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NAS BRUNSWICK
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FINAL RESOURCE CONSERVATION AND RECOVERY ACT PARTIAL CLOSURE REPORT
FOR BUILDINGS 730 THROUGH 749 WITH TRANSMITTAL LETTER NAS BRUNSWICK ME
5/21/2010
NAS BRUNSWICK

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

May 21, 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 Buildings 730 -749 Parcel (20 Buildings)

Dear Mr. Vigneault:

A copy of the Final RCRA Partial Closure Report for Buildings 730 -749 Parcel (20 Buildings) 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,



FOR LISA M. JOY
Environmental Director

Enclosure: (1) Final RCRA Partial Closure Report for 730 -749 Parcel (20 Buildings)

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

RCRA PARTIAL CLOSURE REPORT
for
BUILDINGS 730 THROUGH 749 – BACHELORS ENLISTED QUARTERS PARCEL
NAVAL AIR STATION BRUNSWICK, MAINE
USEPA IDENTIFICATION NUMBER ME8170022018
MAY 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 Buildings 730-749 parcel at Naval Air Station Brunswick (NAS Brunswick).

2. PROPERTY DESCRIPTION

The Buildings 730-749 parcel is located in the central portion of NAS Brunswick (Figure 1). The approximate 14.47-acre parcel is bisected by Pegasus Street and is bordered to the north by Building 25, Building 87 and Beasley Circle; to the east by Building 750; to the south by Neptune Drive; and to the west by Building 211 (Figure 2). The parcel contains a Bachelors Enlisted Quarters complex known as Orion's Landing barracks, which consists of twenty apartment buildings, adjacent parking areas, recreation areas, and grass lawn.

The Orion's Landing buildings were constructed in 2002 and were used as living quarters for enlisted personnel. The five 8-unit buildings (Buildings 730, 732, 741, 743, and 749) each have 5,680 square-feet and the remaining fifteen 10-unit buildings each have 7,083 square-feet, for a total of 134,640 square-feet of building space. The buildings are two-story, wood-framed on concrete slab foundations. The buildings each contain eight two-story apartments used as living quarters for two people, plus a mechanical room with two natural-gas-fired boilers. The apartments are heated with radiant floor heating generated by natural gas supplied by an off-site utility. Photographs of the facility 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 Orion's Landing parcel, including past use and operations at this location.

According to NAS Brunswick Environmental Department personnel, Buildings 730 through 749 have been used as living quarters for enlisted personnel since their construction in 2002. There is no record of hazardous waste generation or accumulation at the Buildings 730-749 parcel.

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 (all produced by James W. Sewall Company) were reviewed along with Public Works Department (PWD) site base maps dated 1946, 1952, 1956, 1957, 1962, 1975, 1983, 1989, 2004, and 2006, to provide historical information.

Available historical maps and aerial photographs indicate that the Buildings 730-749 parcel was undeveloped and wooded until sometime prior to 1975. Between 1975 and 2002, the area of the Buildings 730-749 parcel consisted of baseball fields and tennis, badminton, and volleyball courts. The 2004 and 2006 historical base maps are the earliest maps indicating the presence of the Orion's Landing buildings.

According to NAS Brunswick records, no PCB-containing transformers, underground storage tanks (USTs) or aboveground storage tanks (ASTs) were present at the Buildings 730-749 parcel (PWD, 2010 and Environmental Department, 2009).

No groundwater investigations have been conducted in the vicinity of the Buildings 730-749 parcel; therefore, groundwater characterization information for the parcel is not available. Information available for known groundwater contamination areas at NAS Brunswick was reviewed to determine if groundwater underlying the Buildings 730-749 parcel could potentially be impacted by another (off-parcel) source area.

4. SITE VISIT AND INVESTIGATION

A site visit was conducted by Mr. James Forrelli, P.E., Ms. Mindi Messmer and Mr. Brian Geringer of Tetra Tech on April 27, 2010. 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 Orion's Landing parcel was visually inspected for signs of hazardous waste generation or storage activity. Site visit observations, recorded on the attached Building Inspection Form ⁽¹⁾, are summarized below:

- At the time of the building inspection, the Orion's Landing buildings were predominantly unoccupied and 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, etc.) were observed and no structural modifications, which could conceal signs of a past release, were observed.
- No hazardous waste storage areas or hazardous waste accumulation areas were observed.

One transformer (Cooper Power Systems manufacture) was identified outside the mechanical room at each of the twenty buildings (transformer serial numbers are listed on the attached Building Inspection Form). The transformers are non-PCB containing, since they were manufactured after 1979. One additional transformer was identified on the western side of Pegasus Street adjacent to Building 736. No serial number was identified on the transformer, however, based on the construction date of the buildings, it is unlikely to be a PCB-containing transformer.

The areas of known groundwater contamination at NAS Brunswick were reviewed with respect to the location of the Buildings 730-749 parcel. Based on this review, as well as the review of available information on historical activities that occurred at the parcel, there is no evidence to suggest that groundwater underlying the Buildings 730-749 parcel has been adversely impacted by a release, either from within the parcel or from another (off-parcel) source area.

Based on the records research findings and site visit observations, it was determined that neither further inspection nor sampling of the Buildings 730-749 parcel is required to complete the MEDEP hazardous waste closure requirements.

5. HAZARDOUS WASTE GENERATION AND STORAGE

Based on the records research, site visit observations, and NAS Brunswick Environmental Department personnel interviews, with the exception of universal waste, no hazardous waste generation, hazardous waste accumulation, or hazardous waste storage was conducted at the Buildings 730-749 parcel.

6. OTHER ENVIRONMENTAL CONSIDERATIONS

No USTs or ASTs were observed at the Buildings 730-749 parcel, as described in Section 3. The buildings are heated by radiant floor heat supplied by natural gas from an off-base public utility.

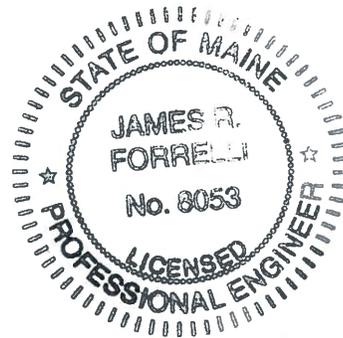
7. LIMITATIONS

This investigation of the hazardous waste closure requirement applies to the Buildings 730-749 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 Buildings 730-749 parcel, NAS Brunswick, Maine. Therefore, the hazardous waste closure of the Buildings 730-749 parcel was completed in accordance with the provisions of MEDEP Regulations Chapter 851, Standards for Generators of Hazardous Waste, Section 11.


James Forreli, 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

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

James W. Sewall Company, 1958. NAS Brunswick Aerial Photographs. James W. Sewall Company, Old Town, ME. October 9.

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

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

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

Mid-Coast Regional Redevelopment Authority, 2006. BNAS Reuse Master Plan Property Condition Assessment.

Northern Division, 2003. Design/Build – Replacement BEQ, 10 Unit Building 1st & 2nd Plans, Record Drawing: As-Built, No Changes. Naval Facilities Engineering Command. March 23.

Public Works Department (PWD), 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.

PWD, 1956. General Station Map, Enclosure 2. NAS Brunswick, Maine.

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

PWD, 1962. Map of Streets, US Naval Air Station, Brunswick, Maine.

PWD, 1975. General Development, Existing and Planned, Operations Area, US Naval Air Station, Brunswick, Maine.

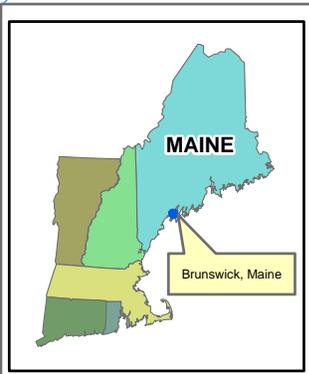
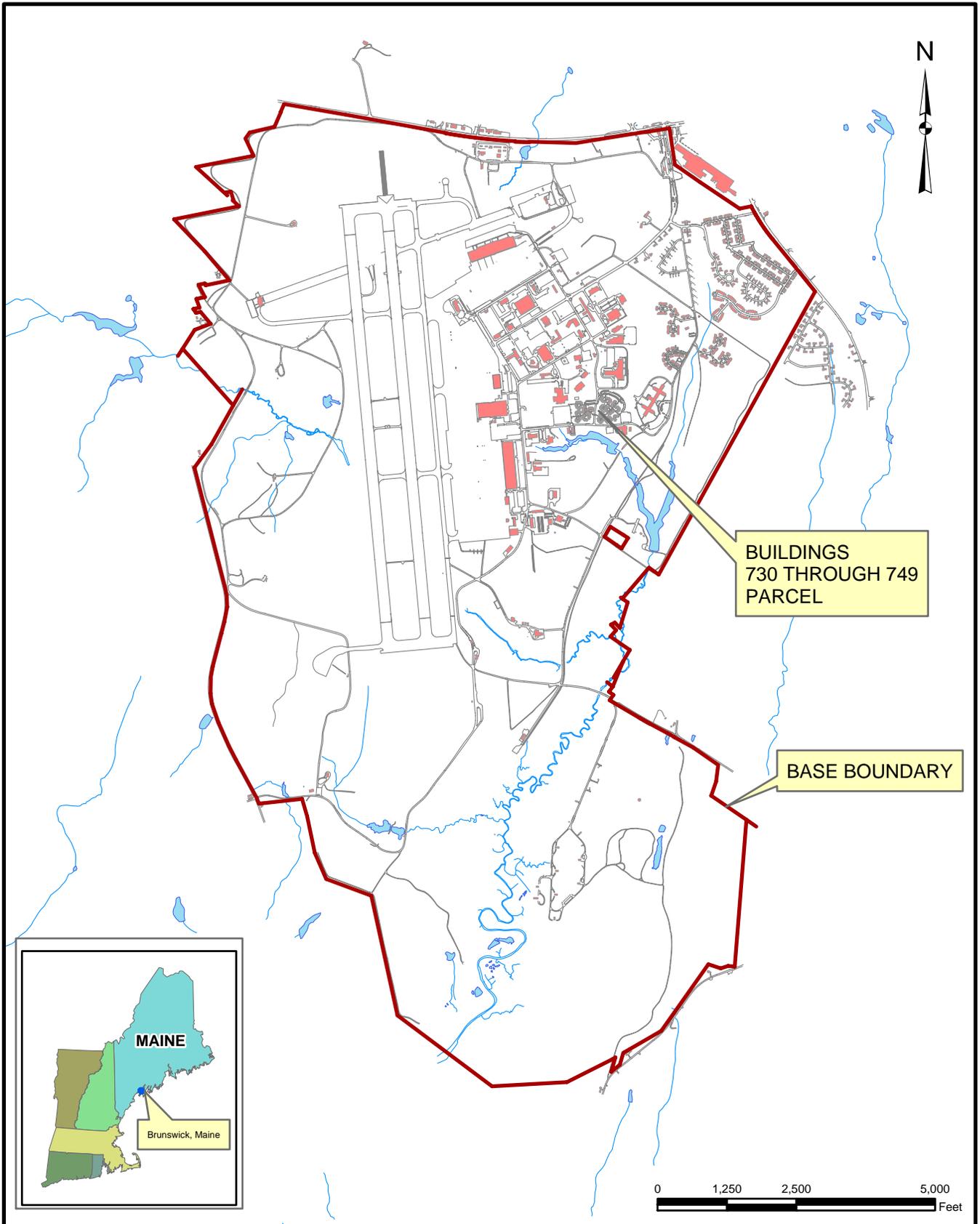
PWD, 1983. Existing Conditions Map. Public Works Department Drawing No. 2157, NAS Brunswick, Maine. May 5.

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

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

PWD, 2004. Brunswick Naval Air Station, NAS Brunswick, Maine.

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



SITE LOCATION MAP
 BUILDINGS 730 THROUGH 749 PARCEL
 RCRA PARTIAL CLOSURE REPORT
 NAVAL AIR STATION BRUNSWICK, MAINE

SCALE AS NOTED	
FILE I:\NUSB_BLDG_730-749_LOCUS.MXD	
REV 0	DATE 05/19/10
FIGURE NUMBER 1	



 PARCEL BOUNDARY



TETRA TECH NUS, INC.

SITE LOCATION MAP
 BUILDINGS 730 THROUGH 749 PARCEL
 RCRA PARTIAL CLOSURE REPORT
 NAVAL AIR STATION BRUNSWICK, MAINE

SCALE
 AS NOTED

FILE
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REV	DATE
0	05/19/10

FIGURE NUMBER
 FIGURE NO. 2

**BUILDING INSPECTION FORM
RCRA PARTIAL CLOSURE PROGRAM
NAS BRUNSWICK
BRUNSWICK, MAINE
CTO WE22**

Inspection Date: 4/27/2010

Personnel: James Forrelli, P.E. / Mindi Messmer / Brian Geringer

Weather: Rainy, 40's

GENERAL BUILDING INFORMATION / USES

Building Name: Buildings 730-749 - Bachelors Enlisted Quarters (Orion's Landing)
 Function: Bachelors enlisted barracks
 Size: 134,640 Total SF
 Year of Construction: 2002

Buildings 730-749 (Orion's Landing) are bordered to the south by Neptune Drive; to the north by Building 25, Building 87 and Beasley Circle; to the west by Building 211; and to the east by Building 750 and is bisected by Pegasus Street. The parcel contains 20 buildings, known as the Bachelors Enlisted Quarters, adjacent parking areas, recreation areas and grass lawn.

Buildings 730-749 were used as living quarters for enlisted personnel.

No hazardous waste was generated at Buildings 730-749 according to NASB personnel.

The apartments are heated with radiant floor heating. The radiant heating is generated by natural gas and each building has a mechanical room with 2 natural gas-fired boilers.

BUILDING INSPECTION / CONDITION

No record of hazardous waste stored at the Orion's Landing buildings.

The apartments toured at the time of the site visit were not occupied and appeared in good condition. Some of the apartments were occupied at the time of the site visit. The interiors of the apartments were furnished.

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.

A transformer was identified during the site visit located along Pegasus Street. Serial numbers could not be obtained from the transformer however it is unlikely that it is PCB containing since the Buildings were constructed in 2002. One transformer is associated with each apartment building and serial numbers indicate that the transformers are non-polychlorinated biphenyls (PCBs) contamination in the event of a leak were observed. The serial numbers are listed below:

<u>Cooper Transformer Serial</u>			
<u>Building #</u>	<u>Number</u>	<u>Building #</u>	<u>Cooper Transformer Serial Number</u>
730	0005066566	740	0005065300
731	0005065549	741	0005066567
732	0005066569	742	0005065302
733	0005065298	743	0005066565
734	0005065552	744	0005065296
735	0005065297	745	0005065305
736	unk- no sticker	746	0005065299
737	0005065801	747	0005065550
738	0005065549	748	0005065304
739	unk- no sticker	749	0005066568

HAZARDOUS WASTE STORED / GENERATED

No hazardous waste was stored or generated at the Orion's Landing buildings, according to NASB personnel.

POTENTIAL PCB-CONTAINING TRANSFORMERS

No potential PCB-containing transformers were identified during the site inspection or review of the NASB transformer database.

APPLICABLE REPORTS / DOCUMENTS

Available historical plans and aerial photos were reviewed for past property uses:

1946 plan - The Orion's Landing Buildings area appears undeveloped. Building 52 to the southwest and building labeled "Receiver AF" to the southeast is shown that may have two tanks associated with it. A building labeled "Operation AF" (approx current location of Building 87) is shown north of the Orion's Landing parcel.

1952 plan - same as 1946 plan except two possible tanks labeled T-207 and T-208 at Building 35 shown southeast (shown as "AF" in 1946).

1956 plan - same as 1952 plan except area labeled "Skeet Range" is shown directly south of the Orion's Landing Parcel. Building 211 and associated parking lot are shown directly west of the Orion's Landing parcel.

1957 plan - Neptune Drive and Building 293 (approx location of current Building 221) are shown west of the Orion's Landing parcel.

1958 aerial - Orion's Landing parcel area is undeveloped and wooded. Building 211 and associated parking are visible to the west along Neptune Drive and Building 293 is also visible to the southwest along Neptune Drive. Building 516 is visible to the southeast along with buildings associated with the "Receiver AF" area. The "Operations AF" building is visible to the northeast. A road cuts across the Orion's Landing parcel from the southeast corner near Building 516 and extends to the northwest to a building in the area of Building 25 shown on site area plans from this time period.

1962 plan - same as 1957 plan except Building 516 is shown to the southeast. Building 293 is labeled theatre. Several buildings are shown where "Operation AF" was shown in 1946 plan. Buildings 25, 21 and 24 are shown north of the Orion's Landing parcel.

1975 plan - same as 1962 plan except a softball field, tennis, volleyball and badminton courts are shown on the Building 730/740 Series parcel. Also a building labeled "Hospital" is shown to the north of the Orion's Landing 730/740 Series parcel. Buildings 21, 24 and 25 are not shown to the northwest any longer.

1978 aerial - same as 1958 aerial except a baseball field is visible in the approximate area of current Buildings 730 through 736 and 746.

1981 aerial - same as 1978 aerial except two baseball fields are visible covering most of the Orion's Landing parcel. A parking lot is visible directly to the east of the baseball fields.

1983 plan - same as 1962 plan except a street is shown in the approximate location of Pegasus Street. Unlabeled buildings are shown in the approx. current locations of Buildings 21, 25 and 24. Building 87, unlabeled, is shown north of Orion's Landing parcel.

1984 aerial - same as 1978 aerial except a building (likely Building 25 is visible directly north of the baseball

1989 plan - same as 1983 plan.

1989 aerial - same as 1984 aerial except Pegasus Street bisects the Orion's Landing parcel. A tennis court and another recreational area are visible north of the baseball fields.

1993 aerial - same as 1989 aerial except additional buildings are visible north of Building 25.

1997 aerial - same as 1993 aerial.

2004 plan - Buildings 730-749 are shown in current location. Building 26 is shown to the north. Another unlabeled building and parking area are shown directly west of Building 516.

2006 plan - same as 2004 plan.

No USTs or ASTs were observed at the Orion's Landing buildings.

HAZARDOUS WASTE STORAGE RECORDS

No hazardous waste was historically stored at Buildings 730-749, according to NAS Brunswick Hazardous

MISCELLANEOUS NOTES

Tetra Tech personnel were accompanied on the inspection by D. Bruce Smith, NAS Brunswick Hazardous

(SEE ATTACHED BUILDING FLOOR PLAN AND PHOTOGRAPHS)

INSPECTOR SIGNATURE:


Brian Geringer

PHOTOGRAPHS



No. 1 Buildings 730-749 – NAS Brunswick April 27, 2010
Bachelors Enlisted Quarters (Orion's Landing) Building 732, 731 and 730 (left to right)



No. 2 Buildings 730-749 – NAS Brunswick April 27, 2010
Bachelors Enlisted Quarters (Orion's Landing) Building 730 south elevation

PHOTOGRAPHS



No. 3 Buildings 730-749 – NAS Brunswick
Bachelors Enlisted Quarters (Orion's Landing) Building 747 west elevation

April 27, 2010



No. 4 Buildings 730-749 – NAS Brunswick
Bachelors Enlisted Quarters (Orion's Landing) Building 743 south elevation showing mechanical room and associated transformer in the foreground

April 27, 2010

PHOTOGRAPHS



No. 5 Buildings 730-749 – NAS Brunswick
Bachelors Enlisted Quarters (Orion's Landing) Building 743 interior kitchen area

April 27, 2010



No. 6 Buildings 730-749 – NAS Brunswick
Bachelors Enlisted Quarters (Orion's Landing) Building 730 interior showing second level sleeping quarters

April 27, 2010