

**FINDING OF SUITABILITY FOR EARLY TRANSFER**

**PHASE 3 – AREA C NORTHEAST PARCEL  
NAVAL TRAINING CENTER ORLANDO  
ORLANDO, FLORIDA**



**Prepared by:**

**Department of the Navy  
Southern Division  
Naval Facilities Engineering Command  
2155 Eagle Drive  
North Charleston, S.C. 29406**

**September 23, 2004**

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## **1.0 BACKGROUND**

In accordance with actions taken pursuant to the Defense Base Realignment and Closure Act of 1990, the former Naval Training Center, Orlando, Florida (NTC Orlando or NTC) was operationally closed in April 1999. Although environmental investigation and cleanup activities have been ongoing at NTC Orlando since 1985, certain response activities to address past hazardous substances releases remain to be completed on portions of the NTC. These releases are currently being addressed pursuant to the requirements of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) of 1980 under the Department of the Navy's (Navy) Installation Restoration (IR) Program. The Orlando Partnering Team (OPT), assembled to address environmental issues at NTC, consists of representatives from the Navy and its contractors, the Florida Department of Environmental Protection (FDEP), and the United States Environmental Protection Agency (EPA). NTC Orlando is not on the EPA's National Priorities List (NPL).

The NTC includes four separate properties – the NTC Main Base, McCoy Annex, Area C, and Herndon Annex – located within the city limits of Orlando. The United States Air Force commanded the Main Base facilities between 1947 and 1968 when they were known as the Orlando Air Force Base. In 1968, the Air Force ceased operations and the Navy acquired the properties now known as the Main Base, Area C, and Herndon Annex. The Main Base is approximately 3 miles east of downtown Orlando, adjacent to the City of Winter Park and unincorporated Orange County. Before closure and the subsequent demolition of most buildings and structures, the Main Base consisted of a campus-like setting with classrooms, dormitories, offices, and recreational facilities. The Herndon Annex is adjacent to Orlando Executive Airport and includes several warehouse facilities. Area C is about one-half mile west of the Main Base and consists mostly of warehouse facilities. McCoy Annex is near the Orlando International Airport and includes over 900 residential units. It was an Army Air Base during World War II and an Air Force Base from the Korean Conflict until the Navy acquired it in 1973 for use as a community support annex.

Approximately 90 percent of the original 2,060 acres of real property comprising the NTC have been transferred, primarily to the City of Orlando (City) for the purpose of community redevelopment. The Northeast (9.22 acres) and Southeast (10.08 acres) Parcels within Area C, as shown in Exhibit A, will be sold together at a public sale to be administered by the General Services Administration (GSA). To facilitate quicker community reuse of both Parcels, the Navy

desires that the proposed sale take place before all necessary remedial activities are completed to address certain CERCLA hazardous substance contamination on the Area C Northeast Parcel. There is no known hazardous substance contamination on the Area C Southeast Parcel, so this *Finding of Suitability for Early Transfer* (FOSET) does not apply to that portion of the land to be sold by GSA.

When a federal agency transfers to an entity other than another federal agency real property on which hazardous substances have been stored for one year or more, known to have been released, or disposed of, the deed must contain covenants warranting that:

- All remedial action necessary to protect human health and the environment with respect to any such substance remaining on the property has been taken before the date of transfer [CERCLA Section 120(h)(3)(A)(ii)(I)], and
- Any additional remedial action found to be necessary after the date of the transfer shall be conducted by the United States [CERCLA Section 120(h)(3)(A)(ii)(II)].

The governor of the state in which federal property is located may defer the first of these two covenants thereby authorizing the deed transfer of the property prior to its cleanup if the federal facility of which it is a part is not listed on the NPL. After any such transfer, the federal agency transferring the property is still responsible for ensuring that all required cleanup is completed and for providing that same covenant via an amendment to the transfer deed at that time.

In order for the Governor of the State of Florida to defer the deed covenant required under Section 120(h)(3)(A)(ii)(I) in connection with the Area C Northeast Parcel, CERCLA Section 120(h)(3)(C)(i) requires that the Governor determine that the property is suitable for transfer based upon a finding that:

- I. The property is suitable for transfer for the use intended by the transferee, and the intended use is consistent with protection of human health and the environment;
- II. The deed or other agreement proposed to govern the transfer between the United States and the transferee of the property contains the Response Action Assurances set forth in CERCLA Section 120(h)(3)(C)(ii):

- Provide for any necessary restrictions on the use of the property to ensure protection of human health and the environment;
  - Provide that there will be restrictions on the use necessary to ensure that required remedial investigations, response action, and oversight activities will not be disrupted;
  - Provide that all necessary response action will be taken and identify the schedule for investigation and completion of all necessary response action as approved by the appropriate regulatory agency; and,
  - Provide that the Federal agency responsible for the property subject to transfer will submit a budget request to the Director of the Office of Management and Budget that adequately addresses schedules for investigation and completion of all necessary response action, subject to congressional authorizations and appropriations.
- III. The Federal agency requesting deferral has provided notice, by publication in a newspaper of general circulation in the vicinity of the property, of the proposed transfer and of the opportunity for the public to submit, within a period of not less than 30 days after the date of the notice, written comments on the suitability of the property for transfer; and
- IV. The deferral and the transfer of the property will not substantially delay any necessary response action at the property.

These findings are intended to assure that the basis for the proposed “early” transfer is sound because the expected reuse of the property does not pose an unacceptable risk to human health or the environment during the “covenant deferral period,” which begins on the date of the property transfer and ends on the date that the federal agency gives the warranty required by CERCLA Section 120(h)(3)(C)(iii) to ensure that all response action necessary to protect human health and the environment with respect to hazardous substances remaining on the property as of the date of transfer has been accomplished. As stated in CERCLA Section 120(h)(3)(C)(iv), all statutory rights and obligations of the transferring Federal agency remain the same, regardless of whether the property is transferred subject to a covenant deferral.

This FOSET is intended to facilitate the granting of early transfer approval by the Governor of the State of Florida in connection with the Area C Northeast Parcel and is consistent with both Department of Defense (DoD) and EPA guidance for the early transfer of federal property. In order to make the determination that the property is suitable for a covenant deferral and early transfer, FDEP believes that the Governor must know how the Transferee intends to use the property during the covenant deferral period. Therefore, information concerning the identity of the successful bidder (Transferee) and the Transferee's planned reuse for the site during the deferral period will be provided with this FOSET when it is submitted to the Governor for approval. The bid package that potential purchasers of the combined Northeast and Southeast Parcels will receive from GSA will include a copy of this FOSET and a separate draft deed for each parcel (previously reviewed by FDEP). The draft deed for the Northeast Parcel will contain land use controls (LUCs) restricting certain uses of and activities on that parcel in order to protect human health and the environment during the deferral period. Acceptance of these LUCs by the Transferee will be made a condition of the sale.

If the Governor approves this request for deferral of the required deed covenant for the Northeast Parcel, the Navy will then develop and execute a separate follow-on Finding of Suitability to Transfer (FOST) and separate deed for each of the two parcels, which under DoD policy is an essential step toward property conveyance. The FOST will address all environmental matters affecting the overall suitability of the property and facilities intended for transfer to include those matters not specifically required by law or DoD policy to be encompassed under this FOSET (e.g., sites with residual petroleum contamination or presence of asbestos-containing materials or lead-based paint in buildings). The draft FOST will be made available for public review and comment prior to finalization and will be issued after consultation with FDEP, EPA, and the Transferee.

## **2.0 DESCRIPTION OF PROPERTY TO BE TRANSFERRED**

As shown in Figure 2-1, Area C is approximately one-half mile west of the former NTC Main Base. The Northeast Parcel comprises 9.22 acres of Area C. It is depicted in Figure 2-2 and Exhibit A. The Northeast Parcel contains the former Defense Reutilization and Marketing Office (DRMO) Warehouses, the Salvage Yard and Truck Scales designated as Study Area (SA) 12, the site of a recently demolished former laundry/dry cleaning facility and boiler house (SA 13), and Building 1102, which was used by DRMO for indoor and outdoor storage of salvageable equipment and materials (SA 14). SAs 12, 13, and 14 comprise Operable Unit (OU) 4. The

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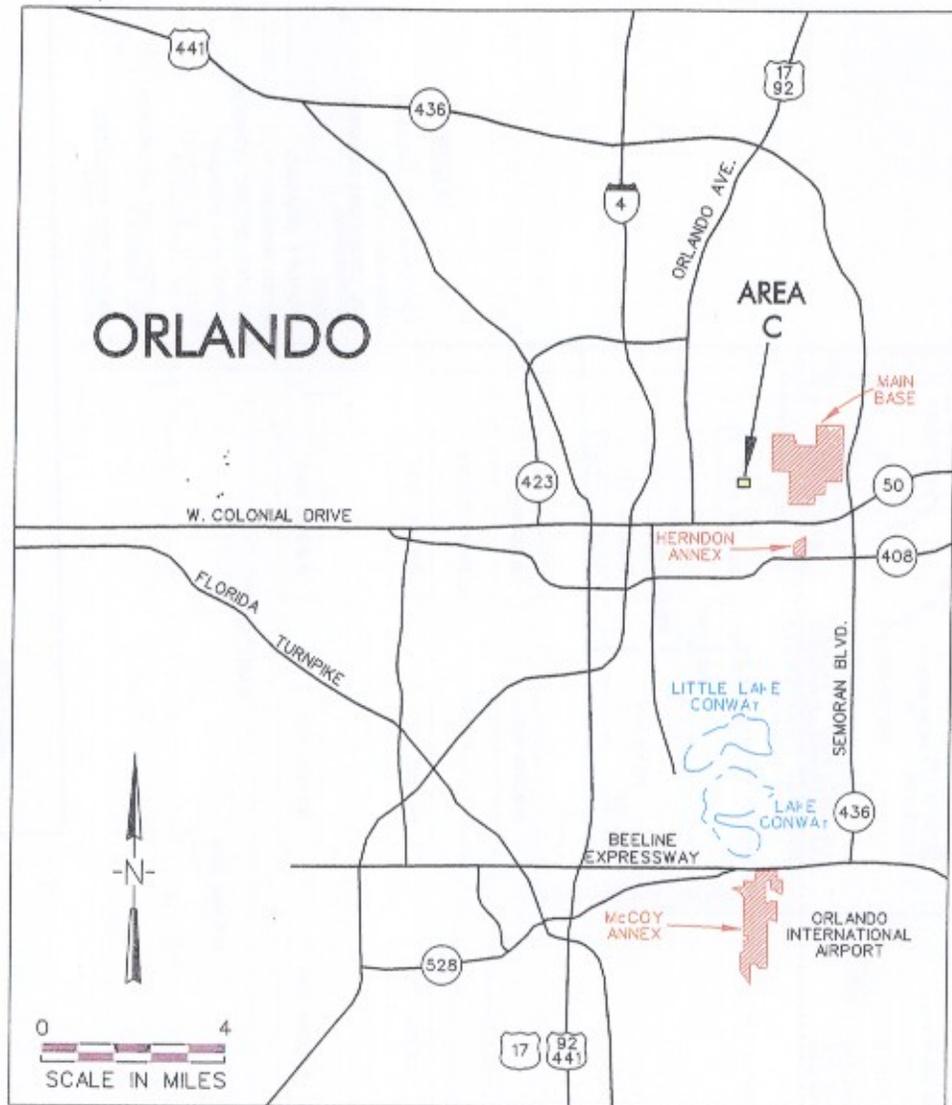


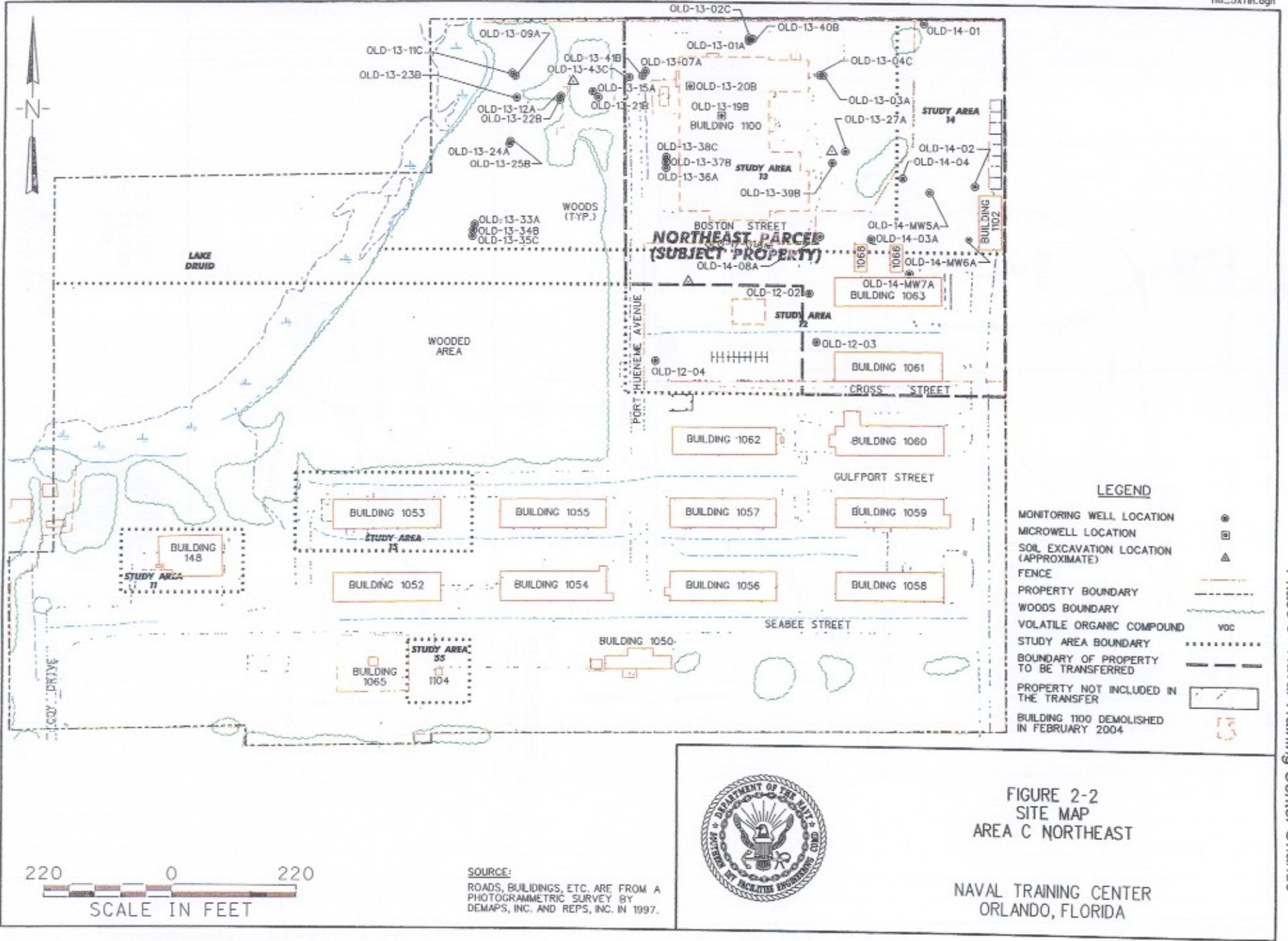
FIGURE 2-1  
VICINITY MAP  
AREA C

NAVAL TRAINING CENTER  
ORLANDO, FLORIDA

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Northeast parcel also includes roadways, parking lots, and a portion of the phytoremediation system installed at the former laundry/dry cleaning facility.

The Northeast Parcel is bordered to the west by the Northwest Parcel of Area C, which is the portion of OU 4 that borders the eastern shoreline of Lake Druid. The Northwest parcel was transferred to the City via the Phase 2 FOSET and does not contain any existing Navy facilities other than groundwater remediation system components that include two pumping wells and their associated above-grade control units, discharge piping, an above-grade irrigation water storage tank, and several acres of cultivated trees that are part of the long-term phytoremediation system. The Northeast Parcel is also bordered by an office complex on the east, an apartment complex on the north, and the uncontaminated portion of Area C which consists of the Southeast and Southwest Parcels of Area C (that are bordered by a United States Postal Service facility and a Target shopping store) on the south. The Southwest Parcel has been transferred to the City via a previously executed FOST.

### **3.0 NATURE AND EXTENT OF HAZARDOUS SUBSTANCE CONTAMINATION**

At OU 4, the volatile organic compound (VOC) perchloroethene (PCE) and its degradation products trichloroethene (TCE), cis-1,2-dichloroethene (DCE), and vinyl chloride (VC) are the groundwater contaminants of concern identified in “northern” and “southern” plumes that commingle and flow west toward Lake Druid (see Figure 3-1). VOCs have been detected to a depth of approximately 55 feet below ground surface (bgs). A third, relatively stationary antimony plume is located in the southeastern corner of OU 4. PCE, TCE, DCE, VC, and antimony are present at concentrations exceeding their respective Florida Groundwater Cleanup Target Levels (GCTLs) and EPA drinking water standards. In November 1995, PCE, TCE, DCE, and VC were also detected in surface water samples from Lake Druid at concentrations exceeding Florida surface water criteria. An interim remedial action (IRA) consisting of the installation and operation of two recirculation wells began in January 1998 to intercept the VOC plume migrating into Lake Druid. By January 1999, the two recirculation wells had successfully reduced VOC concentrations entering Lake Druid to less than Florida standards. In January 2001, the recirculation wells were converted to a conventional pump and treat system with air stripping and discharge of treated groundwater to the sanitary sewer system. A phytoremediation treatment system was installed in March 2002 to remediate the downgradient portions of the VOC plumes, and an in-situ chemical oxidation (ISCO) treatment system for VOC source reduction was operated from March to December 2003 (when it was

dismantled to allow demolition of Building 1100). The areal extents of the three groundwater plumes at OU 4 are shown on Figure 3-1.

In May 1999, 31 tons of surface soil contaminated with arsenic, polynuclear aromatic hydrocarbons, and polychlorinated biphenyls were removed from OU 4, significantly reducing human health and ecological risk associated with soil. No further remedial actions for soil are required on the Northeast Parcel because contaminant concentrations are now less than Florida residential Soil Cleanup Target Levels (SCTLs) as a result of the removals. Exhibit B, an environmental investigation and remedial action summary, describes the site and provides specific details about site concerns, the status of the Navy's cleanup efforts including previous soil and groundwater IRAs, potential exposure pathways, proposed methods for controlling exposure, and a reference to those site-specific CERCLA documents that provide more detailed information about the site. The site-specific documents are available for public review at:

**NTC Orlando Information Repository  
Orlando Public Library, Main Branch  
101 E. Central Boulevard  
Orlando, FL 32801**

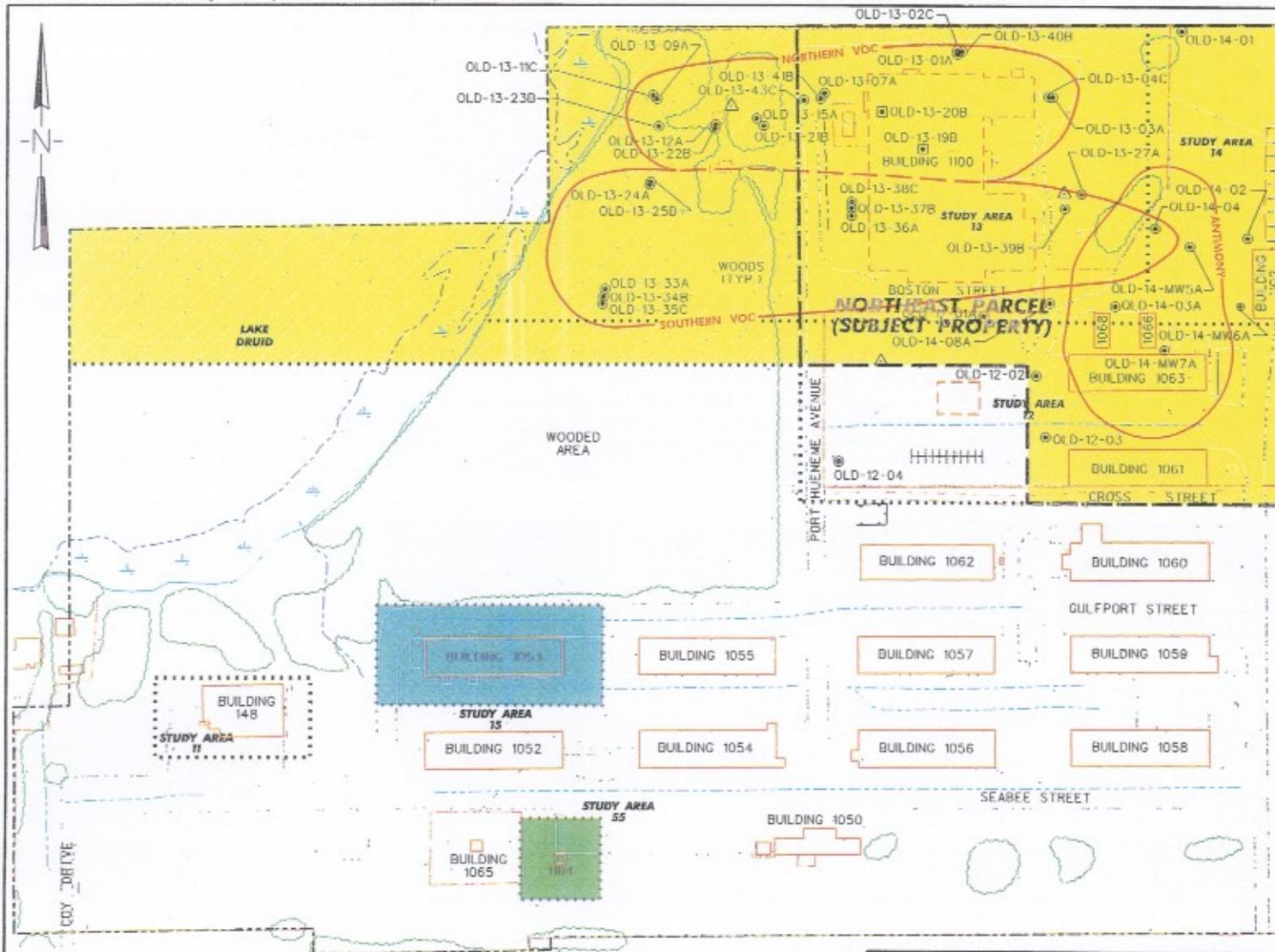
#### **4.0 ANALYSIS OF INTENDED FUTURE USE**

On the City's behalf, BRW Inc. prepared a comprehensive reuse plan for the NTC entitled Naval Training Center - Orlando Reuse Plan. This report (hereafter Reuse Plan) contains the essential components of the City's development and reuse objectives for the NTC and its associated improvements. Area C was not an integral part of the overall reuse described in the plan, and the City originally requested only a few acres of Area C for a bike path. Therefore, the Reuse Plan does not include a planned reuse for Area C. Because of the groundwater contamination and associated potential for vapor intrusion into buildings, the Northeast Parcel transfer deed will restrict future use of the property to commercial and/or industrial (i.e., non-residential) uses. As mentioned in Section 1, information concerning the identity of the successful bidder and the specific planned reuse for the site during the deferral period will be appended to the final version of this FOSET before it is submitted to the Governor of the State of Florida for approval.

Due to the possibility of vapor intrusion into buildings, the transfer deed for the Northeast Parcel will also require the installation and maintenance of vapor barriers or use of other vapor

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- ENVIRONMENTAL CONDITIONS**
- AREAS WHERE NO RELEASE OR DISPOSAL OF HAZARDOUS SUBSTANCES OR PETROLEUM PRODUCTS HAS OCCURRED (INCLUDING NO MIGRATION OF THESE SUBSTANCES FROM ADJACENT AREAS).
  - AREAS WHERE ONLY A RELEASE OR DISPOSAL OF PETROLEUM PRODUCTS AND/OR THEIR DERIVATIVES HAS OCCURRED.
  - AREAS WHERE A RELEASE, DISPOSAL, AND/OR MIGRATION OF HAZARDOUS SUBSTANCES HAS OCCURRED, BUT AT CONCENTRATIONS THAT DO NOT REQUIRE A REMOVAL OR REMEDIAL ACTION.
  - AREAS WHERE A RELEASE, DISPOSAL, AND/OR MIGRATION OF HAZARDOUS SUBSTANCES HAS OCCURRED, AND ALL REMEDIAL ACTIONS NECESSARY TO PROTECT HUMAN HEALTH AND THE ENVIRONMENT HAVE BEEN TAKEN.
  - AREAS WHERE A RELEASE, DISPOSAL, AND/OR MIGRATION OF HAZARDOUS SUBSTANCES HAS OCCURRED, AND REMOVAL OR REMEDIAL ACTIONS ARE UNDERWAY, BUT ALL REQUIRED REMEDIAL ACTIONS HAVE NOT YET TAKEN PLACE.
  - AREAS WHERE A RELEASE, DISPOSAL, AND/OR MIGRATION OF HAZARDOUS SUBSTANCES HAS OCCURRED, BUT REQUIRED ACTIONS HAVE NOT YET BEEN IMPLEMENTED.
  - AREAS THAT ARE NOT EVALUATED OR REQUIRE ADDITIONAL EVALUATION.

- LEGEND**
- GCTL CONTOUR
  - MONITORING WELL LOCATION
  - MICROWELL LOCATION
  - SOIL EXCAVATION LOCATION (APPROXIMATE)
  - FENCE
  - PROPERTY BOUNDARY
  - WOODS BOUNDARY
  - VOLATILE ORGANIC COMPOUND voc
  - STUDY AREA BOUNDARY
  - BOUNDARY OF PROPERTY TO BE TRANSFERRED
  - PROPERTY NOT INCLUDED IN THE TRANSFER
  - BUILDING 1100 DEMOLISHED IN FEBRUARY 2004



SOURCE:  
ROADS, BUILDINGS, ETC. ARE FROM A PHOTOGRAMMETRIC SURVEY BY DEMAPS, INC. AND REPS, INC. IN 1997.



FIGURE 3-1  
ENVIRONMENTAL CONDITION OF PROPERTY  
AND PLUME MAP  
AREA C NORTHEAST

NAVAL TRAINING CENTER  
ORLANDO, FLORIDA

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intrusion control measures, to be approved in advance by FDEP, in connection with the planned construction of any new building on the property, until the concentrations of contaminants in groundwater beneath the property decrease to less than FDEP GCTLs. Due to the potential for the VOC plume at OU 4, as depicted in Figure 3-1, to change in size and position during the remedy implementation, this restriction will apply to the entire Northeast Parcel. Because of the need for continuing remedial activities and the existence of residual groundwater contamination in the Northeast Parcel as described in Section 3 and in Exhibit B to this FOSET, additional LUCs will be implemented on the Northeast Parcel to protect human health and the environment, as further discussed in Section 7.0. Acceptance of these LUCs by the Transferee will be made a condition of the sale.

## **5.0 RISK ANALYSIS**

Soil and groundwater analytical data collected during the investigations of the Northeast Parcel sites were used to perform human health and ecological risk assessments and/or were compared to Florida's risk-based screening criteria – SCTLs, GCTLs, and surface water criteria. As a direct result of the IRA conducted at the Northeast Parcel, during which approximately 31 tons of contaminated soil were removed and disposed off site and clean soil cover was added, there are no longer any SCTL exceedances in surface soil that could pose unacceptable soil exposure risks. However, human health risk assessments and/or comparisons of groundwater data to GCTLs indicate the potential for unacceptable exposure to VOCs (PCE, TCE, DCE, VC) and antimony if groundwater is extracted and used.

The following pathways could potentially result in unacceptable human exposure to the residual contaminants detected in groundwater beneath the Northeast Parcel:

- Direct skin contact with contaminated groundwater
- Ingestion (drinking) of contaminated groundwater
- Inhalation of VOCs from contaminated groundwater via showering and/or vapor migration into indoor air

As described in greater detail in Exhibit B and in the Response Action Summary set forth in Exhibit C, an IRA for surface soil has addressed direct contact concerns. Extraction wells with air stripping/pump and treat, an ISCO treatment system, and a phytoremediation plantation have been implemented as remedial actions for addressing contaminated groundwater at OU 4. While to date these actions have proven successful in reducing groundwater contamination,

additional time is required to meet cleanup goals. In conjunction with the implementation of certain LUCs, these IRAs and response actions should serve to prevent unacceptable risks to human health, taking into account intended future uses of the property.

The LUCs to be implemented on the Northeast Parcel will include restrictions on the following:

- Use of groundwater (including for irrigation).
- Installation of wells (except wells for assessing groundwater quality or remediating groundwater).
- Construction of buildings, unless vapor barriers are installed, over certain areas of significant subsurface VOC contamination.

These restrictions will eliminate the potential pathways for ingestion, dermal contact, and inhalation of VOCs in groundwater and indoor air.

The specific LUCs to be imposed upon the Northeast Parcel are discussed in Section 7.0 and listed in Exhibit B. These LUCs, as well as appropriate access rights so that the Navy may undertake future groundwater monitoring, LUC compliance inspections, and any other investigative or remedial measures necessary for the long-term protection of human health and the environment, will be included in the Navy's deed of conveyance for the Northeast Parcel. The transfer deed will also provide certain access rights to FDEP and provide for Navy and FDEP approval for the removal or modification of those LUCs that will be imposed on the property.

Based upon the findings of the Northeast Parcel site investigations, there are no unacceptable risks to human health or the environment that would preclude transfer and reuse of the Northeast Parcel assuming that residential reuse is not allowed and that the aforementioned LUCs are implemented and maintained during the period of time that groundwater contamination exceeds GCTLs.

## **6.0 RESPONSE/CORRECTIVE ACTION AND O&M REQUIREMENTS**

Requirements for the investigation, remediation, and closure of the sites at NTC Orlando derive from CERCLA, the National Contingency Plan (NCP), EPA guidance, and Navy IR Program and will be implemented by agreement between the members of the OPT. The schedule for investigation and remediation of IR sites at the NTC has been established and will be

periodically updated by the OPT. Deed transfer of the Northeast Parcel to the Transferee will not affect the investigation, remediation, operation and maintenance (O&M), or long-term monitoring requirements set by the OPT for OU 4 or the Navy's responsibility to fully comply with all applicable federal and State legal requirements.

As described in Exhibit C, groundwater IRAs and/or remedial actions are currently ongoing at the Northeast Parcel. The anticipated remedy for OU 4 includes the following components:

- LUCs in the form of a non-residential use restriction, a temporary groundwater use restriction and building construction (vapor barrier) requirements,
- Continuation of the existing pump and treat system to intercept the VOC plume,
- Resumption of in situ chemical oxidation of the northern VOC plume source area (presuming the outcome of the ongoing investigation under the former Building 1100 does not result in a decision to implement different approach),
- Phytoremediation and monitored natural attenuation (MNA) to further reduce VOC concentrations in the northern and southern plumes, and
- Long-term groundwater monitoring of the VOC and antimony plumes.

The Navy anticipates implementing the groundwater response and associated monitoring following the schedule shown below. The need for additional monitoring beyond the dates shown will be determined by the OPT at the earliest possible time so that appropriate funds may be sought by the Navy to perform those efforts.

<b>Site</b>	<b>Response Actions</b>	<b>Quarterly Monitoring</b>	<b>Semi-Annual Monitoring</b>	<b>Annual Monitoring</b>
OU 4	In progress	2005 (and whenever source reduction system is operating)	2004, 2006-2007	2008 and thereafter

The Navy will inspect LUCs annually in conjunction with the required groundwater monitoring efforts, and will certify to FDEP in an annual report that the LUCs are being complied with by the current property owners. Any deficiency will be immediately reported to FDEP as well as the Navy's proposed response to the violation of the restrictive covenant. Long-term O&M requirements will therefore consist of long-term groundwater monitoring and LUC monitoring and maintenance, in addition to maintenance of any groundwater treatment systems deemed

necessary to address contamination related to human health or ecological risks. These LUCs will be temporary and shall only apply for the period in which groundwater contamination exceeds GCTLs. The projected budget requirements and schedule for the selection, completion, and long-term O&M of all necessary remedial measures for the Northeast Parcel are included under Section 7.d.IV. of this FOSET.

## **7.0 CONTENTS OF TRANSFER DEED**

The notice, covenants, and assurances required by CERCLA Sections 120(h)(3)(A) and 120(h)(3)(C) to be included in the transfer deed that will convey title over the Northeast Parcel to the Transferee are summarized below. Prior to conveyance of the Northeast Parcel, EPA and FDEP representatives will be given reasonable opportunity to review and concur with the applicable deed language related to all LUCs and associated rights of entry for FDEP for purposes of LUC oversight enforcement. The Navy will include in the deed the specific language concerning LUCs and rights of entry that was previously agreed upon in the FOST for the Northeast Parcel.

### **a. Notice**

In accordance with CERCLA Section 120(h)(3)(A)(i), the transfer deed shall provide notice, to the extent that such information is available based upon a complete search of agency files, as to: (i) the type and quantity of those hazardous substances that were stored for one year or more, or were known to have been released or disposed of on the Northeast Parcel; (ii) the time at which such storage, release, or disposal took place, and (iii) a description of all remedial actions taken to address such releases or disposals. This information, which will be appended to the deed, is set forth in Exhibit C of this FOSET.

### **b. Covenant**

In accordance with CERCLA Section 120(h)(3)(A)(ii)(II), the transfer deed shall contain a covenant warranting that any additional remedial action found to be necessary after the date of such transfer shall be conducted by the United States.

c. Access

In accordance with CERCLA Section 120(h)(3)(A)(iii), the transfer deed shall contain a clause granting the United States access to the property in any case in which a remedial action or corrective action is found to be necessary after the date of transfer. Appropriate rights of access shall also be provided to FDEP so that it may oversee the Navy's completion of all necessary remedial measures and confirm the long-term effectiveness of all implemented LUCs.

d. Response Action Assurances

In accordance with CERCLA Section 120(h)(3)(C)(ii)(I) through (ii)(IV), the transfer deed shall contain the following specific assurances:

- I. Necessary restrictions on the use of the Northeast Parcel to ensure the protection of human health and the environment. In this regard, those specific categories of LUCs reflected in Exhibit B will be described in detail in the transfer deed and be made to run with the land so that they will be binding upon all future owners and users of the property until no longer needed to ensure future protection of human health and the environment. The transfer deed will also describe the process for Navy and FDEP approval of removal or modification of the LUCs to be imposed upon the Northeast Parcel. In addition, FDEP shall be a third-party beneficiary of the LUCs and shall have all rights to enforce the LUCs in a court of competent jurisdiction.
- II. Necessary restrictions to ensure that required remedial investigations, response actions, and oversight activities will not be disrupted by any new owner or user of the Northeast Parcel.
- III. An assurance that the Navy will take all necessary response actions at the Northeast Parcel and a schedule for the investigation and completion of all such actions as approved by FDEP. In this regard, the projected work schedule shown below for OU 4 will be attached to the deed. It is expected that this schedule will be reviewed and updated on a periodic basis by the OPT.
- IV. An assurance that the Navy will submit annually, through established channels, appropriate budget requests to the Director of the Office of Management and

Budget that adequately address those work completion schedules agreed upon, but not already funded, for the completion of all necessary response actions to be reflected in future annual work schedule updates, subject to future Congressional authorizations and appropriations.

The currently projected budget requirements and schedule for the completion of those actions for the Northeast Parcel are as follows:

<u>Fiscal Year</u>	<u>Projected Cost</u>	<u>Planned Activity</u>
2005	\$50,000	Remedial system O&M, Long Term Monitoring (LTM), LUC Maintenance
2006	\$40,000	Remedial system O&M, LTM, LUC Maintenance
2007	\$40,000	Remedial system O&M, LTM, LUC Maintenance
2008	\$30,000	Remedial system O&M, LTM, LUC Maintenance
2009	\$30,000	Remedial system O&M, LTM, LUC Maintenance
2010-2033	\$720,000	Remedial system O&M, LTM, LUC Maintenance
<b>Total</b>	<b>\$910,000</b>	

The projected cost for fiscal year (FY) 2005 through FY 2008 is the current estimate in the Environmental Cost-To-Complete module of the Navy's cost estimating and budgeting program. The assumed yearly cost for FY 2010 and beyond is considered a placeholder for annual monitoring and LUC maintenance. The Navy shall use its best efforts and take all necessary steps to obtain sufficient and timely funding to perform these requirements. It is understood that if the currently planned remedies do not prove successful in reducing contaminant concentrations to cleanup criteria, the Navy will provide a schedule for and request funding for any additional response actions required to remediate the site. These responses could include, but would not be limited to, Focused Feasibility Studies, Remedial Designs, Remedial Actions, Long-Term O&M, and Long-Term Monitoring.

e. Warranty

In accordance with CERCLA Section 120(h)(3)(C)(iii), the transfer deed for the Northeast Parcel shall contain assurances that when all response actions necessary to protect human health and the environment with respect to any hazardous substance remaining on the property on the date of transfer have been taken, the Navy shall execute and deliver to the Transferee an appropriate document containing a warranty in recordable form. The Navy shall provide this warranty when all required response actions have been completed, or in accordance with CERCLA Section 120(h)(3)(B), the Navy may provide this warranty upon a determination by EPA that the remedial actions at the sites are “operating properly and successfully.”

**8.0 TRANSFEEE RESPONSE ACTION ASSURANCES AND AGREEMENTS**

The Navy currently plans on retaining the responsibility for completion of all necessary response actions consistent with CERCLA. However, should the Transferee agree to assume all or a portion of those obligations after property transfer, and terms for the assumption of such obligations could be reached, it would be memorialized in an Environmental Services Cooperative Agreement between the Navy and the Transferee. Such agreements are authorized under the provisions of 10 United States Code (U.S.C.) 2701 (the Defense Environmental Restoration Program). A draft of any such agreement would be shared with the appropriate FDEP and EPA representatives.

**9.0 EFFECT OF SUITABILITY FINDING/COVENANT DEFERRAL**

Nothing in this FOSET or the Governor’s concurrence therewith shall alter the Navy’s obligations under applicable federal and State law to complete all necessary environmental investigation, response actions, follow-on monitoring, and oversight actions at NTC Orlando. Based on the assurances and obligations to be outlined for the Navy and the Transferee in the deed of conveyance, the Navy believes that the granting by the Governor of the requested covenant deferral and subsequent transfer of the property to the Transferee will not serve to substantially delay necessary response actions on the Northeast Parcel.

## **10.0 RESPONSIVENESS SUMMARY**

As reflected in Exhibit D, public comments were solicited on a draft of this FOSET via newspaper publication of a document availability notice. All comments received were considered in the preparation of this suitability finding, and all written comments are included as Exhibit E. The Navy's responses to any unresolved written comments are included as Exhibit F.

## **11.0 SUITABILITY DECLARATION**

As the cognizant DoD official authorized to make such determinations, I, the undersigned, have determined that, with the proposed use restrictions to be implemented, the above-described property would be suitable for the intended reuses and that to allow such uses would be consistent with protection of human health and the environment.

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Date

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ROBERT B. RAINES, CAPT, CEC, USN  
Commander  
Southern Division  
Naval Facilities Engineering Command  
North Charleston, S.C.

## **11.0 SUITABILITY DECLARATION**

As the cognizant DoD official authorized to make such determinations, I, the undersigned, have determined that, with the proposed use restrictions to be implemented, the above-described property would be suitable for the intended reuses and that to allow such uses would be consistent with protection of human health and the environment.

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Date

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BRIAN M. SCOTT, CAPT, CEC, USN  
Vice Commander  
Southern Division  
Naval Facilities Engineering Command  
North Charleston, S.C.

**EXHIBIT A**  
**PROPERTY SURVEY MAP/LEGAL DESCRIPTION**

**NORTHEAST PARCEL (NAVY)**

**DESCRIPTION**

NORTHEAST PARCEL (NAVY)

A PARCEL OF LAND LYING IN SECTION 19, TOWNSHIP 22 SOUTH, RANGE 30 EAST, BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

COMMENCE AT THE SOUTHWEST CORNER OF THE NE  $\frac{1}{4}$  OF THE NW  $\frac{1}{4}$  OF THE SE  $\frac{1}{4}$  OF SAID SECTION 19; THENCE RUN N00°03'18"W ALONG THE WEST BOUNDARY OF THE NE  $\frac{1}{4}$  OF THE NW  $\frac{1}{4}$  OF THE SE  $\frac{1}{4}$ , 475.84 FEET; THENCE CONTINUE N00°03'18"W, ALONG SAID WEST BOUNDARY, 188.60 FEET, TO THE NW CORNER OF THE NE  $\frac{1}{4}$  OF THE NW  $\frac{1}{4}$  OF THE SE  $\frac{1}{4}$  OF SAID SECTION 19; THENCE RUN N89°09'37"E, 661.98 FEET; THENCE RUN N00°50'15"W, 275.21 FEET; THENCE RUN N89°34'11"E, 339.23 FEET TO THE POINT OF BEGINNING; THENCE CONTINUE N89°34'11"E, 696.56 FEET TO A POINT ON THE NORTHERLY EXTENSION OF THE WEST LINE OF THE ORLANDO AREA EXECUTIVE CENTER UNIT ONE AS RECORDED IN PLAT BOOK 1, PAGES 29 AND 30, PUBLIC RECORDS OF ORANGE COUNTY, FLORIDA; THENCE RUN S00°27'26"E ALONG SAID NORTHERLY EXTENSION AND ALONG WEST LINE, 671.28 FEET; THENCE RUN N89°50'30"W, LEAVING SAID WEST LINE, 361.85 FEET; THENCE RUN N00°00'00"W, 189.00 FEET; THENCE RUN S90°00'00"W 336.25 FEET; THENCE RUN N00°27'26"W, 476.04 FEET TO THE POINT OF BEGINNING.

THE ABOVE DESCRIBED PARCEL OF LAND LIES IN THE CITY OF ORLANDO, ORANGE COUNTY FLORIDA AND CONTAINS 9.22 ACRES, MORE OR LESS.



**EXHIBIT B**  
**ENVIRONMENTAL INVESTIGATION AND REMEDIAL ACTION SUMMARY**

**EXHIBIT B  
ENVIRONMENTAL INVESTIGATION AND REMEDIAL ACTION SUMMARY  
AREA C NORTHEAST PARCEL  
NAVAL TRAINING CENTER, ORLANDO, FLORIDA**

Site	Description	Current Key Contaminants	Status	Exposure Potential and Control	Reference
OU 4 East	<p>Operable Unit (OU) 4 East is comprised of the portion of OU 4 that lies in the Northeast Parcel of Area C. OU 4 East consists of Study Areas (SAs) 12, 13, and 14 – the Former Defense Reutilization and Marketing Office (DRMO) Warehouses, Salvage Yard and Truck Scales (SA 12), the former Laundry/Dry Cleaning Facility and Boiler House (SA 13), and Building 1102, which was used by DRMO for indoor and outdoor storage of salvageable equipment and materials (SA 14).</p> <p>The Northeast Parcel consists of approximately 9.22 acres in the northeastern portion of Area C. Waste storage and handling included transformers, drums, and other equipment at SA 12 (Building/Structures 1061, 1063/1069, 1066, and 1068). At SA 13, the Boiler House (Building 1101) was demolished in 1979 and the Laundry/Dry Cleaning Facility (Building 1100) in early 2004. Hazardous materials and wastes were managed there, and perchloroethene (PCE) spills of 20 gallons (1989) and 55 gallons (1994) have been documented. A 3-gallon release of PCE from scrap dry</p>	<p>Groundwater – PCE, trichloroethene (TCE), cis-1,2-dichloroethene (DCE), vinyl chloride (VC) and antimony.</p> <p>A “northern” and a “southern” volatile organic compound (VOC) plume commingle and then flow west toward Lake Druid. A third, relatively stationary antimony plume is located in the southeastern corner of OU 4.</p> <p>Maximum concentrations (µg/L) of the primary contaminants detected in groundwater samples collected in August 2003 were:</p> <p>PCE – 22,500 TCE – 2,060 DCE – 1,580 VC – 14.7 Antimony – 16</p>	<p>An interim remedial action (IRA) in May 1999 removed 31 tons of surface soil contaminated with arsenic, polynuclear aromatic hydrocarbons, and polychlorinated biphenyls at OU 4.</p> <p>A groundwater IRA was implemented in January 1998. Two recirculation wells with in-well air stripping were installed to intercept the VOC plume and prevent migration to Lake Druid. These wells are located within OU 4 West. The wells were later converted to conventional pump and treat (P&amp;T) wells (air stripping with treated groundwater discharged to sanitary sewer) in January 2001.</p> <p>The remedies selected in the draft Record of Decision include a combination of actions to contain, remove, treat, or restrict access to contaminated groundwater, and to restrict the future use of soil to non-residential use through land use controls (LUCs). The remedy proposed for OU 4 is a combination of In Situ Chemical Oxidation (ISCO), P&amp;T, natural attenuation, and phytoremediation for the VOC plumes.</p> <p>The phytoremediation treatment system consisting of a dense plantation of cottonwood, poplar,</p>	<p>Based on the Human Health Risk Assessment (HHRA) for all of OU 4, potential exposure pathways posing excess risk to hypothetical future site residents consist of ingestion, dermal contact, and/or inhalation of contaminated surface soil, surface water, and groundwater. Under the planned non-residential reuse scenario, the HHRA did not indicate unacceptable risks. IRA surface soil excavations reduced the surface soil contamination to concentrations less than Florida Soil Cleanup Target Levels, and surface water exposure is not applicable to the Northeast Parcel. However, there is a potential for vapor intrusion into buildings that overlie the VOC plumes. This possibility was not evaluated in the HHRA.</p> <p>To prevent exposure to contamination, minimize the migration of contamination, and maintain the integrity of existing or future groundwater monitoring or remediation systems, the deed will impose certain LUCs on the property to include, but not be limited to, the following:</p> <ul style="list-style-type: none"> <li>• Restricted to non-residential use only.</li> <li>• A prohibition on groundwater</li> </ul>	<p>Draft Record of Decision (TtNUS, December 2001)</p> <p>Monitoring Activities and Results at Operable Unit 4, May – July 2002 (CCI, December 2002)</p> <p>Monitoring and Maintenance Status Report, July-Sept 2003 (CCI, December 2003)</p>

**EXHIBIT B  
ENVIRONMENTAL INVESTIGATION AND REMEDIAL ACTION SUMMARY  
AREA C NORTHEAST PARCEL  
NAVAL TRAINING CENTER, ORLANDO, FLORIDA**

Site	Description	Current Key Contaminants	Status	Exposure Potential and Control	Reference
OU 4 East (cont)	<p>cleaning equipment was also documented at SA 14 (Building 1102) in 1989.</p> <p>The OU 4 groundwater remediation system (pumping wells and associated above-grade control units, an air stripping unit, irrigation water storage tank, piping, several acres of cultivated trees for phytoremediation) and wooded land are located in the adjacent OU 4 West (Northwest Parcel).</p> <p>Base Realignment and Closure Environmental Condition of Property Category - 5/Yellow</p>		<p>and willow trees was installed during March 2002. The ISCO, consisting of a series of injection and extraction wells to circulate a chemical oxidant through the contaminant source zone in the surficial aquifer, was operated between March and December 2003. Quarterly groundwater sampling began with operation of ISCO and was last conducted in February 2004. Semi-annual monitoring has been recommended.</p>	<p>extraction or use, or the installation of water supply wells.</p> <ul style="list-style-type: none"> <li>• Requirement that any groundwater dewatering during construction be approved by Florida Department of Environmental Protection (FDEP).</li> <li>• A prohibition on interfering with existing or future groundwater monitoring or remediation systems, investigations, or response activities.</li> <li>• A requirement to install vapor barriers when constructing new buildings until the concentration of contaminants in groundwater are less than their Florida Groundwater Cleanup Target Levels, or until FDEP-approved measures to mitigate VOC vapor intrusion into buildings are implemented.</li> </ul>	

**Notes:** CCI CH2M HILL Constructors, Inc.  
TtNUS Tetra Tech NUS, Inc.

**EXHIBIT C**

**CERCLA HAZARDOUS SUBSTANCE  
STORAGE, RELEASE OR DISPOSAL NOTICE  
AND RESPONSE ACTION SUMMARY**

**EXHIBIT C  
CERCLA HAZARDOUS SUBSTANCE STORAGE, RELEASE OR DISPOSAL NOTICE AND RESPONSE ACTION SUMMARY  
AREA C NORTHEAST PARCEL  
NAVAL TRAINING CENTER, ORLANDO, FLORIDA**

The table below identifies those hazardous substances that it is known, based upon a complete search of agency files, were stored for 1 year or more in quantities greater than or equal to 1000 kg, (or greater than or equal to 1 kg if designated an acutely hazardous waste under 40 CFR Part 261.30) and/or were released or disposed on the property to be transferred in quantities greater than or equal to their respective reportable quantities under 40 CFR 302.4. **The information in this notice is required under the authority of regulations promulgated under Section 120(h) of the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA or Superfund), 42 U.S.C. Section 9620(h).**

Site	Substance Name	CAS Registry No.	40 CFR 302.4 Synonym	RCRA HW No.	Quantity Stored	Date of Storage	Quantity Released	Date of Release	Response Actions Taken
Former Building 1100 (former laundry; release site located upgradient and east of Port Hueneme Ave.)	Perchloroethylene	127184	Tetrachloroethylene, Ethene, tetrachloro-Tetrachloroethene	U210	unknown	various/unknown	20 gallons	Nov 1989	January 1998: Installed two recirculation wells with in-well air stripping to intercept volatile organic compound plume in groundwater.
							55 gallons	Oct 1994	
							unknown	various/unknown	
	Chlorinated pesticides	NA	NA	NA	unknown	unknown	unknown	unknown	May 1999: Removed 31 tons of soil.  January 2001: Converted recirculation wells to conventional pump and treat system.  2002-2003: Phytoremediation in place and injection of potassium permanganate for in-situ oxidation of plume underway.
Building 1102 (former DRMO operations)	Perchloroethylene	127184	Tetrachloroethylene, Ethene, tetrachloro-Tetrachloroethene	U210	unknown	various/unknown	3 gallons	1989	Removal of approximately 20 drums of contaminated soil and asphalt.

**Notes:**

CAS – Chemical Abstract Service.

RCRA HW No. – Resource Conservation and Recovery Act Hazardous Waste ID Number.

NA – Not applicable.

**EXHIBIT D**  
**PUBLIC NOTICE ADVERTISEMENT**

**PUBLIC NOTICE**  
**AREA C - FORMER NAVAL TRAINING CENTER, ORLANDO**

The Navy intends to transfer the remaining 19.3 acres of the approximately 45.8-acre Area C of the former Naval Training Center (NTC) Orlando via public sale. The remaining acreage consists of the Northeast (9.22 acres) and Southeast (10.08 acres) Parcels. Area C is approximately one-half mile west of the former NTC Main Base and consists primarily of warehouse facilities. The deed transferring the Northeast Parcel to the successful bidder will restrict future use of the property to commercial and/or industrial (i.e., non-residential) uses as the Navy is currently undertaking environmental cleanup activities to address hazardous substance contamination on this property. A document called a Finding of Suitability for Early Transfer (FOSET) has been prepared, which, if approved by the Governor of Florida, will allow the transfer to take place before completion of remedial activities in accordance with Section 120(h)(C)(3) of CERCLA (Superfund law).

Soil and groundwater sampling data collected at Operable Unit (OU) 4 in the Northeast Parcel were used to perform human health and ecological risk assessments and/or compared to Florida's risk-based screening criteria – Soil Cleanup Target Levels (SCTLs) and Groundwater Cleanup Target Levels (GCTLs). As a direct result of a May 1999 interim remedial action conducted at OU 4 during which approximately 31 tons of contaminated soil were removed and disposed offsite, soil contaminant concentrations are now below SCTLs for a residential use scenario. However, the OU 4 Human Health Risk Assessment and comparison of groundwater data to GCTLs indicate the potential for unacceptable exposure to volatile organic compounds (VOCs; e.g., perchloroethene, trichloroethene, cis-1,2-dichloroethene, vinyl chloride) and antimony should groundwater be extracted and used or VOC vapors migrate to indoor air.

Groundwater at the site is not used for drinking water or industrial purposes. The Navy, in consultation with the Florida Department of Environmental Protection and the U.S. Environmental Protection Agency, has evaluated the risk associated with this contamination and determined that the current and proposed future uses are acceptable provided temporary land and groundwater use restrictions are implemented at the Area C Northeast Parcel. The Navy will continue cleanup of the property.

The Draft FOSET is available for public review and comment. The Draft FOSET and related investigation and cleanup documents for OU 4 may be viewed at the Orlando Public Library, 101 E. Central Blvd., Orlando, FL 32801 (contact Marcia Bruton, Dept. Head of 2nd Floor Reference at 407-835-7323).

Comments or questions on this notice including requests for copies of the Draft FOSET should be directed to Barbara Nwokike at (843) 820-5566 or mailed to:

Barbara Nwokike, Code ES33  
Naval Facilities Engineering Command, Southern Division  
P.O. Box 190010  
North Charleston, SC 29419-9010

Written comments must be postmarked no later than September 22, 2004.

**EXHIBIT E**  
**PUBLIC COMMENTS**

The draft FOSET – Phase 3 for Area C Northeast was made available for public comment August 24, 2004 through September 22, 2004. No comments were received.

**EXHIBIT F**  
**RESPONSES TO UNRESOLVED WRITTEN COMMENTS**

The draft FOSET – Phase 3 for Area C Northeast was made available for public comment August 24, 2004 through September 22, 2004. No comments were received.