

REPORT ON
MILL RIVER POLLUTION PREVENTION PLAN
CHAPEL STREET FORMER MANUFACTURED GAS PLANT (MGP)
SITE
347 CHAPEL STREET
NEW HAVEN, CONNECTICUT

by Haley & Aldrich, Inc.
Rocky Hill, Connecticut

for Southern Connecticut Gas
Hartford, Connecticut

File No. 131638-002
May 2018





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2 May 2018
File No. 131638-002

Department of Energy and Environmental Protection
Water Protection and Land Reuse
Remediation Division
79 Elm Street
Hartford, Connecticut 06106-5127

Attention: John Duff

Subject: Mill River Pollution Prevention Plan
Chapel Street Former Manufactured Gas Plant (MGP) Site
347 Chapel Street
New Haven, Connecticut

Dear John:

On behalf of the Southern Connecticut Gas Company and pursuant to Item B.1.c of the Consent Order dated January 5, 2018 (SRD-231) and in accordance with the deadline in the "Scope and Schedule" approved by the Connecticut Department of Energy and Environmental Protection on December 4, 2017, Haley & Aldrich, Inc. is pleased to submit this Mill River Pollution Prevention Plan for the Chapel Street Former MGP Site located at 347 Chapel Street in New Haven, Connecticut. Please contact us if you have any comments or questions.

Sincerely yours,
HALEY & ALDRICH, INC.

A handwritten signature in blue ink that reads "Sean M. Carroll".

Sean Carroll, LEP
Associate | Environmental Remediation Engineer



Enclosures

c: Shawn Crosbie, Sean Murphy; The Southern Connecticut Gas Company

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1. Introduction

A Consent Order (SRD-231) between the Southern Connecticut Gas Company (SCG) and the Connecticut Department of Energy and Environmental Protection (CT DEEP) was executed on 5 January 2018, requiring SCG to investigate and remediate the Chapel Street former Manufactured Gas Plant (MGP) Site (the Site). This Mill River Pollution Prevention Plan has been prepared in accordance with the requirement in Section B.1.c of the Consent Order (SRD-231) in compliance with the schedule in the September 2017 “Investigation and Remediation Work Scope and Schedule, Chapel Street Former MGP Site”, prepared by Haley & Aldrich and approved by CT DEEP on 4 December 2017.

1.1 PURPOSE AND DOCUMENT ORGANIZATION

The purpose of this Mill River Pollution Prevention Plan (the Plan) is to outline “management practices for the prevention of pollution discharging to the Mill River through the storm water system at the site” (Consent Order, 2018).

The objectives of the Plan are as follows:

- Summarize the regulatory requirements prompting preparation of this Plan;
- Summarize the circumstances of previous releases from the Site to the Mill River and subsequent response actions to prevent future releases;
- Outline investigations planned to identify potential sources of a future release;
- Describe planned prevention actions to minimize the risk of a release; and,
- Provide guidelines for future emergency response actions.

This Scope of Study is organized as follows:

- Section 1: Introduction, summary of Site setting, and Historical Overview;
- Section 2: Summary of previous releases to the Mill River and associated response actions; and,
- Section 3: Planned pollution prevention measures.

1.2 CURRENT SITE SETTING

The Site is a 12-acre former manufactured gas plant (MGP) that operated for approximately 100 years. The former MGP Site is comprised of two parcels (347 Chapel Street and 259 East Street) located east of downtown New Haven, Connecticut, as depicted on the Site Locus (Figure 1). The Site layout is depicted on Figure 2.

The 347 Chapel Street property is bounded by Chapel Street to the south, the Mill River to the east and north, and a north/south railroad right-of-way to the west. This property is owned by SCG and is currently leased and occupied by Gateway Terminal, Inc., which operates a shipping terminal and storage for bulk materials (rock, aggregate, sand, and road salt) and construction materials (steel) that arrive by trucks, trains, and barges.

Large salt or sand-salt mixture stockpiles are located in the northern and southern portions of the Site. There are also several piles of bulk materials on the Site, partially contained by modular pre-cast concrete walls. These piles are dynamic; their size and location change with time, as materials are imported, stored, processed, and exported. A railroad spur comprised of three railroad tracks is located

in the central portion of the Site. Three buildings are located in the southwestern portion of the site: a former Office, a former Power Plant, and a former Laboratory. The eastern and northeastern Site boundary is a retaining wall, comprised primarily of stone blocks (large granite and sandstone blocks) and concrete separating the 347 Chapel Street property from the Mill River. The elevation of the top of the retaining wall is approximately 7.5 to 8.5 feet (ft) above mean sea level (NGVD 1929), which is approximately 2 to 3 ft above the typical high tide level in the Mill River.

The 259 East Street property is located west of the railroad right-of-way, north of Chapel Street, east of East Street, and south of Ives Place. This parcel is owned by Simkins Industries and leased to Gateway Terminal, Inc. for materials storage operations.

1.3 HISTORICAL OVERVIEW

Prior to filling the Site for development, the Site was a tidal marsh along the western shore of the Mill River. Beginning in the late 1800s, filling occurred along the Mill River and the western shoreline moved eastward, creating the land east of the railroad. From 1861 until the mid-1960's, the Site was operated as an MGP. The MGP was razed in the mid-1960's, except for three buildings (office, power plant, and laboratory buildings). From this time until 1994, the Site was used by SCG as an operations center and maintenance facility. Starting in 1998, the Site has been leased to Gateway Terminal, Inc. for use as a bulk material storage facility.

1.3.1 Mill River

The Mill River shoreline has changed over time. In 1842, the Mill River encompassed the former MGP site with the shoreline extending east towards the railroad alignment. By 1886, the northeast quadrant of the former MGP site had been filled, with a seawall bounding the Mill River, and the southeast quadrant remained as a harbor to the Mill River. By 1901, the southeast quadrant of the former MGP site had been filled, with the current seawall configuration bounding the Mill River which has remained unchanged.

1.3.2 Owner and Operations Overview

Beginning in the 1860s, the Site operated as a former MGP site as summarized below.

Date	Description
Prior to 1853	Tidal Marsh
1853	New Haven Gas Company purchased the Site.
1853-1924	The Site was gradually filled and the property west of the railroad tracks was acquired.
1861-1960s	Gas was produced at the Site during this period; Site was developed with a tank farm; parts of the Site were used as lumber yard, brass foundry, tar processing and storage, and ammonia plant.
1950s	Large holder was constructed.
1960s-1992	Most of the plant structures were razed.
1967	New Haven Gas Company becomes Southern Connecticut Gas Company (SCG).
1989	Large holder caught on fire as it was demolished.
1967-1994	Site occupied by SCG Operations Center and Offices.
1994-1998	Site was vacant.
1998-present	SCG is the current property owner. Site leased to Gateway Terminal, Inc. for the storage of salt, coal, metal and large boulders.

Additional information regarding the historic MGP operations and site history details can be found in the Phase I Environmental Site Assessment (Phase I Report; Haley & Aldrich, 2018a) and in the “Consent Order Compliance – Scope and Schedule” document (Haley & Aldrich, 2015).

2. Previous Releases and Responses

2.1 2008 INCIDENT

2.1.1 Release and Assessment

On 17 July 2008, CT DEEP Emergency Response personnel contacted SCG regarding a sheen on the Mill River adjacent to the Site. A contractor for SCG deployed and maintained containment and sorbent booms to contain the release and remove floating oil and sheen from the River.

SCG undertook multiple response actions intended to assess the nature of the problem and identify and implement a solution. After some initial assessment, SCG determined that coal tar-impacted storm water was discharging to the Mill River from a historical 12-inch diameter cast iron pipe (hereinafter referred to as the “12-inch CIP”) of unknown origin and use, located just above the low tide level in the seawall, approximately 180 ft north of the Chapel Street Bridge.

A review of available site information indicated that a storm water drainage system was located in the southern portion of the Site. Based on the storm drain system layout shown on historical MGP “Sewer Line” plans dated 1934, the storm drain system had been installed during the early 1900s (possibly earlier) and had been expanded and re-configured as the plant expanded. Investigatory work performed during July and August 2008 found that the easternmost portion of a 20-inch-diameter tile pipe storm drain, from the outfall at the Mill River west about 500 feet (ft), had been damaged and/or collapsed.

The 20-inch pipe was historically part of a combined sewer system for the MGP and, at the time of the release, provided storm water drainage for a portion of the Site. The damaged 20-inch pipe was allowing MGP residuals (i.e., coal tar) to migrate into it. The 20-inch pipe had collapsed behind the seawall and discharged to the Mill River via the adjacent 12-inch CIP. The storm drain outfall was serving as a preferential pathway for the release of subsurface MGP residuals to the Mill River, resulting in the sheen. The locations of the 12-inch and 20-inch pipes are shown on Figure 3.

At the time of this work, a large salt pile was located in the southeastern portion of the Site, over the dysfunctional portion of the 20-inch pipe.

2.1.2 Response Actions

The deteriorated section of the 20-inch pipe was plugged and abandoned in place. The 20-inch pipe was bypassed with a new gravity flow storm water system. This bypass pipe (24-inch HDPE) was inserted into the existing pipe outfall through the seawall. The 12-inch CIP was also plugged just behind (east of) the seawall. The locations of the pipe plugs and the new storm water drainage system are shown on Figure 3.

A gravel-filled trench was installed in September 2008 as a preventative measure, intended to collect mobile non-aqueous phase liquid (NAPL) from behind the seawall. Groundwater was regularly pumped from the trench from mid-October 2008 through mid-November 2008 and treated and discharged to the sanitary sewer system. Trench monitoring data indicated that NAPL seepage to the trench was not occurring, and Haley & Aldrich concluded that mobile NAPL was not present in this portion of the Site.

and operation of the trench was not necessary. Therefore, pumping was discontinued in November 2008. The trench was then monitored on a monthly basis through August 2009, and then approximately quarterly through July 2014. NAPL was not observed in the trench over the entire monitoring period, and monitoring was discontinued after July 2014.

A complete description of the assessment and response actions undertaken can be found in a Summary Report prepared by Haley & Aldrich and dated 10 December 2008. This report has previously been provided to CT DEEP.

2.2 2014 INCIDENT

In September 2014, a sheen was observed on the Mill River east of the Site, and there was evidence indicating that the source of the sheen was a discharge of MGP residuals from the outfall of the storm drain bypass installed in 2008.

2.2.1 Response Actions

As an immediate response to the release of MGP residuals to the Mill River via the storm drain, a contractor for SCG deployed a skirted containment boom and a sorbent boom around the affected area and used oil skimmers and sorbent materials to remove floating oil and sheen from the surface water. MGP residuals contain a mixture of “heavy” oils and tars comprised of larger molecules and “light” oils comprised of compounds such as benzene, toluene, ethyl benzene, and xylene (BTEX) and other smaller molecules. When released to the River, the light fraction floated to the surface and the heavier fraction mixed with sediment at the bottom of the River.

Initially, the response was a 24-hour per day schedule to remove floating oil and sheen; this schedule was gradually reduced as the need for recovery reduced. After a period of approximately one week after the release, the removal of floating oil and sheen associated with the release itself was complete; however, at low tides, the release of gasses associated with microbiological activity from the sediments caused release of small amounts of oil and a sheen on the River surface (this is referred to as an ebullition-related sheen). Response actions associated with ebullition-related sheen remain ongoing and are discussed in the next section.

In response to the release, the storm water system was plugged at four locations, described from east to west: the outfall to the Mill River, manhole MH21, manhole MH30, and manhole MH31. The plug locations are shown on Figure 3. Initially inflatable and mechanical plugs were used; however, plug inspections performed on behalf of SCG found that the plugs were deteriorating more rapidly than expected, likely due to the high salinity water in the storm drain. Therefore, in May 2016 the plugs were removed and replaced with more permanent plugs consisting of flowable fill concrete that was poured into the manholes listed above.

As needed, storm water was pumped from manhole MH21 and treated at an on-site water treatment facility prior to discharging water to the Mill River. An emergency discharge to the Mill River was authorized by the Emergency Response Division of the CT DEEP. The emergency discharge of treated groundwater and storm drain water at the Site was discontinued on 18 November 2014.

SCG made two attempts to divert storm water from the southwest corner of the Site. The first attempt was the installation of a pipe to divert storm water to the Greater New Haven Water Pollution Control

Authority (GNHWPCA). Through discussions with GNHWPCA, it was determined that GNHWPCA could not accept storm water on a long-term basis but was willing to accept storm water and treated groundwater during construction to install piping to connect the Site storm drains to the City of New Haven storm drain system in Chapel Street. On behalf of SCG, Haley & Aldrich designed a storm water diversion system and submitted a permit application to The City of New Haven to connect to the Chapel Street storm drain and discharge Site storm water to this storm drain. The City rejected this application on the grounds that accepting potentially contaminated storm water would violate its MS-4 permit.

A complete description of the assessment and response actions undertaken is provided in the Summary of Storm Water System Inspection and Sediment Survey Results report, prepared by Haley & Aldrich and dated 19 January 2015.

2.2.2 Summary of Assessment Actions

The portion of the storm water system between the outfall at the Mill River and manhole MH22 was water-jetted and vacuumed to remove coal tar-contaminated sediments that accumulated in the pipes and manholes. During the water jetting and vacuuming, SCG personnel observed that the slope of the bypass pipe between manholes MH22 and MH31 was pitched toward MH22 (i.e., the slope was the reverse of how it was installed in 2008). A video inspection also found evidence of the reversed slope of the 24-inch HDPE storm water bypass pipe. A break was observed in the 20-inch pipe about four ft west of MH22, “upstream” of the bypass pipe. The broken pipe is a source of groundwater infiltration in to the storm water drainage system and exfiltration from the storm water drainage system to groundwater.

At the request of the United States Coast Guard and CT DEEP, SCG completed a sediment survey near the storm drain outfall. The survey was a limited investigation consisting of collection and logging of 12 vibracore sediment cores (approximately 4-ft deep) and deployment, recovery and laser scanning of 44 Dart Samplers, which are used to screen sediments for the presence of coal tar contamination. Vibracore sediment cores were visually inspected, photographed, and logged. Intervals of coal tar impacts were interpreted and recorded based on visual evidence such as presence/drainage of oily or tarry residuals in sediment, tar/oil staining on core liners and gloves, and naphthalene odors characteristic of MGP residuals. Cores were also screened in the field with a PID to detect volatiles such as BTEX compounds and naphthalene.

The survey found that MGP residuals are present in Mill River sediments in an area approximately 50 ft wide (in the north-south direction parallel to the sea wall), extending from the sea wall approximately 80 to 100 ft eastward into the channel. The impacted area is centered on the outfall, and the impacts extend farther out into the channel in front of the outfall. This distribution pattern is consistent with discharge of MGP residuals from the storm drain outfall. The sampling area is shown on Figure 3. Sampling results are provided in the Summary of Storm Water System Inspection and Sediment Survey Results report, prepared by Haley & Aldrich and dated 19 January 2015.

3. Planned Pollution Prevention Measures

Because the storm drain from which the 2008 and 2014 releases occurred has been plugged in four places with low-permeability concrete plugs, the risk of another release from this storm drain is considered to be minimal. Therefore, remaining pollution prevention measures will focus on monitoring of the storm drain and the plugs, investigation to identify other potential conduits for releases from the Site, and plugging those conduits as needed to prevent additional releases from the Site to the River.

3.1 ONGOING RESPONSE

As of April 2018, the Site storm water drainage system is not operational. Storm water from the eastern portion of the Site is directed across the Site as sheet flow. Storm water from the western portion of the Site, primarily the southwestern corner at the stone yard, enters the storm water drainage system and infiltrates to the subsurface via the damaged 20-inch pipe. The Site tenant, Gateway Terminal, Inc., and its operations are permitted under a General Permit for the Discharge of Stormwater Associated with Industrial Activity.

The sheen at the storm water outfall persists, though the extent of the impacted area has decreased over time. The sheen area also fluctuates with the seasons. A system of booms (shown below in Photograph 1) is in place to contain the sheen to the immediate vicinity of the storm drain outfall.



Photograph 1 - Containment boom setup as of March 2018

The boom containment system consists of two layers of containment: an inner ring in the immediate area of the outfall and an outer ring farther out into the Mill River. Each layer consists of a skirted outer containment boom and an inner sorbent boom. The booms are inspected a minimum of once per week and maintained as needed by Connecticut Tank Remediation (CTR) of Bridgeport, Connecticut on behalf of SCG.

Each inspection consists of the following:

- Inspect the boom for anchoring layout (i.e., has the boom been moved out of the desired configuration by boat traffic, tides, wind, etc.) and adjust anchors if needed;
- Check the condition of the sorbent boom and replace if in the judgement of the inspector the sorbent boom no longer has adequate sorption capacity; and,
- Used booms are placed in an on-site dumpster, which is emptied as needed, typically twice annually.

CTR maintains a storage container on-site, which has additional sorbent material inside it, available for use as needed.

3.2 FUTURE INVESTIGATION

3.2.1 Objectives

Consent Order SRD-231 between SCG and CT DEEP executed on 5 January 2018 requires SCG to investigate and remediate the Site. In accordance with Consent Order SRD-231, Haley & Aldrich submitted a Site Characterization Scope of Study (Haley & Aldrich, 2018b) on 4 April 2018. The Site Characterization Scope of Study is intended to define the extent of Site-related contamination on the Site and in the Mill River, and to assess potential exposure risks to human health and the environment. The Site has been divided into six “Operable Units” (OUs), as shown on Figure 5. OU-A encompasses the 347 Chapel Street waterfront and Mill River sediments.

The CT DEEP-approved Scope and Schedule (Haley & Aldrich, 2017) defines the Site Characterization objectives for **OU-A** as listed below.

- The Mill River is presently and has historically been an active shipping channel with extensive industrial activity occurring adjacent to the River and within its general vicinity. Direct discharges to the River and indirect run-off from these uses have likely resulted in sediment contamination and ecological degradation unrelated to the Site. Therefore, the local ambient background conditions will be characterized by collecting sediment and surface water samples at upstream and downstream locations. Background samples will be representative of fully mixed conditions within the river and will not be collected in the immediate area of influence of other known sources of contamination.
- Delineate the horizontal and vertical extent of site-related contaminants to determine the nature and extent of Site-related contamination in the Mill River sediments;
- Delineate the nature and extent of site-related contamination that is impacting the groundwater and Mill River surface water; and
- Characterize the horizontal and vertical extent of site-related contaminants on the 347 Chapel Street property along the upland waterfront.

3.2.2 OU-A Investigation

Review of historical documents and the site survey has identified a number of potential conduits through the Mill River seawall. These features are identified on Figure 4.

A City of New Haven reinforced concrete pipe storm drain outfall is present in the northern portion of the Site. The other conduits are identified as tile pipe, steel pipe, and cast iron pipe of unknown use and origin. Some of these conduits were likely pipes related to MGP operations. Historical documentation has identified gas lines, tar lines, sewer lines, and water lines in the Site subsurface. This documentation, including an Historic Site Plan, is provided in the Phase I Report.

Steel and cast iron pipes are expected to be highly corroded and damaged as a result of the brackish Mill River and tidally influenced groundwater.

To investigate the identified conduits, the OU-A investigation proposes a series of test pits, test borings, and Tar-specific Green Optical Screening Tool (TarGOST®) probing along the waterfront. These investigation locations are planned to target the known potential conduits. The work may allow for direct observation of the pipes (if they still exist) in order to confirm their location and identify their depth, construction, and integrity, as well as identify potential MGP impacts in their vicinity.

The OU-A investigation also includes sediment sampling within the Mill River, to assess potential other releases from the Site. Vibracore coring and Dart sampling is planned along the Site shoreline. Prior to work in the Mill River, Haley & Aldrich will notify the appropriate local, state, and federal agencies of the planned work.

An explanation of the planned investigation methods and proposed schedule for the work is provided in the Site Characterization Scope of Study (Haley & Aldrich, 2018b).

3.2.2.1 *Mill River Protection Measures*

Erosion and sediment control measures will be utilized during work within OU-A.

Oil booms will be present on-site during the course of the work, including both work on land and on water. Booms may be deployed if a sheen or other evidence of a release is observed in the river. Observations will be recorded in the Daily Field Report.

During work on land, SCG and Haley & Aldrich will implement the necessary temporary erosion and sediment controls within the work area, as applicable. Erosion and sediment controls may include hay bales, straw wattles, and/or silt fence. These controls will be inspected daily, and observations will be recorded in the Daily Field Report.

3.2.3 **Potential Interim Remedy**

If the OU-A investigation identifies conduits that could be reasonably expected to allow contamination from the Site subsurface to migrate to the Mill River, they will be plugged with concrete or a similarly non-reactive plug. This interim remedy will be undertaken as soon as feasibly possible during or following the OU-A investigation. Additional measures, if warranted, may be incorporated into the final remedial design.

The plugs, including those previously installed in the storm water drainage system, will be inspected on quarterly basis. The integrity of the plugs will be assessed and the area around the plugs will be inspected for evidence of the presence of MGP-related materials (NAPL, impacted soil, sheen, etc.).

3.3 EMERGENCY RESPONSE

In the event that an active release is identified, CT DEEP and the USCG will be notified. SCG will implement emergency response methods such as, but not limited to, containing the release through the deployment of booms, turbidity curtains, and use of skimmers, as applicable. The problem conduit will be identified and plugged. A temporary plug may be used until a permanent solution can be implemented.

3.4 COMMUNICATIONS AND REPORTING

The SCG project team will communicate with the CT DEEP and the USCG regarding the performance of work according to this Plan. The current primary points of contact are as follows:

- CT DEEP Remediation Division: John Duff
- USCG Long Island Sound Incident Management Division: Lieutenant Alaina Fagan

At a minimum, annual updates (based on the date on which CT DEEP approves this Plan) on the status of pollution prevention measures will be provided to CT DEEP and the USCG. More frequent updates will be provided as needed or requested.

References

1. Haley & Aldrich, Inc. (Haley & Aldrich). 2018a. Phase I Environmental Site Assessment, Chapel Street Former MGP Site, 347 Chapel Street, New Haven, Connecticut.
2. Haley & Aldrich. 2018b. Site Characterization Scope of Study, Chapel Street Former MGP Site, 347 Chapel Street, New Haven, Connecticut.
3. Haley & Aldrich. 2017. Investigation and Remediation Work Scope and Schedule, Chapel Street former MGP Site, 347 Chapel Street, New Haven, CT – Approved by CT DEEP in the January 2018 Consent Order.
4. Haley & Aldrich. 2015. Summary of Storm Water System Inspection and Sediment Survey Results, Chapel Street Former MGP Site, 347 Chapel Street, New Haven, Connecticut.
5. Haley & Aldrich. 2008. Summary Report, Chapel Street Former MGP Site, 347 Chapel Street, New Haven, Connecticut.
6. State of Connecticut V. The Southern Connecticut Gas Company Consent Order, executed on 5 January 2018

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FIGURES

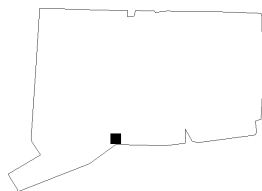


MAP SOURCE: ESRI

SITE COORDINATES: 41°18'17"N, 72°54'30"W

**HALEY
ALDRICH**

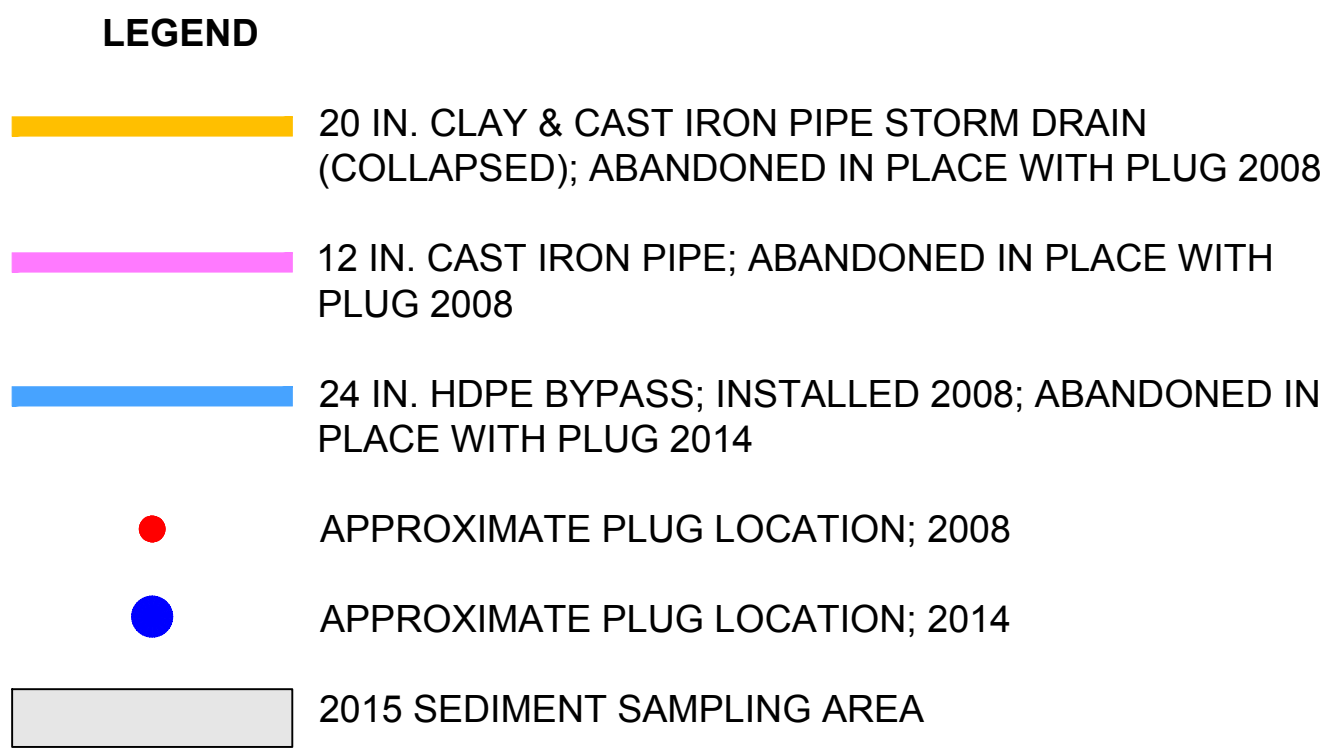
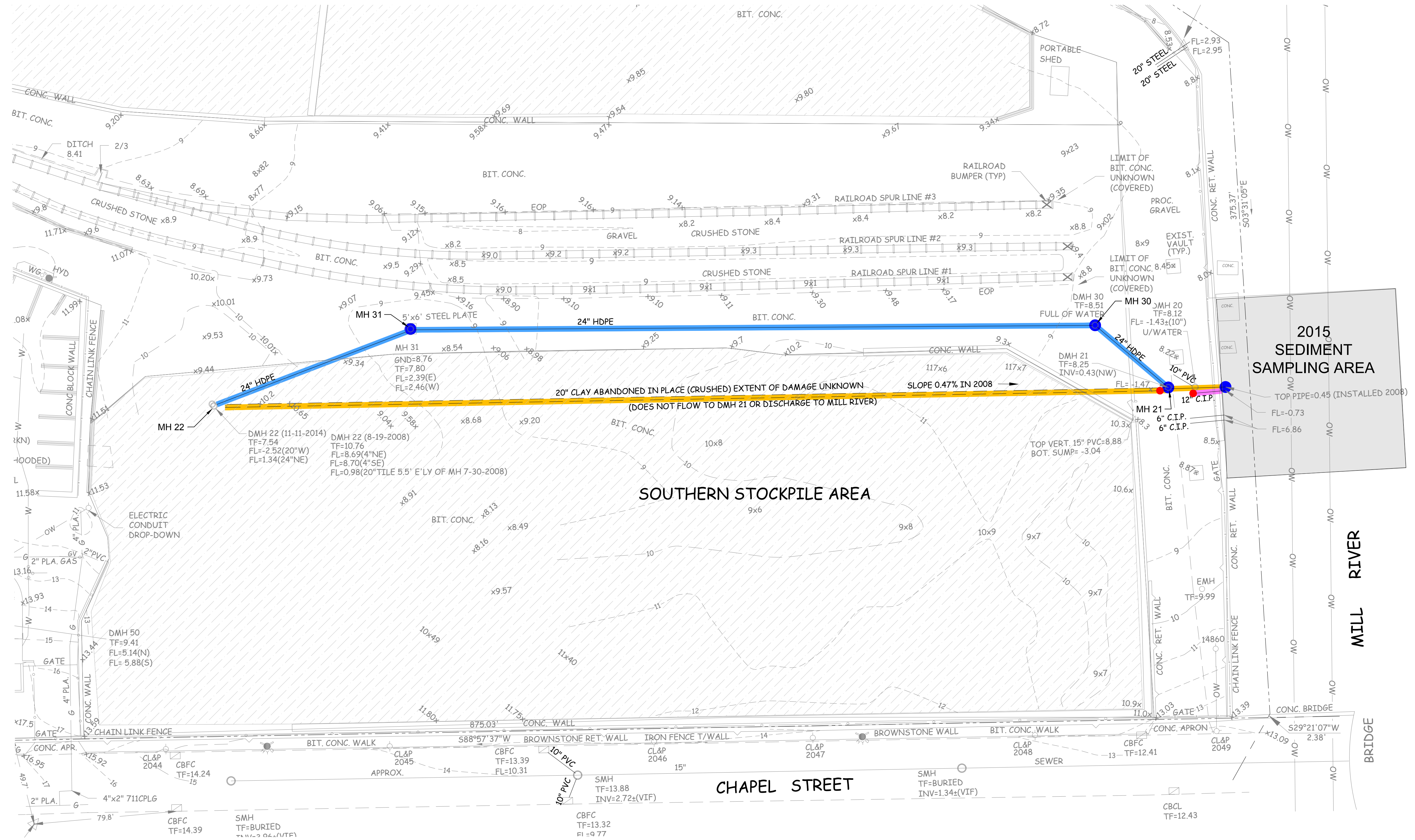
CHAPEL STREET FORMER MGP SITE
347 CHAPEL STREET
NEW HAVEN, CONNECTICUT



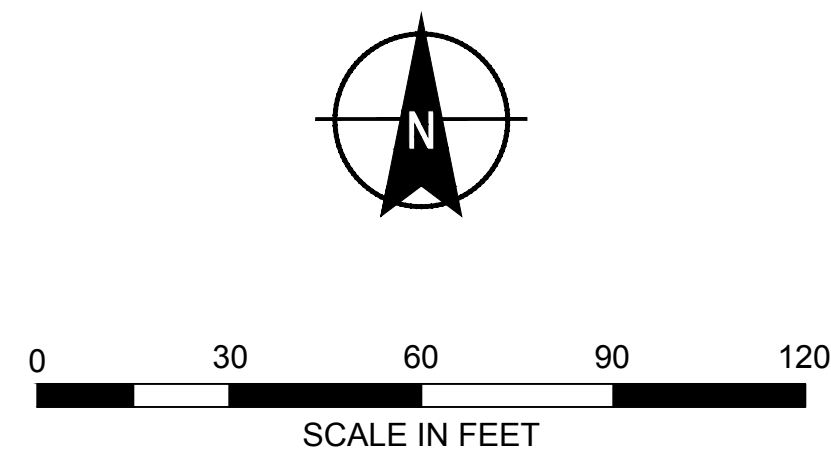
PROJECT LOCUS

APPROXIMATE SCALE: 1 IN = 2000 FT
MAY 2015

FIGURE 1



- NOTES**
1. BASE PLAN IS A DECEMBER 2013 SURVEY BY AESCHLIMAN LAND SURVEYING, INC. (ALS), RECEIVED IN ELECTRONIC FORMAT.
 2. HORIZONTAL DATUM REFERENCE: CONNECTICUT STATE GRID (PAGE 5)
 3. VERTICAL DATUM REFERENCE: NGVD 1929
 4. MH = MANHOLE



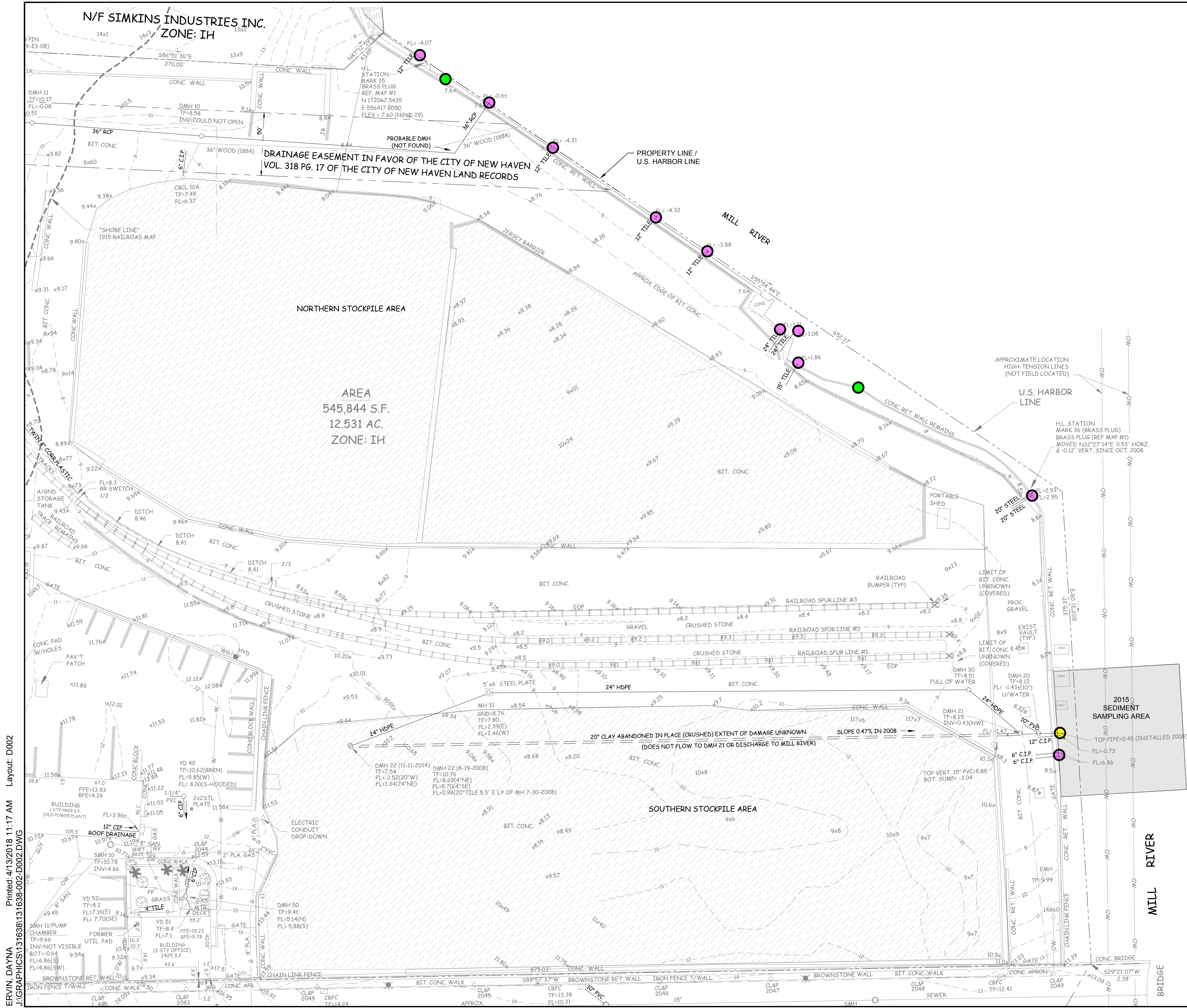
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FORMER CHAPEL STREET MGP SITE
347 CHAPEL STREET
NEW HAVEN, CONNECTICUT

PREVIOUS RESPONSE ACTIONS

SCALE: AS SHOWN
APRIL 2018

FIGURE 3

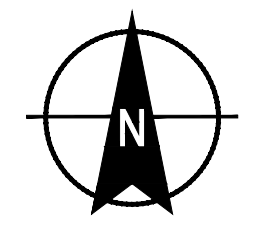


LEGEND

- INVESTIGATE POTENTIAL OUTFALL
- INVESTIGATE POTENTIAL CONDUIT, IDENTIFIED ON HISTORIC SITE PLANS
- PERIODICALLY INSPECT OUTFALLS CONDUIT, IDENTIFIED ON SITE SURVEYS
- 2015 SEDIMENT SAMPLING AREA

NOTES

- BASE PLAN IS A DECEMBER 2013 SURVEY BY AESCHLIMAN LAND SURVEYING, INC. (ALS), RECEIVED IN ELECTRONIC FORMAT.
- HORIZONTAL DATUM REFERENCE: CONNECTICUT STATE GRID (PAGE 5)
- VERTICAL DATUM REFERENCE: NGVD 1929



0 40 80 120 160
SCALE IN FEET

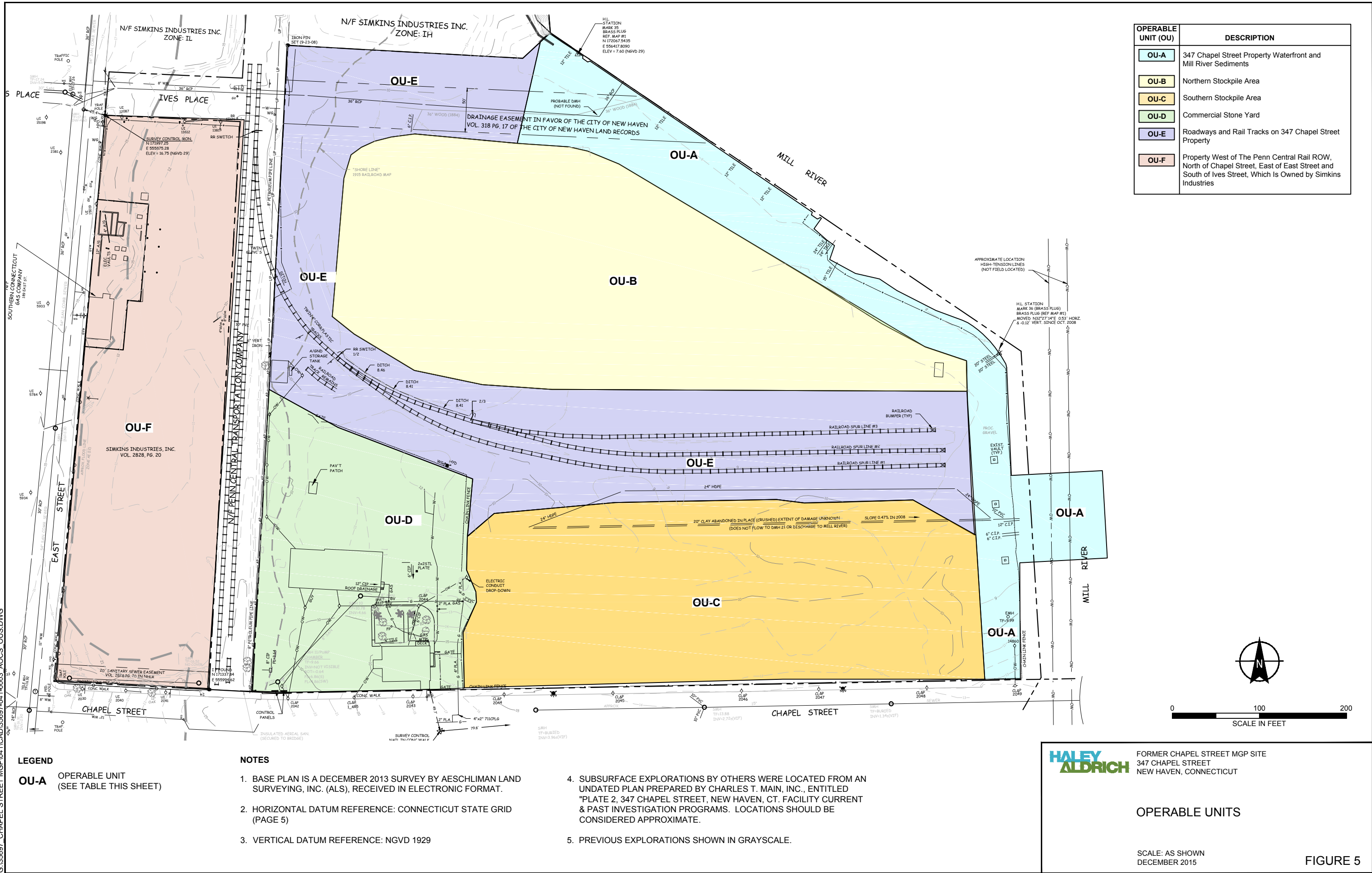
**HALEY
ALDRICH**

FORMER CHAPEL STREET MGP SITE
347 CHAPEL STREET
NEW HAVEN, CONNECTICUT

POTENTIAL CONDUITS TO MILL RIVER

SCALE: AS SHOWN
APRIL 2018

FIGURE 4



OPERABLE UNIT (OU)	DESCRIPTION
OU-A	347 Chapel Street Property Waterfront and Mill River Sediments
OU-B	Northern Stockpile Area
OU-C	Southern Stockpile Area
OU-D	Commercial Stone Yard
OU-E	Roadways and Rail Tracks on 347 Chapel Street Property
OU-F	Property West of The Penn Central Rail ROW, North of Chapel Street, East of East Street and South of Ives Street, Which Is Owned by Simkins Industries