SMP Template: August 2015

OLD CHAMPLAIN MILL WASHINGTON COUNTY WHITEHALL, NEW YORK

SITE MANAGEMENT PLAN

NYSDEC Site Number: C558036

Prepared for:

POULTNEY STREET PARTNERS, LLC 557 ROUTE 23 SOUTH WAYNE, NEW JERSEY 07470

Prepared by:

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Revisions to Final Approved Site Management Plan:

Revision No.	Date Submitted	Summary of Revision	NYSDEC Approval Date

NOVEMBER 2017

CERTIFICATION STATEMENT

SITE MANAGEMENT PLAN OLD CHAMPLAIN MILL WHITEHALL, NEW YORK

I Jeffrey A. Marx, P.E. certify that I am currently a NYS registered professional engineer as in defined in 6 NYCRR Part 375 and that this Site Management Plan was prepared in accordance with all applicable statutes and regulations and in substantial conformance with the DER Technical Guidance for Site Investigation and Remediation (DER-10).

(EFFREY A. MARX P.E.

DECEMBER 4, 2017 DATE

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SITE MANAGEMENT PLAN

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List of Acronyms

AS Air Sparging

ASP Analytical Services Protocol BCA Brownfield Cleanup Agreement BCP Brownfield Cleanup Program

CERCLA Comprehensive Environmental Response, Compensation and Liability Act

CAMP Community Air Monitoring Plan
C/D Construction and Demolition
CFR Code of Federal Regulation
CLP Contract Laboratory Program
COC Certificate of Completion

CO2 Carbon Dioxide CP Commissioner Policy

DER Division of Environmental Remediation

EC Engineering Control

ECL Environmental Conservation Law

ELAP Environmental Laboratory Approval Program

ERP Environmental Restoration Program

EWP Excavation Work Plan GHG Green House Gas

GWE&T Groundwater Extraction and Treatment

HASP Health and Safety Plan IC Institutional Control

NYSDEC New York State Department of Environmental Conservation

NYSDOH New York State Department of Health NYCRR New York Codes, Rules and Regulations

O&M Operation and Maintenance

OM&M Operation, Maintenance and Monitoring

OSHA Occupational Safety and Health Administration

OU Operable Unit

PID Photoionization Detector PRP Potentially Responsible Party PRR Periodic Review Report

QA/QC Quality Assurance/Quality Control
QAPP Quality Assurance Project Plan
RAO Remedial Action Objective
RAWP Remedial Action Work Plan

RCRA Resource Conservation and Recovery Act RI/FS Remedial Investigation/Feasibility Study

ROD Record of Decision RP Remedial Party

RSO Remedial System Optimization

C.T. MALE ASSOCIATES

SAC State Assistance Contract

SCG Standards, Criteria and Guidelines

SCO Soil Cleanup Objective SMP Site Management Plan

SOP Standard Operating Procedures

SOW Statement of Work

SPDES State Pollutant Discharge Elimination System

SSD Sub-slab Depressurization
SVE Soil Vapor Extraction
SVI Soil Vapor Intrusion
TAL Target Analyte List
TCL Target Compound List

TCLP Toxicity Characteristic Leachate Procedure
USEPA United States Environmental Protection Agency

UST Underground Storage Tank
VCA Voluntary Cleanup Agreement
VCP Voluntary Cleanup Program

ES EXECUTIVE SUMMARY

The following provides a brief summary of the controls implemented for the Site, as well as the inspections, monitoring, maintenance and reporting activities required by this Site Management Plan:

Site Identification: C558036

Old Champlain Mill

16 – 50 Poultney Street, Whitehall, New York

Institutional Controls:	1. The property may be used for restricted commercial and industrial use.
	2. All ICs and ECs must be operated and maintained as specified in this SMP.
	3. All ECs must be inspected at a frequency and in a manner defined in the SMP.
	4. The use of groundwater underlying the property is prohibited without necessary water quality treatment as determined by the NYSDOH or the Washington County Department of Health to render it safe for use as drinking water or for industrial purposes, and the user must first notify and obtain written approval to do so from the Department.
	5. Groundwater and other environmental or public health monitoring must be performed as defined in this SMP.
	6. Data and information pertinent to site management must be reported at the frequency and in a manner as defined in this SMP.
	7. All future activities that will disturb remaining contaminated material must be conducted in accordance with this SMP.
	8. Monitoring to assess the performance and effectiveness of the remedy must be performed as defined in this SMP.

Site Identification: C558036

	Old Champlain Mill		
	16 – 50 Poultney Street, Whitehall, New York		
Institutional Controls: (continued)	9. Access to the site must be provided to agents, employees or other representatives of the State of New York with reasonable prior notice to the property owner to assure compliance with the restrictions identified by the Environmental Easement.		
	10. The potential for vapor intrusion must be evaluated for any buildings developed in the area within the IC boundaries, and any potential impacts that are identified must be monitored or mitigated.		
	11. Vegetable gardens and farming on the site are prohibited.		
Engineering Controls:	1. Vapor Intrusion Mitigation (for new buildings)		
Monitoring:			
1. Groundwater Monitoring Wells (MW-1A MW-3A, MW-5A, MW-10A, MW-13A to MW-15A, and MW-17A to MW-19A)		Annually or as otherwise determined by the Department	
Maintenance:			
1. Cover System		As needed	
Reporting:			
1. Groundwater Data		Annually	
2. Periodic Review Report		Annually	

Further descriptions of the above requirements are provided in detail in the latter sections of this Site Management Plan.

1.0 INTRODUCTION

1.1 General

This Site Management Plan (SMP) is a required element of the remedial program for the Old Champlain Mill located in the Village of Whitehall, New York (hereinafter referred to as the "Site"). See Figure 1. The Site is currently in the New York State (NYS) Brownfield Cleanup Program (BCP), Site No. C558036, which is administered by New York State Department of Environmental Conservation (NYSDEC).

Poultney Street Partners, LLC entered into a Brownfield Cleanup Agreement (BCA), on September 9, 2008 with the NYSDEC to remediate the site. A figure showing the site location and boundaries of this site is provided in Figure 1. The boundaries of the site are described in the metes and bounds site description that is part of the Environmental Easement provided in Appendix A.

After completion of the remedial work, some contamination was left at this Site, which is hereafter referred to as "remaining contamination". Institutional and Engineering Controls (ICs and ECs) have been incorporated into the site remedy to control exposure to remaining contamination to ensure protection of public health and the environment. An Environmental Easement granted to the NYSDEC, and recorded with the Washington County Clerk on August 8, 2017 (File Number 00114807), requires compliance with this SMP and all ECs and ICs placed on the site.

This SMP was prepared to manage remaining contamination at the site until the Environmental Easement is extinguished in accordance with ECL Article 71, Title 36. This plan has been approved by the NYSDEC, and compliance with this plan is required by the grantor of the Environmental Easement and the grantor's successors and assigns. This SMP may only be revised with the approval of the NYSDEC.

It is important to note that:

- This SMP details the site-specific implementation procedures that are required by the Environmental Easement. Failure to properly implement the SMP is a violation of the Environmental Easement, which is grounds for revocation of the Certificate of Completion (COC);
- Failure to comply with this SMP is also a violation of Environmental Conservation Law, 6 NYCRR Part 375 and the BCA (Index # A5-0608-0708; Site #C558036) for the Site, and thereby subject to applicable penalties.

All reports associated with the Site can be viewed by contacting the NYSDEC or its successor agency managing environmental issues in New York State. A list of contacts for persons involved with the Site is provided in Tables 1.3-1 and 1.3-2 of this SMP.

This SMP was prepared by C.T. Male Associates Engineering, Surveying, Architecture & Landscape Architecture, D.P.C., on behalf of Poultney Street Partners, LLC, in accordance with the requirements of the NYSDEC's DER-10 ("Technical Guidance for Site Investigation and Remediation"), dated May 2010, and the guidelines provided by the NYSDEC. This SMP addresses the means for implementing the ICs and/or ECs that are required by the Environmental Easement for the Site.

1.2 Revisions

Revisions to this plan will be proposed in writing to the NYSDEC's project manager. Revisions will be necessary upon, but not limited to, the following occurring: a change in media monitoring requirements, upgrades to or shut-down of a remedial system, post-remedial removal of contaminated sediment or soil, or other significant change to the Site conditions. In accordance with the Environmental Easement for the Site, the NYSDEC will provide a notice of any approved changes to the SMP, and append these notices to the SMP that is retained in its files.

1.3 Notifications

Notifications will be submitted by the property owner to the NYSDEC, as needed, in accordance with NYSDEC's DER – 10 for the following reasons:

- 60-day advance notice of any proposed changes in Site use that are required under the terms of the BCA, 6 NYCRR Part 375 and/or Environmental Conservation Law.
- 7-day advance notice of any field activity associated with the remedial program.
- 15-day advance notice of any proposed ground-intrusive activity pursuant to the Excavation Work Plan.
- Notice within 48-hours of any damage or defect to the foundation, structures or EC that reduces or has the potential to reduce the effectiveness of an EC, and likewise, any action to be taken to mitigate the damage or defect.
- Verbal notice by noon of the following day of any emergency, such as a fire; flood; or earthquake that reduces or has the potential to reduce the effectiveness of ECs in place at the Site, with written confirmation within 7 days that includes a summary of actions taken, or to be taken, and the potential impact to the environment and the public.
- Follow-up status reports on actions taken to respond to any emergency event requiring ongoing responsive action submitted to the NYSDEC within 45 days describing and documenting actions taken to restore the effectiveness of the ECs.

Any change in the ownership of the Site or the responsibility for implementing this SMP will include the following notifications:

• At least 60 days prior to the change, the NYSDEC will be notified in writing of the proposed change. This will include a certification that the prospective purchaser/Remedial Party has been provided with a copy of the Brownfield Cleanup Agreement (BCA), and all approved work plans and reports, including this SMP.

• Within 15 days after the transfer of all or part of the Site, the new owner's name, contact representative, and contact information will be confirmed in writing to the NYSDEC.

Table 1.3.1 on the following page includes contact information for the above notification. The information on this table will be updated as necessary to provide accurate contact information. A full listing of Site-related contact information is provided in Table 1.3.2.

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Table 1.3.1: Notifications*

Name	Contact Information	
NYSDEC Project Manager:	Telephone: (518) 897. 1254	
Michael McLean	Email: mike.mclean@dec.ny.gov	
NYSDEC Regional Engineer:	Telephone: (518) 897-1257	
Russell Huyck	Email: russel.huyck@dec.ny.gov	
NYSDEC Site Control	Telephone: (518) 402.9706	
NISDEC Site Control	Email: derweb@dec.ny.gov	

Table 1.3-2: Contact Numbers

Name and Affiliation	Contact Information
Owners – Poultney Street Partners, LLC	Telephone: (845) 565-8500
Rod Donnelly	Email: rdonnelly@donnellyind.com
Karl Benedikt	Email: karl@towerassociatesrealty.com
Professional Engineer (Environmental)	Telephone: (518) 786-7400
C.T. Male Associates	Email: j.marx@ctmale.com
Jeffrey A. Marx, PE	
Owner's Counsel	Telephone: (845) 883-0964
Bowitch & Coffey, LLC	Email: bowitch@bcalbany.com
Gary S. Bowitch, Esq.	·
NYSDOH Bureau of Environmental Exposure	Telephone: (518) 402-7860
Investigation	Email: BEEI@health.ny.gov

^{*} Note: Notifications are subject to change and will be updated as necessary.

2.0 SUMMARY OF PREVIOUS INVESTIGATIONS AND REMEDIAL ACTIONS

2.1 Site Location and Description

The Site is located in the Village of Whitehall, Washington County, New York and is identified as Section 60.06 Block 1 and Lot 5 on the Village of Whitehall, Washington County Tax Map (see Figure 2. The Site is an approximately 11.74-acre area and is bounded by U.S. Route 4 (Poultney Street) to the north, The Clarendon and Pittsford Railroad Company railroad tracks to the south, Wood Creek to the east, and Champlain Canal to the west (see Figure 1). The boundaries of the site are described in Appendix A – Environmental Easement. The owner of the Site parcel at the time of issuance of this SMP is:

POULTNEY STREET PARTNERS, LLC

2.2 Physical Setting

2.2.1 Land Use

The Site is currently vacant and predominant features include a concrete slab foundation from the former manufacturing building, a large brick smoke stack, and a small, active municipally owned and maintained sewage pump station. The majority of the Site is open with some trees found predominantly within the northwestern sections of the Site, and wetlands in the northwestern and southeastern portions of the property. Man-made earthen dikes line the eastern and western property boundaries and serve to protect the Site from flooding from the adjacent Wood Creek and Champlain Canal, respectively.

The Site was first developed in the early 1900s and used as a silk knitting mill until 1959. From 1959 until 2001, the Site was used to manufacture newspaper vending machines. The on-site buildings, including a 120,000 square foot manufacturing building and a 5,000 square foot power house, were demolished in 2003.

2.2.2 Geology

Soils are mapped by the Washington Soil Survey as Limerick silt loam with a small area of Saco silt loam. The Limerick series consists of deep, poorly drained medium-textured soils formed in alluvial deposits of silt and very fine sand. They are nearly level and are found in low areas on flood plains. The Saco series consists of deep, very poorly drained medium textured soils formed in silty alluvial sediments. They are nearly level and are in low areas on flood plains that are subject to frequent flooding.

Based on a review of the Surficial Geologic Map of New York, Adirondack Sheet, the surficial geology in the vicinity of the Site is mapped as Lacustrine deposits which generally consists of laminates of silt and clay deposited on proglacial lakes, generally calcareous, of low permeability, with a variable thickness of up to 50 meters. Bedrock was not encountered in the soil borings conducted as a function of the Remedial Investigation (RI) performed by C.T. Male. The top of bedrock is estimated to be present at approximately 50 to 100 feet below existing grades.

The Site's geology, as detailed during the advancement of soil borings as part of the RI, through previous investigations of the Site conducted by C.T. Male and through review of investigations conducted on the Site's south adjoining Poultney Street IHWS by others, is as follows. The Site's geology, in terms of the overburden soils is relatively complex. Beneath the relative thin layer of fill materials mantling the Site, the native soils are characteristic of alluvial sediments (sands, silts and clays) deposited within the flood plain of a stream or river. Within the depths explored during the investigations, the soil stratigraphy is generally characterized as interlayered deposits of fine sand with little

silt, silt and clay, and coarse sand with little silt above a basal clay deposit. Based on the sequencing of subsurface soils described above, three (3) depositional events resulted in the formation of the soils beneath the Site. The deep basal clay (generally below a depth of approximately 13.5 feet to 19 feet) was formed in a calm water environment likely during the last glacial event within New York. Subsequent to the deposition of the clay strata, glacial outwash sands and sands and gravels were deposited on top of the clay likely in a fast moving water environment. The uppermost soil horizon (alluvium) was likely deposited during flooding events long before the construction of the Site. During the RI, the silt and clay alluvium was encountered at the ground surface during advancement of test borings BMW-13A and BMW-19A. BMW-13A and BMW-19A are located adjacent to and within the Site's delineated wetlands. Based on the absence of the alluvium at the other test boring locations, the alluvium is not believed to be continuous across the Site and may have been disturbed or removed during construction and other development activities within the Site.

Groundwater is present within each of the geologic units explored. The top of the gray clay layer was encountered at depths that ranged from 13.5 feet bgs at BMW-19A to 19 feet bgs at BMW-12A. Soils between the bottom of the silt and clay layer and top of the gray clay consisted of fine to coarse sand with varying percentages of silt and gravel.

Soil specific subsurface information collected during the RI was recorded on test pit logs and subsurface exploration logs. These logs are presented in Appendix B and Appendix C, respectively.

2.2.3 <u>Hydrogeology</u>

According to the map entitled "Unconsolidated Aquifers in Update New York, Adirondack Sheet" (Edward F. Bugliosi and Ruth A. Trudell, 1988'), the subject Site is located within an unconfined aquifer having a potential yield of 10 to 100 gallons per minute.

Groundwater conditions were assessed through the advancement of test borings and test pits and the installation of permanent monitoring wells. Static groundwater levels were collected from new monitoring wells installed during the course of the RI and from existing wells installed during previous investigations of the Site. Based on the collected water level data, the water table across the Site ranges in depth from the ground surface at monitoring wells BMW-19A and MW-10A to approximately 4.22 feet below existing Site grades at monitoring well BMW-14A. The water levels were obtained on March 25, 2010. Groundwater monitoring well construction logs are provided in Appendix D.

Water level measurements obtained on February 10 and March 25, 2010 were used in conjunction with the survey of the Site to generate a Site wide groundwater contour map which is presented as Figures 2 and 3. The Site-wide contour maps show a groundwater ridge within the central portion of the Site which trends from southwest to northeast. Groundwater movement away from the ridge is to the east, north and west. This pattern of flow is generally consistent with the groundwater level data collected from the Site during the Phase II ESA. The groundwater elevation drop from the top of the ridge to the property boundaries is approximately one (1) to two (2) feet.

Based on the observed composition of the three (3) major soil deposits within the Site, the apparent permeability of the near surface alluvium is expected to be lower than that of the underlying outwash deposits, but variable due to its non homogeneous composition. The basal clay, understanding that it is known to exist from depths of approximately 13.5 to greater than 50 feet, likely serves as an aquiclude, a formation that will not transmit water fast enough to furnish appreciable amounts of water, and also deters movement of water and contaminants in the water vertically downward.

Table 2.2.3-1 provides a summary of the monitoring well identification numbers, boring depths, depths at which the monitoring wells were set, monitoring well screened

interval depths, and the depths at which soil samples were collected for laboratory analysis. As presented in the table, the bottom of the wells were established directly on or above the underlying clay layer above which were water bearing granular deposits of sands and sands and gravel.

TABLE 2.2.3-1: Monitoring Well Summary			
Boring/MW ID #	Boring Depth	MW Depth	MW Screened Interval
MW-1A **	20' bgs	20' bgs	3 to 20' bgs
MW-2A **	20' bgs	20' bgs	3 to 20' bgs
MW-3A **	28' bgs	25′ bgs	3 to 25′ bgs
MW-4A	20' bgs	20′ bgs	3 to 20' bgs
MW-5A **	20' bgs	20' bgs	3 to 20' bgs
MW-10A **	20' bgs	20' bgs	3 to 20' bgs
BMW-11A	17′ bgs	17′ bgs	3 to 17′ bgs
BMW-12A	24' bgs	19′ bgs	9 to 19′ bgs
BMW-13A **	22' bgs	17′ bgs	7 to 17′ bgs
BMW-14A **	20' bgs	14' bgs	4 to 14' bgs
BMW-15A **	24' bgs	18' bgs	5 to 18′ bgs
BMW-16A	20′ bgs	15′ bgs	5 to 15′ bgs
BMW-17A **	22' bgs	17′ bgs	5 to 17′ bgs
BMW-18A **	20' bgs	14′ bgs	4 to 14' bgs
BMW-19A **	20' bgs	14' bgs	4 to 14' bgs

Notes:

bgs denotes below ground surface

2.3 Investigation and Remedial History

The following narrative provides a remedial history timeline and a brief summary of the available project records to document key investigative and remedial milestones

^{**} Wells scheduled for routine monitoring

for the Site. C.T. Male has conducted three (3) environmental investigations of the Site, as listed below.

- Phase II Environmental Site Assessment, Old Champlain Mill, prepared by C.T. Male Associates, P.C., dated December 22, 2006 (2006 C.T. Male Phase II ESA).
- Supplemental Phase II Environmental Site Assessment, Old Champlain Mill, prepared by C.T. Male Associates, P.C., dated August 6, 2007 (2007 C.T. Male Supplemental Phase II ESA).
- Remedial Investigation Report, prepared by C.T. Male Associates, P.C., dated August 2011 (2011 RI Report)

2.3.1 2006 C.T. Male Phase II ESA

The Phase II ESA investigation was completed through the advancement of 13 soil borings, of which 11 were converted to monitoring wells, to aid in the collection of soil and groundwater samples for subjective and laboratory analysis, and the collection of a surface water sample for laboratory analysis of pooled water beneath and within the confines of the former building foundation.

The findings of this investigation identified two (2) chlorinated volatile organic compounds (cis-1,2-dichloroethene and trichloroethene) and two (2) metals (lead and chromium) slightly above groundwater guidelines. These findings indicated that contaminants above regulatory guidelines were present on the project Site that may have either originated from past operations at the Site and/or from the Site's south adjoining Poultney Street Inactive Hazardous Waste Site, which was also impacted by chlorinated VOCs. However, upon presentation of the analytical results to the DEC, the DEC indicated that the data obtained was insufficient to determine if the Poultney Street Inactive Hazardous Waste Site was the source of the Site contaminants.

2.3.2 2007 C.T. Male Supplemental Phase II ESA

The Supplemental Phase II ESA was conducted to determine the quality of soil and groundwater at the Site with respect to the recognized environmental conditions identified through the 2002 and 2006 Phase I ESA activities, and to further define the extent of VOC contamination identified during the Phase II ESA. The supplemental Phase II ESA activities were developed in part on the basis of a file review of the adjacent inactive hazardous waste site and a groundwater elevation survey to determine the direction of groundwater flow across the Site.

The Supplemental Phase II subsurface investigation included the advancement of 10 soil borings which were converted to groundwater monitoring wells that extended to the top of the confining clay layer, the collection of soil samples for field vapor screening and the collection and analysis of surface soil samples and groundwater samples for laboratory analysis.

Results of the Supplemental Phase II ESA revealed the following:

Elevated photoionization detector (PID) readings were noted in eight (8) soil samples at five (5) boring locations, generally within the soil samples recovered from 12 feet and deeper, mainly within sand layers situated between other layers of silt and clay. Petroleum or chemical odors or staining were not noted in these samples. The source area for this contamination had not been identified by this study. It was expected that if the source was a release to the near surface soils, there would be evidence of soil impacts at depths shallower than 12 feet below grade.

Seven (7) chlorinated volatile organic compounds (VOCs) were detected at concentrations exceeding DEC guidelines in the groundwater samples from the various monitoring wells. Chlorinated solvent compounds are most often denser than water and

therefore have a tendency to sink within the aquifer until some form of hydraulic barrier (clay layer) is encountered.

Several semi-volatile organic compounds (SVOCs) were detected above their respective soil cleanup guidance values in the surface soil samples collected in the vicinity of the old boiler house. These detections were possibly related to traces of coal, ash and cinders within the surface soils.

Overall, groundwater was determined to be generally from the south to the north with a southeast to northwest trend on the western portion of the Site and a southwest to northeast trend on the eastern portion of the Site. The extent of groundwater impacts by the chlorinated compounds, both vertically and horizontally, was not defined within the monitoring well array installed as part of the Phase II ESA and Supplemental Phase II ESA.

Based on the results of the Phase II ESA and Supplemental Phase II ESA investigations, the data did not suggest that groundwater impacts within the subject Site were related to those at the Poultney Street Inactive Hazardous Waste Site as the monitoring wells located between the two (2) areas of contamination did not exhibit groundwater impacts of the magnitude that could positively link the two (2) areas. However, the data was insufficient to rule out a possible contribution from the Poultney Street Inactive Hazardous Waste Site.

2.3.3 2011 RI Report

Based on the results of the 2011 RI Report, the primary contaminants of concern at the Site are SVOCs and metals in subsurface soils, chlorinated VOCs, SVOCs and metals in groundwater, and metals in wetland surface water and sediments. Refer to Section 2.4 – Remaining Contamination for a summary of the nature and extent of contamination for the project site.

2.4 Remedial Action Objectives

The Remedial Action Objectives (RAOs) for the Site as listed in the Decision Document dated November 27, 2017 are as follows:

Groundwater

RAOs for Public Health Protection

- Prevent ingestion of groundwater with contaminant levels exceeding drinking water standards.
- Prevent contact with, or inhalation of, volatiles from contaminated groundwater.

RAOs for Environmental Protection

- Restore ground water aquifer to pre-disposal/pre-release conditions, to the extent practicable.
- Prevent the discharge of contaminants to surface water.

Soil

RAOs for Public Health Protection

- Prevent ingestion/direct contact with contaminated soil.
- Prevent inhalation of or exposure from contaminants volatilizing from contaminants in soil.

RAOs for Environmental Protection

• Prevent migration of contaminants that would result in groundwater or surface water contamination.

Soil Vapor

RAOs for Public Health Protection

• Mitigate impacts to public health resulting from existing, or the potential for, soil vapor intrusion into buildings at a Site.

2.5 Remaining Contamination

Sampling and analysis of several media types was conducted during the Remedial Investigation (RI) and RI supplemental investigations to evaluate the nature and extent of contamination at the subject Site. These media types included surface soils, subsurface soils, surface water, sediment and groundwater. Additionally, analytical results of surface soils and groundwater from previous investigations of the Site prior to entering into the BCP were incorporated into the RI to aid in developing a broader sense of the nature and extent of Site contaminants.

Based on these investigations, the contaminants of concern (generally defined as compounds detected above commercial use soil cleanup objectives) at the Site are semi-volatile organic compounds (SVOCs) and arsenic in subsurface soils; and chlorinated volatile organic compounds (CVOCs), SVOCs and metals in groundwater. The distribution of contaminants exceeding SCGs in the various media-types sampled during the RI, and the distribution of total CVOCs in groundwater, is presented in the RI and Alternative Analysis (AA) Reports, which are available for review in the document repositories.

2.5.1 Surface Soil

There were four (4) SVOCs (benzo(a)anthracene benzo(b)fluoranthene, dibenz(a,h)anthracene and indeno(1,2,3-cd)pyrene) detected in surface soil above SCGs

in only one (1) of the 18 sample locations (SS-1). There was another SVOC (benzo(a)pyrene) individually detected in only two other sample locations (SS-3 and SS-5) above SCGs. No VOCs, pesticides, PCBs and metals detected in surface soil above applicable SCGs. SVOCs detected in surface soil above SGCs were detected in only a very small minority of sampling locations. Accordingly, surface soil is not a media that requires remedial action for this commercial and industrial use Site.

2.5.2 Subsurface Soils

Three (3) SVOCs and one (1) metal (Arsenic) were detected at concentrations exceeding their applicable SCGs for restricted (commercial) use sites at three (3) of the 13 subsurface sampling locations completed during the RI. The SVOC detections were confined to two (2) subsurface sampling locations in the vicinity of the Site's access road and parking lot for the former manufacturing building. The Arsenic detection was confined to two (2) shallow subsurface soil sampling locations adjacent to the former manufacturing building's footprint.

In comparison to SCGs for unrestricted use sites, four (4) VOCs, four (4) SVOCs and six (6) metals were detected at concentrations above the applicable SCGs at five (5) test boring and two (2) test pit locations.

No subsurface soil samples were submitted for laboratory analysis as part of the 2006 C.T. Male Phase II ESA and the 2007 C.T. Male Supplemental Phase II ESA. One (1) subsurface soil sample was collected from southern portions of the Site during the 2001/2002 URS Remedial Investigation/Feasibility Study of the Site's south adjoining property. The analytical results for this sample revealed three (3) VOCs above the laboratory method detection limits, but below SCOs for unrestricted use sites.

2.5.3 Sediment

Seven (7) metals were detected above SCGs in sediments sampled from the onsite wetlands. The metals (arsenic, cadmium, copper, iron, lead, nickel and zinc) were
detected at concentrations above their NYSDEC Division of Fish, Wildlife and Marine
Resources Bureau of Habitat lowest effects level (LEL) SCGs, but below their NYSDEC
severe effects level (SEL) SCGs. The LEL is the concentration of a contaminant
tolerated by 95% of benthic species. The SEL is the concentration of a contaminant
tolerated by only 5% of benthic species. Considering none of the metals exceed the SEL
SCGs, and in most cases the concentrations of metals only slightly exceeded the LEL
SCGs, implementing remedial action of sediments is not warranted. The impact to the
wetland from implementing a remedial action is more detrimental to the ecological
system than trying to obtain additional benefit to the 95% to 100% of the benthic species
that can't currently tolerate the concentration of the detected metals.

2.5.4 Groundwater

Five (5) chlorinated VOCs, two (2) SVOCs and four (4) metals were detected at concentrations exceeding SCGs during the RI. The most prevalent chlorinated VOCs in groundwater included Vinyl Chloride which exceeded its SCG in nine (9) of 15 sampled wells and cis-1,2-Dichloroethene which exceeded its SCG in seven (7) of 15 sampled wells. The two (2) SVOCs were detected slightly above their SCG and were confined to monitoring well BMW-16A. The most prevalent metals in groundwater were Iron and Manganese.

Total VOCs in groundwater are dispersed across the Site with the highest concentrations in the northwestern portions of the Site in the general vicinity of monitoring well MW-2A and BMW-16A. See Figure 4, Total VOCs in Groundwater Isoconcentration Contour Comparison for 2007 and 2010 Groundwater Sampling.

The same chlorinated VOCs detected during the RI were also detected during the 2006 C.T. Male Phase II ESA and 2007 C.T. Male Supplemental Phase II ESA investigations. Based on inferred groundwater flow direction, it appears that groundwater contaminants may have migrated off-site in northwestern portions of the Site. The lands downgradient of the Site where impacts may be approaching is undeveloped New York State owned land.

2.5.5 Surface Water

Acetone (a VOC) and the metals (iron, manganese and sodium) were the only parameters detected above SCGs. Acetone (51 ppb) was detected above its SCG of 50 ppb at one (1) sampling location only. Iron was detected above SCGs in all of the surface water samples. Manganese was detected above its SCG in two (2) of the four (4) surface water samples. Sodium was detected above its SCG in the surface water sample collected from Wetland 7, which is located in close proximity to NYS Route 4.

Metal contaminants include iron, manganese and sodium. Iron and manganese are viewed as naturally occurring in the environment. Sodium is likely attributed to application of road salt on the Site's northern adjoining US Route 4 and within the parking lots and roadways within the Site when in use for manufacturing uses. Based on the above information (and the absence of other VOCs, SVOCs, pesticides and PCBs above SCGs), potential adverse effects from surface water contaminants to on and off-Site populations are considered to be low. Therefore, surface water is not a media that requires remedial action for this commercial use Site.

2.5.6 Soil Vapor

Soil vapor samples have not been collected or analyzed.

3.0 INSTITUTIONAL AND ENGINEERING CONTROL PLAN

3.1 General

Since remaining contamination exists at the Site, Institutional Controls (ICs) and Engineering Controls (ECs) are required to protect human health and the environment. This IC/EC Plan describes the procedures for the implementation and management of all IC/ECs at the Site. The IC/EC Plan is one component of the SMP and is subject to revision by the NYSDEC.

This plan provides:

- A description of all IC/ECs on the Site;
- The basic implementation and intended role of each IC/EC;
- A description of the key components of the ICs set forth in the Environmental Easement;
- A description of the controls to be evaluated during each required inspection and periodic review;
- A description of plans and procedures to be followed for implementation of IC/ECs, such as the implementation of the Excavation Work Plan (EWP) (as provided in Appendix E) for the proper handling of remaining contamination that may be disturbed during maintenance or redevelopment work on the Site; and
- Any other provisions necessary to identify or establish methods for implementing the IC/ECs required by the Site remedy, as determined by the NYSDEC.

3.2 Institutional Controls

A series of ICs is required by the Decision Document to: (1) implement, maintain and monitor Engineering Control systems; (2) prevent future exposure to remaining contamination; and, (3) limit the use and development of the Site to restricted commercial

and industrial uses only. Adherence to these ICs on the Site is required by the Environmental Easement and will be implemented under this SMP. ICs identified in the Environmental Easement may not be discontinued without an amendment to or extinguishment of the Environmental Easement. The IC boundaries (which are the same as the property boundaries) are shown on Figure 1. These ICs are:

- The property may be used for restricted commercial and industrial use;
- All ECs must be operated and maintained as specified in this SMP;
- All ECs must be inspected at a frequency and in a manner defined in the SMP.
- The use of groundwater underlying the property is prohibited without necessary water quality treatment as determined by the NYSDOH or the Washington County Department of Health to render it safe for use as drinking water or for industrial purposes, and the user must first notify and obtain written approval to do so from the Department.
- Groundwater and other environmental or public health monitoring must be performed as defined in this SMP;
- Data and information pertinent to Site management must be reported at the frequency and in a manner as defined in this SMP;
- All future activities that will disturb remaining contaminated material must be conducted in accordance with this SMP;
- Monitoring to assess the performance and effectiveness of the remedy must be performed as defined in this SMP;
- Operation, maintenance, monitoring, inspection, and reporting of any mechanical or physical component of the remedy shall be performed as defined in this SMP;
- Access to the Site must be provided to agents, employees or other representatives of the State of New York with reasonable prior notice to the property owner to assure compliance with the restrictions identified by the Environmental Easement.
- The potential for vapor intrusion must be evaluated for any buildings developed in the area within the IC boundaries noted on Figure 1, and any potential impacts that are identified must be monitored or mitigated; and

• Vegetable gardens and farming on the Site are prohibited;

3.3 Engineering Controls

3.3.1 <u>Vapor Intrusion Mitigation Systems</u>

No vapor intrusion mitigation systems have been installed as of the date of this SMP. Procedures for operating and maintaining the any future vapor mitigation system(s) are documented in the Operation and Maintenance Plan (Section 5.0 of this SMP). As built drawings, signed and sealed by a professional engineer, are to be included as an amendment to this SMP in the form of an Operations and Maintenance Manual. A Figure showing the location of the vapor mitigation system(s) for the Site shall also be included as amendment to the SMP.

3.3.2 <u>Criteria for Completion of Remediation</u>

Generally, remedial processes are considered completed when monitoring indicates that the remedy has achieved the remedial action objectives identified by the decision document. The framework for determining when remedial processes are complete is provided in Section 6.4 of NYSDEC DER-10.

3.3.2.1 - Sub-Slab Depressurization (SSD) System

Any active SSD systems will not be discontinued unless prior written approval is granted by the NYSDEC and the NYSDOH. In the event that monitoring data indicates that the SSD system may no longer be required, a proposal to discontinue the SSD system will be submitted by the remedial party to the NYSDEC and NYSDOH.

3.3.2.3 - Monitoring Wells associated with Monitored Natural Attenuation

Groundwater monitoring activities to assess natural attenuation will continue, as determined by the NYSDEC with consultation with NYSDOH, until residual groundwater concentrations are found to be consistently below ambient water quality standards, the Site SCGs, or have become asymptotic at an acceptable level over an extended period. In the event that monitoring data indicates that monitoring for natural attenuation may no longer be required, a proposal to discontinue the system will be submitted by the remedial party. Monitoring will continue until permission to discontinue is granted in writing by the NYSDEC. If groundwater contaminant levels become asymptotic at a level that is not acceptable to the NYSDEC, additional source removal, treatment and/or control measures will be evaluated.

4.0 MONITORING AND SAMPLING PLAN

4.1 General

This Monitoring and Sampling Plan describes the measures for evaluating the overall performance and effectiveness of the remedy. This Monitoring and Sampling Plan may only be revised with the approval of the NYSDEC.

This Monitoring and Sampling Plan describes the methods to be used for:

- Sampling and analysis of all appropriate media (e.g., groundwater, indoor air, soil vapor, soils);
- Assessing compliance with applicable NYSDEC standards, criteria and guidance (SCGs), particularly groundwater standards and Part 375 SCOs for soil; and
- Evaluating Site information periodically to confirm that the remedy continues to be effective in protecting public health and the environment;

To adequately address these issues, this Monitoring and Sampling Plan provides information on:

- Sampling locations, protocol and frequency;
- Information on all designed monitoring systems;
- Analytical sampling program requirements;
- Inspection and maintenance requirements for monitoring wells;
- Monitoring well decommissioning procedures; and
- Annual inspection and periodic certification.

Reporting requirements are provided in Section 7.0 of this SMP.

4.2 Site – Wide Inspection

Site-wide inspections will be performed at a minimum of once per year. Modification to the frequency or duration of the inspections will require approval from the NYSDEC. Site-wide inspections will also be performed after all severe weather conditions that may affect ECs or monitoring devices. During these inspections, an inspection form will be completed as provided in Appendix F – Site Management Forms. The form will compile sufficient information to assess the following:

- Compliance with all ICs, including Site usage;
- An evaluation of the condition and continued effectiveness of ECs;
- General Site conditions at the time of the inspection;
- The Site management activities being conducted including, where appropriate, confirmation sampling and a health and safety inspection; and
- Confirm that Site records are up to date.

Inspections of all remedial components installed at the Site will be conducted. A comprehensive Site-wide inspection will be conducted and documented according to the SMP schedule, regardless of the frequency of the Periodic Review Report. The inspections will determine and document the following:

- Whether ECs continue to perform as designed;
- If these controls continue to be protective of human health and the environment;
- Compliance with requirements of this SMP and the Environmental Easement;
- Achievement of remedial performance criteria; and

• If Site records are complete and up to date; and

Reporting requirements are outlined in Section 7.0 of this plan.

Inspections will also be performed in the event of an emergency. If an emergency, such as a natural disaster or an unforeseen failure of any of the ECs occurs that reduces or has the potential to reduce the effectiveness of ECs in place at the Site, verbal notice to the NYSDEC must be given by noon of the following day. In addition, an inspection of the Site will be conducted within 5 days of the event to verify the effectiveness of the IC/ECs implemented at the Site by a qualified environmental professional, as determined by the NYSDEC. Written confirmation must be provided to the NYSDEC within 7 days of the event that includes a summary of actions taken, or to be taken, and the potential impact to the environment and the public.

4.3 Post-Remediation Media Monitoring and Sampling

Samples shall be collected from the monitoring wells on a routine basis. Sampling locations, required analytical parameters and schedule are provided in Table 4.3-1 – Post-Remediation Sampling Requirements and Schedule below. Modification to the frequency or sampling requirements will require approval from the NYSDEC. Monitoring wells locations are shown n Figure 5.

Table 4.3-1 – Post Remediation Sampling Requirements and Schedule

Sampling Location	Analytical Parameters	a
1 0	TCL VOCs (EPA Method 8260)	Schedule
MW-1A	X	Annual
MW-2A	X	Annual
MW-3A	X	Annual
MW-5A	X	Annual
MW-10A	X	Annual

Sampling Location	Analytical Parameters	G 1 1 1
. 0	TCL VOCs (EPA Method 8260)	Schedule
BMW-13A	X	Annual
BMW-14A	X	Annual
BMW-15A	X	Annual
BMW-16A		
BMW-17A	X	Annual
BMW-18A	X	Annual
BMW-19A	X	Annual
BMW-11A	Contingency (1)	To Be Determined

Detailed sample collection and analytical procedures and protocols are provided below.

4.3.1 Groundwater Sampling

Groundwater monitoring will be performed annually or as directed by the Department to assess the performance of the remedy. Modification to the frequency or sampling requirements will require approval from the NYSDEC.

The network of monitoring wells has been installed to monitor upgradient, on-site and downgradient groundwater conditions at the Site. The network of on-site wells has been designed based on the following criteria:

Table 4.3.1-1 summarizes the wells identification number, as well as the location, depths, diameter and screened intervals of the wells. As part of the groundwater monitoring, five (5) upgradient wells, six (6) wells within the contaminant plume and two (2) downgradient wells are sampled to evaluate the effectiveness of the remedial system. Monitoring well construction logs are included in Appendix D.

Table 4.3.1-1 – Monitoring Well Construction Details

Monitoring Well ID	Hydraulic Position Relative to Plume Coordinates (longitude/ latitude)	Coordinates		Elevation (above assumed benchmark of 500')		
		(longitude/		Top of PVC Casing	Screen Top (below grade)	Screen Bottom (below grade)
MW-1A	Upgradient		1.25	497.17'	3	20
MW-2A	Within		1.25	497.85'	3	20
MW-3A	Within		1.25	499.38'	3	25
MW-5A	Upgradient		1.25	498.71'	3	20
MW-10A	Within		1.25	496.23'	3	20
BMW-13A	Within		2.0	497.57'	7	17
BMW-14A	Down- gradient		2.0	500.94'	4	14
BMW-15A	Within		2.0	500.63	5	18
BMW-16A	Cross- gradient		2.0	496.47	4	14
BMW-17A	Upgradient		2.0	498.68'	5	17
BMW-18A	Down- gradient		2.0	498.24'	4	14
BMW-19A	Within		2.0	496.47'	4	14
BMW-11A	Upgradient		2.0	TBD	3	17

If biofouling or silt accumulation occurs in the on-site monitoring wells, the wells will be physically agitated/surged and redeveloped. Routinely sampled monitoring wells will be properly decommissioned and if required, replaced, if an event renders the wells unusable.

Repairs and/or replacement of wells in the monitoring well network will be performed based on assessments of structural integrity and overall performance.

The NYSDEC will be notified prior to any repair or decommissioning of any monitoring well for the purpose of replacement, and the repair or decommissioning and replacement process will be documented in the subsequent Periodic Review Report. Well decommissioning without replacement will be done only with the prior approval of the NYSDEC. Well abandonment will be performed in accordance with NYSDEC's guidance entitled "CP-43: Groundwater Monitoring Well Decommissioning Procedures." Monitoring wells that are decommissioned because they have been rendered unusable will be replaced in kind in the nearest available location, unless otherwise approved by the NYSDEC.

The sampling frequency may only be modified with the approval of the NYSDEC. This SMP will be modified to reflect changes in sampling plans approved by the NYSDEC.

4.3.2 Soil Vapor Intrusion Sampling

An evaluation of the potential for soil vapor intrusion in future buildings developed at the site will be conducted, including a provision for implementing actions recommended to address exposures related to soil vapor intrusion. Modification to the frequency or sampling requirements will require approval from the NYSDEC and NYSDOH.

A network of on-site soil vapor intrusion sample locations will need to be identified and approved by NYSDEC before sampling. The sampling frequency may only be modified with the approval of the NYSDEC. This SMP will be modified to reflect changes in sampling plans approved by the NYSDEC.

Deliverables for the soil vapor intrusion sampling program are specified in Section 7.0 – Reporting Requirements.

4.3.3 Monitoring and Sampling Protocol

All sampling activities will be recorded in an Environmental Services Field Log and associated sampling log as provided in Appendix F - Site Management Forms. Other observations (e.g., groundwater monitoring well integrity, etc.) will be noted on the sampling log. The sampling log will serve as the inspection form for the monitoring network. Laboratory Data Deliverables for the groundwater monitoring program are specified in Section 7.0 – Reporting Requirements.

5.0 OPERATION AND MAINTENANCE PLAN

5.1 General

The Site remedy does not rely on any mechanical systems, such as groundwater treatment systems, sub-slab depressurization systems or air sparge/soil vapor extraction systems to protect public health and the environment. Therefore, the operation and maintenance of such components is not included in this SMP.

Vapor mitigation systems, such as a sub-slab depressurization system, will be required as part of construction of buildings on-site. When a sub-slab depressurization system is designed for installation, this section shall be amended to describe the operation and maintenance of vapor mitigation system components.

6.0 PERIODIC ASSESSMENTS/EVALUATIONS

6.1 Climate Change Vulnerability Assessment

Increases in both the severity and frequency of storms/weather events, an increase in sea level elevations along with accompanying flooding impacts, shifting precipitation patterns and wide temperature fluctuation, resulting from global climactic change and instability, have the potential to significantly impact the performance, effectiveness and protectiveness of a given Site and associated remedial systems. Vulnerability assessments provide information so that the Site and, as applicable, associated remedial systems are prepared for the impacts of the increasing frequency and intensity of severe storms/weather events and associated flooding.

This section provides a summary of vulnerability assessments that will be conducted for the Site during periodic assessments, and briefly summarizes the vulnerability of the Site and/or engineering controls to severe storms/weather events and associated flooding.

- Flood Plain: The Site is not located within FEMA designated flood plains.
- Site Drainage and Storm Water Management: Areas of the Site could be subject to flooding during severe rain events due to shallow groundwater conditions and inadequate storm water management systems. However, improved stormwater management systems will need to be evaluated as part of any Site redevelopment.
- High Wind: With the Site being generally open with minimum tree cover, and adjacent to Champlain Canal, high winds may be present at the Site. However, high wind should have little to no effect on the established existing site conditions.
- Electricity: There may be a potential negative effect on the engineering controls (if an active vapor mitigation system is installed within new buildings) due to power loss and/or dips/surges in voltage during severe weather events, including lightning strikes, and the associated impact on site equipment and operations.

• Spill/Contaminant Release: The Site will not be susceptible to a spill or other contaminant release due to storm-related damage caused by flooding, erosion, high winds, loss of power etc. as there is no storage of petroleum or chemical products at the Site relative to implementing the remedy.

6.2 Green Remediation Evaluation

NYSDEC's DER-31 Green Remediation requires that green remediation concepts and techniques be considered during all stages of the remedial program including Site management, with the goal of improving the sustainability of the cleanup and summarizing the net environmental benefit of any implemented green technology. This section of the SMP provides a summary of any green remediation evaluations to be completed for the Site during Site management, and as reported in the Periodic Review Report (PRR).

- Waste Generation: Operation and maintenance of the remedy should only generate minimal amounts of waste. This waste will be purged groundwater from the monitoring wells during annual sampling events. Wherever possible, and as pre-approved by NYSDEC, the purged groundwater will be allowed to infiltrate back into the ground surface near the well it was removed from.
 - If new Site development or repairs/maintenance of infrastructure occurs, there is the potential to generate excess soils that would require special handling and disposal if the soils exceed NYSDEC unrestricted soil cleanup objectives. If development or repairs are planned, they should consider techniques that minimize Site disturbance and generation of excess soils. If excess soils are generated, measures should be developed to re-use excess soils on Site, if practicable, in accordance with this SMP.
- Emissions: When implementing groundwater sampling with low flow sampling equipment, the power source should be portable batteries in lieu of a generator or running vehicle.

Methods proposed to reduce energy consumption, resource usage, waste generation, water usage, etc. should be included in the PRR.

6.2.1 <u>Timing of Green Remediation Evaluations</u>

Green remediation evaluations and corresponding modifications will be undertaken at any time that the Project Manager feels appropriate, e.g. during significant maintenance events or in conjunction with storm recovery activities. Modifications resulting from green remediation evaluations will be routinely implemented and scheduled to occur during planned/routine operation and maintenance activities. Reporting of these modifications will be presented in the PRR.

6.2.2 Frequency of Sampling and Other Periodic Activities

Transportation to and from the Site and use of consumables in relation to visiting the Site in order to collect samples and shipping samples to a laboratory for analyses have direct and/or inherent energy costs. The schedule and/or means of these periodic activities have been prepared so that these tasks can be accomplished in a manner that does not impact remedy protectiveness but reduces expenditure of energy or resources.

Wherever possible, consideration shall be given to:

- Reduced sampling frequencies;
- Reduced Site visits and system checks;
- Installation of remote sensing/operations and telemetry; and
- Coordination/consolidation of activities to maximize foreman/labor time.

6.2.3 Metrics and Reporting

As discussed in Section 7.0 and as shown in Appendix F – Site Management Forms, information on energy usage, solid waste generation, transportation and shipping, water usage and land use and ecosystems will be recorded to facilitate and document consistent implementation of green remediation during Site management and to identify corresponding benefits; a set of metrics has been developed.

7.0. REPORTING REQUIREMENTS

7.1 Site Management Reports

All Site management inspection, maintenance and monitoring events will be recorded on the appropriate Site management forms provided in Appendix F. These forms are subject to NYSDEC revision.

All applicable inspection forms and other records, including media sampling data and system maintenance reports, generated for the Site during the reporting period will be provided in electronic format to the NYSDEC in accordance with the requirements of Table 7.1-1 and summarized in the Periodic Review Report.

Table 7.1-1: Schedule of Interim Monitoring/Inspection Reports

Task/Report	Reporting Frequency*
Groundwater Monitoring Report	Annual, or as otherwise determined by the Department
Periodic Review Report	Annually, or as otherwise determined by the Department

^{*} The frequency of events will be conducted as specified until otherwise approved by the NYSDEC.

All interim monitoring/inspections reports will include, at a minimum:

- Date of event or reporting period;
- Name, company, and position of person(s) conducting monitoring/inspection activities;
- Description of the activities performed;

- Where appropriate, color photographs or sketches showing the approximate location of any problems or incidents noted (included either on the checklist/form or on an attached sheet);
- Type of samples collected (e.g., groundwater, sub-slab vapor, indoor air, outdoor air, etc);
- Copies of all field forms completed (e.g., well sampling logs, chain-of-custody documentation, etc.);
- Sampling results in comparison to appropriate standards/criteria;
- A figure illustrating sample type and sampling locations;
- Copies of all laboratory data sheets and the required laboratory data deliverables required for points sampled (to be submitted electronically in the NYSDEC-identified format);
- Observations, conclusions, or recommendations; and
- A determination as to whether contaminant conditions have changed since the last reporting event.

Routine maintenance event reporting forms will include, at a minimum:

- Date of event:
- Name, company, and position of person(s) conducting maintenance activities;
- Description of maintenance activities performed;
- Any modifications to the remedial system;
- Where appropriate, color photographs or sketches showing the approximate location of any problems or incidents noted (included either on the checklist/form or on an attached sheet); and,
- Other documentation such as copies of invoices for maintenance work, receipts for replacement equipment, etc., (attached to the checklist/form).

Non-routine maintenance event reporting forms will include, at a minimum:

• Date of event;

- Name, company, and position of person(s) conducting non-routine maintenance/repair activities;
- Description of non-routine maintenance activities performed;
- Where appropriate, color photographs or sketches showing the approximate location of any problems or incidents (included either on the form or on an attached sheet); and
- Other documentation such as copies of invoices for repair work, receipts for replacement equipment, etc. (attached to the checklist/form).

Laboratory data will be reported in digital format as determined by the NYSDEC. Currently, data is to be supplied electronically and submitted to the NYSDEC EQuISTM database in accordance with the requirements found at this link http://www.dec.ny.gov/chemical/62440.html.

7.2 Periodic Review Report

A Periodic Review Report (PRR) will be submitted to the Department beginning sixteen (16) months after the Certificate of Completion is issued. After submittal of the initial Periodic Review Report, the next PRR shall be submitted annually to the Department or at another frequency as may be required by the Department. In the event that the Site is subdivided into separate parcels with different ownership, a single Periodic Review Report will be prepared that addresses the Site described in Appendix A - Environmental Easement. The report will be prepared in accordance with NYSDEC's DER-10 and submitted within 30 days of the end of each certification period. Media sampling results will also be incorporated into the Periodic Review Report. The report will include:

• Identification, assessment and certification of all ECs/ICs required by the remedy for the Site.

- Results of the required annual Site inspections and severe condition inspections, if applicable.
- All applicable Site management forms and other records generated for the Site during the reporting period in the NYSDEC-approved electronic format, if not previously submitted.
- A summary of any discharge monitoring data and/or information generated during the reporting period, with comments and conclusions.
- Data summary tables and graphical representations of contaminants of concern by media (groundwater, soil vapor, etc.), which include a listing of compounds analyzed, along with the applicable standards, with exceedances highlighted. These will include a presentation of past data as part of an evaluation of contaminant concentration trends.
- Results of all analyses, copies of all laboratory data sheets, and the required laboratory data deliverables for all samples collected during the reporting period will be submitted in digital format as determined by the NYSDEC. Currently, data is supplied electronically and submitted to the NYSDEC EQuISTM database in accordance with the requirements found at this link: http://www.dec.ny.gov/chemical/62440.html.
- A Site evaluation, which includes the following:
 - The compliance of the remedy with the requirements of the Site-specific Decision Document;
 - Any new conclusions or observations regarding Site contamination based on inspections or data generated by the Monitoring and Sampling Plan for the media being monitored;
 - Recommendations regarding any necessary changes to the remedy and/or Monitoring and Sampling Plan;
 - Trends in contaminant levels in the affected media will be evaluated to determine if the remedy continues to be effective in achieving remedial goals as specified by the Decision Document; and
 - The overall performance and effectiveness of the remedy.

7.2.1 <u>Certification of Institutional and Engineering Controls</u>

Following the last inspection of the reporting period, a Professional Engineer licensed to practice in New York State will prepare, and include in the Periodic Review Report, the following certification as per the requirements of NYSDEC DER-10:

"For each institutional or engineering control identified for the Site, I certify that all of the following statements are true:

- The inspection of the Site to confirm the effectiveness of the institutional and engineering controls required by the remedial program was performed under my direction;
- The institutional control and/or engineering control employed at this Site is unchanged from the date the control was put in place, or last approved by the Department;
- Nothing has occurred that would impair the ability of the control to protect the public health and environment;
- Nothing has occurred that would constitute a violation or failure to comply with any Site management plan for this control;
- Access to the Site will continue to be provided to the Department to evaluate the remedy, including access to evaluate the continued maintenance of this control;
- The engineering control systems are performing as designed and are effective;
- To the best of my knowledge and belief, the work and conclusions described in this certification are in accordance with the requirements of the Site remedial program and generally accepted engineering practices; and
- *The information presented in this report is accurate and complete.*

I certify that all information and statements in this certification form are true. I understand that a false statement made herein is punishable as a Class "A"

misdemeanor, pursuant to Section 210.45 of the Penal Law. I, [name], of [business address], am certifying as [Owner/Remedial Party] for the Site."

If the Department determines that the Site does not represent a significant threat to public health or the environment, but contaminants in groundwater exceed drinking water standards, the following should also be included for IC/EC scenarios listed above:

• No new information has come to my attention, including groundwater monitoring data from wells located at the Site boundary, if any, to indicate that the assumptions made in the qualitative exposure assessment of off-site contamination are no longer valid; and

Every five years the following certification will be added:

• The assumptions made in the qualitative exposure assessment remain valid.

The signed certification will be included in the Periodic Review Report. The Periodic Review Report will be submitted, in electronic format, to the NYSDEC Central Office, Regional Office in which the Site is located and the NYSDOH Bureau of Environmental Exposure Investigation. The Periodic Review Report may need to be submitted in hard-copy format, as requested by the NYSDEC project manager.

7.3 Corrective Measures Work Plan

If any component of the remedy is found to have failed, or if the periodic certification cannot be provided due to the failure of an institutional or engineering control, a Corrective Measures Work Plan will be submitted to the NYSDEC for approval. This plan will explain the failure and provide the details and schedule for performing work necessary to correct the failure. Unless an emergency condition exists, no work will be performed pursuant to the Corrective Measures Work Plan until it has been approved by the NYSDEC.

8.0 REFERENCES

6 NYCRR Part 375, Environmental Remediation Programs. December 14, 2006.

NYSDEC DER-10 – "Technical Guidance for Site Investigation and Remediation". May 3, 2010.

NYSDEC, 1998. Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations Division of Water Technical and Operational Guidance Series (TOGS) 1.1.1. June 1998 (April 2000 addendum).

Remedial Action Work Plan, Old Champlain Mill, prepared by C.T. Male Associates. November, 2017

Phase II Environmental Site Assessment, Old Champlain Mill, prepared by C.T. Male Associates, P.C. December 22, 2006.

Supplemental Phase II Environmental Site Assessment, Old Champlain Mill, prepared by C.T. Male Associates, P.C. August 6, 2007.

Remedial Investigation Report, prepared by C.T. Male Associates, P.C. August 2011.

Decision Document, prepared by NYSDEC. November 2017.

APPENDIX A ENVIRONMENTAL EASEMENT

APPENDIX E – EXCAVATION WORK PLAN (EWP)

E-1 NOTIFICATION

At least 15 days prior to the start of any activity that is anticipated to encounter remaining contamination, the Site owner or their representative will notify the NYSDEC. Table B-1.1 includes contact information for the above notification. The information on this table will be updated as necessary to provide accurate contact information. A full listing of Site-related contact information is provided in Table 1.3-2 of the SMP.

Table B-1.1: Notifications*

NYSDEC Project Manager:	Telephone: (518) 897. 1254
Michael McLean	Email: mike.mclean@dec.ny.gov
NYSDEC Regional Engineer: Russell Huyck	Telephone: (518) 897-1257 Email: russel.huyck@dec.ny.gov
NYSDEC Site Control	Telephone: (518) 402.9706 Email: derweb@dec.ny.gov

^{*} Note: Notifications are subject to change and will be updated as necessary.

This notification will include:

- A detailed description of the work to be performed, including the location and areal extent of excavation, plans/drawings for site re-grading, intrusive elements or utilities to be installed deeper than 12 inches below grade, estimated volumes of contaminated soil to be excavated and any work that may impact an engineering control;
- A summary of environmental conditions anticipated to be encountered in the work areas, including the nature and concentration levels of contaminants of

concern, potential presence of grossly contaminated media, and plans for any pre-construction sampling;

- A schedule for the work, detailing the start and completion of all intrusive work;
- A summary of the applicable components of this EWP;
- A statement that the work will be performed in compliance with this EWP and 29 CFR 1910.120;
- A copy of the contractor's health and safety plan (HASP), in electronic format:
- Identification of disposal facilities for potential waste streams; and
- Identification of sources of any anticipated backfill, along with all required chemical testing results.

E-2 SOIL SCREENING METHODS

Visual, olfactory and instrument-based (e.g. photo-ionization detector) soil screening will be performed by a qualified environmental professional during all excavations into known or potentially contaminated material (remaining contamination). Soil screening will be performed when invasive work is done and will include all excavation and invasive work performed during development, such as excavations for foundations and utility work, after issuance of the COC.

Soils will be segregated based on previous environmental data and screening results into material that requires off-site disposal and material that requires testing to determine if the material can be reused on-site as soil deeper than 12 inches below grade or if the material can be used less than 12 inches below grade. Further discussion of off-site disposal of materials and on-site reuse is provided in Section E-6 and E-7, respectively, of this Appendix.

E-3 SOIL STAGING METHODS

Soil stockpiles will be continuously encircled with a berm and/or silt fence unless other erosion controls are in-place to prevent a release of sediment during a storm event. Hay bales or other acceptable erosion and sediment control devices/methods will be used as needed near catch basins, surface waters and other discharge points, all in accordance with applicable stormwater regulations.

Stockpiles when not handled for more than seven (7) days will be kept covered at all times with appropriately anchored tarps. Stockpiles will be routinely inspected and damaged tarp covers will be promptly replaced.

Stockpiles will be inspected at a minimum once each week and after every storm event. Results of inspections will be recorded in a logbook and maintained at the site and available for inspection by the NYSDEC.

E-4 MATERIALS EXCAVATION AND LOAD-OUT

A qualified environmental professional or person under their supervision will oversee invasive work, and the excavation and load-out of all excavated material. The owner of the property and remedial party (if applicable), and its contractors are responsible for safe execution of invasive and other work performed under this Plan.

The presence of utilities and easements on the site will be investigated by the qualified environmental professional. It will be determined whether a risk or impediment to the planned work under this SMP is posed by utilities or easements on the Site.

Loaded vehicles leaving the site will be appropriately lined, tarped, securely covered, manifested, and placarded in accordance with appropriate Federal, State, local, and NYSDOT requirements (and all other applicable transportation requirements).

A truck wash or other sediment removing devices/methods will be operated onsite, as appropriate, to satisfy the requirements of the SPDES General Permit, when applicable. The Owner or designated qualified environmental professional will be responsible for ensuring that all outbound trucks do not track Site soils off-site. Truck wash waters (and sediments) will be collected and disposed of off-site in an appropriate manner.

The qualified environmental professional will be responsible for ensuring that all egress points for truck and equipment transport from the Site are clean of dirt and other materials derived from the site during intrusive excavation activities. Cleaning of the adjacent streets will be performed as needed to maintain a clean condition with respect to Site-derived materials.

E-5 MATERIALS TRANSPORT OFF-SITE

Transport of materials will be performed by licensed haulers in accordance with appropriate local, State, and Federal regulations, including 6 NYCRR Part 364. Haulers will be appropriately licensed and trucks properly placarded.

Material transported by trucks exiting the Site will be secured with tight-fitting covers. Loose-fitting canvas-type truck covers will be prohibited. If loads contain wet material capable of producing free liquid, truck liners will be used.

Truck transport routes are to be considered prior to major Site renovation or further development. Appropriate truck routes take into account: (a) limiting transport through residential areas and past sensitive sites; (b) use of city mapped truck routes; (c) prohibiting off-site queuing of trucks entering the facility; (d) limiting total distance to major highways; (e) promoting safety in access to highways; and (f) overall safety in transport.

Trucks will be prohibited from stopping and idling in the neighborhood outside the project Site. Egress points for truck and equipment transport from the site will be kept clean of dirt and other materials during Site remediation and development. Queuing of trucks will be performed on-site in order to minimize off-site disturbance. Off-site queuing will be prohibited.

E-6 MATERIALS DISPOSAL OFF-SITE

Soil/fill excavated and removed from the Site will initially be treated as contaminated and regulated material and will be transported and disposed in accordance with all local, State (including 6 NYCRR Part 360) and Federal regulations. However, if disposal of material from this Site is proposed for unregulated off-site disposal (i.e. clean soil removed for development purposes), a formal request with an associated sampling plan will be made to the NYSDEC. Unregulated off-site management of materials from this Site will not occur without formal NYSDEC approval.

Off-site disposal locations for excavated soils will be identified in the preexcavation notification. This will include estimated quantities and a breakdown by class of disposal facility if appropriate, e.g. hazardous waste disposal facility, solid waste landfill, petroleum treatment facility, C/D recycling facility, etc. Actual disposal quantities and associated documentation will be reported to the NYSDEC in the Periodic Review Report. This documentation will include: waste profiles, test results, facility acceptance letters, manifests, bills of lading and facility receipts.

Non-hazardous historic fill and contaminated soils taken off-site will be handled, at minimum, as a Municipal Solid Waste per 6 NYCRR Part 360-1.2. Material that does not meet Unrestricted SCOs is prohibited from being taken to a New York State recycling facility (6 NYCRR Part 360-16 Registration Facility).

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E-7 MATERIALS REUSE ON-SITE

Chemical criteria for on-Site reuse of material have been approved by NYSDEC and are listed in NYSDEC DER-10 and 6 NYCRR Part 375. The qualified environmental professional will ensure that procedures defined for materials reuse in this SMP are followed and that unacceptable material does not remain on-site. Additional criteria for soil reuse are as follows:

- Contaminated on-site material, including historic fill and contaminated soil, that is acceptable for reuse on-site will be placed below 12 inches below grade) or impervious surface (e.g., concrete or asphalt), and will not be reused within a cover soil layer, within landscaping berms, or as backfill for subsurface utility lines.
- Soils below the 12 inches below grade must be returned to a similar elevation in the same location or other subgrade location on-Site and analytical testing will not be required. If not returned in this manner, soils shall be properly handled, transported and disposed off-site in accordance with applicable regulations. Prior to being transported from the Site, excess soils must be characterized in accordance with the permit requirements of the selected disposal facility permitted and approved by the appropriate regulatory agency(s) to accept the material.
- Grossly contaminated soils must be treated as a regulated material (e.g., characterized, transported, and disposed of off-Site at a permitted disposal facility).

Any demolition material proposed for reuse on-site will be sampled for asbestos and the results will be reported to the NYSDEC for acceptance. Concrete crushing or processing on-site will not be performed without prior NYSDEC approval. Organic

matter (wood, roots, stumps, etc.) or other solid waste derived from clearing and grubbing of the Site will not be reused on-site.

E-8 FLUIDS MANAGEMENT

All liquids to be removed from the Site, including but not limited to, excavation dewatering, decontamination waters and groundwater monitoring well purge and development waters, will be handled, transported and disposed in accordance with applicable local, State, and Federal regulations. Dewatering, purge and development fluids will not be recharged back to the land surface or subsurface of the site, and will be managed off-site, unless prior approval is obtained from NYSDEC.

Discharge of water generated during large-scale construction activities to surface waters (i.e. a local pond, stream or river) will be performed under a SPDES permit.

E-9 SITE RESTORATION

After any invasive activities beyond 12 inches below grade, the upper 12 inches shall be restored in a manner that complies with the decision document. The upper 12 inches shall be comprised of a minimum of 12 inches of existing soil originating from less than 12 inches below grade, asphalt pavement, or concrete building. A figure showing the type of surface material will be included in the Periodic Review Report.

E-10 BACKFILL FROM OFF-SITE SOURCES

Materials proposed for import onto the Site will be approved by the qualified environmental professional and will be in compliance with provisions in this SMP prior to receipt at the Site. A Request to Import/Reuse Fill or Soil form, which can be found at http://www.dec.ny.gov/regulations/67386.html, will be prepared and submitted to the NYSDEC project manager allowing a minimum of five (5) business days for review.

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The source of the imported backfill will need to be documented. Material from industrial sites, spill sites, or other environmental remediation sites or potentially contaminated sites will not be imported to the site.

Imported soils will meet the backfill and cover soil quality standards established in 6 NYCRR 375-6.7(d). Based on an evaluation of the land use, protection of groundwater and protection of ecological resources criteria, the resulting soil quality standards are listed in Appendix 5 of NYSDEC DER-10. Soils that meet 'exempt' fill requirements under 6 NYCRR Part 360, but do not meet backfill or cover soil objectives for this Site, will not be imported onto the site without prior approval by NYSDEC. Solid waste will not be imported onto the Site.

Imported backfill shall be documented clean by analytical testing. Imported backfill will be analyzed according to the following schedule:

Recommended Number of Soil Samples for Soil Imported to the Site				
Contaminant	Volatile Organic Compounds	Semi-volatile Organic Compounds, Inorganics & PCBs/Pesticides		
Imported Backfill Quantity in Cubic Yards	Discrete Samples	Composite Samples	Discrete Samples/Composites	
0 – 50	1	1	3-5 Discrete samples	
51 – 100	2	1	from different	
101 – 200	3	1	locations in the fill	
201 – 300	4	1	being provided will	
301 – 400	4	2	compromise a	
401 – 500	5	2	composite sample	
501 – 800	6	2	for analysis	
801 – 1,000	7	2		
> 1,000		o volatile organic comp mple for each additiona	-	

E-11 STORMWATER POLLUTION PREVENTION

Prior to implementing any Site disturbance greater than one (1) acre, a Stormwater Pollution Prevention Plan (SWPPP) will be prepared in accordance with the regulations for erosion and sediment controls and water quantity/quality controls. This will provide guidance to the contractor doing the construction activities. With the preparation of the SWPPP comes a requirement for submitting a Notice of Intent (NOI) to the NYSDEC upon completion of the SWPPP to document the project exists and gain permit coverage. The NOI will be completed with direction and input from the Site owner and/or remedial party. In addition to the SWPPP, Erosion and Sediment Control

(ESC) plans will be designed and prepared as applicable for implementing the construction activity in accordance with the current stormwater regulations.

When the larger than one acre of disturbance construction project is complete and has met the requirements of the construction permit, a Notice of Termination (NOT) form shall be completed and submitted to the Department.

For implementing construction activities with disturbance with less than one (1) acre, erosion and sediment controls (i.e., silt fencing, hay bales, etc.) will be installed around the down gradient perimeter of the work areas and around temporary stockpiles of excavated soil and imported backfill. Erosion and sediment controls will be observed once a week and corrective actions shall begin within one business day of contractor notification of deficiencies. Deficiencies include removal of accumulated sediments against silt fence, undercutting or erosion of the silt fence, and uncontrolled discharge off-site of turbid water. Corrective action shall be completed within a reasonable time frame. Results of inspections will be recorded in a logbook and maintained at the Site at the construction trailer or at the Owner's office and available for review by NYSDEC.

E-12 EXCAVATION CONTINGENCY PLAN

If underground tanks or other previously unidentified contaminant sources are found during post-remedial subsurface excavations, development related construction, or if the subsurface is otherwise made accessible, excavation activities will be suspended until NYSDEC is notified and properly trained personnel and sufficient equipment is mobilized to investigate as necessary, and address the condition.

Sampling will be performed on product, sediment and surrounding soils, etc. as necessary to determine the nature of the material and proper disposal method. Chemical analysis will be performed for a full list of analytes (TAL metals; TCL volatiles and semi-volatiles, TCL pesticides and PCBs), unless the site history and previous sampling

results provide a sufficient justification to limit the list of analytes. In this case, a reduced list of analytes will be proposed to the NYSDEC for approval prior to sampling.

Identification of unknown or unexpected contaminated media identified by screening during invasive site work will be promptly communicated by phone to NYSDEC's Project Manager. Reportable quantities of petroleum product will also be reported to the NYSDEC spills hotline within two (2) hours of discovery. These findings will be also included in the Periodic Review Report.

E-13 COMMUNITY AIR MONITORING PLAN

The NYSDEC shall be notified before any Site disturbance is to occur. If existing soils are expected to be disturbed, the NYSDEC may require a Community Air Monitoring Plan (CAMP) to be prepared and submitted to the NYSDEC for approval prior to any planned Site disturbance. If required, the CAMP will be followed for any ground intrusive work in general accordance with the New York State Department of Health Generic CAMP dated May 2010, which is included as Appendix G of this SMP.

Monitoring for particulate dust, when handling existing Site soils, will be conducted based on generally prevailing wind conditions. These locations will be adjusted on a daily or more frequent basis based on actual wind directions to provide upwind and downwind monitoring stations. There are no sensitive receptors, such as a school, day care or residential area adjacent to the Site, so fixed monitoring stations located at that Site perimeter are not required.

All readings must be recorded and be available for State (NYSDEC and NYSDOH) personnel to review. Exceedances of action levels listed in the CAMP will be reported to NYSDEC and NYSDOH Project Managers.

E-14 ODOR CONTROL PLAN

Nuisance odors were not encountered during the completion of the remedial investigation, nor do existing soils emit nuisance odors. Therefore, an odor control plan is not expected to be needed for future excavation at the Site. If nuisance odors are observed during future Site excavation work (e.g. Site development), actions should be implemented to mitigate off-site impacts from odors.

If needed, this odor control plan should be capable of controlling emissions of nuisance odors off-site and as necessary on-site during site disturbance. Specific odor control methods to be used on a routine basis could include: (a) limiting the area of open excavations and size of soil stockpiles; (b) shrouding open excavations with tarps and other covers; and (c) using foams to cover exposed odorous soils. If odors develop and cannot be otherwise controlled, additional means to eliminate odor nuisances will include: (d) direct load-out of soils to trucks for off-site disposal; (e) use of chemical odorants in spray or misting systems; and, (f) use of staff to monitor odors in surrounding neighborhoods.

If nuisance odors are identified at the Site boundary, or if odor complaints are received, work will be halted and the source of odors will be identified and corrected. Work will not resume until all nuisance odors have been abated. NYSDEC and NYSDOH will be notified of all odor events and of any other complaints about the project. Implementation of all odor controls, including the halt of work, is the responsibility of the remedial party's Professional Engineer, and any measures that are implemented will be discussed in the Periodic Review Report.

If nuisance odors develop during intrusive work that cannot be corrected, or where the control of nuisance odors cannot otherwise be achieved due to on-site conditions or close proximity to sensitive receptors, odor control will be achieved by sheltering the excavation and handling areas in a temporary containment structure equipped with appropriate air venting/filtering systems.

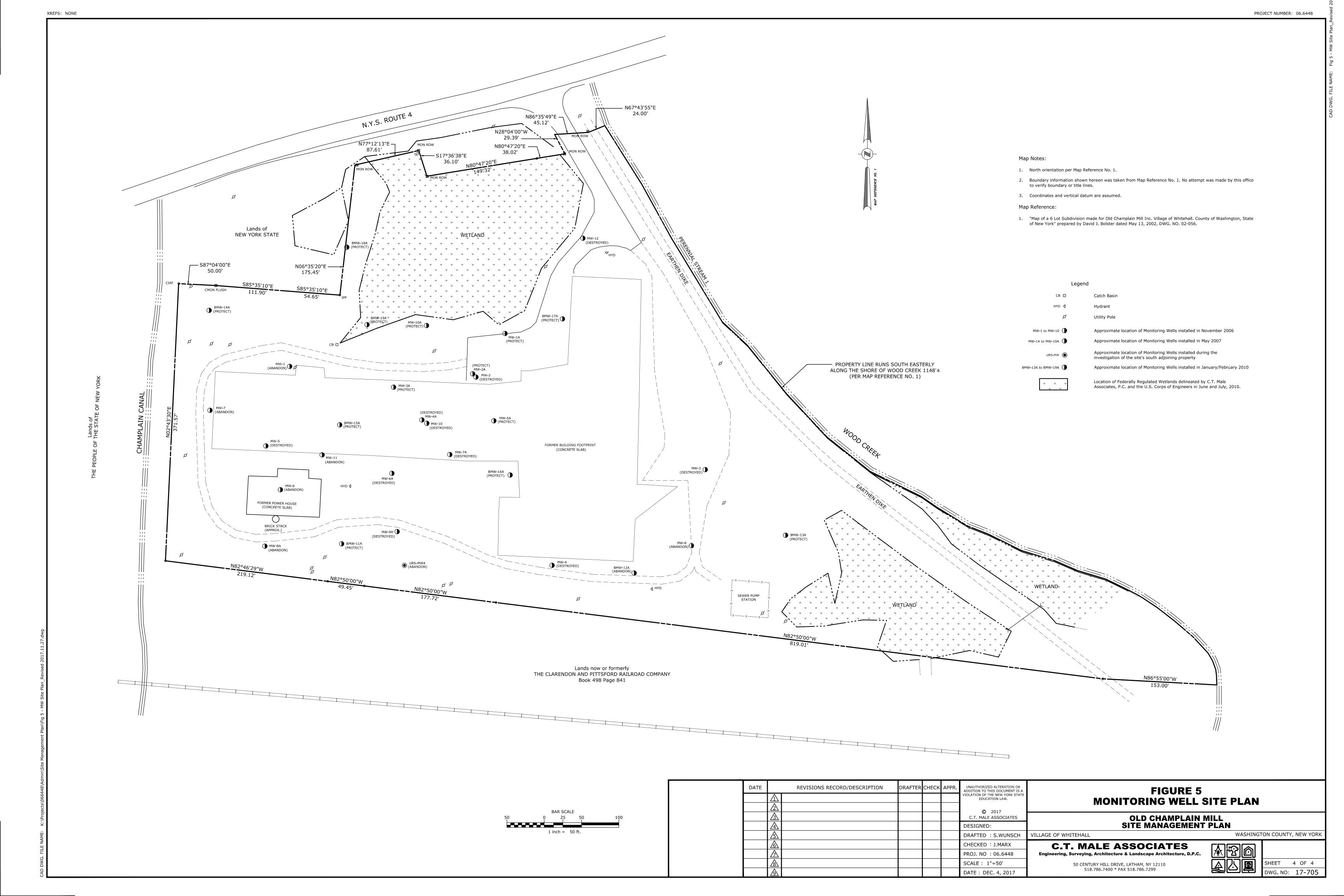
E-15 DUST CONTROL PLAN

A dust suppression plan that addresses dust management during invasive on-site work will include, at a minimum, the items listed below:

- Dust suppression will be achieved though the use of a dedicated on-site water truck for road wetting. The truck will be equipped with a water cannon capable of spraying water directly onto off-road areas including excavations and stockpiles.
- Clearing and grubbing of larger sites will be done in stages to limit the area of exposed, unvegetated soils vulnerable to dust production.
- Gravel will be used on roadways to provide a clean and dust-free road surface.
- On-site roads will be limited in total area to minimize the area required for water truck sprinkling.

DWG. NO: 17-705

DATE: DEC. 4, 2017



APPENDIX A ENVIRONMENTAL EASEMENT

Official Receipt for Recording in:

Washington County Clerk 383 Broadway Building A Fort Edward, New York 12828

Issued To:

BOWITCH AND COFFEY
17 ELK STREET
ALBANY NY 12207

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Thank You STEPHANIE LEMERY - County Clerk

By - Stephanie Lemery

Receipt# Date Time 0397141 08/18/2017 12:00p

Washington County Stephanie Lemery County Clerk 383 Broadway Building A Fort Edward, New York 12828

Doc#: 00114807 8k: 3828 Pa: 185



Volm-3828 Pg-185

Instrument Number: 2017-00114807

As

Recorded On: August 18, 2017

Easement

Parties: POULTNEY STREET PARTNERS LLC

PEOPLE OF THE STATE OF NEW YORK

Billable Pages:

11

Num Of Pages:

12

Recorded By: BOWITCH AND COFFEY Comment:

** Examined and Charged as Follows: **

Easement

Tax-Transfer

95.00

Cover Page

5.00

TP584 Affidavit

5.00

Recording Charge:

105.00

Consideration

Amount RS#/CS#

0.00 RS 176

Basic 0.00

WHITEHALL

0.00

Local Additional 0.00 Special Additional 0.00 Transfer

0.00 0.00

Tax Charge:

0.00

Amount

Received County Clerks Office Aus 18:2017 11:41A Washington County Stephanie Lemery

** THIS PAGE IS PART OF THE INSTRUMENT **

I hereby certify that the within and foregoing was recorded in the Clerk's Office For: Washington County, NY

File Information:

Record and Return To:

Document Number: 2017-00114807

BOWITCH AND COFFEY

Receipt Number: 397141

17 ELK STREET

Recorded Date/Time: August 18, 2017 11:41:22A

ALBANY NY 12207

Book-Vol/Pg: Bk-R VI-3828 Pg-185

Cashier / Station: S Lemery / Cashier Station 3

WASHINGTON COUNTY

Stephanie C. Lemery Washington County Clerk

Stephanie C Lemen

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ENVIRONMENTAL EASEMENT GRANTED PURSUANT TO ARTICLE 71, TITLE 36 OF THE NEW YORK STATE ENVIRONMENTAL CONSERVATION LAW

THIS INDENTURE made this 3^{eD} day of 4cos7, 2017, between Owner(s) Poultney Street Partners, LLC, having an office at c/o Donnelly Industries Inc., 557 Route 23 South, Wayne, New Jersey 07470, County of Passaic, State of New Jersey (the "Grantor"), and The People of the State of New York (the "Grantee."), acting through their Commissioner of the Department of Environmental Conservation (the "Commissioner", or "NYSDEC" or "Department" as the context requires) with its headquarters located at 625 Broadway, Albany, New York 12233,

WHEREAS, the Legislature of the State of New York has declared that it is in the public interest to encourage the remediation of abandoned and likely contaminated properties ("sites") that threaten the health and vitality of the communities they burden while at the same time ensuring the protection of public health and the environment; and

WHEREAS, the Legislature of the State of New York has declared that it is in the public interest to establish within the Department a statutory environmental remediation program that includes the use of Environmental Easements as an enforceable means of ensuring the performance of operation, maintenance, and/or monitoring requirements and the restriction of future uses of the land, when an environmental remediation project leaves residual contamination at levels that have been determined to be safe for a specific use, but not all uses, or which includes engineered structures that must be maintained or protected against damage to perform properly and be effective, or which requires groundwater use or soil management restrictions; and

WHEREAS, the Legislature of the State of New York has declared that Environmental Easement shall mean an interest in real property, created under and subject to the provisions of Article 71, Title 36 of the New York State Environmental Conservation Law ("ECL") which contains a use restriction and/or a prohibition on the use of land in a manner inconsistent with engineering controls which are intended to ensure the long term effectiveness of a site remedial program or eliminate potential exposure pathways to hazardous waste or petroleum; and

WHEREAS, Grantor, is the owner of real property located at the address of 16-50 Poultney Street in the Village of Whitehall, County of Washington and State of New York, known and designated on the tax map of the County Clerk of Washington as tax map parcel numbers: Section 60.6 Block 1 Lot 5, being the same as that property conveyed to Grantor by deed dated March 15, 2007 and recorded in the Washington County Clerk's Office in Liber and Page 2344/69. The property subject to this Environmental Easement (the "Controlled Property") comprises approximately 11.74 +/- acres, and is hereinafter more fully described in the Land Title Survey dated July 10, 2017 prepared by William J. Nettleton, L.L.S. of C.T. Male Associates, which will be attached to the Site Management Plan. The Controlled Property description is set forth in and attached hereto as Schedule A; and

WHEREAS, the Department accepts this Environmental Easement in order to ensure the protection of public health and the environment and to achieve the requirements for remediation

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established for the Controlled Property until such time as this Environmental Easement is extinguished pursuant to ECL Article 71, Title 36; and

NOW THEREFORE, in consideration of the mutual covenants contained herein and the terms and conditions of Brownfield Cleanup Agreement Index Number: A5-0608-0708, Grantor conveys to Grantee a permanent Environmental Easement pursuant to ECL Article 71, Title 36 in, on, over, under, and upon the Controlled Property as more fully described herein ("Environmental Easement").

- 1. <u>Purposes</u>. Grantor and Grantee acknowledge that the Purposes of this Environmental Easement are: to convey to Grantee real property rights and interests that will run with the land in perpetuity in order to provide an effective and enforceable means of encouraging the reuse and redevelopment of this Controlled Property at a level that has been determined to be safe for a specific use while ensuring the performance of operation, maintenance, and/or monitoring requirements; and to ensure the restriction of future uses of the land that are inconsistent with the above-stated purpose.
- 2. <u>Institutional and Engineering Controls</u>. The controls and requirements listed in the Department approved Site Management Plan ("SMP") including any and all Department approved amendments to the SMP are incorporated into and made part of this Environmental Easement. These controls and requirements apply to the use of the Controlled Property, run with the land, are binding on the Grantor and the Grantor's successors and assigns, and are enforceable in law or equity against any owner of the Controlled Property, any lessees and any person using the Controlled Property.
 - A. (1) The Controlled Property may be used for:

Commercial as described in 6 NYCRR Part 375-1.8(g)(2)(iii) and Industrial as described in 6 NYCRR Part 375-1.8(g)(2)(iv)

- (2) All Engineering Controls must be operated and maintained as specified in the Site Management Plan (SMP);
- (3) All Engineering Controls must be inspected at a frequency and in a manner defined in the SMP;
- (4) The use of groundwater underlying the property is prohibited without necessary water quality treatment as determined by the NYSDOH or the Washington County Department of Health to render it safe for use as drinking water or for industrial purposes, and the user must first notify and obtain written approval to do so from the Department;
- (5) Groundwater and other environmental or public health monitoring must be performed as defined in the SMP;
- (6) Data and information pertinent to Site Management of the Controlled Property must be reported at the frequency and in a manner defined in the SMP;
 - (7) All future activities on the property that will disturb remaining

contaminated material must be conducted in accordance with the SMP;

- (8) Monitoring to assess the performance and effectiveness of the remedy must be performed as defined in the SMP;
- (9) Operation, maintenance, monitoring, inspection, and reporting of any mechanical or physical components of the remedy shall be performed as defined in the SMP;
- (10) Access to the site must be provided to agents, employees or other representatives of the State of New York with reasonable prior notice to the property owner to assure compliance with the restrictions identified by this Environmental Easement.
- B. The Controlled Property shall not be used for Residential or Restricted Residential purposes as defined in 6NYCRR 375-1.8(g)(2)(i) and (ii), and the above-stated engineering controls may not be discontinued without an amendment or extinguishment of this Environmental Easement.
- C. The SMP describes obligations that the Grantor assumes on behalf of Grantor, its successors and assigns. The Grantor's assumption of the obligations contained in the SMP which may include sampling, monitoring, and/or operating a treatment system, and providing certified reports to the NYSDEC, is and remains a fundamental element of the Department's determination that the Controlled Property is safe for a specific use, but not all uses. The SMP may be modified in accordance with the Department's statutory and regulatory authority. The Grantor and all successors and assigns, assume the burden of complying with the SMP and obtaining an up-to-date version of the SMP from:

Site Control Section Division of Environmental Remediation NYSDEC 625 Broadway Albany, New York 12233 Phone: (518) 402-9553

- D. Grantor must provide all persons who acquire any interest in the Controlled Property a true and complete copy of the SMP that the Department approves for the Controlled Property and all Department-approved amendments to that SMP.
- E. Grantor covenants and agrees that until such time as the Environmental Easement is extinguished in accordance with the requirements of ECL Article 71, Title 36 of the ECL, the property deed and all subsequent instruments of conveyance relating to the Controlled Property shall state in at least fifteen-point bold-faced type:

This property is subject to an Environmental Easement held by the New York State Department of Environmental Conservation

pursuant to Title 36 of Article 71 of the Environmental Conservation Law.

- F. Grantor covenants and agrees that this Environmental Easement shall be incorporated in full or by reference in any leases, licenses, or other instruments granting a right to use the Controlled Property.
- G. Grantor covenants and agrees that it shall, at such time as NYSDEC may require, submit to NYSDEC a written statement by an expert the NYSDEC may find acceptable certifying under penalty of perjury, in such form and manner as the Department may require, that:
- (1) the inspection of the site to confirm the effectiveness of the institutional and engineering controls required by the remedial program was performed under the direction of the individual set forth at 6 NYCRR Part 375-1.8(h)(3).
 - (2) the institutional controls and/or engineering controls employed at such site:
 - (i) are in-place;
- (ii) are unchanged from the previous certification, or that any identified changes to the controls employed were approved by the NYSDEC and that all controls are in the Department-approved format; and
- (iii) that nothing has occurred that would impair the ability of such control to protect the public health and environment;
- (3) the owner will continue to allow access to such real property to evaluate the continued maintenance of such controls;
- (4) nothing has occurred that would constitute a violation or failure to comply with any site management plan for such controls;
- (5) the report and all attachments were prepared under the direction of, and reviewed by, the party making the certification;
- (6) to the best of his/her knowledge and belief, the work and conclusions described in this certification are in accordance with the requirements of the site remedial program, and generally accepted engineering practices; and
 - (7) the information presented is accurate and complete.
- 3. <u>Right to Enter and Inspect</u>. Grantee, its agents, employees, or other representatives of the State may enter and inspect the Controlled Property in a reasonable manner and at reasonable times to assure compliance with the above-stated restrictions.
- 4. <u>Reserved Grantor's Rights</u>. Grantor reserves for itself, its assigns, representatives, and successors in interest with respect to the Property, all rights as fee owner of the Property, including:
- A. Use of the Controlled Property for all purposes not inconsistent with, or limited by the terms of this Environmental Easement;
- B. The right to give, sell, assign, or otherwise transfer part or all of the underlying fee interest to the Controlled Property, subject and subordinate to this Environmental Easement;

County: Washington Site No: C558036 Brownfield Cleanup Agreement Index: A5-0608-0708

Doc## 00114807

5. Enforcement

A. This Environmental Easement is enforceable in law or equity in perpetuity by Grantor, Grantee, or any affected local government, as defined in ECL Section 71-3603, against the owner of the Property, any lessees, and any person using the land. Enforcement shall not be defeated because of any subsequent adverse possession, laches, estoppel, or waiver. It is not a defense in any action to enforce this Environmental Easement that: it is not appurtenant to an interest in real property; it is not of a character that has been recognized traditionally at common law; it imposes a negative burden; it imposes affirmative obligations upon the owner of any interest in the burdened property; the benefit does not touch or concern real property; there is no privity of estate or of contract; or it imposes an unreasonable restraint on alienation.

- B. If any person violates this Environmental Easement, the Grantee may revoke the Certificate of Completion with respect to the Controlled Property.
- C. Grantee shall notify Grantor of a breach or suspected breach of any of the terms of this Environmental Easement. Such notice shall set forth how Grantor can cure such breach or suspected breach and give Grantor a reasonable amount of time from the date of receipt of notice in which to cure. At the expiration of such period of time to cure, or any extensions granted by Grantee, the Grantee shall notify Grantor of any failure to adequately cure the breach or suspected breach, and Grantee may take any other appropriate action reasonably necessary to remedy any breach of this Environmental Easement, including the commencement of any proceedings in accordance with applicable law.
- D. The failure of Grantee to enforce any of the terms contained herein shall not be deemed a waiver of any such term nor bar any enforcement rights.
- 6. <u>Notice</u>. Whenever notice to the Grantee (other than the annual certification) or approval from the Grantee is required, the Party providing such notice or seeking such approval shall identify the Controlled Property by referencing the following information:

County, NYSDEC Site Number, NYSDEC Brownfield Cleanup Agreement, State Assistance Contract or Order Number, and the County tax map number or the Liber and Page or computerized system identification number.

Parties shall address correspondence to:

Site Number: C558036

Office of General Counsel

NYSDEC 625 Broadway

Albany New York 12233-5500

With a copy to:

Site Control Section

Division of Environmental Remediation

NYSDEC 625 Broadway Albany, NY 12233

All notices and correspondence shall be delivered by hand, by registered mail or by Certified mail and return receipt requested. The Parties may provide for other means of receiving and

County: Washington Site No: C558036 Brownfield Cleanup Agreement Index: A5-0608-0708

communicating notices and responses to requests for approval.

- 7. <u>Recordation</u>. Grantor shall record this instrument, within thirty (30) days of execution of this instrument by the Commissioner or her/his authorized representative in the office of the recording officer for the county or counties where the Property is situated in the manner prescribed by Article 9 of the Real Property Law.
- 8. <u>Amendment</u>. Any amendment to this Environmental Easement may only be executed by the Commissioner of the New York State Department of Environmental Conservation or the Commissioner's Designee, and filed with the office of the recording officer for the county or counties where the Property is situated in the manner prescribed by Article 9 of the Real Property Law.
- 9. <u>Extinguishment.</u> This Environmental Easement may be extinguished only by a release by the Commissioner of the New York State Department of Environmental Conservation, or the Commissioner's Designee, and filed with the office of the recording officer for the county or counties where the Property is situated in the manner prescribed by Article 9 of the Real Property Law.
- 10. <u>Joint Obligation</u>. If there are two or more parties identified as Grantor herein, the obligations imposed by this instrument upon them shall be joint and several.

Remainder of Page Intentionally Left Blank

Poultney Street Partners, LLC:

Doc\$* 00114807 8k: 3828 Pg: 192

IN WITNESS WHEREOF, Grantor has caused this instrument to be signed in its name.

By: Roll Donnelly
Print Name: Roll Donnelly
Title: MANAGING Member Date: July 24, 2017

Grantor's Acknowledgment

STATE OF NEW YORK)	
)	ss:
COUNTY OF)	
	į
On the 24 day of	of $$, in the year 201 $$, before me, the undersigned,
personally appeared Roo Doni	of <u>July</u> , in the year 2017, before me, the undersigned, yelly, personally known to me or proved to me on the basis
of satisfactory evidence to be	the individual(s) whose name is (are) subscribed to the within
	to me that he/she/they executed the same in his/her/their
	her/their signature(s) on the instrument, the individual(s), or the
	e individual(s) acted, executed the instrument.
_ Shew Righ	UD.
Notary Public - State of New ¥	ork Jersoci

DREW R. STRUSS
Commission # 2101384
Notary Public, State of New Jersey
My Commission Expires
June 16, 2022

County: Washington Site No: C558036	Brownfield Cleanup Agreement Index : A5-0608-0708
	Doc\$1 00114807

Bk: 3828 Pe:

THIS ENVIRONMENTAL EASEMENT IS HEREBY ACCEPTED BY THE PEOPLE OF THE STATE OF NEW YORK, Acting By and Through the Department of Environmental Conservation as Designee of the Commissioner,

By:

Robert W. Schick, Director

Division of Environmental Remediation

Grantee's Acknowledgment

STATE OF NEW YORK)
) ss
COUNTY OF ALBANY)

day of Hygyst, in the year 2017, before me, the undersigned, personally appeared Robert W. Schick, personally known to me or proved to me on the basis of satisfactory evidence to be the individual(s) whose name is (are) subscribed to the within instrument and acknowledged to me that he/she/ executed the same in his/her/ capacity as Designee of the Commissioner of the State of New York Department of Environmental Conservation, and that by his/her/signature on the instrument, the individual, or the person upon behalf of which the individual acted, executed the instrument.

Notary Public

David J. Chlusano Notary Public, State of New York No. 01CH5032146

Qualified in Schenectady County Commission Expires August 22, 20 19

County: Washington Site No: C558036 Brownfield Cleanup Agreement Index: A5-0608-0708

Doct: 00114807 Bk: 3828 Ps: 194

SCHEDULE "A" PROPERTY DESCRIPTION

DESCRIPTION LANDS NOW OR FORMERLY OF POULTNEY STREET PARTNERS, LLC VILLAGE OF WHITEHALL, COUNTY OF WASHINGTON, STATE OF NEW YORK AREA = 11.74± ACRES OF LAND

All that certain tract, piece or parcel of land situate in the Village of White Hall, County of Washington, State of New York, lying Southerly of U.S. Route 4 (S.H. No. 1880) and Easterly of the Champlain Canal, and being more particularly bounded and described as follows:

BEGINNING at the point of intersection of the division line between the lands now or formerly of Poultney Street Partners, LLC as described in Book 2344 of Deeds at Page 69 on the North and the lands now or formerly of Clarendon and Pittsford Railroad Company as described in Book 498 of Deeds at Page 841 on the South with the division line between the said lands now or formerly of Poultney Street Partners, LLC on the East and the lands of the People of the State of New York (Champlain Canal) on the West, said point being located in the New York State Plane Coordinate System at North 1,719,705.1479 feet, East 783,281.8807 feet and runs thence from said point of beginning along the last mentioned division line North 02 deg. 43 min. 30 sec. East 371.57 feet to its point of intersection with the division line between the said lands now or formerly of Poultney Street Partners, LLC on the South and the lands of the People of the State of New York (Champlain Canal) on the North; thence along said division line the South 87 deg. 04 min. 00 sec. East 50.00 feet to its point of intersection with the Southerly highway boundary of U.S. Route 4 (S.H. No. 1880); thence along said Southerly highway boundary South 85 deg. 35 min. 10 sec. East 166.55 feet to its point of intersection with the Easterly highway boundary of U.S. Route 4 (S.H. No. 1880); thence North 06 deg. 35 min. 20 sec. East along said Easterly highway boundary 175.45 feet to its point of intersection with the Southerly highway boundary of U.S. Route 4 (S.H. No. 1880); thence along said Southerly highway boundary North 77 deg. 12 min. 13 sec. East 87.61 feet to its point of intersection with the Westerly highway boundary of U.S. Route 4 (S.H. No.

1880); thence along said Westerly highway boundary South 17 deg. 36 min. 38 sec. East 36.10 feet to its point of intersection with the Southerly highway boundary of U.S. Route 4 (S.H. No. 1880); thence North 80 deg. 47 min. 20 sec. East along said Southerly highway boundary 187.34 feet to its point of intersection with the Northeasterly highway boundary of U.S. Route 4 (S.H. No. 1880); thence North 28 deg. 04 min. 00 sec. West along said Northeasterly highway boundary 29.39 feet to its point of intersection with the Southerly highway boundary of U.S. Route 4 (S.H. No. 1880); thence along said Southerly highway boundary the following two (2) courses: 1) North 86 deg. 35 min. 49 sec. East 45.12 feet to a point; and 2) North 67 deg. 43 min. 55 sec. East 24.00 feet to its point of intersection with the division line between the said lands now or formerly of Poultney Street Partners, LLC on the Southwest, West and South and the Wood Creek on the Northeast, East and North; thence along said division line and generally along the Westerly bank of said Wood Creek the following twenty-six (26) courses: 1) South 32 deg. 13 min. 20 sec. East 92.35 feet to a point; 2) South 28 deg. 50 min. 55 sec. East 82.07 feet to a point; 3) South 31 deg. 13 min. 24 sec. East 131.46 feet to a point; 4) South 46 deg. 54 min. 25 sec. East 46.17 feet to a point; 5) South 38 deg. 56 min. 15 sec. East 83.07 feet to a point; 6) South 43 deg. 01 min. 19 sec. East 79.90 feet to a point; 7) South 51 deg. 25 min. 19 sec. East 74.01 feet to a point; 8) South 63 deg. 59 min. 32 sec. East 75.90 feet to a point; 9) South 55 deg. 16 min. 24 sec. East 25.99 feet to a point; 10) South 58 deg. 41 min. 12 sec. East 47.96 feet to a point; 11) South 68 deg. 31 min. 58 sec. East 29.37 feet to a point; 12) South 63 deg. 41 min. 38 sec. East 50.14 feet to a point; 13) South 73 deg. 03 min. 26 sec. East 46.11 feet to a point; 14) South 66 deg. 43 min. 37 sec. East 34.15 feet to a point; 15) South 73 deg. 20 min. 31 sec. East 38.78 feet to a point; 16) South 64 deg. 05 min. 48 sec. East 26.44 feet to a point; 17) South 62 deg. 56 min. 46 sec. East 19.76 feet to a point; 18) South 60 deg. 00 min. 00 sec. East 8.65 feet to a point; 19) South 56 deg. 27 min. 54 sec. East 24.43 feet to a point; 20) South 52 deg. 07 min. 01 sec. East 29.29 feet to a point; 21) South 49 deg. 28 min. 09 sec. East 32.59 feet to a point; 22) South 42 deg. 51 min. 41 sec. East

29.84 feet to a point; 23) South 30 deg. 00 min. 00 sec. East 11.65 feet to a point; 24) South 20 deg. 18 min. 53 sec. East 12.46 feet to a point; 25) South 06 deg. 45 min. 49 sec. East 7.48 feet to a point; and 26) South 02 deg. 38 min. 29 sec. East 13.37 feet to its point of intersection with the division line between the said lands now or formerly of Poultney Street Partners, LLC on the North and the said lands now or formerly of the Clarendon and Pittsford Railroad Company on the South; thence along said division line the following three (3) courses: 1) North 86 deg. 55 min. 00 sec. West 153.00 feet to a point; 2) North 82 deg. 50 min. 00 sec. West 1,046.18 feet to a point; and 3) North 82 deg. 46 min. 29 sec. West 219.12 feet to the point or place of beginning and containing 11.74± acres of land, more or less.

APPENDIX E – EXCAVATION WORK PLAN (EWP)

E-1 NOTIFICATION

At least 15 days prior to the start of any activity that is anticipated to encounter remaining contamination, the Site owner or their representative will notify the NYSDEC. Table B-1.1 includes contact information for the above notification. The information on this table will be updated as necessary to provide accurate contact information. A full listing of Site-related contact information is provided in Table 1.3-2 of the SMP.

Table B-1.1: Notifications*

NYSDEC Project Manager:	Telephone: (518) 897. 1254
Michael McLean	Email: mike.mclean@dec.ny.gov
NYSDEC Regional Engineer: Russell Huyck	Telephone: (518) 897-1257 Email: russel.huyck@dec.ny.gov
	Telephone: (518) 402.9706
NYSDEC Site Control	Email: derweb@dec.ny.gov

^{*} Note: Notifications are subject to change and will be updated as necessary.

This notification will include:

- A detailed description of the work to be performed, including the location and areal extent of excavation, plans/drawings for site re-grading, intrusive elements or utilities to be installed deeper than 12 inches below grade, estimated volumes of contaminated soil to be excavated and any work that may impact an engineering control;
- A summary of environmental conditions anticipated to be encountered in the work areas, including the nature and concentration levels of contaminants of

concern, potential presence of grossly contaminated media, and plans for any pre-construction sampling;

- A schedule for the work, detailing the start and completion of all intrusive work;
- A summary of the applicable components of this EWP;
- A statement that the work will be performed in compliance with this EWP and 29 CFR 1910.120;
- A copy of the contractor's health and safety plan (HASP), in electronic format:
- Identification of disposal facilities for potential waste streams; and
- Identification of sources of any anticipated backfill, along with all required chemical testing results.

E-2 SOIL SCREENING METHODS

Visual, olfactory and instrument-based (e.g. photo-ionization detector) soil screening will be performed by a qualified environmental professional during all excavations into known or potentially contaminated material (remaining contamination). Soil screening will be performed when invasive work is done and will include all excavation and invasive work performed during development, such as excavations for foundations and utility work, after issuance of the COC.

Soils will be segregated based on previous environmental data and screening results into material that requires off-site disposal and material that requires testing to determine if the material can be reused on-site as soil deeper than 12 inches below grade or if the material can be used less than 12 inches below grade. Further discussion of off-site disposal of materials and on-site reuse is provided in Section E-6 and E-7, respectively, of this Appendix.

E-3 SOIL STAGING METHODS

Soil stockpiles will be continuously encircled with a berm and/or silt fence unless other erosion controls are in-place to prevent a release of sediment during a storm event. Hay bales or other acceptable erosion and sediment control devices/methods will be used as needed near catch basins, surface waters and other discharge points, all in accordance with applicable stormwater regulations.

Stockpiles when not handled for more than seven (7) days will be kept covered at all times with appropriately anchored tarps. Stockpiles will be routinely inspected and damaged tarp covers will be promptly replaced.

Stockpiles will be inspected at a minimum once each week and after every storm event. Results of inspections will be recorded in a logbook and maintained at the site and available for inspection by the NYSDEC.

E-4 MATERIALS EXCAVATION AND LOAD-OUT

A qualified environmental professional or person under their supervision will oversee invasive work, and the excavation and load-out of all excavated material. The owner of the property and remedial party (if applicable), and its contractors are responsible for safe execution of invasive and other work performed under this Plan.

The presence of utilities and easements on the site will be investigated by the qualified environmental professional. It will be determined whether a risk or impediment to the planned work under this SMP is posed by utilities or easements on the Site.

Loaded vehicles leaving the site will be appropriately lined, tarped, securely covered, manifested, and placarded in accordance with appropriate Federal, State, local, and NYSDOT requirements (and all other applicable transportation requirements).

A truck wash or other sediment removing devices/methods will be operated onsite, as appropriate, to satisfy the requirements of the SPDES General Permit, when applicable. The Owner or designated qualified environmental professional will be responsible for ensuring that all outbound trucks do not track Site soils off-site. Truck wash waters (and sediments) will be collected and disposed of off-site in an appropriate manner.

The qualified environmental professional will be responsible for ensuring that all egress points for truck and equipment transport from the Site are clean of dirt and other materials derived from the site during intrusive excavation activities. Cleaning of the adjacent streets will be performed as needed to maintain a clean condition with respect to Site-derived materials.

E-5 MATERIALS TRANSPORT OFF-SITE

Transport of materials will be performed by licensed haulers in accordance with appropriate local, State, and Federal regulations, including 6 NYCRR Part 364. Haulers will be appropriately licensed and trucks properly placarded.

Material transported by trucks exiting the Site will be secured with tight-fitting covers. Loose-fitting canvas-type truck covers will be prohibited. If loads contain wet material capable of producing free liquid, truck liners will be used.

Truck transport routes are to be considered prior to major Site renovation or further development. Appropriate truck routes take into account: (a) limiting transport through residential areas and past sensitive sites; (b) use of city mapped truck routes; (c) prohibiting off-site queuing of trucks entering the facility; (d) limiting total distance to major highways; (e) promoting safety in access to highways; and (f) overall safety in transport.

Trucks will be prohibited from stopping and idling in the neighborhood outside the project Site. Egress points for truck and equipment transport from the site will be kept clean of dirt and other materials during Site remediation and development. Queuing of trucks will be performed on-site in order to minimize off-site disturbance. Off-site queuing will be prohibited.

E-6 MATERIALS DISPOSAL OFF-SITE

Soil/fill excavated and removed from the Site will initially be treated as contaminated and regulated material and will be transported and disposed in accordance with all local, State (including 6 NYCRR Part 360) and Federal regulations. However, if disposal of material from this Site is proposed for unregulated off-site disposal (i.e. clean soil removed for development purposes), a formal request with an associated sampling plan will be made to the NYSDEC. Unregulated off-site management of materials from this Site will not occur without formal NYSDEC approval.

Off-site disposal locations for excavated soils will be identified in the preexcavation notification. This will include estimated quantities and a breakdown by class of disposal facility if appropriate, e.g. hazardous waste disposal facility, solid waste landfill, petroleum treatment facility, C/D recycling facility, etc. Actual disposal quantities and associated documentation will be reported to the NYSDEC in the Periodic Review Report. This documentation will include: waste profiles, test results, facility acceptance letters, manifests, bills of lading and facility receipts.

Non-hazardous historic fill and contaminated soils taken off-site will be handled, at minimum, as a Municipal Solid Waste per 6 NYCRR Part 360-1.2. Material that does not meet Unrestricted SCOs is prohibited from being taken to a New York State recycling facility (6 NYCRR Part 360-16 Registration Facility).

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E-7 MATERIALS REUSE ON-SITE

Chemical criteria for on-Site reuse of material have been approved by NYSDEC and are listed in NYSDEC DER-10 and 6 NYCRR Part 375. The qualified environmental professional will ensure that procedures defined for materials reuse in this SMP are followed and that unacceptable material does not remain on-site. Additional criteria for soil reuse are as follows:

- Contaminated on-site material, including historic fill and contaminated soil, that is acceptable for reuse on-site will be placed below 12 inches below grade) or impervious surface (e.g., concrete or asphalt), and will not be reused within a cover soil layer, within landscaping berms, or as backfill for subsurface utility lines.
- Soils below the 12 inches below grade must be returned to a similar elevation in the same location or other subgrade location on-Site and analytical testing will not be required. If not returned in this manner, soils shall be properly handled, transported and disposed off-site in accordance with applicable regulations. Prior to being transported from the Site, excess soils must be characterized in accordance with the permit requirements of the selected disposal facility permitted and approved by the appropriate regulatory agency(s) to accept the material.
- Grossly contaminated soils must be treated as a regulated material (e.g., characterized, transported, and disposed of off-Site at a permitted disposal facility).

Any demolition material proposed for reuse on-site will be sampled for asbestos and the results will be reported to the NYSDEC for acceptance. Concrete crushing or processing on-site will not be performed without prior NYSDEC approval. Organic

matter (wood, roots, stumps, etc.) or other solid waste derived from clearing and grubbing of the Site will not be reused on-site.

E-8 FLUIDS MANAGEMENT

All liquids to be removed from the Site, including but not limited to, excavation dewatering, decontamination waters and groundwater monitoring well purge and development waters, will be handled, transported and disposed in accordance with applicable local, State, and Federal regulations. Dewatering, purge and development fluids will not be recharged back to the land surface or subsurface of the site, and will be managed off-site, unless prior approval is obtained from NYSDEC.

Discharge of water generated during large-scale construction activities to surface waters (i.e. a local pond, stream or river) will be performed under a SPDES permit.

E-9 SITE RESTORATION

After any invasive activities beyond 12 inches below grade, the upper 12 inches shall be restored in a manner that complies with the decision document. The upper 12 inches shall be comprised of a minimum of 12 inches of existing soil originating from less than 12 inches below grade, asphalt pavement, or concrete building. A figure showing the type of surface material will be included in the Periodic Review Report.

E-10 BACKFILL FROM OFF-SITE SOURCES

Materials proposed for import onto the Site will be approved by the qualified environmental professional and will be in compliance with provisions in this SMP prior to receipt at the Site. A Request to Import/Reuse Fill or Soil form, which can be found at http://www.dec.ny.gov/regulations/67386.html, will be prepared and submitted to the NYSDEC project manager allowing a minimum of five (5) business days for review.

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The source of the imported backfill will need to be documented. Material from industrial sites, spill sites, or other environmental remediation sites or potentially contaminated sites will not be imported to the site.

Imported soils will meet the backfill and cover soil quality standards established in 6 NYCRR 375-6.7(d). Based on an evaluation of the land use, protection of groundwater and protection of ecological resources criteria, the resulting soil quality standards are listed in Appendix 5 of NYSDEC DER-10. Soils that meet 'exempt' fill requirements under 6 NYCRR Part 360, but do not meet backfill or cover soil objectives for this Site, will not be imported onto the site without prior approval by NYSDEC. Solid waste will not be imported onto the Site.

Imported backfill shall be documented clean by analytical testing. Imported backfill will be analyzed according to the following schedule:

Recommended Number of Soil Samples for Soil Imported to the Site							
Contaminant	Volatile Organic Compounds		ganic Compounds, PCBs/Pesticides				
Imported Backfill Quantity in Cubic Yards	Discrete Samples	Composite Samples	Discrete Samples/Composites				
0-50	1	1	3-5 Discrete samples				
51 – 100	2	1	from different locations in the fill				
101 – 200	3	1					
201 – 300	4	1	being provided will				
301 – 400	4	2	compromise a				
401 – 500	5	2	composite sample				
501 – 800	6	2	for analysis				
801 – 1,000	7	2					
> 1,000	Add an additional two volatile organic compound discrete sample and one composite sample for each additional 1,000 cubic yards consult with NYSDEC						

E-11 STORMWATER POLLUTION PREVENTION

Prior to implementing any Site disturbance greater than one (1) acre, a Stormwater Pollution Prevention Plan (SWPPP) will be prepared in accordance with the regulations for erosion and sediment controls and water quantity/quality controls. This will provide guidance to the contractor doing the construction activities. With the preparation of the SWPPP comes a requirement for submitting a Notice of Intent (NOI) to the NYSDEC upon completion of the SWPPP to document the project exists and gain permit coverage. The NOI will be completed with direction and input from the Site owner and/or remedial party. In addition to the SWPPP, Erosion and Sediment Control

(ESC) plans will be designed and prepared as applicable for implementing the construction activity in accordance with the current stormwater regulations.

When the larger than one acre of disturbance construction project is complete and has met the requirements of the construction permit, a Notice of Termination (NOT) form shall be completed and submitted to the Department.

For implementing construction activities with disturbance with less than one (1) acre, erosion and sediment controls (i.e., silt fencing, hay bales, etc.) will be installed around the down gradient perimeter of the work areas and around temporary stockpiles of excavated soil and imported backfill. Erosion and sediment controls will be observed once a week and corrective actions shall begin within one business day of contractor notification of deficiencies. Deficiencies include removal of accumulated sediments against silt fence, undercutting or erosion of the silt fence, and uncontrolled discharge off-site of turbid water. Corrective action shall be completed within a reasonable time frame. Results of inspections will be recorded in a logbook and maintained at the Site at the construction trailer or at the Owner's office and available for review by NYSDEC.

E-12 EXCAVATION CONTINGENCY PLAN

If underground tanks or other previously unidentified contaminant sources are found during post-remedial subsurface excavations, development related construction, or if the subsurface is otherwise made accessible, excavation activities will be suspended until NYSDEC is notified and properly trained personnel and sufficient equipment is mobilized to investigate as necessary, and address the condition.

Sampling will be performed on product, sediment and surrounding soils, etc. as necessary to determine the nature of the material and proper disposal method. Chemical analysis will be performed for a full list of analytes (TAL metals; TCL volatiles and semi-volatiles, TCL pesticides and PCBs), unless the site history and previous sampling

results provide a sufficient justification to limit the list of analytes. In this case, a reduced list of analytes will be proposed to the NYSDEC for approval prior to sampling.

Identification of unknown or unexpected contaminated media identified by screening during invasive site work will be promptly communicated by phone to NYSDEC's Project Manager. Reportable quantities of petroleum product will also be reported to the NYSDEC spills hotline within two (2) hours of discovery. These findings will be also included in the Periodic Review Report.

E-13 COMMUNITY AIR MONITORING PLAN

The NYSDEC shall be notified before any Site disturbance is to occur. If existing soils are expected to be disturbed, the NYSDEC may require a Community Air Monitoring Plan (CAMP) to be prepared and submitted to the NYSDEC for approval prior to any planned Site disturbance. If required, the CAMP will be followed for any ground intrusive work in general accordance with the New York State Department of Health Generic CAMP dated May 2010, which is included as Appendix G of this SMP.

Monitoring for particulate dust, when handling existing Site soils, will be conducted based on generally prevailing wind conditions. These locations will be adjusted on a daily or more frequent basis based on actual wind directions to provide upwind and downwind monitoring stations. There are no sensitive receptors, such as a school, day care or residential area adjacent to the Site, so fixed monitoring stations located at that Site perimeter are not required.

All readings must be recorded and be available for State (NYSDEC and NYSDOH) personnel to review. Exceedances of action levels listed in the CAMP will be reported to NYSDEC and NYSDOH Project Managers.

E-14 ODOR CONTROL PLAN

Nuisance odors were not encountered during the completion of the remedial investigation, nor do existing soils emit nuisance odors. Therefore, an odor control plan is not expected to be needed for future excavation at the Site. If nuisance odors are observed during future Site excavation work (e.g. Site development), actions should be implemented to mitigate off-site impacts from odors.

If needed, this odor control plan should be capable of controlling emissions of nuisance odors off-site and as necessary on-site during site disturbance. Specific odor control methods to be used on a routine basis could include: (a) limiting the area of open excavations and size of soil stockpiles; (b) shrouding open excavations with tarps and other covers; and (c) using foams to cover exposed odorous soils. If odors develop and cannot be otherwise controlled, additional means to eliminate odor nuisances will include: (d) direct load-out of soils to trucks for off-site disposal; (e) use of chemical odorants in spray or misting systems; and, (f) use of staff to monitor odors in surrounding neighborhoods.

If nuisance odors are identified at the Site boundary, or if odor complaints are received, work will be halted and the source of odors will be identified and corrected. Work will not resume until all nuisance odors have been abated. NYSDEC and NYSDOH will be notified of all odor events and of any other complaints about the project. Implementation of all odor controls, including the halt of work, is the responsibility of the remedial party's Professional Engineer, and any measures that are implemented will be discussed in the Periodic Review Report.

If nuisance odors develop during intrusive work that cannot be corrected, or where the control of nuisance odors cannot otherwise be achieved due to on-site conditions or close proximity to sensitive receptors, odor control will be achieved by sheltering the excavation and handling areas in a temporary containment structure equipped with appropriate air venting/filtering systems.

E-15 DUST CONTROL PLAN

A dust suppression plan that addresses dust management during invasive on-site work will include, at a minimum, the items listed below:

- Dust suppression will be achieved though the use of a dedicated on-site water truck for road wetting. The truck will be equipped with a water cannon capable of spraying water directly onto off-road areas including excavations and stockpiles.
- Clearing and grubbing of larger sites will be done in stages to limit the area of exposed, unvegetated soils vulnerable to dust production.
- Gravel will be used on roadways to provide a clean and dust-free road surface.
- On-site roads will be limited in total area to minimize the area required for water truck sprinkling.

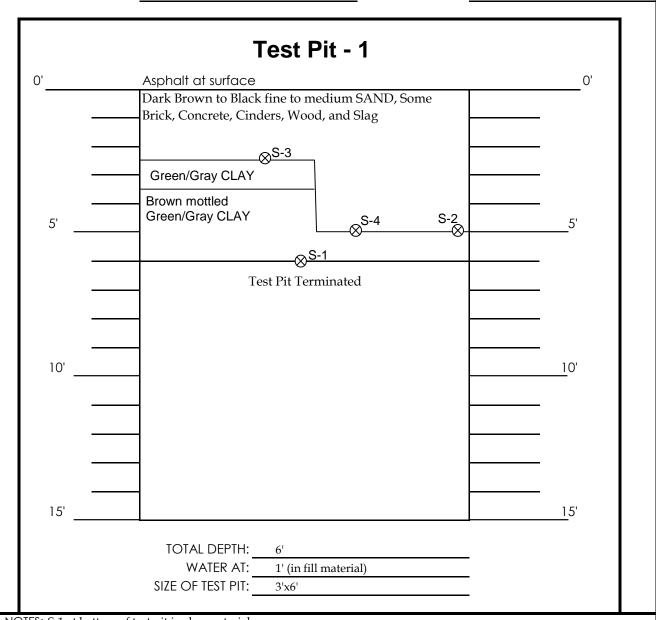
C.T. MALE ASSOCIATES, P.C.

50 Century Hill Drive, P.O. Box 727 Latham, NY 12110-0727 (518) 786-7400 • FAX (518) 786-7299



Building Systems • Engineering • Environmental Services • Land Information Services

PROJECT NAME:	Old Champlain Mill	EXCAVATOR: MCES
PROJECT NUMBER:	06.6448	EQUIPMENT: Bobcat excavator
LOGGED BY:	Jonathan Dippert	DATE: 3/18/2010



NOTES: S-1 at bottom of test pit in clay material
S-2, S-3, and S-4 at fill material and clay interface

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Building Systems • Engineering • Environmental Services • Land Information Services

PROJECT NAME:	Old Champlain Mill	EXCAVATOR: MCES
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LOGGED BY:	Jonathan Dippert	DATE: 3/18/2010

	LOONODETE	0'
	CONCRETE S-1	
	Light Brown SILT, trace brick CINDERS	
	ASH, Some Brown medium Sand S-2 & S-5	
	Brown SILT, Some fine Sand S-3	
	Green/Gray and Black SILT, trace roots, trace brick	
		
5'	Green/Gray SILT, Some Clay	5'
	Green/Gray SILT, Some Clay	
	Test Pit Terminated	
		
10'		10'
15'		<u> </u>
	TOTAL DEPTH. (1	
	TOTAL DEPTH: 6' WATER AT: 1.5' (very moist at 3')	
	WATER AT: 1.5' (very moist at 3')	

NOTES: S-1 at 0.75' bgs at cinders and silt interface; S-2 at 2' bgs, sample of ash

S-3 at 3' bgs, sample of top of silt layer; S-4 at 5' bgs, sample of lower silt layer

S-5 at 2.75' at interface of silt layers

C.T. MALE ASSOCIATES, P.C.

50 Century Hill Drive, P.O. Box 727 Latham, NY 12110-0727



(518) 786-7400 • FAX (518) 786-7299

Building Systems • Engineering • Environmental Services • Land Information Services

PROJECT NAME:	Old Champlain Mill	EXCAVATOR: MCES	internation services
PROJECT NUMBER:	06.6448	EQUIPMENT: Bobcat es	kcavator
LOGGED BY:	Jonathan Dippert	DATE: 3/18/20	
	<u>, 11</u>		
	Test Pit -	3	
01			
0'	CONCRETE	<u> </u>	0'
	CINDERS and ASH	⊗ S-3	
	Brown SILT, Some Clay	S-2	_
	0 /0 011 7 0 01		
	Green/Gray SILT, Some Clay	⊗ _{S-1}	_
			<u>—</u>
5'			5'
		S-4	
		——⊗	
	Test Pit Terminate	ed.	-
	_		–
10'			10'
	_		
			_
			-
15'			<u>1</u> 5'
	TOTAL DEPTH: 6.5'		
		veen layers of silt)	
	SIZE OF TEST PIT: 2.5'x6'		
	op of lower silt layer; S-2 at 1.0' bgs at cinde		
S-3 at 0.75, sam	ple of cinders and ash; S-4 at 6.5' bgs at bott	om of test pit	

C.T. MALE ASSOCIATES, P.C.

50 Century Hill Drive, P.O. Box 727 Latham, NY 12110-0727 (518) 786-7400 • FAX (518) 786-7299



Building Systems • Engineering • Environmental Services • Land Information Services

PROJECT NAME:	Old Champlain Mill	EXCAVATOR:	MCES
PROJECT NUMBER:	06.6448	EQUIPMENT:	Bobcat excavator
LOGGED BY:	Jonathan Dippert	DATE:	3/18/2010
		_	

	Brown mottled Green/Gray SILT, Some Clay	
	S-5 ⊗ Green/Gray SILT, Some Clay, Some Black Silt, trace ⊗ wood, brick, and concrete ⊗S-1 Green/Gray mottled Brown SILT, Some Clay S-4	S-3
J	—— ⊗S-2	9
	Test Pit Terminated	
10'		10'
15'		15'

NOTES: S-1 at 3' bgs, sample of silt layer; S-2 at 5.5' bgs at bottom of test pit

S-3 at 3' bgs, sample of silt layer; S-4 at 4' bgs, sample of lower silt layer

S-5 at 2' bgs, sample of surface silt layer; S-6 at 2.5' bgs at interface of silt layers

APPENDIX C – SUBSURFACE EXPLORATION LOGS



SUBSURFACE EXPLORATION LOG

BORING NO.: BMW-11A

ELEV.: DATUM:

START DATE: 1/28/10 FINISH DATE: 1/28/10

SHEET 1 OF 1

PRO	JECT	:	Old (Cham	ıplain	Mill			CTM PROJECT NO.:	06.6448	
LOC	ATIO	N:	Villa	ge of	White	ehall,	New	York	CTM INSPECTOR:	J. Di <u>r</u>	pert
SAMPLE BLOWS ON SAMPLER											
БЕРТН (FT.)	ГҮРЕ	NO.	0/6	6/12	12/10	18/24	N	RECOVERY	SAMPLE CLASSIFICATION	NOT	res
О	<u> </u>	_							ODC ANICC Doub Provint to Plack fine CAND	rivat	
		1	WOH	WOH	4	2	-	0.5	ORGANICS, Dark Brown to Black fine SAND and SILT, Some Brick and Concrete	wet	
	Г	_		_			_				
		2	3	2	3	3	5	1.0	±3.0'		
	<u> </u>								Green Gray and Brown mottled SILT and	moist at ±3' bgs	
5	/	3	3	3	4	4	7	0.8	CLAY		
									±6.0 ¹		
	\Box	4	WOH	WOH	WOH	WOH	-	1.0	Brown and Green Gray mottled fine SAND	wet at ±6' bgs	
									and SILT ±7.5'		
		5	2	2	1	1	3	1.4	Gray fine SAND and SILT ±8.0		
10									Brown fine to coarse SAND, little gray silt		
_		6	1	2	1	2	3	1.0	, 0,		
		U	1		1		3	1.0	Grades to		
	\leftarrow	_		_	_	_	-	4.4		1 (B :	
		7	WOH	2	2	2	4	1.4	Gray fine to coarse SAND, trace silt	lens of Brown sil	it and clay at
	<u> </u>									12.5 - 13.0' bgs	
15		8	1	2	4	5	6	1.3			
		9	3	2	1	2	3	1.7	±16.5'		
									Gray CLAY, Some Silt		
		10	WOH	1	-	1	-	1.0	•		
20											
_	ř—								Boring Terminated at ±20.0'	Boring abandon	ed due to
									pormig reminiated at ==010	running sand	ou due to
										6	
25											
25	ł										
30											
	N = NO. OF BLOWS TO DRIVE 2" SAMPLER 12" WITH A 140 L				_ER 12	" WITH	A 140	LB. WT. FALLING 30" PER BLOW	GROUNDWA		
DRILL					SJB Se	rvices, l	Inc.		DRILL RIG TYPE: CME 55	DATE LEVEL CASING	
METH	OD OF	INVES	TIGATI	ON:		4.25" h	ollow s	stem au	ger, 2' split spoon sampler	DATE LEVEL CASING	STABILIZATION TIME
THE S	SUBSU	RFAC	E INFO	RMAT	ION SH	HOWN	HERE	AW NC	S OBTAINED FOR C.T. MALE DESIGN		
									SERS ONLY THAT THEY MAY HAVE ACCESS		
									IT IS PRESENTED IN GOOD FAITH, BUT IS NOT TERPRETATION OR JUDGMENT OF SUCH	SAMPLE CLASS	SIFICATION BY:
	ENDED AS A SUBSTITUTE FOR INVESTIGATIONS, INTERPRETATION OR JUDGMENT OF SUCH THORIZED USERS.						J1	D			



SUBSURFACE EXPLORATION LOG

BORING NO.: BMW-11B

ELEV.: DATUM:

START DATE: 1/29/10 FINISH DATE: 1/29/10

SHEET 1 OF 1

PRO	JEC	T:	Old	Cham	ıplair	ı Mill			CTM PROJECT NO.	: 0	06.64	48	
LOC	ATIC	ON:	Villa	ge of	Whit	ehall,	New	York	CTM INSPECTOR	:		J. Dip	pert
													
	SA	MPLE	BL	OWS	ON S	AMPL	.ER	<u> </u>					
БЕРТН (FT.)	JEPTH (FT.) TYPE		0/6 6/12 12/18 18/24 N		· N	RECOVERY	SAMPLE CLASSIFICATION			NOT	ES		
<u>5</u> 10									Reference BMW-11A for soil classifications -2.5' offset to the west of BMW-11A -Augered down to depth and set monitoring well	"Mor	nitorii		installed: See I Construction A
20 25 30									Boring Terminated at ±17.0'				
50	—	—	Щ_	Щ	Щ	لــــــا	Щ	Щ					
N = NC). OF	BLOWS	S TO DF	RIVE 2"	SAMP	LER 12	" WITH	I A 140	LB. WT. FALLING 30" PER BLOW	T .	GROL	JNDWA ⁻	TER LEVEL
		CONTRA				rvices, I		•	DRILL RIG TYPE: CME 55			READI	NGS
		F INVES						stem au	ger, 2' split spoon sampler	DATE	LEVEL	CASING	STABILIZATION TIME
THE S	SUBS	SURFAC	:F INFC)RMAT	ION SI	-OWN	HFRE	ON W/	AS OBTAINED FOR C.T. MALE DESIGN	╄			
PURP	OSE	S. IT IS	MADE	AVAIL	ABLE :	TO AU	THORI	IZED U	SERS ONLY THAT THEY MAY HAVE ACCESS				
INTEN	PURPOSES. IT IS MADE AVAILABLE TO AUTHORIZED USERS ONLY THAT THEY MAY HAVE ACCESS TO THE SAME INFORMATION AVAILABLE TO C.T.MALE. IT IS PRESENTED IN GOOD FAITH, BUT IS NOT INTENDED AS A SUBSTITUTE FOR INVESTIGATIONS, INTERPRETATION OR JUDGMENT OF SUCH AUTHORIZED USERS.								SAMPLE CLASSIFICATION BY: JD				



SUBSURFACE EXPLORATION LOG

BORING NO.: BMW-12A

ELEV.: DATUM:

START DATE: 1/27/10 FINISH DATE: 1/27/10

SHEET 1 OF 1

PRO	JECT		Old	Cham	nplain	ı Mill			CTM PROJECT NO.:					
LOC	ATIOI	N:	Villa	ge of	Whit	ehall,	New	York	CTM INSPECTOR:		J. Dip	pert		
<u> </u>									-					
ļļ	SAM	/IPLE	BL	<u>ows</u>	ON S	SAMPL	.ER	<u></u>	ļ ,	1				
БЕРТН (FT.)	гүре	\ <u>\</u>	0/6	2/12	10/18	10/24	N.I	RECOVERY	SAMPLE CLASSIFICATION	NOTES		ES		
	رک	NO.	0/6			18/24 7			Control and modium SANID	mais				
l j	//	1	4	5	7	7	12	0.8	Very Dark Brown fine and medium SAND,	very mois	,t			
}	\angle	Щ.			L_	<u> </u>	<u> </u>	Щ.	Some Silt, Some Cinders, little brick and wood					
i j	//	2	16	11	10	7	21	1.4		wet at ±3'				
i j	!	Ĺ.	\Box '					<u> </u>	=1	moist at ±	3.75' bg	zs .		
_5		3	3	4	4	6	8	0.5	Green Gray and Brown mottled SILT and	1				
	/							\vdash	CLAY	1				
ļf		4	7	9	9	8	18	1.5	·	wet at ±6'	has			
l j	/	-	₩	<u> </u>	-	0	10	1.0	· '	WEI at ±0	bgs			
! }	\longrightarrow	-	$\perp \perp \prime$	└	├	<u> </u>	_	1		1				
10	//	5	4	4	4	4	8	1.6	<u>,</u>	1				
10			<u> </u>		<u> </u>			<u> </u>	±10.0'	İ				
1 ,	_/	6	2	2	2	3	4	1.4	Green Gray and Brown mottled fine SAND	1				
1 ,	/	\Box						\vdash	and SILT, trace clay	İ				
1 1		7	2	2	3	2	5	2.0	±13.0'	1				
l j	/	<u> </u>	+	 -	- C	┝╧	Ľ		Gray fine to coarse SAND, trace silt	1				
15	\leftarrow	0	OH	OH	1	2	—	17	Gray fine to coarse Sand, have sin	1				
<u>15</u>	//	8	WOrı	WOH	1	2	-	1.7	<u>,</u>	1				
l j		<u> </u>	<u> </u>	Ĺ <u></u>	<u> </u>	<u> </u>	L	<u> </u>	<u> </u>	1				
l j	_/	9	3	4	3	3	7	2.0	Same as above, little medium gravel	1				
l j	/								1	1				
l j		10	WOR	1	WOR	1	-	1.7	±19.0'	1				
20	/	-	+		77.	\vdash	₩		Gray CLAY, Some Silt	1				
1 7	\leftarrow	11	+-	1	1	1	2	10	<u> </u>	. f-nitorit	1470]]	· -11-4. See		
l j	//	11	2	1	1	1		1.0				installed: See		
1 }	\angle	Щ.		<u> </u>	<u> </u>	<u> </u>	Ц	<u> </u>]			ll Construction		
1	//	12	WOH	WOH	WOH	1	-	1.0	ļ .	Log" for N	ΛW-1∠ <i>P</i>	4		
l j	/ _!	Ē_	T'	Γ <u>'</u>			Γ_	Γ_{-}	<u></u> !	İ				
25									Boring Terminated at ±24.0'	1				
1 7	, ,	$\overline{}$	 	\vdash	 	\vdash		\vdash	1	İ				
1	, ,	_	+-	$\vdash \vdash$	 	├─	├──	\vdash	· '	İ				
1 ,	, ,		₩	₩	├──	 		├─	· '	İ				
1 ,	, ,	—	 	├ ──	├ ──	<u> </u>	₩	↓—	. ·	İ				
	, ,	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	Щ.	Ļ		1				
30			<u> </u>	<u> </u>	Ц	<u> </u>	<u> </u>	<u> </u>						
N = NC). OF B	LOWS	TO DR ذ	≀IVE 2"	SAMPI	LER 12'	" WITH	A 140	LB. WT. FALLING 30" PER BLOW	GROL		TER LEVEL		
			ACTOR:		SJB Ser	rvices, I	inc.		DRILL RIG TYPE: CME 55	DATE LEVEL	READIN CASING			
METHO	OD OF	INVES	STIGATI	ON:		4.25" h	ollow s	stem au	iger, 2' split spoon sampler	DATE LLVLL	CASH	STABILIZATION		
										_ 	\vdash	+		
THE §	= RUBSU	IRFAC	F INFC	RMAT	ON SI	NN	HERE	— ∩N W∤	AS OBTAINED FOR C.T. MALE DESIGN					
PURP	OSES.	. IT IS	MADE	AVAIL	ABLE :	TO AU	THORI	IZED U	SERS ONLY THAT THEY MAY HAVE ACCESS					
									IT IS PRESENTED IN GOOD FAITH, BUT IS NOT	SAMPLE	CLASS	IFICATION BY:		
				TUIE	-OK IIV	VESTI	GA HO	NS, IIV	TERPRETATION OR JUDGMENT OF SUCH	0,	JE			
	THORIZED USERS.										JU			



SUBSURFACE EXPLORATION LOG

BORING NO.: BMW-13A

ELEV.: DATUM:

START DATE: 1/28/10 FINISH DATE: 1/28/10

SHEET 1 OF 1

PROJECT: Old Champlain Mill CTM PROJECT NO.											06.644	48			
LOC	ATIO	N:	Villa	ge of	Whit	ehall,	New	York	CTM INSPECTOR:			J. Dip	pert		
<u> </u>															
	SAM	/IPLE	BL	.ows	ON S	AMPLI	ER								
БЕРТН (FT.)	гүре	NO.	0/6	6/12	12/18	19/24	NI NI	RECOVERY	SAMPLE CLASSIFICATION		NOTES		ES		
	اركا	NO.	0/6 WOH	6/12	12/18 3	18/24	N 5	7.4	Green Gray and Brown mottled SILT and	mois	1,				
	//		WOII			4	 	1.4	CLAY	Inois	t		l		
	\vdash	<u> </u>	├	5	 '	 	10	16	CLAI		oic	· -+ +)	1		
	//!	2	5	5	5	5	10	1.6	·	very	mois	t at ±2'	bgs		
5	\vdash	3	MOH	WOH	2	2	 '	1.2	150				l		
<u> </u>	//		VV () 1	WOII			<u> </u>	1.4	±5.0' Brown and Green Gray mottled fine SAND			• _	ĺ		
	\longleftarrow		┯	1	 _ '	\vdash	 '	1.0	and SILT	wei a	at ±5'	bgs	ĺ		
	//	4	2	2	3	2	5	1.0	-				ĺ		
	igwdapprox	'ـــــــــــــــــــــــــــــــــــــ	ليبا	<u> </u>	<u> </u>	لبا	<u> </u>	<u> </u>	±8.0'			-	ĺ		
10	//	5	WOH	WOH	2	3	-	1.5	Brown and Gray mottled SILT and CLAY ±9.0'		moist at ±8' bgs wet at ±9' bgs				
10	\angle	<u>'</u>	$ldsymbol{ld}}}}}}} }$	<u> </u>	<u> </u>	ш	<u> </u>	<u> </u>	Brown and Green Gray mottled fine SAND	wet a					
	[/!	6	WOH	WOH	2	2	-	1.4	and SILT ±10.5']					
1 !	<u>/</u> !	[<u></u> '	<u></u> '	<u> ['</u>	['		<u> </u>		Gray fine and medium SAND and SILT, trace						
4 !		7	WOH	1	1	2	2	1.0	wood						
	/ !								1				ĺ		
15		8	2	2	2	3	4	1.2	Gray fine to coarse SAND, little fine and				ĺ		
-	/ !		\vdash					\dagger	medium gravel, trace silt				ĺ		
1 1		9	WOH	1	1	2	2	1.4	±17.0'				ĺ		
1 1	//	\vdash			\vdash		<u> </u>		Gray CLAY, Some Silt	1					
1 1		10	WOR	WOR	1	1	<u> </u>	0.0	Gray Charl, come chi						
20	//	10	VV C.	VV C.1.	\vdash	 	\vdash	0.0	·	Mon	:+orin	~ Well	installed: See		
<u> </u>	\vdash	11	TATOH	MOH	HOW	╀	_	1 8	4				l Construction		
1 1	//	11	WOII	WOH	WOII	1	- -'	1.8	·			ng wen 1W-13 <i>P</i>			
1	${\longleftarrow}$		igspace		<u>—</u> '	igwdapprox		↓ '	7	LOS	101	IVV-1U1	1		
1 1		<u> </u>	igspace	 '	 	igspace	 '	<u> </u>	Boring Terminated at ±22.0'						
ا _ ا		<u> </u>	╨	<u> </u>	<u> </u>	igspace	<u> </u>	<u> </u>	1						
25		<u> </u>	$oldsymbol{ol}}}}}}}}}}}}}}}}}}$	<u> </u>	<u> </u>	Ш	<u> </u>	<u> </u>	<u>'</u>						
1 1		Ĺ'	<u> </u>	<u> </u>	Ĺ'	igsqcup	<u> </u>	<u> </u>]						
1 1		<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u>'</u>						
1 1		Ĺ'	<u>['</u>	Ĺ′	Ĺ'	['	Ĺ'		1						
1 1		$\bigcap_{i=1}^{n}$	<u></u> '	$\bigcap_{i=1}^{n}$	<u> </u>	<u></u> '	$\bigcap_{i=1}^{n}$	<u></u> '	1						
30	!								1	l					
								A 140) LB. WT. FALLING 30" PER BLOW	۱ ۱	GROU		TER LEVEL		
	ING CO					rvices, I			DRILL RIG TYPE: CME 55	DATE	FVEL	READII CASING	STABILIZATION TIME		
METH	OD OF	INVES	STIGATION	ON:		4.25" h	ollow s	stem au	iger, 2' split spoon sampler			<u> </u>	C		
<u> </u>															
									AS OBTAINED FOR C.T. MALE DESIGN	\Box	\longrightarrow				
									ISERS ONLY THAT THEY MAY HAVE ACCESS IT IS PRESENTED IN GOOD FAITH. BUT IS NOT						
INTEN	TO THE SAME INFORMATION AVAILABLE TO C.T.MALE. IT IS PRESENTED IN GOOD FAITH, BUT IS NOT INTENDED AS A SUBSTITUTE FOR INVESTIGATIONS, INTERPRETATION OR JUDGMENT OF SUCH AUTHORIZED USERS.									SAMPLE CLASSIFICATION BY: JD					



SUBSURFACE EXPLORATION LOG

BORING NO.: BMW-14A

ELEV.: DATUM:

START DATE: 2/2/10 FINISH DATE: 2/2/10

SHEET 1 OF 1

PROJECT: Old Champlain Mill CTM PROJECT NO.														
LOC	ATIO	N:	Villa	ge of	Whit	ehall,	New	York	CTM INSPECTOR:	J. Dij	opert			
			T					1		I				
DEPTH (FT.)	LYPE SA								SAMPLE CLASSIFICATION	NO	ΓES			
		1	6	5	4	6	9	1.6	Brown SILT, ORGANICS, Some fine Sand,	very moist				
									Some fine and medium Gravel $\pm 1.0^{\circ}$	<i>y</i>				
		2	4	5	5	5	10	0.9	Brown and Gray mottled fine SAND and SILT,	1				
									Some fine and medium Gravel ± 4.0					
5		3	3	3	3	4	6	1.4	Gray and Brown mottled SILT and CLAY,	moist at ±4' bgs				
									little organics					
		4	7	7	8	8	15	1.5						
		5	5	6	6	8	12	1.6	±9.0'					
10									Gray fine to coarse SAND, trace fine and	wet at ±9' bgs				
		6	8	6	7	6	13	0.6	medium gravel					
		7	9	8	5	3	13	1.2						
									±14.0'					
15		8	WOH	WOH	WOH	WOH	-	1.0	Gray CLAY, Some Silt					
		9	WOH	WOH	WOH	WOH	-	1.2						
										Monitoring Well installed: See "Monitoring Well Construction				
		10	WOR	WOR	WOR	WOR	-	1.1						
20										Log" for MW-14	A			
									Boring Terminated at ±20.0'					
25														
			<u> </u>											
			<u> </u>											
20														
30														
N – NC) OF B	I OWS	TO DR	1\/F 2"	SAMPI	FR 12	' WITH	Δ 140	LB. WT. FALLING 30" PER BLOW	GROUNDWA	TERTEVEL			
			CTOR:			rvices, I		A 140	DRILL RIG TYPE: CME 55	READ				
			STIGATI	ON:	0,2 00.			tem au	ger, 2' split spoon sampler	DATE LEVEL CASING	STABILIZATION TIME			
THE S	SUBSU	RFAC	E INFO	RMAT	ON SH	IOWN	HERE	ON WA	S OBTAINED FOR C.T. MALE DESIGN					
PURF	POSES	. IT IS	MADE	AVAIL	ABLE	TO AU	THORI	ZED U	SERS ONLY THAT THEY MAY HAVE ACCESS					
									IT IS PRESENTED IN GOOD FAITH, BUT IS NOT TERPRETATION OR JUDGMENT OF SUCH	SAMPLE CLASS	SIFICATION BY:			
	ITENDED AS A SUBSTITUTE FOR INVESTIGATIONS, INTERPRETATION OR JUDGMENT OF SUCH UTHORIZED USERS.									JD				



SUBSURFACE EXPLORATION LOG

BORING NO.: BMW-15A

ELEV.: DATUM:

START DATE: 2/2/10 FINISH DATE: 2/2/10

SHEET 1 OF 1

PRO	JECT	:	Old	Cham	ıplain	Mill			CTM PROJECT NO.:	06.6448				
LOC	ATIO	N:	Villa	ge of	Whit	ehall,	New	York	CTM INSPECTOR:	<u></u> Ј. Г	Dippert			
	SAN	1PLE	RI	OWS	ON S	AMPL	FR							
	O/ 11V			1	1	/ (IVII L								
БЕРТН (FT.)	rype	SAMPLE CLASSIFICATION NO. 0/6 6/12 12/18 18/24 N								NO	OTES			
出	∠	NO.	0/6	6/12	12/18	18/24	Ν	RE						
	A								CONCRETE					
	ΙL								±1.5'					
	▶ ▼,								Brown medium SAND and GRAVEL,					
	/	1	2	2	2	2	4	1.2	CINDERS ±2.5'	very moist at	£2.5' bgs			
									<u> </u>	1				
5		2	1	2	3	3	5	1.3	Green Gray and Brown mottled SILT and					
				_	9	9	J	1.5	CLAY, little fine sand ±5.0'					
	\angle								Black SILT, ROOTLETS ±5.1	<u>'</u>				
	l /	3	3	4	4	5	8	1.2	Gray and Dark Gray mottled SILT and CLAY					
	/								±7.75'					
		-	4	-	-	0	10	1.4		1				
	/	4	4	6	7	8	13	1.4	Green Gray and Brown mottled SILT and					
10									CLAY, little organics ±10.0'					
	\Box	5	4	4	2	2	6	0.8	Gray fine SAND and SILT	wet at ±10' bgs	.0' bgs			
	/								, and the second second second second second second second second second second second second second second se					
	У													
	/	6	3	4	3	1	7	1.0	Grades to					
	\vee								Gray fine to coarse SAND ±14.0'					
15		7	3	4	6	7	10	0.6	Green Gray fine to coarse SAND ±15.0'					
	/	-		_	_									
	<u>Г</u>								Orange Brown fine to coarse SAND					
	/	8	8	9	2	2	11	0.9	±17.0'					
	/								Gray fine to coarse SAND ±18.0'					
		9	WOH	WOH	WOH	WOH	_	1.0	Gray CLAY, Some Silt					
20	/		WOII	WOII	WOII	WOII		1.0	Gray CEP11, Some Sin					
20	<u> </u>													
	l /	10	WOH	WOH	WOH	WOH	-	1.3						
	/									Monitoring W	ell installed: See			
		11	WOL	WOH	WOL	WOL	_	1.7			Vell Construction			
	/	11	WOII	WOII	WOII	WOII		1.7		Log" for MW-				
										Log for Wivv-	1571			
25									Boring Terminated at ±24.0'					
30														
									L					
NI – NIC) OF F	1 OW/	TO DE	21\/E 2"	SAMD	ED 12	" \//ITLI	Λ 140	LB. WT. FALLING 30" PER BLOW	GROUNDY	VATER LEVEL			
								A 140			ADINGS			
DRILLING CONTRACTOR: SJB Services, Inc. DRILL RIG TYPE: CME 55									DATE LEVEL CASI					
METH	OD OF	INVES	STIGATI	ION:		4.25" h	ollow s	stem au	ger, 2' split spoon sampler					
										1				
THE	SURSI	IRF40	E INFO	RMAT	ION SH	10/V/N	HERE	JN W	S OBTAINED FOR C.T. MALE DESIGN	1 1				
									SERS ONLY THAT THEY MAY HAVE ACCESS					
TO TH	HE SAM	ΛΕ INF	ORMA	TION A	AVAILA	BLE TO	O C.T.I	MALE.	IT IS PRESENTED IN GOOD FAITH, BUT IS NOT	CAMPIE CLA	COLEICATION DV:			
				TUTE	OR IN	VESTI	GATIO	NS, IN	TERPRETATION OR JUDGMENT OF SUCH	SAIVIPLE CLA	SSIFICATION BY:			
AUTH	AUTHORIZED USERS.										JD			



SUBSURFACE EXPLORATION LOG

BORING NO.: BMW-16A

ELEV.: DATUM:

START DATE: 2/3/10 FINISH DATE: 2/3/10

SHEET 1 OF 1

PROJECT: Old Champlain Mill CTM PROJECT NO.:										06.644	18		
LOC	ATIO	N:	Villa	ge of	Whit	ehall,	New	York	CTM INSPECTOR:		J. Dip	pert	
SAMPLE BLOWS ON SAMPLER													
	SAIV		DL	LOVVO	ON 3	AIVII L	LIN						
Ē.								≿					
Ē.								监	SAMPLE CLASSIFICATION		NOT	ES	
폰							≥						
БЕРТН (FT.)	гүре							RECOVERY					
DE	Ļ	NO.	0/6	6/12	12/18	18/24	N	RE					
		1	2	1	2	2	3	0.3	Brown and Dark Brown fine SAND and SILT,	very moist	t		
									little brick and concrete	_			
	-	_	_	_	4	_		1.0	±2.0	rurat at ±21	bac		
		2	3	2	4	3	6	1.3	Gray fine SAND and SILT, Some medium Sand	1			
									Green Gray and Brown mottled SILT and	moist at ±3' bgs			
5		3	2	5	8	8	13	1.4					
_													
	\sim	_		4.0	0		40	1.0					
		4	7	10	9	8	19	1.0					
	/												
		5	3	3	4	4	7	1.0	Same As Above, little fine sand	wet at ±8'	bgs		
10			1						110.01				
	-	_		-1	-1	4	_	1.0	±10.0'	ł			
		6	WOH	1	1	4	2	1.2	Green Gray and Brown mottled fine SAND				
	/								and SILT ±12.0'				
		7	WOH	WOH	WOH	2	-	1.0	Gray fine to coarse SAND, trace silt, trace fine				
			1						and medium gravel				
15	-	8	WOH	1	3	2	4	0.8	Ü				
_		0	WOII		5		4	0.0	±15.5'				
		9	WOH	WOH	WOH	1	-	1.5	Gray CLAY, Some Silt	Monitoring Well installed: Se			
												installed: See	
•		10	WOH	WOH	WOH	WOH	_	0.0		"Monitoring Well Construction			
20		10	11011	11011	11011	11011		0.0		Log" for M			
	_									206 101 14	111 101	•	
									Boring Terminated at ±20.0'				
25													
25													
20													
30													
N = NO. OF BLOWS TO DRIVE 2" SAMPLER 12" WITH A 140 LB. WT. FALLING 30" PER BLOW									GROU		TER LEVEL		
DRILL	ING CC	NTRA	CTOR:		SJB Se	rvices, l	Inc.		DRILL RIG TYPE: CME 55	DATE LEVEL	READIN CASING	NGS STABILIZATION TIME	
METH	OD OF	INVES	STIGAT	ION:		4.25" h	ollow s	stem au	ger, 2' split spoon sampler	DATE LEVEL	CASING	STABILIZATION TIME	
THE	SHRSH	IREAC	E INIEC	RMAT	IUN SI	10////	HEDE)N W/	S OBTAINED FOR C.T. MALE DESIGN				
									SERS ONLY THAT THEY MAY HAVE ACCESS	\vdash	<u> </u>		
TO TH	HE SAM	ΛΕ INF	ORMA	TION A	AVAILA	BLE T	O C.T.I	MALE.	IT IS PRESENTED IN GOOD FAITH, BUT IS NOT	CAMPLE		EICATION DV:	
				TUTE	FOR IN	VESTI	GATIO	NS, IN	TERPRETATION OR JUDGMENT OF SUCH	SAIVIPLE		FICATION BY:	
AUTH	AUTHORIZED USERS.									JD			

C.T. MALE ASSOCIATES, P.C.



SUBSURFACE EXPLORATION LOG

BORING NO.: BMW-17A

ELEV.: DATUM:

START DATE: 1/29/10 FINISH DATE: 1/29/10

SHEET 1 OF 1

PRO	JECT	<u> </u>	Old	Cham	ıplair	ı Mill			CTM PROJECT NO.:	06.64	:48	
LOC	ATIOI	N:	Villa	ge of	Whit	ehall,	New	York	CTM INSPECTOR:		J. Dip	pert
	SAM	/IPLE	BL	OWS	ON S	SAMPL	ER	<u> </u>				
БЕРТН (FT.)	TYPE	NO.	0/6	6/12	12/18	3 18/24	· N	RECOVERY	SAMPLE CLASSIFICATION		NOT	ES
		1	<u> </u>	3	4	4	7	1.0	ASPHALT ±0.5'			
	H	2	3	3	3	2	6	0.5	Black fine SAND and SILT, GRAVEL, BRICK, CINDERS ±2.0'	moist		
	\angle								Green Gray SILT and CLAY	1		
<u>5</u>		3	4	6	5	5	11	0.0				
		4	7	7	6	4	13	1.2	Green Gray and Brown mottled SILT and CLAY +8.0'	-	st to we	t at ±6' bgs
10		5	2	2	2	2	4	1.4	Green Gray and Brown mottled fine SAND and SILT	wet at ±8'	bgs	
10	H	6	2	2	2	1	4	0.0	and SILT			
	$/\!\!\!/$	7	2	1	2	1	3	1.4	Gray fine to coarse SAND, trace silt			
	\angle								oray made courses ,			
<u>15</u>		8	5	4	3	2	7	0.8				
		9	3	2	2	1	4	1.5	±16.75'	4		
1 1	\angle	Ę	<u> </u>	<u> </u>		<u> </u>		Ę	Gray CLAY, Some Silt			
20	/	10	WOH	WOH	WOH	WOH	-	0.0	ļ	Monitorii	oo Well	installed See
		11	WOH	1	WOH	1	-	1.5	1	Monitoring Well installed: See "Monitoring Well Construction		
										Log" for N	ЛW-17∄	A
		<u> </u>	┼	<u> </u>	├	 	├	 	Boring Terminated at ±22.0'			
25		\vdash	+		\vdash	\vdash	 					
		<u> </u>	↓	<u> </u>	↓	<u> </u>	igspace	<u> </u>				
		 	\vdash	 	\vdash	 	\vdash	\vdash				
30			上									
N N/	2 25 5	S: OM(- TO DI	- V / F OII	24MD	· 50.40	" \A(IT)	. 4 46	TO WE FALLING COURSED BLOW	T CRO	r i D/V/V.	TED LEVEL
			S TO DE ACTOR:			rvices, I		A 140	LB. WT. FALLING 30" PER BLOW DRILL RIG TYPE: CME 55	GRO	READI	TER LEVEL NGS
			STIGATI		3JD 3C.			stem au	ger, 2' split spoon sampler	DATE LEVEL	CASING	STABILIZATION TIME
<u> </u>									-	1——	 	
_									AS OBTAINED FOR C.T. MALE DESIGN			
TO TH	HE SAN	ME INF	FORMA [®]	TION A	AVAILA	ABLE TO	O C.T.I	MALE.		CAMPLE	01 400	ICIOATION DV:
	TO THE SAME INFORMATION AVAILABLE TO C.T.MALE. IT IS PRESENTED IN GOOD FAITH, BUT IS NOT INTENDED AS A SUBSTITUTE FOR INVESTIGATIONS, INTERPRETATION OR JUDGMENT OF SUCH AUTHORIZED USERS.						SAMPLE CLASSIFICATION BY: JD					

Subsurface Exploration Log.xls Rev. 02/28/01

C.T. MALE ASSOCIATES, P.C.



SUBSURFACE EXPLORATION LOG

BORING NO.: BMW-18A

ELEV.: DATUM:

START DATE: 2/1/10 FINISH DATE: 2/1/10

SHEET 1 OF 1

PRO	JECT	<u> </u>	Old	Cham	ıplair	Mill			CTM PROJECT NO.:	06.64	48	
LOC	ATIOI	N:	Villa	ge of	Whit	ehall,	New	York	CTM INSPECTOR:		J. Dip	pert
									T			
	SAM	/IPLE	BL	.OWS	ON S	AMPL	.ER	<u> </u>				
БЕРТН (FT.)	TYPE	NO.	0/6	6/12	12/18	18/24	· N	RECOVERY	SAMPLE CLASSIFICATION		NOT	ES
		1	3	4	6	6	10	1.0	Brown SILT, ORGANICS, Some fine Sand $\pm 1.0^{\circ}$	very mois	t	
]	\angle								Gray and Brown mottled fine SAND and SILT,	1		
		2	4	4	4	3	8	1.5	trace clay			
_	\angle		اليا		Ļ	البا	Ļ	<u> </u>	<u> </u>			
<u>5</u>	//	3	3	1	1	3	2	1.2	.			
	\longrightarrow	4		-	7		12	1 2	±6.5'	wet at ±6'	bgs	
i j	//	4	5	6	7	6	13	1.3	Brown and Gray fine and medium SAND, little			
1 1	\leftarrow	5	6	4	4	4	8	1.5	silt			
10			 		-	\vdash	<u> </u>	1.0	Grades to Brown fine to coarse SAND ± 10.0			
1 7		6	16	6	5	6	11	1.2	Brown and Orange Brown banding fine to	2" to 3" ba	ınding	
1]	/		 				 		coarse SAND	Gray/Bro	_	lens at
1		7	1	3	4	5	7	1.2	1	±11.5'bgs		
1 1	/!								±14.0			
15		8	WOR	WOR	WOH	WOH	-	1.8	Gray CLAY, Some Silt	1		
1	\angle	Ļ	<u> </u>		匚	<u> </u>	\Box	<u> </u>				
l	/	9	WOH	WOH	WOH	WOH	-	1.5			11	
1	\longrightarrow	10					↓	1 2	.	Monitoring Well installed: See "Monitoring Well Construction		
20	//	10	WOH	WOH	WOH	WOH	<u>-</u> -	1.3		"Monitori Log" for N		
	\longleftarrow	 	┼──	 '	 		├─		Boring Terminated at ±20.0'	LUE 10-	/111	1
1		 	+-		 	$\vdash \vdash$	\vdash	 	Dornig Terminated at 120.0			
1		$\vdash \vdash$	+-	$\vdash \vdash$	\vdash	$\vdash \vdash$	┢─	\vdash	·			
1		$\vdash \vdash$	+	$\vdash \vdash$	\vdash	\vdash	\vdash	 	1			
25			 				 		1			
									1			
]			
20		<u> </u>	<u> </u>	<u> </u>	ــــــ	<u> '</u>	<u> </u>	<u> </u>				
30		<u> </u>		<u> </u>	Щ.	<u> </u>	<u> </u>	<u></u>				
N = NC	D. OF E	3LOWS	TO DF	RIVE 2"	SAMP	LER 12	" WITH	I A 140	LB. WT. FALLING 30" PER BLOW	GROL	JNDWA	TER LEVEL
			CTOR:			rvices, I			DRILL RIG TYPE: CME 55	· 1	READII	
METH	OD OF	INVES	STIGATI	ON:	\equiv	4.25" h	iollow s	stem au	iger, 2' split spoon sampler	DATE LEVEL	CASING	STABILIZATION TIME
									AS OBTAINED FOR C.T. MALE DESIGN			
TO TH	HE SAN	ME INF	FORMA	TION A	AVAILA	BLE TO	O C.T.N	MALE.	SERS ONLY THAT THEY MAY HAVE ACCESS IT IS PRESENTED IN GOOD FAITH, BUT IS NOT	CAMDIE	01.488	ITIONTION DV:
	INTENDED AS A SUBSTITUTE FOR INVESTIGATIONS, INTERPRETATION OR JUDGMENT OF SUCH AUTHORIZED USERS.					SAMPLE CLASSIFICATION BY: JD						

Subsurface Exploration Log.xls Rev. 02/28/01

C.T. MALE ASSOCIATES, P.C.



SUBSURFACE EXPLORATION LOG

BORING NO.: BMW-19A

ELEV.: DATUM:

START DATE: 2/1/10 FINISH DATE: 2/1/10

SHEET 1 OF 1

PROJECT: Old Champlain Mill CTM PROJECT NO.:								CTM PROJECT NO.:	06.6	448		
LOC	ATIO	N:	Villa	ge of	Whit	ehall,	New	York	CTM INSPECTOR:		J. Dip	pert
L												
	SAM	PLE	BL	.ows	ON S	AMPL	ER			ĺ		
БЕРТН (FT.)	ТҮРЕ	NO.	0/6	6/12	12/18	18/24	N	RECOVERY	SAMPLE CLASSIFICATION		NOT	ES
		1	WOH	WOH	1	2	-	1.0	Gray and Brown mottled SILT and CLAY,	very mo	ist	
	/								Some Organics			
		2	1	2	1	2	3	1.0				
	/											
5		3	WOH	3	4	5	7	1.1				
		4	6	7	5	5	12	1.2	±7.0'	ĺ		
										wet at ±7	' bgs	
		5	WOR	WOH	WOH	2	-	0.4	Gray fine to coarse SAND, trace fine and		- 6-	
10									medium gravel	ĺ		
_		6 3 4 6 6 10 0.8										
		0	3	-	0	0	10	0.0		ĺ		
		7	3	2	2	1	4	1.2				
			3			1	4	1.2	±13.5'			
15		8	MOD	WOR	WOR	MOLL	_	1.3	Gray CLAY, Some Silt			
		0	WOK	WOK	WOK	WON	-	1.3	Gray CLAT, Some Sin			
		0	IAZOD	IMOD	THOD			0.7				
		9	WOR	WOR	WOR	WOH	-	0.7			TAT 11	11 1 6
		10	on	on	THOR			1.0		Monitoring Well installed: See "Monitoring Well Construction		
20		10	WOR	WOR	WOR	WOH	-	1.0		Log" for		
20	\sim								D 1 T 1 1 1 200 01	Log Ioi	10100-192	-1
									Boring Terminated at ±20.0'			
										ĺ		
25												
										ĺ		
30												
		1.004/6	TO 5-	W/F 2"	04115	ED 46		A	LD WT FALLING COURT STORY	000	ALINIDAA/A	TED LEVE
								A 140	LB. WT. FALLING 30" PER BLOW	GRC	UNDWA READI	TER LEVEL NGS
DRILL METH					əjb Sei	vices, I		tom a:-	DRILL RIG TYPE: CME 55 ger, 2' split spoon sampler	DATE LEVE		STABILIZATION TIME
IVIE I FI	OD OF	IINVES	IIGAII	OIN.		4.43 n	OHOW S	aem au	ger, 2 spin spoon sampier			
- 1.:	N 15 0	DE		D1/:-	1011 2:	10140			0.007411150 500 0.7 144 5 5 5 5 5 5 5		1	
									S OBTAINED FOR C.T. MALE DESIGN SERS ONLY THAT THEY MAY HAVE ACCESS		1	
TO TH	HE SAN	1E INF	ORMA	TION A	AVAILA	BLE TO	O C.T.1	MALE.	IT IS PRESENTED IN GOOD FAITH, BUT IS NOT	SAMPI	F CLASS	IFICATION BY:
				IUIE	-OR IN	vES110	AIIO	NS, IN	TERPRETATION OR JUDGMENT OF SUCH	JV L	JI	
4	AUTHORIZED USERS.						i					

Subsurface Exploration Log.xls Rev. 02/28/01

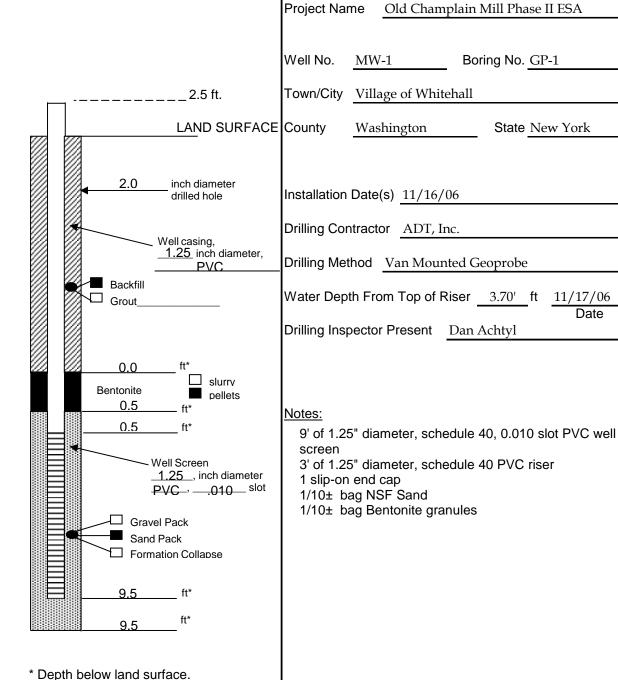
APPENDIX D – MONITORING WELL CONSTRUCTION LOGS



Project Number

06.6448

C.T. MALE ASSOCIATES, P.C.

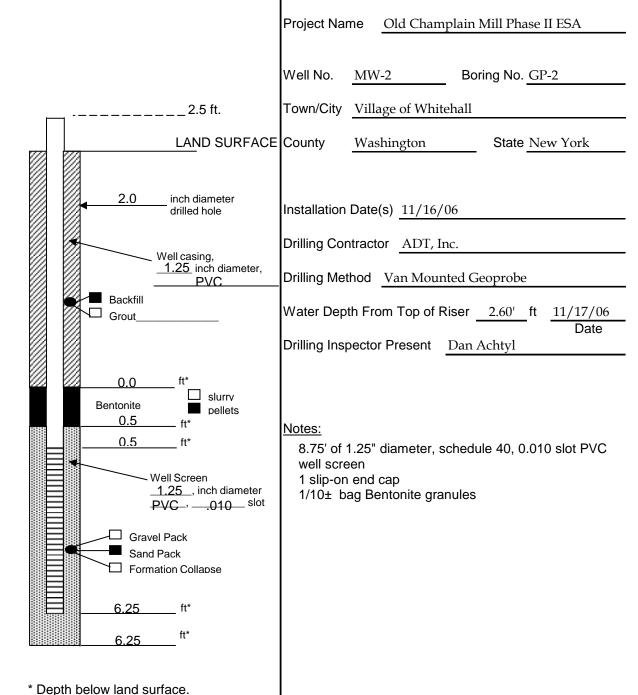




Project Number

06.6448

C.T. MALE ASSOCIATES, P.C.

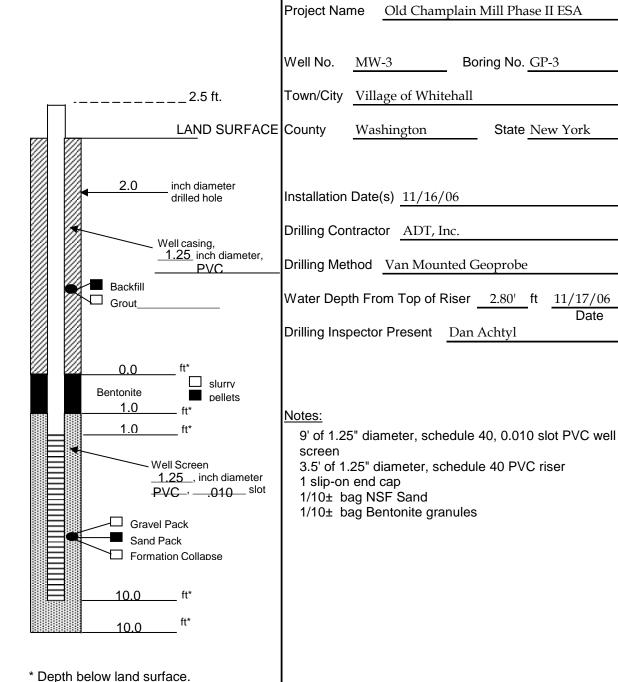




Project Number

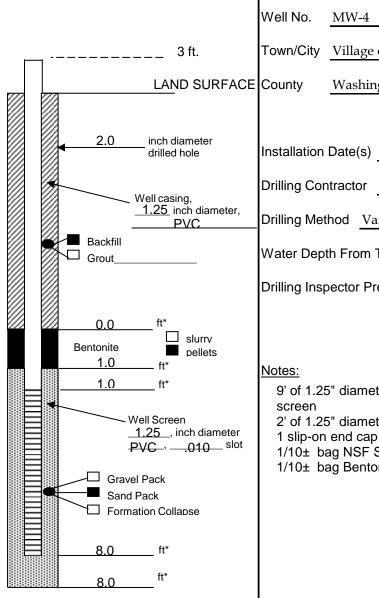
06.6448

C.T. MALE ASSOCIATES, P.C.





C.T. MALE ASSOCIATES, P.C.



^{*} Depth below land surface.

Project Number 06.6448 Project Name Old Champlain Mill Phase II ESA MW-4 Boring No. GP-4 Village of Whitehall State New York Washington Installation Date(s) 11/16/06 Drilling Contractor ADT, Inc. Drilling Method Van Mounted Geoprobe Water Depth From Top of Riser 3.78 ft 11/17/06 Date **Drilling Inspector Present** Dan Achtyl

9' of 1.25" diameter, schedule 40, 0.010 slot PVC well

2' of 1.25" diameter, schedule 40 PVC riser

1/10± bag NSF Sand

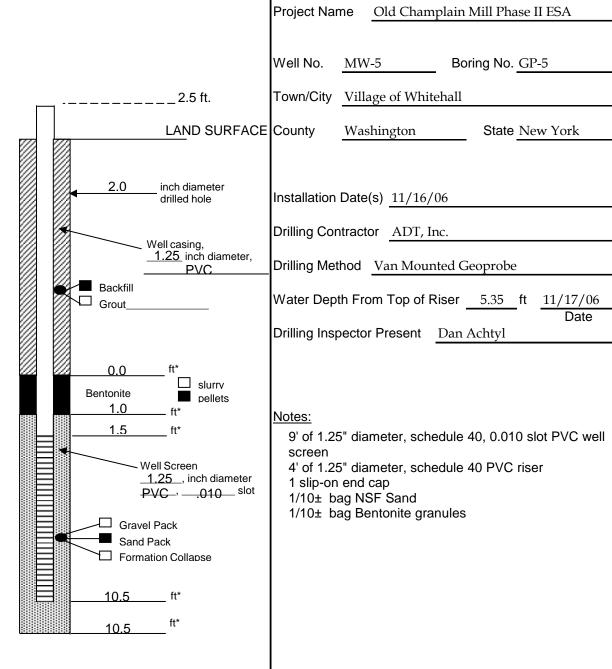
1/10± bag Bentonite granules



Project Number

06.6448

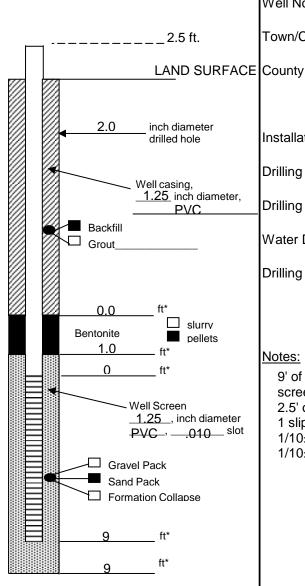
C.T. MALE ASSOCIATES, P.C.



^{*} Depth below land surface.



C.T. MALE ASSOCIATES, P.C.



^{*} Depth below land surface.

Project Number Project Name Old Champlain Mill Phase II ESA Well No. MW-6 Boring No. GP-6 Town/City Village of Whitehall Washington State New York Installation Date(s) 11/16/06 Drilling Contractor ADT, Inc. Drilling Method Van Mounted Geoprobe Water Depth From Top of Riser 5.35 ft 11/17/06 Date **Drilling Inspector Present** Dan Achtyl

06.6448

Notes:

9' of 1.25" diameter, schedule 40, 0.010 slot PVC well

2.5' of 1.25" diameter, schedule 40 PVC riser

1 slip-on end cap

1/10± bag NSF Sand

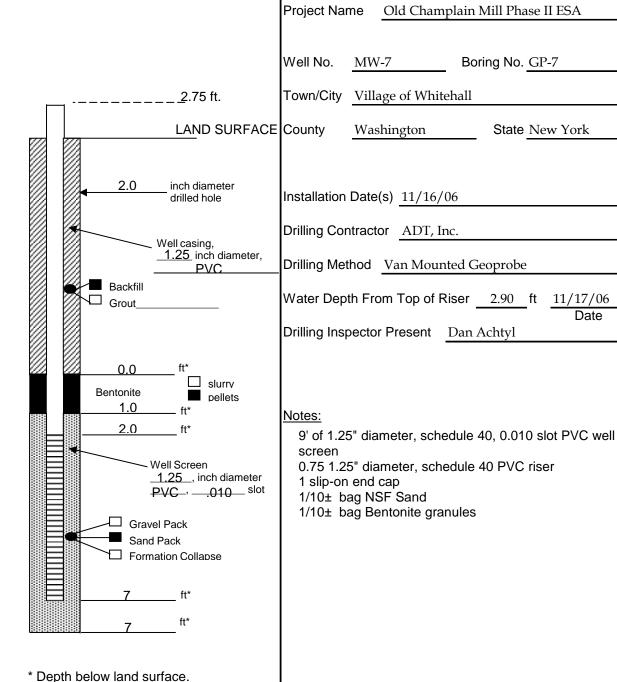
1/10± bag Bentonite granules



Project Number

06.6448

C.T. MALE ASSOCIATES, P.C.



Date

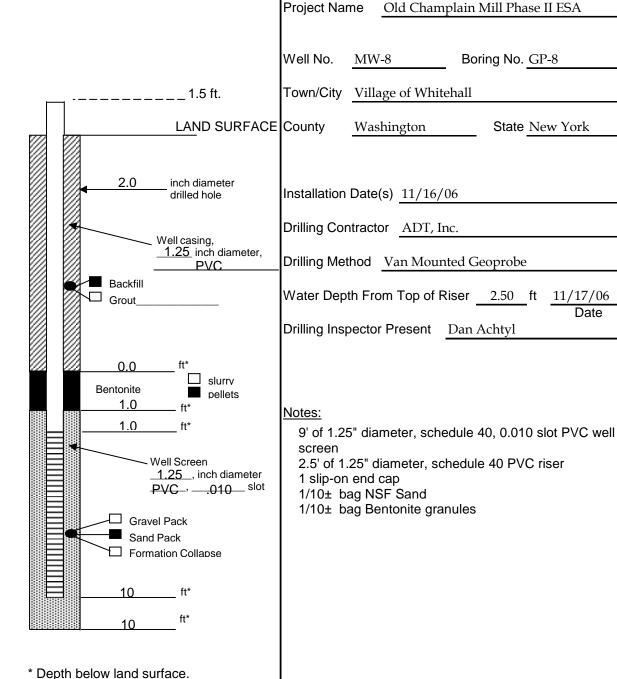


MONITOR WELL CONSTRUCTION LOG

Project Number

06.6448

C.T. MALE ASSOCIATES, P.C.

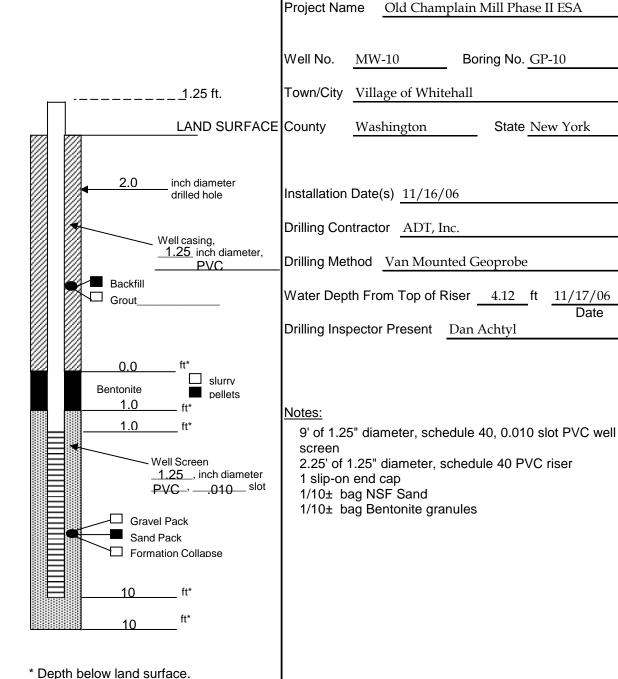




Project Number

06.6448

C.T. MALE ASSOCIATES, P.C.

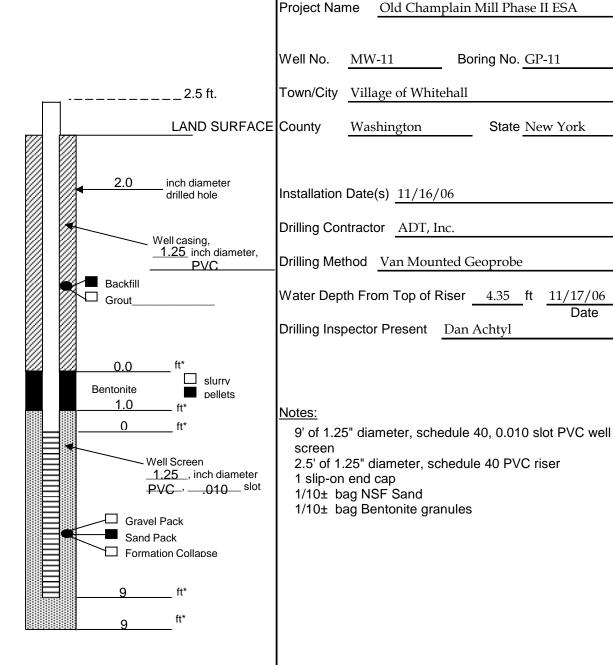




Project Number

06.6448

C.T. MALE ASSOCIATES, P.C.



* Depth below land surface.

11/17/06

Date

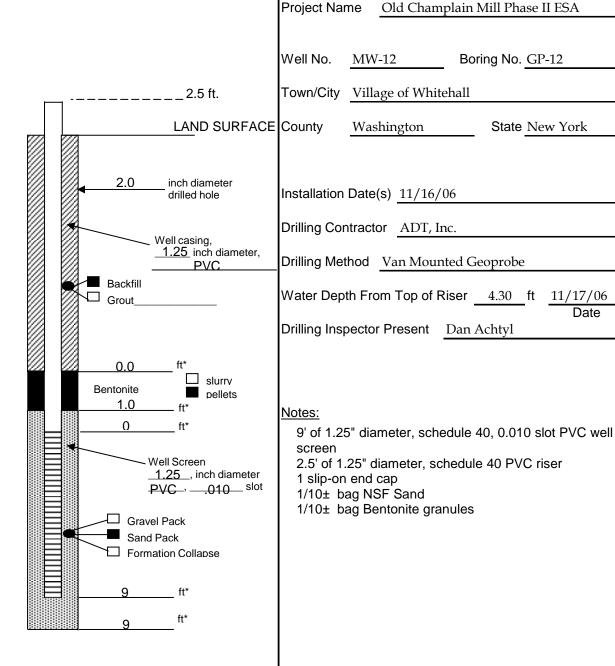


MONITOR WELL CONSTRUCTION LOG

Project Number

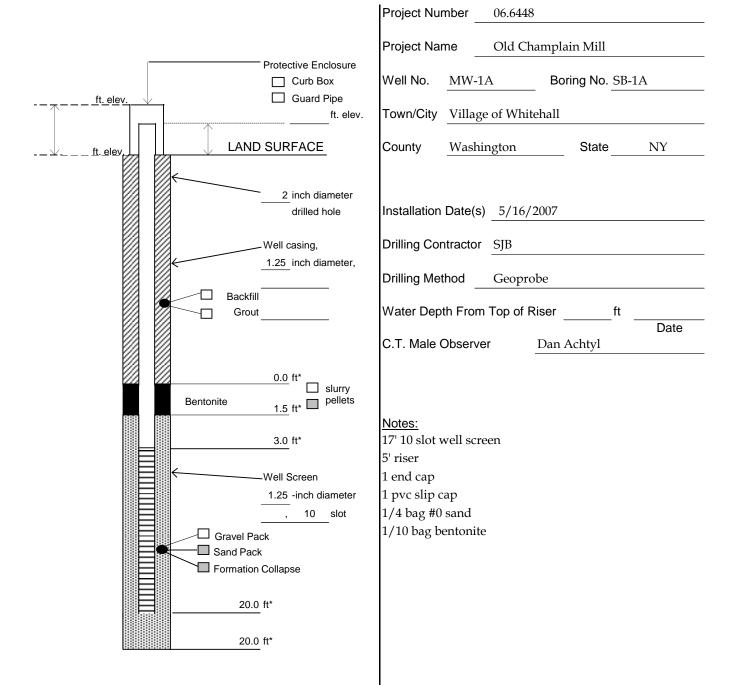
06.6448

C.T. MALE ASSOCIATES, P.C.



^{*} Depth below land surface.

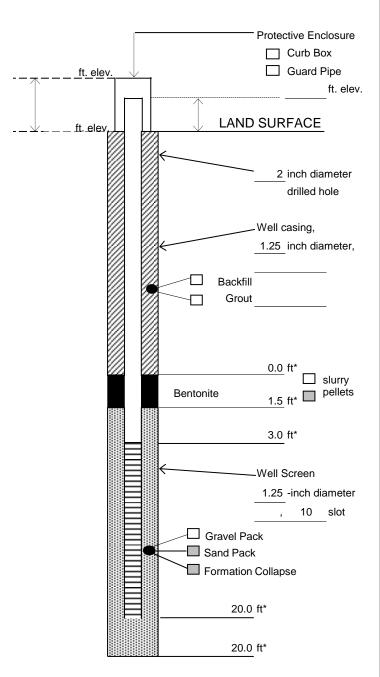




^{*} Depth below land surface.



C.T. MALE ASSOCIATES, P.C.



^{*} Depth below land surface.

Project Number		06.6448				
Project Nar	me _	Old Ch	amplain	Mill		
Well No.	MW-2	2A	Boring	g No. SB	-2A	
Town/City	Villag	ge of White	ehall			
County	Wash	ington		State	NY	
Installation	Date(s	5/16/2	2007			
Drilling Cor	itractor	SJB				
Drilling Method Geoprobe						
Water Dept	th Fron	n Top of R	liser	ft		
C.T. Male Observer Dan Achtyl						

Notes:

17' 10 slot well screen

5' riser

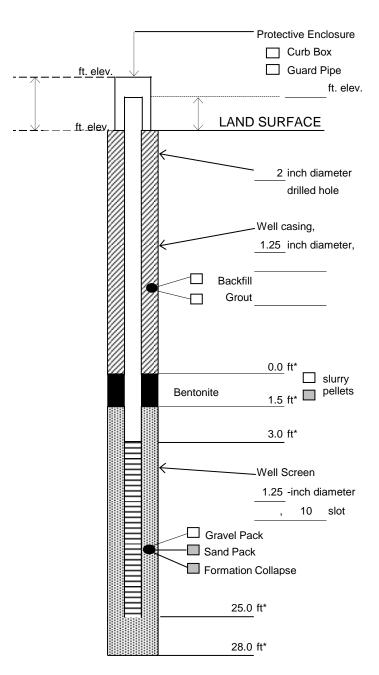
1 end cap

1 pvc slip cap

1/4 bag #0 sand



C.T. MALE ASSOCIATES, P.C.



^{*} Depth below land surface.

Project Number		06.6448				
Project Nar	ne _	Old Ch	amplain	Mill		
Well No.	MW-3	3A	Borin	g No. SB	-3A	
Town/City	Villag	e of White	ehall			
County	Wash	ington		State	NY	
Installation	Date(s) 5/16/2	2007			
Drilling Cor	itractor	SJB				
Drilling Method Geoprobe						
Water Dept	th Fron	n Top of R	Riser	ft		
C.T. Male Observer Dan Achtyl						

Notes:

22' 10 slot well screen

5' riser

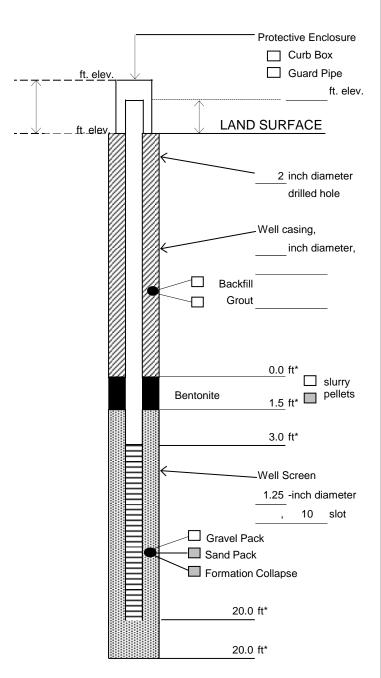
1 end cap

1 pvc slip cap

1/4 bag #0 sand



C.T. MALE ASSOCIATES, P.C.



^{*} Depth below land surface.

Project Nur	mber	06.6448				
Project Nar	me	Old Cha	mplai	n Mill		
Well No.	MW-4/	Α	Borii	ng No. <u>s</u>	5B-4A	
Town/City	Village	of White	hall			
County	ngton	gton State			NY	
Installation	Date(s)	5/16/2	007			
Drilling Cor	ntractor	SJB				
Drilling Met	hod	Geoprob	oe .			
Water Dep	th From	Top of Ri	iser _	f	t	
C.T. Male (Observe	r 1	Dan A	chtyl		Date
		_				

Notes:

17' 10 slot well screen

5' riser

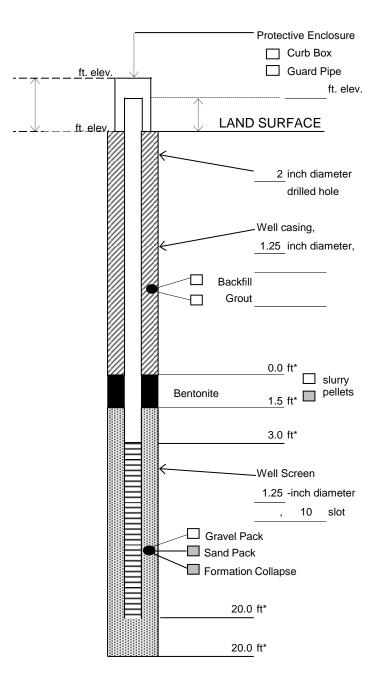
1 end cap

1 pvc slip cap

1/4 bag #0 sand



C.T. MALE ASSOCIATES, P.C.



^{*} Depth below land surface.

Project Nur	nber _	06.6448						
Project Nar	ne _	Old Ch	amplai	n Mill				
Well No.	MW-5	A	-5A					
Town/City	Village	e of White	ehall					
County	Washi	ngton		State	NY			
Installation	Date(s)	5/16/2	2007					
Drilling Cor	tractor	SJB						
Drilling Met	Drilling Method Geoprobe							
Water Dept	th From	Top of R	Riser _	ft				
C.T. Male Observer Dan Achtyl								

Notes:

17' 10 slot well screen

5' riser

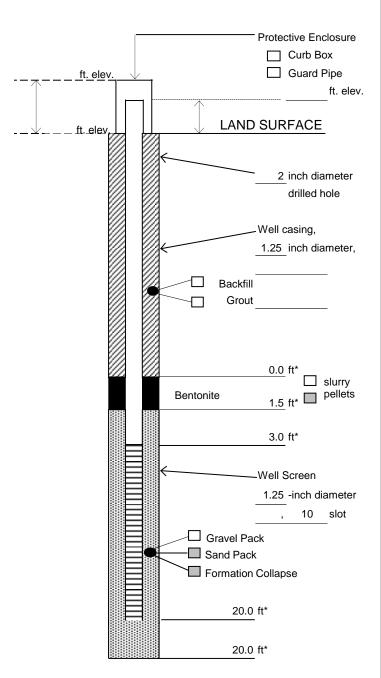
1 end cap

1 pvc slip cap

1/4 bag #0 sand



C.T. MALE ASSOCIATES, P.C.



^{*} Depth below land surface.

Project Nur	nber06.64	48					
Project Nar	me Old C	Champlain Mill					
Well No.	MW-6A	Boring No.	SB-6A				
Town/City	Village of Wh	itehall					
County	Washington	State	NY				
Installation	Date(s) _5/16	6/2007					
Drilling Con	ntractor SJB						
Orilling Method Geoprobe							
Water Depth From Top of Riserft							
C.T. Male C	Observer	Dan Achtyl	Date				

Notes:

17' 10 slot well screen

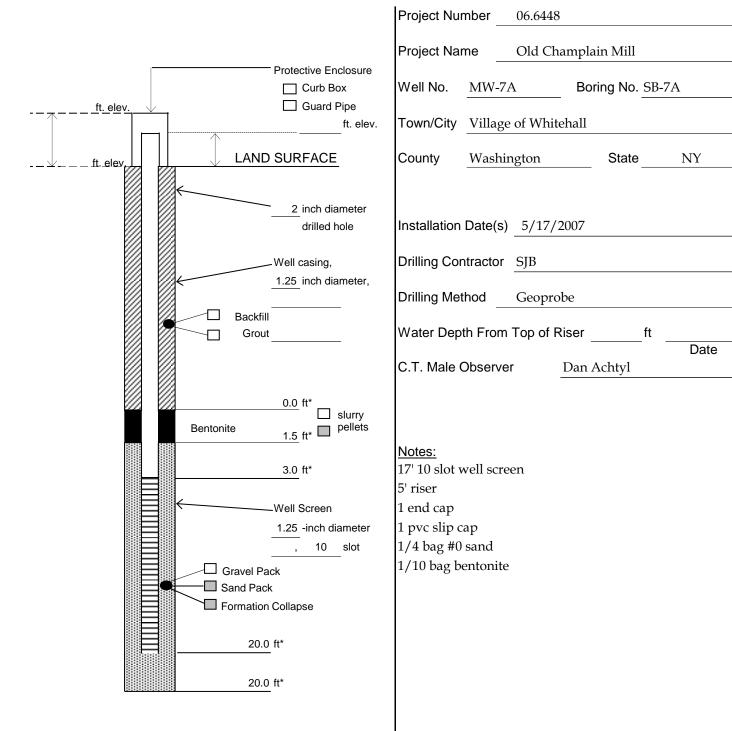
5' riser

1 end cap

1 pvc slip cap

1/4 bag #0 sand

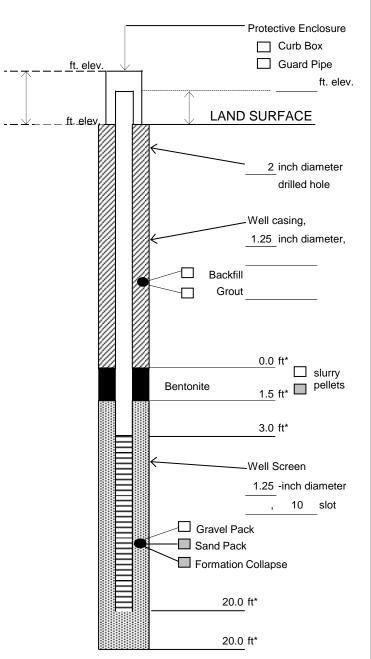




^{*} Depth below land surface.



C.T. MALE ASSOCIATES, P.C.



^{*} Depth below land surface.

Project Nur	nber _	06.6448			
Project Nar	me _	Old Cha	amplain Mill		
Well No.	MW-8	SA	Boring No.	SB-8A	
Town/City	Villag	e of White	ehall		
County	Washi	ngton	State		NY
Installation	Date(s	5/17/2	2007		
Drilling Cor	ntractor	SJB			
Drilling Met	hod _	Geoprol	be		
Water Dep	th From	Top of R	iser	ft	
C.T. Male (Observe	er _	Dan Achtyl		Date

Notes:

17' 10 slot well screen

5' riser

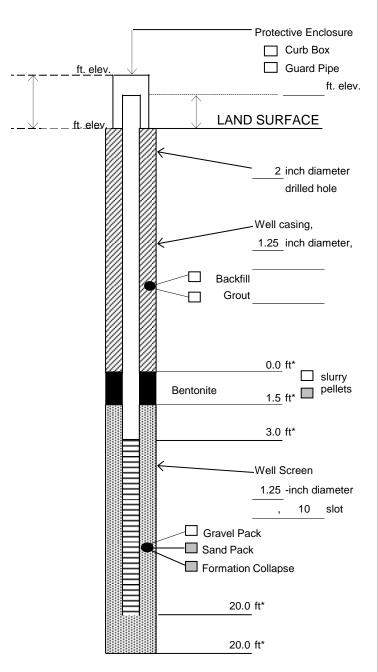
1 end cap

1 pvc slip cap

1/4 bag #0 sand



C.T. MALE ASSOCIATES, P.C.



^{*} Depth below land surface.

Project Nur	nber _	06.6448						
Project Nar	ne _	Old Ch	amplair	n Mill				
Well No.	MW-9	A	Borin	Boring No. SB-9A				
Town/City	Village	e of White	ehall					
County	Washi	hington State			NY			
Installation	Date(s)	5/17/2	2007					
Drilling Con	tractor	SJB						
Drilling Met	Drilling Method Geoprobe							
Water Dept	th From	Top of R	Riser	ft				
C.T. Male Observer Dan Achtyl								

Notes:

17' 10 slot well screen

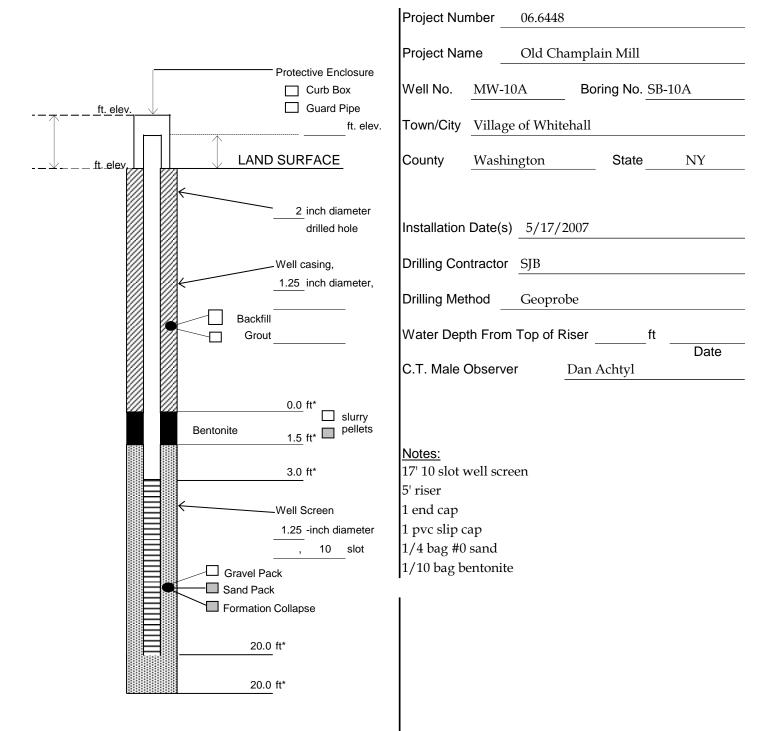
5' riser

1 end cap

1 pvc slip cap

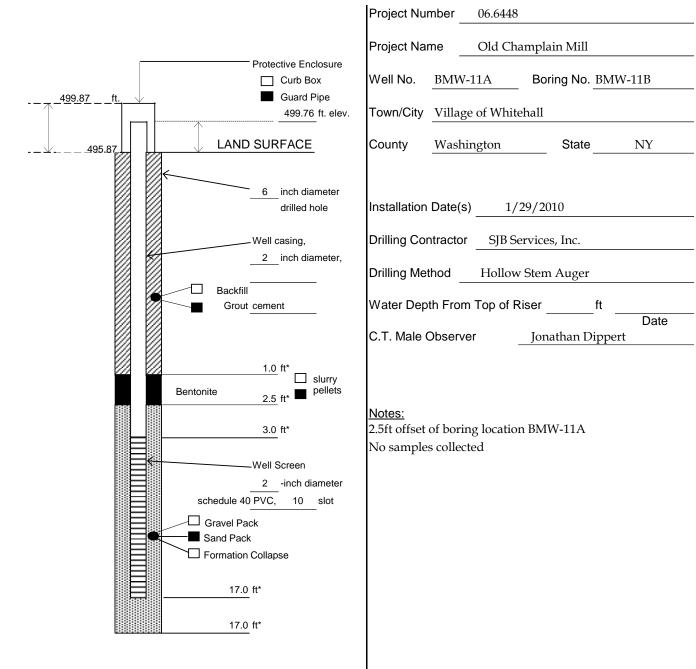
1/4 bag #0 sand





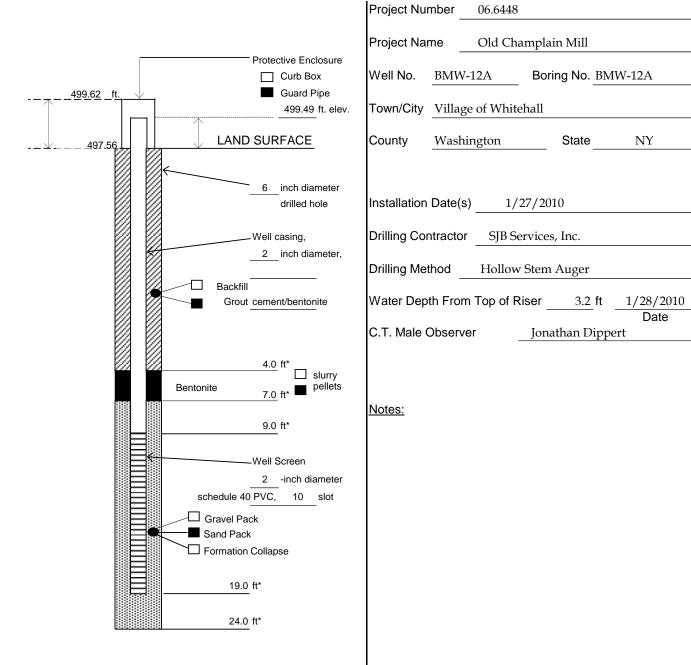
^{*} Depth below land surface.





^{*} Depth below land surface.





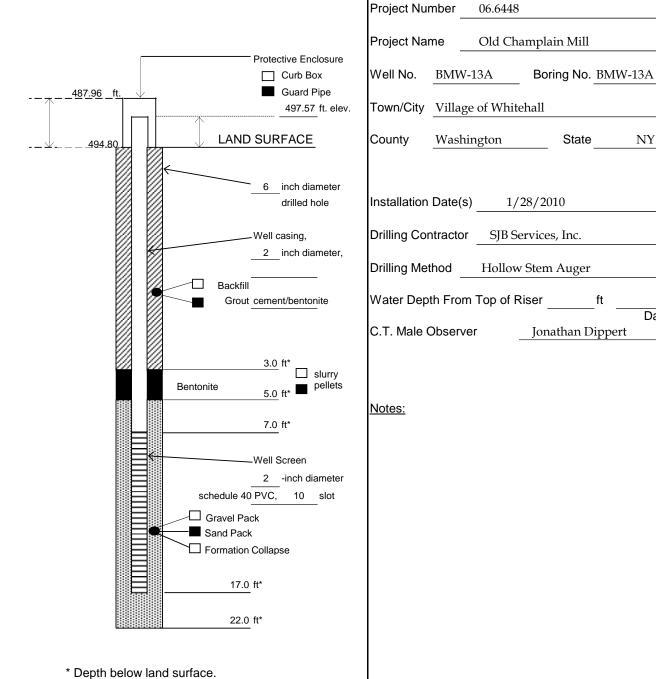
^{*} Depth below land surface.

NY

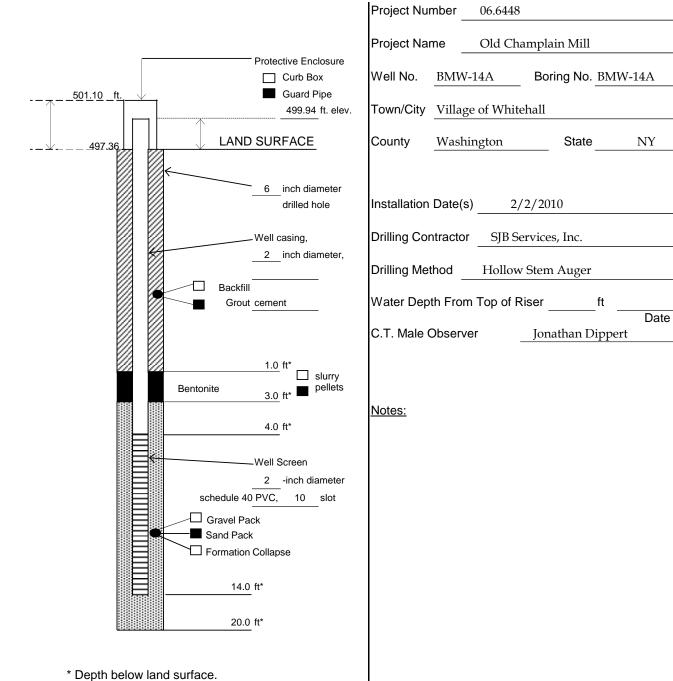
Date



MONITORING WELL CONSTRUCTION LOG



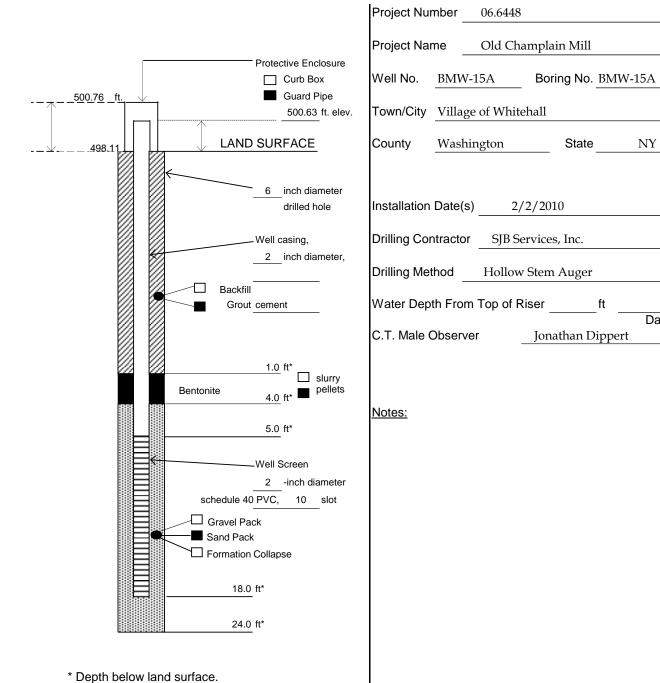




Date



MONITORING WELL CONSTRUCTION LOG

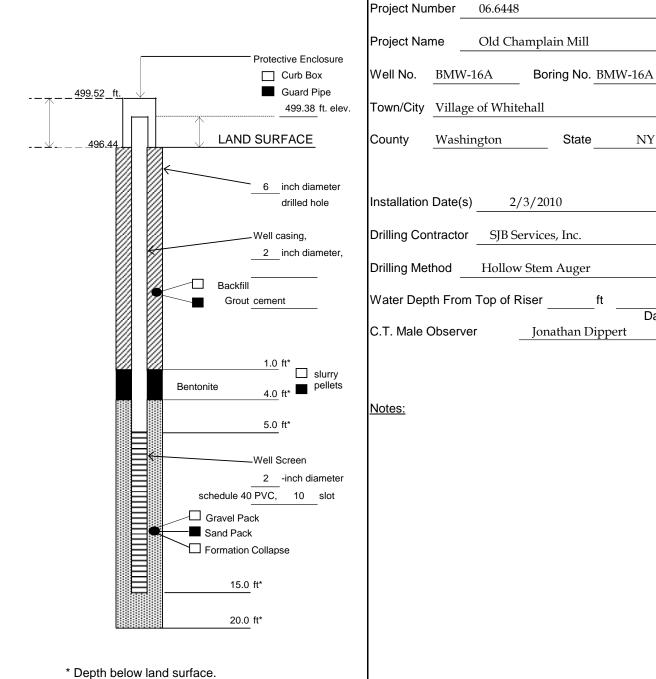


NY

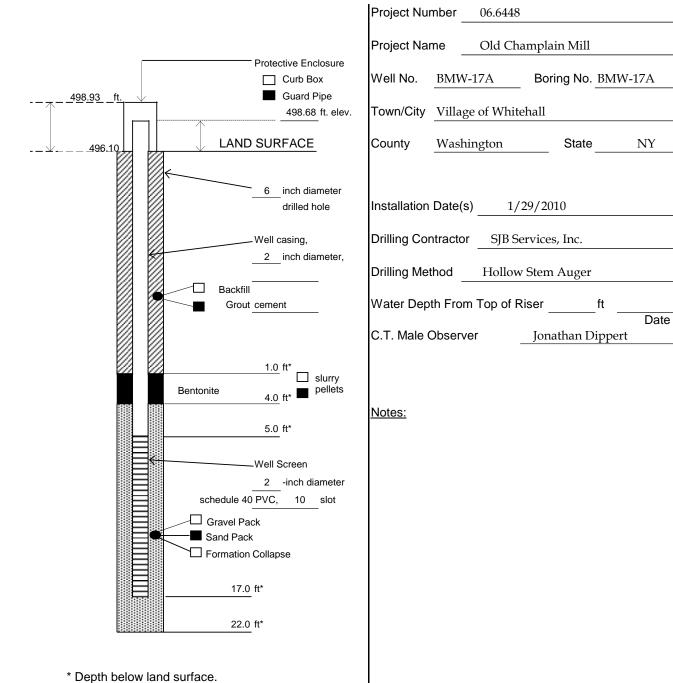
Date



MONITORING WELL CONSTRUCTION LOG



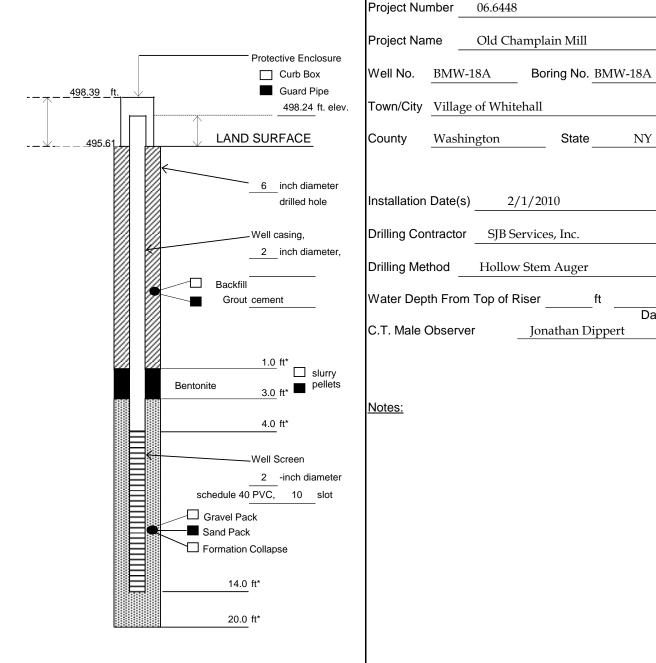




Date

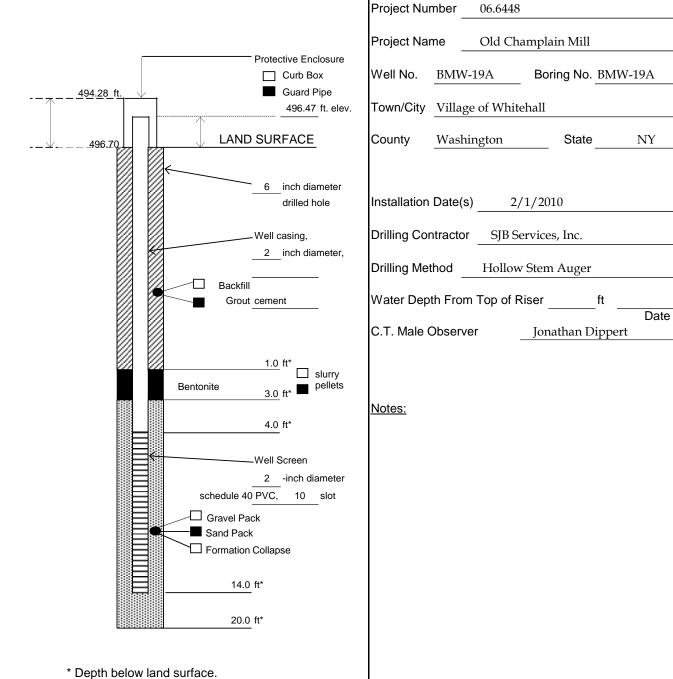


MONITORING WELL CONSTRUCTION LOG



^{*} Depth below land surface.





APPENDIX F - SITE MANAGEMENT FORMS

APPENDIX G GENERIC COMMUNITY AIR MONITORING PLAN

Appendix 1A New York State Department of Health Generic Community Air Monitoring Plan

Overview

A Community Air Monitoring Plan (CAMP) requires real-time monitoring for volatile organic compounds (VOCs) and particulates (i.e., dust) at the downwind perimeter of each designated work area when certain activities are in progress at contaminated sites. The CAMP is not intended for use in establishing action levels for worker respiratory protection. Rather, its intent is to provide a measure of protection for the downwind community (i.e., off-site receptors including residences and businesses and on-site workers not directly involved with the subject work activities) from potential airborne contaminant releases as a direct result of investigative and remedial work activities. The action levels specified herein require increased monitoring, corrective actions to abate emissions, and/or work shutdown. Additionally, the CAMP helps to confirm that work activities did not spread contamination off-site through the air.

The generic CAMP presented below will be sufficient to cover many, if not most, sites. Specific requirements should be reviewed for each situation in consultation with NYSDOH to ensure proper applicability. In some cases, a separate site-specific CAMP or supplement may be required. Depending upon the nature of contamination, chemical- specific monitoring with appropriately-sensitive methods may be required. Depending upon the proximity of potentially exposed individuals, more stringent monitoring or response levels than those presented below may be required. Special requirements will be necessary for work within 20 feet of potentially exposed individuals or structures and for indoor work with co-located residences or facilities. These requirements should be determined in consultation with NYSDOH.

Reliance on the CAMP should not preclude simple, common-sense measures to keep VOCs, dust, and odors at a minimum around the work areas.

Community Air Monitoring Plan

Depending upon the nature of known or potential contaminants at each site, real-time air monitoring for VOCs and/or particulate levels at the perimeter of the exclusion zone or work area will be necessary. Most sites will involve VOC and particulate monitoring; sites known to be contaminated with heavy metals alone may only require particulate monitoring. If radiological contamination is a concern, additional monitoring requirements may be necessary per consultation with appropriate DEC/NYSDOH staff.

Continuous monitoring will be required for all <u>ground intrusive</u> activities and during the demolition of contaminated or potentially contaminated structures. Ground intrusive activities include, but are not limited to, soil/waste excavation and handling, test pitting or trenching, and the installation of soil borings or monitoring wells.

Periodic monitoring for VOCs will be required during <u>non-intrusive</u> activities such as the collection of soil and sediment samples or the collection of groundwater samples from existing monitoring wells. "Periodic" monitoring during sample collection might reasonably consist of taking a reading upon arrival at a sample location, monitoring while opening a well cap or

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overturning soil, monitoring during well baling/purging, and taking a reading prior to leaving a sample location. In some instances, depending upon the proximity of potentially exposed individuals, continuous monitoring may be required during sampling activities. Examples of such situations include groundwater sampling at wells on the curb of a busy urban street, in the midst of a public park, or adjacent to a school or residence.

VOC Monitoring, Response Levels, and Actions

Volatile organic compounds (VOCs) must be monitored at the downwind perimeter of the immediate work area (i.e., the exclusion zone) on a continuous basis or as otherwise specified. Upwind concentrations should be measured at the start of each workday and periodically thereafter to establish background conditions, particularly if wind direction changes. The monitoring work should be performed using equipment appropriate to measure the types of contaminants known or suspected to be present. The equipment should be calibrated at least daily for the contaminant(s) of concern or for an appropriate surrogate. The equipment should be capable of calculating 15-minute running average concentrations, which will be compared to the levels specified below.

- 1. If the ambient air concentration of total organic vapors at the downwind perimeter of the work area or exclusion zone exceeds 5 parts per million (ppm) above background for the 15-minute average, work activities must be temporarily halted and monitoring continued. If the total organic vapor level readily decreases (per instantaneous readings) below 5 ppm over background, work activities can resume with continued monitoring.
- 2. If total organic vapor levels at the downwind perimeter of the work area or exclusion zone persist at levels in excess of 5 ppm over background but less than 25 ppm, work activities must be halted, the source of vapors identified, corrective actions taken to abate emissions, and monitoring continued. After these steps, work activities can resume provided that the total organic vapor level 200 feet downwind of the exclusion zone or half the distance to the nearest potential receptor or residential/commercial structure, whichever is less but in no case less than 20 feet, is below 5 ppm over background for the 15-minute average.
- 3. If the organic vapor level is above 25 ppm at the perimeter of the work area, activities must be shutdown.
- 4. All 15-minute readings must be recorded and be available for State (DEC and NYSDOH) personnel to review. Instantaneous readings, if any, used for decision purposes should also be recorded.

Particulate Monitoring, Response Levels, and Actions

Particulate concentrations should be monitored continuously at the upwind and downwind perimeters of the exclusion zone at temporary particulate monitoring stations. The particulate monitoring should be performed using real-time monitoring equipment capable of measuring particulate matter less than 10 micrometers in size (PM-10) and capable of integrating over a period of 15 minutes (or less) for comparison to the airborne particulate action level. The equipment must be equipped with an audible alarm to indicate exceedance of the action level. In addition, fugitive dust migration should be visually assessed during all work activities.

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- If the downwind PM-10 particulate level is 100 micrograms per cubic meter (mcg/m³) greater than background (upwind perimeter) for the 15-minute period or if airborne dust is observed leaving the work area, then dust suppression techniques must be employed. Work may continue with dust suppression techniques provided that downwind PM-10 particulate levels do not exceed 150 mcg/m³ above the upwind level and provided that no visible dust is migrating from the work area.
- If, after implementation of dust suppression techniques, downwind PM-10 particulate levels are greater than 150 mcg/m³ above the upwind level, work must be stopped and a re-evaluation of activities initiated. Work can resume provided that dust suppression measures and other controls are successful in reducing the downwind PM-10 particulate concentration to within 150 mcg/m³ of the upwind level and in preventing visible dust migration.
- All readings must be recorded and be available for State (DEC and NYSDOH) and County Health personnel to review.

December 2009

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