

**PHASE I ENVIRONMENTAL SITE ASSESSMENT**

**POPLAR POINT SITE (SECTION ONE)**

**WASHINGTON, D.C.**

**PREPARED FOR THE**

**DISTRICT OF COLUMBIA**

**AND THE**

**NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION**

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**POPLAR POINT SITE (SECTION ONE)**  
**WASHINGTON, D.C.**

Prepared for the  
District of Columbia  
and the  
National Oceanic and Atmospheric Administration

Prepared by  
Ridolfi Engineers Inc.

January 31, 2003



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## EXECUTIVE SUMMARY

The findings of the Phase I Environmental Site Assessment for Section One of the Poplar Point Site bounded by Highway 295/Anacostia Freeway and Howard Road to the south, a frontage road to the west, Anacostia Drive to the north, and by the U.S. Park Police and the National Capitol Parks - East headquarters to the east, in the District of Columbia (D.C.) are summarized as follows:

### *Findings and Conclusions*

Historically, the Poplar Point Site (Site) was used as a plant/tree nursery and a Naval Receiving Station. Nursery operations were conducted by the Architect of the Capitol (AOC) on the eastern portion of the Site and by the District of Columbia on the western portion of the Site until 1993. Numerous structures including two sets of greenhouses (a northern and southern set), a garage building, office building, boiler room, chemical storage building, and pump house were noted during Ridolfi's observational walkover of the Site. All the buildings present on the Site are located in the AOC portion of the Site. There are no current operations at the Site.

Several environmental investigations have been conducted at the Site beginning in 1997 and continuing through 2002. Results of these investigations indicate the presence of recognized environmental conditions (REC) at the Site including: petroleum in ground water and soil associated with underground and above ground fuel storage tanks that were formerly on-site; petroleum in ground water and soil that may be associated with the adjacent Green Fuel Oil Inc.; and arsenic, pesticides and polycyclic aromatic hydrocarbons in surface soil. Other chemicals, not clearly attributed to a particular source, including vinyl chloride, have been detected in ground water or soil.

At the time of Ridolfi's observational walkovers May 6-9 and August 27-29, 2002, the majority of the Site consisted of thick vegetation (trees, bushes, shrubs, and grasses), several buildings/structures in the AOC area, and a large open field in the U.S. Naval Receiving Station (NRS) area. Scattered surface debris, consisting of paper, plastic, glass, household waste, 55-gallon drums, and gas cylinders was observed throughout the Site. The scattered surface debris did not appear to represent a REC in connection with the Site.

Ridolfi reviewed state and federal regulatory agency lists of sites of environmental concern. Other than Green Fuel Oil, as described above, and P & P Auto, an adjacent automobile repair/storage facility, the remaining sites identified in the specified search radii do not appear to represent RECs in connection with the Site.

### *Recommendations*

Additional soil, ground water, and wetland investigations, that began in July 2002 and include sediment sampling in the Anacostia River, scheduled for spring 2003, will provide additional information to further evaluate the nature and extent of environmental impacts at the Site. These data will also be used to evaluate risk to human and ecological receptors, and to plan remedial actions and habitat restoration efforts.

The summary presented above is general in nature and should not be considered apart from the entire text of the report with all the qualifications and considerations mentioned herein. Details of our findings and conclusions are included in this report.

### REPORT PREPARED BY:

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## 1.0 INTRODUCTION

Ridolfi Engineers Inc. (Ridolfi) performed a Phase I Environmental Site Assessment (ESA) for a portion of the Poplar Point Site, which is located in Washington D.C. This Phase I ESA was prepared for the District of Columbia (D.C.) Department of Health to partially fulfill an Interagency Cooperative Agreement between National Oceanic and Atmospheric Administration (NOAA) and D.C. This Phase I ESA is intended to be used solely and exclusively by NOAA and D.C. No other party may rely upon Ridolfi's opinions, conclusions or reports unless Ridolfi has agreed to such reliance in writing.

### 1.1 Purpose

The purpose of this Phase I ESA was to identify recognized environmental conditions (RECs) on the Site and to assess the significance of the identified REC(s) for future site development plans. A REC is defined by American Society for Testing and Materials (ASTM) Standard Practice 1527-00 as:

*...the presence or likely presence of any hazardous substance\* or petroleum products on a property under conditions that indicate an existing release, a past release, or a material threat of a release of any hazardous substance or petroleum products into structures on the property or into the ground, groundwater, or surface water of the property. The term includes hazardous substances or petroleum products even under conditions in compliance with laws. Recognized environmental conditions are not intended to include de minimis conditions that generally do not present a material risk of harm to public health or the environment and that generally would not be the subject of an enforcement action if brought to the attention of appropriate governmental agencies.*

\*For the purposes of this Phase I ESA, a hazardous substance is a substance as defined in the ASTM Standard E 1527-00.

### 1.2 Special Terms and Conditions

This Phase I ESA was conducted in general accordance with portions of the ASTM Standard on Environmental Site Assessments for Commercial Real Estate designation E 1527-00, "Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process" (ASTM 2000). This Phase I ESA was not performed to satisfy the requirements to qualify for the innocent landowner defense to Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) liability. This Phase I ESA does not address the non-scope considerations as defined by Section 12 of ASTM E 1527-00.

## 2.0 SITE DESCRIPTION

The following describes the Site and summarizes observed site uses and site conditions. RECs identified during the Site walkovers are also described.

### 2.1 Site Location

As defined in the Implementation Plan (Appendix A of the Interagency Agreement signed by D.C. Department of Health and the National Ocean Service on July 31, 2001), the Poplar Point study area is comprised of two sections (Figure 1). Section One covers an area where several

environmental site investigations have been conducted and encompasses properties used previously for nursery operations. Section Two contains properties that are owned by or are under the jurisdiction of D.C. Additionally, there is an area to the east of Section One that was formerly operated by the U.S. Navy as a Naval Receiving Station. The history of operations at the Naval Receiving Station was investigated by Dolph (2002), which is included as Appendix H. The area formerly operated by the Navy is not considered part of the Poplar Point site for this study.

### **Section One**

This section of the Poplar Point study area is located on the eastern bank of the Anacostia River at 1900 Anacostia Drive SE, Washington, D.C. The property is primarily bounded by Anacostia Drive to the north, by Howard Road, by southbound Interstate 295 to the south, and by South Capitol Street to the west. National Park Service property formerly operated by the U.S. Navy forms the eastern boundary. The tunnel for the METRO Green Line also runs through and beneath the eastern section of Poplar Point, and the Anacostia METRO Station is on the southeastern side of the property.

Section One can be further subdivided into three tracts:

- 1) The western nursery area known as the D.C. Lanham Tree Nursery;
- 2) A central portion, formerly operated by the Architect of the Capitol (AOC), that contains abandoned greenhouses, offices, and other buildings; and
- 3) An eastern portion now owned by the National Park Service that is undeveloped except for the underground METRO tunnel. The METRO tract was formerly operated by the U.S. Navy and is not evaluated for this report.

Although these areas have been under multiple jurisdictions and control, for ease, they will be referred to in this report as the Lanham tract, the greenhouse tract, and the NPS/METRO tract. This Phase I ESA report focuses on Section One, which is referred to as the "Site".

### **Section Two**

This is an irregularly shaped zone. The area is bounded on the north by the Park Service property and on the east by the 11<sup>th</sup> Street Bridge. The southern boundary runs along southbound I-295 and Firth Sterling Avenue to the limits of the cloverleaf interchanges for I-295 and Suitland Parkway. South Capitol Street and the Anacostia River form the western boundaries. Few environmental investigations have been conducted in this area. The area contains numerous private properties, some of which have been noted for posing potential hazardous substance issues (for instance, Green Oil, P&P Auto Body, and the Howard Street warehouse). A previously prepared Phase I ESA report focussed on properties, owned by the District of Columbia, within Section Two (Ridolfi 2002). The area referred to as the "Site" in this report is enclosed by a dashed line on Figure 2. Four wetlands (No. 1 through No. 4) are shown on Figure 2. The configuration of these wetland areas is based on a delineation performed in 1995 and may or may not represent current conditions (Geotechnical Services Inc. 1995).

## **2.2 Site and Vicinity Physical Characteristics**

According to the United States Geological Survey (USGS) Alexandria and Anacostia 7.5 Minute Series topographic maps, the Site is at an elevation between 5 and 15 feet above mean sea level. The Site is relatively flat, and the Anacostia River flows just north of the Site. The Anacostia

River, which is tidally influenced in the vicinity of the Poplar Point Site, flows toward the west, joining the Potomac River approximately 6,500 feet southwest of the Site.

### **2.3 Site Walkover**

On May 6 through May 9, 2002 Mr. Andrew T. Nicholls of Ridolfi conducted an observational walkover of the Site and recorded site conditions, features, and RECs observed. On August 27 through 29, Mr. Colin H. Wagoner of Ridolfi conducted a second and more specific observational walkover of the Site to record further site conditions, features, and RECs observed. Photographs taken during both walkovers, which illustrate observed site conditions and surrounding areas, are contained in Appendix A. Figure 2 maps the features of the Poplar Point Site described below.

#### ***D.C. Lanham Area***

Ten gas cylinders were observed staged near the southeastern corner of the D.C. Lanham area, adjacent to the main access road on the Site. Five of these cylinders were green, three were white or silver, and one was pink or lavender. Six empty 55-gallon drums were also observed adjacent to the access road, near the southwestern corner of the D.C. Lanham area. In addition, four drums containing purge water from wells were also found in the southwestern corner of this area, near a monitoring well.

Approximately 128 drums bound together in groups of 12 to 14 with steel bands forming a large "drum cluster" were observed just west of the North-South Road, in the southern portion of Wetland 1. All of the visible drums had holes cut in each end, approximately 8 inches in diameter. The accessible drums were noted to be empty, and the outer surfaces of all the drums were rusted. There were also some isolated drums, somewhat removed from the main cluster, but in the same general vicinity.

Other surface debris was also noted in the southern portion of Wetland 1, including a pile of tan-colored pipe (containing asbestos) and several debris piles. The pipes were scattered just north of the drum cluster. Materials in the debris piles included tires, scrap metal, carpeting, building materials, wire mesh, and other miscellaneous materials. A section of culvert approximately 5 feet long and 4 feet in diameter was also observed in this area resting on the ground surface. The culvert was filled with concrete rubble and soil when observed in August 2002.

A number of items were observed in the central portion of the D.C. Lanham area, east the North-South Road, in Wetland 1. These included 5 drums and other debris. One of the drums contained a few inches of dry sediment, and another drum had a hand pump attached at one end, and may have been about half full. The remaining drums were apparently empty.

In the center of the D.C. Lanham area, three drums apparently containing water purged during sampling activities, were found staged adjacent to a monitoring well.

In the northwestern section of the D.C. Lanham area, as well as the northwestern section of Wetland 1, indications of multiple dumping activities were observed. The topography of the area had many mounded areas, and surface debris was noted throughout these mounded areas. The mounds appeared to consist of soil and construction debris with associated metal, tires, carpet, etc. Two drums were observed in this area, as well as an area with stressed soil and charred materials, indicative of historical burning activities.



Evidence of dumping and several drums were observed in the northeastern corner of the D.C. Lanham area. Five empty drums were found near the fence running parallel to the North-South Road, and a channel running parallel to this fence was littered with trash including mufflers, tires, and a great number of soda cans and bottles. Five drums of water were also found near a pair of monitoring wells in this area.

### **AOC Area**

A few drums were found in the AOC area of the Site. Drums were found associated with drilling or sampling activities near MW-5 (adjacent to the southeastern corner of the northern greenhouses), the former underground storage tank (UST; near the garage building), and near MW-04 (located adjacent to the southwestern corner of the southern greenhouses).

### **NRS Area (Western Portion)**

The METRO Green Line runs under the western portion of the former NRS area. Site grading during construction of the tunnel created two topographically low areas that collect local runoff from adjacent vegetated areas. Wetland vegetation has become established in these areas, which are shown as Wetlands 2 and 3, on Figure 2. Generally the area is flat and is covered with grasses, shrubs and small trees. The only structure observed in the NRS area is a concrete pad with metal hatches. This structure is directly over the METRO line and presumably is used for maintenance access.

## **2.4 November 2002 Drum & Debris Removal**

Empty drums, purge water, culvert, and other miscellaneous debris identified in the site walkover were collected, placed in dumpsters, and hauled to appropriate off-site disposal facilities in November 2002. The material removal activities will be described in more detail in a Phase II report that will be prepared in the Spring of 2003.

## **2.5 Current and Past Uses of the Site**

Current operations at the Site were determined during the walkover, through discussions with Mr. Buchman, and by reviewing several reports describing previous site investigations. The Poplar Point Site is an area encompassing approximately 44 acres along the Anacostia River, just across from downtown Washington, D.C. Though the Site has undergone many changes in usage over several decades, it has primarily been associated with nursery activities.

The Site is currently unused except as an unsanctioned dumping area through holes in the perimeter fence. Past use as a plant nursery is evident in some areas, particularly on the AOC area of the Site, because of the presence of greenhouses. However, based on the unmanaged growth of vegetation inside the greenhouses, and the general state of disrepair observed in the buildings, roads and other facilities, it is apparent that the Site has not been actively used for some years.

Dredging operations to improve navigation in and around the Potomac River (including the Anacostia River) began in 1882 and were completed in 1900. Historical sources indicate that the Site was submerged beneath 3 to 5 feet of water prior to the emplacement of dredge spoils. Almost the entire Site was reclaimed from the Anacostia mud flats between 1912 and 1916. A historical report of the Chief of Engineers US Army indicates dredge spoils from the

Washington Navy Yard on the opposite bank of the river were emplaced on the Site through January 1917 (Environ 2002 and Dolph 2002).

Historical sources indicate that the Site was used as a plant nursery between 1927 and 1993. The Architect of the Capital operated the eastern 25-acre parcel and the D.C. Tree Nursery operated the western 19-acre parcel (Environ 2002). The nursery operations were alternatively called the Poplar Point Nursery or the U.S. Botanical Garden Greenhouses and Nursery. The Navy used the area to the east of the nurseries as a Naval Receiving Station (NRS) between the 1940s and the 1960s (Dolph 2001,). At the beginning of that period, the Navy constructed dozens of buildings to support their operations. Most of these buildings were demolished by the 1960s but a few of the easternmost structures were turned over to the Department of the Interior, and are currently used by the US Park Police and the National Park Service.

In the late 1980s the METRO Green Line tunnel was installed under the western portion of the NRS parcel. This was partially constructed using the "cut-and-cover" method, meaning that a deep trench was excavated, the tunnel was installed, and backfill was placed over the tunnel. The portion of the tunnel closest to the Anacostia River was constructed using traditional tunneling techniques (Ashe personal communication 2002). A concrete pad with a maintenance hatch for the tunnel is located approximately midway between the Anacostia Parking garage to the south of the Site and the Anacostia River.

## **2.6 Utilities and Drainage**

During the Site walkover, several non-working lampposts were observed throughout the D.C. Lanham and AOC areas. No overhead electrical lines were observed on the Site. There is one dysfunctional fire hydrant in the southwest corner of the D.C. Lanham area, and there is water distribution piping under some portion of the AOC area. A break in a water main during Summer 2001 flooded large areas of the Site, documenting the presence of water supply piping under the Site.

The METRO's Anacostia Station parking deck is located adjacent to the southern portion of the NRS area. The METRO Green Line tunnel runs from this parking deck diagonally beneath the NRS area, and continues underneath the Anacostia River.

In the early 1940s, surface water falling on the Site was directed into ditches that drained northward to the Anacostia River (Environ 2002). Beginning in the late 1940s, surface water drainage from the D.C. Lanham and AOC areas collected in storm drains and culverts and drained into a pumphouse where it was then pumped into the Stickfoot Sewer. The Stickfoot Sewer sits at a higher elevation than the rest of the Site and therefore could not be gravity fed. The sewer runs north along the eastern boundary of the AOC area and empties into the Anacostia River.

The Site has not been in operation since 1993; and the pump discharging surface water runoff via the Stickfoot Sewer from the Site has not operated since that time. Currently, surface water in the D.C. Lanham area accumulates in the low-lying areas in and in the vicinity of Wetland 1 (Figure 2). The boundaries of the wetland areas may change seasonally or over longer timeframes in response to flooding and drought conditions. Surface water from the AOC area drains into storm drains where it accumulates and either overflows to the ground surface, or infiltrates through the Site's soils.

Historical drawings for the NRS area show that runoff from buildings and grounds were collected and conveyed in a complex stormwater system. The point of discharge for the historical system is unclear from available records. The NRS buildings were demolished or transferred to the National Parks Service between 1959 and 1980 (Dolph 2001). The stormwater conveyance system was presumably abandoned or decommissioned in a piecemeal manner during the same timeframe. The NRS area is now an open field with no engineered storm water management. During the site visits, storm water was observed collecting in topographically low areas adjacent to the east side of the Stickfoot Sewer line.

## **2.7 Adjoining Properties**

Adjoining properties were observed from the Site boundaries for evidence of RECs. The Site walkover did not include accessing the adjoining properties. Ridolfi was unable to view portions of adjoining properties due to structural obstacles and other obstacles such as fences and vegetation.

Green Fuel Oil Inc. is adjacent to southwestern corner of the D.C. Lanham area of the Site. Five above ground storage tanks (ASTs) and several fuel trucks were observed on the Green Fuel Oil Inc. property. Staining was observed on one of the ASTs and on the ground surface beneath the AST. The ASTs, staining, and fuel trucks observed on the Green Fuel Oil Inc. indicate that the property is a REC in connection with the Site.

P & P Auto operates an automobile scrap yard and a trailer storage yard adjoining the southeastern corner of the D.C. Lanham area of the Site. Several scrap automobiles, automobile parts, and debris were observed on the automobile scrap yard property. Staining was observed on the ground surface near some of the debris in the scrap yard property. The staining and scrap automobiles represent a REC in connection with the Site.

The Site is also adjoined by apartment buildings and/or similar multiple family housing units to the south of the D.C. Lanham area. These housing units are private property and were not accessed during the site walkover. The D.C. Metro Anacostia Station Parking Deck is located to the south of the NRS area. A cursory visit to this facility did not indicate obvious RECs.

The U.S. Park Police Headquarters and the National Capital Parks – East Headquarters adjoin the Site to the east. This area is not a public access area, therefore Ridolfi did not perform a walkover of this property.

The Site is bounded on the west by public highways that do not appear to be RECs in connection with the Site.

## **2.8 Recognized Environmental Conditions Observed**

During the site walkover, Ridolfi looked for indications of RECs. Identified RECs are described in the following sections.

### **2.8.1 Hazardous Substance Containers and Unidentified Substance Containers**

At the time of Ridolfi's observational walkover, no hazardous substance containers or unidentified substance containers were observed on the Site. Unlabeled drums were present at several locations as described in Section 2.3. However, these drums were either empty or

contained water purged when monitoring wells were sampled. Based on historical data, this water is considered non-hazardous (Brown 1999).

### **2.8.2 Storage Tanks (USTs / ASTs)**

According to previous environmental investigations at the Site, five above-ground storage tanks (ASTs) and one underground storage tank (UST) were reportedly removed from the AOC and D.C. Lanham areas of the Site (Figure 2). A former 275-gallon diesel AST was reportedly removed from southeast of the former fuel pad in the D.C. Lanham area. Ridolfi did not observe remaining evidence of this AST. The other four ASTs were located in the AOC area of the Site. Two of these were in the vicinity of the southern greenhouses. A former 10,000-gallon fuel oil AST was reportedly removed from the southern side of the boiler room, and a former 300-gallon vaulted AST was reportedly removed from the southeastern corner of the eastern-most southern greenhouses. Ridolfi observed the concrete platform on top of which the 300-gallon AST had been located, and noted a cable where the former 10,000-gallon AST had been located. A former 275-gallon AST was reportedly removed from the northern end of the western-most northern greenhouse. Ridolfi did not observe remaining evidence of this AST. A former 275-gallon kerosene AST was reportedly removed from the southern end of the garage building. Ridolfi did not observe remaining evidence of this AST. A former 1,000-gallon gasoline UST was reportedly removed from the southeast corner of the garage building. Ridolfi did not observe remaining evidence of this UST. These former ASTs and UST represent RECs in connection with the Site due to the release or potential for release of petroleum products from these tanks.

### **2.8.3 PCB and Mercury Containing Equipment**

Fluorescent lights were reportedly observed during a site characterization in 1997 by Thomas L. Brown Associates, P.C. (Brown) in the buildings of the former office areas of the AOC area. Fluorescent light ballasts manufactured prior to 1979 may contain small quantities of polychlorinated biphenyls (PCBs). The buildings were built in 1927 and 1967; therefore the light ballasts may be a potential source of PCBs, and represent a REC in connection with the Site (Volkert 1995). Fluorescent lights may also contain small amounts of mercury within the glass tube. Used light bulbs should be disposed of in accordance with applicable regulations.

Three pole-mounted transformers were observed on the Site in the central AOC area. Information concerning the PCB content of these transformers was not available from PEPCO Utilities, owner of the transformers. These transformers represent a REC in connection with the Site at this time, due to their potential to contain PCBs (Volkert 1995).

### **2.8.4 Waste Generation, Treatment, Storage, and Disposal**

During Ridolfi's Site walkover, waste generation, treatment, storage and disposal was not observed on the Site, with the exception of drums mentioned in Section 2.3, and scattered debris consisting of plastic, glass, paper, household waste, and other litter. The drums and scattered debris do not represent a REC in connection with the Site.

### **2.8.5 Known or Suspected Asbestos Containing Materials (ACMs)**

Previous investigations at the Site indicate the presence of asbestos containing materials (ACMs). Several suspect ACMs were identified in the roofing materials, piping insulation, tank insulation, floor tile, and indoor ceiling plaster of buildings in the AOC area during an investigation by Brown in 1997. In addition, Ridolfi observed approximately 30 pieces of

cylindrical ACM near the southeastern boundary of Wetland 1. Each piece was cylindrical and approximately 4 inches in diameter and 1-3 feet in length. These ACMs were removed from the Site in November 2002, and disposed of at an appropriate disposal facility. The ACMs identified in the buildings of the AOC area remain on the Site.

### **2.8.6 Other Site Features**

Previous reports indicated that laboratory kits containing ferrous oxide and potassium nitrate, had been found in the chemical storage buildings. These kits were reportedly removed from the Site during 1997 (Environ 2002).

## **3.0 HISTORICAL REVIEW**

Ridolfi conducted a review of the history of use of the Site at intervals from the present, back to the first obvious developed use of the Site, or back to 1940, whichever was earlier. Data failures encountered, as defined by ASTM, are described under each appropriate standard historical source. ASTM requires review of only as many of the standard historical sources as are necessary and both reasonably ascertainable, and likely to be useful. Listed below is a description of ASTM standard historical sources. Observations made from these data sources are summarized in Table 1.

### **3.1 Aerial Photographs**

Aerial photographs are taken from an aerial platform at altitudes that allow identification of development and activities. Review of aerial photography is often useful in identifying features including building location and size, land usage, and potential RECs such as exposed soils, mounding, debris deposition, etc. It should be noted, the quality and scale of the aerial photographs limited Ridolfi's ability to make detailed observations and conclusions concerning historical uses of the Site and adjoining properties.

Ridolfi reviewed aerial photographs of the Site and surrounding area, dated 1957, 1970, 1980, and 1988, which were obtained from Environmental Data Resources, Inc. (EDR). The aerial photographs obtained from EDR are contained in Appendix B. Ridolfi also reviewed aerial photographs dated 1918, 1942-43, 1947, 1949, 1955, 1957, 1959, 1963, 1973, 1978, 1985, 1990, 1994, and 2000, which were obtained from NOAA. Some of the aerial photographs obtained from NOAA are contained in Appendix C. Both sets of the aerial photographs are described in Table 2. The 1918 aerial photograph was of poor quality, and no detailed observation of the Site could be made. The 2000 aerial photograph depicting the Site and surrounding areas was used as a base map for Figure 2, the Site Plan.

### **3.2 Fire Insurance Maps**

Fire insurance maps are produced by private companies and indicate uses of properties at specified dates. Fire insurance maps were created to document fire prevention hazards for urban areas. Sanborn Fire Insurance Maps typically indicate type of building materials and property usage. Often, the maps also include UST, AST, and flammable material storage locations.

Ridolfi reviewed Sanborn Maps of the Properties and surrounding areas, dated 1927, 1960, 1985, 1989, 1990, 1992, and 1995, which were obtained from EDR. Coverage of the Sanborn

Maps was limited to the very southern portions of the D.C. Lanham, the AOC, and the NRS areas. The Sanborn Maps are described in Table 1. A copy of EDR's Sanborn Map Report is contained in Appendix D.

### **3.3 Local Street Directories**

Local street directories are published by public and private sources and show occupancy and/or use of properties by reference to street address. Due to the lack of specific street address information, street directory information was not available for the Site.

### **3.4 Building Department Records**

Building Department records are maintained by the local government. These records indicate permission of the local government to construct, alter, or demolish improvements on a specified property. Frequently, information regarding the dates of installation and/or removal of USTs, municipal sewer, and water connections, and natural gas or electrical service installation is contained in these records.

Ridolfi did not review building department records for the Site because information regarding the history of the Site was obtained from other historical sources.

### **3.5 Property Tax Files**

Property tax files are maintained for property tax purposes by the local jurisdiction and may include records of past ownership, appraisals, maps, sketches, photographs, or other information pertaining to a property. Ridolfi did not review property tax records for the Site because the Site is government-owned land, and is therefore not included in property tax records.

### **3.6 Zoning / Land Use Records**

Zoning ordinances, enacted by the local government, indicate the uses permitted by the local government in particular zones within the limits of its jurisdiction. Zoning/land use records are maintained by various local government offices such as the Planning Department or Commission. Ridolfi reviewed a Land Zoning Map prepared by the District of Columbia Office of Zoning, dated September 2002. The D.C. Zoning Map is described in Table 1.

### **3.7 Land Title Records**

Land title records include records of fee ownership, leases, land contracts, easements, liens, and other encumbrances on or of the Site, recorded in the place where land title records are, by law or custom, and recorded for the local jurisdiction in which a property is located. Typically, these records are maintained by the municipal or county recorder or clerk. Information about the title to a property that is recorded in any place other than where land title records are, by law or custom, and recorded for the local jurisdiction in which a property is located, are not considered part of the recorded land title record.

Ridolfi did not review land title records for the Site, because information regarding the history of the Site was obtained from other historical sources, and because typically land title records provide information regarding ownership but not use.

### 3.8 Previous Investigations

Ridolfi reviewed previous environmental investigations of the Site to obtain additional information on the history of both activities and contamination on the Site. The following is a brief summary of the investigations Ridolfi review.

#### ***Department of Transportation Investigations – 1981***

In 1981, the D.C. Department of Transportation completed an Environmental Impact Statement (EIS) for construction of the Anacostia segment of the Green Line of the Washington METRO. Geological data collected in connection with construction was used in characterizing stratigraphy and potential ground water flow characteristics. The EIS primarily focused on the impact of the proposed rail line, and did not include an extensive evaluation of locations that warranted environmental investigation (as cited in Environ 2002).

#### ***Wetlands Delineation – 1995***

Wetland areas were delineated at the Site in August 1995 by Geotechnical Services, Inc. (GSI 1995). Four wetland areas, as indicated approximately on Figure 2, were delineated.

#### ***Phase I Environmental Site Assessment – 1995***

In December 1995, Volkert Environmental Group, Inc. completed a Phase I ESA of the Site (Volkert 1995). The ESA revealed the presence of a gasoline UST, a fuel oil AST, a relatively large number of 55-gallon drums, possible ACMs, possible PCBs, hazardous materials or chemicals, and/or historical activities which might have impacted the Site.

Additional investigations were recommended near the discarded 55-gallon drums, fuel oil AST, gasoline UST, and possible ACMs in the boiler house, offices, and greenhouses.

#### ***Emergency Response Activities – 1997***

In March 1997, several federal and local agencies initiated emergency response activities at the Site due to the presence of drums, compressed cylinders, and other evidence of potential contamination. Further inspections warranted the D.C. Fire Department to de-escalated the Site to a non-emergency status. According to the NPS, the District of Columbia received a Notice of Violation from EPA, and the National Parks Service was designated as the On Scene Coordinator (Hewitt 2002). D.C. was established as the primary authority at the Site, having been authorized by the United States Environmental Protection Agency (USEPA) to implement the Resource Conservation and Recovery Act (RCRA) and the Clean Water Act (CWA) (Environ 2002). The Department of Health/Environmental Health Administration (DOH/EHA) was the designated as the lead agency. The emergency response activities motivated numerous response activities as described below.

Brown completed the following activities in 1997 (Brown 1997b, 1997c, and 1999):

- Staged eleven gas cylinders for removal from the Site, and properly disposed of laboratory kits containing ferrous oxide and potassium nitrate.
- Installed and collected samples from soil borings/monitoring wells,
- Inventoried drums located throughout the Site, and coordinated sampling of selected drums.

- Collected a small number of sediment, surface water, and ground water samples from the wetlands.
- Excavated ten test pits to characterize subsurface conditions.
- Collected soil samples from beneath the 1,000-gallon UST and from the stained soil excavated from the southeast end of the garage building.

Brown completed the following activities in 1999 (Brown 1999):

- Installed additional monitoring wells, and collected of an additional round of ground water samples
- Monitored the tidal influence on the ground water.

The results of the sampling activities are as follows:

### **Soils**

- Elevated concentrations of pesticides were detected in the surface soil samples collected from the D.C. Lanham section of the Site. PCBs were detected in surface soils at elevated concentrations near the garage in the AOC area of the Site.
- Elevated concentrations of arsenic and beryllium were detected in several surface soils samples throughout the AOC and D.C. Lanham areas of the Site, including the wetland areas.
- Elevated concentrations of pesticides were detected in surface soil samples from Wetland 1.
- Elevated concentrations of diesel range organics (DRO) were detected in soil samples collected in the D.C. Lanham and AOC sections of the Site.
- Several SVOCs were detected at elevated concentrations in samples collected throughout the D.C. Lanham and AOC areas of the Site, including the wetland areas.
- Analytical results indicated that the soil beneath the UST had been contaminated with gasoline, and the pile of stained soil excavated from the southeast end of the garage building contained elevated concentrations of DRO and total petroleum hydrocarbons (TPH).

### **Ground Water**

- Benzene and naphthalene were detected at elevated concentrations in monitoring wells installed near the leaking UST. Gasoline range organic (GRO) compounds and DRO compounds were also detected in monitoring wells near the leaking UST. Methyl tertiary-butyl ether (MTBE) was detected at an elevated concentration in a monitoring well in the AOC section of the Site.
- Elevated concentrations of arsenic, beryllium, cadmium, and lead were detected in several monitoring wells.



### **Wetlands/Surface Water**

- Several SVOCs were detected in nearly all the soil/sediment samples collected from the wetland areas, however benzo(a)pyrene was the only SVOC with concentrations exceeding one or more soil screening levels.

### ***Asbestos Survey -1997***

Brown completed an asbestos survey of the Site in 1997 (Brown 1997a). The study analyzed 114 samples collected from floor tiles, roofing, ceiling tiles, pipe insulation, and other potential ACMs. Materials containing asbestos were observed in floor tiles, mastic, transite board, mudded fitting insulation, and miscellaneous insulation. These materials were located in the boiler room, the southern and northern greenhouses, and the northern office building, adjacent to the northern greenhouses.

### ***Soil/Planting Medium and Sediment Investigations - 1998***

In August 1998, Ecology and Environment, Inc. was retained by the National Park Service to collect soil/planting medium and sediment samples at the Site (E&E 1999). The following samples were collected during the investigation:

- Soil/planting medium samples were collected from eight of fourteen greenhouses.
- Three samples were collected at the K-9 training area (off site, and north of the AOC area).
- One sediment sample was collected from the southeast drain sump.
- Three soil samples were collected from unidentified test pit locations.

Analytical results indicated the presence of arsenic in the soil samples and in the sump sediment sample. The arsenic concentrations exceeded one or more soil screening levels, but were determined to be within normal limits for soil. Chlordane was detected at concentrations that exceeded one or more screening levels in six greenhouse soil samples. None of the samples collected outside the greenhouses appeared to show significant contamination with pesticides.

### ***Site Investigation Activities - 1999***

In 1999, ENVIRON was retained by the AOC to conduct environmental investigation activities and prepare a comprehensive report regarding soil, sediment, ground water, and surface water conditions at the Site (Environ 2002). The following tasks/activities were included in the investigation:

- Collection of soil samples for pesticides analysis in greenhouses, former planting areas, wetlands, and former drum areas;
- Collection of soil samples for dioxin analysis at the location of a reported former burn pit;
- Collection of soil samples from an off-site area north of Anacostia Drive for carcinogenic polynuclear aromatic hydrocarbons (PAHs) and arsenic analyses to evaluate anthropogenic impacts;

- Collection of sediment samples for pesticides analyses from two storm drains in the vicinity of the southern greenhouses; and
- Resampling of ground water from seven monitoring wells, where several metals were reported by Brown as present at elevated concentrations.

Environ prepared a site-specific risk assessment for the Site, and determined that arsenic in surface soil was the only constituent exceeding risk-based screening levels (RBSLs) at the Site. Environ concluded that elevated arsenic levels were a result of fill material dredged from the Anacostia River and placed on the Site by the U.S. Army Corps of Engineers in the early 1900s.

### ***Site Inspection – 2001***

Resource Applications, Inc. (RAI) completed a site inspection in July and August 2001 on behalf of the USEPA (RAI 2001). The objective of this investigation was to determine the level of contamination in the various media sampled, and to complete a hazard ranking system preliminary ranking evaluation score.

Based on the information gathered during the site inspection, the following conclusions were reached by RAI:

- Significant arsenic levels do not appear to be widespread in surface or deeper soils, however surface erosion may be concentrating arsenic in the wetland sediments, as evidenced by arsenic detections in all sediment and surface water samples.
- All of the surface sediment, deep sediment, and several soil samples contained pesticides above one or more screening levels.
- SVOCs, primarily benzo(a)pyrene, were detected in soil samples above at least one screening level.
- Chloroform was detected above at least one screening level in all surface water samples, except from the greenhouse office area sump sample.
- GRO was detected in several surface water, surface sediment, and deep sediment samples.
- DRO was detected in three soil samples.

### **3.9 Other Historical Sources**

The term “other historical sources” refers to any source or sources other than standard historical sources that are credible to a reasonable person, and that identify past uses of the property. This category includes miscellaneous maps, newspaper archives, and records or personal knowledge of the Site owner or occupants.

Ridolfi reviewed USGS Alexandria Quadrangle Topographic Maps dated 1956, 1965, 1971 (photorevised from 1965), 1972 (photorevised from 1965), 1979 (photorevised from 1965), 1983 (photorevised from 1965), and 1994; and USGS Anacostia Quadrangle Topographic Maps dated 1951, 1956, 1965, 1971 (photorevised from 1965), and 1979 (photorevised from 1965). The findings of Ridolfi’s review of the topographic maps are summarized in Table 1. Copies of the topographic maps are contained in Appendix G.

### **3.10 Historical Usage Summary**

The following table presents a summary of historical usage of the Site based on the information collected from the sources outlined above.

Intervals of 5 years or greater in reasonably ascertainable Standard Historical Sources were identified during our historical records review for the following periods: 1927 to 1942, 1965 to 1970, 1973 to 1978, and 1995 to 2000. Although intervals of 5 years or greater were identified, there is no indication that the use of the Site changed during these intervals.

**Table 1. Historical usage summary.**

Year	Use / Comment	Source
1927	<p><b>D.C. Lanham:</b> No structures are present in the southern portion of this area.</p> <p><b>AOC:</b> A single rectangular building is present in the southern section of the AOC area. There are no structures in the southern section.</p> <p><b>NRS:</b> No structures are present in the southern portion of this area.</p>	Sanborn Map
1942-43	<p><b>D.C. Lanham:</b> Two long, narrow buildings and one square building are present in the southeastern corner of the D.C. Lanham area.</p> <p><b>AOC:</b> Three buildings similar in shape, orientation, and location to the boiler room and southern greenhouses are present in the southern section of the AOC area.</p> <p><b>NRS:</b> Several buildings/structures are present throughout the NRS area.</p>	Aerial Photograph
1947	<p><b>D.C. Lanham:</b> A rectangular building and a square building are present in the southeastern corner of the D.C. Lanham area.</p> <p><b>AOC:</b> Previously observed buildings are still present, and an additional building similar in shape, location, and orientation to a chemical storage building is present in the southern section of the AOC area.</p> <p><b>NRS:</b> No change relative to prior aerial photograph.</p> <p>(Note: This aerial photograph did not have complete coverage for the D.C. Lanham area of the Site)</p>	Aerial Photograph
1949	<p><b>D.C. Lanham:</b> A rectangular building is present in the southeastern corner of the D.C. Lanham area. Three rectangular shaped buildings are present in the central-western portion of the D.C. Lanham area (looks like a staging area for construction of a bridge across river).</p> <p><b>AOC:</b> No change relative to prior aerial photograph.</p> <p><b>NRS:</b> No change relative to prior aerial photograph.</p>	Aerial Photograph
1951	<p><b>D.C. Lanham:</b> No structures exist on the map.</p> <p><b>AOC:</b> No structures exist on the map.</p> <p><b>NRS:</b> The NRS area is labeled as the "U.S. Naval Res. Receiving Station." Several buildings/structures are present throughout the NRS area.</p>	Topographic Map
1955	<p><b>D.C. Lanham:</b> Two rectangular buildings are present in the southeastern corner of the D.C. Lanham area.</p> <p><b>AOC:</b> No change relative to prior aerial photograph.</p> <p><b>NRS:</b> No change relative to prior aerial photograph.</p>	Aerial Photograph
1956	<p><b>D.C. Lanham:</b> The D.C. Lanham area is labeled as a nursery, and a rectangular building is present in the southeastern corner.</p> <p><b>AOC:</b> The AOC area is labeled as a nursery, and four buildings are present in the southern section of this area. These buildings are similar in shape, orientation, and location to the boiler room, southern greenhouses, and chemical storage building.</p> <p><b>NRS:</b> No change relative to the prior topographic map.</p>	Topographic Map

Table 1. Historical usage summary. (continued)

Year	Use / Comment	Source
1957	<p><b>D.C. Lanham:</b> The D.C. Lanham area has no structures except for rectangular buildings in the southeastern and southwestern corners of the area.</p> <p><b>AOC:</b> No change relative to prior aerial photograph.</p> <p><b>NRS:</b> Several buildings/structures are present throughout the NRS area. There are also parking areas in the northern, central, and southern sections of the NRS area.</p>	Aerial Photograph
1959	<p><b>D.C. Lanham:</b> No change relative to prior aerial photograph.</p> <p><b>AOC:</b> No change relative to prior aerial photograph.</p> <p><b>NRS:</b> Several buildings/structures are present throughout the NRS area. There are also parking areas in the central and southern sections of the NRS area.</p>	Aerial Photograph
1960	<p><b>D.C. Lanham:</b> The D.C. Lanham area of the Site is labeled as the Poplar Point Nursery, D.C. Government. Two rectangular buildings and one square building are present in the southern section of the D.C. Lanham area.</p> <p><b>AOC:</b> A rectangular building labeled as a heater is present in the southern section of the AOC area, and three larger buildings labeled as greenhouses are located to the east and west of the heater building. These buildings are similar in shape, orientation, and location to the boiler room and the southern greenhouses.</p> <p><b>NRS:</b> No structures are present in the southern portion of this area.</p>	Sanborn Map
1963	<p><b>D.C. Lanham:</b> There are several new rectangular structures near the Green Fuel Oil property and a number of rectangular objects further east that may be trailers.</p> <p><b>AOC:</b> Several buildings similar in shape, orientation, and location to the garage building, northern greenhouses, office building, southern greenhouses, boiler room, and chemical storage buildings are present in the AOC area.</p> <p><b>NRS:</b> There are no structures in the northern portion of the area. A large parking or storage area is located in the central portion of this area, and two buildings are present in the southern portion of the NRS area.</p>	Aerial Photograph
1965	<p><b>D.C. Lanham:</b> The D.C. Lanham area is no longer labeled as a nursery, with a single, small rectangular building in the southeastern corner of the area.</p> <p><b>AOC:</b> The AOC area is labeled as a nursery, and buildings similar in shape, orientation, and location to the garage building, northern greenhouses, office building, southern greenhouses, boiler room, and a chemical storage building are present in this area.</p> <p><b>NRS:</b> The NRS area is still labeled as the "U.S. Naval Res. Receiving Station." There is a single rectangular building in the southern portion of this area.</p>	Topographic Map
1970	<p><b>D.C. Lanham:</b> The D.C. Lanham area has three rectangular buildings present in the southeastern corner of the area.</p> <p><b>AOC:</b> No change relative to prior aerial photograph.</p> <p><b>NRS:</b> No change relative to prior aerial photograph.</p>	Aerial Photograph

Table 1. Historical usage summary. (continued)

Year	Use / Comment	Source
1971	<b>D.C. Lanham:</b> No change relative to the prior topographic map. <b>AOC:</b> No change relative to the prior topographic map. <b>NRS:</b> No change relative to the prior topographic map.	Topographic Map
1972	<b>D.C. Lanham:</b> No change relative to the prior topographic map. (Note: Coverage was limited to the D.C. Lanham area.)	Topographic Map
1973	<b>D.C. Lanham:</b> Three rectangular buildings and a parking area are present in the southern section of the D.C. Lanham area. An open circular area similar in shape, orientation, and location to the former burn pit area is visible in the northeastern corner of the D.C. Lanham area. <b>AOC:</b> No change relative to the prior aerial photograph. <b>NRS:</b> The northern section of the NRS area has no structures, and the middle section of this area appears to be a storage/parking area. The southern section of the NRS area is occupied by two parking areas and a rectangular building.	Aerial Photograph
1978	<b>D.C. Lanham:</b> Three rectangular buildings and a parking area are present in the southern section of the D.C. Lanham area. Two rectangular buildings area also present in the southeastern corner of this area. <b>AOC:</b> No change relative to the prior aerial photograph. <b>NRS:</b> The northern section of the NRS area has no structures, and the middle section of this area appears to be a parking area. Two large rectangular buildings are present just south of the parking area, and a small square building and a rectangular building occupy the southern section of the NRS area.	Aerial Photograph
1979	<b>D.C. Lanham:</b> No change relative to the prior topographic map. <b>AOC:</b> No change relative to the 1971 topographic map. <b>NRS:</b> No change relative to the 1971 topographic map.	Topographic Map
1980	<b>D.C. Lanham:</b> The D.C. Lanham area has no buildings or structures. <b>AOC:</b> No change relative to the prior aerial photograph. <b>NRS:</b> The NRS has a small square building/structure and a rectangular building in the southern section of the area.	Aerial Photograph
1983	<b>D.C. Lanham:</b> No change relative to the prior topographic map. (Note: Coverage was limited to the D.C. Lanham area only.)	Topographic Map
1985	<b>D.C. Lanham:</b> The southern section of the D.C. Lanham area is now labeled as "(P.P.N) Lanham Nursery, D.C. Government, 600 Howard Road S.E." <b>AOC:</b> No change relative to the prior Sanborn map. <b>NRS:</b> No change relative to the prior Sanborn map.	Sanborn Map
	<b>D.C. Lanham:</b> A parking/working area is present in the southern section of the D.C. Lanham area. <b>AOC:</b> No change relative to the prior aerial photograph. <b>NRS:</b> Three small buildings are present in the northeastern corner of the NRS area. A parking area is present in the central portion of this area, and a rectangular building is present in the southern section of the NRS area.	Aerial Photograph

Table 1. Historical usage summary. (continued)

Year	Use / Comment	Source
1988	<b>D.C. Lanham:</b> A large grid-like area similar in shape, orientation, and location to the area north of the former fuel pad is present in the southern-central D.C. Lanham area. A rectangular building is adjacent to the southern border of the gridded area. <b>AOC:</b> No change relative to the prior aerial photograph. <b>NRS:</b> The NRS has no structures and contains very little bushy/tree vegetation.	Aerial Photograph
1989	<b>D.C. Lanham:</b> No change relative to the prior Sanborn map. <b>AOC:</b> No change relative to the prior Sanborn map. <b>NRS:</b> No change relative to the prior Sanborn map.	Sanborn Map
1990	<b>D.C. Lanham:</b> No change relative to the prior Sanborn map. <b>AOC:</b> No change relative to the prior Sanborn map. <b>NRS:</b> No change relative to the prior Sanborn map.	Sanborn Map
	<b>D.C. Lanham:</b> A large grid-like area similar in shape, orientation, and location to the area north of the former fuel pad is present in the southern-central D.C. Lanham area. The rectangular building described in 1988 is no longer visible. <b>AOC:</b> No change relative to the prior aerial photograph. <b>NRS:</b> The western portion of the NRS area appears to have undergone recent excavation associated with the METRO Green Line. The associated Anacostia Station parking structure located to the south is substantially, but not entirely complete.	Aerial Photograph
1992	<b>D.C. Lanham:</b> No change relative to the prior Sanborn map. <b>AOC:</b> No change relative to the prior Sanborn map. <b>NRS:</b> No change relative to the prior Sanborn map.	Sanborn Map
1994	<b>D.C. Lanham:</b> No change relative to the 1983 topographic map. (Note: Coverage was limited to the D.C. Lanham area only.)	Topographic Map
1994	<b>D.C. Lanham:</b> No change relative to the prior aerial photograph. <b>AOC:</b> No change relative to the prior aerial photograph. <b>NRS:</b> The NRS appears to have standing water over the western portion in the area identified as Wetland 2 on Figure 2.	Aerial Photograph
1995	<b>D.C. Lanham:</b> No change relative to the prior Sanborn map. <b>AOC:</b> No change relative to the prior Sanborn map. <b>NRS:</b> No change relative to the prior Sanborn map.	Sanborn Map
2000	<b>D.C. Lanham:</b> No change relative to the prior aerial photograph. <b>AOC:</b> No change relative to the prior aerial photograph. <b>NRS:</b> No change relative to the prior aerial photograph.	Aerial Photograph
2002	The Site is labeled as government owned. The area adjacent to the south of the Site is zoned as a high density mixed residential-commercial area, and the remaining adjacent areas are all labeled as government owned.	Zoning Map

## 4.0 INTERVIEWS

Ridolfi did not interview people because interviews were available from previous reports, and no activities have occurred at the Site since the time of these interviews. Ms. Carla Pastore, the former Production Facility Manager of the Federal Botanical Gardens Nursery (AOC) and Mr. Lee Murphy, the former Maintenance Foreman of the Federal Botanical Gardens Nursery (AOC) from the Volkert Phase I ESA (1995), and are reproduced below.

### *Ms. Carla Pastore*

Ms. Pastore stated that she worked at the facility for three years prior to its being relocated in May, 1993. She stated that the eastern portion of the Site was used as a nursery for the Federal Botanical Gardens Nursery, and that primarily tropical and subtropical plants were grown. She stated that all chemical containers were triple rinsed with water prior to being disposed of in a waste receptacle on-site. Ms. Pastore was not aware of an UST on-site nor did she know the age of the fuel oil AST. Ms. Pastore did say that the oldest buildings on-site were built in 1967. Ms. Pastore did not have any information concerning the use of the western portion of the site.

### *Mr. Lee Murphy*

Mr. Murphy stated he worked at the Botanical Gardens Nursery for approximately 20 years prior to its being moved in May, 1993. Mr. Murphy stated that to the best of his knowledge, an asbestos survey had never been performed on the buildings at the nursery. He also stated that water wells were not present at the Site. The pump house that was seen at the Site was used to pump out flood waters. When asked about the possibility of a diesel UST on-site, Mr. Murphy stated that there was not a diesel UST on-site, but that there was a 1,000 to 2,000-gallon inactive gasoline UST at the Site. He stated that the diesel pump had been used for gasoline, but had then been changed over to diesel in 1990. The diesel pump was supplied by a 250-gallon diesel AST. He stated that the gasoline UST was about 25 years old and did not know whether it had ever been registered. He also stated that manual gauging of the tank was used for leak detection and inventory control.

When asked about the western portion of the Site, the D.C. Nursery, Mr. Murphy stated that, to the best of his knowledge, that portion of the property was owned by the District of Columbia, and was used for storage. He said that the botanical gardens did not use that property. When asked about the fuel oil AST, Mr. Murphy stated that the tank was approximately 30 years old, and that he was not aware of any problems with the tank leaking. Mr. Murphy also stated that all irrigation water was allowed to drain from the greenhouses and percolate into the ground, or allowed to runoff.

## 5.0 REGULATORY REVIEW

### 5.1 Standard Environmental Record Sources, Federal, and State

The following state and federal regulatory agency lists were reviewed by EDR to identify regulated and/or environmentally impacted sites in the specified search radii of the Poplar Point Site. A copy of EDR's Radius Map Reports are contained in Appendices E and F. Sites found on these lists are identified in Table 2, included at the end of this section. Sites located



across the Anacostia River from the Site were identified in the specified search radii. Because the Anacostia River is believed to represent a hydraulic barrier between sites north of the river and the subject Site, the sites identified across the Anacostia River do not represent RECs in connection with the Site, and therefore are not included in Table 2. ASTM Standard E 1527-00 indicates that a State hazardous waste sites (SHWS) list, equivalent to the USEPA Comprehensive Environmental Response, Compensation and Liability Information System (CERCLIS) Sites list, should be reviewed to identify hazardous waste sites located within a 1-mile radius of the Site. The District of Columbia does not maintain a SHWS list, therefore, the USEPA CERCLIS list was used to identify such sites.

1. **District of Columbia Leaking Underground Storage Tank (LUST) Cases, January 2, 2002; 1/2-mile radius:** This list contains an inventory of reported LUST incidents.
2. **District of Columbia USTs Database, September 1, 2002; properties and adjoining:** This database contains USTs in the District of Columbia that are regulated under Subtitle I of the Resource Conservation and Recovery Act (RCRA).
3. **USEPA CERCLIS Sites, August 15, 2002; 1/2-mile radius:** The CERCLIS list is a compilation by the USEPA of sites under investigation for potential contamination under CERCLA, also known as Superfund.
4. **USEPA National Priorities List (NPL), July 18, 2002; 1-mile radius:** The NPL is a list of Superfund sites that qualify for federal funds for remedial action and also appear on the federal CERCLIS list.
5. **USEPA Resource Conservation and Recovery Information System (RCRIS) Treatment Storage and Disposal (TSD) Facilities List, September 9, 2002; 1/2-mile radius:** The RCRIS TSD list includes sites and facilities which transport, store, treat, and/or dispose of hazardous waste as defined by RCRA.
6. **USEPA RCRIS Large Quantity Generators (LQG) and Small Quantity Generators (SQG) List, September 9, 2002; Property and adjoining properties:** The RCRIS Generators list includes sites and facilities which generate hazardous waste as defined by RCRA.
7. **USEPA Emergency Response Notification System (ERNS) List, December 31, 2001; Property only:** The USEPA maintains a list of reported CERCLA hazardous substance releases or spills in quantities greater than the reportable quantity, as maintained at the National Response Center. The database contains information from spill reports made within the referenced time frame to the USEPA, U.S. Coast Guard, and State agencies.
8. **USEPA RCRA Corrective Action (CORRACTS) Facilities List, May 02, 2002; 1-mile radius:** The CORRACTS list includes sites which generate, treat, store, or dispose of hazardous waste and which are currently conducting corrective actions as regulated by RCRA.

**Table 2. Federal and state listed sites.**

Site Name and Location	Distance and Direction	Name of List
DOI & NPS – Poplar Point Nursery 600 Howard Rd. S.E.	On the Site	UST*
P&P Auto Body 822 Howard Rd. S.E.	Adjoins the Site to the South (210 Feet)	RCRIS-SQG, UST
*Note: This UST is believed to be the UST removed from the AOC area of the Site near the former garage building. The acronyms used by EDR refer to the Department of the Interior (DOI) and National Park Service (NPS).		

## 5.2 Record Reviews and Interviews

### 5.2.1 Listed Sites

Two of the sites identified in the vicinity of the Site (DOI & NPS – Polar Point Nursery and P&P Auto Body) represent RECs in connection with the Site. The remaining sites identified in the specified search radii do not appear to represent RECs in connection with the Site, due to their regulatory status, distance, and direction from the Site.

### 5.2.2 District of Columbia Office of Fire Prevention

Previous contact between the D.C. Office of Fire Prevention and Ridolfi indicated that due to a lack of specific street address information for the Site, the Office of Fire Prevention is unable to search their database for available information about the Site.

### 5.2.3 District of Columbia Department of Environmental Health

Ridolfi is currently sharing information with the D.C. Department of Environmental Health regarding the Site. Any information obtained from the Department of Environmental Health has been included in this report.

## 6.0 FINDINGS AND CONCLUSIONS

Ridolfi performed a Phase I ESA for a portion of the Poplar Point Site on behalf of NOAA in accordance with an interagency agreement (IA) between NOAA and the D.C. Department of Health. The study focussed on the portion of the Site identified in the IA as section one, which is bounded by Anacostia Drive to the North, by Howard Road S.E. and the southbound Interstate 295 to the south, and by South Capitol Street to the west. National Park Service property, formerly operated by the U.S. Navy forms the eastern boundary.

The AOC and the D.C. historically operated plant nursery facilities at the Site between 1927 and 1993. The U.S. Navy operated a NRS on the eastern portion of the Site between the 1940s and the 1960s. There are no current operations at the Site, with the exception of the METRO Green Line, which passes under the eastern portion of the Site in a tunnel.

A review of historical operations and previous environmental investigations has identified the nature, if not the full extent of RECs at the Site. The RECs include:

- Petroleum in ground water and soil associated with releases from UST near the former maintenance building;
- Petroleum in ground water and soil associated with releases from the former 300-gallon AST in the southeast corner of the Site;
- Petroleum in ground water and soil associated with releases from the Green Oil Company, and possibly the nearby former fuel pad in the D.C. Lanham area.
- Relatively widespread, elevated concentrations of arsenic in soil that may be associated with placement of fill on the Site in the early 1900s.
- Relatively widespread, elevated concentrations of pesticides in surface soil that may be associated with former nursery activities and/or citywide insect control activities.
- Relatively localized, elevated concentration of PAHs that have not been tied to a particular activity.

A review of state and federal agency lists of regulated and/or environmentally impacted sites located in the vicinity of the Poplar Point Site additionally identified the P & P Auto repair facility as a REC in connection with the Site.

## 7.0 RECOMMENDATIONS

The IA between NOAA and the D.C. Department of Environmental Health describes Phase II environmental investigation activities for the Poplar Point Site. Ridolfi began conducting these activities in July 2002, and will complete on-site sampling in December 2002. Field efforts have included geophysical investigations, surface and subsurface soil sampling, ground water sampling, and installation of piezometers and seepage meters in wetland areas to evaluate wetland hydrology. Additionally, a program to collect sediment samples from the Anacostia River near the Site is scheduled for the spring of 2003.

Taken together, new data and information from numerous historical investigations will be used to evaluate the environmental risk at the Site associated with historical chemical releases to the environment. The risk evaluation can be used by stakeholders in a planning process to evaluate various future plans for the Site, and to develop remediation strategies that will allow safe implementation of these plans.

## 8.0 REFERENCES

American Society for Testing and Materials (ASTM). 2000. Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process, Designation 1527-00.

Ashe, J. 2002. Personal communication: email to Diane Douglas, D.C. DOH, describing Green Line tunnel construction techniques. February 1.

Buchman, M.F., S. Hahn, and A. Merten. 2002. Phase I Environmental Site Assessment of Poplar Point, Washington, D.C. Seattle, WA.

Dolph, James, E. 2001. Industrial History of the Former Naval Receiving Station, Anacostia Park, Washington, D.C. Portsmouth, NJ: Prepared for NOAA.

Dolph, James, E. 2002. Report on the Historic Waste Disposal, Salvage, Dredging, Grading, and Filling Operations Conducted at the Washington Navy Yard. January 5.

Ecology and Environment, Inc. (E&E). 1999. Letter to Ms. Julia Hewitt, National Park Service, National Capital Region, Regarding Soils Sampling Results at the Former Architect of the Capitol Nursery Site, Howard Road, SE, Washington, D.C. January 7.

ENVIRON International Corporation (Environ). 2002. Completion and Compilation of Site Inspection and Remedial Assessment Activities at 1900 Anacostia Drive, Southeast, Washington, D.C. Volume I. Princeton, NJ: Prepared for the National Park Service.

Geotechnical Services, Inc. (GSI). 1995. Report of Wetland Investigation and Delineation for the Anacostia Station Regional Parking Lot and Access Roads. August 29.

Hewitt, J. 2002. Memorandum to James Rosenstock, National Park Service. October 28.

Resource Applications, Inc (RAI). 2001. Draft Field Activities Report for the Poplar Point Nursery Site, 1900 Anacostia Drive, SE, Washington, D.C. July/August.

Ridolfi Engineers, Inc. (Ridolfi). 2002. Draft: Phase I Environmental Site Assessment, District of Columbia Properties, Poplar Point, Washington, D.C.: Seattle, WA: Prepared for NOAA.

Thomas L. Brown Associates, P.C. (Brown). 1997a. Asbestos Survey Report, Anacostia Station Access Road and Parking Lot, Washington, D.C. Washington, D.C.: Prepared for the District of Columbia Department of Public Works.

Thomas L. Brown Associates, P.C. (Brown). 1997b. Sampling Results Associated with the Phase III USCG Priority Response at the Anacostia Station Access Road and Parking Lot, Washington, D.C. Washington, D.C.: Prepared for the District of Columbia Department of Public Works.

Thomas L. Brown Associates, P.C. (Brown). 1997c. Tri-County Samples, Anacostia Station Access Road and Parking Lot, Washington, D.C. Washington, D.C.: Prepared for the District of Columbia Department of Public Works.

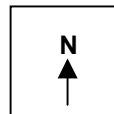
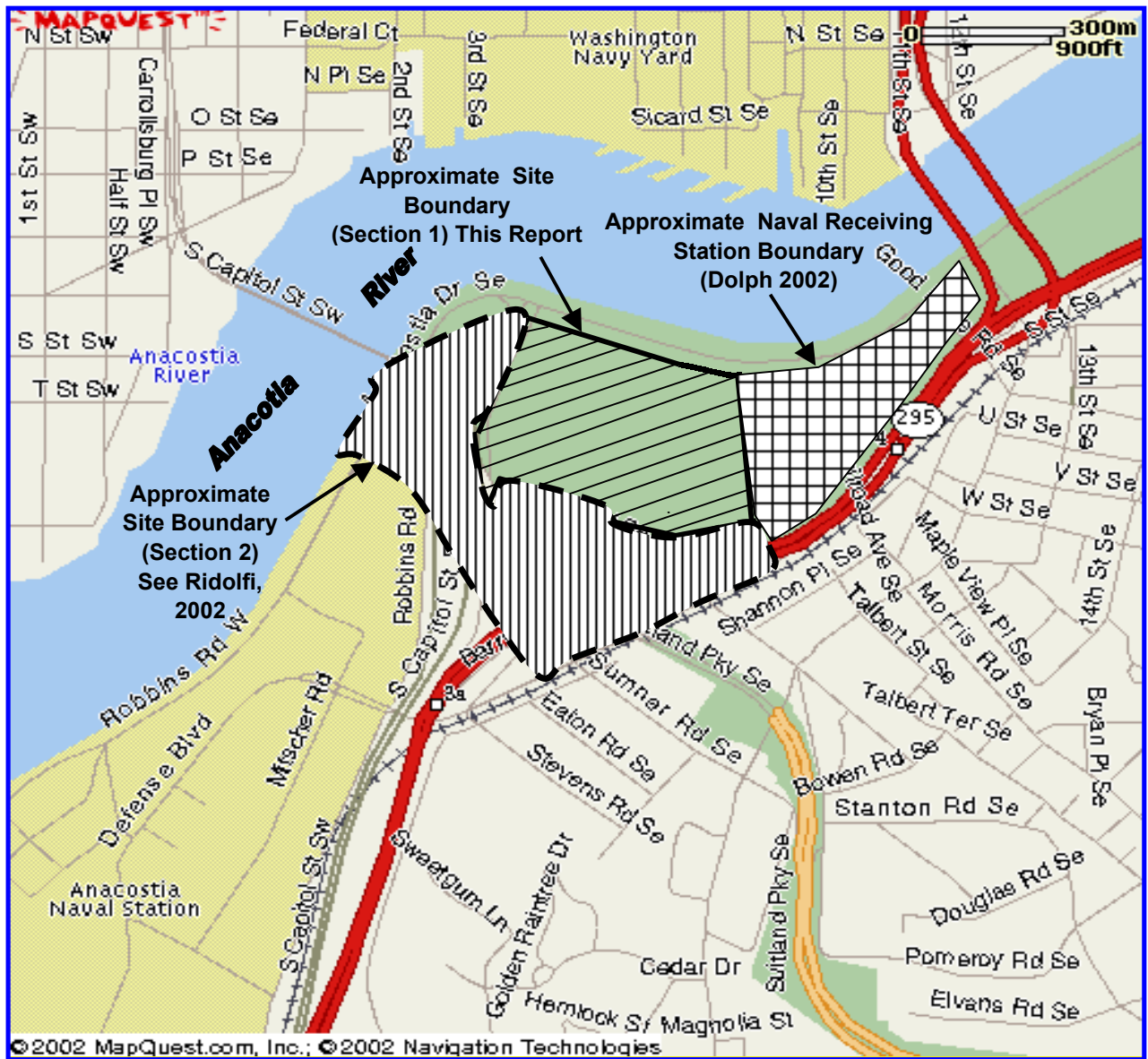
Thomas L. Brown Associates, P.C. (Brown). 1999. Phase II Environmental Site Assessment of the Proposed Anacostia Station's Regional Parking Lot and Access Roads, Southeast Washington, D.C. Washington, D.C.: Prepared for the District of Columbia Public Works Department.

Volkert Environmental Group, Inc. (Volkert). 1995. D.C. Nursery, Howard Road, Washington, D.C. Mobile, AL: Prepared for the District of Columbia Department of Public Works.


## 9.0 ACRONYMS AND ABBREVIATIONS

ACM	asbestos containing material
AOC	Architect of the Capitol
AST	above ground storage tank
ASTM	American Society for Testing and Materials
Brown	Thomas L. Brown Associates, P.C.
CERCLA	Comprehensive Environmental Response, Compensation and Liability Act
CERCLIS	Comprehensive Environmental Response, Compensation and Liability Information System
CWA	Clean Water Act
D.C.	District of Columbia
DOH/EHA	Department of Health/Environmental Health Administration
DOI	Department of the Interior
DRO	diesel range organics
EDR	Environmental Data Resources, Inc.
EIS	environmental impact statement
ESA	environmental site assessment
GRO	gasoline range organics
IA	interagency agreement
MTBE	methyl tertiary-butyl ether
NOAA	National Oceanic and Atmospheric Administration
NPS	National Park Service
NRS	Naval Receiving Station
PAH	polynuclear aromatic hydrocarbons
PCB	polychlorinated biphenyls
RCRA	Resource Conservation and Recovery Act
RCRIS-SQG	Resource Conservation and Recovery Information System Small Quantity Generators
REC	recognized environmental condition
Ridolfi	Ridolfi Engineers, Inc.
Site	Poplar Point Site
SVOC	semivolatile organic compounds
TPH	total petroleum hydrocarbons
USEPA	U.S. Environmental Protection Agency
USGS	U.S. Geological Survey
UST	underground storage tank

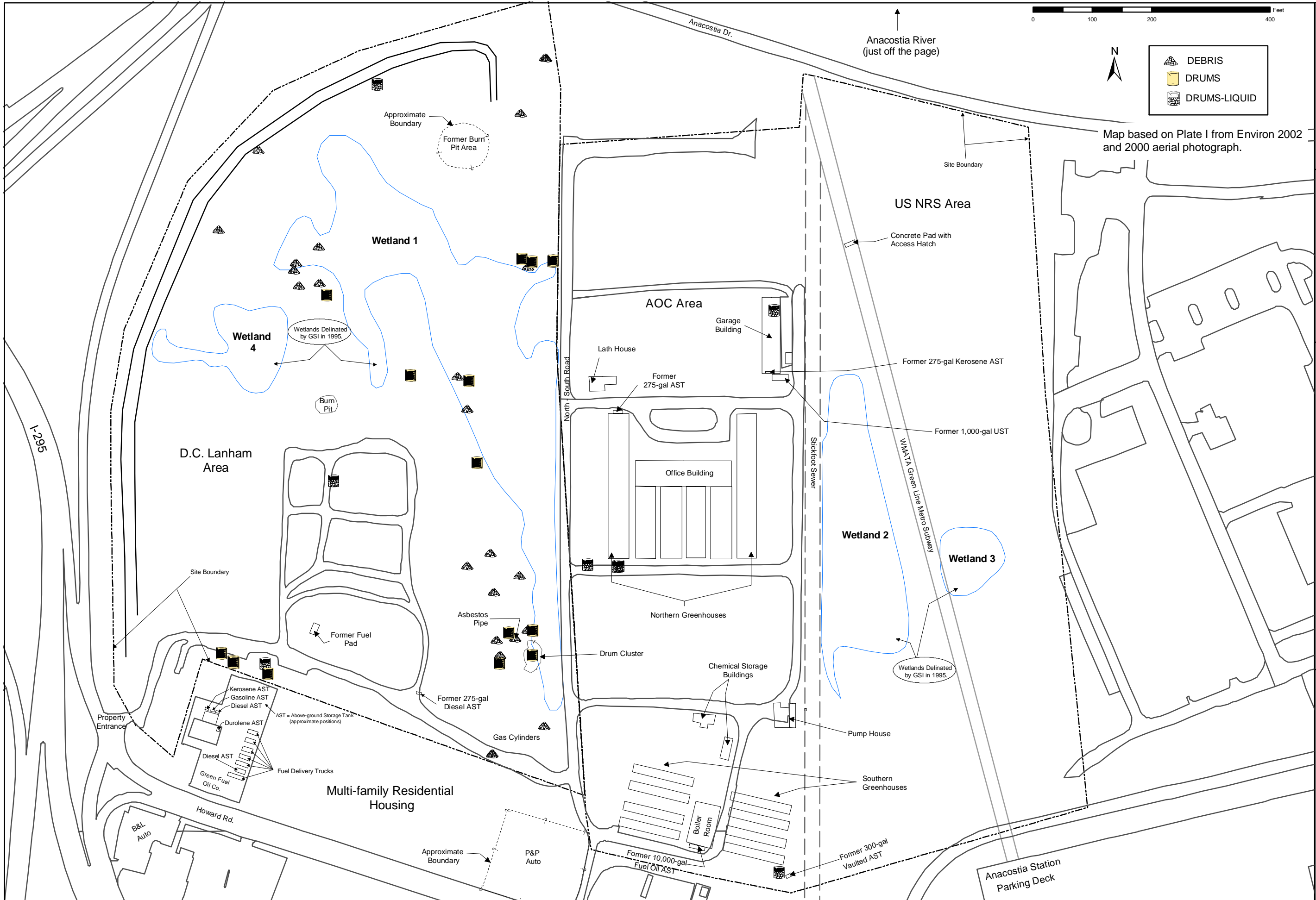
**FIGURES**



Notes: Basemap was obtained from www.mapquest.com. Site boundaries are approximate.

 <b>RIDOLFI ENGINEERS Inc.</b>	Phase I Environmental Site Assessment Poplar Point (Section 1) Washington, DC	January 31, 2003	Figure 1
	Prepared for the District of Columbia and the National Oceanic and Atmospheric Administration	Site Location Diagram	



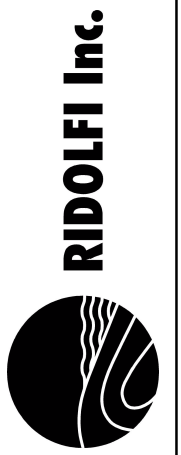


**Phase I Environmental Site Assessment  
Poplar Point Site**

February 3, 2003

Figure 2

Site Plan



**APPENDIX A  
Photographs**



**Photo 1:** Overview of the southern portion of the former AOC and NRS areas of the Site, facing northwest (from the Anacostia Station parking structure photographed on May 6, 2002).



**Photo 2:** Overview of the northern portion of the former AOC and NRS areas of the Site, facing northwest (from the Anacostia Station parking structure photographed on May 6, 2002).





**Photo 3:** A portion of the drum cluster found in Wetland 1, near the eastern boundary of the D.C. Lanham area of the Site (removed in November 2002 photographed on July 16, 2002).



**Photo 4:** Gas cylinders in the southern portion of the D.C. Lanham area of the Site (removed in November 2002 photographed on August 27, 2002).



**Photo 5:** Southern portion of northern greenhouses, facing northwest (photographed on December 18, 2002).



**Photo 6:** Interior of easternmost northern greenhouse (photographed on December 18, 2002).





**Photo 7:** Former maintenance garage in AOC area facing northwest (photographed on December 18, 2002).



**Photo 8:** Large debris pile with lamp posts D.C. Lanham area of the Site (photographed on November 19, 2002).



**Photo 9:** ASTs located near the central portion of Green Fuel Oil Inc. property, facing southwest (photographed on May 8, 2002).



**Photo 10:** Overview of the P&P Auto Body property adjacent to the southern portion of the D.C. Lanham area of the Property, along Howard Road (photographed on May 6, 2002).

**APPENDIX B**  
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**APPENDIX C  
Aerial Photographs Obtained from NOAA**

**APPENDIX D  
EDR Sanborn Map Report**

**APPENDIX E  
EDR Radius Map Report  
November 2002**

**APPENDIX F**  
**EDR Radius Map Report**  
**April 2002**

**APPENDIX G**  
**EDR Topographic Map Report**

**APPENDIX H**  
**Industrial History of the Former Naval Receiving Station**

**Industrial History  
of the  
Former NAVAL RECEIVING STATION  
Anacostia Park, Washington, DC**

Researched and Compiled By:  
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Portsmouth Naval Shipyard  
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For:

Michael Buchman  
National Oceanographic and Atmospheric Administration

December 20, 2001

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10. US Naval Receiving Station, Washington, DC, “Key Plan and Index of Drawings,” Y&D Dwg. No. 827344, September 17, 1958.
11. US Naval Receiving Station, Washington, DC, “Site and Grading Plans, Site “A” and Site “B”,” Y&D Dwg. No. 827347, September 17, 1958.
12. US Naval Receiving Station, Washington, DC, “Sanitary Sewer System, Plan & Detail,” Y&D Dwg. No. 827372, September 17, 1958.
13. US Naval Receiving Station, Washington, DC, “Storm Drainage Plan, Profile & Details,” Y&D Dwg. No. 827374, September 17, 1958.
14. US Naval Station, Washington, DC, “Demolition of Structures, Site Plan,” Y&D Dwg. No. 941532, November 6, 1961.
15. US Naval Receiving Station, Anacostia, “Master Shore Station Development Plan, Part III Section 2, General Development Plan, Y&D Dwg. No. 580483, June 30, 1955.

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16. US Naval Station, Washington, DC, Map of Anacostia Annex, US Naval Station, PW Dwg. No. 18622, Showing Conditions as of July 1, 1965.

17. US Naval Station, Washington, DC, "Anacostia Annex, General Development Map, Existing & Planned Pre M Day," REC Dwg. No. 1118041, September 12, 1967.

18. US Naval Station, Washington, DC, "Demolition of Various Buildings, Site Plan & Vicinity Map, Architectural," NAV/FAC Dwg. No. 3011697, June 6, 1975.

19. US Naval Station, Washington, DC, "Relocate Steam Line and Electric Distribution System Modification, Site Plan and Vicinity Map, Architectural," NAV/FAC Dwg. No. 3011699, June 6, 1975.

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2. Naval Training Center, Anacostia, "Laundry Bldg. T-32, Addition to Dry Cleaning Space, Plan & Details," PW Dwg. No. 8463, December 20, 1943.
3. Naval Training Center, Anacostia, "Laundry Bldg. T-32, Addition to Dry Cleaning Space, Plumbing," PW Dwg. No. 8466, December 20, 1943.
4. Naval Training Center, Anacostia, "Laundry Bldg. T-32, Addition to Dry Cleaning Space, Electrical," PW Dwg. No. 8469, December 20, 1943.
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6. Naval Training Center, Anacostia, "Laundry Bldg. Part Plan No. 1," PW Dwg. No. 13732, September 13, 1944.
7. Naval Training Center, Anacostia, "Laundry Bldg. Part Plan No. 4," PW Dwg. 13735, September 13, 1944.
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9. US Naval Receiving Station, Anacostia, "Laundry Bldg. T-32, Overhead Piping Layout," Y&D Dwg. No.827480, September 17, 1958.

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10. Naval Training Center, Anacostia, "Laundry Boiler House, Foundation Plan T-33," PW Dwg. 7131, September 13, 1944.
11. Naval Training Center, Anacostia, "Laundry Boiler House, Ground Floor Plan T-33," PW Dwg. 7132, September 13, 1944.
12. Navy Training Center, Washington, DC, "T-33 Laundry Boiler House, Mechanical Steam Equipment & Piping," PW Dwg No. 13745, September 13, 1944.
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14. Naval Training Center, Anacostia, "Extension to Boiler House T-48, Elevations & Section," PW Dwg. No. 8718, February 21, 1944.

15. Naval Training Center, Anacostia, "Extension to Boiler House T-48, Mechanical Plans & Sections," PW Dwg No. 8721, February 21, 1944.

### **Miscellaneous Plans**

16. Naval Training Center, Anacostia, "Mine Disposal School, Floor Plans," PW Dwg. No. 6809, September 15, 1942.

17. Navy Department, Washington, DC, "Trash House, Plan Elevations, Sections, & Structural Details," PW Dwg. No. 7098, October 29, 1942.

18. Naval Training Center, Anacostia, "Scrub Building, Plans Elevations Details," PW Dwg. 9813, July 1944.

19. Naval Receiving Station, Washington, DC, "Alterations & Additions to Navy Exchange Gas Station, Plans & Elevations," Y&D Dwg. No. 557610, May 15, 1952.

20. US Naval Receiving Station, Anacostia, "Site And Grading Plans, Sites "C", "D", and "E"," Y&D Dwg. No. 827368, September 17, 1958.

21. US Naval Receiving Station, Anacostia, "Fire Station, Bldg. T-31, Plan, Elevations, & Details," Y&D Dwg. No. 827377, September 17, 1958.

22. US Naval Receiving Station, Anacostia, "Naesu Building T-14, Floor Plans," Y&D Dwg. No. 827380, September 17, 1958.

23. US Naval Receiving Station, Anacostia, "Miscellaneous Structural Details," Y&D Dwg. No. 827397, September 17, 1958.

24. 23. US Naval Receiving Station, Anacostia, "Miscellaneous Structural Details," Y&D Dwg. No. 827400, September 17, 1958.

25. US Naval Receiving Station, Anacostia, "Boiler House Building N-1, Fuel Tank Piping Plan Elevation & Details," Y&D Dwg. No. 827408, September 17, 1958.

26. US Naval Receiving Station, Anacostia, "Building T-5, Electrical Plan & Diagrammatic," Y&D Dwg. No. 827423, September 17, 1958.

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## 1.0 INTRODUCTION

**1.1 Purpose:** This intention of this report is to provide a brief background history of the industrial activities that occurred at the former Naval Receiving Station, Anacostia, Washington, DC. It was prepared at the request of, and for the

### 1.2 Research Methodology:

An in-depth literature search was conducted to identify past industrial operations that were conducted at the former Naval Receiving Station. The following type, (but not limited to), of documentation was sought and reviewed:

- Facility Drawings
- Property Records
- Environmental Studies and Reports
- Command Narratives
- Oil & Hazardous Materials Spills Contingency Plans
- Photographs
- Master Shore Station Development Reports
- World War II Administrative Histories
- Aerial Photographs

Research was conducted at the following document repositories:

Engineering Field Activity, Chesapeake Division (NAVFACENGCOM) Washington Navy Yard 1314 Harwood Street, SE Washington, DC 20374-5018	Naval Facilities Engineering Command, Headquarters Sangar Building Washington Navy Yard Washington, DC 20374
Naval Department Library Building 57 Washington Navy Yard Washington, DC 20374-5018	Naval Facilities Engineering Command Service Center & Seabee Museum (Old NAVFAC Archives) Port Hueneme, CA
National Archives I Pennsylvania Avenue Washington, DC	National Archives II Adelphi Road College Park, MD
Naval Historical Center Photographic Section Washington Navy Yard Washington, DC 20374-5018	Naval Historical Center Operational Archives Washington Navy Yard Washington, DC 20374-5018
Naval Historical Center	National Capital Parks – East

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Ships Histories Branch  
(Shore Station Files)  
Washington Navy Yard  
Washington, DC 20374-5018

1900 Anacostia Drive, S.E.  
Washington, DC 20020 – 6722

Army Corps of Engineers  
FUDS Project Office  
Baltimore, Md

Portsmouth Naval Shipyard Museum  
(Industrial History and Naval Shore Station  
Files)  
Portsmouth, NH 03901-5000

## **2.0 BRIEF HISTORY OF THE NAVAL RECEIVING STATION:**

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## 2.1 Physical Component:

The Naval Receiving Station was located two miles southeast of the Capitol Building on the left bank of the Anacostia River immediately downstream from the Eleventh Street Bridge. The site consisted of 63.58 acres of land, of which 60.9 acres belonged to the Department of the Interior and was occupied by the Navy under a letter of agreement. The remaining 2.68 acres were Navy owned. The Station was bounded on the north and west by Anacostia Drive and on the east by Good Hope Road and the Baltimore and Ohio Railroad and on the south by Howard Avenue.

## 2.2 General History:

A Naval Receiving Station is often referred to as a Receiving Ship, for the reason that in earlier times a ship was commonly used for the purpose. In the case of the Washington Navy Yard, we have occasional records during the nineteenth century of ships being set aside in this capacity. For instance, in 1885, the U.S.S Wyandotte was thus used, and during the same year the U.S.S. Dale became her successor and remained the receiving ship for at least five years. As the number of men grew, the activity was moved ashore. For years, the Receiving Station was located in Building 120 which was located near the Sixth Street entrance to the Yard. In 1904 it was relocated to Building 166 the Washington Navy Yard. Its mission was the housing of naval personnel attending schools in the Navy Yard, and the receiving, housing and processing for further transfer of enlisted personnel.

The beginning of World War II and the resultant mobilization made the old Receiving barracks at the Naval Gun Factory obsolete. To meet the demand of increased productivity and for additional space and facilities requirements, the US Naval Receiving Station, Washington, DC was established.

In May 1942 an agreement was made between the Secretary of the Navy and Secretary of the Interior whereby the Navy could occupy approximately fifty (50) acres of land under these terms:

The Navy would transfer all of the land so acquired by permit, back to the Department of the Interior within one (1) year after the President of the United States had declared the hostilities (World War II) to have terminated.

All recreational areas and buildings were to be constructed on a permanent basis.

All other buildings would be of a temporary nature.

All buildings, other than the permanent recreational buildings, and the land itself, other than any recreational areas which had been developed by the Navy, would be cleared prior to transfer of the land back to the Department of the Interior.



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Construction of the new Station commenced in 1942. The original buildings included barracks for local and transient enlisted personnel, bachelor officers' quarters, messing facilities, recreational facilities, and dry cleaning plant. The Receiving Station was commissioned and the first Commanding Officer assigned on 7 January 1943. Construction of facilities continued during the period from 1942 through 1944, and in that year, by permit of the Department of the Interior, an additional 11.5 acres of land were granted for occupation by the Navy.

Tenant activities and training schools located on the facility included:

- Naval Training Publication Center
- Naval Intelligence School
- Naval Aviation Engineering Service Unit
- Naval School of Music
- Naval Accounts Disbursing Office
- General Court Martial Board,
- Potomac River Naval Command
- Navy Patent Counselors Office

War necessitated additional personnel be assigned to Washington inasmuch as there was a lack of available qualified civilian personnel in the area, and also the fact that many jobs were of a nature which could be performed only by military personnel. By the Spring of 1942 there were 3967 men attached to the Receiving Station, half of whom worked in the Navy Department buildings.

The Director of Naval Communications had maintained the records of personnel on duty in the Washington area, since most of them were Communications specialists and were assigned to him for duty. However, with the rapid increase in 1942 of personnel, he requested that a personnel office be set up within the Navy Department to take care of this additional workload. The Bureau of Personnel recommended the Receiving Station, as the responsible activity, set up branch offices in each of the two buildings of the Navy Department, where these people were working, and assign division officers from among administratively attached Receiving Station Officers within each bureau and division, The Commandant, Potomac River Naval Command, also recommended that records and pay accounts be maintained by the Receiving Station, as well as handling all disciplinary reports requiring action.

In August of 1945 the Commandant recommended to the Secretary of the Navy the establishment of an Advanced Naval Technical Training Center at the Naval Receiving Station. It was pointed out that due to the increased technical knowledge and development of advanced weapons and systems it was necessary not only to retrain personnel in these fields, but to maintain the training on a continuing basis, thereby keeping up with future advancements along this line. The letter stated that the Receiving Station could provide berthing, messing, and recreational facilities for 6600 enlisted men and 423 officers under normal conditions, and had classroom space for 3000 enlisted and 300 officers daily. At this peak period, 4150 enlisted and 559 officers were receiving

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daily instructions at the schools located on this Station. The Advanced Technical Training Center was officially opened by the Secretary of the Navy in a letter, Ser 1960 OP 24 of 27 September 1946.

In this same letter from the Commandant to the Secretary of the Navy, it was suggested to the Secretary that he approach the Secretary of the Interior with the proposition of retaining the land on which the Receiving Station was located on a permanent basis for the Navy. The estimated value of all the buildings, excluding technical equipment and real estate was \$7,668,204. at this time.

During the period of time from December 1945 to March 1946, the Secretary of the Navy originated correspondence to the Secretary of the Interior requesting the permanent transfer of the land to the Navy. This first request was denied. Subsequently, it was requested the original period of time granted the Navy after the termination of hostilities before the land must be returned to the Department of the Interior, be extended from one year to five years. This request was likewise denied. However, the Secretary of the Interior did recognize that it may be physically impossible to transfer the Receiving Station to another site within a year's time. For this reason he granted to the Navy Department a "sufficient period of time" needed to effect this move, but did not mention any specific date that this move must be completed. As the situation remains today, the Navy is occupying land without permit, the original permit having expired in 1946.

On 1 June 1949 the following personnel allowance was effective for the Naval Receiving Station:

Officer allowance – 20	Officers on board – 24
Enlisted allowance – 497	Enlisted on board – 596

There was no other major construction aboard this Station until 1952, when the buildings presently occupied by the Naval Aviation Engineering Service Unit (NAESU) and the Navy Exchange gas station and its surrounding facilities were opened.

In 1959 there were 130 General Detail (transient) personnel aboard, and 1194 students under instruction at the various training schools located within the confines of the station.

In 1959 the Navy began to relocate the Naval Receiving Station. The relocation was partially necessitated by the requirement for use of a critical part of the present land area for the proposed Anacostia Freeway. The Freeway was designed to cut through the property parallel and adjacent to the Baltimore and Ohio right-of-way for the entire length of the facility.

From 1959 through 1980, the US Navy either demolished or transferred all of the buildings located on the station to the National Park Service. Today, the property is park of a larger parcel of land known as Anacostia Park.

### **3.0 BUILDING, STRUCTURE TYPES AND HISTORIES:**

### **3.1 Building and Structure Types:**

#### Administration / Personnel Support:

- Administrative / Office Space
- Recreation
- Chapel
- Dispensary
- Barracks
- Quarters
- Temporary Lodge
- Mess Hall
- Subsistence Building
- Garbage House
- Recreation Field
- Laundry
- Hobby Shop
- Ship's Services (Exchange)

#### Applied Instruction

- School
- Institute

#### Supply

- Storehouse
- Warehouse
- Coal Storage Yard
- Cold Storage
- Dry Provisions
- Paint Locker
- Flammables Storehouse
- Storage Yard (area)

#### Utility / Station Support

- Boiler Plant
- Sub-Station
- Fire House
- Garage
- Public Works Building
- Gas Station
- Paint Shop
- Pump House

Security:

- Brig
- Gatehouse
- Sentry Booth

Miscellaneous

- Laboratory
- Dry Cleaning Plant
- Experimental

### **3.2 Individual Building and Structure Histories**

#### **Building T-1:**

Building T-1 was a temporary building constructed in 1943 as a Recreation Building. It served as the primary recreation facility until it was demolished or transferred to the National Park Service sometime after 1975.

Rooms and major equipment located within the building over the years included:

- Indoor Swimming Pool (63' x 82' – ref 22)
- Lunch count and kitchen
- Auditorium/Theatre
- Bowling Alley
- Game Room
- Broadcasting Booth
- Library
- Bank
- Post Office
- Day Nursery

#### **Building T – 2**

Building T – 2 was a temporary building constructed in 1943 as Heating Plant. It served as a heating plant and was demolished or removed by 1969.

#### **Building T – 3**

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Building T – 3 was a temporary building constructed in 1943 as a Chapel. It served as a Chapel until 1969. In 1971 it was declared excess and demolished or removed from the site prior to 1980. When the chapel was in operation, it could seat up to 300 individuals.

### **Building T – 4**

Building T – 4 was a temporary building constructed in 1943 as a Dispensary. Rooms and major equipment located within the building included:

- Dental Laboratory
- X-Ray Facilities
- General Medical Facilities
- Ambulance Shelter

When the Dispensary was disestablished is not known. In the 1960s the building was used for administrative purposes that included officer and training space. It was demolished or transferred to the National Park Service sometime after 1975.

### **Building T – 5**

Building T – 5 was a temporary building constructed in 1943 as a Fire Control School. It served as an instruction and administrative type facility until it was demolished or transferred to the National Park Service sometime after 1975.

### **Building T – 6**

Building T – 6 was a temporary building constructed in 1943 as an Administration Building. It served as an instruction and administrative type facility until it was demolished in 1976.

### **Building T – 7**

Building T – 7 was a temporary building constructed in 1943 as an Enlisted Men's Barracks. In the late 1960s it was converted into a training facility for the Metro Police Department. It was demolished prior to 1975.

### **Building T – 8**

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Building T – 8 was a temporary building constructed in 1943 as an Enlisted Men's Barracks. In the late 1960s it was converted into a training facility for the Metro Police Department. It was demolished prior to 1975.

### **Building T – 9**

Building T – 9 was a temporary building constructed in 1943 as an Enlisted Men's Barracks. In the late 1960s and early 1970s it served as a Sunday School, Storage Facility and training facility for the Metro Police Department. It was demolished in 1976.

### **Building T – 10**

Building T – 10 was a temporary building constructed in 1943 as an Enlisted Men's Barracks. In the late 1960s and it served as a Defense Language School and was demolished in 1976.

### **Building T – 11**

Building T – 11 was temporary building constructed in 1943 as a Subsistence Building (Galley, Mess Hall, etc). Rooms and equipment in the building included:

- Sculleries
- Mess Hall
- Food and Storage Areas
- Garbage Area

In the late 1960s the building was converted into the Defense Language Institute and in 1976 it was demolished.

### **Building T – 12**

Building T – 12 was a temporary building constructed in 1943 as an Enlisted Men's Barracks. In the late 1960s and it served as a Defense Language School and was demolished in 1976.

### **Building T – 13**

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Building T – 13 was a temporary building constructed in 1943 as a Barracks. Over the years it had a variety of uses that included:

- Barracks
- US Naval Aviation Engineering Service Unit
- Defense Intelligence School.

The mission of the US Naval Aviation Engineering Service Unit was to provide field engineering assistance and instruction to naval aviation activities in the installation, maintenance, repair and operation of all types of aviation systems and equipment.

The types of rooms and facilities that would have been in the building when it served as the US Naval Aviation Engineering Service Unit included:

- Labs and Classrooms
- Officers
- Publication and Arts Room
- Print, Power and Store Room
- Ladies Lounge
- Shop
- Library
- Material Room
- Storage Rooms
- Heads and Showers

(Ref #22)

In the late 1960s the building served as the Defense Intelligence School and was demolished by 1976.

### **Building T – 14**

Building T – 14 was a temporary building constructed in 1943 as a Barracks. In the late 1960s it was used for storage and training. The building was demolished prior to 1975.

### **Building T –15**

Building T – 15 was a temporary building constructed in 1943 as an Enlisted Men's Barracks. It served as a school for a short period of time and was demolished in 1968.

### **Building T – 16**

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Building T – 16 was a temporary building constructed in 1943 as a Fire Department and Garage. It was demolished sometime prior to 1965.

### **Building T – 17**

Building T – 17 was a temporary building constructed in 1943 as a Heating Plant. It was demolished sometime prior to 1965.

### **Building T – 18**

Building T – 18 was a temporary building constructed in 1943 as a Brig. It had the capacity to confine 110-120 prisoners. It served as a place of confinement for all of the activities under the Commandant, PRNC, Marine Corps Activities in the Washington area, and in sometimes included Coast Guard personnel. It was demolished sometime prior to 1965.

### **Building T – 19**

Building T – 19 was a temporary building constructed in 1943 as a Storehouse. It was demolished sometime prior to 1965.

### **Building T – 20**

Building T – 20 was a permanent building constructed in 1943 as a Heating Plant. It was demolished or transferred to the National Park Service sometime after 1975.

### **Building T – 21**

Building T – 21 was a temporary building constructed in 1943 as a Camouflage Laboratory. The laboratory included Aerial, Technical, Color Development Laboratory and a Graphic Arts section.

In 1945 the Photographic Interpretation Center (PIC) was located in the building. The PIC operated in conjunction and cooperation with Photographic Science Laboratory that was located in Building 168 at the Anacostia Naval Air Station. The mission of the PIC was to train officers in all aspects of photographic intelligence. It occupied an area of about 10,000 square feet. The scope of training was as follows:

- (a) Photographic Interpretation – Fundamentals of photographic interpretation and training in specialized fields of photographic intelligence, including Military



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Defenses, Ship and Harbor Analysis, Aircraft and Airfields, Industrial Analysis, Guided Missiles, Amphibious Warfare, Urban Area Analysis, Underwater Depth Determination, Flak Analysis, and Damage Assessment.

(b) Photogrammetry – Determination of geographic control; determination of astronomic control; map projections; cartography, optics; radial line plot mapping; contouring; geometry of vertical and oblique photographs; oblique photography; trimetrogon mapping; controlled mosaics; photogrammetric instrument operations; and new photogrammetric instrument operations; and new photogrammetric techniques.

(c) Reserve Classes: Refresher training for Reserve Officers with (A) classification who have had previous experience or training in Photographic Interpretation.

(Ref 19)

The school vacated from the building and it was used as a storage building for a short period of time. The building was demolished sometime in the late 1960s.

### **Building T – 22**

Building T – 22 was a temporary structure constructed in 1943 to store paint. In 1945 it was used as an Experimental Building by the Naval Ordnance Laboratory and was demolished prior to 1965.

### **Building T – 23**

Building T – 23 was a temporary structure constructed in 1943 as an Experimental Building for the Naval Ordnance Laboratory. In 1955 it was used for storage by the Public Works Department and was demolished prior to 1965.

### **Building T – 24**

Building T – 24 was a temporary structure constructed in 1943 as an Experimental Building for the Naval Ordnance Laboratory. In 1955 it was used for storage by the Public Works Department and was demolished prior to 1965.

### **Building T – 25**

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Building T – 25 was a temporary structure constructed in 1943 as an Experimental Building for the Naval Ordnance Laboratory. In 1955 it was used for storage by the Public Works Department and was demolished prior to 1965.

### **Building T – 26**

Building T – 26 was a temporary structure constructed in 1943 as an Experimental Building for the Naval Ordnance Laboratory. It was demolished sometime prior to 1965.

### **Building T – 27**

Building T – 27 was a temporary structure constructed in 1943 as an Experimental Building for the Naval Ordnance Laboratory. In 1955 it was used for storage by the Public Works Department and was demolished prior to 1965.

### **Building T – 28**

Building T – 28 was a temporary building constructed in 1943 as an Electrical Interior Communication School. It served in an administrative capacity until it was demolished or transferred to the National Park Service after 1975.

### **Building T – 29**

Building T – 29 was a temporary building constructed in 1943 as the US Navy Music School. A Heating Plant was co-located within the structure.

The mission of the Music School was to improve the instrumental proficiency of personnel, and give additional formal musical training. Rooms and major equipment that located within the building:

- Rehearsal Rooms
- Classrooms (Navy, Army, Air Force)
- Studios, Woodwind and Brass
- Studios, Percussion
- Studios, Piano
- Studio, Accordion
- Studio, Guitar
- Studios, small
- Study Hall
- Studios, Tuba and St. Base
- Reference Library
- Storage Rooms
- Band Library

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- Audition Rooms
- Arrangers' Room
- Instrument Issue
- Locker Rooms
- Auditorium and Recording Room
- Recording Studio
- Duplicating Room
- Storage Room
- Offices
- Lounge

Operation of the Music School in the ceased by the late 1950s and the building had a variety of administrative uses that included the Department of Defense Computer Institute. The building was demolished or transferred to the National Park Service sometime after 1975.

**NOTE:** Building 93 served as the Instrument Repair Shop for the Music School.

### **Building T – 30**

Building T – 30 was a temporary building constructed in 1943 as a Mine Disposal School. The Mine Disposal School mission and operation is best described in the Naval Gun Factory World War II Administrative History:

#### **“The Mine Disposal School**

At the conclusion of the war, the Mine Disposal School and the Mine Disposal Unit, both occupying quarters at the Anacostia Receiving Station existed at the Washington Navy Yard. The former was the training activity, coming under the jurisdiction of the Yard Commandant. The latter, being an operational activity, was administratively a part of the Potomac River Naval Command. However, in many respects, the two were almost the same. They had the same Officer-in-Charge, and occupied the same facilities. Personnel attached to each performed duties interchangeably for both. Officers attached to the school usually had additional duty at the unit, the reverse also being true. The main difference could be found in the stated aims of the two activities and their separate chains of command. Since the Navy Yard and its subdivisions is the subject of the present study, major emphasis here will be placed on the Mine Disposal School.

On May 13, 1941, the Chief of Naval Operations addressed a letter to the heads of the following Bureaus: Navigation (later Personnel), Ordnance, Ships, and Aeronautics. This expressed the wish of the Naval Operation Chief for proceedings to be instituted at once for the formation of Mine Recovery Units, as they were then called. This undertaking, which should be carried out by BuOrd in collaboration with the other three, involved the establishment of two such units, to be located at the Washington and Mare Island Navy Yards. They should have

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cognizance respectively, of all mine recovery activities on the Atlantic and Pacific Coasts. Smaller Units, set up in the Naval Districts and at advanced bases, should be responsible, though in a subordinate way, for mine disposal activities in their own areas. Assignment to such duty would be voluntary and with it would go sea duty status on an afloat basis. Four aims were laid down as the task assignments of the various Mine Recovery Units:

- 1- To provide personnel trained in mine recovery, available for transportation by plane to an endangered locality on the shortest notice.
- 2- The safe recovery of mines, for the purpose of aiding development of a minesweeping technique and other measures of defense.
- 3- Disposal of hostile mines in danger areas where other measures proved unavailing.
- 4- Safe recovery of hostile mines for purpose of mine development; in other words to aid the United States in perfecting mines of its own.

The directive cited above had not come into existence out of the nowhere; on the contrary it had an important history behind it. In the summer of 1940, two American Naval Officers visited England to study British mining efforts from the offensive, defensive, and countermeasure angles. At this very time the German Luftwaffe began its great offensive mining effort, using the new and dangerous influence mines that very nearly brought ruin to England. That the British were able to carry on was due in large measure to their R.M.S. (rendering mines safe) personnel. This group, small and entirely volunteer, worked both on land and underwater to render safe the German mines in order that English scientists might learn their mechanisms and provide countermeasures. The dangerous character of such work hardly needs to be emphasized. R.M.S. personnel also, at times, had to render mines safe that had been planted in areas where an explosion would destroy or endanger vital installations.

The two American Officers sent to England for this study were Lieutenants O. D. Waters and S. M. Archer, now both Commanders. Impressed by the work of the R.M.S. personnel, and foreseeing the need for a similar organization in the US Navy, they recommended strongly that such a unit be created as fast as possible. Their efforts, with those of the Chief of Naval Operations and the Bureau of Ordnance, resulted in the establishing letter, already cited. Details paving the way for the new activity were ironed out by Commander (later Captain) L. D. McKeehan of BuOrd, and Lieutenant (later Commander) R. D. Hughes of VCNO.

The original letter made no reference to the establishment of a school, but merely provided for the formation of operational Mine Recovery Units. However, the school was inherent in the suggestion and came into existence from the inexorable logic of the case. No letter establishing it can now be found, and in all probability none ever existed. Part of the explanation of the lack of documentary evidence comes from the fact that the United States was then not at

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war. Hence the Navy thought in very limited terms. The purpose then in view was to provide protection for the North American Continent and certain bases adjacent to it. A total trained personnel of fifty to sixty officers and men seemed adequate. Six months was to be the total training period, within which time two groups could be given ten weeks of very informal instruction apiece. There could be, it was thought, constant rotation of personnel between the United States and England, thus assuring a constant flow of new information. Under such circumstances, no permanent teaching organization would seem to be necessary, and in fact none existed until Pearl Harbor.

The letter did designate the Washington Navy Yard as the center of all training of this type. Lieutenants' Waters and Archer were appointed to establish and get the organization under way. They had to work on short notice. When they greeted their first group of volunteers on June 13, 1941, they had very little ready in the shape of either facilities or a formal instruction program. They had no physical plant and had to borrow or "procure" whatever gear they used. Their activities, at the best, had only a status of quasi-legality. The two officers sometimes could obtain funds from Naval Ordnance Laboratory research appropriations. They comprised the entire instructional staff themselves, managed to get a desk at the old Fire Control School, in a Gun Shop, and held classes anywhere in the Navy Yard that offered a suitable room. Their activities came under the cognizance of the Superintendent of the Naval Gun Factory.

No texts or training aids could be had for the simple reason that none existed. Instruction had to be on the basis of the Officers' personal experience, gained in England. Finally they made up some mimeographed training sheets known as Mine Disposal Bulletins, to serve as school texts and also to be taken by the trainees to their field assignments for use as guides and references.

All members of the first entering class were graduates of the Naval Mine Warfare School at Yorktown, Virginia. This was at the suggestion of Lieutenants Waters and Archer. Later, when the results had proven it to be a sound idea, it became the official policy of BuPers to assign only such graduates to the school.

After about a month, the Mine Disposal School secured somewhat better, though still inadequate quarters, and there carried on instruction. Though both officers and enlisted men made up the classes, they received identical training. Limited facilities would not permit separate groups. Furthermore, both needed to know the same things.

The first class graduated in August 1941. Some of the graduates did not immediately receive field assignments. They thus became available to help the two original officers with instructional duties and such little administrative work as the cramped office space permitted.

In September 1941, Chief Gunner's Mate E. D. Buie (later Lt. jg), received orders to the school. His duty was to found a separate Mine Recovery Operational and Instruction Diving Section. The Deep-Sea Diving School, a Yard activity of long standing, would furnish him facilities for use in practical training and instruction. But emphasis in this case would be placed on diving as related to mine recovery. A short time later, authorization came to set up a Mine Investigation Station at Stump Neck, Maryland. This ultimately developed into

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what became known as the Ordnance Investigation Laboratory. It furnished all subsequent classes with the facilities for fieldwork in ordnance investigation and disposal.

On October 2, 1941, the order came to change the name of the establishment at the Yard to Advanced Mine School (Unit). Security reasons prompted this alteration, it being felt that the original titles were too revealing considering the highly classified nature of the work being performed. A few days later the school and unit received more permanent quarters than any thus far occupied. The old Naval Reserve Armory, building 186, furnished the space, consisting of two offices, a classroom, a museum for housing the equipment studied, a locker room, and a workshop. Through the cooperation of the Royal Navy at this time, specimens of German ordnance arrived and became the basis of the museum. Facilities still proved inadequate, but something like a working basis had now been achieved.

American formal entry into the war came in December, at which time the status of the school was clarified by its recognition as a permanent training facility. In March 1942, the operational units in the field again became known as Mine Disposal Units, and officer personnel attached became known as Mine Disposal Officers. Though the change somewhat compromised the security of the units' mission, it seemed desirable to let field commands know more definitively what these units were and what could be expected of them. The school, it might be mentioned, retained the name Advanced Mine School.

A further development in status came on July 4, 1942, when for the first time school and unit were formally separated. The former became a Washington Navy Yard activity, while the latter was placed under the newly formed Potomac River Naval Command. This did not prevent the same Officer-in-Charge from taking care of both. The school, however, soon came under the general supervision of the Captain of the Yard, who, about the end of the year, assumed additional duty as Officer-in-Charge of all Navy Yard Schools. This did not upset the arrangement, which left each with its own individual Officer-in-Charge, and Lieutenant Waters continued to act in this capacity for the Mine School.

At the beginning of 1943, the school and unit moved to their present quarters, building T30 in the new Anacostia Receiving Station and Training Center. For the first time in their mutual history, both now enjoyed adequate facilities.

Shortly after this, Waters and Archer, each meanwhile promoted to Lieutenant Commander, were detached and sent to other duties. Lieutenant (later Lieutenant Commander) E. F. Nichlos, a member of the school's first graduating class, became Officer-in-Charge of both activities. He remained until March 1944, when he was relieved by Lieutenant (later Lieutenant Commander) W. R. Amesbury, who continued in charge until replaced by Lieutenant (later Lieutenant Commander) J. R. Ganther, in July 1945.

During the latter part of 1943, the school had begun to train some personnel whose duties were not primarily concerned with mine disposal. The first of these special classes, composed of Sea Bee Officers and men, began instruction about the end of October. Thereafter, such groups studied intermittently at the school.

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The name Mine Disposal School, which was to be the final and permanent title, was bestowed in October 1943. The accurately descriptive nature of the name outweighed security considerations, which, moreover, no longer seemed so pertinent as they had at first.

During 1944, several important developments took place. On the first of July, expanded school facilities permitted segregation of the officers and men into separate groups to be instructed apart. The school building underwent various modifications involving the installation of new activities, including a Publications Officer, and a Drafting Department, and a complete photographic darkroom. The school also undertook technical publications on mine disposal and related subjects. In place of the original crude Mine Disposal Bulletins, there now appeared OP1330 (Mine Disposal Handbook), incorporating all established facts and procedures related to fieldwork. Mine Disposal Intelligence Bulletins, which had begun to appear in mimeograph form in March 1943, could now also be issued in print.

By December 1944, the growing workload that fell on the school required an increased amount of specialization of its activities. The change necessitated and brought an increase in personnel, which at its peak numbered seventeen officers and twenty-nine men regularly assigned. From this point until the end of the war the school was divided into various departments, as follows:

- Officer-in-Charge
- Assistant Officer-in-Charge
- Administration
- Personnel and First Lieutenant
- Instruction
- Intelligence and Research
- Publications
- Diving.

The curriculum of the Mine Disposal School naturally underwent significant development during its history. This came as the result of experience gained with new types of underwater explosive ordnance by the operational Mine Disposal Units. The activity started as a small group of officers and men responsible for rendering mines safe. It grew into an organization cognizant of all underwater explosive ordnance, both American and foreign. All problems had to be covered; underwater locating, recovery, rendering safe, and disposal. To avoid too verbose a description, it will be well to outline briefly the original curriculum and to note significant additions made from time to time.

The school started with a six-point program. First came the physics of magnetism and acoustics, followed by the operational characteristics and rendering safe proceedings of all mines; American and known foreign ones. Next there was taught disposal of mines by means other than disassembly, including countermining, steaming out, burning, thermit(sic) ignition, and penetration. Harbor and dock clearance was included, as well as organization of Naval Districts and Advanced Bases for Mine Defense. Item number six was deep sea

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diving. Each graduate of the school must qualify as a diver, second class, and so took a course for the purpose, as well as learning practical underwater work on mines.

The first addition came about the beginning of 1942, and consisted of torpedo recovery and operational characteristics and rendering safe procedures for torpedo exploders.

Four additional points were added in April 1942: the study of military explosives, general demolition techniques, bomb identification, and work on depth charges and depth bombs.

At the beginning of 1943, came the introduction of principles of underwater locators, and three months later, in April, there was added miniature photograph and report writing and official correspondence. In November 1943, the school began working with land mines and booby traps.

Two new subjects entered the curriculum during 1944: underwater locators, and photographic darkroom technique.

The year 1945 brought only two additions: complete torpedo coverage including propulsion mechanisms, and a brief course in the Japanese language. The Japanese taught was limited to seven hours, and consisted of recognition training in numbers and symbols appearing on Japanese ordnance equipment. The student, with the aid of a Japanese-English Dictionary, which he was taught to use, left the school prepared to translate and understand the markings on Nipponese torpedoes, mines, and depth chargers to be encountered in his later disposal work.

The chronology of the courses named above is at this date somewhat conjectural. No one stationed at the school in its later days was prepared to say at what exact date some of the innovations occurred. It should also be remembered that the subject matter of each course underwent constant revision as new information came in. On V-J Day the curriculum of the school was as follows:

<u>Subject</u>	<u>Hours</u>
Course Orientation	2
Influence Mines and Units	17
Contact and Controlled Mines	26
Anti-submarine Weapons	12
Military Explosives	12
Demolition and Disposal Techniques	12
Photography	15
Torpedoes	16
Report Writing (officers only)	7
Land Ordnance Disposal	21
Underwater Photography	3
Japanese Language	7
Mine Disposal Field Organization	4
Practical Field Work in Disposal	40
Underwater Locating	29
Technical Intelligence	3



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Diving	176
Review and Examinations	<u>21</u>
Total	423

In the course of instruction, the school made use of several outside facilities. For fieldwork in disposal and demolition techniques, it made visits to the Ordnance Investigation Laboratory, Stump Neck, Maryland. The Bomb Disposal School, Americana University, gave facilities for land ordnance disposal. The Deep Sea Diving School, Navy Yard, Washington, assisted with diver training. Practice in rendering bombs safe underwater was gained at the Naval Ordnance Laboratory tank at the Yard. USS IX 201 provided fieldwork with underwater locating gear.

With the ending of the Japanese War, the Bureau of Ordnance made immediate plans for abolishing the school. Instruction ended on October 20, 1945, after which the Bureau undertook no further dissemination of information to the field. On November 1 it disestablished the school, which was replaced by the Ordnance Disposal Unit, made up of both Mine and Bomb Disposal personnel. The new unit thereafter handled all disposal activities on the East Coast.”

**Reference:** US Navy “*US Naval Gun Factory*,” Office of Naval History, Washington, DC. 1946 pg.407-419.

Shortly after World War II it was converted into the Navy Intelligence School. The mission of the school was:

“To train Naval officers who select Intelligence as their specialty in all phases of Intelligence, including strategic, operational and counter intelligence, as required by the Navy. To conduct intensive instruction in foreign languages to meet the needs of the Navy for linguistic officers. To offer instruction in intelligence and foreign languages to personnel of the other armed services up to the capacity of the school. In addition, to conduct a suitable refresher course for reserve intelligence officers.”

In the 1960s, the Defense Language Institute was located in the building. The building was demolished in 1976.

**NOTE:** See Section 7.0 Ordnance Activities for additional information on ordnance activities conducted within the building.

### **Building T – 31**

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Building T – 31 was a temporary structure constructed in 1943 as a garage for the Mine Disposal School (T- 30). When Building T – 30 was converted into the Defense Intelligence School, Building T – 31 became a support and storage facility for the school. The building was demolished or transferred to the National Park Service after 1975.

### **Building T – 32**

Building T – 32 was a temporary building constructed in 1943 as a Laundry. In the summer of 1942 it became apparent that the laundry facilities in the Washington DC area were inadequate to handle the increasing numbers of civilian and military personnel relocating into the city in support of the war effort. To alleviate this problem, a laundry and laundry school was established. A laundry and a dry cleaning plant were constructed to handle the laundry needs of six thousand men. The laundry operation opened on May 17, 1943.

The mission and operation of the Laundry School is best described in the Naval Gun Factory World War II Administrative History:

#### **“Laundrymen’s School**

During the latter part of World War II, one of the busiest places at the Anacostia Receiving Station was the school for Laundrymen, run in conjunction with the Station Laundry. There, hundreds of men received the training needed before undertaking the unspectacular but very urgent Laundrymen’s duties both on shore and afloat. To any layman who might be inclined to regard washing in the Navy as merely a matter of scrubbing clothes and hanging them out to dry, a trip through the Anacostia establishment would prove an eye-opener.

The older custom in the American as well as in foreign navies was for each man to do his own washing. Lord Nelson, as early as the beginning of the nineteenth century, insisted that every sailor aboard his ships be given a small tub or bowl, in which to take care of his clothing. A policy similar to this prevailed in the United States service afloat until near the end of the last war. Then, in 1918, what appears to have been first regular Navy laundry on shipboard was installed in the battleship Texas, to be followed in time by regular laundry establishments throughout the Navy. Today, any ship larger than a DE has a laundry complement, with the necessary equipment. For some years, however, there was no such thing as a rated Laundryman. The Commander of a ship or a shore establishment assigned men at random to laundry work. In practice this usually meant that the least competent men, who seemed fit for no other particular duties, were placed in the Laundry.

When the United States began participation in World War II, the problem of clean clothes for naval personnel rapidly became an acute one. The large numbers of officers and men concentrated in the Washington vicinity led first to the establishment of the large Receiving Station Laundry at Anacostia and, some time later, to the beginning of the Laundry School. With this went some agitation for the creation of a Laundryman rating. It proved impossible to obtain this as a

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separate category, so the matter was finally compromised by including Laundrymen in a general Ship's Service rating, which also took in Barbers, Cobblers, and Tailors. The insignia of the Ship's Service rate are a crossed quill and key, combining the Yeoman's emblem with that of the Storekeeper.

The official date of the establishment of the Laundry School is May 1943, although the first students did not arrive to begin their training until the following November. The school was of the Class "A" type, meaning that men were taken directly from Boot Camp to be sent there, and on the conclusion of the laundry course were sent directly to the Fleet. The Anacostia School was almost but not quite the only one of its type in the Navy. At Camp Shelton, the Armed Guard Training Center at Norfolk, Virginia, there existed another Laundry School, though this apparently was by no means as good. By the summer of 1945 there seemed a reasonable prospect that the Norfolk School would be closed soon and its work absorbed by the Anacostia establishment.

The course established at the Receiving Station School lasted eight weeks, twenty-five new men being admitted every two weeks. All instructors, though serving in the Navy, were laundrymen by background. Of the student personnel, about one-third had laundry experience as dry-cleaners or textile laundrymen, while the remaining third had no background of either type. This latter third furnished most of the failures in the course, which amounted in all to about 12% of the total number enrolled. It is believed, however, that most of the failures resulted more from the men's dislike of the idea of being Laundrymen than from lack of experience or background. The men were sent to the school without being consulted in the matter, and a few resented such an assignment. Presumably any man with fair intelligence and willingness to work should have been able to pass the course, because a score of 40 in the General Classification Test qualified anyone for admission to the school. The great majority of those selected on this basis were able to pass the course.

In January 1944, the Chief of Naval Personnel inquired regarding the curriculum of studies pursued in the Laundry School, with a view to standardizing and making it official for Navy purposes.

What the Bureau of Personnel actually did was to take the school course as it already existed and direct that it be placed in effect. This presumably standardized the curriculum for the other laundry school at Norfolk as well, and did the same for any new establishment that might be set up in the future.

Graduates of the Laundrymen's School at present must have rather high qualifications. Under the heading of organization, planning, and supervision, they are required to organize a ship's laundry requiring a crew of from 5 to 30 men, and must be able to plan workflow, the distribution and coordination of subordinates' duties, and the supervision of all work. Since all types of laundering will be required, they have to know the variations in the laundry process in handling work from the division, the wardroom and mess, the chief petty officers, and the commissioned officers. Clothes must be simply but effectively marked, to avoid confusion, and the Laundryman must know the systems ordinarily used for the purpose. His training further includes listing, sorting, and the preparation of stock solutions for the various types of washing,

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using the chemicals in stock. With this goes spotting and stain removing (including bloodstains), by the use of proper chemical agents. Laundrymen are required to be familiar with standard types of washing machines and their uses, as well as soaps, bluing, and starches. They need to be well posted in all methods of finishing work.

Decontamination is also in their field. Laundry duties include, when necessary, the making of repairs and adjustments on the machines, besides which the Laundryman must know and undertake the safety precautions that go with this work. Finally, he is required to advise the Supply Department as to specifications and quantities of Laundry materials and supplies that are to be purchased, and must keep such records and make such reports as are required regarding the personnel under him and the operations they perform.

The men who are attending the Laundry School at any given time are divided into four groups. Membership in a group is determined by date of entrance, since new classes come in at two-weeks' intervals. A typical day's routine for school members is as follows:

0730 – 0750	Physical Training
0800 – 0945	First Class
0950 – 1135	Practical
1135 – 1235	Chow
1235 – 1420	Second Class
1420 – 1500	Physical Training
1505 – 1650	Practical

Practical periods are spent at work in the actual laundry, either that of the Receiving Station to learn mass and bulk methods or that of the School to learn shipboard methods. Of the total time consumed in instruction, about half is spent in class, about a fourth in the Station Laundry, and the other fourth in the School Laundry. The latter is fitted up with the general equipment that is to be found on board cruisers, destroyers, and submarines, and is arranged in the shipboard way, not only as to items of machinery but with regard to space as well. On ships, the men will work under crowded conditions, so they may as well get used to this while at the school.

Lectures are given on such subjects as soaps, bleaches, dyes, and bluing. A limited amount of chemistry is included, to teach Laundrymen why certain substances behave as they do. Other lectures cover the numerous pieces of laundry equipment and their nomenclature, flat work ironing, inspections, and other subjects too numerous for discussion. Any classroom presentation is followed, when possible, by practical work in the same subject in the Laundry.

While the work of the Laundry School does not require as much educational background as do some other Navy courses, the hours are long and the work is hard, since the object is to train, in eight weeks, a Laundryman who will be able to give satisfaction in any type of Navy situation.”

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**Reference:** US Navy “*US Naval Gun Factory*,” Office of Naval History, Washington, DC 1946 pg. 440-445.

The laundry operation ceased by the 1960s and the building was converted in a Chief Petty Officers’ Club. It was demolished sometime in the late 1960s.

### **Building T – 33**

Building T – 33 was a permanent building construction 1943 as a Heating Plant for the laundry. It was demolished sometime in the late 1960s.

### **Building T – 34**

Building T – 34 was a permanent building constructed in 1943 as an Office Building. It was demolished or transferred to the National Park Service sometime around 1965.

### **Building T – 35**

Building T – 34 was a temporary building constructed in 1943 as an Office Building. In the years to follow it served with a variety of administrative functions. It was demolished or transferred to the National Park Service sometime around 1965.

### **Building T – 35A**

Building T – 35A was a permanent building constructed in 1947 as an Ordnance & Gunnery Projection Building. In 1948 it was converted into a Greenhouse and was demolished sometime in the 1960s.

### **Building T – 35B**

Building T – 35B was a permanent building constructed in 1947 as a Barracks. It was demolished sometime around 1955.

### **Building T – 36**

Building T – 36 was a permanent building constructed in 1943 as a Preparation Building for the Naval Gun Factory. In 1945 it was used as an Experimental Laboratory by the Naval Ordnance Laboratory. In 1955 it was used for storage by the Naval receiving Station Supply Department. It was demolished sometime around 1960.

### **Building T – 37**

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Building T – 37 was a permanent building constructed in 1943 as a Storage Building for the Naval Gun Factory. In 1945 it was used as an Experimental Laboratory by the Naval Ordnance Laboratory. In 1955 it was used for storage by the Naval receiving Station Supply Department. It was demolished sometime around 1965.

### **Building T – 38**

Building T – 38 was a permanent building constructed in 1943 as a Storage Building. It was demolished sometime after 1944.

### **Building T – 39**

Building T – 39 was a permanent building constructed in 1943 as a Gun Director Training School. It was demolished sometime around 1965.

### **Building T – 40**

Building T – 40 was a permanent building constructed in 1943 as a Gun Room Building. It served as part of the Fire Control School. It was demolished sometime around 1965.

### **Building T – 41**

Building T – 41 was a temporary building constructed in 1943 as a Barracks. It was demolished sometime around 1965.

### **Building T – 42**

Building T – 42 was a temporary building constructed in 1943 as a Chapel Annex. In the late 1960s it was converted into the Defense Intelligence School. The building was demolished in 1976.

### **Building T – 43**

Building T – 43 was a temporary building constructed in 1943 as a Gatehouse and Security Office. In the 1960s the building was used as a training facility in support of the Defense Language Institute. The building was demolished or transferred to the National Park Service in 1975.

### **Building T – 44**

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Building T – 44 was constructed in 1943 as Quarters for the Executive Officer of the Naval Receiving Station. In the late 1970s the quarters were transferred to the National Park Service.

### **Building T – 45**

Building T – 45 was constructed in 1943 as Quarters for the Commanding Officer of the Naval Receiving Station. In the late 1970s the quarters were transferred to the National Park Service.

### **Building T – 46**

Building T – 46 was a temporary building constructed in 1943 as a Crew’s Laundry. It was demolished sometime prior to 1965.

### **Building T – 47**

Building T – 47 was a temporary building constructed in 1943 as a Crew’s Laundry. It was demolished sometime prior to 1965.

### **Building T – 48**

Building T – 48 was a permanent building constructed in 1944 as a Heating Plant. The building was demolished prior to 1965.

### **Building T – 49**

Building T – 49 was a temporary building constructed in 1944 as an Anti-Aircraft Training Building. In the mid 1950s it was used for storage by the Advanced Technical Service School and was demolished prior to 1965.

### **Building T – 50**

Building T – 50 was a temporary building constructed in 1944 as a Ship’s Service Building (same as Exchange Building). Rooms and major equipment included:

- Galley
- Scullery
- Food Storage and Sales Area
- Display Stands and Cabinets
- Counters

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In the 1960s the building was listed on Station Maps as a Cafeteria, Exchange and Enlisted Men's Club. The building was demolished in 1976.

### **Building T – 51**

Building T – 51 was a temporary building constructed as a utility building in 1944. It was demolished or transferred to the National Park Service sometime around 1975.

### **Building T – 52**

Building T – 52 was a temporary building constructed in 1944 as the 1<sup>st</sup> Lieutenant's Storage Building. In the 1950s it was used for storage and the Post Office. The building was demolished by 1965.

### **Building T – 53**

Building T – 53 was a temporary building constructed in 1944 as a Barracks. It was demolished sometime prior to 1965.

### **Building T – 54**

Building T – 54 was a temporary building constructed in 1944 as a Barracks. It was demolished sometime prior to 1965.

### **Building T – 55**

Building T – 55 was a temporary building constructed in 1944 as a Barracks. It was demolished sometime prior to 1965.

### **Building T – 56**

Building T – 56 was a temporary building constructed in 1944 as a Mess Hall. It was converted into a Public Works Garage and Supply Department Facility. The building was demolished sometime prior to 1965.

**Building T – 57** Not Assigned

**Building T - 58**



## DRAFT

Building T – 58 was a temporary building constructed in 1944 as a Barracks. It was demolished sometime prior to 1965.

### **Building T – 59**

Building T – 59 was a temporary building constructed in 1944 as a Barracks. It was demolished sometime prior to 1965.

### **Building T – 60**

Building T – 60 was a temporary building constructed in 1944 as a Barracks. It was demolished sometime prior to 1965.

### **Building T – 61**

Building T – 61 was a temporary building constructed in 1944 as a Barracks. It was demolished sometime prior to 1965.

### **Building T – 62**

Building T – 62 was a temporary building constructed in 1944 as a Barracks. It was demolished sometime prior to 1965.

**NOTE:** Buildings T – 60, 61 & 62 served primarily as barracks for Bachelor Officers' and could berth and mess 336 officers under normal conditions and 440 officers under emergency conditions.

### **Building T – 63**

Building T – 63 was a temporary building constructed in 1944 as the Advanced Gunners' Mat' School. In 1960 the US Naval Personnel Research Activity was located in the building. The building was demolished sometime prior to 1965.

### **Building T – 64**

Building T – 64 was a temporary building constructed in 1944 as a Cold Storage Building for the Potomac River Naval Command. It was demolished sometime prior to 1965.

### **Building T – 65**

## DRAFT

Building T – 65 was a temporary building constructed in 1944 as a Barracks and Storage Facility. After World War II it was converted into an Automobile Hobby Shop. In 1965 it was used for storage by the Architect of the Capitol. It was demolished or transferred to the National Park Service after 1975.

### **Building T – 66**

Building T – 66 was a temporary building constructed in 1945 as a Dry Provision Storage Building for the Potomac River Naval Command. It was demolished sometime prior to 1965.

### **Building T – 67**

Building T – 67 was a temporary building constructed in 1945 as an Annex to the Advanced Gunners' Mate School. It was demolished sometime prior to 1965.

### **Building T – 68**

Building T – 68 was a temporary building constructed in 1945 as a Crew's Laundry. It was demolished sometime prior to 1965.

### **Building T – 69**

Building T – 69 was a temporary building constructed in 1945 as a Crew's Laundry. It was demolished sometime prior to 1965.

### **Building T – 70**

Building T – 70 was constructed in 1945 as an Advanced Fire Control and Director Training School. In the 1950s it was occupied by the Bureau of Aeronautics Aerology and Photographic Division. It was demolished sometime prior to 1965.

### **Building T – 71**

Building T – 71 was constructed in 1945 as an Experimental Building for the Naval Ordnance Laboratory. In 1955 it was being used for storage by the Naval Receiving Station Public Works Department and was demolished sometime prior to 1965.

### **Building T – 72**

## DRAFT

Building T – 72 was constructed in 1945 as a Camouflage Storage Building. In the late 1940s it was used by the Photographic Interpretation Center for storage and was demolished sometime prior to 1965.

### **Building T – 73**

Building T – 73 was constructed in 1945 as a Storage Building for the Naval Ordnance Laboratory. It was demolished sometime prior to 1965.

### **Building T – 74**

Building T – 74 was constructed in 1945 as a Storage Building for the Naval Ordnance Laboratory. It was demolished sometime prior to 1965.

### **Building T – 75**

Building T – 75 was constructed in 1945 as a Storage Building for the Naval Ordnance Laboratory. It was demolished sometime prior to 1965.

### **Building T – 76**

Building T – 76 was constructed in 1945 as a Storage Building for the Naval Ordnance Laboratory. It was demolished sometime prior to 1965.

### **Building T – 77**

Building T – 77 was constructed in 1945 as a Storage Building for the Naval Ordnance Laboratory. It was demolished sometime prior to 1965.

### **Building T – 78**

Building T – 78 was constructed in 1945 as the Naval Ordnance Laboratory Advanced Fire Control School. In the mid1950s it was used for storage by the Hobby Shop and was demolished sometime prior to 1965.

### **Building T – 79**

## DRAFT

Building T – 79 was constructed in 1948 as a Refrigerated Storage Building for the Naval Ordnance Laboratory. By 1955 the building was gone and the number was assigned to a Sentry House that was located in a different location. The Sentry Booth was demolished sometime prior to 1961.

### **Building T – 80**

Building T – 80 was constructed in 1955 as a Sentry House. It was demolished sometime prior to 1961.

### **Building T – 81**

Building T – 81 was constructed in 1955 as a Sentry House. It was demolished sometime prior to 1970.

### **Building T – 82**

Building T – 82 was constructed in 1955 as a Sentry House. It was demolished sometime prior to 1965.

### **Building T – 83**

Building T – 83 was constructed in 1955 as a Trailer Pump House. It was demolished sometime prior to 1965.

### **Building T – 84**

Building T – 84 was constructed in 1955 as a Trailer Pump House. It was demolished sometime prior to 1961.

### **Building T – 85**

Building T – 85 was constructed in 1955 as a Trailer Pump House. It was demolished sometime prior to 1961.

### **Building T – 86**

## DRAFT

Building T – 86 was constructed in 1955 as a Paint Shop for the Naval Receiving Station Public Works Department. It was demolished sometime prior 1965.

### **Building T – 87**

Building T – 87 was constructed in the late 1940s or early 1950s as a Paint Locker for the Naval Photographic Interpretation Center. It served as a paint storage locker until 1973. The structure was demolished or transferred to the National Park Service sometime around 1975.

### **Building T – 88**

Building T – 88 was constructed in 1955 as a Gas Station. It was demolished sometime prior 1965.

### **Building T – 89**

Building T – 89 was constructed in 1955 as a Garbage House. It was demolished sometime prior 1965.

### **Building T – 90**

Building T – 90 was constructed in 1955 as a Garbage House. It was demolished sometime prior 1965.

### **Building T – 91**

Building T – 91 was constructed in 1955 as a Storage Building. It was demolished sometime prior 1965.

### **Building T – 92**

Building T – 92 was constructed in 1955 as a Garage for the First Lieutenant. It was demolished sometime around 1976.

### **Building T – 93**

## DRAFT

Building T – 93 was a temporary structure constructed in 1951 as an Instrument Repair Shop for the Music School. Operations conducted in the building included:

- Instrument Repair Shop
- Paint Spraying and Buffing
- Lacquer Storage

In the 1960s and 1970s it was used to store hazardous and flammable materials. It was demolished or transferred to the National Park Service in 1975.

### **Structure PL -1**

This structure was constructed in 1948 as a Paint Locker. It was demolished or removed by 1955.

### **Structure PL -2**

This structure was constructed in 1948 as a Paint Locker. It was demolished or removed by 1955.

### **MISCELLANEOUS STRUCTURES:**

- Outdoor Swimming Pool
- Athletic Field
- Tennis Court

### **4.0 ELECTRICAL TRANSFORMERS:**

**DRAFT**

<b>Location</b>	<b>Description</b>	<b>Reference #</b>
Building T-29	Large Transformers (Installed in 1967)	16
Building T-11	Switch Gear	1975 plan No. 3011699
Building T - 25	Transformer (located on the east side of building)	
Structure N - 2	Transformer Sub-Station (located adjacent to Building T - 40)	Plan 37666

**5.0 COAL STORAGE FACILITIES:**

<b>Location</b>	<b>Description</b>	<b>Remarks</b>
Building T - 2	Boiler House	
Building T-17	Boiler House No. 1	A Coal Yard was located adjacent to the building. Coal Handling and Storage Equipment listed to be removed on 1961 Demolition Map.
Building T - 20	Boiler House	
Building T - 33	Boiler House	Coal Bunker
Building T-48	Boiler House No. 6	A Coal Yard was located adjacent to the building. Coal Handling and Storage Equipment listed to be removed on 1961 Demolition Map. This included railroad tracks.

**6.0 ABOVE / UNDERGROUND STORAGE TANKS:**

**DRAFT**

No.	Building / Structure Name	Type AST/UST	Qty	Status	Remarks
T-20	Heating Plant	AST	1		There in 1970, ref 16
No. 1	Heating Plant (converted from coal)	AST	1		20,000 gallon – Steel 10’6” x 21” cylindrical
No. 2	Heating Plant (converted from coal)	AST	1		20,000 gallon – Steel 10’6” x 21” cylindrical
No. 3	Heating Plant (converted from coal)	AST	1		20,000 gallon – Steel 10’6” x 21” cylindrical
T-16	Fire House & Garage	UST	1		5000 gallon, (listed to be removed on 1961 Demolition Map) (Included gas pump)
T-33	Laundry	AST	2		Solvent Tank
T-33	Laundry	UST	1		Solvent Tank
T-40	Gasoline Station	UST	2		10,000 gallon
T-88	Gasoline Station	UST	2		5000 gasoline tanks (listed to be removed by government on 1961 Demolition Map)

**7.0 ORDNANCE ACTIVITIES**



## DRAFT

The following ordnance related schools were located on the station:

- T – 5 Advance Fire Control School
- T – 35A Ordnance & Gunnery Projection Building
- T – 39 Ordnance Gunnery Officers' School
- T – 40 Gun Room & Advance Fire Control School
- T – 49 Mark I Training Building
- T – 63 Advance Gunner's Mate School
- T – 67 Annex, Gunner's Mate School
- T – 78 Gun Trainer Building

According to a literature search performed under the oversight of the Army Corps of Engineers, it was determined that only inert ordnance would have been used in these buildings. (see FUDS Report # )

The following buildings and structures were operated on the station under the control of the Naval Ordnance Laboratory:

- T – 22 Experimental Building
- T – 23 Experimental Building
- T – 24 Experimental Building
- T – 25 Experimental Building
- T – 26 Experimental Building
- T – 27 Experimental Building
- T – 36 Experimental Building
- T – 37 Experimental Building
- T – 71 Experimental Building
- T – 72 Storage
- T – 73 Storage
- T – 74 Storage
- T – 75 Storage
- T – 76 Storage
- T – 77 Storage
- T – 79 Refrigerated Storage

The work performed in these buildings is unknown.

### SECTION 8.0 LIST OF REFERENCES

1. Navy Department, "*Public Works of the Navy Data Book*," Bureau of Yards and Docks, Washington DC., July 1947.

## DRAFT

2. (Map), US Naval Receiving Station, Anacostia, DC. 30 June 1948.
3. (Map), US Naval Receiving Station, Anacostia, DC. 30 June 1949.
4. (Map), US Naval Station, Washington (Anacostia), DC. Demolition of Structures, Site Plan, Y & D Dwg. No. 941532. 6 November 1961.
5. Map of Anacostia Annex. 1 July 1965.
6. Anacostia Annex, General Development Map, FEC Dwg. No. 1118041. 27 February 1969.
7. US Naval Station, Washington, DC. Demolition of Various Buildings, NAVFAC Dwg. No. 3011697. 6 June 1975.
8. Master Shore Development Plan, Dwg. No. 29961. 30 June 1955.
9. Navy Department, "*Public Works of the Navy Data Book*," Bureau of Yards and Docks, Washington, DC., July 1945.
10. US Naval Station, Washington DC. Site Plan & Vicinity Map, NAVFAC Dwg. No. 3011699. 6 June 1975.
11. (Map) Map of US Navy Yard, Washington, DC., Showing Conditions on June 30, 1942.
12. (Map) Map of US Navy Yard, Washington, DC., Showing Conditions on June 30, 1943, PWD No.7788.
13. (Map) Map of US Navy Yard, Washington, DC., Showing Conditions on June 30, 1944, PWD No.8971.
14. (Map) Map of US Navy Yard, Washington, DC., Showing Conditions on June 30, 1945, PWD No.11694.
15. Plan Index Cards (EFACHES)
16. US Naval Station, Washington, DC, Command Narratives (All Years).
17. US Navy "*US Naval Photographic Science Lab. 1945*," Washington, DC. November 29, 1945.
18. Dyers, Wayne J. "*A History of the United States Navy Band, Washington, DC. (1918-1988)*." Dissertation; University of Houston, Texas. May 1988.

## DRAFT

19. US Navy “*Catalog of US Naval Training Activities and Courses.*” Bureau of Naval Personnel, Washington, DC. January 1951.

20. US Navy “*Catalog of US Naval Training Activities and Courses.*” Bureau of Naval Personnel, Washington, DC. January 1953.

21. “*Real Estate File, US Naval Station Washington, DC.*” Engineering Field Activity, Chesapeake, Washington Navy Yard, Washington, DC (Various Years).

22. Mills, Petticord & Mills, “Feasibility Study and General Development Plan,” Washington, DC. July 15, 1959.

23. (Map) Anacostia Annex, General Development Map, FEC Dwg. No. 1118041, January 21, 1971.

**APPENDIX I**  
**Qualifications of Environmental Professionals**

ANDREW NICHOLLS  
Hydrogeologist

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**EDUCATION**

B.S., Hydrogeology, Western Michigan University, 1999

**REGISTRATION AND CERTIFICATION**

Current OSHA Hazardous Materials Health & Safety Certification

**EXPERTISE**

Andrew (Andy) Nicholls has 3 years of experience as a hydrogeologist and 6 years in landscape planting. As a hydrogeologist, he conducted hydrogeologic testing and performed environmental sampling of soil, water, sediment, and vapor. He has observed drilling, soil probe activities, and well installation activities, underground storage tank (UST) removals, and subcontractor field operations. Andy's expertise also includes performing regular operation and maintenance of remediation systems; performing Phase I and Phase II environmental site assessments, environmental assessments, and environmental transaction screen process studies.

**EXPERIENCE**

**Phase II Environmental Site Assessment for the Tanana Chiefs Conference, Inc. , Alaska.**

Andy served as project manager for this project, which involved determining the nature and extent of contamination related to a former multi-product military pipeline at a Native Allotment in Northway Village, AK. Impacts related to past uses of herbicides for vegetation control along the pipeline corridor were also investigated. The Phase II ESA included site reconnaissance activities, completing hand auger borings and direct-push probes, and collecting surface and subsurface soil samples.

**Sediment Investigation at Puget Creek Site, NOAA, Tacoma, WA.**

Andy served as hydrogeologist for this project, which included completing a Phase I ESA of the site and a follow-up sediment investigation. Ridolfi collected sediment samples at the site to determine if contamination related to the Commencement Bay Nearshore Tidelands site is present at the site. Sediment samples were

also collected near creosote-treated pilings at the site to determine if the creosote has impacted the soil/sediment surrounding the pilings.

**Poplar Point Site Characterization Activities, NOAA, District of Columbia.**

Andy serves as hydrogeologist for the project. The project involves conducting a site characterization study and associated activities at a 40-acre former nursery in response to a statement of work issued by NOAA. Field work includes reconnaissance activities; Anacostia River sediment investigations; wetland investigations; geophysical work; collecting surface soil samples; installing and sampling monitoring wells; and sampling subsurface soil.

**Formally Utilized Defense Sites (FUDS) Remedial Investigation and Removal Action, Metlakatla, AK.**

Andy is the hydrogeologist for the project, which involves site investigations and removal actions at selected sites on the Metlakatla Peninsula within the Annette Islands Reserve. Remedial Investigations include determining the nature and extent of contamination in areas near former fuel tanks, septic tanks, and building and structures that have been associated with hazardous substances. The removal actions include removing fuel tanks and petroleum contaminated soil. The work is being performed under a Cooperative Agreement between the U.S. Army Corps Engineers (USACE) and the Metlakatla Indian Community (MIC), and includes preparing planning documents, field work, and reporting relative to the remedial investigations and removal actions.

**Frank Albert Road Project, Commencement Bay Restoration, NOAA.**

Andy serves as hydrogeologist investigating the relationship between ground water and surface water for this project, which involves habitat restoration efforts for NOAA and the Commencement Bay Trustees at the Frank Albert Road site on the lower Puyallup River. The project is intended to provide off-channel resting, feeding, and rearing habitat for juvenile salmonids migrating to sea. Project work includes hydrological

analysis of the site, wetland delineation, conceptual design, permitting, and preparing plans and specifications. Preliminary concepts include a setback levee and 10 to 20 acres of tidally influenced pools and channels.

**Technical Services, Fidalgo Island, WA, Swinomish Indian Tribal Community.**

Andy was the hydrogeologist for this project, which involved oversight of the time-critical removal of over 50,000 tons of contaminated sludge and soil on the Swinomish Reservation. Ridolfi completed investigations of downgradient impacts related to the source material. The downgradient impacts investigations included sediment, surface water, and ground water seep sampling. Ridolfi supported efforts to verify that the removal was complete and that there were no residual risks to reservation resources.

**Technical Services—Water Resources, Lower Elwha Tribe, Port Angeles, WA.**

Andy has served as the hydrogeologist for this project. Ridolfi is conducting a survey of the Elwha River to determine the effects on the water table of dam removal and subsequent fluctuations in the river level, in particular, how it will impact wastewater treatment systems. The project has included installing and monitoring piezometers, staff gages, and water wells.

**Hansville Landfill Technical Support, Port Gamble S'Klallam Tribe, Kingston, WA.**

Andy served as hydrogeologist for this project, which involved evaluating post-closure surface and ground water quality trends for a county landfill and proposed modifications to the existing monitoring program. The evaluation was based on review of pre- and post-closure files from the Washington Department of Ecology (Ecology) and the Kitsap County Health District, Remedial Investigation documentation, and various historical records. Ridolfi is providing review and comment on the Draft Remedial Investigation/ Feasibility Study for the landfill; provide technical coordination with US EPA, Ecology, and the Kitsap County Health Department to address

issues and concerns regarding the landfill for the Tribe.

Ridolfi conducted a supplemental investigation at the site, which included sediment and surface water sampling downgradient from the landfill. The supplemental investigation was completed to address issues and concerns regarding releases of contaminants to the reservation resources, including beaches used for collecting shellfish along Port Gamble Bay.

**Various Sites, Michigan.** Andy was responsible for several soil abatement projects, including removal of contaminated soil and soil cleanup verification sampling for General Motors, the U.S. Postal Service, Michigan State Capitol Facilities Agency, and Consolidated Courts in Lansing, MI. Andy also performed system operation and maintenance on vapor extraction and air sparging treatment systems and free-phase hydrocarbon recovery systems. He evaluated irrigation wells and ground water monitoring wells using down-hole, insitu slug tests, and aquifer drawdown and recovery pumping tests.

Andy served as the field geologist for UST removals and soil and ground water investigations, which involved using a variety of methods to delineate vertical and horizontal extent of contaminants. The investigations involved using direct-push probe, hollow stem auger, and temporary well sampling methods. Andy conducted quarterly ground water sampling of monitoring wells and completed status reports for leaking UST sites, petroleum contaminated sites, metal contaminated sites, chloride contaminated sites, and volatile and semi-volatile organic compound contaminated sites located throughout Michigan.

**AFFILIATIONS**

Michigan Association of Environmental Professionals (MAEP)

COLIN H. WAGONER, P.E.  
Senior Civil Engineer

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**EDUCATION**

M.S.E., Civil Engineering Department,  
University of Washington, 1990  
M.S., Geophysics, Colorado School of Mines, 1985  
B.S., Geophysical Engineering, Colorado  
School of Mines, 1982

**SPECIALIZED PROFESSIONAL COURSES**

Natural Attenuation Short Course; Hydrology  
and Hydraulics for Highway Design; Applied  
Storm Water Pollution Prevention Planning;  
Vapor Extraction Short Course; Probability,  
Statistics and Geostatistics Short Course

**REGISTRATION AND CERTIFICATION**

Registered Professional Engineer: Washington, 1994  
R.G., Hydrogeologist, 2002  
Current OSHA Hazardous Materials Health & Safety  
Certification

**EXPERTISE**

Colin Wagoner has over 17 years of experience as a civil engineer and as project manager for complex multidiscipline projects. His expertise is in remedial investigation and feasibility studies (RI/FS), remediation, and quality control projects. He has developed novel approaches to managing projects that result in reduced operating costs and savings over the life of the project.

Since 1998, Colin has managed the Commencement Bay Task Order for NOAA, which involves managing the activities of a team of seven subconsultants. In this capacity, he communicates project status and progress with NOAA's Restoration Case Manager for Commencement Bay on a routine basis. He also interfaces regularly with other Commencement Bay Trustees on this project, including representatives from the Department of Ecology, U.S. Fish and Wildlife, Department of Natural Resources, the Puyallup Tribe, and the Muckleshoot Tribe. Part of Ridolfi's task is to help facilitate agreement between the Trustees on the preferred restoration alternative for each of the project sites. *NOAA's representative has stated that she couldn't be more pleased with how well this project has been managed.*

**EXPERIENCE**

**NRDA Technical Services for Projects and Activities, Commencement Bay, U.S. Dept. of Commerce, NOAA, Tacoma, WA.** Colin is the project manager for habitat restoration projects at estuarine sites in Commencement Bay. The first sites include the mouth of the Hylebos Creek and the Puyallup Tribal Intertidal Plant Nursery. Colin manages a team that took the projects beginning at a conceptual design phase, through final design, permitting and contractor selection. Restoration efforts are now underway and Ridolfi is performing construction oversight, acting as a liaison between NOAA and the contractor, to verify that the work is performed correctly.

As project manager, Colin is managing sampling efforts, civil design, permitting, construction oversight, and monitoring activities at several habitat restoration projects. These projects are enlarging habitat area for juvenile salmonid, which is accomplished by changing elevations, planting salt marsh vegetation, and installing habitat features.

His responsibilities include restoration planning, hydraulic design analysis, and managing development of plans and specifications. Technical services include site surveys and sampling; landscape architecture; civil engineering services; biological and environmental monitoring; permitting; and construction oversight. Colin is also responsible for client communications, quality control, consensus-building within the Trustee group, and communicating site restoration concepts to the public. *Note: This project won the ACEC Washington Gold Award for "Best in State" for Social and Economic Considerations, January 9, 2002.*

**Technical Services, Fidalgo Island, WA, Swinomish Indian Tribal Community.** Colin is the project manager for oversight of a contaminant cleanup project on the Swinomish Reservation. Oil companies historically used several lagoons to dump refinery wastes and drums. The companies have agreed to remove the waste materials and Ridolfi is supporting the efforts to verify that the removal is complete and that there are no residual risks to groundwater

and surface water resources. Colin's role is to review plans, coordinate field oversight activities and to provide regulatory support during negotiations with EPA.

**Hansville Landfill Technical Support, Port Gamble S'Klallam Tribe, Kingston, WA.** Colin was responsible for review of the Feasibility Study for this project, which involved evaluation of post-closure surface and ground water quality trends for a county landfill and proposed modifications to the existing monitoring program. The evaluation was based on review of pre- and post-closure files from the Washington Department of Ecology (DOE) and the County Health District, Remedial Investigation documentation, and various historical records. Ridolfi is providing review and comment on the Draft RI/FS for the landfill; provide technical coordination with US EPA, Washington DOE, and the County Health Department to address issues and concerns regarding the landfill for the Tribe.

**Feasibility Study, Coeur d'Alene Basin Idaho, US EPA and the Coeur d'Alene Tribe.** Colin is preparing a Feasibility Study Report for the US EPA in coordination with the Coeur d'Alene Tribe for the lower Coeur d'Alene River. The goal is to develop cleanup alternatives for the river and its floodplains to reduce or eliminate the environmental impacts associated with decades of upstream mining activities. Important project elements include the hydrology and hydraulics of the river system; sediment transport; groundwater surface water interactions; evaluating areas where wildlife has been impacted; and developing and analyzing solutions for these problems. Colin is the primary author for of the FS report for this section of the basin.

**Frank Albert Road Project, Commencement Bay Restoration, NOAA.** Colin is managing habitat restoration efforts for NOAA and the Commencement Bay Trustees at the Frank Albert Road site on the lower Puyallup River. The project is intended to provide off-channel resting, feeding and rearing habitat for juvenile salmonids migrating to sea. Project work includes hydrological analysis of the site, wetland delineation, conceptual design, permitting and ESA consultation and preparation of plans and

specifications. Preliminary concepts include a setback levee around a complex with 10 to 20 acres of tidally influenced pools and channels.

**RI/FS, Superfund Site, Vancouver, Washington.** Colin was project manager for this \$1.3-million remedial investigation and feasibility study. He was responsible for preparation and adherence to budgets, staffing, and technical direction. Pilot tests are underway on the first combined in-well stripping system that will treat solvent and chromium contaminated ground water. If successful, this novel approach could reduce operating costs by approximately \$200,000 per year, resulting in a savings of several million dollars over the life of the project.

**Feasibility Study and Remediation, Aerospace Firm.** Colin was project manager during the planning and implementation phases of a multi-phase environmental project for a major aerospace firm. The original task of preparing a Feasibility Study grew into full-scale remediation based on the client's satisfaction with the work. A series of 20 task order proposals were negotiated raising the original budget from approximately \$200,000 to over \$1 million dollars. Approximately 3,500 tons of petroleum contaminated soil were treated under Colin's direction by a field staff of up to 20 people. The project was completed on schedule and under budget.

**Remediation Contract, U.S. Army Corps of Engineers.** Colin prepared the winning proposal for this remediation contract. He subsequently responsible for preparing the work plan; coordinating subcontractors and sampling staff; and performing quality control inspections during remediation.

**Cleanup of Residential Properties, Superfund Site, Tacoma, WA.** Colin acted as a technical resource and facilitator in the negotiation between EPA and Washington State Department of Ecology to determine cleanup approaches for residential properties at a Tacoma Superfund site. He provided technical rationale for not using several of MTCA's provisions for evaluating cleanup data.



**Contaminated Water Recovery System, U.S. Air Force, North Slope, Alaska.** Colin designed and oversaw installation of a product and contaminated water recovery system for the U.S. Air Force at a radar installation on the North Slope region of Alaska. The system was designed to require a minimum of operator intervention due to the remote location of the site.

**Outfall Diffuser for Manufacturing Facility, Tacoma, WA.** Colin performed the engineering analysis and preliminary design for a replacement outfall diffuser at a chlor-alkali manufacturing facility in Tacoma, Washington. The analysis indicated that the pre-existing diffuser was incapable of achieving NPDES discharge standards. He used a dispersion model to size the replacement diffuser such that discharge standards could be met under a variety of operating conditions.

**AFFILIATIONS**

American Society of Civil Engineers  
National Groundwater Association  
Society for Ecological Restoration

**HONORS AND AWARDS**

Finalist, ICF Kaiser Engineers, National Technical Conference, Denver, CO, 1994

**PUBLICATIONS/PRESENTATIONS**

- Society for Ecological Restoration, 2001, Oral Presentation on Salt Marsh Restoration at the Mowitch Site in Tacoma Washington.
- Puget Sound Research 2001, Conference Proceedings and Oral Presentation-Squally Beach: Challenges of Urban Restoration.
- Soil Sampling at a Residential Superfund Site, Conference Proceedings, ICF Kaiser National Technical Conference, 1994.
- Wagoner, Colin and Dennis P. Lettenmaier, 1990 Monitoring Network Design for Risk-Based Groundwater Remediation, University of Washington, Water Resources Series Technical Report No. 125.