
AAI Phase I Environmental Site Assessment

645 Main Street
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

October 2011

AAI Phase I Environmental Site Assessment

645 Main Street
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

Environmental
Professional



Amy Vaillancourt

Technical
Review



Robert McCarthy, LEP

Table of Contents

Executive Summary	1
Introduction	8
Purpose and Scope of Work	8
Project Location/Description	9
Site Location and Description	9
Site Utilities	9
Environmental Setting	9
Records Review	11
Historical Records Review	11
Municipal Records Review	21
Previous Investigations/Assessments	25
Site Reconnaissance	26
Current Uses and Activities	26
Hazardous Materials/Petroleum Products Storage and Handling	26
Waste Generation, Treatment, Storage and Disposal	27
Surface Conditions	27
Adjacent Properties	28
Regulatory File Search	29
Interviews	33
Summary of Findings	34
Data Gaps	40
Conclusions	41
References	43

Figures

Figure No.	Title
1	Site Location Map
2	Site Plan

Appendices

Appendix	Description
A	Limitations
B	File Review Information
C	Environmental Database Summary Report
D	Site Photographs

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 645 Main Street 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 prior to purchasing the Site for redevelopment purposes.

Site Location and Description

The Site is comprised of one (1) parcel of land totaling 0.14 acres, is identified by the City of Middletown Tax Assessor’s Office as Parcel 22-0255, and referred to as 645 Main Street. During completion of the municipal file review, it was noted that the Site is also referred to as 649 Main Street. The Site is currently owned by Lucky Grocery, LLC and is zoned for downtown business use (B-1). The Site was historically developed prior to 1924 and was used as a gasoline station and auto repair facility from at least 1924 until approximately 2006.

The Site is located on the southwest corner of Main and Grand Streets and is accessible from both Main and Grand Streets. The Site is improved with a 1,880 square foot brick and concrete block, single-story building located on the western portion of the Site. The eastern portion of the Site consists of paved parking and a gasoline dispenser island. According to the City of Middletown Sewer and Water Department, the Site has been connected to the municipal sewer and water systems since the late 1800s to early 1900s.

The Site is abutted to the north by Grand Street and the Community Health Center (which is currently under construction) and to the east by Main Street and several mixed-use buildings that contain retail/commercial space on the ground floors with residential/office space above. The Site is abutted to the south by a single-story building currently used as a church/meeting hall and to the west by a single-story retail building (currently occupied by a tailor).

The topography of the Site is level. Based upon a review of topographic maps the Site is located at approximately 65 feet above mean sea level (AMSL). The on-Site building occupies approximately 30 percent of the Site with paved parking comprising the remainder of the Site.

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 thick till. Soils at the Site are mapped as Wethersfield-Urban land complex with 3 to 8 percent slopes and Urban land.

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 east toward the Connecticut River, the nearest surface water body, which is located approximately 1,195 feet east of the Site and is classified as an “C,D to B” 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 #09007C0109G – 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 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. Surficial runoff from the Site likely moves as overland flow to the north (toward Grand Street) and east (toward Main Street).

Records Review

According to documents reviewed, the Site was initially developed prior to 1895 with several retail and commercial properties. Commercial, retail and residential use at the Site continued through 1913. The 1913 Sanborn map depicts a tobacco store, cobbler, laundry, and tailor on the property. The 1924 Sanborn map depicts a building on the Site in the approximate location of the current Site building and three (3) gasoline tanks are depicted on the portion of the property along Grand Street.

Surrounding properties have been used primarily for residential and commercial/retail use since prior to 1895. Activities documented at properties in close proximity to the Site include; a hotel, a beer bottling operation, gasoline station, and automobile sales & service.

Various letters, forms, and inspection reports were identified for the Site at the City of Middletown Fire Marshal’s office. The reviewed information documents a number of USTs have existed at the Site since prior to 1985. A Building Department permit, dated October 30, 1986, was identified on file for the Site for the installation of three (3) gasoline USTs at the Site. According to deeds reviewed for the Site, a CTDEEP Notice of Bureau of Air Management Order was filed on the land records on June 18, 2007. The nature of this order was not stated in the land record and a copy was not on file with CTDEEP Public File room.

VHB requested available Connecticut Department of Energy and Environmental Protection (CTDEEP) files for the Site including tank records, spill reports, hazardous waste generation information, violations or orders, and remediation files. Information reviewed at CTDEEP identified that the following UST are currently or were historically located at the Site:

- Tank A1 - 6,000-gallon gasoline UST, installed November 1, 1986, currently in use.
- Tank B1 - 6,000-gallon gasoline UST, installed November 1, 1986, currently in use.
- Tank C1 - 6,000-gallon gasoline UST, installed November 1, 1986, currently in use.
- Tank D1 - 2,000-gallon gasoline UST, installed March 1, 1956, permanently closed/removed from ground, last used November 1, 1986.
- Tank E1 - 3,000-gallon gasoline UST, installed March 1, 1956, permanently closed/removed from ground, last used November 1, 1986.
- Tank F1 - 3,000-gallon gasoline UST, installed March 1, 1956, permanently closed/removed from ground, last used November 1, 1986.
- Tank G1 - 4,000-gallon gasoline UST, installed March 1, 1956, permanently closed/removed from ground, last used November 1, 1986.
- Tank H1 - 1,000-gallon gasoline UST, installed March 1, 1956, permanently closed/removed from ground, last used November 1, 1986.
- Tank J1 - 500-gallon gasoline UST, installed March 1, 1956, permanently closed/removed from ground, last used November 1, 1986.

Additional information was identified includes CTDEEP Site inspection reports and tank test reports. VHB reviewed CTDEEP databases for the Site (List of Potentially Contaminated Sites, List of Significant Environmental Hazards Reported to the CTDEEP, and the Hazardous Waste Manifest Database (from 1/1/1984 through 12/31/2007)) and did not identify any listings for the Site.

The Client provided VHB a copy of a letter from CTDEEP summarizing a limited subsurface investigation completed at the Site in 2011. The investigation was conducted due to gasoline impacts being detected in a groundwater monitoring well located along Main Street approximately sixty (60) feet south of the Site. The investigation identified petroleum impacts to soil and groundwater at the Site at levels that exceed the CTDEEP Remediation Standard Regulations (RSRs) numerical criteria.

No other previous investigations were identified for the Site during the completion of this ESA.

The Site was identified in three (3) of the databases queried as part of the requested FirstSearch™ environmental database report.

- The Site (listed as 649 Main Street) is identified in the State Spills 90 database. The entry dated May 13, 2011 references soil and groundwater impacts identified at the Site and lists CTDEEP as the reporting party. The status of the case is listed as “Open”.
- The Site (listed as Steve’s Repairs Unlimited, LLC at 649 Main Street) is identified on the State UST database. The listing identifies three (3) 6,000-gallon, gasoline USTs currently in use at the Site. The entry also identifies a 2,000-gallon gasoline UST that was removed in 1986.
- A property (listed as J. F. Jarzabek 5207, Main Street) is identified on the State UST database. The information presented in the database (the listed property owner, number and configuration of historical USTs) appear to match information reviewed in the municipal and CTDEEP files for the Site. As such, the “J. F. Jarzabek 5207, Main Street” information appears to be mapped incorrectly and appears to pertain to the Site. The listing identifies four (4) permanently closed USTs at the property. Based upon the database information, one (1) 4,000-gallon gasoline UST was abandoned in-place and three (3) tanks (two (2) 3,000-gallon gasoline and 1 (1) 550-gallon gasoline) were removed from the property.

Numerous entries in the FirstSearch™ environmental database report were identified for incidents and properties in close proximity to the Site. Several listings were identified in proximity to the Site for apparent minor spills and releases that do not pose a significant threat to impact the Site. Four (4) of the listings were for properties in close proximity to the Site that have or had USTs including:

- The Connection at 605 Main Street (at the corner of Main and Liberty south of the Site) is listed as having had a leaking 2,000-gallon heating oil UST.
- Nehemiah House at 47 Rappallo Avenue (east of the Site) is listed as having had a leaking heating oil UST.
- Former T & T Sunoco at 569 Main Street (south of the Site) is listed on the UST and LUST databases.
- Bob’s Amoco at 711 Main Street (north of the Site) is listed as having removed three 4,000-gallon gasoline USTs.

Releases of oil or petroleum products from surrounding properties have the potential to impact groundwater flowing beneath the Site.

Site Reconnaissance

A Site reconnaissance was conducted by VHB's Environmental Professional, Amy Vaillancourt on October 4, 2011. At the time of the reconnaissance the Site was unoccupied and the building was boarded up.

Driveways for access to the Site are located on both Grand Street (north) and Main Street (east). The building is located on the west side of the Site. Two overhead garage doors are located on the east side of the building and one overhead door is located on the north side of the building. A three to four foot wide alleyway exists between the on-Site building and the building located on the southerly abutting parcel. A paved drive way is located between the on-Site building and the westerly abutting parcel. A gas meter hook up was observed on the northwest side of the building.

During the Site reconnaissance, evidence of boring holes spray painted with labels (GP-1 thru GP-9) were observed in the paved area on the north and west sides of the Site. These labeled borings are remnant of the aforementioned DEEP investigation recently completed for the Site.

The interior of the building consists of two garage bays on the east side of building and a single bay on the west side of building (rear). A small office is located in the northeast corner of the building. At the time of the reconnaissance significant amounts of building debris (brick, concrete, roofing, plaster) occupied the majority of the interior building space. It was apparent that interior demolition had occurred. Due to the amount of building debris inside visual observations were limited. The building is reportedly slab on grade with no basement.

Two hydraulic lifts (2) one in the front bay and one in the rear bay were observed. Piping associated with one of the lifts was observed along the wall in the rear garage bay. Ceiling mounted heaters were observed in the garage bays. Several small pails and buckets containing what appears to be waste oil were observed interior to the building.

A gasoline pump island with three separate pumps is located on the east side of the Site. Evidence of three USTs was observed just to the north of the pumps. An observation well is located between the USTs and the pump island. Vent pipes presumed in association with the three existing USTs were observed along the southeast wall of the building.

Observations of adjacent properties were also made from publicly accessible roadways. The Site is abutted to the north across Grand Street by the Community Health Center which is currently under construction and to the east across Main Street by several mixed-use buildings that contain retail/commercial space on the ground floors with residential/office space above. The Site is abutted to the south by a single-story building currently used as a church/meeting hall. A single-story retail building (currently occupied by a tailor) abuts the Site to the west.

Interviews

During the conduct of this ESA, the current Site owner, Tahir Hussain was interviewed regarding the Site. According to Mr. Hussain, he and two other individuals purchased the Site in 2010 under Lucky Grocery, LLC. Mr. Hussain was unaware of any environmental issues associated with the Site when purchased. He indicated the recent DEEP investigation identified gasoline contaminated soil and groundwater at the Site. Mr. Hussain could not provide any recent information on the status of the three (3) known USTs at the Site but believed these USTs were emptied in 1999. He was unaware of any additional USTs existing at the Site.

Mr. Hussain stated that interior demolition began a few months back, but was stopped when the City ordered the demolition to cease because a demolition permit was not obtained.

VHB also interviewed various municipal personnel at the City of Middletown regarding environmental conditions at the Site. None of the personnel interviewed were aware of environmental issues at the Site.

Data Gaps

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

- Current and historic hazardous materials/petroleum products storage and handling practices are unknown. However, due to use of the Site for auto repair - various petroleum products, solvents, and other automotive type chemicals were potentially used and stored at the Site.
- Recent and historical hazardous waste generation, treatment, storage, and disposal activities at the Site are unknown. It is assumed that potential hazardous wastes including oil, solvents, and other types of related wastes were generated as a result of automotive repair operation conducted at the Site. These wastes were likely stored (at least temporarily) at the Site.
- The condition/status of the three (3) existing USTs at the Site is unknown. Gasoline impacts to soil and groundwater have been identified by CTDEEP. The extent of these impacts is unknown.
- Several additional USTs reportedly existed at the Site. Documentation confirming the removal of these USTs (i.e. UST removal report) was not identified.
- A CTDEEP Notice of Bureau of Air Management Order was filed on the land records for the Site in June 2007. The nature and status of the order is unknown.

- Due to the age of the building (pre 1970) there is potential for hazardous building materials to be associated with the on-site structure. During the Site reconnaissance interior building demolition was observed. Significant amounts of building debris occupied much of the interior. It is unknown if any of these building components contained hazardous materials (i.e. lead based paint or asbestos).

Conclusions and Recommendations

Based upon the data collected and reviewed during this investigation, the Site has been used for automotive repair and as a gasoline station since at least 1924. No documentation was found during the conduct of this investigation regarding use or storage of oil or hazardous materials, or hazardous waste generation, storage, and disposal activities. It is likely that typical automotive fluids, petroleum products, and solvents were used and stored at the Site.

Based upon reviewed information, three (3) 6,000-gallon gasoline USTs currently exist at the Site. Several former USTs have reportedly been removed or closed in-place at the Site. Two (2) in-ground hydraulic lifts were identified interior to the building.

A limited subsurface investigation conducted by CTDEEP identified impacts above RSR numerical criteria to soil and groundwater on-Site. Numerous releases of petroleum products have been reported for properties in proximity to the Site. It is our understanding that the Client intends to demolish the current on-Site structure to facilitate redevelopment of the Site. Due to the age of the building (constructed prior to 1978) there is potential for hazardous building materials (i.e. asbestos and lead based paint) to be associated with the structure.

Based on the findings of this investigation, we recommend that a Phase II/III Subsurface Investigation (Phase II or Phase II) be conducted for the site to determine the extent and degree of OHM releases at the Site.

Furthermore we recommend additional inquiry to CTDEEP to determine the nature and status of the CTDEEP Notice of Bureau of Air Management Order found on the land records for the Site.

1

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 645 Main Street 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 as part of the North End Gateway Redevelopment Project.

Project Location/Description

Site Location and Description

The Site is comprised of one (1) parcel of land totaling 0.14 acres, is identified by the City of Middletown Tax Assessor's Office as Parcel 22-0255, and is referred to as 645 Main Street. During the completion of municipal file review, it was noted that the Site is also identified as 649 Main Street. The Site is currently owned by Lucky Grocery, LLC and is zoned for downtown business use (B-1).

The Site is located on the southwest corner of Main and Grand Streets and is accessible from both Main and Grand Streets. The Site is improved with a 1,880 square foot brick and concrete block, single-story building located on the western portion of the Site. The eastern portion of the Site consists of paved parking and a gasoline dispenser island.

The Site is abutted to the north across Grand Street by the Community Health Center which is currently under construction and to the east across Main Street by several mixed-use buildings that contain retail/commercial space on the ground floors with residential/office space above. The Site is abutted to the south by a single-story building currently used as a church/meeting hall. A single-story retail building currently occupied by a tailor abuts the Site to the west.

Site Utilities

According to the City of Middletown Sewer and Water Department, the Site has been connected to the municipal sewer and water systems since the late 1800s to early 1900s. No information regarding the specific connection dates was available. Electric service is provided to the Site via overhead electric lines.

Environmental Setting

Topography

According to the United States Geological Survey (USGS) topographic map dated 1992, the Site is located at approximately 65 feet above mean sea level (AMSL) and the topography of the Site is generally level.

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 CTDEEP, 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 "Thick 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 and Urban land.

Hydrology

CTDEEP 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 east toward the Connecticut River.

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 the Connecticut River which is located approximately 1,195 feet east of the Site. The CTDEEP classifies the Connecticut River as a "C, D to B" surface water body. This designation indicates water quality has been degraded.

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 #09007C0109G – revised August 28, 2008. The "Zone X" designation indicates an area of minimal flooding (outside the 100 year flood plain).

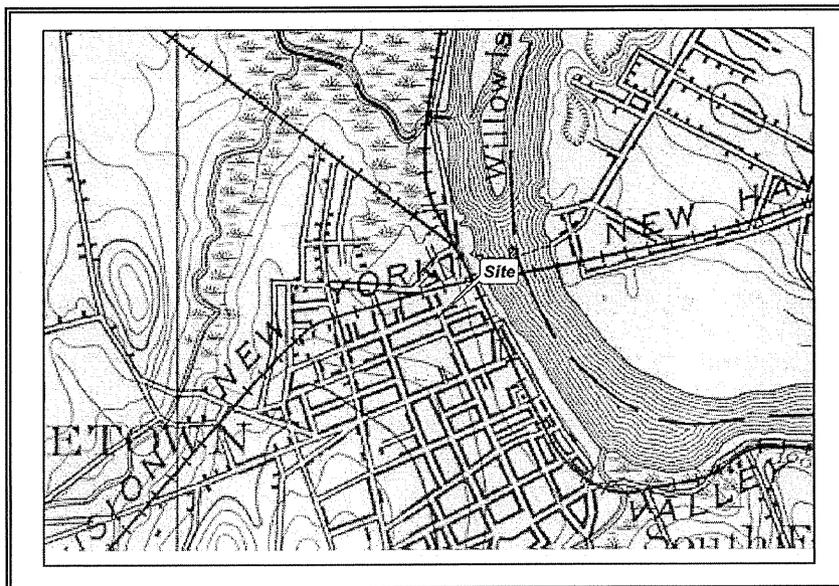
Records Review

Historical Records Review

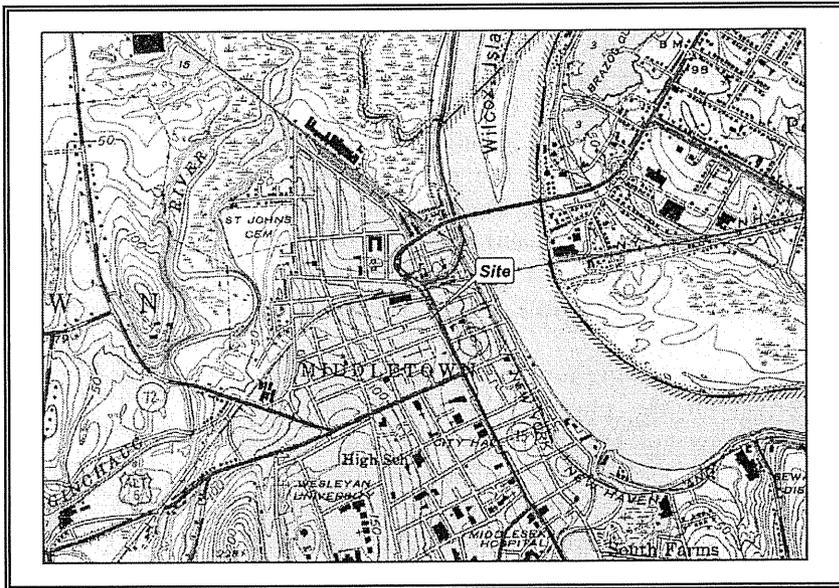
Historical Topographic Maps

VHB reviewed the available historical USGS topographic quadrangle mapping below during the completion of this investigation.

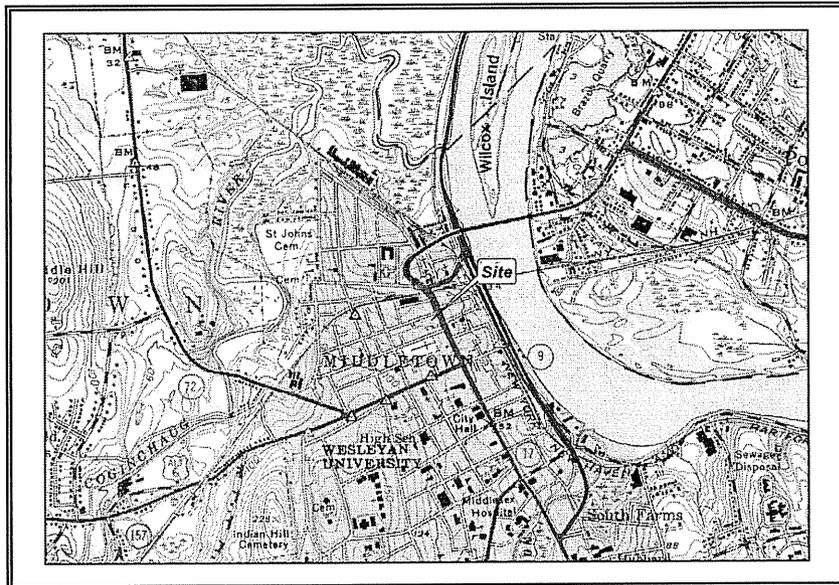
1893 USGS Topographic Quadrangle Map



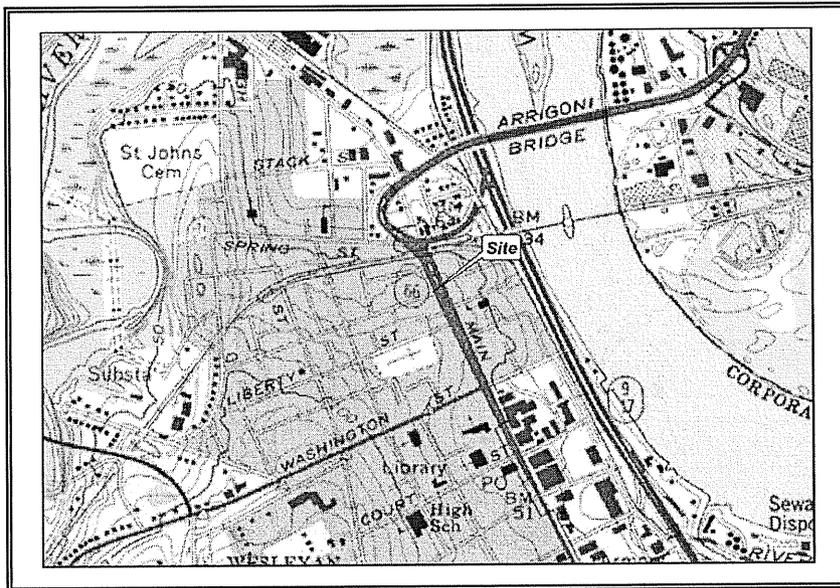
1945 USGS Topographic Quadrangle Map



1952 USGS Topographic Quadrangle Map



1992 USGS Topographic Quadrangle Map

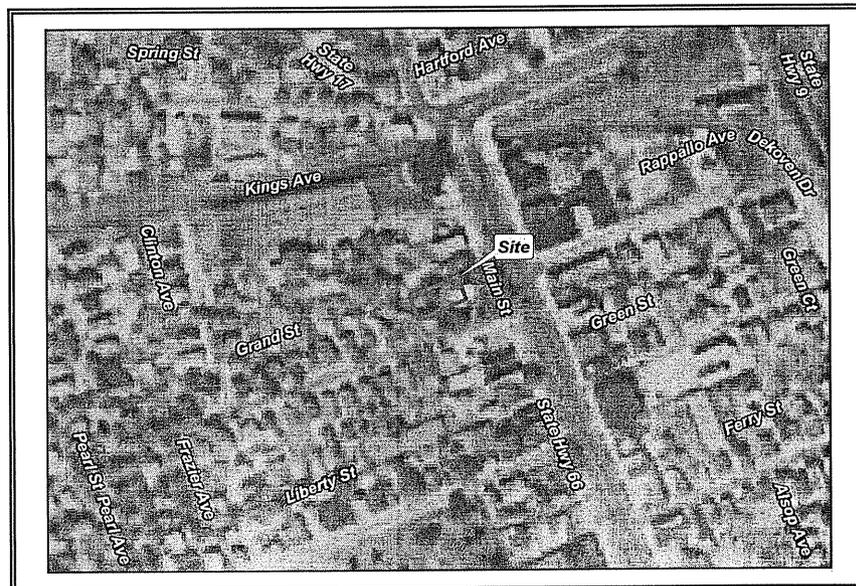


Based on topographic maps reviewed it does not appear as though the topography of the Site or surrounding area has changed significantly between 1893 and the present.

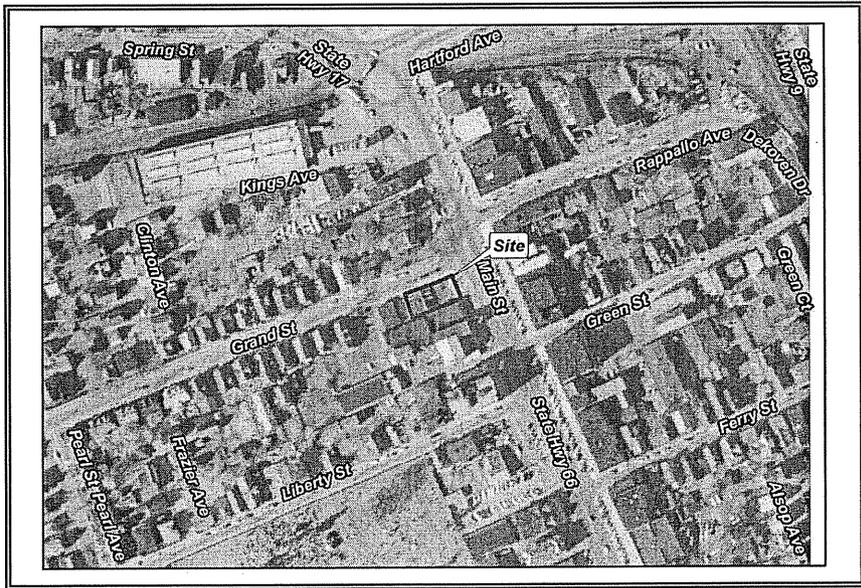
Historical Aerial Photographs

VHB reviewed the following available historical aerial photographs during the completion of this investigation.

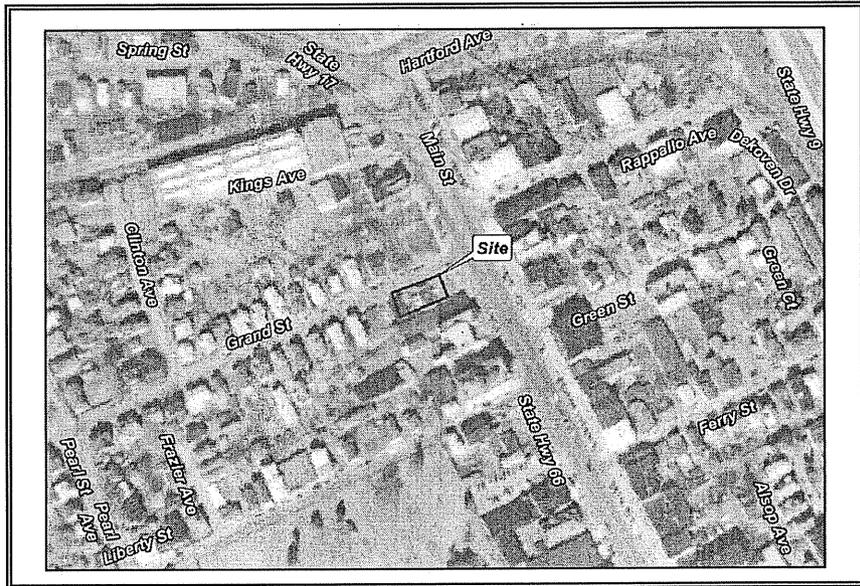
1934 Aerial Photograph



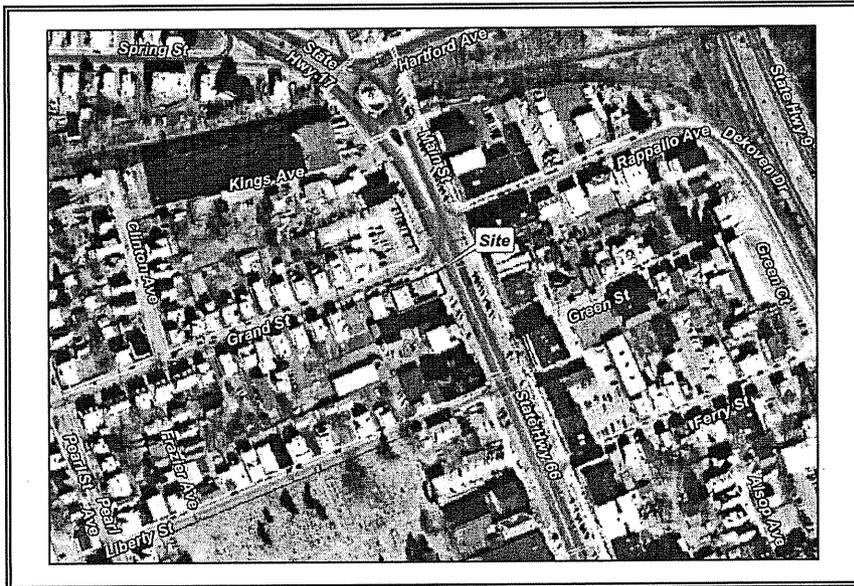
1965 Aerial Photograph



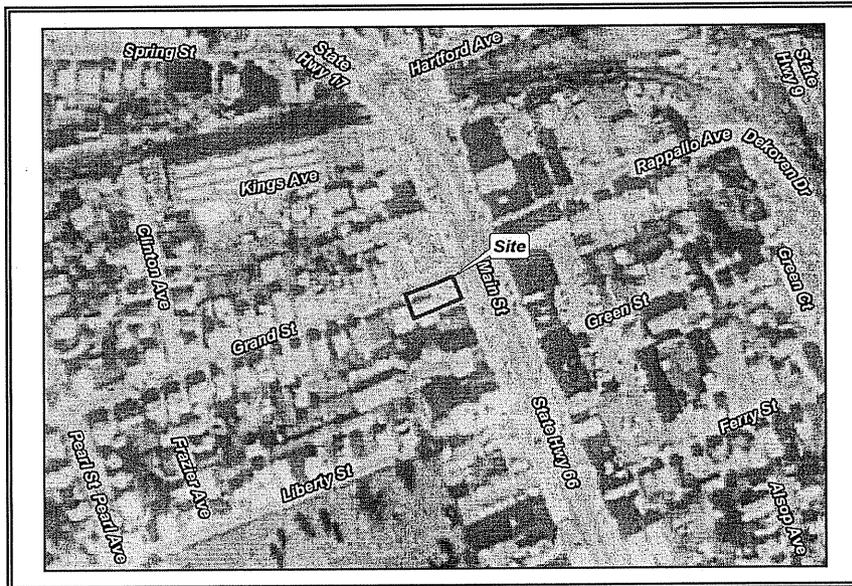
1970 Aerial Photograph



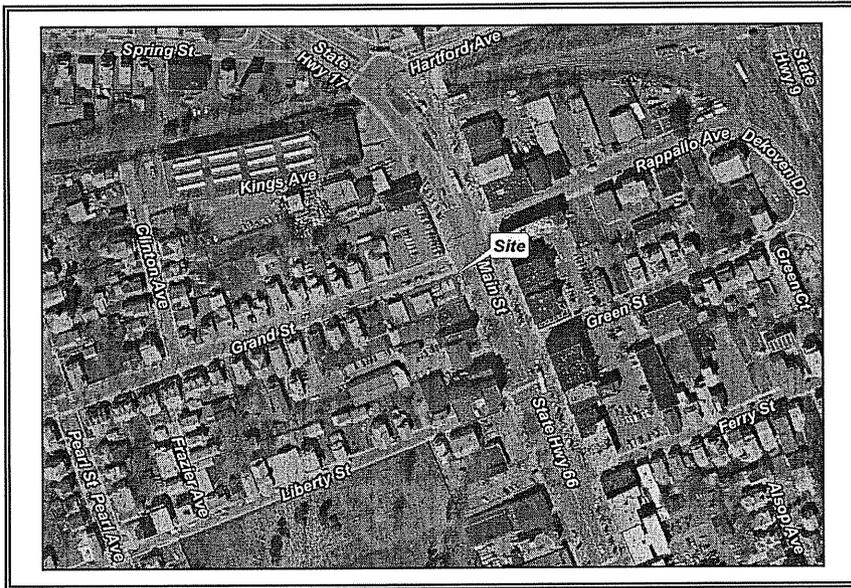
1986 Aerial Photograph



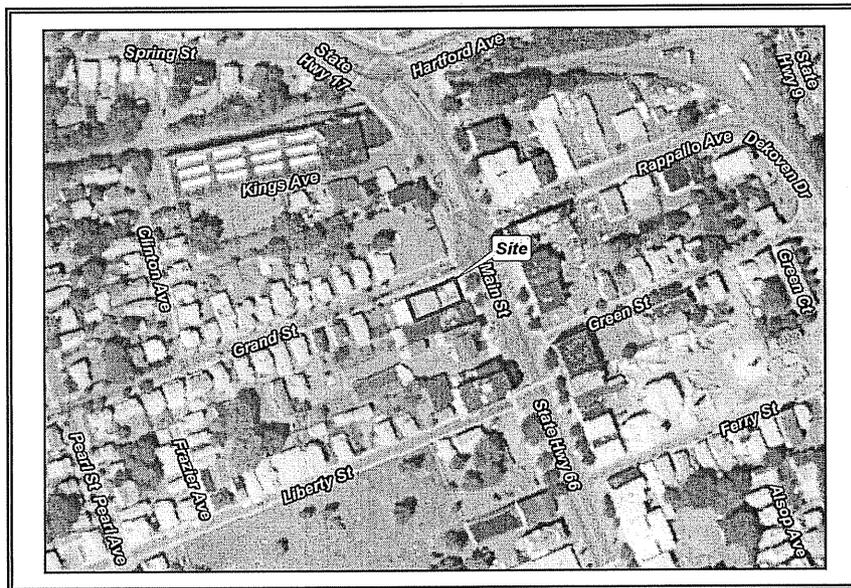
1991 Aerial Photograph



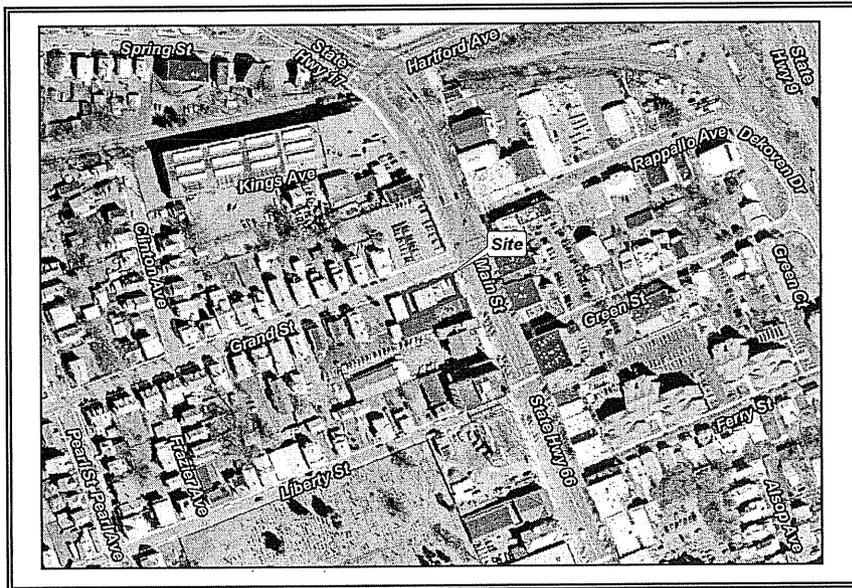
2004 Aerial Photograph



2006 Aerial Photograph



2008 Aerial Photograph



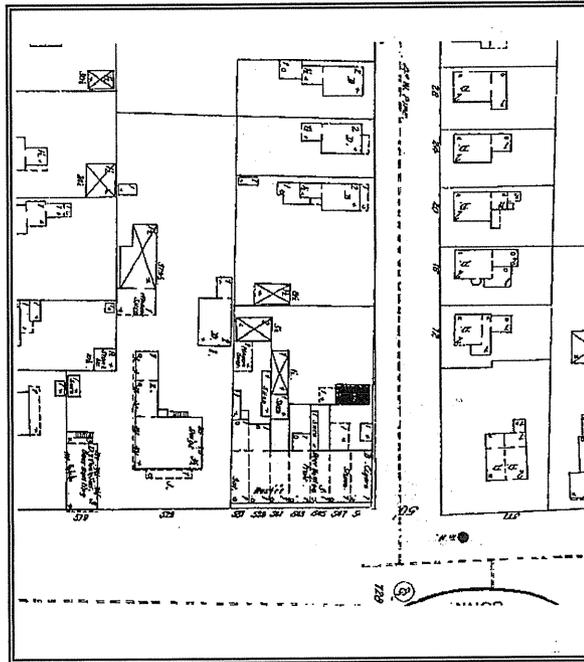
Some of the aerial photographs reviewed were of poor quality and therefore details of the Site and surrounding area could not be discerned. The Site configuration in the 1934 aerial photograph and all subsequent reviewed photos is similar to current conditions.

The area surrounding the Site appeared similar to current conditions in the aerial photographs reviewed with the exception of the area to the west of the Site. The 1934 to 1965 aerials depict several houses in the currently paved parking lot to the west of the Site.

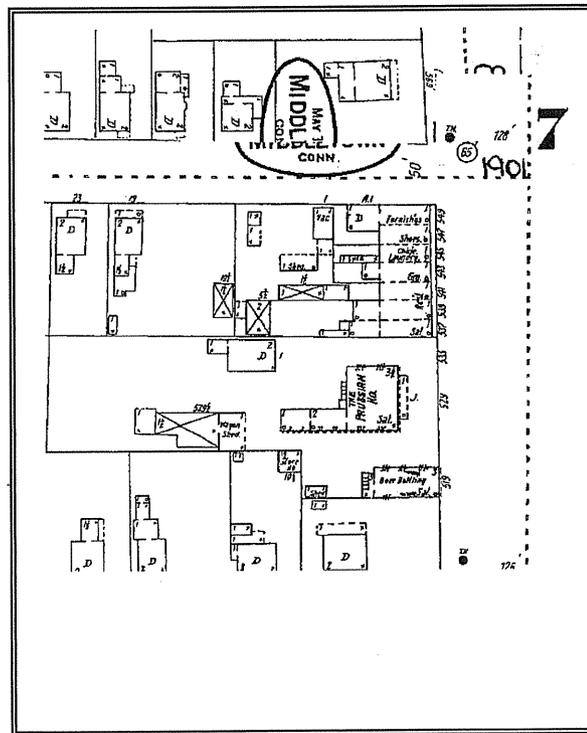
Historic Sanborn Fire Insurance Maps

VHB reviewed the following Sanborn Maps below during the completion of this investigation.

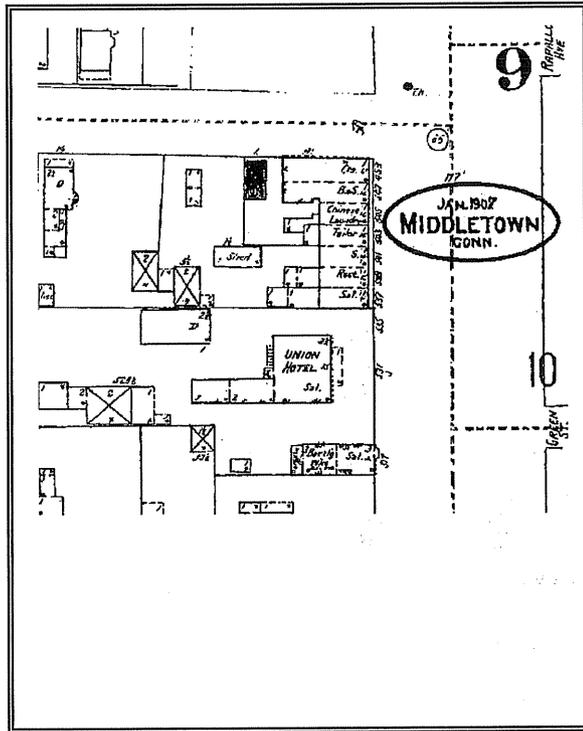
1895 Sanborn Fire Insurance Map



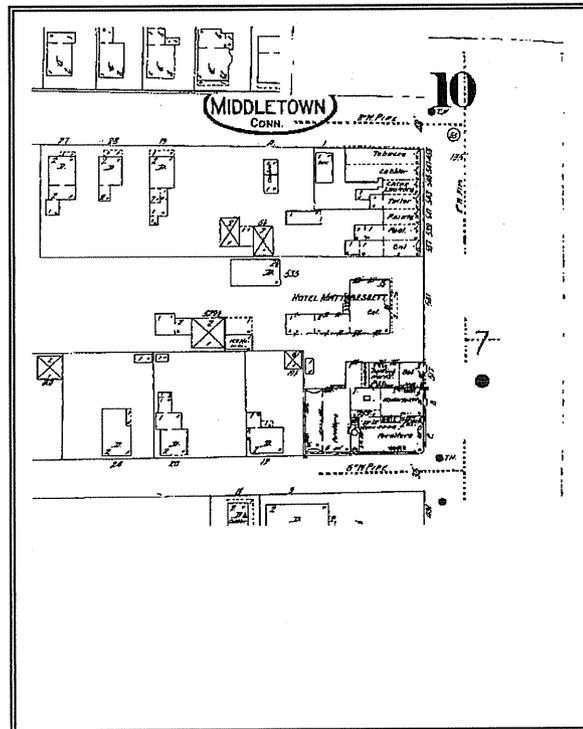
1901 Sanborn Fire Insurance Map



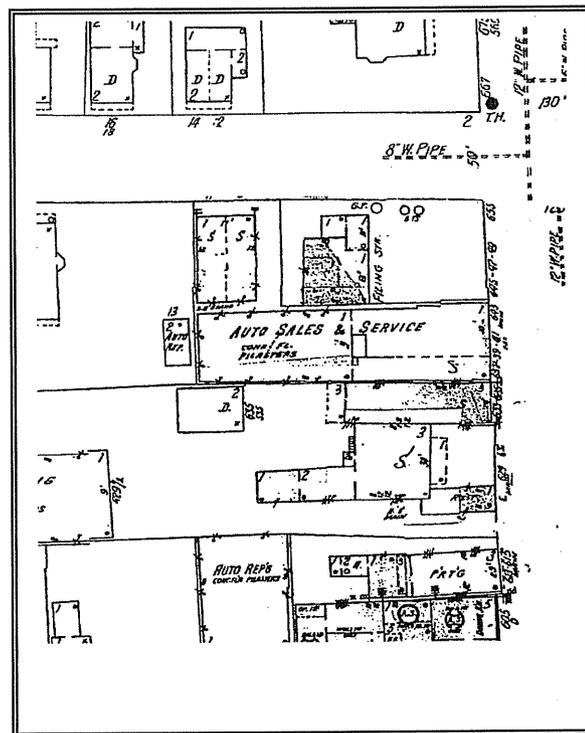
1907 Sanborn Fire Insurance Map



1913 Sanborn Fire Insurance Map



1924 Sanborn Fire Insurance Map



Based on the Sanborn Maps reviewed, the Site was initially developed prior to 1895 with several retail and commercial properties. Continued commercial, retail and residential use is depicted on the reviewed Sanborn maps through 1913. The 1913 map depicts a tobacco store, cobbler, laundry, and tailor on the property. The 1924 Sanborn map depicts a gasoline "filling station" at the Site. A building is shown on the Site in the approximate location of the current Site building and three (3) gasoline tanks are depicted on the north portion of the property along Grand Street.

Based on Sanborn Maps reviewed, surrounding properties have been used primarily for residential and commercial/retail use. A hotel and beer bottling operation are shown south of the Site beginning in 1901. The 1924 map depicts a filling station north of the Site at the intersection of Main Street and Kings Avenue. The 1924 map shows an automobile sales & service facility immediately south of the Site.

City Directories

VHB reviewed available City of Middletown Directories for the Site from prior to 1920 to 1990 in approximate 5 year increments. The following listings for the Site were identified:

<u>Year</u>	<u>Listing</u>
1920	Charlie Wing Laundry
1925	Carl Wenneke & Company Vulcanizing
1930	Carl Wenneke & Company Tires
1935	Carl Wenneke & Company Tires
1939	Carl Wenneke & Company Tires
1945	Carl Wenneke & Company Tires
1950	TJ McCue Gasoline
1955	Tom's Esso Service Station
1960	J J Esso Service Center
1965	J J Esso Service Center
1970	J J Esso Service Center
1975	J J Exxon Service Center
1980	J J Exxon Service Center
1984	J J Exxon Service Center
1990	J & J Service Center

Municipal Records Review

VHB personnel reviewed available files for the Site at City of Middletown municipal offices October 4th and 6th, 2011 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 current City of Middletown Tax Assessors information, the Site is owned by Lucky Grocery, LLC, is identified as parcel 22-0255, and is referred to as 645 Main Street. The Assessors field card indicates the current site building was constructed in 1930. However, historical Sanborn Fire Insurance Map dated 1924 depicts what appears to be the current on-Site building. The Assessor's card did not indicate a heating source for this building.

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
Lucky Grocery, LLC	Stephen S. Coladonato & Carol Coladonato	1709/988-992	10/14/2010
Lucky Grocery, LLC	Coladonato Real Estate, LLC	1709/986-987	10/14/2010
Coladonato Real Estate, LLC	Coladonato Realty, LLC	1708/745	9/30/2010
Coladonato Realty, LLC	John Jarzabek	1271/938	8/1/2001
John Jarzabek	Farmers and Mechanics Bank	1271/937	8/1/2001
Farmers and Mechanics Bank	Joseph F. Jarzabek, Sr.	389/133-136	10/27/1972
Joseph F. Jarzabek, Sr.	Colonial Beacon Oil Company	222/190*	12/31/1947

* The reviewed deed references six (6) USTs at the Site at the time of transfer of ownership. The USTs are identified as:

- (1) 2,000-gallon UST
- (2) 3,000-gallons USTs
- (1) 4,000-gallon UST
- (1) 1,000-gallon UST
- (1) 500-gallon UST

A CTDEEP Notice of Bureau of Air Management Order dated June 18, 2007 was found on the land records for the Site (Volume 1604 Page 631). The nature of the Order was not stated in the document and no direct information regarding this Order was found on file at CTDEEP. The status of this Order is unknown.

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

VHB visited the City of Middletown Fire Marshal's Office on October 4th and October 6th, 2011. A number of files were identified for the Site. A summary of the information reviewed is presented below.

- *Underground Storage Tank Facility Notification Form for Steve's Repairs Unlimited, LLC, dated January 9, 2007.*
The form documents the presence of three (3) 6,000-gallon UST at the Site. The form notes that the USTs were installed in November 1986.
- *Underground Storage Tank Facility Notification Form for Home Town Garage, dated July 31, 2001.*
The form documents the presence of three (3) 6,000-gallon UST at the Site. The form notes that the USTs were installed in November 1986.
- *Letter to Fire Marshal from Home Town Garage, dated January 14, 1999.*
The letter documents that the business at the Site is vacant and that gasoline in the USTs was pumped out and removed on or about September 1, 1999.
- *Letter to Joseph F. Jarzabek, Sr. from Fire Marshal, dated January 14, 1999.*
The letter notifies the Site owner that the USTs are in violation of Connecticut General Statute Section 29-320-2b NFA 30/197 Appendix C-1.3. due to the USTs being "temporarily" placed out of service for a period greater than 90 days.
- *Letter to Fire Marshal from the Director of Consumer Protection, dated December 30, 1998.*
The letter documents that the gasoline station at the Site, identified as J & J Service Center (Texaco) closed on approximately October 1, 1998.
- *Letter to J & J Service from Fire Marshal, dated July 3, 1997.*
The letter was written pursuant to a complaint regarding old anti-freeze containers stored on the property. The letter reports that the anti-freeze containers were used for transporting gasoline which is prohibited.
- *Underground Storage Tank Facility Notification Form for J & J Service Center, dated February 19, 1987.*
The form documents the presence of three (3) 6,000-gallon UST at the Site. The form notes that the USTs were installed in November 1986. The USTs are noted as being constructed of steel with cathodic protection.
- *Case Management Report.*
The report documents a number of tanks were removed on November 4, 1986. Documents that new tanks are being installed at the Site on approximately November 13, 1986. The report also documents that a pressure test of the new tanks was witnessed as was the backfilling of the new tanks.
- *Underground Storage Tank Facility Notification Form for J. F. Jarzabek, dated April 13, 1986.*
The form documents the following USTs at the Site:

- Tank A1 - 4,000-gallon gasoline UST, unknown installation date, last used in October 1985, abandoned in-place.
 - Tank B2 - 3,000-gallon gasoline UST, unknown installation date, currently in use.
 - Tank C3 - 3,000-gallon gasoline UST, unknown installation date, currently in use.
 - Tank D4 - 550-gallon waste oil UST, unknown installation date, currently in use.
 - Tank E5 - 2,000-gallon UST, unknown installation date, last used in March 1977, abandoned in-place. *Note: the contents of this UST was not identified, however, due to the volume of the UST it likely contained either gasoline or diesel fuel.*
- *Tank Test Report, Armor Shield of Connecticut, Inc., dated September 1986.*
The report includes a Site sketch that depicts two (2) in-use 3,000-gallon, gasoline USTs, and one 2,000-gallon and one 4,000-gallon abandoned in-place USTs. The report documents passing test results of the two (2) gasoline USTs (one leaded and one premium gasoline).
 - *Letter to J & J Exxon from Deputy Fire Marshal, dated September 5, 1980.*
The letter references an addition to the building and potentially relocating a 1,000-gallon fuel oil tank (presumably a UST) to the north side of the building adjacent to Grand Street.

Various other letters (motor vehicle inspection reports, etc.) were reviewed in the Fire Marshal's file, but none referenced topics related to the environmental conditions of the Site.

Health Department

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

Planning & Zoning Department

According to the City of Middletown Planning and Zoning Department there are no records on file for the Site.

Building Department

A permit was identified on file at the Building Department that appears to pertain to the Site. The permit lists J & J Exxon (Joseph Jarzbeck) as 650 Main Street. The permit is dated November 30, 1986 and was obtained to install three (3) new gasoline USTs at the

Site. No additional information for the Site was observed on file at the Building Department.

Previous Investigations/Assessments

The Client provided VHB a copy of a letter from CTDEEP summarizing a limited subsurface investigation completed at the Site in 2011. A summary of the investigation is presented below.

- *Limited Subsurface Investigation, CTDEEP Site Assessment and Support Unit (SASU), May - June 2011.*

SASU of the CTDEEP conducted a limited subsurface investigation at the Site in May and June of 2011. The investigation was conducted due to gasoline impacts being detected in a groundwater monitoring well located along Main Street approximately sixty (60) feet south of the Site. The findings of the investigation are summarized in a letter titled "*Subsurface investigation findings and Underground Storage Tank (UST) compliance status for facility ID# 83-1400*", dated August 19, 2011. The letter identifies the property investigated as "649 Main Street", however, it has been determined that it is the same property as the Site (645 Main Street). The letter is addressed to Mr. Anwar Wassen of Lucky Grocery, LLC, one of the current Site owners.

The investigation consisted of using a truck-mounted Geoprobe® to advance nine (9) soil borings from 16 to 32 feet in depth at the Site each of which were finished as temporary groundwater monitoring wells. Ten (10) groundwater samples and eleven (11) soil samples were submitted for laboratory analysis of volatile organic compounds (VOCs) during the investigation. The investigation identified petroleum impacts to soil and groundwater at the Site at levels that exceed the CTDEEP Remediation Standard Regulations (RSRs) numerical criteria. Groundwater was reported by CTDEEP to be approximately 12 to 32 feet below grade.

The letter states that if steps are not taken to abate the pollution an enforcement order will be issued by CTDEEP for the Site. The letter also states that the USTs at the Site need to be registered with CTDEEP. The letter concludes by recommending that the Site owner retain an environmental consultant to develop a scope of work (SOW) to abate the soil and groundwater pollution and submit the SOW to CTDEEP for review within 30 to 45 days from receipt of the letter.

No other previous investigations were identified for the Site during the completion of this ESA.

Site Reconnaissance

Current Uses and Activities

A Site reconnaissance was conducted by VHB's Environmental Professional, Amy Vaillancourt on October 4, 2011. At the time of the reconnaissance the Site was unoccupied and the building was boarded up.

Driveways for access to the Site are located on both Grand Street (north) and Main Street (east). The building is located on the west side of the Site. Two overhead garage doors are located on the east side of the building and one overhead door is located on the north side of the building. A three to four foot wide alleyway exists between the on-Site building and the building located on the southerly abutting parcel. A paved drive way is located between the on-Site building and the westerly abutting parcel. A gas meter hook up was observed on the northwest side of the building.

During the Site reconnaissance, evidence of boring holes spray painted with labels (GP-1 thru GP-9) were observed in the paved area on the north and west sides of the Site. These labeled borings are remnant of the aforementioned DEEP investigation recently completed for the Site.

The interior of the building consists of two large garage bays on the east side of the building and a single bay on the west side of building (rear). A small office is located in the northeast corner of the building. At the time of the reconnaissance significant amounts of building debris (brick, concrete, roofing, plaster) occupied the majority of the interior building space. It was apparent that interior demolition had occurred. Due to the amount of building debris inside visual observations were limited. The building is reportedly slab on grade with no basement.

Two hydraulic lifts (2) one in the front bay and one in the rear bay were observed. Piping associated with one of the lifts was observed along the wall in the rear garage bay. Ceiling mounted gas heaters were observed in the garage bays.

Hazardous Materials/Petroleum Products Storage and Handling

Historic hazardous materials/petroleum products storage and handling practices are unknown. However, due to the use of the Site for auto repair operations, it is assumed that various petroleum products, solvents, and other automotive type chemicals were used and stored at the Site. At the time of the reconnaissance several small pails and buckets containing what appears to be waste oil were observed interior to the building.

A gasoline pump island with three separate pumps is located on the east side of the Site. Evidence of three USTs was observed just to the north of the pumps. An observation well is located between the USTs and the pump island. Vent pipes presumed in association with the three existing USTs were observed along the southeast wall of the building.

Due to the age of the building (pre-1970) it is possible for lead based paint and/or asbestos containing materials to be associated with the building. As previously mentioned interior demolition was conducted and significant amounts of building debris (brick, concrete, roofing, plaster) occupy the majority of the interior building space.

A pole mounted transformer was observed along Grand Street in the vicinity of the Site. This transformer is owned by the utility company. No transformers were observed on-Site.

Waste Generation, Treatment, Storage and Disposal

Historical hazardous waste generation, treatment, storage, and disposal activities at the Site are unknown. It is presumed that potentially hazardous wastes including oil, solvents, and other types of automotive wastes were generated as a result of automotive repair operations conducted at the Site. These wastes were likely stored (at least temporarily) on-Site before presumably being transported off-Site for disposal.

At the time of the reconnaissance several small pails and buckets containing what appears to be waste oil were observed interior to the building. If it is determined that building debris interior to the building contains asbestos then this material will likely need to be disposed of as hazardous waste.

Surface Conditions

The on-Site building comprises approximately 30 percent of the Site. Asphalt parking comprises the remainder of the Site. Surficial run-off from the Site likely moves as overland flow to the north (toward Grand Street) and to the east (toward Main Street).

No catch basins were observed on-Site. Nearby catch basins are located along adjacent roadways. No evidence of staining or releases was observed on exterior portions of the Site during the reconnaissance.

Adjacent Properties

Observations of adjacent properties were made from publicly accessible roadways. The Site is abutted to the north across Grand Street by the Community Health Center which is currently under construction and to the east across Main Street by several mixed-use buildings that contain retail/commercial space on the ground floors with residential/office space above. The Site is abutted to the south by a single-story building currently used as a church/meeting hall. A single-story retail building currently occupied by a tailor abuts the Site to the west.

5

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	0
RCRA COR ACT	1.0	0
RCRA TSD	0.5	0
RCRA GEN	0.25	2
Federal IC/EC	0.5	0
ERNS	0.12	0
Tribal Lands	1.0	0
State Spills 90*	.12	32*
State Spills 80	0.25	0
State/Tribal Sites	1.0	23
State/Tribal SWL	0.5	0
State/Tribal LUST	0.5	33
State/Tribal UST/AST*	0.25	10*
State/Tribal EC	0.5	0
State/Tribal IC	0.25	0
State/Tribal VCP	0.5	0
State/Tribal Brownfields	0.5	6
State Other	0.25	1

The Site was identified in three (3) of the databases queried as part of the requested FirstSearch™ environmental database report.

- The Site (listed as 649 Main Street) is identified in the State Spills 90 database. The entry dated May 13, 2011 references soil and groundwater impacts identified at the Site and lists CTDEEP as the reporting party. The status of the case is listed as “Open”.
- The Site (listed as Steve’s Repairs Unlimited, LLC at 649 Main Street) is identified on the State UST database. The listing identifies three (3) 6,000-gallon, gasoline USTs currently in use at the Site. The entry also identifies a 2,000-gallon gasoline UST that was removed in 1986.
- A property (listed as J. F. Jarzabek 5207, Main Street) is identified on the State UST database. The listing identifies four (4) permanently closed USTs at the property. Based upon the database information, one (1) 4,000-gallon gasoline UST was abandoned in-place and three (3) tanks (two (2) 3,000-gallon gasoline and 1 (1) 550-gallon gasoline) were removed from the property. The information presented in the database (the listed property owner, number and configuration of historical USTs) appears to match information reviewed in municipal file for the Site. As such, this information appears to be mapped incorrectly and appears to pertain to the Site itself.

Numerous entries in the FirstSearch™ environmental database report were identified for incidents and properties in close proximity to the Site. Several listings were identified in proximity to the Site for apparent minor spills and releases that do not pose a significant threat to impact the Site. Four (4) of the listings were for properties in close proximity to the Site that have or had USTs including:

- The Connection at 605 Main Street (at the corner of Main and Liberty south of the Site) is listed as having had a leaking 2,000-gallon heating oil UST.
- Nehemiah House at 47 Rappallo Avenue (east of the Site) is listed as having had a leaking heating oil UST.
- Former T & T Sunoco at 569 Main Street (south of the Site) is listed on the UST and LUST databases.
- Bob’s Amoco at 711 Main Street (north of the Site) is listed as having removed three 4,000-gallon gasoline USTs.

Releases of oil or petroleum products from surrounding properties have the potential to impact groundwater flowing beneath the Site.

VHB reviewed a list of non-geocoded entries identified on the queried databases. None of the reviewed entries are believed to be in close proximity to the Site or have the ability to significantly impact the Site.

Department of Environmental Protection

VHB requested available CTDEEP files for the Site on October 4, 2011 including tank records, spill reports, hazardous waste generation information, violations or orders, and remediation files. A summary of the files identified and reviewed at CTDEEP is presented below:

- *CTDEEP UST Registration Information, dated December 29, 2009*
This form provides a summary of registered UST currently or formerly located at the Site. The form identifies the Site as Steve's Repairs Unlimited, LLC – 649 Main Street as Facility Number 83-1400. *Note: a number of UST registration forms were reviewed in the CTDEEP files which reiterate the information presented below.* The following USTs are identified for the Site.
 - Tank A1 - 6,000-gallon gasoline UST, installed November 1, 1986, currently in use. The UST is reportedly constructed of cathodically protected steel.
 - Tank B1 - 6,000-gallon gasoline UST, installed November 1, 1986, currently in use. The UST is reportedly constructed of cathodically protected steel.
 - Tank C1 - 6,000-gallon gasoline UST, installed November 1, 1986, currently in use. The UST is reportedly constructed of cathodically protected steel.
 - Tank D1 - 2,000-gallon gasoline UST, installed March 1, 1956, permanently closed/removed from ground, last used November 1, 1986.
 - Tank E1 - 3,000-gallon gasoline UST, installed March 1, 1956, permanently closed/removed from ground, last used November 1, 1986.
 - Tank F1 - 3,000-gallon gasoline UST, installed March 1, 1956, permanently closed/removed from ground, last used November 1, 1986.
 - Tank G1 - 4,000-gallon gasoline UST, installed March 1, 1956, permanently closed/removed from ground, last used November 1, 1986.
 - Tank H1 - 1,000-gallon gasoline UST, installed March 1, 1956, permanently closed/removed from ground, last used November 1, 1986.
 - Tank J1 - 500-gallon gasoline UST, installed March 1, 1956, permanently closed/removed from ground, last used November 1, 1986.

- *Letter to Attorney Szewczyk from Scott Jezek, Steve's Repair Unlimited, dated July 15, 2010.*

The letter documents the results of a title search that identified the following encumbrances that must be released prior to a closing on the Site.

- CTDEEP Notice of Violation recorded against Steve's Repair Unlimited, LLC, recorded on Volume 1604, Page 631 on July 5, 2007. A copy of this land record was obtained and indicates it is a Notice of Bureau of Air Management Order. The nature of the Order was not stated in the document and the status is unknown.
- Lis Pendens for a foreclosure action brought by the City of Middletown, recorded on Volume 1604, Page 405 on June 26, 2008.
- Mortgage to John Jarzabek, recorded on Volume 1271, Page 940.
- *Annual Operational Survey of Cathodic Protection Systems for USTs, Steve's Repair Unlimited, PTS Corrosion Engineering, Inc., dated January 14, 2009.*
The report documents the results of cathodic protection (CP) testing completed on three (3) UST systems at the Site. The report indicates that passing readings were recorded for each of the three (3) USTs and the product lines associated with each UST.
- *Annual Operational Survey of Cathodic Protection Systems for USTs, Steve's Repair Unlimited, PTS Corrosion Engineering, Inc., dated March 19, 2007.*
The report documents the results of cathodic protection (CP) testing completed on three (3) UST systems at the Site. The report indicates that passing readings were recorded for each of the three (3) USTs and the product lines associated with each UST.
- *CTDEP Storage Tank Enforcement Unit - Inspection Checklist, dated December 26, 2006, Hometown Garage, 649 Main Street.*
The checklist details a Site inspection conducted by CTDEP and identified the following UST regulatory issues:
 - Failure to notify CTDEP of temporarily closed status of USTs.
 - Failure to properly perform inventory reconciliation.
 - Failure to perform cathodic protection testing during 2005 & 2006.

VHB reviewed publically available CTDEEP databases for the Site (List of Potentially Contaminated Sites, List of Significant Environmental Hazards Reported to the CTDEEP, and the Hazardous Waste Manifest Database (from 1/1/1984 through 12/31/2007)) and did not identify any listings for the Site.

6

Interviews

During the conduct of this ESA, the current Site owner, Tahir Hussain was interviewed regarding the Site. According to Mr. Hussain, he and two other individuals purchased the Site in 2010 under Lucky Grocery, LLC. Mr. Hussain was unaware of any environmental issues associated with the Site when purchased. He indicated the recent DEEP investigation identified gasoline contaminated soil and groundwater at the Site. Mr. Hussain could not provide any recent information on the status of the three (3) known USTs at the Site but believed these USTs were emptied in 1999. He was unaware of any additional USTs existing at the Site.

Mr. Hussain stated that interior demolition began a few months back, but was stopped when the City ordered the demolition to cease because a demolition permit was not obtained.

VHB also interviewed various municipal personnel at the City of Middletown regarding environmental conditions at the Site. None of the personnel interviewed were aware of environmental issues at the Site.

7

Summary of Findings

Site Location and Description

The Site is comprised of one (1) parcel of land totaling 0.14 acres, is identified by the City of Middletown Tax Assessor's Office as Parcel 22-0255, and referred to as 645 Main Street. During completion of the municipal file review, it was noted that the Site is also referred to as 649 Main Street. The Site is currently owned by Lucky Grocery, LLC and is zoned for downtown business use (B-1). The Site was historically developed prior to 1924 and was used as a gasoline station and auto repair facility from at least 1924 until approximately 2006.

The Site is located on the southwest corner of Main and Grand Streets and is accessible from both Main and Grand Streets. The Site is improved with a 1,880 square foot brick and concrete block, single-story building located on the western portion of the Site. The eastern portion of the Site consists of paved parking and a gasoline dispenser island. According to the City of Middletown Sewer and Water Department, the Site has been connected to the municipal sewer and water systems since the late 1800s to early 1900s.

The Site is abutted to the north by Grand Street and the Community Health Center (which is currently under construction) and to the east by Main Street and several mixed-use buildings that contain retail/commercial space on the ground floors with residential/office space above. The Site is abutted to the south by a single-story building currently used as a church/meeting hall and to the west by a single-story retail building (currently occupied by a tailor).

The topography of the Site is level. Based upon a review of topographic maps the Site is located at approximately 65 feet above mean sea level (AMSL). The on-Site building occupies approximately 30 percent of the Site with paved parking comprising the remainder of the Site.

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 thick till. Soils at the Site are mapped as Wethersfield-Urban land complex with 3 to 8 percent slopes and Urban land.

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 east toward the Connecticut River, the nearest surface water body, which is located approximately 1,195 feet east of the Site and is classified as an "C,D to B" 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 #09007C0109G – 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 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. Surficial runoff from the Site likely moves as overland flow to the north (toward Grand Street) and east (toward Main Street).

Records Review

According to documents reviewed, the Site was initially developed prior to 1895 with several retail and commercial properties. Commercial, retail and residential use at the Site continued through 1913. The 1913 Sanborn map depicts a tobacco store, cobbler, laundry, and tailor on the property. The 1924 Sanborn map depicts a building on the Site in the approximate location of the current Site building and three (3) gasoline tanks are depicted on the portion of the property along Grand Street.

Surrounding properties have been used primarily for residential and commercial/retail use since prior to 1895. Activities documented at properties in close proximity to the Site include; a hotel, a beer bottling operation, gasoline station, and automobile sales & service.

Various letters, forms, and inspection reports were identified for the Site at the City of Middletown Fire Marshal's office. The reviewed information documents a number of USTs have existed at the Site since prior to 1985. A Building Department permit, dated October 30, 1986, was identified on file for the Site for the installation of three (3) gasoline USTs at the Site. According to deeds reviewed for the Site, a CTDEEP Notice of Bureau of Air Management Order was filed on the land records on June 18, 2007. The nature of this order was not stated in the land record and a copy was not on file with CTDEEP Public File room.

VHB requested available Connecticut Department of Energy and Environmental Protection (CTDEEP) files for the Site including tank records, spill reports, hazardous waste generation information, violations or orders, and remediation files. Information reviewed at CTDEEP identified that the following UST are currently or were historically located at the Site:

- Tank A1 - 6,000-gallon gasoline UST, installed November 1, 1986, currently in use.
- Tank B1 - 6,000-gallon gasoline UST, installed November 1, 1986, currently in use.
- Tank C1 - 6,000-gallon gasoline UST, installed November 1, 1986, currently in use.
- Tank D1 - 2,000-gallon gasoline UST, installed March 1, 1956, permanently closed/removed from ground, last used November 1, 1986.
- Tank E1 - 3,000-gallon gasoline UST, installed March 1, 1956, permanently closed/removed from ground, last used November 1, 1986.
- Tank F1 - 3,000-gallon gasoline UST, installed March 1, 1956, permanently closed/removed from ground, last used November 1, 1986.
- Tank G1 - 4,000-gallon gasoline UST, installed March 1, 1956, permanently closed/removed from ground, last used November 1, 1986.
- Tank H1 - 1,000-gallon gasoline UST, installed March 1, 1956, permanently closed/removed from ground, last used November 1, 1986.
- Tank J1 - 500-gallon gasoline UST, installed March 1, 1956, permanently closed/removed from ground, last used November 1, 1986.

Additional information was identified includes CTDEEP Site inspection reports and tank test reports. VHB reviewed CTDEEP databases for the Site (List of Potentially Contaminated Sites, List of Significant Environmental Hazards Reported to the CTDEEP, and the Hazardous Waste Manifest Database (from 1/1/1984 through 12/31/2007)) and did not identify any listings for the Site.

The Client provided VHB a copy of a letter from CTDEEP summarizing a limited subsurface investigation completed at the Site in 2011. The investigation was conducted due to gasoline impacts being detected in a groundwater monitoring well located along Main Street approximately sixty (60) feet south of the Site. The investigation identified petroleum impacts to soil and groundwater at the Site at levels that exceed the CTDEEP Remediation Standard Regulations (RSRs) numerical criteria.

No other previous investigations were identified for the Site during the completion of this ESA.

The Site was identified in three (3) of the databases queried as part of the requested FirstSearch™ environmental database report.

- The Site (listed as 649 Main Street) is identified in the State Spills 90 database. The entry dated May 13, 2011 references soil and groundwater impacts identified at the Site and lists CTDEEP as the reporting party. The status of the case is listed as “Open”.
- The Site (listed as Steve’s Repairs Unlimited, LLC at 649 Main Street) is identified on the State UST database. The listing identifies three (3) 6,000-gallon, gasoline USTs currently in use at the Site. The entry also identifies a 2,000-gallon gasoline UST that was removed in 1986.
- A property (listed as J. F. Jarzabek 5207, Main Street) is identified on the State UST database. The information presented in the database (the listed property owner, number and configuration of historical USTs) appear to match information reviewed in the municipal and CTDEEP files for the Site. As such, the “J. F. Jarzabek 5207, Main Street” information appears to be mapped incorrectly and appears to pertain to the Site. The listing identifies four (4) permanently closed USTs at the property. Based upon the database information, one (1) 4,000-gallon gasoline UST was abandoned in-place and three (3) tanks (two (2) 3,000-gallon gasoline and 1 (1) 550-gallon gasoline) were removed from the property.

Numerous entries in the FirstSearch™ environmental database report were identified for incidents and properties in close proximity to the Site. Several listings were identified in proximity to the Site for apparent minor spills and releases that do not pose a significant threat to impact the Site. Four (4) of the listings were for properties in close proximity to the Site that have or had USTs including:

- The Connection at 605 Main Street (at the corner of Main and Liberty south of the Site) is listed as having had a leaking 2,000-gallon heating oil UST.
- Nehemiah House at 47 Rappallo Avenue (east of the Site) is listed as having had a leaking heating oil UST.
- Former T & T Sunoco at 569 Main Street (south of the Site) is listed on the UST and LUST databases.
- Bob’s Amoco at 711 Main Street (north of the Site) is listed as having removed three 4,000-gallon gasoline USTs.

Releases of oil or petroleum products from surrounding properties have the potential to impact groundwater flowing beneath the Site.

Site Reconnaissance

A Site reconnaissance was conducted by VHB's Environmental Professional, Amy Vaillancourt on October 4, 2011. At the time of the reconnaissance the Site was unoccupied and the building was boarded up.

Driveways for access to the Site are located on both Grand Street (north) and Main Street (east). The building is located on the west side of the Site. Two overhead garage doors are located on the east side of the building and one overhead door is located on the north side of the building. A three to four foot wide alleyway exists between the on-Site building and the building located on the southerly abutting parcel. A paved drive way is located between the on-Site building and the westerly abutting parcel. A gas meter hook up was observed on the northwest side of the building.

During the Site reconnaissance, evidence of boring holes spray painted with labels (GP-1 thru GP-9) were observed in the paved area on the north and west sides of the Site. These labeled borings are remnant of the aforementioned DEEP investigation recently completed for the Site.

The interior of the building consists of two garage bays on the east side of building and a single bay on the west side of building (rear). A small office is located in the northeast corner of the building. At the time of the reconnaissance significant amounts of building debris (brick, concrete, roofing, plaster) occupied the majority of the interior building space. It was apparent that interior demolition had occurred. Due to the amount of building debris inside visual observations were limited. The building is reportedly slab on grade with no basement.

Two hydraulic lifts (2) one in the front bay and one in the rear bay were observed. Piping associated with one of the lifts was observed along the wall in the rear garage bay. Ceiling mounted heaters were observed in the garage bays. Several small pails and buckets containing what appears to be waste oil were observed interior to the building.

A gasoline pump island with three separate pumps is located on the east side of the Site. Evidence of three USTs was observed just to the north of the pumps. An observation well is located between the USTs and the pump island. Vent pipes presumed in association with the three existing USTs were observed along the southeast wall of the building.

Observations of adjacent properties were also made from publicly accessible roadways. The Site is abutted to the north across Grand Street by the Community Health Center which is currently under construction and to the east across Main Street by several mixed-use buildings that contain retail/commercial space on the ground floors with residential/office space above. The Site is abutted to the south by a single-story building currently used as a church/meeting hall. A single-story retail building (currently occupied by a tailor) abuts the Site to the west.

Interviews

During the conduct of this ESA, the current Site owner, Tahir Hussain was interviewed regarding the Site. According to Mr. Hussain, he and two other individuals purchased the Site in 2010 under Lucky Grocery, LLC. Mr. Hussain was unaware of any environmental issues associated with the Site when purchased. He indicated the recent DEEP investigation identified gasoline contaminated soil and groundwater at the Site. Mr. Hussain could not provide any recent information on the status of the three (3) known USTs at the Site but believed these USTs were emptied in 1999. He was unaware of any additional USTs existing at the Site.

Mr. Hussain stated that interior demolition began a few months back, but was stopped when the City ordered the demolition to cease because a demolition permit was not obtained.

VHB also interviewed various municipal personnel at the City of Middletown regarding environmental conditions at the Site. None of the personnel interviewed were aware of environmental issues at the Site.

8

Data Gaps

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

- Current and historic hazardous materials/petroleum products storage and handling practices are unknown. However, due to use of the Site for auto repair - various petroleum products, solvents, and other automotive type chemicals were potentially used and stored at the Site.
- Recent and historical hazardous waste generation, treatment, storage, and disposal activities at the Site are unknown. It is assumed that potential hazardous wastes including oil, solvents, and other types of related wastes were generated as a result of automotive repair operation conducted at the Site. These wastes were likely stored (at least temporarily) at the Site.
- The condition/status of the three (3) existing USTs at the Site is unknown. Gasoline impacts to soil and groundwater have been identified by CTDEEP. The extent of these impacts is unknown.
- Several additional USTs reportedly existed at the Site. Documentation confirming the removal of these USTs (i.e. UST removal report) was not identified.
- A CTDEEP Notice of Bureau of Air Management Order was filed on the land records for the Site in June 2007. The nature and status of the order is unknown.
- Due to the age of the building (pre 1970) there is potential for hazardous building materials to be associated with the on-site structure. During the Site reconnaissance interior building demolition was observed. Significant amounts of building debris occupied much of the interior. It is unknown if any of these building components contained hazardous materials (i.e. lead based paint or asbestos).

9

Conclusions

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 as part of the North End Gateway Redevelopment Project.

Based upon the data collected and reviewed during this investigation, the Site has been used for automotive repair and as a gasoline station since at least 1924. No documentation was found during the conduct of this investigation regarding use or storage of oil or hazardous materials, or hazardous waste generation, storage, and disposal activities. It is likely that typical automotive fluids, petroleum products, and solvents were used and stored at the Site.

Based upon reviewed information, three (3) 6,000-gallon gasoline USTs currently exist at the Site. Several former USTs have reportedly been removed or closed in-place at the Site. Two (2) in-ground hydraulic lifts were identified interior to the building.

A limited subsurface investigation conducted by CTDEEP identified impacts above RSR numerical criteria to soil and groundwater on-Site. Numerous releases of petroleum products have been reported for properties in proximity to the Site. It is our understanding that the Client intends to demolish the current on-Site structure to facilitate redevelopment of the Site. Due to the age of the building (constructed prior to 1978) there is potential for hazardous building materials (i.e. asbestos and lead based paint) to be associated with the structure.

Opinion

Based upon the information reviewed during the completion of the ESA, VHB believes that conditions indicative of threatened releases of petroleum and/or hazardous substances were identified at the Site. Automotive service and retail gasoline operations were conducted at the Site from at least 1924 until approximately 2006. CTDEEP investigations have confirmed gasoline impacts to soil and groundwater beneath the Site.

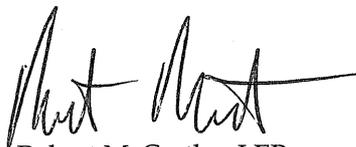
Qualifications and Signatures

"We declare that, to the best of our professional knowledge and belief, we meet the definition of Environmental Professional as defined in §312.10 of this part."

"We have specific qualifications based on education, training, and experience to assess a property of the nature, history, and setting of the subject property. We have developed and performed the all appropriate inquiries in conformance with the standards and practices set forth in 40 CFR Part 312."

 PHILIP M. RIDEL (for AJ)

Amy Vaillancourt
Environmental Professional



Robert McCarthy, LEP
Environmental Professional

Opinion Regarding Additional Appropriate Investigation

In compliance with §312.31(b) of the AAI final rule and §12.6.1 of ASTM E1527-05, the environmental professional must include in the final report an opinion regarding additional appropriate investigation. VHB makes the following recommendation - Based on the findings of this investigation, we recommend that a Phase II/III Subsurface Investigation (Phase II or Phase II) be conducted for the site to determine the extent and degree of OHM releases at the Site. No subsurface investigations have been conducted by VHB.

Furthermore we recommend additional inquiry to CTDEEP to determine the nature and status of the CTDEEP Notice of Bureau of Air Management Order found on the land records for the Site.

References

City of Middletown, Connecticut, municipal file review and interviews, October 2011

Connecticut Department of Energy and Environmental Protection, file review, October 4, 2011

Connecticut Department of Energy and Environmental Protection letter regarding Subsurface Investigation Findings and Underground Storage Tank Compliance Status for Facility ID# 83-1400, dated August 19, 2011

USGS Topographic Maps (1893, 1945, 1952, and 1992)

Aerial Photographs reviewed at the Connecticut State Library, the UCONN MAGIC Server, and Live Search Maps (1934, 1965, 1970, 1986, 1991, 2004, 2006, and 208).

Sanborn Fire Insurance Maps (1895, 1901, 1907, 1913, and 1924).

City of Middletown Directories (various between 1920 and 1990) available from City Clerk.

Federal Emergency Management Agency Flood Insurance Rate Mapping panel No. 09007C0109G dated August 28, 2008.

FirstSearch™ Environmental Database Report for 645 Main Street, Middletown, Connecticut dated October 4, 2011

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 and owner interview October 4, 2011

Figures

Appendix A

Limitations

- ↗ This report has been prepared for the sole and exclusive use of The City of Middletown (Client), its affiliates and subsidiaries and their successors, assigns and grantees. It is subject to and issued in connection with the Agreement and the provisions thereof. Any use or reliance upon information provided in this report, without the specific written authorization of the Client and VHB, shall be at the User's sole risk.
- ↗ In conducting this assessment, VHB has obtained and relied upon information from multiple sources to form certain conclusions regarding potential environmental issues at and in the vicinity of the host property. Except as otherwise noted, no attempt has been made to verify the accuracy or completeness of such information.
- ↗ The objectives of the assessment described in this report were to assess the physical characteristics of the host property with respect to overt evidence of past or present use, storage, and/or disposal of oil or hazardous materials, as defined in applicable state and federal environmental laws and regulations, and to gather information regarding current and past operations and environmental conditions at and in the vicinity of the host property.
- ↗ No attempt has been made to assess the compliance status of any past or present Owner or Operator of the Site with any federal, state, or local laws or regulations.
- ↗ The findings, observations, and conclusions presented in this report are limited by the scope of services outlined in our Agreement, which reflects schedule and budgetary constraints imposed by the Client for the current phase of environmental assessment. Furthermore, the assessment has been performed in accordance with generally accepted engineering practices and standards set forth in ASTM E 1527-00. No other warranty, expressed or implied, is made.
- ↗ The assessment presented in this report is based solely upon information gathered to date. Should further environmental or other relevant information be developed at a later date, Client should bring the information to the attention of VHB as soon as possible. Based upon an evaluation, VHB may modify the report and its conclusions.
- ↗ The FirstSearch™ Environmental Database Search was conducted under the Notice of Disclaimer/Waiver of Liability included in the summary report.

Appendix B

File Review Information

Appendix C

Environmental Database Summary Report

Appendix D

Site Photographs