
AAI Phase I Environmental Site Assessment

61 Durant Terrace
Middletown, Connecticut

Prepared for City of Middletown
245 deKoven Drive
Middletown, Connecticut 06457

Prepared by *VHB / Vanasse Hangen Brustlin, Inc.*
Transportation, Land Development, Environmental Services
54 Tuttle Place
Middletown, Connecticut 06457

November 2010

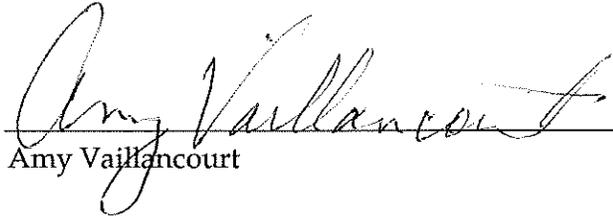
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Environmental
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Amy Vaillancourt

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Executive Summary

At the request of the City of Middletown (herein referred to as the "Client"), Vanasse Hangen Brustlin, Inc. (VHB) conducted a AAI Phase I Environmental Site Assessment (ESA) of the property located at 61 Durant Terrace in Middletown, Connecticut (herein referred to as the "Site"). This investigation was conducted in general conformance with the Code of Federal Regulations (CFR) 40 Part 312 "Standards and Practices for All Appropriate Inquiries (AAI); Final Rule" (effective November 1, 2006) and the ASTM 1527-05 "Standard Practice for Environmental Site Assessments". This ESA was conducted as part of the Middletown Brownfields Program utilizing EPA Brownfields Assessment Grant funds.

It is our understanding that the Client intends to evaluate the environmental condition of the Site in association with the potential purchase of the Site for use as a senior center and municipal office space.

Site Location and Description

The Site is comprised of a 1.01 acre parcel of land referred to as 61 Durant Terrace. The Site is identified by the City of Middletown Tax Assessor's Office as parcel 28-0253 (Map 26, Block 29-6A, Lot 1) and is zoned for residential use (RPZ). The Site is currently unoccupied and for sale by the owner (St. Sebastian Church).

The Site is located on the west side of Durant Terrace and is improved with two former school buildings including a two story 13,300 square foot brick structure (main building) and a single story 1,000 square foot modular annex building (annex). Paved areas are located on the south and central portions of the Site and chain link fencing surrounds the Site. A small playground is located on the southwest corner of the Site. The main building is heated via oil stored in a 2,000-gallon underground storage tank (UST) on the northwest side of the building. The annex building is heated via natural gas.

The Site is bounded by residential properties on all sides. Commercial properties along South Main Street (Route 17) are located west of the Site. Residential neighborhoods are located north, south, and east of the Site. Middlesex Hospital and Route 9 are located less than 0.25 miles north of the Site.

The topography of the Site is generally level. Based upon the reviewed topographic maps the Site is located at approximately 90 feet above mean sea level (AMSL).

Environmental Setting

According to available mapping, bedrock at the Site is identified as a reddish-brown arkose (brownstone) of the Portland Arkose Formation. Depth to bedrock at the Site is unknown. No bedrock outcroppings were observed at or in the vicinity of the Site. Surficial material at the Site is classified as glacial till. Soils at the Site are mapped as Wethersfield-Urban land complex with 3 to 8 percent slopes.

Groundwater at the Site is classified as "GB." The "GB" designation indicates that groundwater at the Site is presumed to require treatment prior to its use for human consumption or other domestic uses. Inferred groundwater flow direction appears to be to the west toward Pameacha Pond. The nearest surface water body is Pameacha Pond which is located approximately 650 feet west of the Site and is classified as an "A" surface water body.

The Site is located within "Zone X" according to the Flood Insurance Rate Map for the City of Middletown and is depicted on community panel #09007C0117G – revised August 28, 2008. The "Zone X" designation indicates an area of minimal flooding (outside the 100 year flood plain). No obvious wetland vegetation was observed at the Site during the Site reconnaissance. A formal wetlands survey was not part of the scope of services for this investigation and was not conducted as part of this ESA.

Records Review

According to documents reviewed, the Site was originally developed as a public school circa 1875 with the current on-Site brick building. The Site operated as a public school from 1875 until 2009 and has been vacant since 2009. Building department records indicate the modular annex building was constructed circa 1999.

Fire Marshal records reviewed contained a letter from Didato's Oil Service indicating a 2,000-gallon oil tank was removed from the St. Sebastian School and replaced with a 1,000-gallon Stip-3 oil tank in May 2007. According to the letter, two soil samples were collected from the tank grave, analyzed, and found not to contain extractable petroleum hydrocarbons above laboratory detection limits. The laboratory analytical report was attached to the letter along with photographs documenting the removal activities.

The Site is connected to the municipal sewer and water system. No information regarding the specific connection date was available. According to the Middletown Sewer and Water Department, utilities were installed in the vicinity of the Site circa 1931. Prior to 1931 the Site may have been served by an on-site potable well and/or septic system. No documentation was found to confirm this information during the conduct of this ESA.

Portions of a Three-Year Asbestos Re-Inspection report dated September 2005, prepared by Superior Industries, LLC, was provided by the owners real estate agent for VHB's review. According to this report the vinyl floor tile in the basement/auditorium is

asbestos containing and the window caulk, boiler gasket, and flue cement were assumed to contain asbestos. The report indicates wall and ceiling plaster, glue daubs, and wall board throughout the school were sampled and found not to contain asbestos.

No other previous investigations or reports were identified for the Site during the conduct of the Phase I.

A UST Notification Form dated February 11, 1986 was observed on file for the Site at the Connecticut Department of Environmental Protection (CTDEP). The form identifies a 1,000-gallon UST containing No. 2 heating oil is in use at the Site (referred to as Eckersley Hall). This UST is referred to as Tank I.D. – J10. A copy of a second UST Notification Form was also observed. The date of this Form did not appear on the copy available. The form indicated the Site was now referred to as St. Sebastian School. The information on the form was similar to the 1986 form except the Tank I.D. is listed as E1. A map was also observed on file depicting Tank E1 as being located along the northwest corner of the main building and having a capacity of 500 gallons. It is believed that the capacity of the UST was recorded incorrectly on the map and the location is meant to represent the former 1,000-gallon heating oil UST that was removed in 2007 and replaced with the current 2,000-gallon UST.

A CTDEP Storage Tank Enforcement Inspection Checklist was observed on file for the Site dated January 3, 2007. This checklist indicates the inspection was done for full compliance monitoring and the facility is registered with CTDEP. No other information for the Site was observed on file at CTDEP.

The Site was identified in the FirstSearch™ environmental database report as being on the UST and FINDS databases. The FINDS listing indicates the Site may have been registered as a “facility” for the generation of hazardous wastes and was entered into the National Compliance Database (NCDB). No additional information was provided. VHB has requested additional information from EPA via e-mail. No hazardous waste manifests were identified on file for the Site at CTDEP.

According to the FirstSearch™ report, a 1,000-gallon gasoline UST is reported as permanently closed – abandoned in ground which does not appear accurate. The date of installation is listed as 1/1/1950. No other information is provided in the database report. This UST listing appears to be incorrect and is believed to pertain to the former 1,000-gallon UST removed in 2007 and replaced with the current 2,000-gallon UST. No other database listings were identified for the Site.

Numerous entries in the FirstSearch™ environmental database report were identified for properties in close proximity to the Site along South Main Street to the west of the Site. None of these properties are considered to be upgradient of the Site and therefore, releases of oil or hazardous materials from these properties are not believed to pose a significant risk of direct impact to the Site.

Currently and historically the Site has been surrounded by residential properties with commercial properties along Route 17 (South Main Street) to the west of the Site. Several industrial factories formerly occupied areas to the north and northwest of the Site.

Site Reconnaissance

A Site reconnaissance was conducted by VHB's Environmental Professional, Amy Vaillancourt on October 22, 2010. Ms. Vaillancourt was escorted by Trevor Davis, real estate agent for the owner. At the time of the Site reconnaissance the buildings were vacant and the property was for sale.

The main building is located on the central portion of the Site. The annex building is located on the north portion of the Site. The area between the two buildings and the area to the south of the main building are paved. A playground area is located on the southwest corner of the Site. The entire Site is surrounded by chain link fencing.

Entrances to the main building exist on the north, south, and east sides. Vent and fill pipes for the aforementioned heating oil UST were observed on the northwest side of the main building. An oil fired furnace is located in the northwest corner of the building's basement. A sump pump was observed in the furnace room.

Entrances to the annex are located on the east, west, and south sides of the building. A natural gas meter was observed on the west side of the annex building.

No evidence of a release of OHM was observed during the Site reconnaissance.

Observations of adjacent properties were exterior portions of the Site and abutting properties from publicly accessible roadways. Residential properties surround the Site. No obvious storage of OHM or environmental concerns were identified for adjacent properties.

Interviews

VHB interviewed Trevor Davis, real estate agent for the owner. According to Mr. Davis, he was unaware of releases of OHM or environmental concerns for the Site. He indicated the existing UST was only a few years old and was installed to replace a former UST. Mr. Davis indicated the majority of the main building's roof was original slate and only a portion was asphalt shingles that were used for repairs. Other than the aforementioned Asbestos Re-Inspection report for the Site, Mr. Davis was unaware of any environmental investigations or hazardous building material abatement activities for the Site.

VHB interviewed various municipal personnel regarding the Site during the conduct of this investigation. None of the personnel interviewed were aware of environmental issues associated with the Site or abutting properties.

Data Gaps

The following data gaps were identified the Site during the completion of this ESA.

- There was a lack of information regarding whether the Site utilized an on-site well and/or septic system from 1875 to the 1930s. This does not appear to represent a significant data gap since the Site was connected to the municipal sewer and water sometime in the 1930s and has been used as a public school since 1875 (i.e. no industrial activity).
- Although conflicting information was found regarding the former size and contents of reported USTs at the Site, currently it appears that only one 2,000-gallon No. 2 heating oil exists at the Site and it was installed in 2007 to replace the former 1,000-gallon UST. The installation date of the 1,000-gallon UST was reportedly 1950. Fuel sources prior to that time are unknown. This does not appear to represent a significant data gap since the Site configuration and location of the furnace suggests any historic heating oil USTs serving the building would have likely been located along the northwest corner of the building. During the 2007 UST replacement no evidence of petroleum releases were identified in this area.
- During the UST removal/replacement activities in 2007, only two samples were collected from the tank grave for laboratory analysis. CTDEP UST Regulations require that one sample be collected from each of the sidewalls and two from the bottom. For heating oil CTDEP requires all six samples be analyzed for extractable total petroleum hydrocarbons and the most contaminated sample (based on field observation) be further analyzed for aromatic volatile organic compounds, methyl-tertiary-butyl-ether (MTBE) and semi-volatile organics. This does not appear to represent a significant data gap since no releases of heating oil or impacts to surrounding soils were identified during the 2007 UST removal /replacement activities. However, as a general rule, CTDEP expects soil sampling associated with UST removals be conducted in accordance with regulations that were in effect at the time of UST removal/replacement activities.
- The Site was listed on the EPA's FINDS as a potential "facility" for the generation of hazardous wastes and was entered into the National Compliance Database (NCDB). No additional information was provided. VHB has requested additional information from EPA via e-mail but as of the date of this report no information has been received. This does not appear to represent a significant data gap since no hazardous waste manifests were identified on file for the Site at CTDEP, the Site has been used as a public school since 1875, and municipal personnel familiar with the Site have no knowledge of chemical use or storage activities.
- Portions of a Three-Year Asbestos Re-Inspection report dated September 2005, prepared by Superior Industries, LLC, was provided by the owners real estate agent for VHB's review. According to this report the vinyl floor tile in the

basement/auditorium is asbestos containing and the window caulk, boiler gasket, and flue cement were assumed to contain asbestos. The report indicates wall and ceiling plaster, glue daubs, and wall board throughout the school were sampled and found not to contain asbestos. It is unknown if additional asbestos containing building materials or lead based paint coated components exist in association with the building. This does not appear to represent a significant data gap since the building is not slated for demolition and during the Site reconnaissance no significant damage to building components was observed.

Conclusions and Recommendations

It is our understanding the Client has requested this ESA for due diligence purposes in support of a potential purchase of the Site. The slated reuse of the building would be for use as a senior center and municipal office space. Furthermore, minor interior renovations are expected to facilitate reuse plans. A hazardous building materials inspection should be completed prior to impacting building materials or conducting renovation activities.

Based upon the data collected and reviewed during this investigation the Site has been used as a public school since development in 1875. No significant environmental concerns or releases of OHM were identified for the Site. However, additional soil sampling could be required by CTDEP in the vicinity of the UST for compliance with UST Regulations, particularly if the Site were entered into a formal state regulatory program.

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Introduction

Purpose and Scope of Work

At the request of the City of Middletown (herein referred to as the "Client"), Vanasse Hangen Brustlin, Inc. (VHB) conducted an AAI Phase I Environmental Site Assessment (ESA) of the property known as 61 Durant Terrace in Middletown, Connecticut (referred to herein as the "Site"). This investigation was conducted in general conformance with the Code of Federal Regulations (CFR) 40 Part 312 "Standards and Practices for All Appropriate Inquiries (AAI); Final Rule" (effective November 1, 2006) and the ASTM 1527-05 "Standard Practice for Environmental Site Assessments".

The objective of this investigation is identification of conditions indicative of releases and threatened releases of petroleum or hazardous substances on, at, in, or to the subject property. VHB gathered information that is required for each standard and practice that is publicly available, obtainable from its source with reasonable time and cost constraints, and which can practicably be reviewed.

The scope of services include inquiry by an "Environmental Professional" as defined in Section 312.21 AAI Rule, interviews with past and present owners, operators, and occupants, in an effort to gather any specialized knowledge or experience with regard to the subject property, review of historical sources including, but not limited to, chain of title documents, aerial photographs, building department records, and land use records to determine previous uses and occupancy since first development, establishment of the relationship of the purchase price to the value of the property, searches for recorded environmental cleanup liens against the facility that are filed under Federal, State, or local law, review of Federal, State, or local government records, and visual inspection of the facility and surrounding properties.

This ESA is subject to the terms of the agreement between VHB and the Client and the Limitations included in Appendix A. The ESA was conducted as part of the Middletown Brownfield Program and was funded by an EPA Brownfield Assessment Grant. It is our understanding that the Client intends to conduct due diligence activities in support of a potential purchase of the Site.

Project Location/Description

Site Location and Description

The Site is comprised of 1.01 acres of land along the west side of Durant Terrace in Middletown, Connecticut. The Site is known as 61 Durant Terrace and is identified by the City of Middletown Tax Assessor's Office as parcel 28-0253 (Map 26, Block 29-6A, Lot 1). The current owner of the Site is listed as St. Sebastian Church Corporation.

The Site is improved with two former school buildings including a two story 13,300 square foot brick structure (main building) and a single story 1,000 square foot modular annex building (annex). Paved areas are located on the south and central portions of the Site and chain link fencing surrounds the Site. A small playground is located on the southwest corner of the Site. The Site is currently unoccupied and for sale.

The Site is bounded by residential properties on all sides. Commercial properties along South Main Street (Route 17) are located west of the Site. Residential neighborhoods are located north, south, and east of the Site. Middlesex Hospital and Route 9 are located less than 0.25 miles north of the Site.

The topography of the Site is generally level. Based upon the reviewed topographic maps the Site is located at approximately 90 feet above mean sea level (AMSL).

Site Utilities

According to the City of Middletown Sewer and Water Department, the Site has been connected to the municipal sewer and water system since the 1930s. No information regarding the specific connection date was available. Prior to the 1930s the Site may have been served by an on-site potable well or septic system. No documentation was found to confirm this information during the conduct of this ESA.

Electric is provided to the Site via overhead electric lines. The main building is heated via oil. The annex building is heated via natural gas.

Environmental Setting

Topography

VHB reviewed historical atlases and United States Geological Survey (USGS) topographic maps for the years 1880, 1947, 1951, and 1965 (photorevised 1992) for the Site. The topography of the Site is generally level. Based upon the reviewed topographic maps the Site is located at approximately 90 feet above mean sea level (AMSL).

Soils/Geology

According to the Bedrock Geological Map of Connecticut, compiled by John Rodgers 1985, available digitally through Geographic Information System (GIS) data available from the Connecticut Department of Environmental Protection (CTDEP), bedrock at the Site is identified as a reddish-brown arkose (brownstone) of the Portland Arkose Formation.

Surficial material at the Site is classified as "Till" based upon GIS versions of the Surficial Materials Map of Connecticut by Janet Stone, 1992. The total depth of the deposition is not specified. Depth to bedrock at the Site is unknown and no bedrock outcroppings were observed at or in the vicinity of the Site.

Based upon GIS mapping available from CTDEP, soils at the Site are mapped as Wethersfield-Urban land complex with 3 to 8 percent slopes.

Hydrology

CTDEP classifies groundwater at the Site as "GB." The "GB" designation indicates that groundwater at the Site is presumed to require treatment prior to its use for human consumption or other domestic uses.

Groundwater flow direction may be impacted locally by surface topography, hydrology, hydrogeology and soil characteristics. Based on review of aforementioned USGS topographic maps, and observations made during reconnaissance in the surrounding area, inferred groundwater flow direction is generally to the west toward Pameacha Pond.

Wetlands

No obvious wetland vegetation was observed at the Site during the Site reconnaissance. A formal wetlands survey was not part of the scope of services for this investigation and was not conducted as part of this ESA.

Surface Water Bodies

The nearest surface water body is Pameacha Pond which is located approximately 650 feet west of the Site. The CTDEP classifies Pameacha Pond as an "A" surface water body. Designated uses for an "A" surface water body include use as a potential drinking water supply; fish and wildlife habitat; recreational use; agricultural and industrial supply and other legitimate uses including navigation.

Flood Plains

The Site is located within "Zone X" according to the Flood Insurance Rate Map for the City of Middletown and is depicted on community panel #09007C0117G – revised August 28, 2008. The "Zone X" designation indicates an area of minimal flooding (outside the 100 year flood plain). No obvious wetland vegetation was observed at the Site during the Site reconnaissance. A formal wetlands survey was not part of the scope of services for this investigation and was not conducted as part of this ESA.

Records Review

Historical Records Review

Historical Maps

VHB reviewed available Sanborn Fire Insurance Maps dated 1901, 1907, 1913, 1924, and 1950 for the Site.

All of the Sanborn Maps reviewed depict the Site as a “public school” with the main building configuration shown. The area surrounding the Site is depicted as residential development similar to current conditions.

City Directories

VHB reviewed various City of Middletown Directories dated from 1895 to 1973 available in the basement vault at the Clerk’s Office. The Site is listed as “Eckersley Hall” public school in all of the directories reviewed.

Aerial Photographs

VHB personnel reviewed aerial photographs dated 1934, 1951, 1965, 1970, 1986, 1990, 1995, 2004 and 2008. These photos were obtained through a number of different sources including the Connecticut State Library, the University of Connecticut MAGIC site, and Live Search Maps.

All of the aerial photographs depict the Site similar to current conditions except paved areas are only depicted in the 1986 to 2008 aerials and the annex building is only depicted in the 2004 and 2008 aerials.

The area surrounding the Site appears residential in all aerials with increasing development from 1934 to 1951.

Municipal Records Review

VHB personnel reviewed available files for the Site at City of Middletown municipal offices on November 5, 2010 to obtain information regarding Site history and use; zoning; and OHM use, storage, and releases, and/or disposal practices that may have occurred at the Site and/or adjacent properties.

Assessor's Office

According to the current City of Middletown Assessors information, the Site consists of 1.01 acres of land identified as parcel 28-0253 (Map 26, Block 29-6A, Lot 1) and referred to as 61 Durant Terrace. The current owner of the Site is listed as St. Sebastian Church Corp. The Site is zoned residential (RPZ) and the Assessors card identifies two permits issued to the Site including one in August 1999 to erect a sign and another in September 1999 to construct a temporary classroom. Assessment information provided on the card indicates the school was renovated in 1938 and asphalt parking was added in 1970.

City Clerk Office

The following is a summary of Site ownership information obtained from a review of available deeds at the City of Middletown Town Clerks office.

Grantee	Grantor	Volume/Page	Date
St. Sebastian Church Corp.	City of Middletown	803/348	3/16/1987
City of Middletown	Julius Hotchkiss	103/386*	2/10/1873

* This deed indicates the property was the "most suitable for new school house".

No environmental liens or environmental land use restrictions (ELURs) were identified in the deeds reviewed. A certified title search is not within the scope of services for this investigation. A title company is capable of completing a full title, ELUR and environmental lien search.

Fire Marshal's Office

Fire Marshal records reviewed contained a letter from Didato's Oil Service indicating a 2,000-gallon oil tank was removed from the St. Sebastian School and replaced it with a 1,000-gallon Stip-3 oil tank in May 2007. According to the letter, two soil samples were collected from the tank grave, analyzed, and found not to contain extractable petroleum hydrocarbons above laboratory detection limits. The laboratory analytical report was attached to the letter along with photographs documenting the removal activities.

Health Department

According to personnel at the City of Middletown Health Department there are no records on file for the Site.

Planning & Zoning and Building Departments

According to the City of Middletown Planning and Zoning Department there are no records on file for the Site. The building department had a permit on file for the Site dated September 1, 1999 to construct a 36 x 36 temporary classroom.

Previous Investigations/Assessments

Portions of a Three-Year Asbestos Re-Inspection report dated September 2005, prepared by Superior Industries, LLC, were provided by the owner's real estate agent for VHB's review. According to this report the vinyl floor tile in the basement/auditorium is asbestos containing and the window caulk, boiler gasket, and flue cement were assumed to contain asbestos. The report indicates wall and ceiling plaster, glue daubs, and wall board throughout the school were sampled and found not to contain asbestos.

No other previous investigations or reports were identified for the Site during the conduct of the Phase I.

Site Reconnaissance

Current Uses and Activities

A Site reconnaissance was conducted by VHB's Environmental Professional, Amy Vaillancourt on October 22, 2010. Ms. Vaillancourt was escorted by Trevor Davis, real estate agent for the owner. At the time of the Site reconnaissance the buildings were vacant and the property was for sale.

The main building is located on the central portion of the Site. The annex building is located on the north portion of the Site. The area between the two buildings and the area to the south of the main building are paved. A playground area is located on the southwest corner of the Site. The entire Site is surrounded by chain link fencing. No catch basins were observed on the Site.

Entrances to the main building exist on the north, south, and east sides. Vent and fill pipes for the aforementioned heating oil UST were observed on the northwest side of the main building. An oil fired furnace is located in the northwest corner of the building's basement. A sump pump was observed in the furnace room.

Entrances to annex are located on the east, west, and south sides of the building. A natural gas meter was observed on the west side of the annex building.

Observations of adjacent properties were exterior portions of the Site and abutting properties from publicly accessible roadways. Residential properties surround the Site. No obvious storage of OHM or environmental concerns were identified for adjacent properties.

Hazardous Materials/Petroleum Products Storage and Handling

Others than heating stored in the 2,000-gallon UST on the northwest side of the main building, no other petroleum products or hazardous chemicals are stored at the Site. This UST was installed in 2007 to replace a former 1,000-gallon UST. The installation date of the former 1,000-gallon UST was reportedly 1950. Fuel sources prior to that time are unknown. Site configuration and location of the furnace suggests any historic heating oil

USTs serving the building would have likely been located along the northwest corner of the building. During the 2007 UST replacement no evidence of petroleum releases were identified in this area.

Due to the age of the main building (circa 1875) it is likely that hazardous building materials (i.e. asbestos and lead based paint) are associated with the structure. A Hazardous Building Materials Survey as not completed during the conduct of this ESA. All of the building materials observed during the Site reconnaissance appeared to be in good condition and the majority of the windows in the main building appeared to be newer vinyl replacement windows.

No evidence of OHM dumping or release was observed during the Site reconnaissance.

Waste Generation, Treatment, Storage and Disposal

No evidence of hazardous waste generation, treatment, storage, or disposal was observed during the Site reconnaissance. Based on historical use of the Site as a public school it is anticipated that only office and typical household type wastes were generated at the Site.

No science laboratories exist in the school.

Surface Conditions

The on-Site building comprises approximately 80 percent of the Site. Paved parking occupies approximately 10 percent of the Site and the remaining 10 percent consists of landscaping. Surficial run-off from the Site likely moves as overland flow to nearby catch basins located along adjacent roadways. No catch basins were observed on-Site. No evidence of surface staining or stressed vegetation was observed.

Adjacent Properties

Observations of adjacent properties were exterior portions of the Site and abutting properties from publicly accessible roadways. The Site is bounded by residential properties on all sides. No obvious storage of OHM or environmental concerns were identified for adjacent residential properties.

Regulatory File Search

VHB reviewed the following FirstSearch™ environmental databases: National Priority List (NPL) sites; Comprehensive Environmental Response, Compensation and Liability Information System (CERCLIS); Resource Conservation and Recovery Act (RCRA) Treatment, Storage, and Disposal (TSD) facilities list; RCRA hazardous waste generators (GEN) and no longer registered (NLR) hazardous waste generators; state list of hazardous waste sites; state list of spills sites; Active Solid Waste Landfill (SWL) facilities; registered underground storage tanks (USTs); leaking USTs (LUSTs), and institutional controls or engineering controls (IC/EC Registries), and Facility Index Notification System (FINDS) facilities. The FirstSearch™ report is attached as Appendix C. Database search radii were chosen generally in accordance with the AAI Standards and Practices for All Appropriate Inquiries:

DATABASE	AAI SEARCH RADIUS	NUMBER OF SITES WITHIN SEARCH RADIUS
NPL	1.0	0
NPL Delisted	0.5	0
CERCLIS	0.5	0
NFRAP	0.5	1
RCRA COR ACT	1.0	2
RCRA TSD	0.5	1
RCRA GEN	0.25	4
Federal IC/EC	0.5	0
ERNS	0.25	0
Tribal Lands	1.0	0
State/Tribal Sites	1.0	17
State/Tribal Spills	0.25	4
State/Tribal SWL	0.5	0
State/Tribal LUST	0.5	34
State/Tribal UST/AST	0.25	9*
State/Tribal EC	0.5	0
State/Tribal IC	0.25	0
State/Tribal VCP	0.5	2
State/Tribal Brownfields	0.5	0
FINDS	0.25	19*
State Other	0.25	0

* Indicates listing for the Site

The Site was identified in the FirstSearch™ environmental database report as being on the UST and FINDS databases. The FINDS listing indicates the Site may have been registered as a “facility” for the generation of hazardous wastes and was entered into the National Compliance Database (NCDB). No additional information was provided. VHB has requested additional information from EPA via e-mail. No hazardous waste manifests were identified on file for the Site at CTDEP.

According to the FirstSearch™ report, a 1,000-gallon gasoline UST is reported as permanently closed – abandoned in ground. The date of installation is listed as 1/1/1950. No other information is provided in the database report. This UST listing is believed to pertain to the former 1,000-gallon UST replaced in 2007. No other database listings were identified for the Site.

Numerous entries in the FirstSearch™ environmental database report were identified for properties in close proximity to the Site along South Main Street to the west of the Site. None of these properties are considered to be upgradient of the Site and therefore, releases of oil or hazardous materials from these properties are not believed to pose a significant risk of impact to the Site.

Department of Environmental Protection

VHB requested available Connecticut Department of Environmental Protection (CTDEP) files for the Site including tank records, spill reports, hazardous waste generation information, violations or orders, and remediation files.

A UST Notification Form dated February 11, 1986 was observed on file for the Site at the Connecticut Department of Environmental Protection (CTDEP). The form identifies a 1,000-gallon UST containing No. 2 heating oil is in use at the Site (referred to as Eckersley Hall). This UST is referred to as Tank I.D. – J10. A copy of a second UST Notification Form was also observed. The date of this Form did not appear on the copy available. The form indicated the Site was now referred to as St. Sebastian School. The information on the form was similar to the 1986 form except the Tank I.D. is listed as E1. A map was also observed on file depicting Tank E1 as being located along the northwest corner of the main building and having a capacity of 500 gallons. It is believed that the capacity of the UST was recorded incorrectly on the map and the location is meant to represent the former 1,000-gallon heating oil UST that was removed in 2007.

A CTDEP Storage Tank Enforcement Inspection Checklist was observed on file for the Site dated January 3, 2007. This checklist indicates the inspection was done for full compliance monitoring and the facility is registered with CTDEP. No other information for the Site was observed on file at CTDEP.

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Interviews

VHB interviewed Trevor Davis, real estate agent for the owner. According to Mr. Davis, he was unaware of releases of OHM or environmental concerns for the Site. He indicated the existing UST was only a few years old and was installed to replace a former UST. Mr. Davis indicated the majority of the main building's roof was original slate and only a portion was asphalt shingles that were used for repairs. Other than the aforementioned Asbestos Re-Inspection report for the Site, Mr. Davis was unaware of any environmental investigations or hazardous building material abatement activities for the Site.

VHB interviewed various municipal personnel regarding the Site during the conduct of this investigation. None of the personnel interviewed were aware of environmental issues associated with the Site or abutting properties.

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Summary of Findings

Site Location and Description

The Site is comprised of a 1.01 acre parcel of land referred to as 61 Durant Terrace. The Site is identified by the City of Middletown Tax Assessor's Office as parcel 28-0253 (Map 26, Block 29-6A, Lot 1) and is zoned for residential use (RPZ). The Site is currently unoccupied and for sale by the owner (St. Sebastian Church).

The Site is located on the west side of Durant Terrace and is improved with two former school buildings including a two story 13,300 square foot brick structure (main building) and a single story 1,000 square foot modular annex building (annex). Paved areas are located on the south and central portions of the Site and chain link fencing surrounds the Site. A small playground is located on the southwest corner of the Site. The main building is heated via oil stored in a 2,000-gallon underground storage tank (UST) on the northwest side of the building. The annex building is heated via natural gas.

The Site is bounded by residential properties on all sides. Commercial properties along South Main Street (Route 17) are located west of the Site. Residential neighborhoods are located north, south, and east of the Site. Middlesex Hospital and Route 9 are located less than 0.25 miles north of the Site.

The topography of the Site is generally level. Based upon the reviewed topographic maps the Site is located at approximately 90 feet above mean sea level (AMSL).

Environmental Setting

According to available mapping, bedrock at the Site is identified as a reddish-brown arkose (brownstone) of the Portland Arkose Formation. Depth to bedrock at the Site is unknown. No bedrock outcroppings were observed at or in the vicinity of the Site. Surficial material at the Site is classified as glacial till. Soils at the Site are mapped as Wethersfield-Urban land complex with 3 to 8 percent slopes.

Groundwater at the Site is classified as "GB." The "GB" designation indicates that groundwater at the Site is presumed to require treatment prior to its use for human

consumption or other domestic uses. Inferred groundwater flow direction appears to be to the west toward Pameacha Pond. The nearest surface water body is Pameacha Pond which is located approximately 650 feet west of the Site and is classified as an "A" surface water body.

The Site is located within "Zone X" according to the Flood Insurance Rate Map for the City of Middletown and is depicted on community panel #09007C0117G – revised August 28, 2008. The "Zone X" designation indicates an area of minimal flooding (outside the 100 year flood plain). No obvious wetland vegetation was observed at the Site during the Site reconnaissance. A formal wetlands survey was not part of the scope of services for this investigation and was not conducted as part of this ESA.

Records Review

According to documents reviewed, the Site was originally developed as a public school circa 1875 with the current on-Site brick building. The Site operated as a public school from 1875 until 2009 and has been vacant since 2009. Building department records indicate the modular annex building was constructed circa 1999.

Fire Marshal records reviewed contained a letter from Didato's Oil Service indicating a 2,000-gallon oil tank was removed from the St. Sebastian School and replaced with a 1,000-gallon Stip-3 oil tank in May 2007. According to the letter, two soil samples were collected from the tank grave, analyzed, and found not to contain extractable petroleum hydrocarbons above laboratory detection limits. The laboratory analytical report was attached to the letter along with photographs documenting the removal activities.

The Site is connected to the municipal sewer and water system. No information regarding the specific connection date was available. According to the Middletown Sewer and Water Department, utilities were installed in the vicinity of the Site circa 1931. Prior to 1931 the Site may have been served by an on-site potable well and/or septic system. No documentation was found to confirm this information during the conduct of this ESA.

Portions of a Three-Year Asbestos Re-Inspection report dated September 2005, prepared by Superior Industries, LLC, were provided by the owner's real estate agent for VHB's review. According to this report the vinyl floor tile in the basement/auditorium is asbestos containing and the window caulk, boiler gasket, and flue cement were assumed to contain asbestos. The report indicates wall and ceiling plaster, glue daubs, and wall board throughout the school were sampled and found not to contain asbestos.

No other previous investigations or reports were identified for the Site during the conduct of the Phase I.

A UST Notification Form dated February 11, 1986 was observed on file for the Site at the Connecticut Department of Environmental Protection (CTDEP). The form identifies a 1,000-gallon UST containing No. 2 heating oil is in use at the Site (referred to as Eckersley

Hall). This UST is referred to as Tank I.D. – J10. A copy of a second UST Notification Form was also observed. The date of this Form did not appear on the copy available. The form indicated the Site was now referred to as St. Sebastian School. The information on the form was similar to the 1986 form except the Tank I.D. is listed as E1. A map was also observed on file depicting Tank E1 as being located along the northwest corner of the main building and having a capacity of 500 gallons. It is believed that the capacity of the UST was recorded incorrectly on the map and the location is meant to represent the former 1,000-gallon heating oil UST that was removed in 2007 and replaced with the current 2,000-gallon UST.

A CTDEP Storage Tank Enforcement Inspection Checklist was observed on file for the Site dated January 3, 2007. This checklist indicates the inspection was done for full compliance monitoring and the facility is registered with CTDEP. No other information for the Site was observed on file at CTDEP.

The Site was identified in the FirstSearch™ environmental database report as being on the UST and FINDS databases. The FINDS listing indicates the Site may have been registered as a “facility” for the generation of hazardous wastes and was entered into the National Compliance Database (NCDB). No additional information was provided. VHB has requested additional information from EPA via e-mail. No hazardous waste manifests were identified on file for the Site at CTDEP.

According to the FirstSearch™ report, a 1,000-gallon gasoline UST is reported as permanently closed – abandoned in ground which does not appear accurate. The date of installation is listed as 1/1/1950. No other information is provided in the database report. This UST listing appears to be incorrect and is believed to pertain to the former 1,000-gallon UST removed in 2007 and replaced with the current 2,000-gallon UST. No other database listings were identified for the Site.

Numerous entries in the FirstSearch™ environmental database report were identified for properties in close proximity to the Site along South Main Street to the west of the Site. None of these properties are considered to be upgradient of the Site and therefore, releases of oil or hazardous materials from these properties are not believed to pose a significant risk of direct impact to the Site.

Currently and historically the Site has been surrounded by residential properties with commercial properties along Route 17 (South Main Street) to the west of the Site. Several industrial factories formerly occupied areas to the north and northwest of the Site.

Site Reconnaissance

A Site reconnaissance was conducted by VHB’s Environmental Professional, Amy Vaillancourt on October 22, 2010. Ms. Vaillancourt was escorted by Trevor Davis, real estate agent for the owner. At the time of the Site reconnaissance the buildings were vacant and the property was for sale.

The main building is located on the central portion of the Site. The annex building is located on the north portion of the Site. The area between the two buildings and the area to the south of the main building are paved. A playground area is located on the southwest corner of the Site. The entire Site is surrounded by chain link fencing.

Entrances to the main building exist on the north, south, and east sides. Vent and fill pipes for the aforementioned heating oil UST were observed on the northwest side of the main building. An oil fired furnace is located in the northwest corner of the building's basement. A sump pump was observed in the furnace room.

Entrances to the annex are located on the east, west, and south sides of the building. A natural gas meter was observed on the west side of the annex building.

No evidence of a release of OHM was observed during the Site reconnaissance.

Observations of adjacent properties were exterior portions of the Site and abutting properties from publicly accessible roadways. Residential properties surround the Site. No obvious storage of OHM or environmental concerns were identified for adjacent properties.

Interviews

VHB interviewed Trevor Davis, real estate agent for the owner. According to Mr. Davis, he was unaware of releases of OHM or environmental concerns for the Site. He indicated the existing UST was only a few years old and was installed to replace a former UST. Mr. Davis indicated the majority of the main building's roof was original slate and only a portion was asphalt shingles that were used for repairs. Other than the aforementioned Asbestos Re-Inspection report for the Site, Mr. Davis was unaware of any environmental investigations or hazardous building material abatement activities for the Site.

VHB interviewed various municipal personnel regarding the Site during the conduct of this investigation. None of the personnel interviewed were aware of environmental issues associated with the Site or abutting properties.

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Data Gaps

The following data gaps were identified the Site during the completion of this ESA.

- There was a lack of information regarding whether the Site utilized an on-site well and/or septic system from 1875 to the 1930s. This does not appear to represent a significant data gap since the Site was connected to the municipal sewer and water sometime in the 1930s and has been used as a public school since 1875 (i.e. no industrial activity).
- Although conflicting information was found regarding the former size and contents of reported USTs at the Site, currently it appears that only one 2,000-gallon No. 2 heating oil exists at the Site and it was installed in 2007 to replace the former 1,000-gallon UST. The installation date of the 1,000-gallon UST was reportedly 1950. Fuel sources prior to that time are unknown. This does not appear to represent a significant data gap since the Site configuration and location of the furnace suggests any historic heating oil USTs serving the building would have likely been located along the northwest corner of the building. During the 2007 UST replacement no evidence of petroleum releases were identified in this area.
- During the UST removal/replacement activities in 2007, only two samples were collected from the tank grave for laboratory analysis. CTDEP UST Regulations require that one sample be collected from each of the sidewalls and two from the bottom. For heating oil CTDEP requires all six samples be analyzed for extractable total petroleum hydrocarbons and the most contaminated sample (based on field observation) be further analyzed for aromatic volatile organic compounds, methyl-tertiary-butyl-ether (MTBE) and semi-volatile organics. This does not appear to represent a significant data gap since no releases of heating oil or impacts to surrounding soils were identified during the 2007 UST removal /replacement activities. However, as a general rule, CTDEP expects soil sampling associated with UST removals be conducted in accordance with regulations that were in effect at the time of UST removal/replacement activities.
- The Site was listed on the EPA's FINDS as a potential "facility" for the generation of hazardous wastes and was entered into the National Compliance Database

(NCDB). No additional information was provided. VHB has requested additional information from EPA via e-mail but as of the date of this report no information has been received. This does not appear to represent a significant data gap since no hazardous waste manifests were identified on file for the Site at CTDEP, the Site has been used as a public school since 1875, and municipal personnel familiar with the Site have no knowledge of chemical use or storage activities.

- Portions of a Three-Year Asbestos Re-Inspection report dated September 2005, prepared by Superior Industries, LLC, were provided by the owner's real estate agent for VHB's review. According to this report the vinyl floor tile in the basement/auditorium is asbestos containing and the window caulk, boiler gasket, and flue cement were assumed to contain asbestos. The report indicates wall and ceiling plaster, glue daubs, and wall board throughout the school were sampled and found not to contain asbestos. It is unknown if additional asbestos containing building materials or lead based paint coated components exist in association with the building. This does not appear to represent a significant data gap since the building is not slated for demolition and during the Site reconnaissance no significant damage to building components was observed.

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Conclusions

It is our understanding the Client has requested this ESA for due diligence purposes in support of a potential purchase of the Site. The slated reuse of the building would be for use as a senior center and municipal office space. Furthermore, minor interior renovations are expected to facilitate reuse plans. A hazardous building materials inspection should be completed prior to impacting building materials or conducting renovation activities.

Based upon the data collected and reviewed during this investigation the Site has been used as a public school since development in 1875. No significant environmental concerns or releases of OHM were identified for the Site. However, additional soil sampling could be required by CTDEP in the vicinity of the UST for compliance with UST Regulations, particularly if the Site were entered into a formal state regulatory program.

References

City of Middletown, Connecticut, municipal file review and interviews, November 5, 2010

Connecticut Department of Environmental Protection, file review, November 9, 2010

USGS Topographic Map (1984)

Aerial Photographs reviewed at the Connecticut State Library, the UCONN MAGIC Server, and Live Search Maps (1934, 1951, 1965, 1970, 1986, 1990, 1995, 2004, and 2008).

Sanborn Fire Insurance Maps (1901, 1907, 1913, 1924, and 1950).

City of Middletown Directories (various between 1895 and 1973) available from City Clerk.

Federal Emergency Management Agency Flood Insurance Rate Mapping panel No. 09007C0117G dated August 28, 2008.

FirstSearch™ Environmental Database Report for 61 Durant Terrace, Middletown, Connecticut dated November 8, 2010

Surficial Materials Map of Connecticut, CTDEP GIS Data

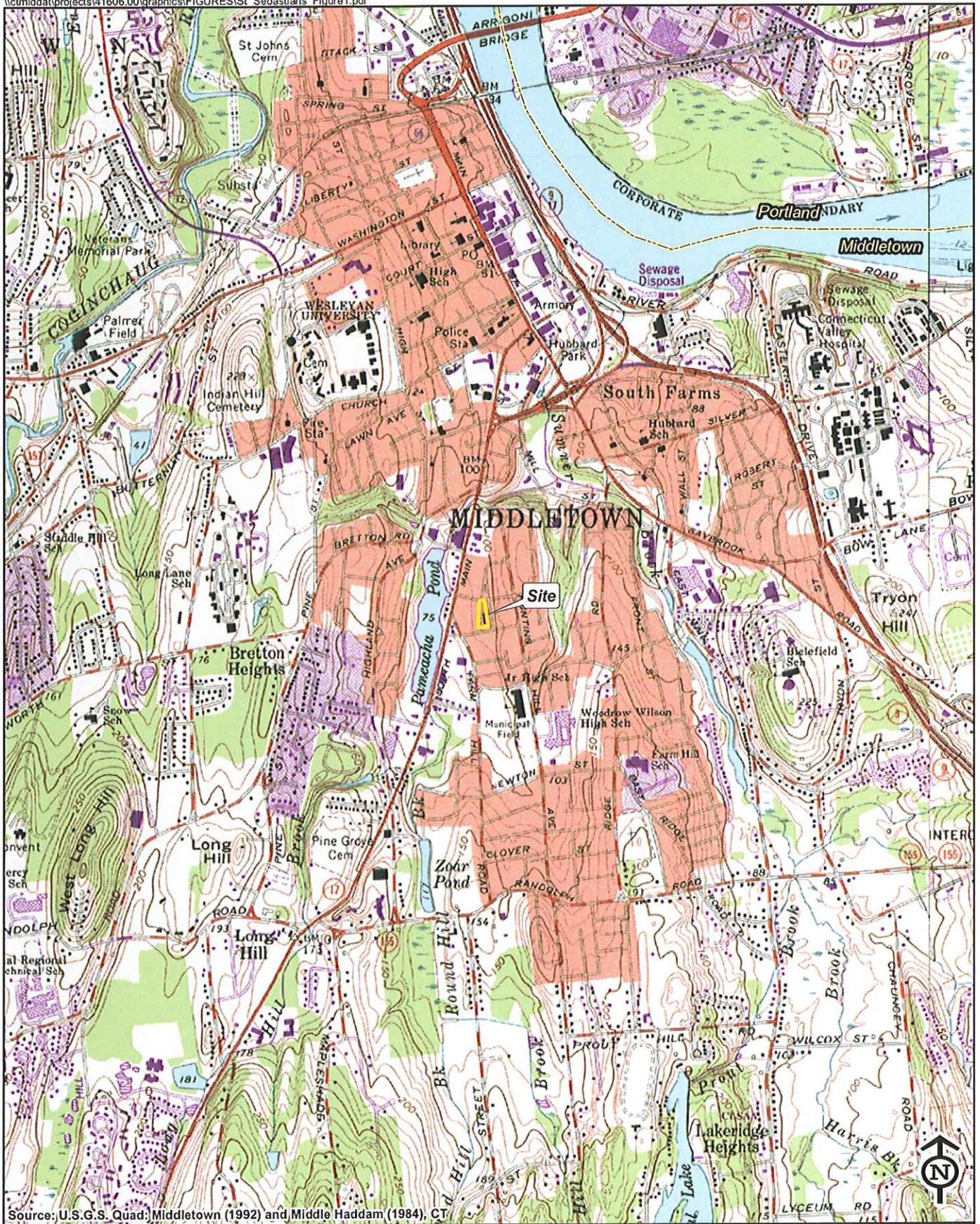
Bedrock Geological Map of Connecticut, CTDEP GIS Data

Water Quality Classification Digital Map of Connecticut, CTDEP GIS Data

Site reconnaissance October 22, 2010

Three-year Asbestos Re-Inspection Report (portions) dated September 2005 prepared by Superior Industries, LLC.

Figures



Source: U.S.G.S. Quad: Middletown (1992) and Middle Haddam (1984), CT



Vanasse Hangen Brustlin, Inc.

Figure 1
Site Location Map
Saint Sebastian
61 Durant Terrace
Middletown, Connecticut



Quadrangle Location



Base Map Sources: AirPhoto USA 2006 Aerial Photography with 1-foot resolution.

Legend

-  Underground Storage Tank
-  Approximate Parcel Boundary
-  Assessor Parcel Boundary



Vanasse Hangen Brustlin, Inc.

Figure 2
Site Plan Map
Saint Sebastian
61 Durant Terrace
Middletown, Connecticut