHECKED BY:	JLN	FILE:	PNG0616-03
REVIEWED BY:	GTC	DRAWING NO.:	3 OF 10
APPROVED BY:	GTC		

FINAL AS-BUILT DRAWINGS

SCALE IS BASED ON 22" X 34" NON-REDUCED SHEET SIZE (BORDER = 21" X 32")

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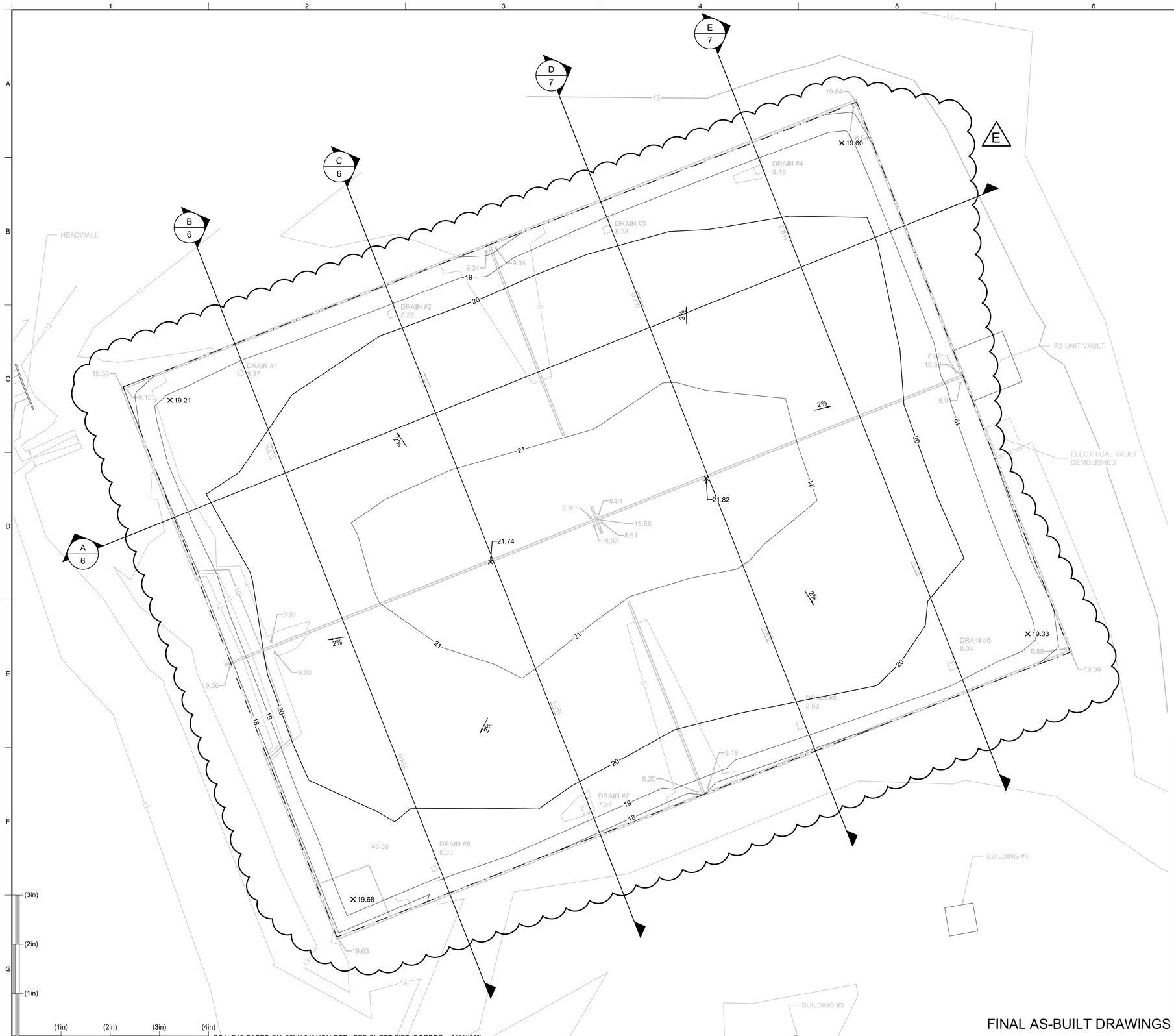

LEGEND

10	EXISTING GROUND / R-2 UNIT AS-BUILT MAJOR CONTOUR (5')
11	EXISTING GROUND / R-2 UNIT AS-BUILT MINOR CONTOUR (1')
× 8.71	R-2 UNIT AS-BUILT SPOT ELEVATION (FEET)
20	TOP OF WASTE AS-BUILT MAJOR CONTOURS (5') (NOTE4)
19	TOP OF WASTE AS-BUILT MINOR CONTOURS (1') (NOTE 4)
— · — · —	TOP OF WASTE AS-BUILT SURVEY LIMIT
× 19.60	TOP OF WASTE AS-BUILT SPOT ELEVATION

0 20' 40'
SCALE IN FEET

NOTES:

1. EXISTING TOPOGRAPHIC SURVEY DATA COLLECTED BY GEOSYNTEC IN NOVEMBER, 2011.
2. HORIZONTAL COORDINATE SYSTEM BASED UPON NAD83 (1993), UTM (ZONE 01).
3. VERTICAL DATUM BASED UPON EGM 96 AT NGS SURVEY MONUMENT "MIDWAY 11855".
4. AS-BUILT SURVEY DATA COLLECTED ON 10-07-17 BY PND ENGINEERS. SURVEY DATA COLLECTED WITH A TRIMBLE® RTK-GPS R8-4. BRASS CAP NEAR THE R1 WATER TANKS REFERENCED AS SURVEY CONTROL. HORIZONTAL DATUM: WGS84, UTM 1N. VERTICAL DATUM: MLLW. DEFENSE MAPPING AGENCY, SURVEY MARK 11855, YEAR 1989.
5. AS-BUILT VERTICAL DATA ADJUSTED 5.4 FEET UP TO RELATE TO DESIGN DRAWING DATUM (NOTE 3).

REV	DATE	DESCRIPTION	DRN	APP
E	12/12/17	FINAL AS-BUILTS	MMC	GTC
D	9/29/17	ADDED DETAIL	SLB	GTC
C	5/27/15	REVISED FINAL DESIGN	MMC	GTC
B	5/21/12	FINAL DESIGN	MMC	GTC
A	5/1/12	DRAFT FINAL DESIGN SUBMITTAL	MMC	GTC

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U.S. FISH & WILDLIFE SERVICE

TITLE:

TOP OF WASTE GRADING PLAN

PROJECT:

MIDWAY ATOLL REMEDIATION PROJECT, R-2 UNIT

SITE:

MIDWAY ATOLL NATIONAL WILDLIFE REFUGE

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CHECKED BY:	JLN	FILE:	PNG0616-04B-07B
REVIEWED BY:	GTC	DRAWING NO.:	4 OF 10
APPROVED BY:	GTC		

FINAL AS-BUILT DRAWINGS

(3in) (2in) (1in)
(1in) (2in) (3in) (4in)
SCALE IS BASED ON 22" X 34" NON-REDUCED SHEET SIZE (BORDER = 21" X 32")

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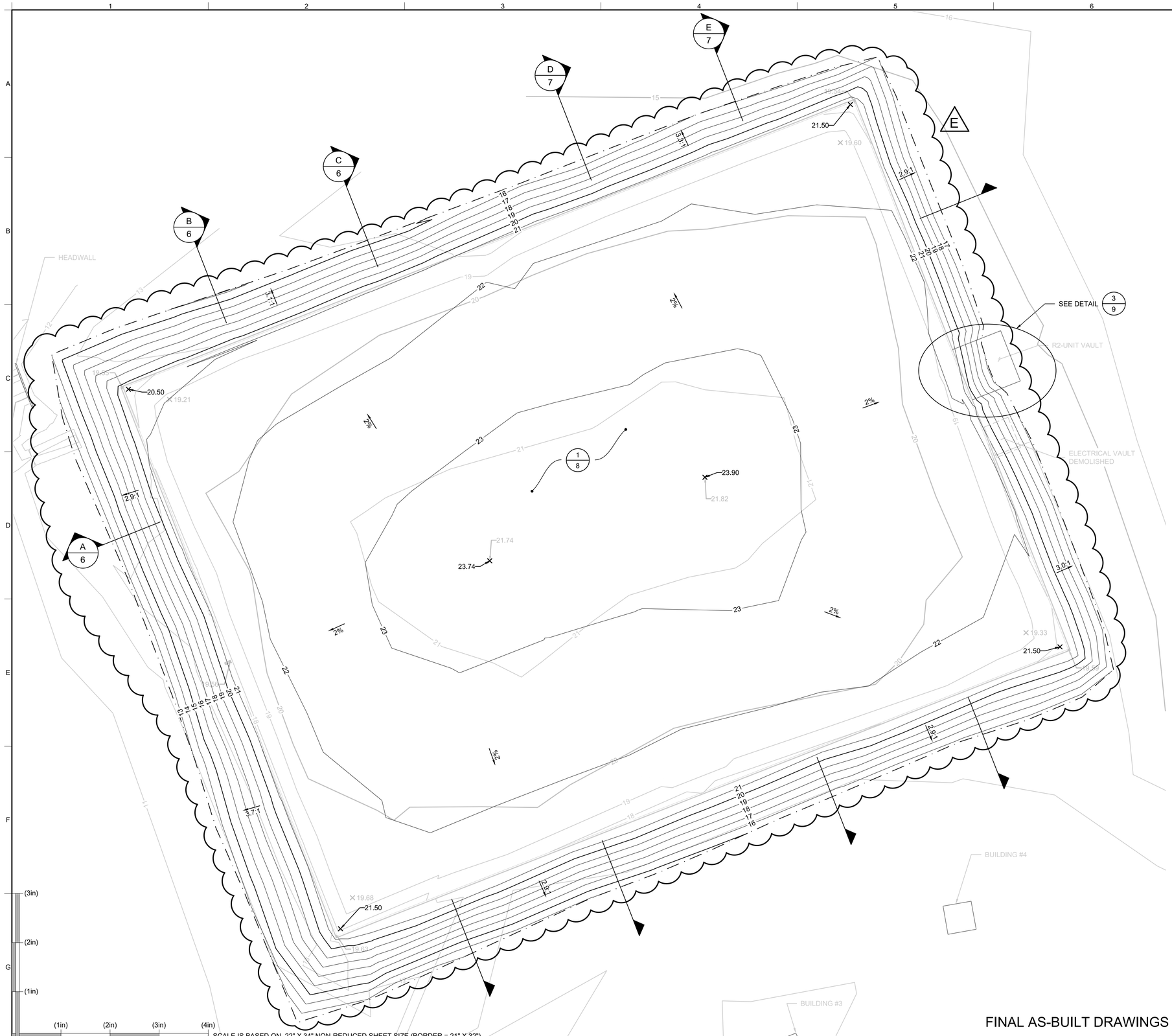

LEGEND

10	EXISTING GROUND / AS-BUILT WASTE SURFACE MAJOR CONTOUR (5')
11	EXISTING GROUND / AS-BUILT WASTE SURFACE MINOR CONTOUR (1')
× 8.71	R-2 UNIT AS-BUILT / AS-BUILT WASTE SURFACE SPOT ELEVATION (FEET)
20	FINAL COVER AS-BUILT MAJOR CONTOURS (5') (NOTE 4)
19	FINAL COVER AS-BUILT MINOR CONTOURS (1') (NOTE 4)
— · — · —	FINAL COVER AS-BUILT SURVEY LIMIT
× 23.83	FINAL COVER AS-BUILT SPOT ELEVATION

0 20' 40'
SCALE IN FEET

NOTES:

1. EXISTING TOPOGRAPHIC SURVEY DATA COLLECTED BY GEOSYNTEC IN NOVEMBER, 2011.
2. HORIZONTAL COORDINATE SYSTEM BASED UPON NAD83 (1993), UTM (ZONE 01).
3. VERTICAL DATUM BASED UPON EGM 96 AT NGS SURVEY MONUMENT "MIDWAY 11855".
4. AS-BUILT SURVEY DATA COLLECTED ON 10-24-17 BY PND ENGINEERS. SURVEY DATA COLLECTED WITH A TRIMBLE® RTK-GPS R8-4. BRASS CAP NEAR THE R1 WATER TANKS REFERENCED AS SURVEY CONTROL. HORIZONTAL DATUM: WGS84, UTM 1N. VERTICAL DATUM: MLLW. DEFENSE MAPPING AGENCY, SURVEY MARK 11855, YEAR 1989.
5. AS-BUILT VERTICAL DATA ADJUSTED 5.4 FEET UP TO RELATE TO DESIGN DRAWING DATUM (NOTE 3).

REV	DATE	DESCRIPTION	DRN	APP
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U.S. FISH & WILDLIFE SERVICE

TITLE: TOP OF FINAL COVER PLAN

PROJECT: MIDWAY ATOLL REMEDIATION PROJECT, R-2 UNIT

SITE: MIDWAY ATOLL NATIONAL WILDLIFE REFUGE

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APPROVED BY:	GTC		

FINAL AS-BUILT DRAWINGS

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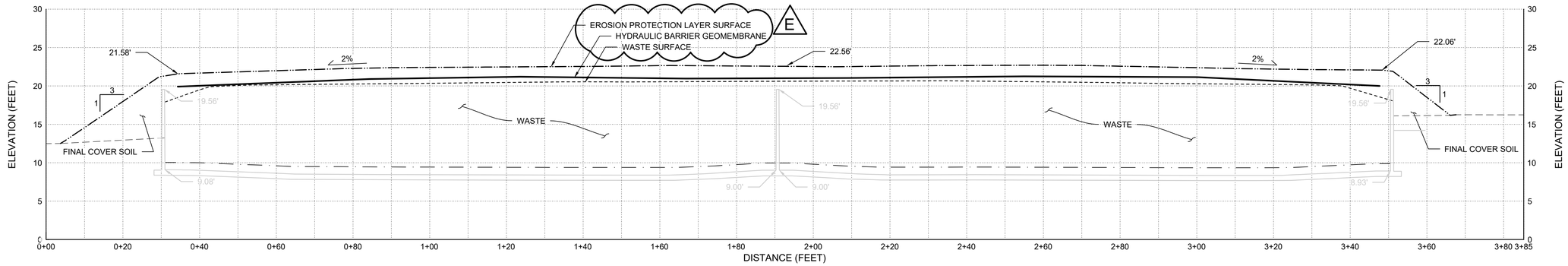
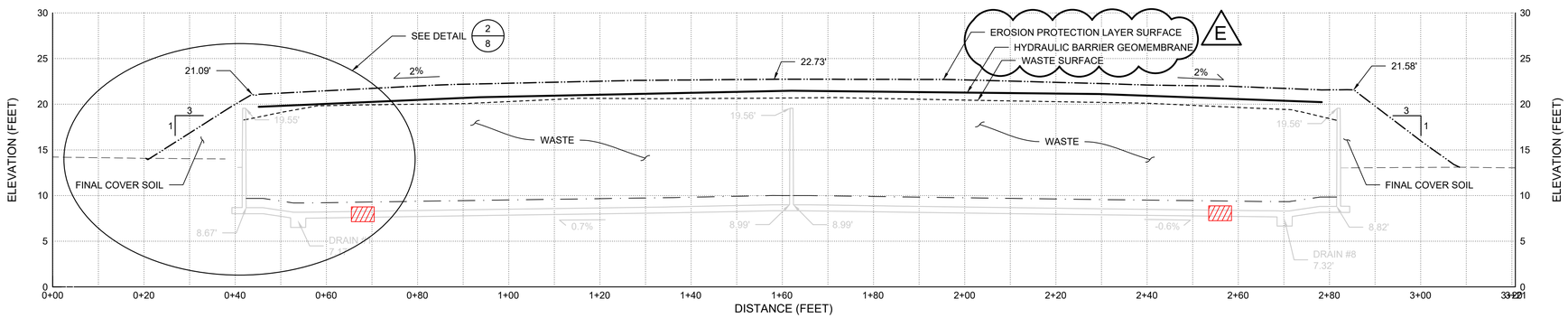


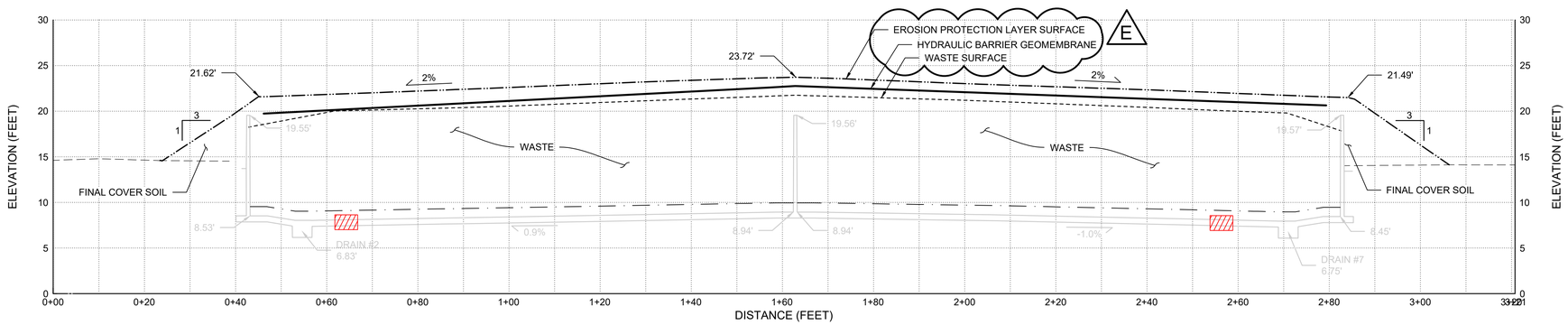
A / 4,5 SECTION PROFILE A

HORIZONTAL SCALE: 1" = 15'
VERTICAL SCALE: 1" = 7.5'



B / 4,5 SECTION PROFILE B

HORIZONTAL SCALE: 1" = 15'
VERTICAL SCALE: 1" = 7.5'



C / 4,5 SECTION PROFILE C

HORIZONTAL SCALE: 1" = 15'
VERTICAL SCALE: 1" = 7.5'

SECTION LEGEND

- EXISTING GROUND SURFACE
- R-2 UNIT AS-BUILT SURFACE
- 1 FOOT DRAINAGE LAYER
- WASTE SURFACE
- HYDRAULIC BARRIER GEOMEMBRANE
- FINAL COVER SOIL SURFACE
- WITNESS LAYER / FILTER GEOTEXTILE
- EROSION PROTECTION LAYER SURFACE
- CONCRETE REMOVAL (NOTE 2)

NOTES:

1. CONTRACTOR SHALL PLACE WASTE IN ACCORDANCE WITH PROJECT TECHNICAL SPECIFICATIONS, WHILE MAINTAINING WASTE OPERATIONAL ACCESS.
2. REMOVE CONCRETE (BREAK OUT) AT EACH LOCATION, ENTIRE THICKNESS. DISPOSE OF CONCRETE WITHIN R-2 UNIT.
3. PORTIONS OF R2-UNIT VAULT AND ELECTRICAL VAULT TO REMAIN. MISCELLANEOUS OTHER PIPING, CONCRETE PAD, AND ANCILLARY STRUCTURES TO BE DEMOLISHED PER DRAWING 3 AND PER TECHNICAL SPECIFICATIONS.

0 15' 30'
HORIZONTAL SCALE IN FEET
(2X VERTICAL SCALE)

REV	DATE	DESCRIPTION	DRN	APP
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U.S. FISH & WILDLIFE SERVICE

TITLE: PROFILES I

PROJECT: MIDWAY ATOLL REMEDIATION PROJECT, R-2 UNIT

SITE: MIDWAY ATOLL NATIONAL WILDLIFE REFUGE

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REGISTERED PROFESSIONAL ENGINEER GREGORY T. CORCORAN No. C 58876 Exp. CIVIL STATE OF CALIFORNIA

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CHECKED BY:	JLN	FILE:	PNG0616-04B-07B
REVIEWED BY:	GTC	DRAWING NO.:	6 OF 10
APPROVED BY:	GTC		

FINAL AS-BUILT DRAWINGS

(3in) (2in) (1in) (1in) (2in) (3in) (4in)
SCALE IS BASED ON 22" X 34" NON-REDUCED SHEET SIZE (BORDER = 21" X 32")

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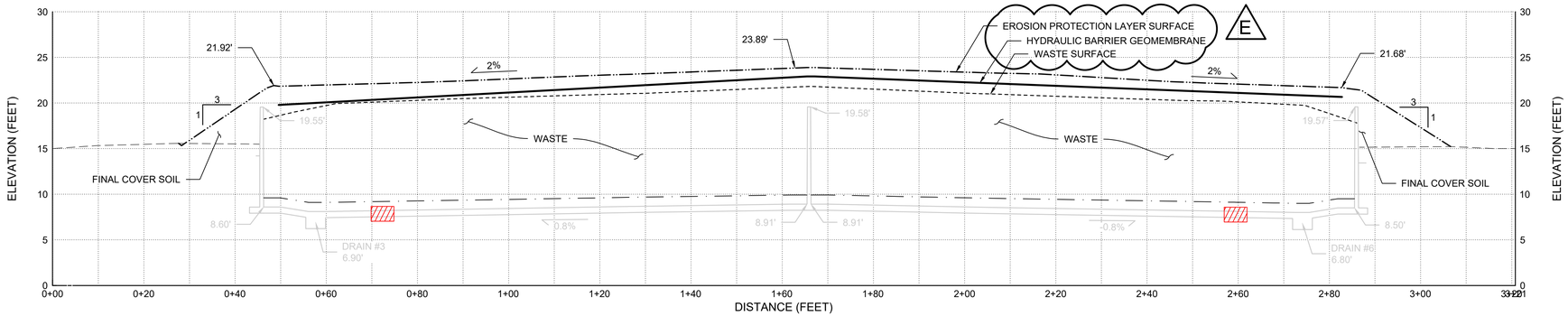
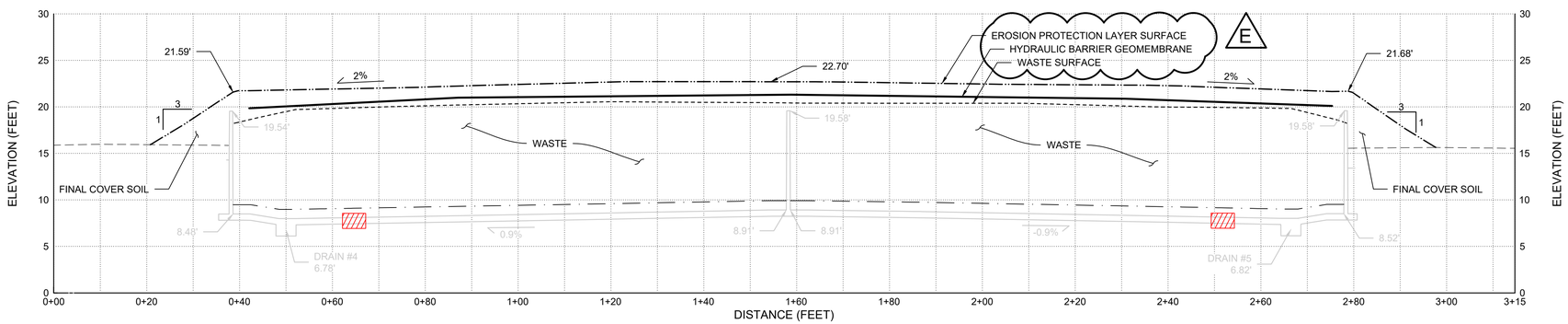


D
4,5

SECTION
PROFILE D

HORIZONTAL SCALE: 1" = 15'
VERTICAL SCALE: 1" = 7.5'



E
4,5

SECTION
PROFILE E

HORIZONTAL SCALE: 1" = 15'
VERTICAL SCALE: 1" = 7.5'

SECTION LEGEND

- EXISTING GROUND SURFACE
- R-2 UNIT AS-BUILT SURFACE
- 1 FOOT DRAINAGE LAYER
- WASTE SURFACE
- HYDRAULIC BARRIER GEOMEMBRANE
- FINAL COVER SOIL SURFACE
- WITNESS LAYER / FILTER GEOTEXTILE
- EROSION PROTECTION LAYER SURFACE
- CONCRETE REMOVAL (NOTE 2)

NOTES:

1. CONTRACTOR SHALL PLACE WASTE IN ACCORDANCE WITH PROJECT TECHNICAL SPECIFICATIONS, WHILE MAINTAINING WASTE OPERATIONAL ACCESS.
2. REMOVE CONCRETE (BREAK OUT) AT EACH LOCATION, ENTIRE THICKNESS. DISPOSE OF CONCRETE WITHIN R-2 UNIT.
3. PORTIONS OF R2-UNIT VAULT AND ELECTRICAL VAULT TO REMAIN. MISCELLANEOUS OTHER PIPING, CONCRETE PAD, AND ANCILLARY STRUCTURES TO BE DEMOLISHED PER DRAWING 3 AND PER TECHNICAL SPECIFICATIONS.

0 15' 30'
HORIZONTAL SCALE IN FEET
(2X VERTICAL SCALE)

REV	DATE	DESCRIPTION	DRN	APP
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U.S. FISH & WILDLIFE SERVICE

TITLE: PROFILES II

PROJECT: MIDWAY ATOLL REMEDIATION PROJECT, R-2 UNIT

SITE: MIDWAY ATOLL NATIONAL WILDLIFE REFUGE

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FINAL AS-BUILT DRAWINGS

(3in) (2in) (1in) (1in) (2in) (3in) (4in)
SCALE IS BASED ON 22" X 34" NON-REDUCED SHEET SIZE (BORDER = 21" X 32")

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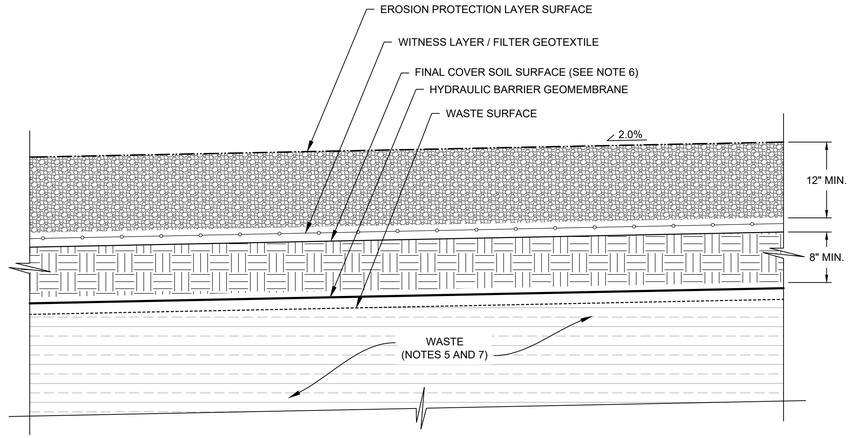
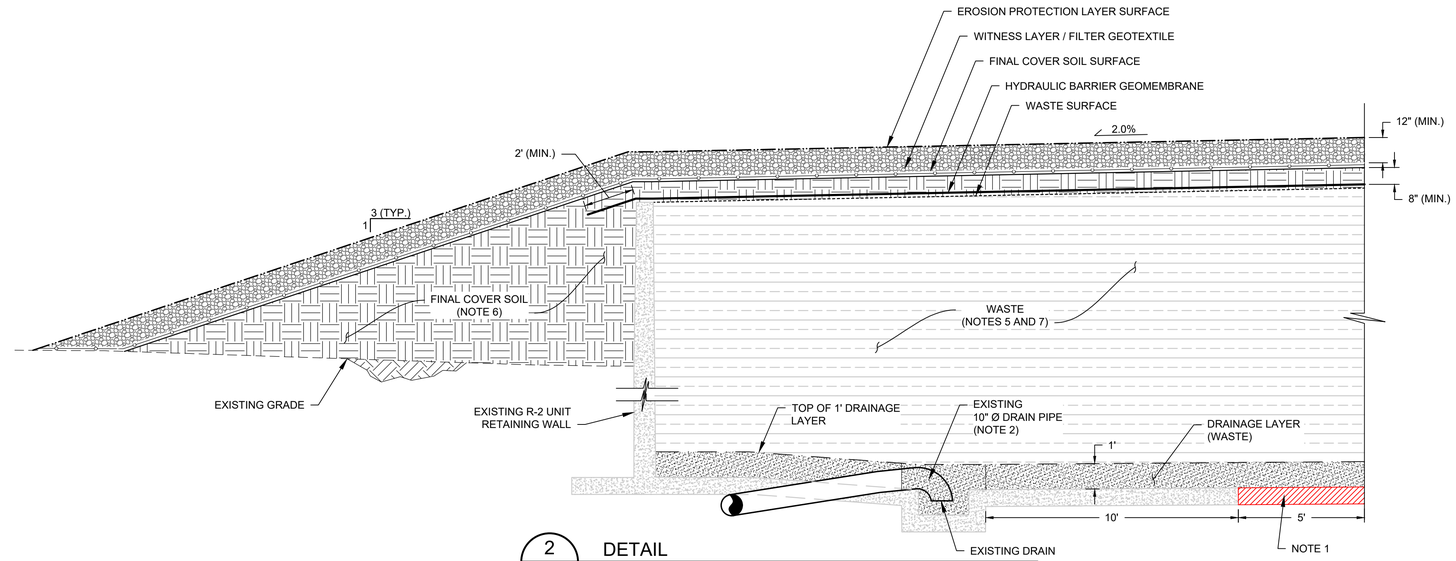
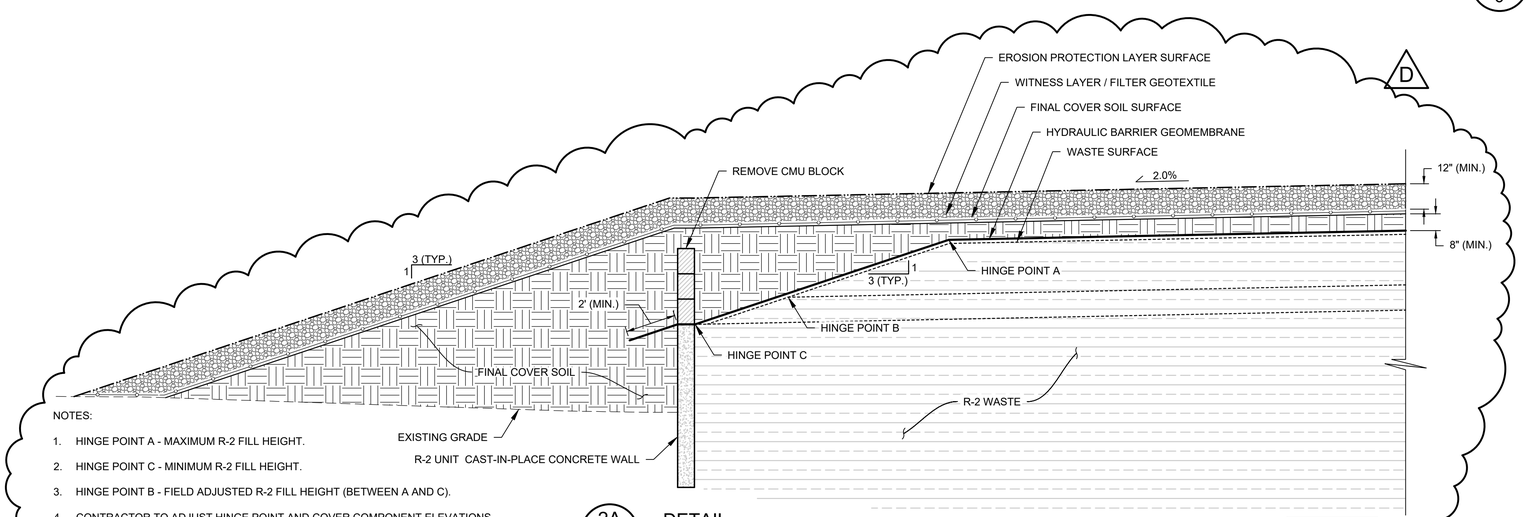


1/5 DETAIL
TYPICAL COVER SYSTEM
SCALE: 1" = 1'



2/6 DETAIL
TYPICAL COVER SYSTEM TERMINATION DETAIL
SCALE: 1" = 3'



NOTES:

1. HINGE POINT A - MAXIMUM R-2 FILL HEIGHT.
2. HINGE POINT C - MINIMUM R-2 FILL HEIGHT.
3. HINGE POINT B - FIELD ADJUSTED R-2 FILL HEIGHT (BETWEEN A AND C).
4. CONTRACTOR TO ADJUST HINGE POINT AND COVER COMPONENT ELEVATIONS BASED ON FINAL WASTE FILL HEIGHT.
5. ROOF RISERS AT TOP OF CAST-IN-PLACE CONCRETE WALL MAY BE LEFT IN PLACE PROVIDED WASTE/SAND SURFACE (GEOMEMBRANE SUBGRADE) IS GRADED TO DRAIN OFF OF TOP OF R-2

2A/6 DETAIL
TYPICAL COVER SYSTEM TERMINATION DETAIL
SCALE: 1" = 3'

8/8 DETAIL
CONCRETE BEAM
SCALE: NTS

NOTES:

1. REMOVE CONCRETE (BREAK OUT) AT EACH LOCATION, ENTIRE THICKNESS. DISPOSE OF CONCRETE WITHIN R-2 UNIT.
2. SEAL EXISTING PIPE TO MAKE WATER TIGHT.
3. DRAINAGE LAYER MATERIAL SHALL BE TREATED SAND (WASTE) THAT DOES NOT CONTAIN PARTICLES LARGER THAN 6 INCHES, ORGANIC MATERIALS, OR DEBRIS.
4. TOP OF WASTE SHALL BE PLACED TO DESIGN ELEVATIONS, THEN BROUGHT UP IN UNIFORM 1 FOOT THICK LIFTS UNTIL ALL WASTE HAS BEEN PLACED. TOP OF EROSION PROTECTION LAYER SHALL BE 2 FEET ABOVE TOP OF WASTE.
5. TOP OF WASTE SHALL BE COVERED IN ACCORDANCE WITH PROJECT TECHNICAL SPECIFICATIONS.
6. SEE TECHNICAL SPECIFICATION FOR WASTE PLACEMENT AND COMPACTION REGARDING MAXIMUM PARTICLE SIZE.
7. ESTIMATED NET VOLUME OF WASTE CAPACITY = 33,188 CUBIC YARDS.
8. GEOSYNTHETICS DRAWN AT AN EXAGGERATED SCALE FOR CLARITY.

FINAL AS-BUILT DRAWINGS

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PHONE: 858.674.6559

U.S. FISH & WILDLIFE SERVICE

TITLE: DETAILS I

PROJECT: MIDWAY ATOLL REMEDIATION PROJECT, R-2 UNIT

SITE: MIDWAY ATOLL NATIONAL WILDLIFE REFUGE

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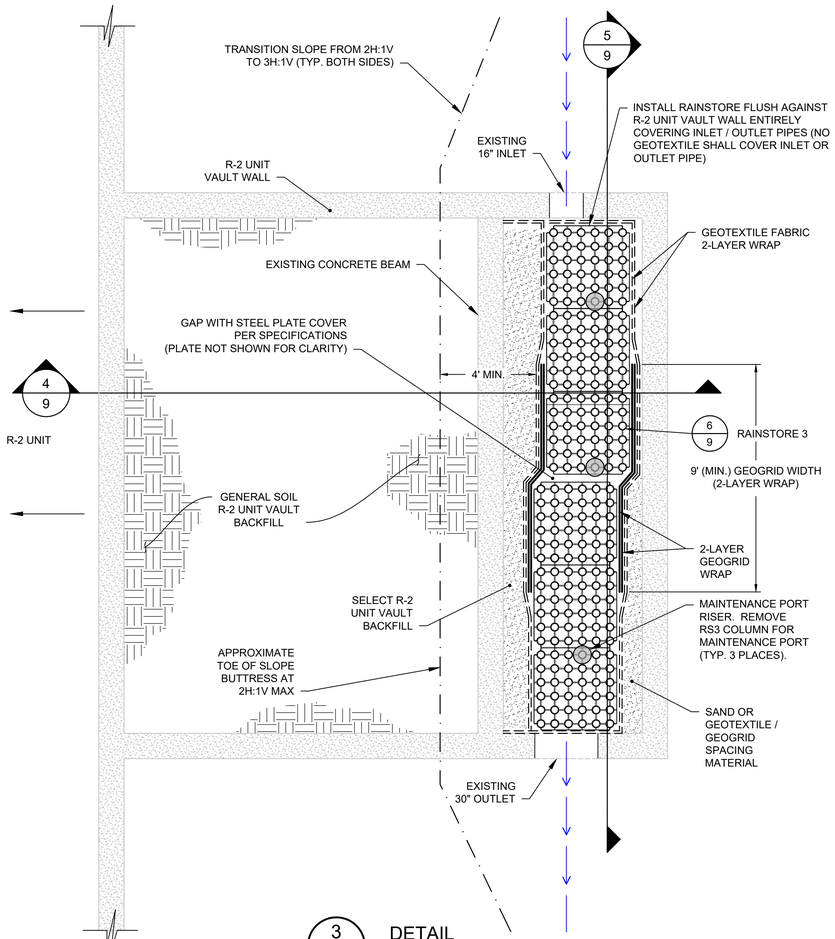
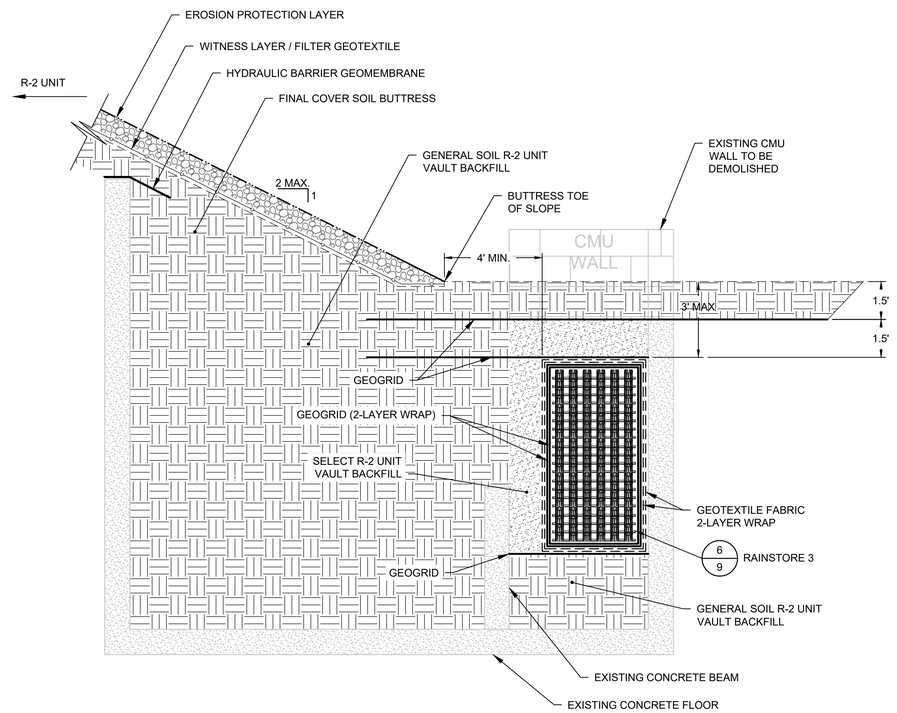
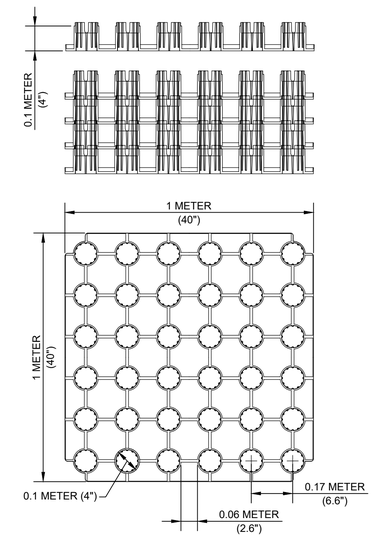


3 / 5 DETAIL
R-2 UNIT (PLAN VIEW)
SCALE: 1" = 3'



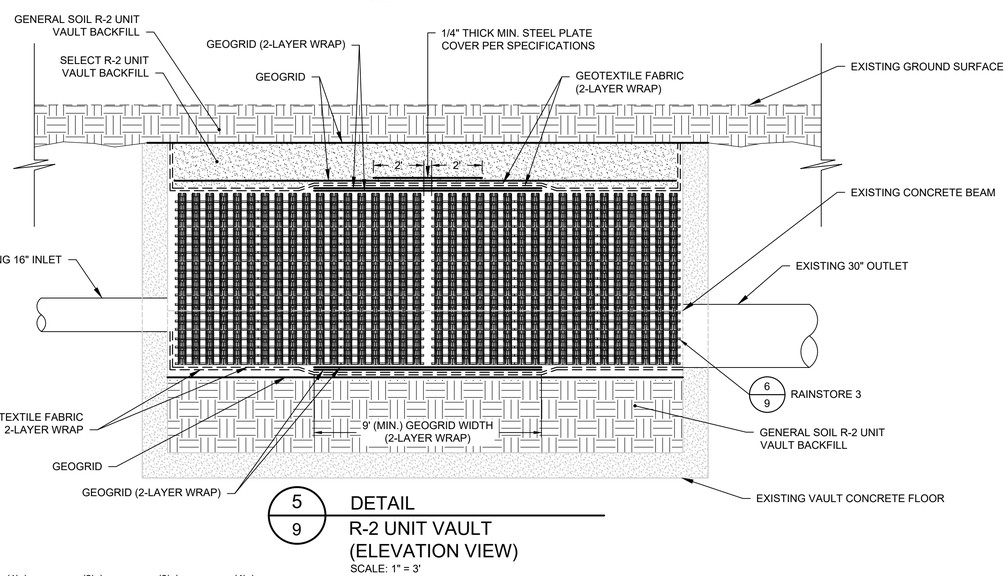
4 / 9 DETAIL
R-2 UNIT VAULT (SECTION VIEW)
SCALE: 1" = 3'



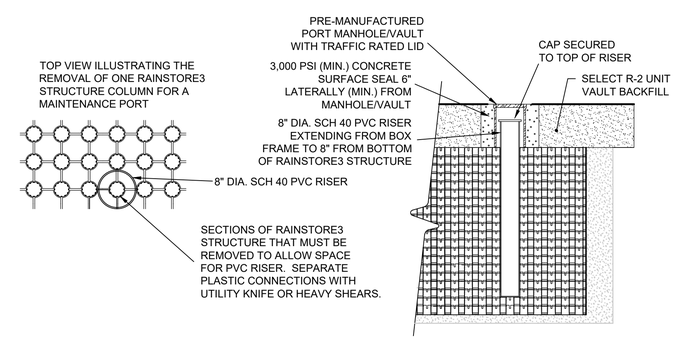
NOTES:
1. INSTALLATION TO BE COMPLETED IN ACCORDANCE WITH MANUFACTURER'S SPECIFICATIONS.
2. DO NOT SCALE DRAWING.
3. CONTRACTOR'S NOTE: FOR PRODUCT AND COMPANY INFORMATION VISIT www.in□siblestru□tures.□o□ and t□en www.CADdetails.□o□/in□o AND ENTER REFERENCE NUMBER 112-024.

6 / 5 DETAIL
RAINSTORE 3
SCALE: N.T.S.

NOTES:
1. VAULT DIMENSIONS ARE APPROXIMATE AND TO BE CONFIRMED DURING CONSTRUCTION.
2. GEOGRID AND GEOTEXTILE MATERIALS PER SPECIFICATIONS.
3. GEOSYNTHETICS DRAWN AT AN EXAGGERATED SCALE FOR CLARITY.



5 / 9 DETAIL
R-2 UNIT VAULT (ELEVATION VIEW)
SCALE: 1" = 3'



7 / 9 DETAIL
RAINSTORE 3 MAINTENANCE PORT
SCALE: 1" = 3'

FINAL AS-BUILT DRAWINGS

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PHONE: 858.674.6559

U.S. FISH & WILDLIFE SERVICE

TITLE: DETAILS II

PROJECT: MIDWAY ATOLL REMEDIATION PROJECT, R-2 UNIT

SITE: MIDWAY ATOLL NATIONAL WILDLIFE REFUGE

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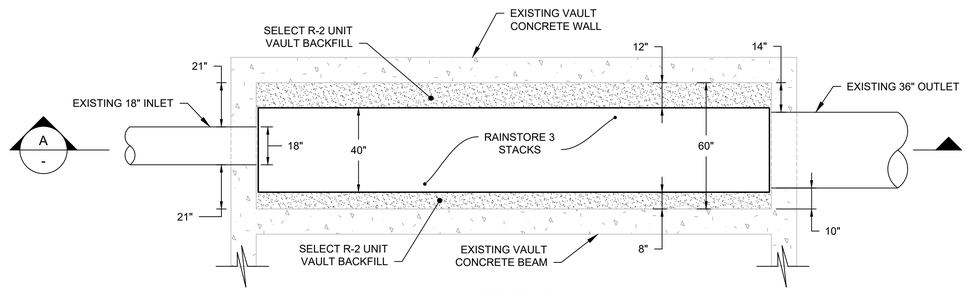
APPROVED BY:	GTC		

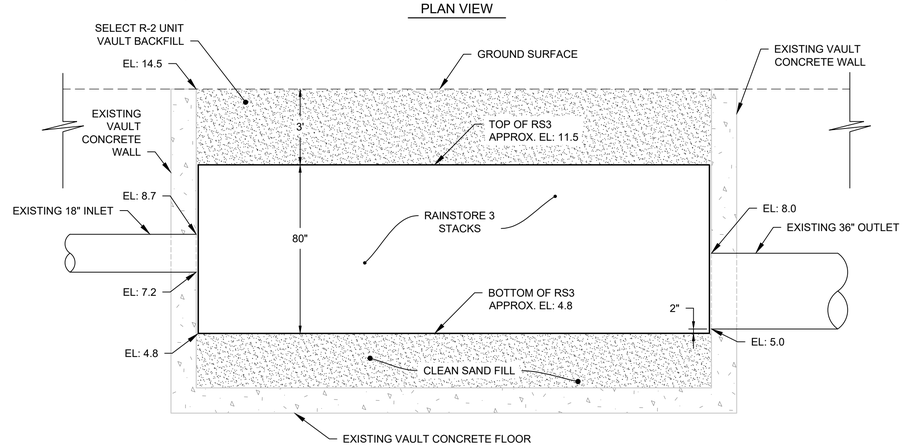
SCALE IS BASED ON 22" X 34" NON-REDUCED SHEET SIZE (BORDER = 21" X 32")

P:\PRJ\SDCadd\CADD\PNG0616 - MIDWAY R2 UNIT\Plansets_Current Set\PNG0616-08.dwg Last Edited by: MCarlson on 12/19/2017 10:19 AM

E



PLAN VIEW



SECTION A

8
10

DETAIL

R-2 UNIT VAULT BACKFILL

SCALE: 1" = 3'

NOTE:

1. VAULT DIMENSIONS ARE APPROXIMATE AND TO BE CONFIRMED DURING CONSTRUCTION.

REV	DATE	DESCRIPTION	DRN	APP
E	12/12/17	FINAL AS-BUILTS	MMC	GTC
D	9/29/17	ADDED DETAIL	SLB	GTC
C	5/27/15	REVISED FINAL DESIGN	MMC	GTC
B	5/21/12	FINAL DESIGN	MMC	GTC
A	5/1/12	DRAFT FINAL DESIGN SUBMITTAL	MMC	GTC

Geosyntec consultants

16644 WEST BERNARDO DRIVE, SUITE 300
SAN DIEGO, CA 92127
PHONE: 858.674.6559

U.S. FISH & WILDLIFE SERVICE

TITLE: DETAILS III

PROJECT: MIDWAY ATOLL REMEDIATION PROJECT, R-2 UNIT

SITE: MIDWAY ATOLL NATIONAL WILDLIFE REFUGE

THIS DRAWING MAY NOT BE ISSUED FOR PROJECT TENDER OR CONSTRUCTION, UNLESS SEALED.

SIGNATURE

DATE

REGISTERED PROFESSIONAL ENGINEER GREGORY T. CORCORAN No. C 58876 Exp. CIVIL STATE OF CALIFORNIA

DESIGN BY:	GTC	DATE:	MAY 2015
DRAWN BY:	MMC	PROJECT NO.:	PNG0759
CHECKED BY:	JLN	FILE:	PNG0616-08
REVIEWED BY:	GTC	DRAWING NO.:	10 OF 10
APPROVED BY:	GTC		

FINAL AS-BUILT DRAWINGS

(3in) (2in) (1in) (1in) (2in) (3in) (4in)

SCALE IS BASED ON 22" X 34" NON-REDUCED SHEET SIZE (BORDER = 21" X 32")

P:\PRJ\SDCadd\CADD\PNG0616 - MIDWAY R2 UNIT\Planset_Current Set\PNG0616-08.dwg Last Edited by: MCarlson on 12/19/2017 10:19 AM

APPENDIX L

WASTE DISPOSAL DOCUMENTATION

INIKI ENTERPRISES, LIMITED
dba INIKI DEMOLITION & ABATEMENT SERVICE

PROJECT WASTE LOG

Project Name: Midway Atoll — Iniki Job No. 17001.00

Contract / Job No.

General Contractor: Northwest Demolition

Start Date:

End Date:

Superintendent / Foreman: **Gary Lewis**

Date	Type i.e. Asbestos, Mixed Waste, Concrete, Metal	Hauler i.e. RRI, Stone's Tajiri, Iniki, Manao	Destination i.e. PVT, WOA, HEPS etc.	Clearance #	Recycling Revenue	Dump Fees	Weight in Tons
8/30/2017	Mixed Waste	Iniki	PVT Tkt # 963800	110089		$ 413.46	7.45
8/31/2017	Asbestos	Iniki	PVT Tkt # 963826	110998		$ 458.59	3.61
8/31/2017	Asbestos	Iniki	PVT Tkt # 963848	110998		$ 605.06	9.11
8/31/2017	Asbestos	Iniki	PVT Tkt # 963926	110998		$ 591.89	4.95
8/31/2017	Asbestos	Iniki	PVT Tkt # 963953	110998		$ 712.25	6.16
9/6/2017	Mixed Waste	Iniki	PVT Tkt # 964531	110089		$ 277.49	4.67
9/7/2017	Asbestos	Iniki	PVT Tkt # 964600	111085		$ 1,571.73	14.80
9/7/2017	Asbestos	Iniki	PVT Tkt # 964621	111085		$ 753.04	6.57
					$ -	$ 5,383.51	57.32

P O BOX 4776, KANEOHE, HI 96744, PHONE: 808-478-7683 FAX: 808-676-9618 CONTRACTORS LICENSE # BC-28779

#1693-MW
MIDWAY

PVT LAND COMPANY LTD.
87-2020 FARRINGTON HWY.
WAIANAE, HI 96792

Ticket #: 963800

Bill To: INIKI ENTERPRISES LIMITED
Haul Acct/Veh #: INIKIE /INIKI-5
PO #/Job #:
Date:08/30/17 Time I/O:02:10 PM/02:44 PM
Clearance #: Midway Atoll C/O Makepono St 1082 H
ono

Mixed Waste/Demo
Gross: 49200 Tare: 34300 Net: 14900 lbs
7.45 Tons @ 53.00/TN $ 394.85

Tax 18.61

==========

TOTAL 413.46

COD Customer: 1 - 1 Not Specified
Notes:

STATE OF HAWAII CERTIFICATE OF MEASURES
DIVISION OF MEASUREMENT STANDARDS

This certifies to the accuracy and
identity of the quantity & commodity
shown, is suitable for all deliveries
when sealed by a measuremaster.

STATE OF HAWAII MEASUREMASTER
NO.Ashley MeyerRegistered Intls AAM

Pmnt Type: 1 - Charge (Invoice)

<<< COVER YOUR LOAD >>>

1693
-A-

PVT/NANAKULI LANDFILL
ASBESTOS DISPOSAL MANIFEST

CL # 110998

GENERATOR

1. Work site and mailing address	Owner's Name	Owner's Phone No.
U.S. Fish & Wildlife Service (Midway Wildlife Ref.) 300 Ala Moana Blvd. Room 5-307, Hon HI 96850	U.S. Fish & Wildlife Service	(808)732-7736

2. Operator's name and address:	Operator's Phone No.
Iniki Enterprises LTD 1040 Sand Island Parkway, Honolulu HI 96819	(808) 478-7683 Fax No.

3. Waste disposal site (WDS) name & physical site location		
PVT / Nanakuli Landfill 85-2020 Farrington Hwy Waianae, HI 96792	Mailing Address: 85-2020 Farrington Hwy Waianae, HI 96792	WDS Phone No. (808) 668-4561 WDS Fax No. (808) 668-1368

4. Name and address of responsible agency:

HI Dept. of Health: Noise, Radiation, & Indoor Air Quality Branch, Indoor Air Quality Section
591 Ala Moana Blvd. 1st Floor
Honolulu, HI 96813 Phone No. (808) 586-5800

5. Description of materials:	6. Containers		7. Total Quantity
	No.	Type	
Asbestos-containing transite pipe, transite panels, roofing, and floor tile	70/25	Burrito Wraps/Dbl Bags	30 cy

8. Special Handling Instructions and additional information:

BURY UPON ACCEPTANCE - Hazard Class 9, the ERG 171, ID Number NA 2212 and the packing Group #III

9. OPERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and governmental regulations.

Printed/Typed name & title	Signature	Month/Date/Year
Gary Lewis, Operations Manager	Gary Lewis	8/31/17

TRANSPORTER/HAULER

10. Transporter 1 Signature (Acknowledgement of receipt of materials) — Month/Date/Year: 8-31-17

Printed/Typed name & title	Transporter's Address	Transporter's Phone No.
Iniki Enterprises LTD	1040 Sand Island Pkwy. Hon., HI 96819	(808) 677-7800

11. Transporter 2 Signature (Acknowledgement of receipt of materials) — Month/Date/Year

Printed/Typed name & Title	Transporter's Address	Transporter's Phone No.

DISPOSAL SITE

12. Indicate any discrepancies here: (Circle Below)

Placard ID Cards Suits Respirators Manifest Double Bags ID Labels 4' Lengths Signatures

13. Waste disposal site:
PVT/Nanakuli Landfill
84-2020 Farrington Hwy
Waianae, Oahu, HI

Landfill Monitor Signature: WEIGHMASTER ASHLEY MEYERS — Month/Date/Year: 8/31/17

Scale Attendant Signature: WEIGHMASTER ASHLEY MEYERS — Month/Date/Year: 8/31/17

14. Landfill Ticket No. _____
Time of Delivery _____
Special Handling Charge: _____

#1693-A
MIDWAY ATOLL

PVT LAND COMPANY LTD.
87-2020 FARRINGTON HWY.
WAIANAE, HI 96792

Ticket #: 963826

Bill To: INIKI ENTERPRISES LIMITED
Haul Acct/Veh #: INIKIE /INIKI-5
PO #/Job #:
Date:08/31/17 Time I/O:07:35 AM/07:47 AM
Clearance #: Midway Wild Life Refuge, Midway

Asbestos
Gross: 41960 Tare: 34740 Net: 7220 lbs
3.61 Tons @ 95.00/TN $ 342.95
Fees:HA-Handli 1 EA = 95.00

Tax 20.64

TOTAL 458.59
COD Customer: 1 - 1 Not Specified
Notes:

STATE OF HAWAII CERTIFICATE OF MEASURES
DIVISION OF MEASUREMENT STANDARDS

This certifies to the accuracy and identity of the quantity & commodity shown, is suitable for all deliveries when sealed by a measuremaster.

STATE OF HAWAII MEASUREMASTER
NO.3348 Registered Intls MD

Pmnt Type: 1 - Charge (Invoice)

<<< COVER YOUR LOAD >>>

#1879

PVT/NANAKULI LANDFILL
ASBESTOS DISPOSAL MANIFEST

CL # 110998
3 of 8

GENERATOR

1. Work site and mailing address
U.S. Fish & Wildlife Service (Midway Wildlife Ref.)
300 Ala Moana Blvd. Room 5-307, Hon HI 96850

Owner's Name
U.S. Fish & Wildlife Service

Owner's Phone No.
(808)732-7736

2. Operator's name and address:
Iniki Enterprises LTD
1040 Sand Island Parkway, Honolulu HI 96819

Operator's Phone No.
(808) 478-7683
Fax No.

3. Waste disposal site (WDS) name & physical site location

PVT / Nanakuli Landfill
85-2020 Farrington Hwy
Waianae, HI 96792

Mailing Address:
85-2020 Farrington Hwy
Waianae, HI 96792

WDS Phone No.
(808) 668-4561
WDS Fax No.
(808) 668-1368

4. Name and address of responsible agency:

HI Dept. of Health: Noise, Radiation, & Indoor Air Quality Branch, Indoor Air Quality Section
591 Ala Moana Blvd. 1st Floor
Honolulu, HI 96813

Phone No. (808) 586-5800

5. Description of materials:	6. Containers		7. Total Quantity
	No.	Type	
Asbestos-containing transite pipe, transite panels, roofing, and floor tile	~~1~~ 70/25	Burrito Wraps/Dbl Bags	70/25 ~~30 cy~~

8. Special Handling Instructions and additional information:

BURY UPON ACCEPTANCE - Hazard Class 9, the ERG 171, ID Number NA 2212 and the packing Group #III

9. OPERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and governmental regulations.

Printed/Typed name & title
Gary Lewis, Operations Manager

Signature

Month/Date/Year
8/31/17

TRANSPORTER/HAULER

10. Transporter 1 Signature (Acknowledgement of receipt of materials)

Month/Date/Year
8-31-17

Printed/Typed name & title
Iniki Enterprises LTD

Transporter's Address
1040 Sand Island Pkwy. Hon., HI 96819

Transporter's Phone No.
(808) 677-7800

11. Transporter 2 Signature (Acknowledgement of receipt of materials)

Month/Date/Year

Printed/Typed name & Title

Transporter's Address

Transporter's Phone No.

DISPOSAL SITE

12. Indicate any discrepancies here: (Circle Below)

Placard ID Cards Suits Respirators Manifest Double Bags ID Labels 4' Lengths Signatures

13. Waste disposal site:
PVT/Nanakuli Landfill
84-2020 Farrington Hwy
Waianae, Oahu, HI

Landfill Monitor Signature
WEIGHMASTER ASHLEY MEYERS
Month/Date/Year 8/31/17

Scale Attendant Signature
WEIGHMASTER ASHLEY MEYERS
Month/Date/Year 8/31/17

14. Landfill Ticket No. _____
Time of Delivery _____

Special Handling Charge: _____

1823-A
Midway

PVT LAND COMPANY LTD.
87-2020 FARRINGTON HWY.
WAIANAE, HI 96792

Ticket #: 963848

Bill To: MANA'O CONSTRUCTION LLC
Haul Acct/Veh #: INIKIE /INIKI-5
PO #/Job #:
Date:08/31/17 Time I/O:08:27 AM/08:39 AM
Clearance #: Midway Wild Life Refuge, Midway

Mixed Waste/Demo
Gross: 54320 Tare: 36100 Net: 18220 lbs

9.11 Tons @	53.00/TN $	482.83
Fees:HA-Handli	1 EA =	95.00
Tax		27.23
	TOTAL	605.06

COD Customer: 1 - 1 Not Specified
Notes:

STATE OF HAWAII CERTIFICATE OF MEASURES
DIVISION OF MEASUREMENT STANDARDS

This certifies to the accuracy and identity of the quantity & commodity shown, is suitable for all deliveries when sealed by a measuremaster.

STATE OF HAWAII MEASUREMASTER
NO.3348 Registered Intls MD

Pmnt Type: 1 - Charge (Invoice)

<<< COVER YOUR LOAD >>>

#1710

PVT/NANAKULI LANDFILL
ASBESTOS DISPOSAL MANIFEST

CL # 110998 ~~2 of 8~~ 3 of 8

GENERATOR

1. Work site and mailing address
U.S. Fish & Wildlife Service (Midway Wildlife Ref.)
300 Ala Moana Blvd. Room 5-307, Hon HI 96850

Owner's Name
U.S. Fish & Wildlife Service

Owner's Phone No.
(808)732-7736

2. Operator's name and address:
Iniki Enterprises LTD
1040 Sand Island Parkway, Honolulu HI 96819

Operator's Phone No.
(808) 478-7683
Fax No.

3. Waste disposal site (WDS) name & physical site location
PVT / Nanakuli Landfill
85-2020 Farrington Hwy
Waianae, HI 96792

Mailing Address:
85-2020 Farrington Hwy
Waianae, HI 96792

WDS Phone No.
(808) 668-4561
WDS Fax No.
(808) 668-1368

4. Name and address of responsible agency:
HI Dept. of Health: Noise, Radiation, & Indoor Air Quality Branch, Indoor Air Quality Section
591 Ala Moana Blvd. 1st Floor
Honolulu, HI 96813
Phone No. (808) 586-5800

5. Description of materials:	6. Containers		7. Total Quantity
	No.	Type	
Asbestos-containing transite pipe, transite panels, roofing, and floor tile	40/60	Burrito Wraps/Dbl Bags	13 cy

8. Special Handling Instructions and additional information:
BURY UPON ACCEPTANCE - Hazard Class 9, the ERG 171, ID Number NA 2212 and the packing Group #III

9. OPERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and governmental regulations.

Printed/Typed name & title
Gary Lewis, Operations Manager

Signature

Month/Date/Year
8/31/17

TRANSPORTER/HAULER

10. Transporter 1 Signature (Acknowledgement of receipt of materials)

Month/Date/Year
8-31-17

Printed/Typed name & title
Iniki Enterprises LTD

Transporter's Address
1040 Sand Island Pkwy. Hon., HI 96819

Transporter's Phone No.
(808) 677-7800

11. Transporter 2 Signature (Acknowledgement of receipt of materials)

Month/Date/Year

Printed/Typed name & Title

Transporter's Address

Transporter's Phone No.

DISPOSAL SITE

12. Indicate any discrepancies here: (Circle Below)

Placard ID Cards Suits Respirators Manifest Double Bags ID Labels 4' Lengths Signatures

13. Waste disposal site:
PVT/Nanakuli Landfill
84-2020 Farrington Hwy
Waianae, Oahu, HI

Landfill Monitor Signature

Month/Date/Year
8 31 17

Scale Attendant Signature

Month/Date/Year
8 31 17

14. Landfill Ticket No. _____
Time of Delivery _____

Special Handling Charge: _____

#1710-A
MIDWAY

PVT LAND COMPANY LTD.
87-2020 FARRINGTON HWY.
WAIANAE, HI 96792

Ticket #: 963926

Bill To: INIKI ENTERPRISES LIMITED
Haul Acct/Veh #: INIKIE /INIKI-5
PO #/Job #:
Date:08/31/17 Time I/O:12:13 PM/12:26 PM
Clearance #: Midway Wild Life Refuge, Midway

Asbestos
Gross: 43620 Tare: 33720 Net: 9900 lbs
4.95 Tons @ 95.00/TN $ 470.25
Fees:HA-Handli 1 EA = 95.00

Tax 26.64

TOTAL 591.89
COD Customer: 1 - 1 Not Specified
Notes:

STATE OF HAWAII CERTIFICATE OF MEASURES
DIVISION OF MEASUREMENT STANDARDS

This certifies to the accuracy and identity of the quantity & commodity shown, is suitable for all deliveries when sealed by a measuremaster.

STATE OF HAWAII MEASUREMASTER
NO.Ashley MeyerRegistered Intls AAM

Pmnt Type: 1 - Charge (Invoice)

<<< COVER YOUR LOAD >>>

+1823
A

PVT/NANAKULI LANDFILL
ASBESTOS DISPOSAL MANIFEST

CL # 110998
4 of 8

GENERATOR

1. Work site and mailing address
U.S. Fish & Wildlife Service (Midway Wildlife Ref.)
300 Ala Moana Blvd. Room 5-307, Hon HI 96850

Owner's Name
U.S. Fish & Wildlife Service

Owner's Phone No.
(808)732-7736

2. Operator's name and address:
Iniki Enterprises LTD
1040 Sand Island Parkway, Honolulu HI 96819

Operator's Phone No.
(808) 478-7683
Fax No.

3. Waste disposal site (WDS) name & physical site location

PVT / Nanakuli Landfill
85-2020 Farrington Hwy
Waianae, HI 96792

Mailing Address:
85-2020 Farrington Hwy
Waianae, HI 96792

WDS Phone No.
(808) 668-4561
WDS Fax No.
(808) 668-1368

4. Name and address of responsible agency:

HI Dept. of Health: Noise, Radiation, & Indoor Air Quality Branch, Indoor Air Quality Section
591 Ala Moana Blvd. 1st Floor
Honolulu, HI 96813

Phone No. (808) 586-5800

5. Description of materials:	6. Containers		7. Total Quantity
	No.	Type	
Asbestos-containing transite pipe, transite panels, roofing, and floor tile	101 / 12 Burritos BAG	Burrito Wraps/Dbl Bags	30 cy

8. Special Handling Instructions and additional information:

BURY UPON ACCEPTANCE - Hazard Class 9, the ERG 171, ID Number NA 2212 and the packing Group #III

9. OPERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and governmental regulations.

Printed/Typed name & title
Gary Lewis, Operations Manager

Signature

Month/Date/Year
8/31/17

TRANSPORTER/HAULER

10. Transporter 1 Signature (Acknowledgement of receipt of materials)

Month/Date/Year
8-31-17

Printed/Typed name & title
Iniki Enterprises LTD

Transporter's Address
1040 Sand Island Pkwy. Hon., HI 96819

Transporter's Phone No.
(808) 677-7800

11. Transporter 2 Signature (Acknowledgement of receipt of materials)

Month/Date/Year

Printed/Typed name & Title

Transporter's Address

Transporter's Phone No.

DISPOSAL SITE

12. Indicate any discrepancies here: (Circle Below)

Placard ID Cards Suits Respirators Manifest Double Bags ID Labels 4' Lengths Signatures

13. Waste disposal site:
PVT/Nanakuli Landfill
84-2020 Farrington Hwy
Waianae, Oahu, HI

Landfill Monitor Signature

Month/Date/Year
8/31/17

Scale Attendant Signature

Month/Date/Year
8/31/17

14. Landfill Ticket No. _____
Time of Delivery _____

Special Handling Charge: _____

#1823-A 8
MIDWAY ATOLL

PVT LAND COMPANY LTD.
87-2020 FARRINGTON HWY.
WAIANAE, HI 96792

Ticket #: 963953

Bill To: INIKI ENTERPRISES LIMITED
Haul Acct/Veh #: INIKIE /INIKI-5
PO #/Job #:
Date:08/31/17 Time I/O:01:04 PM/01:19 PM
Clearance #: Midway Wild Life Refuge, Midway

Asbestos
Gross: 48000 Tare: 35680 Net: 12320 lbs

6.16 Tons @	95.00/TN $	585.20
Fees:HA-Handli	1 EA =	95.00
Tax		32.05
	TOTAL	712.25

COD Customer: 1 - 1 Not Specified
Notes:

STATE OF HAWAII CERTIFICATE OF MEASURES
DIVISION OF MEASUREMENT STANDARDS

This certifies to the accuracy and identity of the quantity & commodity shown, is suitable for all deliveries when sealed by a measuremaster.

STATE OF HAWAII MEASUREMASTER
NO.Ashley MeyerRegistered Intls AAM

Pmnt Type: 1 - Charge (Invoice)

<<< COVER YOUR LOAD >>>

#1694-MW
MIDWAY

PVT LAND COMPANY LTD.
87-2020 FARRINGTON HWY.
WAIANAE, HI 96792

Ticket #: 964531

Bill To: INIKI ENTERPRISES LIMITED
Haul Acct/Veh #: INIKIE /INIKI-5
PO #/Job #:
Date:09/06/17 Time I/O:01:23 PM/01:49 PM
Clearance #: Midway Atoll C/O Makepono St 1082 H
ono

Mixed Waste/Demo
Gross: 43880 Tare: 34540 Net: 9340 lbs
4.67 Tons @ 53.00/TN $ 265.00

Tax 12.49

TOTAL 277.49

COD Customer: 1 - 1 Not Specified
Notes:

STATE OF HAWAII CERTIFICATE OF MEASURES
DIVISION OF MEASUREMENT STANDARDS

This certifies to the accuracy and
identity of the quantity & commodity
shown, is suitable for all deliveries
when sealed by a measuremaster.

STATE OF HAWAII MEASUREMASTER
NO.Ashley MeyerRegistered Intls AAM

Pmnt Type: 1 - Charge (Invoice)

<<< COVER YOUR LOAD >>>

1824

PVT/NANAKULI LANDFILL
ASBESTOS DISPOSAL MANIFEST

CL # 111085
1 of 2

GENERATOR

1. Work site and mailing address
U.S. Fish & Wildlife Service (Midway Wildlife Ref.)
300 Ala Moana Blvd. Room 5-307, Hon HI 96850

Owner's Name
U.S. Fish & Wildlife Service

Owner's Phone No.
(808)732-7736

2. Operator's name and address:
Iniki Enterprises LTD
1040 Sand Island Parkway, Honolulu HI 96819

Operator's Phone No.
(808) 478-7683
Fax No.

3. Waste disposal site (WDS) name & physical site location

PVT / Nanakuli Landfill
85-2020 Farrington Hwy
Waianae, HI 96792

Mailing Address:
85-2020 Farrington Hwy
Waianae, HI 96792

WDS Phone No.
(808) 668-4561
WDS Fax No.
(808) 668-1368

4. Name and address of responsible agency:

HI Dept. of Health: Noise, Radiation, & Indoor Air Quality Branch, Indoor Air Quality Section
591 Ala Moana Blvd. 1st Floor
Honolulu, HI 96813

Phone No. (808) 586-5800

5. Description of materials:	6. Containers		7. Total Quantity
	No.	Type	
Asbestos-containing Floor Tile, Transite Pipe & Petal, Asbestos-coated metal	225/220	Burrito Wraps/Dbl Bags	30 cy

8. Special Handling instructions and additional information:

BURY UPON ACCEPTANCE - Hazard Class 9, the ERG 171, ID Number NA 2212 and the packing Group #III

9. OPERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and governmental regulations.

Printed/Typed name & title
Gary Lewis, Operations Manager

Signature

Month/Date/Year
9/7/17

TRANSPORTER/HAULER

10. Transporter 1 Signature (Acknowledgement of receipt of materials)

Month/Date/Year
9-7-17

Printed/Typed name & title
Iniki Enterprises LTD

Transporter's Address
1040 Sand Island Pkwy. Hon., HI 96819

Transporter's Phone No.
(808) 677-7800

11. Transporter 2 Signature (Acknowledgement of receipt of materials)

Month/Date/Year

Printed/Typed name & Title

Transporter's Address

Transporter's Phone No.

DISPOSAL SITE

12. Indicate any discrepancies here: (Circle Below)

Placard ID Cards Suits Respirators Manifest Double Bags ID Labels 4' Lengths Signatures

13. Waste disposal site:
PVT/Nanakuli Landfill
84-2020 Farrington Hwy
Waianae, Oahu, HI

Landfill Monitor Signature

Month/Date/Year
9/7/17

Scale Attendant Signature

Month/Date/Year
9/7/17

14. Landfill Ticket No. _____
Time of Delivery _____

Special Handling Charge: _____

#1824-A
MIDWAY

PVT LAND COMPANY LTD.
87-2020 FARRINGTON HWY.
WAIANAE, HI 96792

Ticket #: 964600

Bill To: INIKI ENTERPRISES LIMITED
Haul Acct/Veh #: INIKIE /INIKI-5
PO #/Job #:
Date:09/07/17 Time I/O:08:26 AM/08:42 AM
Clearance #: Midway Wildlife Refuge, Honolulu

Asbestos
Gross: 65320 Tare: 35720 Net: 29600 lbs
14.80 Tons @ 95.00/TN $ 1406.00
Fees:HA-Handli 1 EA = 95.00

Tax 70.73

TOTAL 1571.73
COD Customer: 1 - 1 Not Specified
Notes:

STATE OF HAWAII CERTIFICATE OF MEASURES
DIVISION OF MEASUREMENT STANDARDS

This certifies to the accuracy and identity of the quantity & commodity shown, is suitable for all deliveries when sealed by a measuremaster.

STATE OF HAWAII MEASUREMASTER
NO.Ashley MeyerRegistered Intls AAM

Pmnt Type: 1 - Charge (Invoice)

<<< COVER YOUR LOAD >>>

1823

PVT/NANAKULI LANDFILL
ASBESTOS DISPOSAL MANIFEST

CL # 111085
2 of 2

GENERATOR

1. Work site and mailing address
U.S. Fish & Wildlife Service (Midway Wildlife Ref.)
300 Ala Moana Blvd. Room 5-307, Hon HI 96850

Owner's Name
U.S. Fish & Wildlife Service

Owner's Phone No.
(808)732-7736

2. Operator's name and address:
Iniki Enterprises LTD
1040 Sand Island Parkway, Honolulu HI 96819

Operator's Phone No.
(808) 478-7683
Fax No.

3. Waste disposal site (WDS) name & physical site location

PVT / Nanakuli Landfill
85-2020 Farrington Hwy
Waianae, HI 96792

Mailing Address:
85-2020 Farrington Hwy
Waianae, HI 96792

WDS Phone No.
(808) 668-4561
WDS Fax No.
(808) 668-1368

4. Name and address of responsible agency:

HI Dept. of Health: Noise, Radiation, & Indoor Air Quality Branch, Indoor Air Quality Section
591 Ala Moana Blvd. 1st Floor
Honolulu, HI 96813

Phone No. (808) 586-5800

5. Description of materials:	6. Containers		7. Total Quantity
	No.	Type	
Asbestos-Containing Transite Panels & Asbestos coated metal	101	Burrito Wraps/	25 cy

8. Special Handling instructions and additional information:

BURY UPON ACCEPTANCE - Hazard Class 9, the ERG 171, ID Number NA 2212 and the packing Group #III

9. OPERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and governmental regulations.

Printed/Typed name & title
Gary Lewis, Operations Manager

Signature

Month/Date/Year
9/7/17

TRANSPORTER/HAULER

10. Transporter 1 Signature (Acknowledgement of receipt of materials)

Month/Date/Year
9-7-17

Printed/Typed name & title
Iniki Enterprises LTD

Transporter's Address
1040 Sand Island Pkwy. Hon., HI 96819

Transporter's Phone No.
(808) 677-7800

11. Transporter 2 Signature (Acknowledgement of receipt of materials)

Month/Date/Year

Printed/Typed name & Title

Transporter's Address

Transporter's Phone No.

DISPOSAL SITE

12. Indicate any discrepancies here: (Circle Below)

Placard ID Cards Suits Respirators Manifest Double Bags ID Labels 4' Lengths Signatures

13. Waste disposal site:
PVT/Nanakuli Landfill
84-2020 Farrington Hwy
Waianae, Oahu, HI

Landfill Monitor Signature

Month/Date/Year
9/7/17

Scale Attendant Signature

Month/Date/Year
9/7/17

14. Landfill Ticket No. _____
Time of Delivery _____

Special Handling Charge: _____

1823-A
MIDWAY

PVT LAND COMPANY LTD.
87-2020 FARRINGTON HWY.
WAIANAE, HI 96792

Ticket #: 964621

Bill To: INIKI ENTERPRISES LIMITED
Haul Acct/Veh #: INIKIE /INIKI-5
PO #/Job #:
Date:09/07/17 Time I/O:09:13 AM/09:24 AM
Clearance #: Midway Wildlife Refuge, Honolulu

Asbestos
Gross: 48860 Tare: 35720 Net: 13140 lbs
6.57 Tons @ 95.00/TN $ 624.15
Fees:HA-Handli 1 EA = 95.00

Tax 33.89

TOTAL 753.04
COD Customer: 1 - 1 Not Specified
Notes:

STATE OF HAWAII CERTIFICATE OF MEASURES
DIVISION OF MEASUREMENT STANDARDS

This certifies to the accuracy and identity of the quantity & commodity shown, is suitable for all deliveries when sealed by a measuremaster.

STATE OF HAWAII MEASUREMASTER
NO.Ashley MeyerRegistered Intls AAM

Pmnt Type: 1 - Charge (Invoice)

<<< COVER YOUR LOAD >>>

458719

Please print or type. (Form designed for use on elite (12-pitch) typewriter.)

Form Approved. OMB No. 2050-0039

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator ID Number: TTI170090004
2. Page 1 of: 3
3. Emergency Response Phone: 800-424-9300
4. Manifest Tracking Number: 002628357 GBF

5. Generator's Name and Mailing Address: US FISH AND WILDLIFE SERVICE, 300 ALA MOANA BLVD, ROOM 5-307, HONOLULU, HI 96850
Generator's Phone: 808-854-4818
Generator's Site Address (if different than mailing address): 302338-01 MIDWAY ATOLL NATIONAL WILDLIFE REFUGE, MIDWAY ATOLL

6. Transporter 1 Company Name: AMERICAN MARINE CORPORATION — 808-545-5190 — U.S. EPA ID Number: HIR000069575

7. Transporter 2 Company Name: PACIFIC COMMERCIAL SERVICES, LLC — 808-545-4699 — U.S. EPA ID Number: HID 982 040 578

8. Designated Facility Name and Site Address: CHEMICAL WASTE MANAGEMENT OF THE NW, 17629 CEDAR SPRINGS LANE, ARLINGTON, OR 97812
Facility's Phone: 541-454-2643
U.S. EPA ID Number: ORD 089452353

9a. HM	9b. U.S. DOT Description (Including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.	13. Waste Codes		
	1. UN3077, WASTE ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S (DEBRIS WITH LEAD) 9, PG III	010	CF	20000	P			D008
	2.							
	3.							
	4.							

14. Special Handling Instructions and Additional Information: XINU 142184-9 OR333942 QAT410161 6-6

SEND COPY TO: PCS LLC, P.O. BOX 235117, HONOLULU, HI 96823

15. GENERATOR'S/OFFEROR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations. If export shipment and I am the Primary Exporter I certify that the contents of this consignment conform to the terms of the attached EPA Acknowledgment of Consent.
I certify that the waste minimization statement identified in 40 CFR 262.27(a) (if I am a large quantity generator) or (b) (if I am a small quantity generator) is true.

Generator/Offeror's Printed/Typed Name: Robert L. Pratson — Signature: [signature] — Month 10 Day 23 Year 2017

16. International Shipments: ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit:
Transporter signature (for exports only): Date leaving U.S.:

17. Transporter Acknowledgment of Receipt of Materials
Transporter 1 Printed/Typed Name: Bkalika Cunningham — Signature: [signature] — Month 10 Day 24 Year 2017
Transporter 2 Printed/Typed Name: STEVEN [illegible] — Signature: [signature] — Month 11 Day 1 Year 17

18. Discrepancy
18a. Discrepancy Indication Space: ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ Full Rejection

Manifest Reference Number:
18b. Alternate Facility (or Generator) — U.S. EPA ID Number
Facility's Phone:
18c. Signature of Alternate Facility (or Generator) — Month Day Year

19. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems)
1. H132 2. 3. 4.

20. Designated Facility Owner or Operator: Certification of receipt of hazardous materials covered by the manifest except as noted in Item 18a
Printed/Typed Name: [illegible] — Signature: [signature] — Month 11 Day 21 Year 17

GENERATOR — INTL TRANSPORTER — DESIGNATED FACILITY

EPA Form 8700-22 (Rev. 3-05) Previous editions are obsolete.

~~45877~~ 45871?

Please print or type. (Form designed for use on elite (12-pitch) typewriter.) Form Approved. OMB No. 2050-0039

UNIFORM HAZARDOUS WASTE MANIFEST (Continuation Sheet)	21. Generator ID Number TT1170090004	22. Page 2	23. Manifest Tracking Number 002628357GBF

24. Generator's Name: U.S. FISH AND WILDLIFE SERVICE C/O OF DBSI — 302338-01

25. Transporter 3 Company Name: ALASKA MARINE LINES — U.S. EPA ID Number: WAD 991 281 809

26. Transporter 4 Company Name: NORTHLAND ~~R. TRANSPORT, INC.~~ — U.S. EPA ID Number: WAH000014061 ~~WAH000000000~~

27a. HM	27b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))	28. Containers No.	28. Containers Type	29. Total Quantity	30. Unit Wt./Vol.	31. Waste Codes		

32. Special Handling Instructions and Additional Information

GENERATOR

33. Transporter Acknowledgment of Receipt of Materials
Printed/Typed Name: Robin Davis — Signature: [signature] — Month 11 Day 19 Year 17

34. Transporter Acknowledgment of Receipt of Materials
Printed/Typed Name — Signature — Month — Day — Year

TRANSPORTER

35. Discrepancy

DESIGNATED FACILITY

36. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems)

EPA Form 8700-22A (Rev. 3-05) Previous editions are obsolete.

DESIGNATED FACILITY TO DESTINATION STATE (IF REQUIRED)

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458719

Please print or type. (Form designed for use on elite (12-pitch) typewriter.) Form Approved. OMB No. 2050-0039

UNIFORM HAZARDOUS WASTE MANIFEST (Continuation Sheet)	21. Generator ID Number TT1170090004	22. Page 3	23. Manifest Tracking Number 002628357GBF

24. Generator's Name
U.S. FISH AND WILDLIFE SERVICE C/O OF DBSI

202338-01

25. Transporter 15 Company Name R-TRANSPORT, INC. ~~UNION PACIFIC RAILROAD COMPANY~~ U.S. EPA ID Number NMH000028338 ~~N D 0 0 1 7 9 2 9 1 0~~

26. Transporter 16 Company Name UNION PACIFIC RAILROAD COMPANY U.S. EPA ID Number NED.000179291D

27a. HM	27b. U.S. DOT Description (Including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))	28. Containers No.	28. Containers Type	29. Total Quantity	30. Unit Wt./Vol.	31. Waste Codes		

32. Special Handling Instructions and Additional Information

33. Transporter _____ Acknowledgment of Receipt of Materials

Printed/Typed Name	Signature	Month	Day	Year

34. Transporter _____ Acknowledgment of Receipt of Materials

Printed/Typed Name	Signature	Month	Day	Year

35. Discrepancy

36. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems)

GENERATOR — TRANSPORTER — DESIGNATED FACILITY

EPA Form 8700-22A (Rev. 3-05) Previous editions are obsolete.

DESIGNATED FACILITY TO DESTINATION STATE (IF REQUIRED)

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Please print or type. (Form designed for use on elite (12-pitch) typewriter.)

Form Approved. OMB No. 2050-0039

UNIFORM HAZARDOUS WASTE MANIFEST (Continuation Sheet)	21. Generator ID Number	22. Page	23. Manifest Tracking Number
	TI170090004	4/4	002628357 GBF

24. Generator's Name

US Fish + Wildlife Serv.

25. Transporter 5 Company Name PILRC — U.S. EPA ID Number ORD987173457

26. Transporter ____ Company Name — U.S. EPA ID Number

27a. HM	27b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))	28. Containers No.	28. Containers Type	29. Total Quantity	30. Unit Wt./Vol.	31. Waste Codes		

32. Special Handling Instructions and Additional Information

CATULOIL

33. Transporter 5 Acknowledgment of Receipt of Materials

Printed/Typed Name: Bonnie Shaw — Signature: B Shaw — Month 12 Day 4 Year 17

34. Transporter Acknowledgment of Receipt of Materials

Printed/Typed Name — Signature — Month Day Year

35. Discrepancy

36. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems)

GENERATOR

TRANSPORTER

DESIGNATED FACILITY

EPA Form 8700-22A (Rev. 3-05) Previous editions are obsolete.

DESIGNATED FACILITY TO DESTINATION STATE (IF REQUIRED)

458720

Please print or type. (Form designed for use on elite (12-pitch) typewriter.) Form Approved: OMB No. 2050-0039

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator ID Number: TT1170090004
2. Page 1 of 3
3. Emergency Response Phone: 800-424-9300
4. Manifest Tracking Number: 002628358 GBF

5. Generator's Name and Mailing Address: US FISH AND WILDLIFE SERVICE, 300 ALA MOANA BLVD. ROOM 5-307, HONOLULU, HI 96850
Generator's Site Address (if different than mailing address): MIDWAY ATOLL NATIONAL WILDLIFE REFUGE, MIDWAY ATOLL
Generator's Phone: 808-854-4811
302338-01

6. Transporter 1 Company Name: AMERICAN MARINE CORPORATION 808-545-5190 — U.S. EPA ID Number: HIR000069575
7. Transporter 2 Company Name: PACIFIC COMMERCIAL SERVICES, LLC. 808-546-4599 — U.S. EPA ID Number: HID 982 040 578
8. Designated Facility Name and Site Address: CHEMICAL WASTE MANAGEMENT OF THE NW, 17629 CEDAR SPRINGS LANE, ARLINGTON, OR 97812
Facility's Phone: 541-454-2643
U.S. EPA ID Number: ORD089452353

9a. HM	9b. U.S. DOT Description (Including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.	13. Waste Codes		
	1. UN 3077, WASTE ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (DEBRIS WITH LEAD) 9, PG III	007	CF	14000	P			D008
	2.							
	3.							
	4.							

14. Special Handling Instructions and Additional Information: EMCU 366006-8 OR333942 GATU 10 16 16-6

SEND COPY TO: PCS LLC, P.O. Box 235117, Honolulu, HI 96823

15. GENERATOR'S/OFFEROR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations. If export shipment and I am the Primary Exporter, I certify that the contents of this consignment conform to the terms of the attached EPA Acknowledgment of Consent.
I certify that the waste minimization statement identified in 40 CFR 262.27(a) (if I am a large quantity generator) or (b) (if I am a small quantity generator) is true.

Generator's/Offeror's Printed/Typed Name: Robert E. Peyton — Signature: [signature] — Month/Day/Year: 10 | 23 | 2017

16. International Shipments: ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit: Date leaving U.S.:
Transporter signature (for exports only):

17. Transporter Acknowledgment of Receipt of Materials
Transporter 1 Printed/Typed Name: Bekka Cunningham — Signature: [signature] — Month/Day/Year: 10 | 24 | 2017
Transporter 2 Printed/Typed Name: Steve Kay — Signature: [signature] — Month/Day/Year: 11 | 12 | 17

18. Discrepancy
18a. Discrepancy Indication Space: ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ Full Rejection
Manifest Reference Number:

18b. Alternate Facility (or Generator) — U.S. EPA ID Number
Facility's Phone:

18c. Signature of Alternate Facility (or Generator) — Month/Day/Year

19. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems)
1. H132 2. 3. 4.

20. Designated Facility Owner or Operator: Certification of receipt of hazardous materials covered by the manifest except as noted in Item 18a
Printed/Typed Name: [illegible] — Signature: [signature] — Month/Day/Year: 12 | 14 | 17

GENERATOR — TRANSPORTER INTL — DESIGNATED FACILITY

EPA Form 8700-22 (Rev. 3-05) Previous editions are obsolete.

458720

Please print or type. (Form designed for use on elite (12-pitch) typewriter.)

Form Approved. OMB No. 2050-0039

UNIFORM HAZARDOUS WASTE MANIFEST (Continuation Sheet)	21. Generator ID Number TT1170090004	22. Page 2	23. Manifest Tracking Number 002628358GBF

24. Generator's Name
U.S. FISH AND WILDLIFE SERVICE C/O OF DBSI

J02338-01

25. Transporter 3 Company Name ALASKA MARINE LINES — U.S. EPA ID Number WAD 991 281 309

26. Transporter 4 Company Name NORTHLAND ~~N. TRANSPORT, INC.~~ — U.S. EPA ID Number WAH000011486 ~~WAH000028338~~

27a. HM	27b. U.S. DOT Description (Including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))	28. Containers No.	Type	29. Total Quantity	30. Unit Wt./Vol.	31. Waste Codes		

32. Special Handling Instructions and Additional Information

GENERATOR

33. Transporter ____ Acknowledgment of Receipt of Materials
Printed/Typed Name: Robin Davis — Signature: [signature] — Month 11 Day 9 Year 14

34. Transporter ____ Acknowledgment of Receipt of Materials
Printed/Typed Name — Signature — Month — Day — Year

TRANSPORTER

35. Discrepancy

DESIGNATED FACILITY

36. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems)

EPA Form 8700-22A (Rev. 3-05) Previous editions are obsolete.

DESIGNATED FACILITY TO DESTINATION STATE (IF REQUIRED)

~~45778~~ 458720

Please print or type. (Form designed for use on elite (12-pitch) typewriter.)

Form Approved. OMB No. 2050-0039

UNIFORM HAZARDOUS WASTE MANIFEST (Continuation Sheet)	21. Generator ID Number TT1170090004	22. Page 3	23. Manifest Tracking Number 002628358GBF

302338-01

24. Generator's Name: U.S. FISH AND WILDLIFE SERVICE C/O OF DBSI

25. Transporter 35 Company Name R. TRANSPORT, INC. ~~UNION PACIFIC RAILROAD COMPANY~~ U.S. EPA ID Number NAH000028338 ~~NSD001792910~~

26. Transporter 6 Company Name UNION PACIFIC RAILROAD COMPANY U.S. EPA ID Number NED001792910

27a. HM	27b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))	28. Containers No.	28. Containers Type	29. Total Quantity	30. Unit Wt./Vol.	31. Waste Codes		

32. Special Handling Instructions and Additional Information

GENERATOR

33. Transporter _____ Acknowledgment of Receipt of Materials

Printed/Typed Name | Signature | Month | Day | Year

34. Transporter _____ Acknowledgment of Receipt of Materials

Printed/Typed Name | Signature | Month | Day | Year

TRANSPORTER

35. Discrepancy

DESIGNATED FACILITY

36. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems)

EPA Form 8700-22A (Rev. 3-05) Previous editions are obsolete.

DESIGNATED FACILITY TO DESTINATION STATE (IF REQUIRED)

45870

Please print or type. (Form designed for use on elite (12-pitch) typewriter.)

Form Approved. OMB No. 2050-0039

UNIFORM HAZARDOUS WASTE MANIFEST (Continuation Sheet)

21. Generator ID Number: TT1170090004

22. Page: 4/4

23. Manifest Tracking Number: 002628358 GBF

24. Generator's Name: US Fish + Wildlife Serv.

25. Transporter 5 Company Name: CRLRC — U.S. EPA ID Number: ORD987173457

26. Transporter ____ Company Name — U.S. EPA ID Number:

27a. HM	27b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))	28. Containers No.	28. Containers Type	29. Total Quantity	30. Unit Wt./Vol.	31. Waste Codes		

32. Special Handling Instructions and Additional Information

G-ATU 101016

GENERATOR

33. Transporter 5 Acknowledgment of Receipt of Materials

Printed/Typed Name: Bonnie Shaw — Signature: B Shaw — Month 12 Day 9 Year 12

34. Transporter ____ Acknowledgment of Receipt of Materials

Printed/Typed Name — Signature — Month Day Year

TRANSPORTER

35. Discrepancy

DESIGNATED FACILITY

36. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems)

EPA Form 8700-22A (Rev. 3-05) Previous editions are obsolete.

DESIGNATED FACILITY TO DESTINATION STATE (IF REQUIRED)