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NAS BRUNSWICK
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FINAL RESOURCE CONSERVATION AND RECOVERY ACT PARTIAL CLOSURE REPORT
FOR BUILDING 37 WITH TRANSMITTAL LETTER NAS BRUNSWICK ME
12/1/2010
NAS BRUNSWICK

**ENVIRONMENTAL DEPARTMENT
NAVAL AIR STATION
437 HUEY DRIVE
BRUNSWICK, ME 04011**

December 1, 2010

Mr. Edward Vigneault
Maine Department of Environmental Protection
Division of Oil and Hazardous Waste Facilities Registration
17 State House Station
Augusta, ME 04333-0017

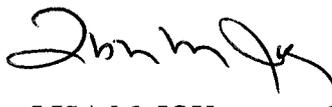
Subj: Final RCRA Partial Closure Report for Building 37

Dear Mr. Vigneault:

A copy of the Final RCRA Partial Closure Report for Building 37 at Naval Air Station Brunswick is provided as Enclosure (1).

If you have any questions, please contact Mr. Mike Fagan at 921-1717 or via e-mail at michael.fagan1@navy.mil.

Sincerely,



LISA M. JOY
Environmental Director

Enclosure: (1) Final RCRA Partial Closure Report for Building 37

Copy to:
NAVFAC Mid-Atlantic (B. Abraham)
NAS Brunswick (M. Fagan/D. Smith)
EPA Region I (M. Daly)
MRRA (V. Boundy)
Curtis Memorial Library (L. Oliver)
Lepage Environmental (C. Lepage)
BRAC PMO NE (P. Burgio)

RCRA PARTIAL CLOSURE REPORT
for
BUILDING 37 – MIDCOAST REGIONAL REDEVELOPMENT AUTHORITY (MRRA) OFFICE
PARCEL
NAVAL AIR STATION BRUNSWICK, MAINE
USEPA IDENTIFICATION NUMBER ME8170022018
NOVEMBER 2010

1. INTRODUCTION

The purpose of this report is to present the findings and conclusions of the investigation conducted to determine if the Maine Department of Environmental Protection (MEDEP) RCRA or hazardous waste closure requirements have been completed for the Building 37 parcel at Naval Air Station Brunswick (NAS Brunswick).

2. PROPERTY DESCRIPTION

The Building 37 parcel is located at the northeastern boundary of NAS Brunswick at the main gate of the base (Figure 1). The approximately 12.9-acre parcel is bordered to the north by State Route 24 (Bath Road), to the east by the base perimeter fence and private commercial property, to the south by security fencing and the Private Housing Area, and to the west by the Former Quarters C Area (Figure 2). The parcel includes Building 37 (the Midcoast Regional Redevelopment Authority [MRRA] Office), associated paved parking and grass-covered areas, and a portion of Fitch Avenue. Several other buildings located within the parcel have been addressed separately under the NAS Brunswick RCRA closure program, including:

- Building 33 – Front Gate Sentry House (Tetra Tech, 2010)
- Building 38 – Pass and Decal Office (Tetra Tech, 2009)
- Building 109 – Dog Kennel (Tetra Tech, 2010)
- Building 415 – Dog Kennel Administrative Building (Tetra Tech, 2010)
- Building 471 – Main Gate Administrative Vehicle Inspection (AVI) Tent (Tetra Tech, 2010)
- Building 472 – Main Gate Support Building (Tetra Tech, 2010)

Buildings 1145 (Quarters D) and 100 (Quarters D Garage) are residential buildings located in the northwestern portion of the parcel. These buildings are not owned by the Navy and are not addressed by the NAS Brunswick RCRA closure program. Former Building 77 (Bus Waiting Area) was located west of Building 33 along Fitch Avenue. (Note that building identification number 77 was later reassigned to the present Weapons Build-up Facility, located in the Weapons/Magazine Area.)

Building 37 itself is located at the intersection of Fitch Avenue and Route 24, in the northeastern portion of the parcel (Figure 2). It was constructed in 1943 and consists of a 2,320-square-foot, single-story, wood-framed structure on a concrete masonry unit (CMU) block foundation. The building floor plan is presented as Figure 3. Building 37 has a forced hot water heating system. Photographs of the building are provided as an attachment to this report.

3. PROPERTY HISTORY AND RECORDS RESEARCH

The Tetra Tech NUS, Inc. (Tetra Tech) project team interviewed NAS Brunswick Environmental Department personnel and performed records research at both NAS Brunswick and the MEDEP office in Augusta, Maine to collect available information concerning the Building 37 parcel, including past use and operations at that location.

Records reviewed include historical aerial photographs, the NAS Brunswick Other Environmental Liabilities (OEL) Database, area-specific reports, facility plans and drawings, and hazardous waste records. Aerial photographs dated 1958, 1978, 1981, 1984, 1989, 1993 and 1997 (Sewall,

1958, 1978, 1981, 1984, 1989, 1993 and 1997) were reviewed along with Public Works Department (PWD) site base maps dated 1943, 1946, 1952, 1956, 1957, 1975, 1989, and 2006 (PWD, 1943, 1946, 1952, 1956, 1957, 1975, 1989, and 2006a) to provide historical information, summarized below.

- Beginning with the 1943 site plan - Building 37 is shown in its current location, with Route 24 and Fitch Avenue to the north and east, respectively, and Building 33 and former Building 77 to the southeast;
- 1957 site plan – former Building 77 is not shown on this plan;
- 1958 aerial photograph - a parking area is shown to the east and south of Building 37; Building 33 and former Building 77 are shown to the southeast; railroad tracks and a large parking area are shown to the west;
- 1978 aerial photograph - the former large parking area is shown as a heavily wooded area;
- 1984 aerial photograph - Building 109 is shown to the southwest;
- 1989 aerial photograph - Building 415 is shown to the southwest, adjacent to Building 109.

No further changes to the parcel are observed after 1989.

According to MEDEP and NAS Brunswick spill records, no spills were reported in the vicinity of the Building 37 parcel (Environmental Department, 1988; Environmental Department 1999; and MEDEP, 2010).

According to historical NAS Brunswick buildings lists and NAS Brunswick Environmental Department personnel, since its construction in 1943, Building 37 has been used for:

- Security and Administration Building: 1943 - 1956 (PWD, 1943; PWD, 1946)
- Internal Revenue Office (IRO) and Security Administration: 1956 - 1966
- Pass Office and Shore Patrol: 1966 - 1976 (PWD, 1966)
- Gatehouse: 1976 - unknown date, no later than 2006 (PWD, 1976)
- Naval Criminal Investigative Services (NCIS): unknown date (no later than 2006) – 2008 (PWD, 2006b)
- MRRA Office: 2008 - present (PWD, 2008)

There is no record of hazardous waste generation at Building 37 (Environmental Department, 2010).

The NAS Brunswick Removed Transformer Database lists one non-polychlorinated-biphenyl (non-PCB)-containing electrical transformer for Building 37 (PWD, 2010). Pertinent information regarding the transformer is provided in the table below.

Transformer	Manufacturer	Serial No.	Manufacture Date	Notes
112.5-kVa non-PCB-containing, pad-mounted	Westinghouse	81JJ540178 ⁽¹⁾	1981	Mineral Oil

(1) The first two digits of the serial numbers denote the year of manufacture (EES, 1998)

The serial number for the Westinghouse-manufactured unit indicates that it was manufactured after 1979 and therefore is unlikely to contain PCBs. As of July 1, 1979, the United States Environmental Protection Agency (EPA) prohibited all manufacturing of new PCB electrical equipment (transformers and capacitors). Due to the age of the building, PCB-containing transformers may have been in service at the Building 37 transformer pad at any time in the past.

The NAS Brunswick Aboveground Storage Tank (AST) and Underground Storage Tank (UST) inventory records for Building 37 indicate that one AST has been associated with the building

(Environmental Department, 2009). The 275-gallon, single-walled, steel AST (A37.0) was used to store No. 1 heating oil and is located in the fuel storage room in the southeast corner of the building. It was installed at an unknown date and is inactive.

No oil-water separators (OWS) have been associated with Building 37 (Navy, 2006).

No groundwater investigations have been conducted in the vicinity of the Building 37 parcel; no groundwater characterization information is available. Information available for known groundwater contamination areas at NAS Brunswick was reviewed to determine if groundwater underlying the Building 37 parcel could potentially be impacted by another (off-parcel) source area.

According to Draft Final Remedial Investigation Report (E.C. Jordan, 1990), the Building 37 parcel is located within the Lower Androscoggin River Basin. Surface water runoff and groundwater flow within the parcel is likely generally to the north and toward the Androscoggin River. An inferred groundwater divide is located just south of the parcel. Site 7, the Old Acid Caustic Pit, is located 800 to 900 feet southwest of the Building 37 parcel, and Site 8, the perimeter Road Disposal Site, located approximately 1,000 feet west of the parcel, have been investigated under Installation Restoration Program (IRP). The approximately 1.4-acre Site 7 was used for the disposal of liquid waste in the 1950 and 1960s. Soil removal actions have been conducted at the site. According to a 2009 investigation depths to groundwater ranged from approximately 3 to 11.5 feet below ground surface (bgs) across the site and groundwater flows generally toward the southeast (Tetra Tech, 2010). Site 8 is a closed site that was used to dispose of construction and demolition debris in the 1960s and 1970s. Remediation of the site included the removal of all construction debris and contaminated soils. Based on previous studies groundwater flow from Site 8 is generally to the north toward the Androscoggin River.

4. SITE VISIT AND INVESTIGATION

A site visit was conducted for Building 37 on September 23, 2010 by Mr. James Forrelli, P.E., and Mr. Brian Geringer of Tetra Tech. The purpose of the visit was to verify information gathered during the records search and to collect additional information as necessary to prepare this closure report. Tetra Tech personnel were accompanied by Mr. D. Bruce Smith, the NAS Brunswick Hazardous Waste Manager. The building was visually inspected for signs of hazardous waste generation or storage. Site visit observations, recorded on the attached Building Inspection Form ⁽¹⁾, are summarized below:

- At the time of inspection, Building 37 was occupied and in good condition.
- No evidence of current or past hazardous waste generation activities was observed.
- No signs of a past release (staining, unusual odors, stressed vegetation, etc.) were observed.
- No modifications to the structure, which may conceal signs of a past release, were observed.
- No peeling or flaking paint was observed on the exterior or interior of the building.

Because Building 37 was constructed prior to 1979, the transformer pad, located south of the building, could potentially be an area of PCB soil contamination, if there had been an historical transformer leak. On October 14, 2010, Tetra Tech collected surface soil samples from two locations surrounding the transformer pad. A hand auger was used to collect two samples from 0 to 6 inches below ground surface (bgs) and two samples from 6 to 24 inches bgs. No soil was present on the northern and western sides of the concrete pad, where it is adjacent to the building. Sample locations are presented on Figure 4.

All soil samples were submitted for PCB analysis by Tetra Tech's subcontracted analytical laboratory (Analytix Environmental Laboratory, Portsmouth, New Hampshire). Sample analytical

data underwent limited data validation, consisting of an evaluation of field duplicate(s), blank contamination, and completeness. As presented in the attached Table 1, PCB levels are compared to the MEDEP RCRA standard for total PCBs in soil, 1 part per million (ppm). PCBs were not detected in any of the soil samples collected at Building 37. The EPA Regional Screening Levels [RSLs] for Residential Soil are included in Table 1 for informational purposes (EPA, 2009).

The areas of known groundwater contamination at NAS Brunswick were reviewed with respect to the location of the Building 37 parcel. Based on this review, as well as the review of available information on historical activities that occurred at the parcel, it is unlikely that groundwater underlying the Building 37 parcel has been adversely impacted by a release, either from within the parcel or from the nearest (off-parcel) source areas.

5. HAZARDOUS WASTE GENERATION AND STORAGE

Based on the records research, site visit observations, and NAS Brunswick Environmental Department personnel interviews, no hazardous waste generation, hazardous waste accumulation, or hazardous waste storage was conducted at the Building 37 parcel.

6. OTHER ENVIRONMENTAL CONSIDERATIONS

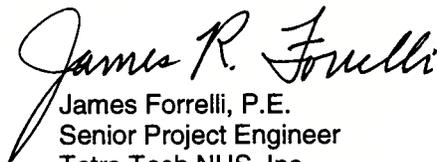
As discussed in Section 3, one AST is known to be associated with the Building 37 parcel. No other tanks were observed in the immediate vicinity of the Building 37 parcel.

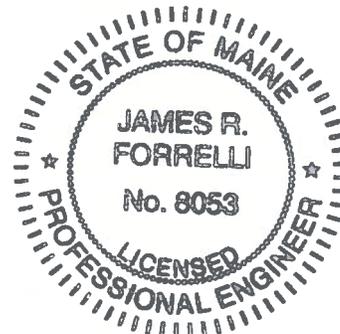
7. LIMITATIONS

This investigation of the hazardous waste closure requirement applies to the Building 37 parcel (as shown on Figure 2) only.

8. CERTIFICATION

Based on the findings of this investigation, there have been no activities resulting in the generation, accumulation, or storage of hazardous waste at the Building 37 parcel, NAS Brunswick, Maine. Therefore, the hazardous waste closure of the Building 37 parcel was completed in accordance with the provisions of MEDEP Regulations Chapter 851, Standards for Generators of Hazardous Waste, Section 11.


James Forrelli, P.E.
Senior Project Engineer
Tetra Tech NUS, Inc.



⁽¹⁾ The Building Inspection Form provides preliminary information collected during the building inspection, including information from visual observations, Navy personnel interviews, and from documents reviewed during file reviews. It does not reflect any additional information provided at a later date that further clarifies or corrects preliminary information collected during the building inspection and file reviews.

REFERENCES

EC Jordan, 1990. Draft Final Remedial Investigation Report, Naval Air Station, Brunswick, Maine. August

Environmental Department, 1988. Environmental Incident Log - Book No. 1, July 1988-November 1999, Naval Air Station Brunswick Environmental Department, Brunswick, Maine.

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Environmental Department, 2009. Master/Historical Aboveground and Underground Storage Tank Inventory. NAS Brunswick, Maine. February.

Environmental Department, 2010. Hazardous Waste Database, Naval Air Station Brunswick Environmental Department, Brunswick, Maine.

MEDEP (Maine Department of Environmental Protection), 2010. Spills Report Master List. Maine Department of Environmental Protection, Augusta, Maine. Updated November 1.

NAS Brunswick Environmental Department. NAS Brunswick Transformer Database.

Navy, 2006. Environmental Condition of Property Report for the Naval Air Station Brunswick, Maine, Base Realignment and Closure Program Management Office. May 30.

PWD (Public Works Department), 1943. "Building Site Plan Showing Location of Underground Water Distribution Lines and Hydrants," US NAS Brunswick, Maine. September 4.

PWD, 1946. "Map of US Naval Air Station, Brunswick, Maine, Showing conditions on June 30, 1946," NAS Brunswick, Maine. June 30.

PWD, 1952. "Map of US Naval Air Station, Brunswick, Maine, Showing conditions on June 30, 1952," NAS Brunswick, Maine. June 30.

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PWD, 1957. "Map of US Naval Air Station, NAS Brunswick, Maine.

PWD, 1966. "Building and Structure List, U.S. Naval Air Station, Brunswick, Maine". January 1.

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PWD, 1976. "Index of Structures, Naval Air Station, Brunswick, Maine". September 21.

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PWD, 1983. "Existing Conditions Map. Operations Area, Public Works Department Drawing No. 2156," NAS Brunswick, Maine. May 5.

PWD, 1989. "Existing Conditions Map. Public Works Department Drawing No. 2157," NAS Brunswick, Maine. Revised April 2.

PWD, 2006a. Brunswick Naval Air Station, NAS Brunswick, Maine.

PWD, 2006b. "NASB Facility List, Naval Air Station, Brunswick, Maine". March.

PWD, 2008. "NAS Brunswick Facility List, NAS Brunswick". March.

PWD. 2010. Transformer Database. NAS Brunswick, Maine.

Sewall (James W. Sewall Company), 1958. NAS Brunswick Aerial Photographs. James W. Sewall Company, Old Town, Maine. October 9.

Sewall, 1978. NAS Brunswick Aerial Photographs. James W. Sewall Company, Old Town, Maine. November 22.

Sewall, 1981. NAS Brunswick Aerial Photographs. James W. Sewall Company, Old Town, Maine. October 17.

Sewall, 1984. NAS Brunswick Aerial Photographs. James W. Sewall Company, Old Town, Maine. April 23.

Sewall, 1989. NAS Brunswick Aerial Photographs. James W. Sewall Company, Old Town, Maine. April 2.

Sewall, 1993. NAS Brunswick Aerial Photographs. James W. Sewall Company, Old Town, Maine. November 8.

Sewall, 1997. NAS Brunswick Aerial Photographs. James W. Sewall Company, Old Town, Maine.

Tetra Tech (Tetra Tech NUS), 2009. RCRA Partial Closure Report for Building 38 – Pass and ID Office Naval Air Station Brunswick, Maine. Tetra Tech NUS, Inc, King of Prussia, Pennsylvania. December.

Tetra Tech, 2010. RCRA Partial Closure Report for Building 33 – Front Gate Security Building, Building 265 – Forrestal Drive Housing Guard Shack, and Building 481 – Coombs Road Guard Shack, Naval Air Station Brunswick, Maine. Tetra Tech NUS, Inc, King of Prussia, Pennsylvania. March.

Tetra Tech, 2010. RCRA Partial Closure Report for Building 109 – Dog Kennel, Naval Air Station Brunswick, Maine. Tetra Tech NUS, Inc, King of Prussia, Pennsylvania. January.

Tetra Tech, 2010. RCRA Partial Closure Report for Building 415 – Dog Kennel Administrative Building, Naval Air Station Brunswick, Maine. Tetra Tech NUS, Inc, King of Prussia, Pennsylvania. January.

Tetra Tech, 2010. RCRA Partial Closure Report for Building 471 – Main Gate Administrative Vehicle Inspection Tent and Building 472 – Main Gate Support Building, Naval Air Station Brunswick, Maine. Tetra Tech NUS, Inc, King of Prussia, Pennsylvania. October.

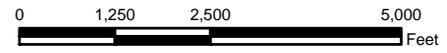
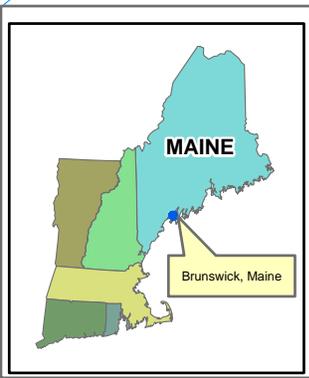
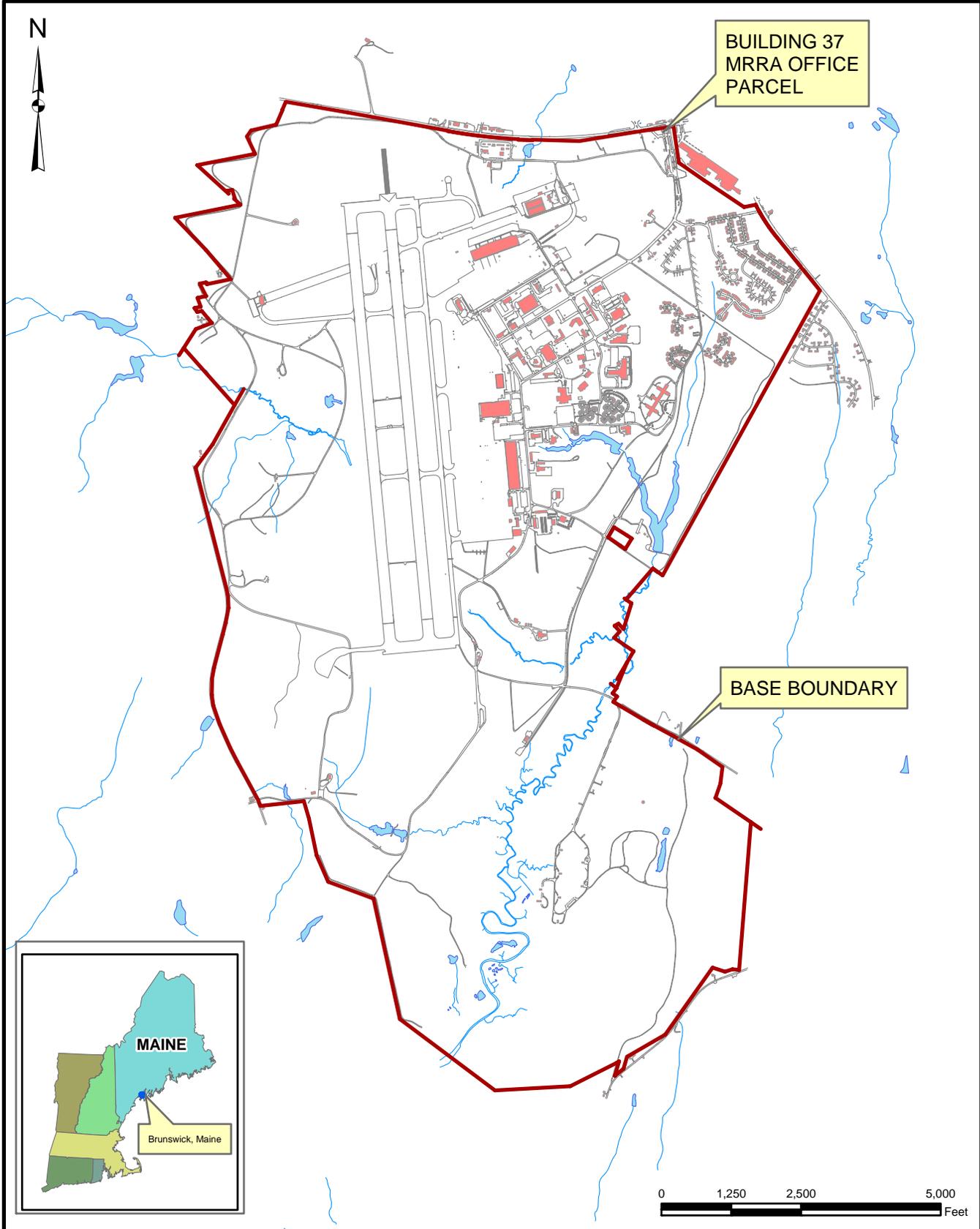
Tetra Tech, 2010. Site Investigation Report for Site 7, Naval Air Station Brunswick, Brunswick, Maine. June.

**TABLE 1
SOIL SAMPLE PCB RESULTS
RCRA PARTIAL CLOSURE REPORT
BUILDING 37 – MRRR OFFICE PARCEL
NAVAL AIR STATION BRUNSWICK, MAINE**

SAMPLE ID ⁽¹⁾	EPA RSLs ⁽²⁾ (ug/kg)	B37-SB01-0006	B37-SB01-0624	B37-SB02-0006	B37-SB04-0624
LOCATION		south side transformer pad	south side transformer pad	east side transformer pad	east side transformer pad
MATRIX		soil	soil	soil	soil
DEPTH		0-6 inches bgs	6-24 inches bgs	0-6 inches bgs	6-24 inches bgs
SAMPLE DATE		10/14/10	10/14/10	10/14/10	10/14/10
PCB (µg/kg)					
Aroclor-1016	3,900	18 U	18 U	20 U	18 U
Aroclor-1221	140	18 U	18 U	20 U	18 U
Aroclor-1232	140	18 U	18 U	20 U	18 U
Aroclor-1242	220	18 U	18 U	20 U	18 U
Aroclor-1248	220	18 U	18 U	20 U	18 U
Aroclor-1254	220	18 U	18 U	20 U	18 U
Aroclor-1260	220	18 U	18 U	20 U	18 U
Total PCB ⁽³⁾	1,000	18 U	18 U	20 U	18 U

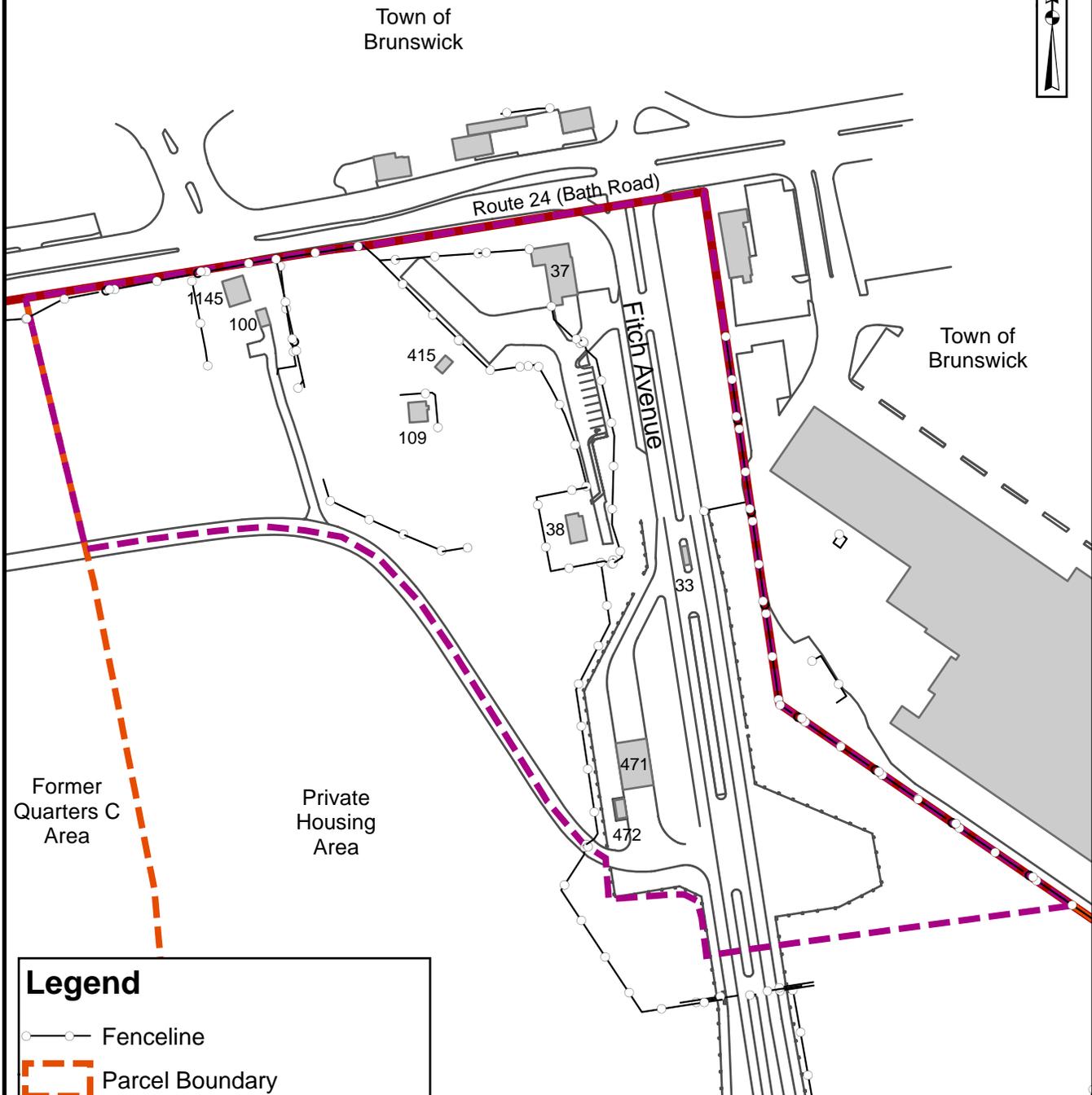
Notes:

- (1) Sample prefix "NASB" is not shown
(2) EPA Regional Screening Levels [RSLs] for residential soil provided for informational purposes
(3) MEDEP action limit for PCB spill (1 mg/kg).
bgs below ground surface
µg/kg micrograms per kilogram
U not detected (with associated detection limit)
PCB polychlorinated biphenyl



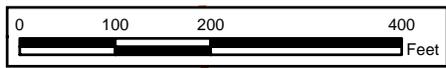
SITE LOCATION MAP
 BUILDING 37 - MRRA OFFICE PARCEL
 RCRA PARTIAL CLOSURE REPORT
 NAVAL AIR STATION BRUNSWICK, MAINE

SCALE AS NOTED	
FILE I:\02258\CP\DRIN\SB_BLDG_37_LOCUS.MXD	
REV 0	DATE 11/11/10
FIGURE NUMBER 1	



Legend

- Fence line
- Parcel Boundary
- MMRA Office Parcel Boundary
- Base Boundary



Building 37 Corner	Northing	Easting
Northeast	391388.700	3017719.720
Southeast	391322.820	3017731.600
Southwest	391307.950	3017698.220
Northwest	391381.070	3017670.850

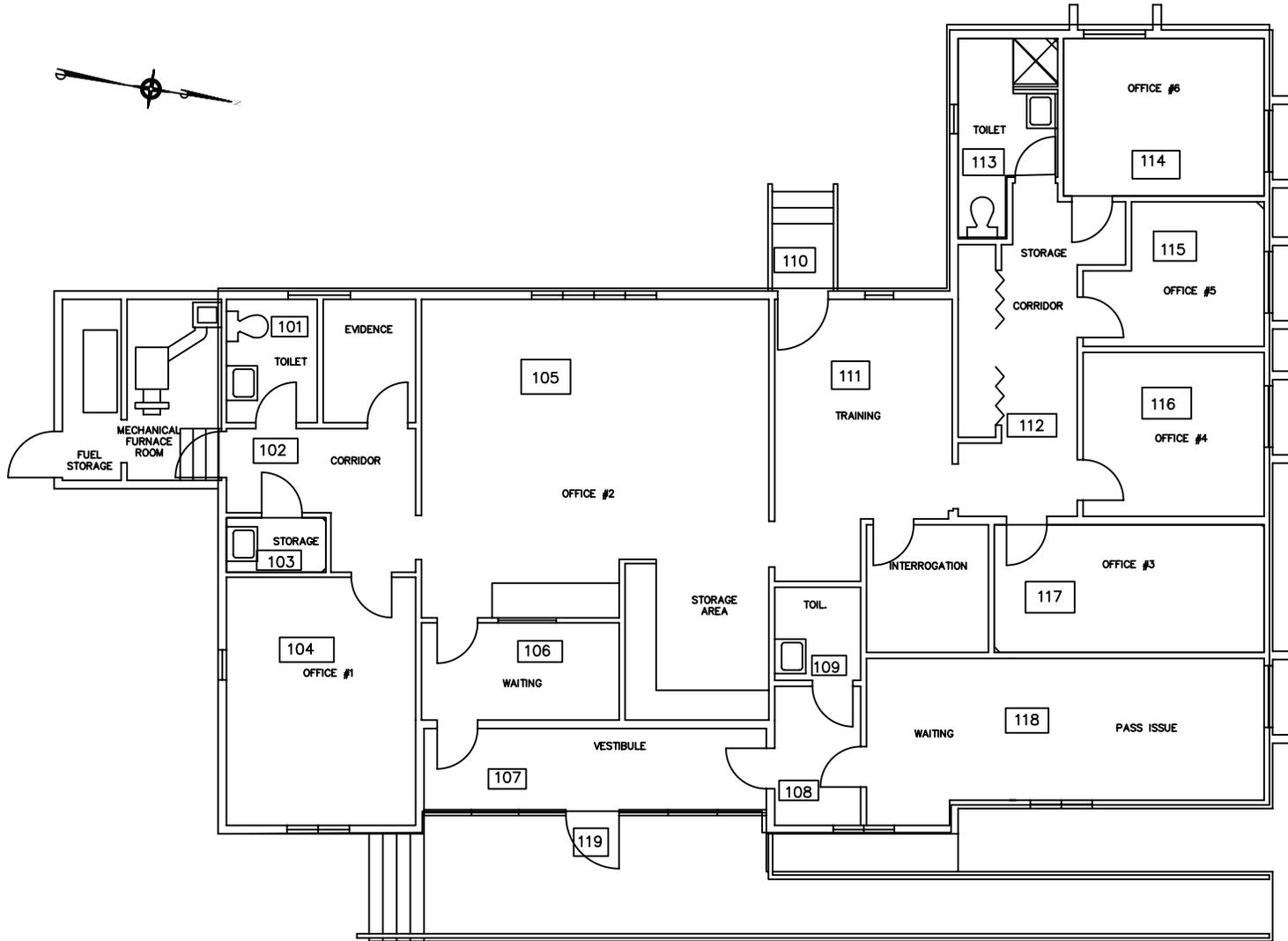
Coordinates are in NAD 1983, Maine West, Feet



Tetra Tech NUS, Inc.

SITE MAP
 BUILDING 37 - MMRA OFFICE PARCEL
 RCRA PARTIAL CLOSURE REPORT
 NAVAL AIR STATION BRUNSWICK, MAINE

SCALE AS NOTED	
FILE I:\NASB_BLDG_37_SITE_MAP.MXD	
REV 0	DATE 11/16/10
FIGURE NUMBER FIGURE NO. 2	

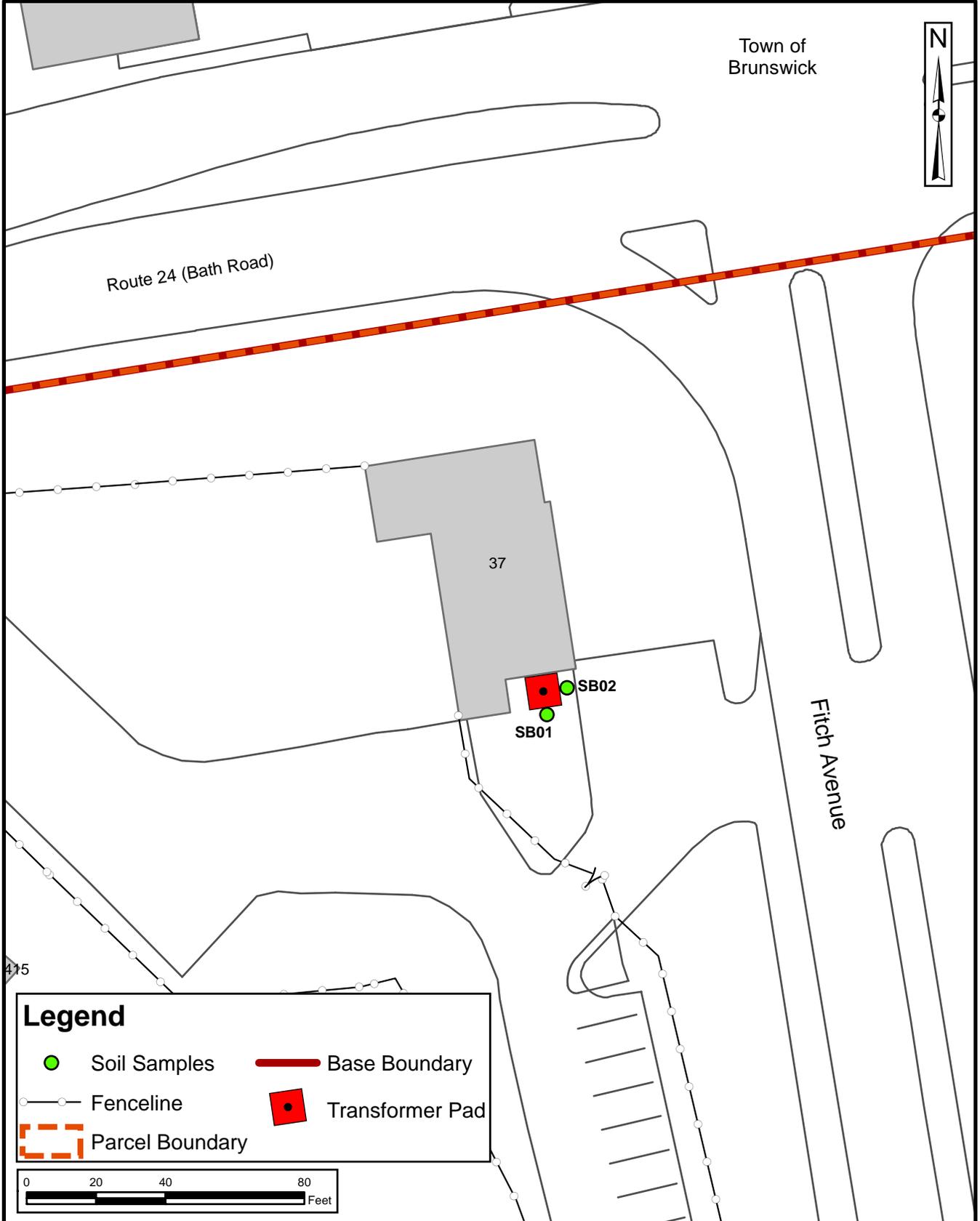


TETRA TECH NUS, INC.

FLOOR PLAN
 BUILDING 37 - MRRA OFFICE PARCEL
 RCRA PARTIAL CLOSURE REPORT
 NAVAL AIR STATION BRUNSWICK, MAINE

SCALE AS NOTED	
FILE \\.\NASB_BLDG_37_FP.DWG	
REV 0	DATE 11/16/10
FIGURE NUMBER 3	

Town of Brunswick



Legend

-  Soil Samples
-  Transformer Pad
-  Fenceline
-  Parcel Boundary
-  Base Boundary



Tetra Tech NUS, Inc.

SAMPLE LOCATION MAP
 BUILDING 37 - MRRA OFFICE PARCEL
 RCRA PARTIAL CLOSURE REPORT
 NAVAL AIR STATION BRUNSWICK, MAINE

SCALE AS NOTED	
FILE L:\NASB_BLDG_37_SAMP_LOC.MXD	
REV 0	DATE 11/16/10
FIGURE NUMBER FIGURE NO. 4	

**HWSA INSPECTION FORM
HAZARDOUS WASTE STORAGE AREAS CLOSURE
NAS BRUNSWICK
BRUNSWICK, MAINE
CTO WE22**

Inspection Date: 9/23/10
Personnel: Brian Geringer / James Forrelli, P.E.
Weather: Clear, 60s

GENERAL BUILDING INFORMATION / USES

Building Name: Building 37 – MRRA Office
Function: Base Redevelopment Office
Size: 2,320 SF
Year of Construction: 1943

Building 37 is located at NASB Brunswick west of Fitch Avenue, north of the Building 38 (Pass and ID), south of Route 24, and east of Building 109 and 415 (Security Dog Kennels). It was constructed in 1943 and served as the Security and Labor Board (1943-1956), I.R.O. and Security Administration (1956-1966), Pass Office and Shore Patrol (1966-1976), Gatehouse (1976-unknown date), NCIS (unknown date-2008) and MRRA office (2008-present). Building 37 is a 2,320 SF single story wood framed building that consists of a number of administration offices on a CMU block foundation. The building is currently occupied under by the Midcoast Regional Redevelopment Authority (MRRA). The building is heated by forced hot water heat.

HWSA INSPECTION / CONDITION

No record of hazardous waste stored at Building 37.
At the time of inspection, Building 37 was in good condition.
No evidence of current or past hazardous waste generation activities was observed.
No evidence of hazardous waste residues was observed.
No signs of a past release (staining, unusual odors, stressed vegetation, etc.) were observed. No modifications to the structure, which may conceal signs of a past release, were observed.
No hazardous waste storage areas or hazardous waste accumulation areas were observed.

POTENTIAL PCB-CONTAINING TRANSFORMERS

One transformer that could be a potential source of polychlorinated biphenyls (PCBs) contamination in the event of a leak was observed on the southeastern corner of the building.

112.5 kVa pad-mounted Westinghouse transformer (serial no. 81JJ540178) (contains mineral oil)

PHOTOGRAPHS



No. 1 Building 37 – NAS Brunswick
MRRA Office northwest elevation

September 23, 2010



No. 1 Building 37 – NAS Brunswick
MRRA Office west elevation

September 23, 2010



No. 3 Building 37 – NAS Brunswick
MRRA Office interior (Room 105)

September 23, 2010



No. 4 Building 37 – NAS Brunswick
MRRA Office transformer pad

September 23, 2010