Environmental Services

Engineering Services

Phase I – Initial Site Investigation Report
Release Tracking Number 3-34474

River's Edge Development

484 Boston Post Road
Wayland, Massachusetts

August 14, 2018

Prepared for:

Wayland Board of Selectmen
% Town Administrator Nannette F. Balmer
41 Cochituate Road
Wayland, MA 01778

Prepared by:

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SIGNATURE OF REPORT AUTHORS

The undersigned employees of CMG Environmental, Inc. (CMG) prepared and reviewed this report. Please direct any requests for additional information regarding the content of this document to these individuals.

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August 14, 2018
Date

Gary E. Magnuson
Principal

8-14-2018
Date

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1.0 INTRODUCTION

This Report describes the Phase I – Initial Site Investigation (ISI) that CMG Environmental, Inc. (CMG) performed on a portion of the property located at 484 Boston Post Road in Wayland, Massachusetts. CMG conducted this ISI at the request of the Town of Wayland.

The entire property addressed as 484 Boston Post Road consists of parcels of land identified on Wayland Assessor's Map 22 as Lots 22-3 (7.63 acres), 22-4 (15 acres), 22-5 (24 acres), 22-6 (4.5 acres), and 22-7 (1.0 acre). The Town of Wayland has designated Lot 22-6, Lot 22-7, and the southerly half of Lot 22-3 as the planned "River's Edge" development (which comprises about 7 acres of land). CMG will herein refer to these 7 acres as "the Property" (see Figure 2).

CMG defines "the Site" (disposal site) as a part of the large (estimated at 34,000 yd^3) soil stockpile located principally on Lot 22-6, amassed over many years by the Town of Wayland Highway Department from roadway maintenance projects (see Figure 3).

1.1 PURPOSE

The Massachusetts Department of Environmental Protection (DEP) has set forth the following ISI performance standard at 310 CMR 40.0482 of the Massachusetts Contingency Plan (MCP, 310 CMR 40.0000, et seq.):

> A Phase I Report shall provide sufficient information to meet the requirements of the Tier Classification process described in 310 CMR 40.0500 or, where appropriate, support a Permanent Solution Statement filed for a site prior to Tier Classification.

CMG has prepared this ISI Report to meet the performance standard for a Phase I – Initial Site Investigation, as set forth by the DEP at 310 CMR 40.0482.

1.2 GENERAL DISPOSAL SITE INFORMATION [40.0483(1)(a)]

The Vertex Companies, Inc. (Vertex) of Boston, Massachusetts was supervising characterization of the large soil stockpile located at the Property in 2017. In August 2017 Vertex had this stockpile partially graded into a more manageable configuration to allow sampling for waste classification or potential reuse. On August 8, 2017 Vertex observed suspect ACWM (pieces of 3-4" diameter transite pipe & vinyl floor tile) near the top of the stockpile and halted grading activities. They collected samples of this material for asbestos analysis using polarized light microscopy (PLM) methodology. Five of the six samples contained >1% asbestos.

1.2.1 RELEASE TRACKING NUMBER (RTN)

CMG prepared a "Release Notification & Notification Retraction Form" (BWSC103) for RTN 3-34474, which the Town of Wayland submitted to DEP on October 12, 2017. Wayland Town Engineer Paul Brinkman, P.E. had verbally notified Mr. Sean Griffin of DEP of a 2-hour reporting condition at 6:40 p.m. on August 14, 2017 on behalf of the Town of Wayland (greater than the reportable quantity of 1 pound asbestos identified in samples Vertex collected in August 2017). DEP issued RTN 3-34474 to identify this reporting condition at that time.

1.2.2 SITE LOCATION & LEGAL DESCRIPTION

As noted above, 484 Boston Post Road, Wayland MA 01778 consists of five parcels of land that total over 52 acres of land, of which approximately 7 acres (the Property) comprise the planned "River's Edge" development. Boston Post Road is also U.S. Route 20.

The "Site" (RTN 3-34474 disposal site) occupies approximately 4,370 square feet (0.10 acres) near the top of the large soil stockpile located principally on Lot 22-6. The Site is at 42º21'50.9" north latitude (42.36413 °N), 71º22'55.5" west longitude (-71.38208 °E). The UTM (Universal Transverse Mercator) coordinates in the middle of the Site are 4,692,955 meters north and 303,845 meters east in Zone 19.

1.2.3 LOCUS MAP

Figure 1 (Site Location) shows the Site (disposal site) locus in relation to streets and other topographic features on the United States Geological Survey (USGS) Framingham, Massachusetts quadrangle.

1.2.4 ON-SITE WORKERS

No one works (or resides) at the Site. Its small size and location near the top of the large soil stockpile makes the chances of even a trespasser entering the Site remote.

1.2.5 RESIDENTIAL POPULATION

According to its Wikipedia page, the 2010 population of Wayland, a town 15.9 square miles in size, was 13,444 persons. Approximately 664 persons live within ½-mile of the Site based on these numbers.

1.2.6 SURROUNDING LAND USAGE

The Property is in an area of Wayland zoned R40 for residential use (within overlay districts for municipal use, wireless communication, and River's Edge Housing). Adjoining property usage is as follows:

ADJOINING PROPERTY USES

DIRECTION	ADDRESS	PROPERTY USE
North	Also 484 Boston Post Road	Wayland Transfer Station
East	No street address (Lot 22-8)	Undeveloped wooded wetlands
South	No street address (Lots 22-1 & 22-2)	Undeveloped wooded wetlands
West	20 Boston Post Road, Sudbury MA	Sudbury Transfer Station

1.2.7 NEARBY INSTITUTIONS

There are no 'institutions,' as defined at 310 CMR 40.0006[1] within 500' of the Site.

1.2.8 NEARBY NATURAL RESOURCE AREAS

Wooded wetlands along the westerly bank of the Sudbury River are located within 500' of the Site (the river is located approximately 0.3 miles to the east).

[1] Any publicly or privately owned hospital, health care facility, orphanage, nursing home, convalescent home, educational facility, or correctional facility, where such facility in whole or in part provides overnight housing.

Figure 4 (Priority Resource Map) illustrates 500' and ½-mile radii surrounding the Site. There are no Zone II areas or Interim Wellhead Protection Areas within 500' of the Site. However, the Site is within a mapped high-yield Potentially Productive Aquifer. The Massachusetts Division of Water Pollution Control does not indicate any Zone A areas within 500' of the Site. There are no private wells within 500' of the Site According to Wayland Board of Health information.

Figure 4 does not depict any Sole Source Aquifers; local, state and/or federal protected open space; fish habitats; or habitats of Species of Special Concern or Threatened or Endangered Species within 500' of the Site. However, there is an area of estimated rare wetland wildlife habitat approximately 500' to the east-southeast.

1.3 DISPOSAL SITE MAP [40.0483(1)(b)]

Figure 3 depicts the RTN 3-34474 disposal site boundaries to the extent that subsurface assessment conducted to date has defined them (labeled as "Approximate Area of Identified ACWM"). CMG identifies the 'disposal site' as this area of identified asbestos-containing waste material disposal. Figure 3 also illustrates soil sampling locations at or adjacent to the large Property soil stockpile. These include:

- Vertex soil sampling locations TP-3 & TP-4 within the Site boundary and TP-1, TP-2 & TP-6 at other portions of the soil stockpile;
- Vertex Test Pit #4 location within the Site boundary, Test Pit #1 & Test Pit #3 partially within the Site boundary, and Test Pit #2, Test Pit #5 & Test Pit #6 at other portions of the soil stockpile; and
- Tighe & Bond[2] test pit locations TP-9 & TP-10 within the Site boundary and test pit locations TP-1, TP-2, TP-3, TP-4, TP-5, TP-7, TP-8, TP-11 & TP-12 at other portions of the soil stockpile.

There are no property boundaries, on-Site buildings, floor drains, storm drains, subsurface utilities, OHM storage structures & areas, or monitoring wells located within or adjacent to Site boundaries.

2.0 SITE HISTORY [40.0483(1)(C)]

2.1 OWNER & OPERATIONS HISTORY

Wayland Assessor's records indicate the current owner of the Property as the Town of Wayland Highway Department (195 Main Street, Wayland MA 01778). The following table summarizes Wayland Assessor's Office and Middlesex County Registry of Deeds records of Site ownership since 1908. CMG does not represent our cursory review of ownership records to be a complete chain-of-title for the Site.

[2] Tighe & Bond, Inc. (T&B) of Worcester, Massachusetts conducted a "Phase I Environmental Site Assessment and Limited Phase II Investigation" of the entire Property in 2012.

PAST SITE OWNERSHIP

DATE OF TRANSFER	SITE OWNER	BOOK & PAGE REFERENCE
MAP 22, LOT 3		
January 13, 1971	Town of Wayland (taking)	11943 | 420
February 21, 1961	Boston Edison Company	Not Identified
MAP 22, LOT 6		
April 11, 1978	Town of Wayland (taking)	13443 | 177
Not Identified	Estate of William & Mary Lord	Not Identified
MAP 22, LOT 7		
September 27, 1968	Town of Wayland (taking)	11003 | 389
January 25, 1963	Harold H. Sears	10207 | 131
June 21, 1946	Donald W. & Constance R. Neelon	7000 | 336
June 11, 1946	Old Colony Trust Company (much larger property)	(Probate Court)
August 4, 1908	Estate of Ada L. Perry (much larger property)	3388 | 578
Not Identified	Charles E. Giles, Jr. (much larger property)	Not Identified

The Town of Wayland has owned and operated the Property since at least 1978 (and likely since 1968). The Town had operated the southwesterly portion of the Property as the Wayland and Sudbury Septage Treatment Facility (a wastewater treatment plant) until circa 2010. The Wayland Police Department operated a firing range at the northwesterly portion for the Property until circa 2017. The Town Highway Department had used the central portion of the Property to stockpile excess soil materials from roadway projects until circa 2015. First Student, Inc. currently uses the southwesterly portion of the property to park Town of Wayland school buses.

Historic topographic mapping depicts a residence at the Map 22, Lot 7 portion of the Property in 1967, 1979, and 1987.

2.2 RELEASE HISTORY

DEP records indicate a release of waste gear oil to the former wastewater treatment plant at the Property on August 27, 1986 (identified as RTN 3-1724). Subsequent investigation determined that this material was entirely contained within de-grit and raw waste aboveground storage tanks and did not result in a release to the environment.

DEP records also indicate petroleum releases at the Town of Wayland Sand Hill Landfill in 2005 (RTN 3-24698) and 2008 (RTN 3-27741). This landfill is located on the Map 22 Lot 4 parcel which is also addressed as 484 Boston Post Road, but is well beyond Property boundaries.

As noted in Section 2.1 above, Vertex observed suspect ACWM near the top of the stockpile on August 8, 2017. They collected six samples of this material on August 10, 2017 and submitted these for PLM asbestos testing. Five of the six samples contained >1% asbestos. Subsequent calculation indicated that the total amount of asbestos identified in these five samples exceeded the reportable quantity of 1 pound. DEP has identified this two-hour notification condition as RTN 3-34474.

2.3 OHM USE & STORAGE

The Wayland/Sudbury Septage Treatment Facility stored several chemicals in a 'chemical shed' at the southwesterly portion of the Property when they were in operation. These included:

- 55-Gallon drums of dilute hydrochloric acid, sodium hypochlorite (bleach), caustic soda (NaOH solution), lubricating oils, gear oils, hydraulic oil & compressor oil;
- 35-Gallon drums of degreasers, weed killer, liquid deicer, detergent, soaps, turbine oil & lubricating oil;
- 25-Gallon drums of sulfuric acid, hydrochloric acid & phosphoric acid;
- 5-Gallon buckets of polyester patch mix, concrete cure seal, 'non-acid cleaner,' gear oils & lubricating oil; and
- Various smaller containers of cleaners, spray insecticide & lubricants.

The septage treatment facility also reportedly had a 4,000-gallon No. 2 fuel oil underground storage tank (UST), a 1,000-gallon diesel fuel UST, and two ferric chloride solution USTs. These tanks were located just north of the Property building. Available information indicates the Town of Wayland had these USTs removed on December 17, 1998.

The Wayland Police Department had stored live ammunition in two storage trailers located in the northwesterly portion of the Site, adjacent to the firing range.

2.4 WASTE MANAGEMENT

The Map 22, Lot 3 portion of the Property is part of the land that the DEP Bureau of Solid Waste 'Site Assigned' for the Town of Wayland's Sand Hill Sanitary Landfill in 1975. However, this solid waste landfill (now the Wayland Transfer Station) is located on parcels 17-18, 22-4, and 22-10A which are 950-2,000' (0.18-0.38 miles) north-northwest of the Property.

The former Wayland/Sudbury Septage Treatment Facility operated as a wastewater treatment plant from 1983 through the end of 2009. This operation reportedly discharged treated water to the subsurface. The Town of Wayland decommissioned this facility circa 2010.

CMG presumes that when in operation, the septage treatment facility maintained a standard solid waste dumpster for disposal of ordinary solid waste. There is currently no land disposal, subsurface disposal, surface water discharge, or wastewater discharge from the Property.

2.5 ENVIRONMENTAL PERMITS & COMPLIANCE HISTORY

The former Wayland/Sudbury Septage Treatment Facility (EPA ID #MAW052725) did not have a National Pollution Discharge Elimination System (NPDES) permit, as it did not discharge to surface water. According to the EPA's 1997 listing of Municipal Wastewater Treatment Facilities in New England, this facility incorporated rotating biological contactors to treat septage, and discharged treated water to shallow groundwater via a rapid infiltration basin. It disposed of residual solids (sludge) by landfilling (presumably at the adjacent Sand Hill Sanitary Landfill).

CMG discovered no information indicating the issuance of any local or state permits regarding wetlands alteration at the Property. T&B indicated that the former septage treatment facility had

a groundwater discharge permit from DEP. We discovered no information indicating the issuance of any state permits for M.G.L. c.21E response actions, wastewater disposal, or air quality discharge at the Property. We discovered no information indicating the issuance of federal Resource Conservation and Recovery Act (RCRA) or NPDES permits at the Property.

2.6 POTENTIALLY RESPONSIBLE PARTY (PRP)[3]

DEP assigned RTN 3-34474 to the Town of Wayland.

PRP Name: Town of Wayland
Town Building
41 Cochituate Road
Wayland, MA 01778-2614

Contact: Paul Brinkman, P.E.
Town Engineer
66 River Road
Wayland, MA 01778-1829
508-358-6852

3.0 HYDROGEOLOGICAL CHARACTERISTICS [40.0483(1)(D)]

3.1 RELEVANT SUBSURFACE & HYDROLOGIC INVESTIGATIONS

3.1.1 TIGHE & BOND (2012)

T&B conducted an American Society for Testing and Materials (ASTM) Phase II investigation of the Property in August 2012 on behalf of the Town of Wayland. This investigation included:

- Excavation of 12 test pits (designated TP-1 through TP-12) to a depth of 5' in the large soil stockpile (including two test pit locations within the subject Site);
- Field-screening of 82 surface or shallow soil samples and 6 deeper (1-2' below grade) samples in the firing range portion of the Property for total lead using a portable X-ray fluorescence meter;
- Advancement of 7 soil borings (designated B-1 through B-7) in the former wastewater treatment plan portion of the Property (5 to a depth of 20' below grade in the former UST area, and two others to a depth of 10' below grade);
- Installation of three soil gas monitoring points (designated SG-1 through SG-3) for field-screening of landfill gases; and
- Collection of groundwater samples from one monitoring well ("Downgradient-1") with laboratory analysis of samples for volatile organic compounds (VOCs), volatile petroleum hydrocarbons (VPH), and extractable petroleum hydrocarbons (EPH) with target polynuclear aromatic hydrocarbon (PAH) identifications.

[3] "PRP" = Potentially Responsible Party, defined at 310 CMR 40.0006 as "a person who is potentially liable pursuant to M.G.L. c. 21E" (Massachusetts General Law Chapter 21E, the Massachusetts Oil and Hazardous Material Release Prevention Act).

3.1.2 VERTEX (2017 & 2018)

Vertex graded the top of the large Property soil stockpile in August 2017 to reshape it to a more manageable configuration and allow soil sampling for waste classification purposes. During this reshaping work they observed suspect ACWM (Transite pipe & vinyl floor tiles) within the soil stockpile. To further investigate this ACWM Vertex excavated a series of 6 test pits, designated Test Pit #1 through Test Pit #6. They also collected soil samples from 6 locations, designated TP-1 through TP-6.

Vertex excavated 8 or more additional test pits in undisturbed portions of the large soil stockpile at the Property between July 16 and 18, 2018. They observed additional suspect ACWM in test pits near the top of the large soil stockpile, and collected a composite soil sample at each test pit location for asbestos testing.

Figure 3 illustrates the location of T&B and Vertex sampling points.

3.2 BORINGS & WELLS

T&B advanced 7 soil borings in the former wastewater treatment plant portion of the Property. Appendix B includes copies of their boring logs. T&B did not install any groundwater monitoring wells at the Property, but they did observe one such well at the Property (the "Downgradient" well) and one within 10' of the westerly Property boundary (the "Upgradient" well). T&B did not state who installed these monitoring wells or when they were put in.

Vertex did not advance soil borings; their soil samples each consisted of three sub-samples of surficial or shallow soil composited into a single sample for laboratory PLM analysis.

3.3 TECHNICAL JUSTIFICATION REGARDING GROUNDWATER

Section 310 CMR 40.0481(3) of the MCP reads as follows:

> 40.0481: General Provisions for Phase I Initial Site Investigation Report
>
> (3) The preliminary description of hydrogeologic conditions at a disposal site required in a Phase I Report pursuant to 310 CMR 40.0483(d) shall be based upon the installation of a minimum of three groundwater monitoring wells, in locations near known or likely release or source areas. This requirement may be modified or eliminated based upon the exercise of Technical Justification by a Licensed Site Professional, as described in 310 CMR 40.0193.

The sole contaminant of concern for RTN 3-34474 is asbestos, a mineral substance that is inherently insoluble in water. Previous subsurface investigation by T&B at the former wastewater treatment plant portion of the Property indicated the water table was approximately 30' below grade. The Site area of identified ACWM is located near the top of the large soil stockpile at the Property, approximately 30' above grade. Thus there is about a 60' vertical distance of soil material between the identified asbestos release area and the water table. Therefore CMG concludes that groundwater flow direction and other hydrogeologic characteristics are irrelevant to investigation of the RTN 3-34474 release.

Pursuant to 310 CMR 40.0193, it is the professional judgement of LSP Benson R. Gould of CMG that the specific requirement of 40.0481(3) to install a minimum of three groundwater monitoring wells is unnecessary for the completion of Phase I ISI activities for RTN 3-34474.

3.4 GENERAL SITE TOPOGRAPHY

The Property is at an elevation between 39-48 meters (128-157') above the National Geodetic Vertical Datum of 1929 (NGVD) according to the USGS Framingham, Massachusetts topographic quadrangle (see Figure 1). The ground surface slopes slightly down to the east and north, towards the nearby Sudbury River. T&B estimated the height of the large soil stockpile to be approximately 40' above native grade in 2012 (which grade is approximately 42 meters, or 138' NGVD). CMG observed the soil stockpile to be approximately 30' above grade in 2017 after Vertex had initiated regrading activities. Therefore the elevation of the Site portion of the Property is approximately 165' (50 m) NGVD. CMG did not observe any bedrock outcrops at or in the immediate vicinity of the Site.

There is no surface water body located at the Site. Surface runoff at the southwesterly portion of the Property would be to the north and east if unimpeded by systems such as stormwater catchbasins. The firing range in the northwesterly portion of the Property is in a topographic low area, so surface runoff would be towards that portion of the Property. Runoff from the large soil stockpile would be radially outwards in all directions towards the base of this stockpile.

3.5 GEOLOGIC & STRATIGRAPHIC CONDITIONS

According to the Natural Resources Conservation Service 'Web Soil Survey,' udorthents with refuse substratum or the udorthents/urban land complex underlies >85% of the Property ('udorthents' indicates material remaining after removal of native soils and/or importing additional soil material as fill).

Swansea muck soils (0-1% slopes) underlie about 10% of the northerly portion of the Property. These very poorly-drained soils form in bogs or swamps from highly decomposed organic material over loose sandy and gravelly glaciofluvial deposits. A typical soil profile would be 34" of muck atop 45" of coarse-grained sand.

Hinckley loamy sand (15-25% slopes) underlie the northeasterly corner of the Property. These excessively-drained soils form on eskers, kames, kame terraces, outwash plains, outwash terraces, moraines, and outwash deltas from sandy and gravelly glaciofluvial deposits derived from gneiss, granite, and/or schist. A typical soil profile would be 7" of loamy sand under 1"of moderately decomposed plant material, atop 8" of gravelly loamy sand, underlain by 49" of very gravelly loamy sand grading into very gravelly sand.

Previous subsurface investigation of the Site identified native soils at the Property to consist of fine- to coarse-grained sand and gravel to depths of at least 20' below grade.

Material within the large soil stockpile consists of sand, gravel, cobbles, vegetative debris, wood, and urban fill material. T&B reported observing varying amounts of asphalt, concrete, brick, metal, railroad ties, asphaltic conduit piping, glass, coal, and Transite asbestos pipe. Vertex identified Transite pipe, floor tiling, mastic, linoleum, and tar paper buried in soil material at the Site portion of the Property.

According to the Bedrock Geological Map of Massachusetts, bedrock underlying the Site is part of the Blackstone Group of the Milford-Dedham Zone. This Proterozoic Z-aged bedrock consists of metamorphosed mafic to felsic flow, intruded by volcanoclastic and hypabyssal rocks.

3.6 GROUNDWATER FLOW DIRECTION

CMG did not install any groundwater monitoring wells at the Property (see Section 3.3 above). T&B reported the presence of one groundwater monitoring well in the former wastewater treatment plant portion of the Property (the "Downgradient" well) and another within 10' beyond the westerly Property boundary (the "Upgradient" well). They indicated the depth to water in the Downgradient well was approximately 30' below grade but did not provide accurate depth to groundwater measurements, wellhead elevation data, or any other information that would assist in determining groundwater flow direction.

CMG infers that Property groundwater in unconsolidated subsurface materials at the Property would flow easterly or northeasterly based on topography and the proximity of the Sudbury River. (That flow direction is also consistent with the monitoring well designations T&B provided).

4.0 NATURE & EXTENT OF CONTAMINATION [40.0483(1)(E)]

4.1 EVIDENCE OF OHM RELEASE

4.1.1 TIGHE & BOND TESTING (2012)

T&B observed asbestos Transite pipe during their test pit excavations in August 2012 but did not collect any samples for confirmation of asbestos content. Their field screening identified up to 1,204 ppm lead in firing range surface/shallow samples tested (they did not collect any samples for laboratory analysis). T&B did not encounter any visual or olfactory evidence of contamination in the 7 soil borings they advanced in August 2012 and so did not submit soil samples for laboratory analysis or install any monitoring wells.

T&B reported the following landfill gases in the three monitoring points they installed:

- SG-1 – 1.4% methane (29% of LEL), 0.4% oxygen, 3 ppm hydrogen sulfide, 0.8 ppm non-methane VOCs & 22% carbon dioxide;
- SG-2 – 0% methane, 14.7% oxygen, 2 ppm hydrogen sulfide, 0.4 ppm non-methane VOCS & 4.9% carbon dioxide; and
- SG-3 – 0% methane, 14.1% oxygen, 1 ppm hydrogen sulfide, 0.3 ppm non-methane VOCs & 5.2% carbon dioxide.

CMG notes that T&B placed soil gas monitoring point SG-1 in the firing range portion of the Property, within the area mapped as Swansea muck soil; we opine that soil gas readings there likely represent naturally-occurring anoxic conditions in mucky soil rather than any migration of landfill gases at the Property.

VOC analysis of groundwater samples collected from the 'Downgradient' monitoring well identified low concentrations of chlorobenzene (1.6 µg/L), methyl tertiary butyl ether (4.7 µg/L), and tertiary amyl methyl ether (6.4 µg/L). T&B reported that testing did not identify any VPH or EPH carbon fractions, nor any PAHs above laboratory reporting limits in groundwater.

4.1.2 VERTEX TESTING (2017)

Vertex collected 6 samples of suspect ACWM from the Site portion of the Property on August 10, 2017 and submitted these to EMSL Analytical, Inc. of Woburn, Massachusetts for PLM analysis of asbestos content. The following table summarizes the results of this testing.

RESULTS OF SUSPECT ACWM TESTING

SAMPLE ID	DESCRIPTION	LOCATION SAMPLE COLLECTED FROM	RESULTS
B-0810-001A B-0810-001B	Yellow speckled floor tile	East side of Site	3% Chrysotile
B-0810-002A B-0810-002B	Mastic associated with above floor tile	East side of Site	6% Chrysotile
B-0810-003A B-0810-003B	Yellow stone pattern linoleum	North side of Site	15% Chrysotile
B-0810-004A B-0810-004B	Green/red linoleum	North side of Site	10% Chrysotile
B-0810-005A B-0810-005B	Black tar paper	East side of Site	No Asbestos Detected
B-0810-006A B-0810-006B	Transite pipe	East side of Site	10% Chrysotile, 3% Crocidolite

Vertex also collected 6 soil samples from the Property on August 10, 2017 (from the locations designated TP-1 through TP-6) and submitted these to CEI Labs of Cary, North Carolina for bulk PLM asbestos analysis. This testing did not identify any asbestos in the soil samples.

4.1.3 VERTEX TESTING (2018)

Vertex excavated 8 or more additional test pits in undisturbed portions of the large soil stockpile at the Property between July 16 and 18, 2018. They also conducted dust monitoring at four locations around the stockpile perimeter during this field work. At each test pit location Vertex collected a composite soil sample and submitted these for bulk PLM asbestos analysis. This testing reportedly did not identify any asbestos in the soil samples.

Vertex personnel observed suspect ACWM during excavation of test pits in July 2018, which they segregated and placed in the 'ACWM Temporary Storage Area' at the Property. Vertex collected approximately 50 samples of these materials for PLM analysis of asbestos content, which reportedly confirmed asbestos content in just one sample.

Vertex has not yet provided CMG with copies of the ambient air dust monitoring results, nor analytical data from testing soil and suspect ACWM samples. We expect to provide this information in the next IRA Status Report for RTN 3-34474.

4.2 QUANTITY OF OHM RELEASE

Certified asbestos personnel from Vertex collected ACWM from the Site and staged it in the 'ACWM Temporary Storage Area' depicted on Figure 3. They placed smaller pieces into 5-gallon buckets with sealed lids and larger pieces atop polyethylene sheeting, then covered all of this material with additional sheeting (secured against the wind with weights). Vertex did not provide a total weight for the ACWM. However CMG estimates that as of August 14, 2017 there were over 10 pounds of floor tile and mastic in plastic buckets, along with over 10 pounds of Transite piping. Therefore a conservative estimate of the total amount of asbestos contained within this material would be more than 2 pounds.

4.3 LABORATORY DATA SHEETS

Appendix C includes available laboratory certificates of analysis and chain-of-custody documentation for asbestos testing of Site samples.

4.4 APPROXIMATE EXTENT OF CONTAMINATION

As of August 2017 Vertex had only identified ACWM within the roughly 4,370 square foot area near the top of the large soil stockpile identified as the RTN 3-34474 'disposal site' on Figure 3. The identified ACWM did not extend more than a couple of feet downward into the stockpile. Vertex concluded (and CMG concurs) that it is possible that additional ACWM remain buried within the large soil stockpile. This was confirmed by the recent additional test pit excavations and sampling conducted in July 2018.

4.5 NON-AQUEOUS PHASE LIQUIDS (NAPL)

Environmental assessment has not identified any NAPL at the Site.

5.0 MIGRATION PATHWAYS & EXPOSURE POTENTIAL [40.0483(1)(F&G)]

5.1 OHM MIGRATION POTENTIAL

The following subsections discuss the potential for OHM migration through various media.

5.1.1 OHM MIGRATION THROUGH AIR

Friable asbestos fibers pose a significant threat of airborne migration. However ACWM identified in the large soil stockpile at the Property had remained buried within the soil matrix for many years before Vertex began regrading activities in August 2017. They identified suspect ACWM due to regrading activities and removed it to the temporary storage area within two days of its exposure (see Section 4.2 above). CMG notes that some of this ACWM is damaged, but none appeared to be friable. Therefore we opine that the risk of OHM migration through air has been minimal to date.

Proposed remediation activities will include careful removal of soil material to identify and retrieve any additional ACWM contained within the stockpile, while spraying potable water to keep down dust. There will also be ambient dust monitoring, with collection of dust samples for PLM asbestos testing. These precautions should minimize the potential for any future migration of asbestos through air.

5.1.2 OHM MIGRATION THROUGH SOIL

Asbestos is a fibrous solid and will not migrate through soil.

5.1.3 OHM MIGRATION THROUGH GROUNDWATER

Asbestos is not soluble and therefore cannot migrate through groundwater.

5.1.4 OHM MIGRATION THROUGH SOIL GAS

Buried asbestos cannot migrate through soil gas.

5.1.5 PREFERENTIAL FLOW PATHWAYS

Not applicable, since the only viable mechanism for asbestos migration is through air (friable asbestos only).

5.1.6 OHM MIGRATION THROUGH SURFACE WATER OR SEDIMENT

Should airborne asbestos fibers drop into surface water they could migrate through water. There are no surface water bodies within 500' of the Site, so it is extremely unlikely that OHM from the Site would migrate in this manner.

Airborne asbestos fibers that drop into surface water would soon sink to the sediment surface where they would remain unless mobilized by bulk movement of the sediment. Thus there is some small chance for migration via this route.

5.2 HUMAN EXPOSURE

Human Site receptors could be exposed to inhalation of friable asbestos fibers from the Site, which is why future investigation of the large soil stockpile at the Property will be done with dust controls and airborne dust monitoring.

It is possible that humans could be exposed to dermal contact with asbestos from the Site, which is why future investigation of the large soil stockpile at the Property will be done under the supervision of certified asbestos abatement personnel.

Ingestion of asbestos by humans does not appear likely since asbestos does not migrate through soil or groundwater, and the Site is not used for gardening or other agricultural uses.

5.3 IMPACT ON ENVIRONMENTAL RECEPTORS

Wooded areas of the Property are contiguous with other woodlands and wetlands along the Sudbury River that extend northerly to the Great Meadows National Wildlife Refuge. The DEP Priority Resource Map for the Site vicinity (see Figure 4) indicates an estimated area of rare wetland wildlife habitat within 500' southeast of the Site that continues along the Sudbury River.

CMG opines that the Site itself will have little to no impact on environmental receptors due to its small size, relatively isolated location atop a large soil stockpile, and the high-traffic nature of surrounding properties such as Route 20 and the Wayland Transfer Station.

5.4 IMMEDIATE RESPONSE ACTION EVALUATION

CMG is currently supervising an ongoing IRA at the Site to address the two-hour notification condition reported on August 14, 2017. However no significant IRA activities have occurred in the past year. This is due in part to the need to coordinate any IRA activities through the DEP Asbestos Program and the Massachusetts Department of Labor Services.

CMG prepared a written IRA Plan, which the Town of Wayland submitted via eDEP on October 12, 2017. We also prepared two IRA Status reports to date, which Wayland submitted on December 11, 2017 and June 11, 2018. Please refer to these reports for further details regarding the IRA for RTN 3-34474.

6.0 CONCLUSIONS

6.1 PHASE I REPORT CONCLUSIONS [40.0483(1)(h)]

Site investigation has identified the following:

- PLM analysis identified asbestos in 5 of 6 samples of suspect ACWM collected from the Site in August 2017;
- The total amount of ACWM multiplied by the percentage of identified asbestos in samples was greater than the reportable quantity of 1 pound, thereby triggering a two-hour DEP notification condition;
- IRA activities are currently on hold pending municipal selection of a licensed asbestos contractor and additional state regulatory approvals; and
- It does not appear that asbestos identified at the Site could migrate via air, soil, groundwater, surface water, sediment, or preferential pathways at the present time.

6.2 PRELIMINARY CONCEPTUAL SITE MODEL

DEP guidance and regulations stress the importance of the Conceptual Site Model (CSM) approach to understanding environmental conditions at a given disposal site. This is an iterative approach that seeks to:

- Hypothesize mechanisms to explain the observed environmental conditions,
- Identify gaps in the available data and assign a relative significance to each,
- Determine specific investigation and assessment goals to close significant data gaps, thereby confirming or refuting the hypothesized mechanism, and
- Re-evaluate each hypothesized mechanism in light of recently obtained data and determine which hypothesis best fits the available data.

6.2.1 CSM HYPOTHESES

Wayland Highway Department activities over the past decades generated a large volume of soil materials and associated debris, which they stockpiled at the Property. A small amount of the debris contained asbestos and was buried within the large soil stockpile.

6.2.2 CURRENT DATA GAPS

The actual source of ACWM identified at the Site is unknown. CMG opines this is a minor data gap.

It is possible that additional ACWM remains buried within the large soil stockpile at the Property. CMG opines that this is a significant data gap.

6.2.3 INVESTIGATION & ASSESSMENT GOALS

The goal of additional assessment is to identify any remaining ACWM contained within the large soil stockpile at the Property. The selected asbestos remediation contractor will use PLM to analyze for the asbestos content of identified suspect ACWM.

6.3 PHASE I REPORT COMPLETION STATEMENT [40.0484]

CMG prepared a Form BWSC107 ("Tier Classification Transmittal Form") for RTN 3-34474 using the eDEP electronic submittal system. Section C of this form presents the LSP Opinion that this Phase I ISI conforms with the applicable requirements specified in 310 CMR 40.0480. CMG has attached a .pdf copy of this ISI Report to the Form BWSC107 submitted electronically.

CMG concludes the following as to the identified asbestos release at the Site:

- Investigation to date has identified a total of more than 1 pound of asbestos within ACWM obtained from the Site; and
- Additional investigation is necessary to determine if additional ACWM remains buried within the large soil stockpile at the Property.

Therefore, CMG concludes that Comprehensive Response Actions are necessary for the RTN 3-34474 disposal site. We have compared Site conditions to the Tier I inclusionary criteria set forth at 310 CMR 40.0520(2), and concluded that the Site meets the criteria for Tier I classification because one or more remedial actions are required as part of an Immediate Response Action pursuant to 310 CMR 40.0414(2).

6.4 PUBLIC INVOLVEMENT [40.0485]

Appendix A includes copies of the notification letters CMG submitted to the Wayland Chief Municipal Officer and Board of Health pursuant to 310 CMR 40.1403(3)(e) and the newspaper legal notice required by 40.1403(6).

6.5 CONCEPTUAL PHASE II SCOPE OF WORK [40.0510(2)(f)2]

6.5.1 GENERAL TECHNICAL APPROACH

Thorough investigation of the large soil stockpile at the Property will likely involve scraping off thin layers of the stockpile (no greater than about 2' at a time) to allow for visual inspection of debris included within the soil matrix. The investigation contractor will segregate any suspect ACWM for visual inspection and sampling for PLM asbestos testing prior to proper disposal. The contractor will also implement dust control measures and air monitoring to mitigate any potential exposure to airborne asbestos fibers.

6.5.2 POTENTIAL RECEPTORS & EXPOSURE PATHWAYS

Sections 5.2 & 5.3 above list potential human and environmental receptors, and Section 5.1 details potential exposure pathways. The primary exposure concern is that friable asbestos could become airborne during stockpile investigation.

6.5.3 PHASE II SCHEDULE & COST ESTIMATE

CMG estimates it will cost on the order of $100,000 to thoroughly investigate the soil stockpile for suspect ACWM and properly disposal of identified ACWM.

7.0 LIMITATIONS & CONDITIONS

7.1 METHODOLOGY

CMG Environmental, Inc. conducted this ISI of the Site in conformance with DEP regulations set forth at 310 CMR 40.0480, et seq. We conducted Tier Classification in accordance with regulations set forth in Subpart E of the MCP.

7.2 SCOPE OF SERVICES

Wayland Town Administrator Nannette F. Balmer authorized CMG to conduct necessary MCP response actions (including preparation of this ISI Report) on August 14, 2017. We performed the following scope of services between August 2017 and August 2018:

- Conducted an inspection of the Site on August 14, 2017;

- Reviewed a draft "Non-Traditional Asbestos Work Plan" prepared by Vertex to address asbestos identified at the Site;
- Reviewed a "Phase I Environmental Site Assessment and Limited Phase II Investigation Report" prepared by T&B on the Property;
- Researched readily available online records from the Town of Wayland website;
- Reviewed available documentation on previous RTNs which DEP assigned to the Property;
- Researched records of property ownership from the Massachusetts Registry of Deeds website;
- Prepared this Phase I – Initial Site Investigation in support of Tier I Classification; and
- Prepared a Form BWSC107 for electronic certification and eDEP submittal by the Town of Wayland.

7.3 GENERAL LIMITATIONS

CMG prepared this Report to assess current recognized environmental conditions at the subject Site in accordance with generally accepted engineering and hydrogeologic practices. We make no other warranty, express or implied. CMG cannot provide absolute assurance that we have identified any and all recognized environmental conditions at the Site.

Where CMG included visual or other observations in this report, they represent conditions visibly and/or physically observed at the time of the inspection, or verified through interviewing or by record review, and may not be indicative of past or future Site conditions.

7.4 SPECIFIC CONDITIONS OF THE ISI REPORT

CMG based the conclusions of this report, in large part, on information provided by the client, their agents, or third parties, including state or local officials. We assume no responsibility for the accuracy and completeness of this information.

CMG's Site inspection included observing the Site and surrounding area. However not all Site boundaries were clearly delineated, making it difficult to distinguish certain Site features from those of the surrounding area. Therefore, the location of certain Site features described in this Report and depicted on the figures may be approximate.

7.5 RELIANCE

CMG prepared this ISI for the sole use of the Town of Wayland, its successors and assigns to address DEP reporting obligations regarding assessment and remediation activities associated with RTN 3-34474. CMG does not authorize use of this information by others for any reason, except with our prior written consent.

8.0 REFERENCES

INTERVIEWS

Town of Wayland: Town Engineer Paul Brinkman, P.E. on several occasions beginning August 14, 2017.

The Vertex Companies, Inc.: Senior Project Manager William J. Gibbons, P.E., LSP on August 14, 2017.

WAYLAND

Assessor's Office: available online records reviewed August 8, 2018.

MASSACHUSETTS

Department of Environmental Protection: Massachusetts Contingency Plan regulations (310 CMR 40.0000), April 25, 2014 revision.

Department of Environmental Protection "Reportable Release Lookup" information obtained July & August 2018 from https://eeaonline.eea.state.ma.us/portal#!/search/wastesite.

Geographic Information Systems: MassDEP Priority Resource Map Viewer information downloaded October 6, 2017 from http://maps.massgis.state.ma.us/21E/viewer.htm.

Registry of Deeds on-line information (http://www.masslandrecords.com) August 8, 2018.

UNITED STATES

Department of Agriculture, Natural Resources Conservation Service: Web Soil Survey information obtained August 9, 2018 from http://websoilsurvey.nrcs.usda.gov/app.

Environmental Protection Agency: "Municipal Wastewater Treatment Facilities in New England" dated 1997.

Geological Survey (in cooperation with the Massachusetts Department of Public Works): "Bedrock Geologic Map of Massachusetts" edited by E-an Zen, dated 1983.

Geological Survey: "Natick, Massachusetts" 7.5×15-minute metric series topographic quadrangle, dated 1987.

RESOURCES

NETR Online (https://www.historicaerials.com): aerial photograph images dated 1957, 1963, 1969, 1971, 1978, 1995, 2001, 2003, 2005, 2008, 2010, 2012, 2013 & 2014 and topographic map images dated 1894, 1900, 1901, 1902, 1905, 1908, 1911, 1917, 1918, 1929, 1938, 1943, 1951, 1959, 1967, 1979, 1981, 1987, 2012 & 2015.

PREVIOUS ENVIRONMENTAL REPORTS

ESS Group, Inc.: "Release Notification Class A-1 Response Action Outcome Statement" for RTN 3-24698 (Wayland Sand Hill Sanitary Landfill, 484 Boston Post Road), dated May 17, 2005.

CarriageHouse Consulting, Inc.: "Immediate Response Action Completion Report and Class A-2 Response Action Outcome Statement" for RTN 3-27741 (Town of Wayland Sand Hill Sanitary Landfill, 484 Boston Post Road), dated July 31, 2008.

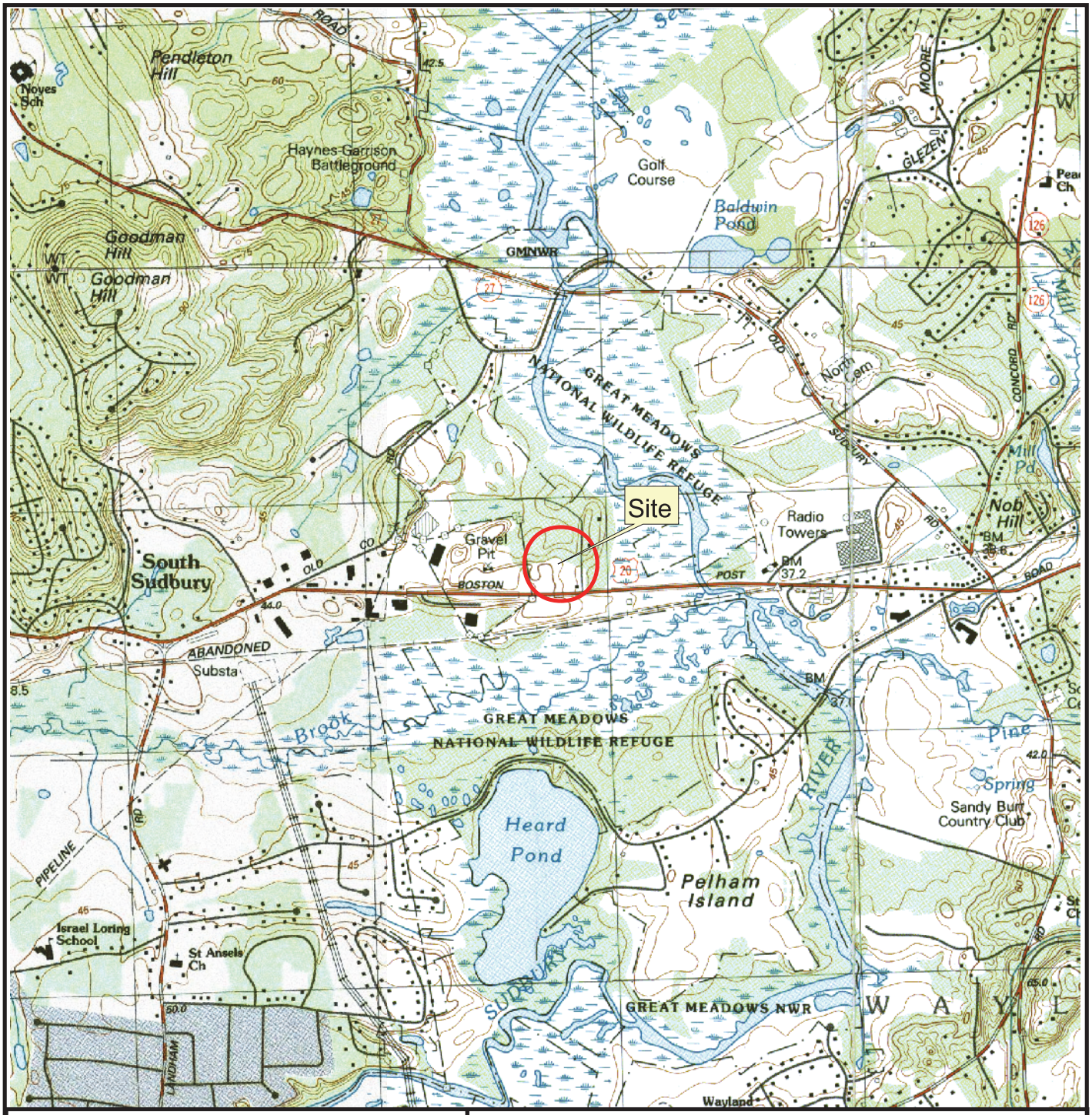
Tighe & Bond, Inc.: "Phase I Environmental Site Assessment and Limited Phase II Investigation Report" for the former Route 20 Septage Site (484-490 Boston Post Road), October 2012.

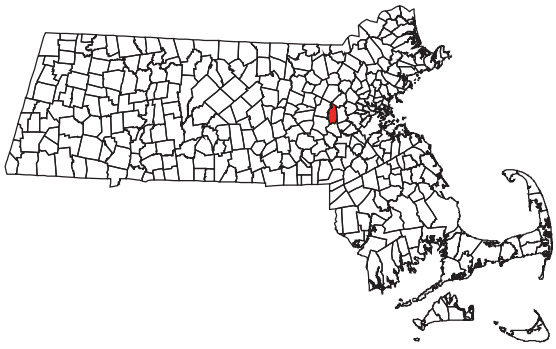
The Vertex Companies, Inc.: draft "Non-Traditional Asbestos Work Plan" for Town of Wayland former public works staging yard (484-490 Boston Post Road), dated September 20, 2017.

CMG Environmental, Inc. Immediate Response Action reports for RTN 3-34474:

- IRA Plan dated October 9, 2017;
- Initial IRA Status Report dated December 8, 2017; and
- IRA Status Report #2 dated June 11, 2018.

FIGURES





TOWN LOCATION - WAYLAND, MA

FIGURE 1
SITE LOCATION

484 Boston Post Road
Wayland, Massachusetts
CMG ID 2017-160

SCALE 1:24000

0.5 0 0.5 Miles

N

ENVIRONMENTAL SERVICES CMG ENGINEERING SERVICES
EST. 2002
67 HALL ROAD, STURBRIDGE MA 01566

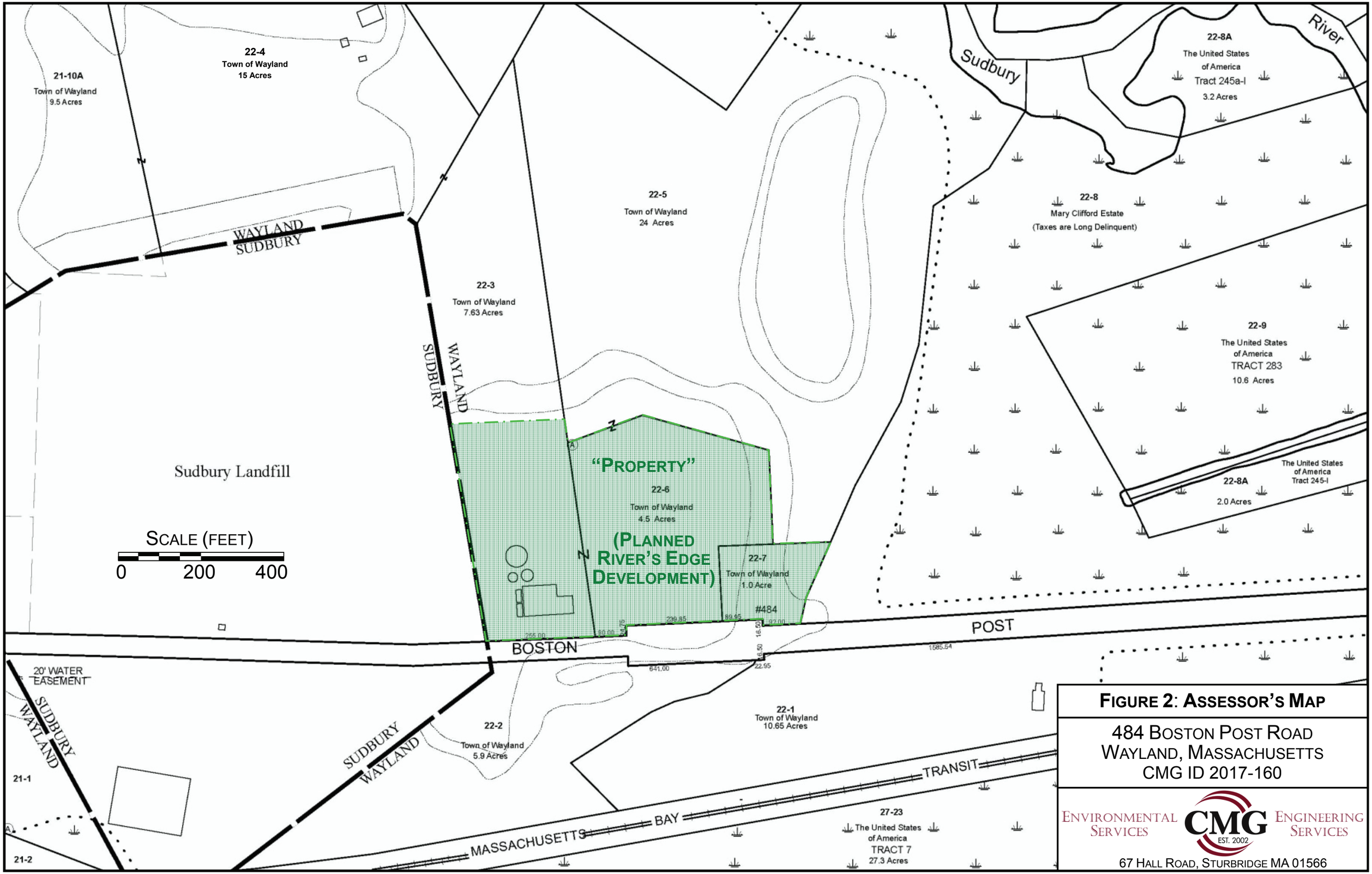


FIGURE 2: ASSESSOR'S MAP

484 BOSTON POST ROAD
WAYLAND, MASSACHUSETTS
CMG ID 2017-160

ENVIRONMENTAL SERVICES CMG EST. 2002 ENGINEERING SERVICES
67 HALL ROAD, STURBRIDGE MA 01566

FIGURE 3: PROPERTY PLAN

484 BOSTON POST ROAD
WAYLAND, MASSACHUSETTS
CMG ID 2017-160

ENVIRONMENTAL SERVICES CMG EST. 2002 ENGINEERING SERVICES
67 HALL ROAD, STURBRIDGE MA 01566

SCALE (FEET)
0 50 100

PROPERTY BOUNDARY

APPROXIMATE AREA OF IDENTIFIED ACWM (RTN 3-34474 "DISPOSAL SITE" BOUNDARY)

SG-1

AMMUNITION STORAGE TRAILERS

FIRING RANGE

ACWM TEMPORARY STORAGE AREA

TP-5

AIR MONITORING LOCATIONS (2018)

TP-2
TEST PIT #1
TEST PIT #6
TP-3
TEST PIT #3
TP-3
TP-9
TEST PIT #4
TP-4
TP-2
TP-10
TP-1
TP-1
TEST PIT #5
TP-11
TP-4
TP-8
TP-5
TP-6
TP-8
TP-12
TP-4
TP-6
TP-7
TP-7
TP-5
TP-2
TEST PIT #2
TP-6

SOIL STOCKPILE MAPPED EXTENT 2018

SOIL STOCKPILE EXTENT AS OF AUGUST 2017

SOIL STOCKPILE EXTENT IN 2016

TRANSFER STATION ACCESS ROAD

B-7

FORMER CHEMICAL STORAGE SHED

"DOWNGRADIENT" MONITORING WELL

SG-3

SG-2

FORMER WASTEWATER TREATMENT PLANT AREA

B-2
B-1
B-5
B-3
LOCATION OF FORMER USTs
B-4

PROPERTY BUILDING

B-6

"UPGRADIENT" MONITORING WELL

GRAVEL-PAVED PARKING AREA

KEY

- SOIL GAS MONITORING POINT BY TIGHE & BOND (2012)
- SOIL BORING OR TEST PIT BY TIGHE & BOND (2012)
- SOIL BORING BY VERTEX (2017)
- TEST PIT BY VERTEX (2017)
- TEST PIT BY VERTEX (2018)

BOSTON POST ROAD (ROUTE 20)

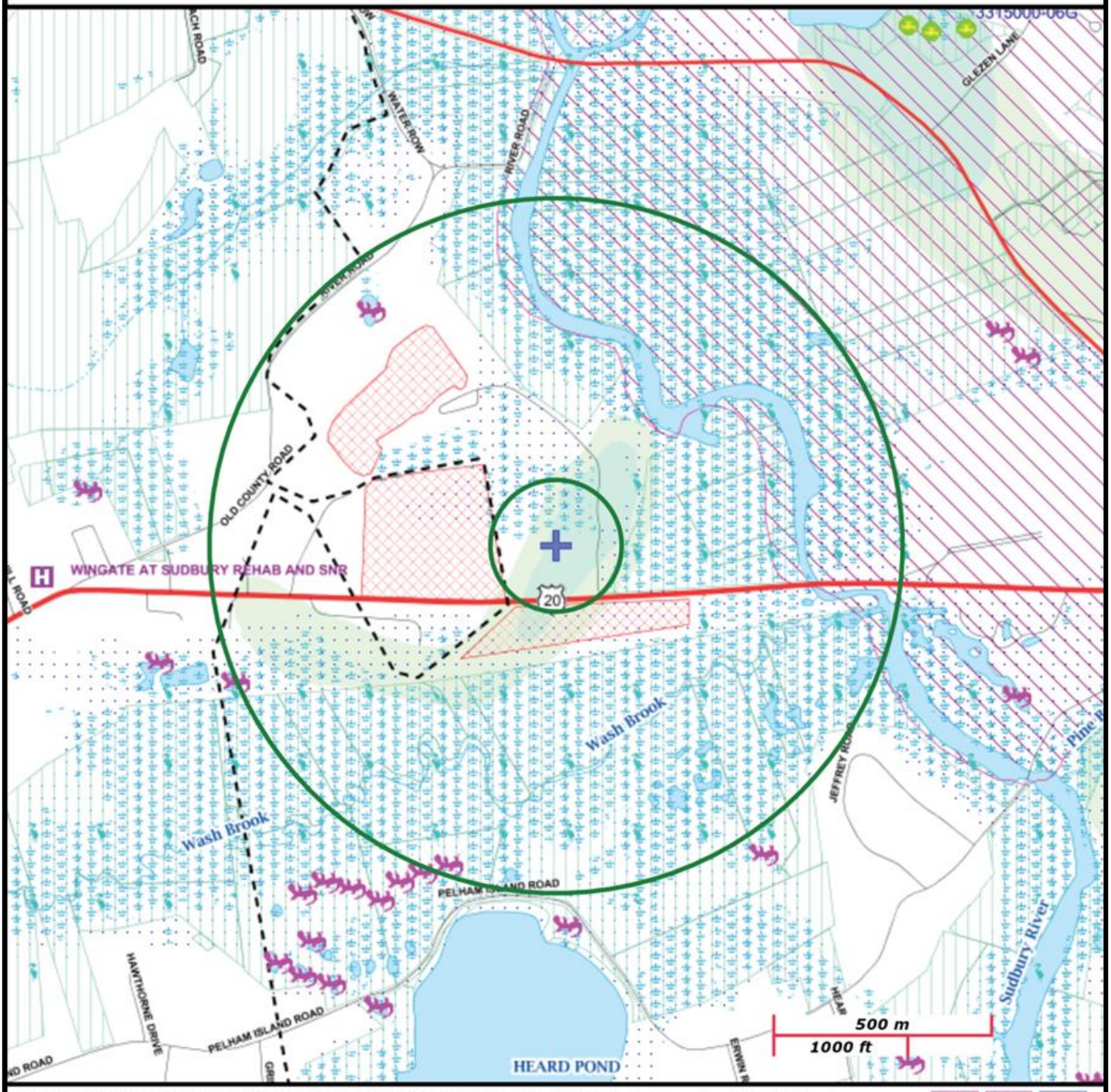
MassDEP - Bureau of Waste Site Cleanup

Phase 1 Site Assessment Map: 500 feet & 0.5 Mile Radii

Site Information:
RIVER'S EDGE DEVELOPMENT
484 BOSTON POST ROAD WAYLAND, MA
3-000034474
NAD83 UTM Meters:
4692950mN, 303850mE (Zone: 19)
October 6, 2017

The information shown is the best available at the date of printing. However, it may be incomplete. The responsible party and LSP are ultimately responsible for ascertaining the true conditions surrounding the site. Metadata for data layers shown on this map can be found at: http://www.mass.gov/mgis/.

MassDEP
Commonwealth of Massachusetts
Department of Environmental Protection



Roads: Limited Access, Divided, Other Hwy, Major Road, Minor Road, Track, Trail
Boundaries: Town, County, DEP Region; Train; Powerline; Pipeline; Aqueduct
Basins: Major, PWS; Streams: Perennial, Intermittent, Man Made Shore, Dam
Aquifers: Medium Yield, High Yield, EPA Sole Source
Non Potential Drinking Water Source Area: Medium, High (Yield)
PWS Protection Areas: Zone II, IWPA, Zone A
Hydrography: Open Water, PWS Reservoir, Tidal Flat
Wetlands: Freshwater, Saltwater, Cranberry Bog
FEMA 100yr Floodplain; Protected Open Space; ACEC
Est. Rare Wetland Wildlife Hab; Vernal Pool: Cert., Potential
Solid Waste Landfill; PWS: Com.GW,SW, Emerg., Non-Com.

FIGURE 4: PRIORITY RESOURCE MAP
484 BOSTON POST ROAD, WAYLAND MA
CMG ID 2017-160

ENVIRONMENTAL SERVICES CMG ENGINEERING SERVICES
EST. 2002
67 HALL ROAD, STURBRIDGE MA 01566

APPENDIX A

COPIES OF PUBLIC NOTIFICATIONS

August 14, 2018

Town Administrator Nannette F. Balmer
Wayland Town Building
41 Cochituate Road
Wayland, MA 01778

Re: **Notice of Phase I – Initial Site Investigation**
River's Edge Development
484 Boston Post Road, Wayland MA
Release Tracking Number (RTN) 3-34474
CMG ID 2017-160

Dear Ms. Balmer:

This letter is to inform the chief municipal officer of Wayland, in accordance with 310 CMR 40.1403(3)(e), that the Town of Wayland has submitted a Phase I – Initial Site Investigation Report to the Massachusetts Department of Environmental Protection in support of Tier I classification for RTN 3-34474.

Local officials interested in reviewing the Phase I Report or other Tier II Classification documentation may download an electronic copy from https://eeaonline.eea.state.ma.us/portal#!/search/wastesite (the DEP 'Search for Waste Site & Reportable Releases' web page) by entering the RTN, selecting 'Site File Viewer' from the next web page, and selecting the .pdf file in the Attachments column for Form Name "BWSC107."

This letter is also to provide you with an advance copy of the legal notice required pursuant to 310 CMR 40.1403(6), which the Town of Wayland will publish in the Wayland Town Crier on August 16, 2018 and a copy of the Disposal Site map for Property. If you are interested in obtaining further information you may contact the undersigned at the letterhead address.

Sincerely,
CMG ENVIRONMENTAL, INC.

Benson R. Gould, LSP, LEP
Principal

cc: Massachusetts DEP, Northeast Regional Office

Enclosures: Copy of legal notice
Figure 3 (Property Plan)

67 HALL ROAD
STURBRIDGE, MA 01566
PHONE (774) 241-0901
FAX (774) 241-0906

747 FARMINGTON AVENUE
NEW BRITAIN, CT 06053
PHONE (866) 304-7625

August 14, 2018

Julia Junghanns, R.D., C.H.O.
Director of Public Health
Wayland Town Building
41 Cochituate Road
Wayland, MA 01778

Re: **Notice of Phase I – Initial Site Investigation**
River's Edge Development
484 Boston Post Road, Wayland MA
Release Tracking Number (RTN) 3-34474
CMG ID 2017-160

Dear Ms. Junghanns:

This letter is to inform the Wayland Board of Health, in accordance with 310 CMR 40.1403(3)(e), that the Town of Wayland has submitted a Phase I – Initial Site Investigation Report to the Massachusetts Department of Environmental Protection in support of Tier I classification for RTN 3-34474.

Local officials interested in reviewing the Phase I Report or other Tier II Classification documentation may download an electronic copy from https://eeaonline.eea.state.ma.us/portal#!/search/wastesite (the DEP 'Search for Waste Site & Reportable Releases' web page) by entering the RTN, selecting 'Site File Viewer' from the next web page, and selecting the .pdf file in the Attachments column for Form Name "BWSC107."

This letter is also to provide you with an advance copy of the legal notice required pursuant to 310 CMR 40.1403(6), which the Town of Wayland will publish in the Wayland Town Crier on August 16, 2018 and a copy of the Disposal Site map for Property. If you are interested in obtaining further information you may contact the undersigned at the letterhead address.

Sincerely,
CMG ENVIRONMENTAL, INC.

Benson R. Gould, LSP, LEP
Principal

cc: Massachusetts DEP, Northeast Regional Office

Enclosures: Copy of legal notice
Figure 2 (Site Plan)

67 HALL ROAD
STURBRIDGE, MA 01566
PHONE (774) 241-0901
FAX (774) 241-0906

747 FARMINGTON AVENUE
NEW BRITAIN, CT 06053
PHONE (866) 304-7625

NOTICE OF INITIAL SITE INVESTIGATION AND TIER I CLASSIFICATION

484 BOSTON POST ROAD, WAYLAND
DEP RTN 3-34474

Pursuant to the Massachusetts Contingency Plan (310 CMR 40.0480), an Initial Site Investigation has been performed at the above referenced location.

A release of oil and/or hazardous materials has occurred at this location, which is a disposal site (defined by M.G.L. c. 21E, Section 2). This site has been classified as Tier I, pursuant to 310 CMR 40.0500. Response actions at the site will be conducted by the Town of Wayland who has employed Mr. Benson R. Gould (LSP #9923) to manage response actions in accordance with the Massachusetts Contingency Plan (310 CMR 40.0000).

M.G.L. c. 21E and the Massachusetts Contingency Plan provide additional opportunities for public notice of and involvement in decisions regarding response actions at disposal sites: 1) The Chief Municipal Officer and Board of Health of the community in which the site is located will be notified of major milestones and events, pursuant to 310 CMR 40.1403; and 2) Upon receipt of a petition from ten or more residents of the municipality in which the disposal site is located, or of a municipality potentially affected by a disposal site, a plan for involving the public in decisions regarding response actions at the site will be prepared and implemented, pursuant to 310 CMR 40.1405.

To obtain more information on this disposal site and the opportunities for public involvement during its remediation, please contact CMG Environmental, Inc. of 67 Hall Road, Sturbridge MA 01566 at 774-241-0901.

APPENDIX B

BORING LOGS

Tighe&Bond
www.tighebond.com

Project: Route 20 Septage Site
Location: 484-490 Boston Post Road, Wayland, MA
Client: Town of Wayland

Boring No. B-1
Page 1 of 1
File No W-1887
Checked by: PBG/MJR1

Drilling Co.: T.D.S.
Foreman: Matt
T&B Rep.: PBG1
Date Start: 08/28/12 End: 08/28/12
Location See Exploration Location Plan
GS. Elev. Datum:

	Casing	Sampler
Type		
I.D./O.D.		
Hammer Wt.		
Hammer Fall		
Other	Geoprobe	

Groundwater Readings

Date	Time	Depth	Casing	Sta. Time

Note that groundwater levels can fluctuate with season, precipitation, temperature, construction activities, and other factors occurring since the time of measurement.

Depth (ft.)	Casing Blows Per Ft.	% Recovery	Sample Depth (ft.)	Blows Per 6"	Sample Description	General Stratigraphy	Notes	Well Construction
			0-5		Light brown fine to coarse SAND and gravel, dry, no odor.			No Installation
		33						
5								
			5-10		Light brown fine to coarse SAND and gravel, dry, no odor.			
		33						
10								
			10-15		Light brown fine to coarse SAND and gravel, dry, no odor.			
		66						
					Light brown fine to medium SAND and silt, dry, no odor.			
15								
			15-20		Light brown fine to medium SAND and silt, dry, no odor.			
		100						
20								
25								
30								

Notes: Location was on the west side of the tank grave (asphalt patch) to the north of the site building.

Tighe&Bond
www.tighebond.com

Project: Route 20 Septage Site
Location: 484-490 Boston Post Road, Wayland, MA
Client: Town of Wayland

Boring No. B-2
Page 1 of 1
File No. W-1887
Checked by: PBG/MJR1

Drilling Co.: T.D.S.
Foreman: Matt
T&B Rep.: PBG1
Date Start: 08/28/12 End: 08/28/12
Location See Exploration Location Plan
GS. Elev. Datum:

	Casing	Sampler
Type		
I.D./O.D.		
Hammer Wt.		
Hammer Fall		
Other	Geoprobe	

Groundwater Readings

Date	Time	Depth	Casing	Sta. Time

Note that groundwater levels can fluctuate with season, precipitation, temperature, construction activities, and other factors occurring since the time of measurement.

Depth (ft.)	Casing Blows Per Ft.	% Recovery	Sample Depth (ft.)	Blows Per 6"	Sample Description	General Stratigraphy	Notes	Well Construction
			0-5					No Installation
		33			Light brown fine to coarse SAND and gravel, dry, no odor.			
5								
			5-10					
		50			Light brown fine to coarse SAND and gravel, dry, no odor.			
10								
			10-15					
		50			Light brown fine to coarse SAND and gravel, dry, no odor.			
15								
			15-20					
		80			Light brown fine to coarse SAND and gravel, dry, no odor.			
20								
25								
30								

Notes: Location was on the north side of the tank grave (asphalt patch) to the north of the site building.

Tighe&Bond
www.tighebond.com

Project: Route 20 Septage Site
Location: 484-490 Boston Post Road, Wayland, MA
Client: Town of Wayland

Boring No. B-3
Page 1 of 1
File No. W-1887
Checked by: PBG/MJR1

Drilling Co.: T.D.S.
Foreman: Matt
T&B Rep.: PBG1
Date Start: 08/28/12 End: 08/28/12
Location See Exploration Location Plan
GS. Elev. Datum:

	Casing	Sampler
Type		
I.D./O.D.		
Hammer Wt.		
Hammer Fall		
Other	Geoprobe	

Groundwater Readings

Date	Time	Depth	Casing	Sta. Time

Note that groundwater levels can fluctuate with season, precipitation, temperature, construction activities, and other factors occurring since the time of measurement.

Depth (ft.)	Casing Blows Per Ft.	% Recovery	Sample Depth (ft.)	Blows Per 6"	Sample Description	General Stratigraphy	Notes	Well Construction
			0-5					No Installation
		50			Light brown fine to coarse SAND and gravel, dry, no odor.			
5			5-10					
		50			Light brown fine to coarse SAND and gravel, dry, no odor.			
10			10-15					
		66			Light brown fine to coarse SAND and gravel, dry, no odor.			
15			15-20					
		80			Light brown fine to coarse SAND and gravel, dry, no odor.			
20								
25								
30								

Notes:
Location was on the east side of the tank grave (asphalt patch) to the north of the site building.

Tighe&Bond
www.tighebond.com

Project: Route 20 Septage Site
Location: 484-490 Boston Post Road, Wayland, MA
Client: Town of Wayland

Boring No. B-4
Page 1 of 1
File No. W-1887
Checked by: PBG/MJR1

Drilling Co.: T.D.S.
Foreman: Matt
T&B Rep.: PBG1
Date Start: 08/28/12 End: 08/28/12
Location See Exploration Location Plan
GS. Elev. Datum:

	Casing	Sampler
Type		
I.D./O.D.		
Hammer Wt.		
Hammer Fall		
Other	Geoprobe	

Groundwater Readings

Date	Time	Depth	Casing	Sta. Time

Note that groundwater levels can fluctuate with season, precipitation, temperature, construction activities, and other factors occurring since the time of measurement.

Depth (ft.)	Casing Blows Per Ft.	% Recovery	Sample Depth (ft.)	Blows Per 6"	Sample Description	General Stratigraphy	Notes	Well Construction
			0-5					No Installation
		50			Light brown fine to coarse SAND and gravel, dry, no odor.			
5								
			5-10					
		50			Light brown fine to coarse SAND and gravel, dry, no odor.			
10								
			10-15					
		50			Light brown fine to coarse SAND and gravel, dry, no odor.			
15								
			15-20					
		50			Light brown fine to coarse SAND and gravel, dry, no odor.			
20								
25								
30								

Notes:

Location was on the south side of the tank grave (asphalt patch) to the north of the site building.

Tighe&Bond
www.tighebond.com

Project: Route 20 Septage Site
Location: 484-490 Boston Post Road, Wayland, MA
Client: Town of Wayland

Boring No. B-5
Page 1 of 1
File No. W-1887
Checked by: PBG/MJR1

Drilling Co.: T.D.S.
Foreman: Matt
T&B Rep.: PBG1
Date Start: 08/28/12 End: 08/28/12
Location See Exploration Location Plan
GS. Elev. Datum:

	Casing	Sampler
Type		
I.D./O.D.		
Hammer Wt.		
Hammer Fall		
Other	Geoprobe	

Groundwater Readings

Date	Time	Depth	Casing	Sta. Time

Note that groundwater levels can fluctuate with season, precipitation, temperature, construction activities, and other factors occurring since the time of measurement.

Depth (ft.)	Casing Blows Per Ft.	% Recovery	Sample Depth (ft.)	Blows Per 6"	Sample Description	General Stratigraphy	Notes	Well Construction
			0-5					No Installation
		50			Light brown fine to coarse SAND and gravel, dry, no odor.			
5								
			5-10					
		50			Light brown fine to coarse SAND and gravel, dry, no odor. Possible concrete slab encountered at approximately 8' bsg, drilled through.			
10								
			10-15					
		50			Light brown fine to coarse SAND and gravel, dry, no odor.			
15								
			15-20					
		50			Light brown fine to coarse SAND and gravel, dry, no odor.			
20								
25								
30								

Notes: Location was at the center of the tank grave (asphalt patch) to the north of the site building.

Tighe&Bond
www.tighebond.com

Project: Route 20 Septage Site
Location: 484-490 Boston Post Road, Wayland, MA
Client: Town of Wayland

Boring No. **B-6**
Page 1 of 1
File No. W-1887
Checked by: PBG/MJR1

Drilling Co.: T.D.S.
Foreman: Matt
T&B Rep.: PBG1
Date Start: 08/28/12 End: 08/28/12
Location See Exploration Location Plan
GS. Elev. Datum:

	Casing	Sampler
Type		
I.D./O.D.		
Hammer Wt.		
Hammer Fall		
Other	Geoprobe	

Groundwater Readings

Date	Time	Depth	Casing	Sta. Time

Note that groundwater levels can fluctuate with season, precipitation, temperature, construction activities, and other factors occurring since the time of measurement.

Depth (ft.)	Casing Blows Per Ft.	% Recovery	Sample Depth (ft.)	Blows Per 6"	Sample Description	General Stratigraphy	Notes	Well Construction
			0-5					No Installation
		33						
					Brown fine to medium SAND and gravel, dry, no odor.			
5			5-10					
		33						
					Brown fine to medium SAND and gravel, dry, no odor.			
10								
15								
20								
25								
30								

Notes: Boring was advanced near the former UST location to the south of the site building.

Tighe&Bond
www.tighebond.com

Project: Route 20 Septage Site
Location: 484-490 Boston Post Road, Wayland, MA
Client: Town of Wayland

Boring No. **B-7**
Page 1 of 1
File No. W-1887
Checked by: PBG/MJR1

Drilling Co.: T.D.S.
Foreman: Matt
T&B Rep.: PBG1
Date Start: 08/28/12 End: 08/28/12
Location See Exploration Location Plan
GS. Elev. Datum:

	Casing	Sampler
Type		
I.D./O.D.		
Hammer Wt.		
Hammer Fall		
Other	Geoprobe	

Groundwater Readings

Date	Time	Depth	Casing	Sta. Time

Note that groundwater levels can fluctuate with season, precipitation, temperature, construction activities, and other factors occurring since the time of measurement.

Depth (ft.)	Casing Blows Per Ft.	% Recovery	Sample Depth (ft.)	Blows Per 6"	Sample Description	General Stratigraphy	Notes	Well Construction
			0-5					No Installation
		33						
					Brown fine to medium SAND and gravel, dry, no odor.			
5			5-10					
		50						
					Brown fine to medium SAND and gravel, dry, no odor.			
10								
15								
20								
25								
30								

Notes: Location was to the north of the former Hazardous Waste storage shed.

APPENDIX C

LABORATORY CERTIFICATES OF ANALYSIS & CHAIN-OF-CUSTODY DOCUMENTATION

EMSL Analytical, Inc.

5 Constitution Way, Unit A Woburn, MA 01801

Tel/Fax: (781) 933-8411 / (781) 933-8412

http://www.EMSL.com / bostonlab@emsl.com

EMSL Order:	131703562
Customer ID:	VERT51G
Customer PO:	46047
Project ID:	

Attention:	Kristen Sarson	**Phone:**	(781) 952-6000
	The Vertex Companies, Inc.	**Fax:**	(781) 335-3543
	1 Congress Street	**Received Date:**	08/10/2017 12:11 PM
	Floor 10	**Analysis Date:**	08/10/2017
	Boston, MA 02114	**Collected Date:**	08/10/2017
Project:	46047		

Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

			Non-Asbestos		Asbestos
Sample	**Description**	**Appearance**	**% Fibrous**	**% Non-Fibrous**	**% Type**
B-0810-001A *131703562-0001*	Demolition Pile (East Corner) - Yellow Speckled Floor Tile	Yellow Non-Fibrous Homogeneous	HA: 1	97% Non-fibrous (Other)	3% Chrysotile
B-0810-001B *131703562-0002*	Demolition Pile (East Corner) - Yellow Speckled Floor Tile	Yellow Non-Fibrous Homogeneous	HA: 1	97% Non-fibrous (Other)	3% Chrysotile
B-0810-002A *131703562-0003*	Demolition Pile (East Corner) - Mastic Assoc. w/Yellow Speckled Floor Tile	Black Non-Fibrous Homogeneous	HA: 2	94% Non-fibrous (Other)	6% Chrysotile
B-0810-002B *131703562-0004*	Demolition Pile (East Corner) - Mastic Assoc. w/Yellow Speckled Floor Tile	Black Non-Fibrous Homogeneous	HA: 2	94% Non-fibrous (Other)	6% Chrysotile
B-0810-003A *131703562-0005*	North of Demolition Pile - Yellow Stone-Patterned Linoleum	Gray/Yellow Fibrous Homogeneous	HA: 3	85% Non-fibrous (Other)	15% Chrysotile
B-0810-003B *131703562-0006*	North of Demolition Pile - Yellow Stone-Patterned Linoleum	Gray/Yellow Fibrous Homogeneous	HA: 3	85% Non-fibrous (Other)	15% Chrysotile
B-0810-004A *131703562-0007*	North of Demolition Pile - Green/Red Linoleum	Gray/Red/Green Fibrous Homogeneous	HA: 4	90% Non-fibrous (Other)	10% Chrysotile
B-0810-004B *131703562-0008*	North of Demolition Pile - Green/Red Linoleum	Gray/Red/Green Fibrous Homogeneous	HA: 4	90% Non-fibrous (Other)	10% Chrysotile
B-0810-005A *131703562-0009*	Debris from East of Demo. Pile - Black Tar Paper	Black Fibrous Homogeneous	30% Cellulose HA: 5	70% Non-fibrous (Other)	None Detected
B-0810-005B *131703562-0010*	Debris from East of Demo. Pile - Black Tar Paper	Black Fibrous Homogeneous	30% Cellulose HA: 5	70% Non-fibrous (Other)	None Detected
B-0810-006A *131703562-0011*	Debris from East of Demo. Pile - Transite Pipe	Gray Fibrous Homogeneous	HA: 6	87% Non-fibrous (Other)	10% Chrysotile 3% Crocidolite

Initial report from: 08/10/2017 13:08:18

EMSL Analytical, Inc.
5 Constitution Way, Unit A Woburn, MA 01801
Tel/Fax: (781) 933-8411 / (781) 933-8412
http://www.EMSL.com / bostonlab@emsl.com

EMSL Order:	131703562
Customer ID:	VERT51G
Customer PO:	46047
Project ID:	

Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

			Non-Asbestos		Asbestos
Sample	**Description**	**Appearance**	**% Fibrous**	**% Non-Fibrous**	**% Type**
B-0810-006B	Debris from East of Demo. Pile - Transite Pipe	Gray Fibrous Homogeneous		87% Non-fibrous (Other)	10% Chrysotile 3% Crocidolite
131703562-0012			HA: 6		

Analyst(s)
Michael Mink (12)

Steve Grise, Laboratory Manager
or Other Approved Signatory

Initial report from: 08/10/2017 13:08:18

OrderID: 131703562

EMSL ANALYTICAL, INC.
LABORATORY • PRODUCTS • TRAINING

Asbestos Bulk Building Material Chain of Custody

EMSL Order Number *(Lab Use Only)*: **131703562**

EMSL ANALYTICAL, INC.
5 CONSTITUTION WAY, UNIT A
WOBURN, MA 01801
PHONE: (781) 933-8411
FAX: (781) 933-8412

Company: The Vertex Companies, Inc.	**EMSL-Bill to:** ☐ Same ☑ Different If Bill to is Different note instructions in Comments**
Street: 1 Congress St. Floor 10	*Third Party Billing requires written authorization from third party*
City: Boston **State/Province:** MA	**Zip/Postal Code:** 02114 **Country:** USA
Report To (Name): Kristen Sarson	**Telephone #:** 781-917-5360
Email Address: ksarson@vertexeng.com	**Fax #:** 781-335-3543 **Purchase Order:** 46047
Project Name/Number: 46047	**Please Provide Results:** ☐ Fax ☑ Email
U.S. State Samples Taken: MA	**CT Samples:** ☐ Commercial/Taxable ☐ Residential/Tax Exempt

Turnaround Time (TAT) Options* – Please Check

☑ 3 Hour ☐ 6 Hour ☐ 24 Hour ☐ 48 Hour ☐ 72 Hour ☐ 96 Hour ☐ 1 Week ☐ 2 Week

*For TEM Air 3 hr through 6 hr, please call ahead to schedule.*There is a premium charge for 3 Hour TEM AHERA or EPA Level II TAT. You will be asked to sign an authorization form for this service. Analysis completed in accordance with EMSL's Terms and Conditions located in the Analytical Price Guide.

PLM - Bulk (reporting limit)	TEM – Bulk
☑ PLM EPA 600/R-93/116 (<1%)	☐ TEM EPA NOB – EPA 600/R-93/116 Section 2.5.5.1
☐ PLM EPA NOB (<1%)	☐ NY ELAP Method 198.4 (TEM)
Point Count ☐ 400 (<0.25%) ☐ 1000 (<0.1%)	☐ Chatfield Protocol (semi-quantitative)
Point Count w/Gravimetric ☐ 400 (<0.25%) ☐ 1000 (<0.1%)	☐ TEM % by Mass – EPA 600/R-93/116 Section 2.5.5.2
☐ NIOSH 9002 (<1%)	☐ TEM Qualitative via Filtration Prep Technique
☐ NY ELAP Method 198.1 (friable in NY)	☐ TEM Qualitative via Drop Mount Prep Technique
☐ NY ELAP Method 198.6 NOB (non-friable-NY)	**Other**
☐ OSHA ID-191 Modified	☐
☐ Standard Addition Method	

☐ **Check For Positive Stop – Clearly Identify Homogenous Group** **Date Sampled:** 8/10/17

Samplers Name: Matt Carralero **Samplers Signature:** [signature]

Sample #	HA #	Sample Location	Material Description
B-0810- 001A	1	Demolition Pile (East Corner)	Yellow Speckled Floor Tile
" B	"	↓ ↓	" "
002A	2	↓ ↓	Mastic assoc. w/ Yellow
" B	"	↓ ↓	Speckled Floor Tile
003A	3	North of Demolition Pile	Yellow Stone-patterned
" B	"	" "	Linoleum
004A	4	↓ ↓	Green/Red Linoleum
" B	"	↓ ↓	" "
005A	5	Debris from East of Demo. Pile	Black Tar Paper
" B	"	" " "	" "

Client Sample # (s): B-0810-001A - B-0810-006B **Total # of Samples:** 12

Relinquished (Client): [signature] **Date:** 8/10/17 **Time:** 11:50

Received (Lab): **Date:** **Time:**

Comments/Special Instructions: Bill To: The Vertex Companies, Inc.
400 Libbey Industrial Parkway
Weymouth, MA 02189 USA

RECEIVED
AUG 10 2017
By 12:11

Controlled Document – Asbestos COC – R2 – 4/9/2013

OrderID: 131703562

EMSL ANALYTICAL, INC.
LABORATORY • PRODUCTS • TRAINING

Asbestos Bulk Building Material Chain of Custody

EMSL Order Number *(Lab Use Only)*:

131703562

EMSL ANALYTICAL, INC.
5 CONSTITUTION WAY, UNIT A
WOBURN, MA 01801
PHONE: (781) 933-8411
FAX: (781) 933-8412

Additional Pages of the Chain of Custody are only necessary if needed for additional sample information

Sample #	HA #	Sample Location	Material Description
B-0810 ↓ 006A	6	North of Demolition Pile	Transite Pipe
" B	"	Debris from SE of Demo. Pile	" "

*Comments/Special Instructions:

Report for Bulk Analysis by California Air Resources Board (C.A.R.B.) Method 435

CLIENT: Vertex Companies
398 Libbey Industrial Parkway
Weymouth MA 02189

CEI Lab Code: A17-11602
Received: 08/15/2017
Reported: 08/15/2017
Analyst: Candace Burrus

Project: Wayland, MA; 46047

Client ID	CEI Lab ID	Asbestos Fibers Observed?	Asbestos Type	Asbestos Detected %
TP-1	A2472971	No	None Detected	0.00
TP-2	A2472972	No	None Detected	0.00
TP-3	A2472973	No	None Detected	0.00
TP-4	A2472974	No	None Detected	0.00
TP-5	A2472975	No	None Detected	0.00
TP-6	A2472976	No	None Detected	0.00

REVIEWED BY: _____

LEGEND: None

METHOD: CARB 435

LIMIT OF DETECTION: 0.25%

REGULATORY LIMIT: >1% by weight

This report relates only to the samples tested or analyzed and may not be reproduced, except in full, without written approval by CEI Labs, Inc. CEI Labs makes no warranty representation regarding the accuracy of client submitted information in preparing and presenting analytical results. Interpretation of the analytical results is the sole responsibility of the client.

CEI Labs, Inc. is only responsible for the Analytical Procedures (section 7), Procedures (section 8), and Calculations (section 9) portion of the C.A.R.B. 435 Method.

End of Document

ASBESTOS CHAIN OF CUSTODY

(6) A17.11.602
A247 2971
A247 2976

730 SE Maynard Road, Cary, NC 27511
Tel: 866-481-1412; Fax: 919-481-1442

LAB USE ONLY:
CEI Lab Code:
CEI Lab I.D. Range:

COMPANY INFORMATION	PROJECT INFORMATION
CEI CLIENT #:	Job Contact: Kristen Sarson
Company: The Vertex Companies, Inc	Email / Tel: ksarson@vertexeng.com / 781-917-5340
Address: 395 Libbey Industrial Pkwy	Project Name: Wayland, MA
Weymouth, MA 02189	Project ID#: 46047
Email: Ksarson@vertexeng.com	PO #:
Tel: 781-952-6000 Fax: 781-952-6051	STATE SAMPLES COLLECTED IN: MA

IF TAT IS NOT MARKED STANDARD 3 DAY TAT APPLIES.

ASBESTOS	METHOD	TURN AROUND TIME					
		4 HR	8 HR	24 HR	2 DAY	3 DAY	5 DAY
PLM BULK	EPA 600	☐	☐	☐	☐	☐	☐
PLM POINT COUNT (400)	EPA 600	☐	☐	☐	☐	☐	☐
PLM POINT COUNT (1000)	EPA 600	☐	☐	☐	☐	☐	☐
PLM GRAV w POINT COUNT	EPA 600		☐	☐	☐	☐	☐
PLM BULK	CARB 435		☐	☐	☐	☒	☐
PCM AIR	NIOSH 7400	☐	☐	☐	☐	☐	☐
TEM AIR	EPA AHERA	☐	☐	☐	☐	☐	☐
TEM AIR	NIOSH 7402	☐	☐	☐	☐	☐	☐
TEM AIR	ISO 10312	☐	☐	☐	☐	☐	☐
TEM AIR	ASTM 6281-09	☐	☐	☐	☐	☐	☐
TEM BULK	CHATFIELD		☐	☐	☐	☐	☐
TEM DUST WIPE	ASTM D6480-05 (2010)	☐	☐	☐	☐	☐	☐
TEM DUST MICROVAC	ASTM D5755-09 (2014)	☐	☐	☐	☐	☐	☐
TEM SOIL	ASTM D7521-13			☐	☐	☐	☐
TEM VERMICULITE	CINCINNATI METHOD			☐	☐	☐	☐
OTHER:		☐	☐	☐	☐	☐	☐

REMARKS / SPECIAL INSTRUCTIONS:

Please Hold until further Notice

☑ Accept Samples
☐ Reject Samples

Relinquished By:	Date/Time	Received By:	Date/Time
[signature]	8/10/17 @ 15:03	DC	8-14 9:10
			8-15 8:20

Samples will be disposed of 30 days after analysis

CEI LABS

ASBESTOS SAMPLING FORM

COMPANY CONTACT INFORMATION	
Company: The Vertex Companies, Inc	Job Contact: Kristen Sarson
Project Name: Wayland, MA	
Project ID #: 46047	Tel: 781-917-5360

SAMPLE ID#	DESCRIPTION / LOCATION	VOLUME/ AREA	TEST			
TP-1	Silty sand sample	1 gal	PLM	CARB / CARP 435	TEM	
TP-2	Sand sample	1 gal	PLM	✓ Carb 435	TEM	
TP-3	Clay sample	1 gal	PLM	✓ Carb 435	TEM	
TP-4	Sandy silt sample	1 gal	PLM	✓ Carb 435	TEM	
TP-5	Stockpile sample	1 gal	PLM	✓ CARB 435	TEM	
TP-6	Construction debris composite	1 gal	PLM	✓ Carb 435	TEM	
			PLM		TEM	
			PLM		TEM	
			PLM		TEM	
			PLM		TEM	
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