Environmental Services

CMG EST. 2002

Engineering Services

Immediate Response Action Plan
Release Tracking Number 3-34474

River's Edge Development

484 Boston Post Road
Wayland, Massachusetts

October 9, 2017

Prepared for:

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

Prepared by:

CMG Environmental, Inc.
CMG ID 2017-160

67 Hall Road
Sturbridge, MA 01566
Phone (774) 241-0901
Fax (774) 241-0906

560 South Main Street
New Britain, CT 06051
Phone (866) 304-7625
Fax (860) 223-5454

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.

Benson R. Gould, LSP, LEP
Licensed Site Professional #9923

October 9, 2017
Date

Gary E. Magnuson
Principal

10-9-2017
Date

TABLE OF CONTENTS

SECTION **PAGE**

1.0 INTRODUCTION

CMG Environmental, Inc. (CMG) has prepared this written Immediate Response Action (IRA) Plan for a portion of the property located at 484 Boston Post Road in Wayland, Massachusetts (the Property). Figure 1 (Site Location Map) depicts the Property locus in relation to streets and other topographic features.

This IRA Plan addresses release tracking number (RTN) 3-34474. CMG followed regulations set forth by the Massachusetts Department of Environmental Protection (DEP) in the Massachusetts Contingency Plan (MCP, 310 CMR 40.0000) in preparing this IRA Plan.

1.1 PURPOSE

The purpose of an IRA is to address urgent releases or threats of release at a 'disposal site'[1] that trigger two-hour notifications pursuant to 310 CMR 40.0311 or 40.0312, or 72-hour notifications per 40.0313 or 40.0314.

The purpose of an IRA Plan is to present the specific reason(s) why DEP requires an IRA, and to document proposed and completed IRA activities taken at the Site, in accordance with 310 CMR 40.0424.

1.2 SITE LOCATION & IDENTIFICATION

The Property is located at 484 Boston Post Road, Wayland MA 01778-1831. Boston Post Road is a portion of U.S. Route 20. The Property is on the northerly side of Route 20, approximately ½ mile west of its intersection with Andrew Avenue (at the Wayland Town Center development) and 0.3 miles west of the Sudbury River. It also abuts the neighboring town of Sudbury.

The Property 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 approximately 7 acres of land).

CMG defines "the Site" (disposal site) as a large (estimated at 32,000 yd³) soil stockpile located principally on Lot 22-6, amassed over many years by the Town of Wayland Highway Department from roadway maintenance. The Site is at 42º21'51" north latitude (42.36413 °N), 71º22'55" 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.

CMG has appended Figure 2 (Existing Conditions Aerial Photograph) and Figure 3 (Sample Location Plan) prepared by The Vertex Companies, Inc. (Vertex) to this IRA Plan. These figures each depict an "Approximate Area of Identified ACWM" (asbestos-containing waste material) near the apex of the large soil stockpile. CMG considers this area to be the approximate limits of the RTN 3-34474 'disposal site.'

[1] Defined at 310 CMR 40.0006 as "any structure, well, pit, pond, lagoon, impoundment, ditch, landfill or other place or area, excluding ambient air or surface water, where uncontrolled oil and/or hazardous material [OHM] has come to be located as a result of any spilling, leaking, pouring, abandoning, emitting, emptying, discharging, injecting, escaping, leaching, dumping, discarding or otherwise disposing of such [OHM]."

1.3 CURRENT PROPERTY OCCUPANTS & USES

The Lot 22-3 portion of the Property includes the First Student, Inc. parking area for Town of Wayland school buses. It also includes a former municipal wastewater treatment plan, a defunct firing range which the Wayland Police Department had used, and undeveloped wooded areas. The Lot 22-6 portion of the Property (formerly known as the Wayland Public Works Staging Yard) includes the majority of the large soil stockpile. It also contains undeveloped wooded areas, a dirt-paved parking area, and driveways. The Lot 22-7 portion of the Property includes a small part of the large soil stockpile. It also contains undeveloped wooded areas and the exit for the access drive to the Wayland Transfer Station (which is located primarily on Lot 22-4).

1.4 RELEASE NOTIFICATION [40.0311]

Vertex is supervising characterization of the large soil stockpile located on Lots 22-6 and 22-7 at the Property. 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 six samples of this material on August 10, 2017 and submitted these for asbestos analysis using polarized light microscopy (PLM) methodology. Five of the six samples contained >1% asbestos.

Vertex met with Wayland Town Engineer Paul Brinkman, Mr. Peter Seward of the DEP Bureau of Air and Waste, and CMG at the Property on August 14, 2017 to discuss these findings. At that time we concluded there was greater than the reportable quantity (1 pound) of asbestos contained in the ACWM separated out of the soil stockpile. Therefore the "release" of asbestos had the potential to pose an Imminent Hazard, and thus triggered a two-hour notification requirement per 310 CMR 40.0311(7). Mr. Brinkman verbally notified the DEP Bureau of Waste Site Cleanup of this finding at 6:40 p.m. on August 14, 2017.

1.5 IRA APPROVAL

Mr. Brinkman spoke with Sean Griffin of DEP, who forwarded this information to the DEP Northeast Region Asbestos Group. Chief John MacAulay of the Asbestos Group later spoke with Mr. Brinkman and advised him that Site IRA activities would be subsumed under an asbestos Work Plan.

This IRA Plan provides written documentation of the IRA Plan approved by DEP (Bureau of Waste Site Cleanup), as required by 310 CMR 40.0420(7). However, all Site IRA activities will be conducted under a Non-Traditional Asbestos Work Plan (NTAWP) approved by the DEP Bureau of Air and Waste.

Vertex has prepared said NTAWP on behalf of their client Wood Partners, LLC. The Town of Wayland selected Wood Partners, LLC as developer for the River's Edge project (who is currently in a Land Disposition Agreement 90-day due diligence period). Thus Vertex (not CMG) will conduct or provide direct supervision of ACWM identification, segregation, containment, and proper disposal at the Site.

CMG will compile information provided by Vertex and prepare MCP submittals on behalf of the Town of Wayland, which we believe will culminate in an IRA Completion and Permanent Solution Report for RTN 3-34474.

1.6 POTENTIALLY RESPONSIBLE PARTY INFORMATION

PRP[2] 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

1.7 PUBLIC INVOLVEMENT [40.1403(3)(b)]

Appendix A includes copies of the municipal notification letters CMG sent to the Wayland Chief Municipal Officer and Board of Health to satisfy MCP public involvement requirements regarding this IRA Plan.

2.0 SPECIFIC IRA PLAN [40.0424(1)]

Section 1.6 above provides the name, address, telephone number, and relationship to the Site of the "person assuming responsibility for conducting" the IRA, as required by 310 CMR 40.0424(1)(a). Section 1.4 describes the [threat of] release in conformance with 40.0424(1)(b). The following subsections detail the additional information required at 310 CMR 40.0424.

2.1 BACKGROUND [40.0427(4)(a)]

2.1.1 RELEASE DESCRIPTION

Section 1.4 above describes the "release" at the Site.

2.1.2 SITE CONDITIONS

The Site is currently the location of a large soil stockpile. Vertex identified ACWM contained within this stockpile and has halted work to further characterize soil materials pending DEP approval of their NTAWP (Appendix B presents a draft of this Plan).

2.1.3 SURROUNDING RECEPTORS

CMG observed the following uses of properties adjoining the Site:

[2] "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).

ADJOINING PROPERTY USES

DIRECTION	ADDRESS	PROPERTY USE
North	Also 384 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)	Sudbury Transfer Station

There are no residences, schools, playgrounds, recreational areas, or parks within 500' of the Site.

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

Figure 4 (Priority Resource Map) depicts all identified potentially productive aquifers, sole-source aquifers, approved Zone II areas for public drinking water supply wells, Interim Wellhead Protective Areas, Zone A areas of public water supply surface reservoirs, state- or federally-mapped wetlands, National Heritage & Endangered Species Program habitats of endangered or threatened species, protected open spaces, Areas of Critical Environmental Concern, and certified vernal pools located within ½-mile of the Site.

2.2 IRA ACTIVITIES CONDUCTED TO DATE [40.0424(1)(c)]

Vertex submitted 12 samples from six suspect ACWMs on August 19, 2017 and submitted these to EMSL Analytical, Inc. of Woburn MA for PLM analysis of asbestos via EPA 600/R-193/116 methodology. Results of this testing were as follows:

- Yellow speckled floor tile (B-0810-001A & B) – 3% Chrysotile,
- Mastic associated with above (B-0810-002A & B) – 6% Chrysotile,
- Yellow stone pattern linoleum (B-0810-003A & B) – 15% Chrysotile,
- Green/red linoleum (B-0810-004A & B) – 10% Chrysotile,
- Black tar paper (B-0810-005A & B) – no asbestos identified, and
- Transite pipe (B-0810-006A & B) – 10% Chrysotile and 3% Crocidolite.

Vertex also collected samples of undisturbed soil from the large stockpile by digging six shallow test pits on August 10, 2017 (designated TP-1 through TP-6) and submitting one-gallon samples to CEI Labs of Cary, North Carolina for PLM bulk asbestos analysis using California Air Resources Board Method 425. This testing did not identify asbestos in any of these six soil samples above the laboratory reporting limit of 0.00%.

Vertex Figure 3 appended to this IRA Plan illustrates ACWM and soil sampling locations at the Site. Appendix B presents the Vertex draft NTAWP, which includes laboratory certificates of analysis and chain-of-custody documentation for samples collected by Vertex to date.

Vertex has securely stored known and suspect ACWM at the Lot 22-3 portion of the Property. This material is placed on polyethylene sheeting and covered with additional sheeting, secured with weights against the wind. Smaller pieces of ACWM are placed in sealed 5-gallon plastic buckets, also staged on and covered by polyethylene sheeting.

2.3 REASON WHY IRA REQUIRED [40.0412 & 40.0424(1)(d)]

Section 310 CMR 40.0412(1) of the MCP requires an IRA at the Site because RTN 3-34474 was a two-hour notification pursuant to 40.0311.

The RTN 3-34474 release has not resulted in a CEP[3] at the Site or nearby properties.

2.4 IMMINENT HAZARD (IH) EVALUATION [40.0426]

CMG has determined that no actual IH condition (as defined at 310 CMR 40.0321) currently exists at the Site because:

- The release identified by RTN 3-34474 did not result in the presence of OHM vapors within buildings, structures, or underground utility conduits at concentrations equal to or greater than 10% of the lower explosive limit;
- RTN 3-34474 did not result in a release to the environment of reactive or explosive hazardous material that threatens human safety;
- RTN 3-34474 did not result in a roadway release that endangers public safety;
- RTN 3-34474 did not result in a release to the environment of OHM that poses a 'significant risk' to human health (as defined at 310 CMR 40.0950) when present for even a short time;
- RTN 3-34474 did not result in a release to the environment of OHM that produces immediate or acute adverse impacts to freshwater or saltwater fish populations;
- RTN 3-34474 no longer constitutes a release to the environment of OHM that could produce readily apparent effects to human health (such as respiratory distress or skin irritation);
- The RTN 3-34474 release is of asbestos, which does not pose any threat to public or private drinking water supplies;
- CMG has no reason to suspect that laboratory analysis of soil samples collected from within 12" of the surface in accessible areas within 500' of residences would identify concentrations of total arsenic, total cadmium, hexavalent or total chromium, cyanide, total mercury, methyl mercury, or polychlorinated biphenyl above the IH criteria set forth at 310 CMR 40.0321(2)(b);
- Long-term risk levels associated with current exposure to the contamination associated with RTN 3-34474 do not exceed ten times the cumulative risk receptor limits set forth by DEP at 310 CMR 40.0993(6); and
- CMG is not aware that DEP has otherwise determined that an IH condition currently exists at the Site.

[3] Defined at 310 CMR 40.0006 as "those routes by which [OHM] released at a disposal site are transported, or are likely to be transported, to human receptors via:

(a) vapor-phase emissions of measurable concentrations of [OHM] into the living or working space of a pre-school, daycare, school or occupied residential dwelling; or

(b) ingestion, dermal absorption or inhalation of measurable concentrations of [OHM] from drinking water supply wells located at and servicing a pre-school, daycare, school or occupied residential dwelling."

2.5 OBJECTIVE, SPECIFIC PLAN & PROPOSED SCHEDULE [40.0424(1)(e)]

2.5.1 IRA OBJECTIVE

The objective of this IRA Plan is to:

- Identify all suspect ACWM in the large soil stockpile at the Property and conduct PLM analysis to determine if it contains >1% asbestos,
- Contain and properly dispose of ACWM associated with RTN 3-34474, and
- Eliminate a potential IH condition associated with RTN 3-34474.

2.5.2 SPECIFIC IRA PLAN

Please refer to the draft NTAWP prepared by Vertex and included as Appendix B to this IRA Plan. Vertex anticipates a three-phase approach to evaluating the large soil stockpile at the Site for additional ACWM that entails cleaning of surface impacts, Site soil characterization, and completing stockpile grading (to continue with waste classification analyses). Section 2.0 of their NTAWP provides details of this approach.

2.5.3 PROPOSED IRA SCHEDULE

Please refer to the draft NTAWP prepared by Vertex and included as Appendix B to this IRA Plan. The schedule for this work is subject to approval by DEP Bureau of Air and Waste personnel.

2.6 REMEDIATION WASTE [40.0424(1)(f)]

Please refer to the draft NTAWP prepared by Vertex and included as Appendix B to this IRA Plan. Section 2.5 of the Vertex Plan discusses waste disposal protocols.

2.7 ENVIRONMENTAL MONITORING PLAN [40.0424(1)(g)]

Please refer to the draft NTAWP prepared by Vertex and included as Appendix B to this IRA Plan. Section 8.0 of this Plan discusses air monitoring to comply with the OSHA Construction Standard for asbestos exposure promulgated at 29 CFR 1926.1101.

2.8 PERMITS [40.0424(1)(h)]

Vertex is seeking approval from the DEP Bureau of Air and Waste for their NTAWP. CMG does not anticipate that this IRA will require any other federal, state, or local permits or approvals to complete.

2.9 ADDITIONAL INFORMATION [40.0424(1)(j)]

CMG is not aware of any additional IRA information that DEP has deemed appropriate and necessary to review and evaluate this IRA Plan.

2.10 LICENSED SITE PROFESSIONAL (LSP) OPINION [40.0424(1)(i)]

CMG prepared a Form BWSC105 [“Immediate Response Action (IRA) Transmittal Form”] using the eDEP electronic submittal system. Section E of this form presents the LSP Opinion regarding this IRA Plan for RTN 3-34474. Section I of this form presents the certification required by 310 CMR 40.0424(1)(i). CMG has attached a .pdf copy of this IRA Plan to the Form BWSC105 submitted electronically.

3.0 LIMITATIONS & CONDITIONS

3.1 METHODOLOGY

CMG Environmental, Inc. followed guidelines set forth by the DEP in the MCP and employed a "level of diligence reasonably necessary to obtain the quantity and quality of information adequate to assess" the disposal site in accordance with the Response Action Performance Standard promulgated at 310 CMR 40.0191.

Moreover, CMG followed guidelines set forth by DEP in the MCP. We specifically complied with IRA requirements set forth at 310 CMR 40.0410 through 40.0429.

3.2 SCOPE OF SERVICES

Wayland Town Administrator Nannette F. Balmer authorized CMG to prepare this written IRA Plan on August 14, 2017. We performed the following scope of services between August and October 2017:

- Conducted a visual reconnaissance of the Property and vicinity on August 14, 2017 to inspect pertinent features;
- Interviewed Mr. Brinkman and knowledgeable Vertex personnel regarding recognized environmental conditions at the Site and vicinity;
- Identified a two-hour reportable condition at the Site at 5:00 p.m. on August 14, 2017 pursuant to 310 CMR 40.0311(7), namely a potential IH condition from significant quantities of ACWM;
- Reviewed available online information on the Property from the Town of Wayland website;
- Reviewed the September 20, 2017 Draft NTAWP prepared by Vertex;
- Prepared release notification and IRA Plan transmittal forms for Town of Wayland electronic certification and eDEP submittal; and
- Prepared this written IRA Plan.

3.3 GENERAL LIMITATIONS

CMG conducted IRA response actions in accordance with generally accepted engineering and hydrogeologic practices. CMG makes no other warranty, express or implied. CMG cannot provide absolute assurance that we have identified any and all recognized environmental conditions (including DEP reportable 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.

Please be advised that environmental conditions at the disposal site and surrounding properties may change in time. CMG does not render an opinion as to environmental conditions at the Property that change after the date of the environmental studies reported herein.

3.4 SPECIFIC CONDITIONS OF THE IRA PLAN

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. CMG assumes no responsibility for the accuracy and completeness of this information.

CMG based the conclusions discussed herein solely and in reliance upon information collected during activities detailed in our Scope of Services (see Section 3.2 above).

Vertex's investigation included the collection and laboratory PLM analysis of suspect ACWM samples from a limited number of locations at the Property. However, neither Vertex nor CMG intend this study to be a definitive investigation of subsurface conditions at the Property. Vertex restricted the scope of services for this investigation due to time and/or cost constraints, and though they did undertake a limited amount of analytical testing, currently unrecognized subsurface conditions may exist at the Property. Increasing exploration (such as placement of test pits, completion of additional soil borings with subsequent collection of soil samples for laboratory analysis, installation of additional groundwater monitoring wells with subsequent collection of groundwater samples for laboratory analysis, and conducting surface geophysical survey techniques) may better delineate subsurface conditions.

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

3.5 RELIANCE

CMG prepared this IRA Plan 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.

4.0 REFERENCES

INTERVIEWS

Wayland Town Engineer Paul Brinkman, P.E.: several occasions including August 14, 2017.

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

Massachusetts DEP, Bureau of Air and Waste: Environmental Analyst and Asbestos Inspector Peter C. Seward August 14, 2017.

WAYLAND

Assessor's Office: available online records reviewed August and October 2017.

MASSACHUSETTS

Department of Environmental Protection: Cleanup Sites Search, records reviewed online September 26, 2017 at http://db.state.ma.us/dep/cleanup/sites/search.asp.

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

Division of Water Pollution Control regulations (314 CMR 4.00): December 27, 1996 revision.

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

UNITED STATES

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

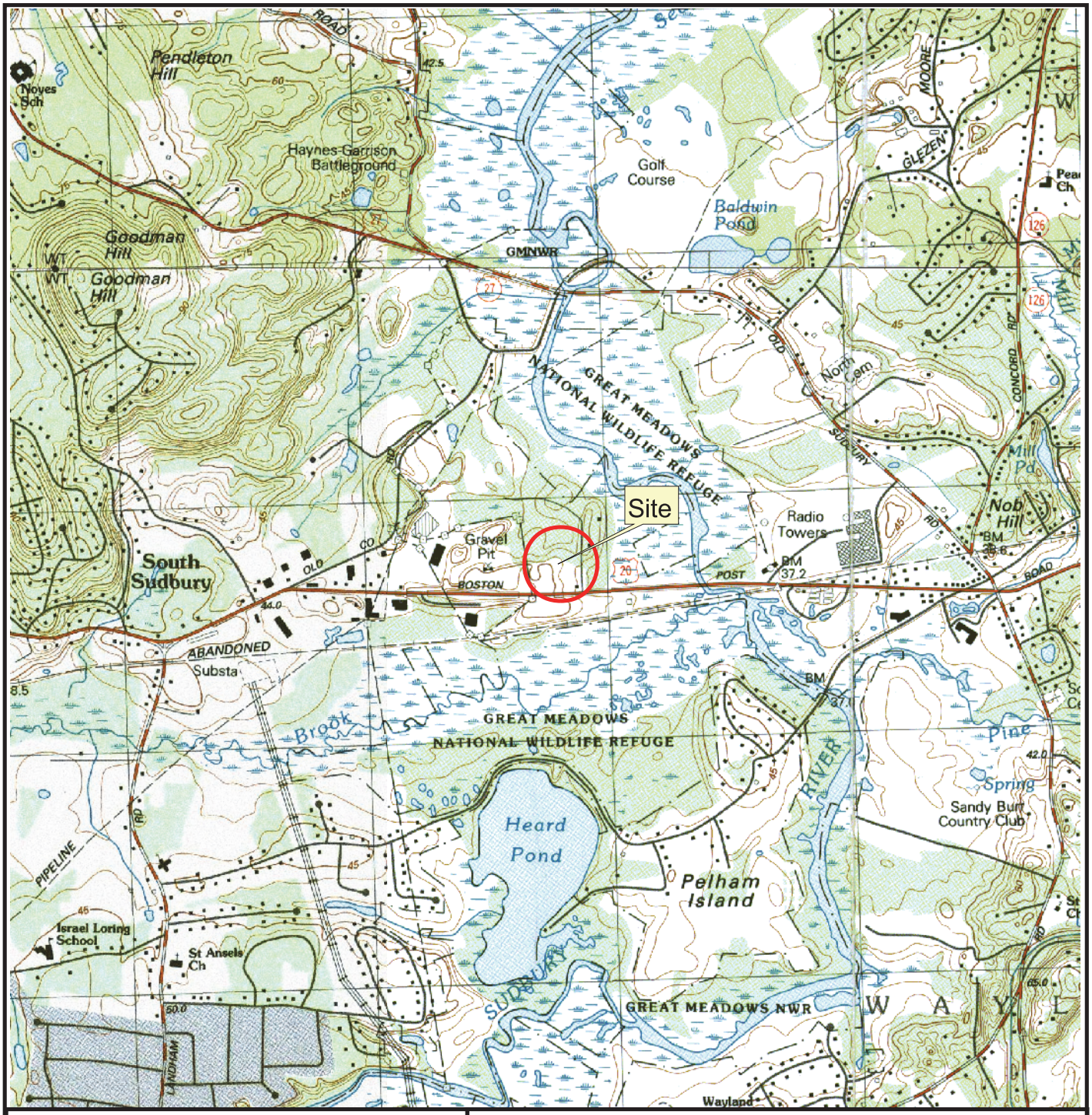
PREVIOUS ENVIRONMENTAL REPORTS

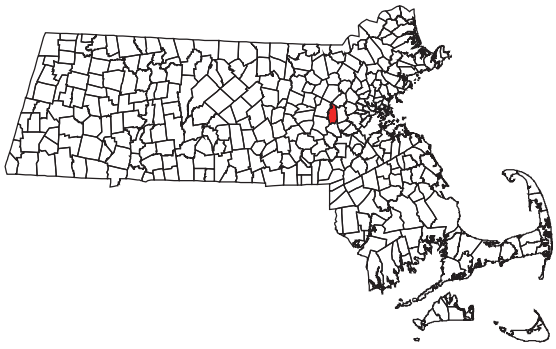
The Vertex Companies, Inc.: "Non-Traditional Asbestos Work Plan" draft September 20, 2017.

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.

FIGURES

*Figure 2 and Figure 3 prepared by The Vertex Companies, Inc. (Boston MA)





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

AMMUNITION STORAGE TRAILERS

FIRING RANGE

ACWM AND ASSOCIATED SOIL TEMPORARY STORAGE AREA

STORAGE BINS

APPROXIMATE AREA OF IDENTIFIED ACWM

CONCRETE DEBRIS PILE

ORIGINAL EXTENT OF SOIL STOCKPILE

CURRENT EXTENT OF SOIL STOCKPILE

BUS PARKING / FORMER WASTEWATER TREATMENT PLANT

TRANSFER STATION ACCESS ROAD

Wayland Town Dump

Google

Map

EXISTING CONDITIONS AERIAL PHOTOGRAPH

FORMER PUBLIC WORKS STAGING YARD
484-490 Boston Post Road
Wayland, Massachusetts

File No.:	NA
Date:	09/15/2017
Drawn:	FC
Checked:	WJG
Job No.:	46047

FIGURE 2

REVISIONS

VERTEX
1 CONGRESS STREET, 10TH FL.
BOSTON, MA 02114
617.275.5407
VERTEXENG.COM

Z:\Shared\Projects\...\46047.River's Edge - Wayland\NTWP

AMMUNITION STORAGE TRAILERS

FIRING RANGE

ACWM AND ASSOCIATED SOIL TEMPORARY STORAGE AREA

TP-5

STORAGE BINS

Test Pit #3

Test Pit #1

Test Pit #6

TP-3

TP-4

Test Pit #4

Test Pit #5

APPROXIMATE AREA OF IDENTIFIED ACWM

CONCRETE DEBRIS PILE

TP-1

TP-6

ORIGINAL EXTENT OF SOIL STOCKPILE

CURRENT EXTENT OF SOIL STOCKPILE

Test Pit #2

TP-2

BUS PARKING / FORMER WASTEWATER TREATMENT PLANT

TRANSFER STATION ACCESS ROAD

LEGEND:

ORIGINAL LOCATION OF SOIL WITHIN STOCKPILE

SOIL SAMPLE LOCATION

0 50 100 150

SCALE: 1" = 50'-0"

(WHEN PRINTED AT 11x17)

Z:\Shared\Projects\...\46047.River's Edge - Wayland\NTWP

VERTEX
1 CONGRESS STREET, 10TH FL.
BOSTON, MA 02114
617.275.5407
VERTEXENG.COM

REVISIONS

SAMPLE LOCATION PLAN

FORMER PUBLIC WORKS STAGING YARD
484-490 Boston Post Road
Wayland, Massachusetts

File No.: NA FIGURE 3
Date: 09/15/2017
Drawn: FC
Checked: WJG
Job No.: 46047

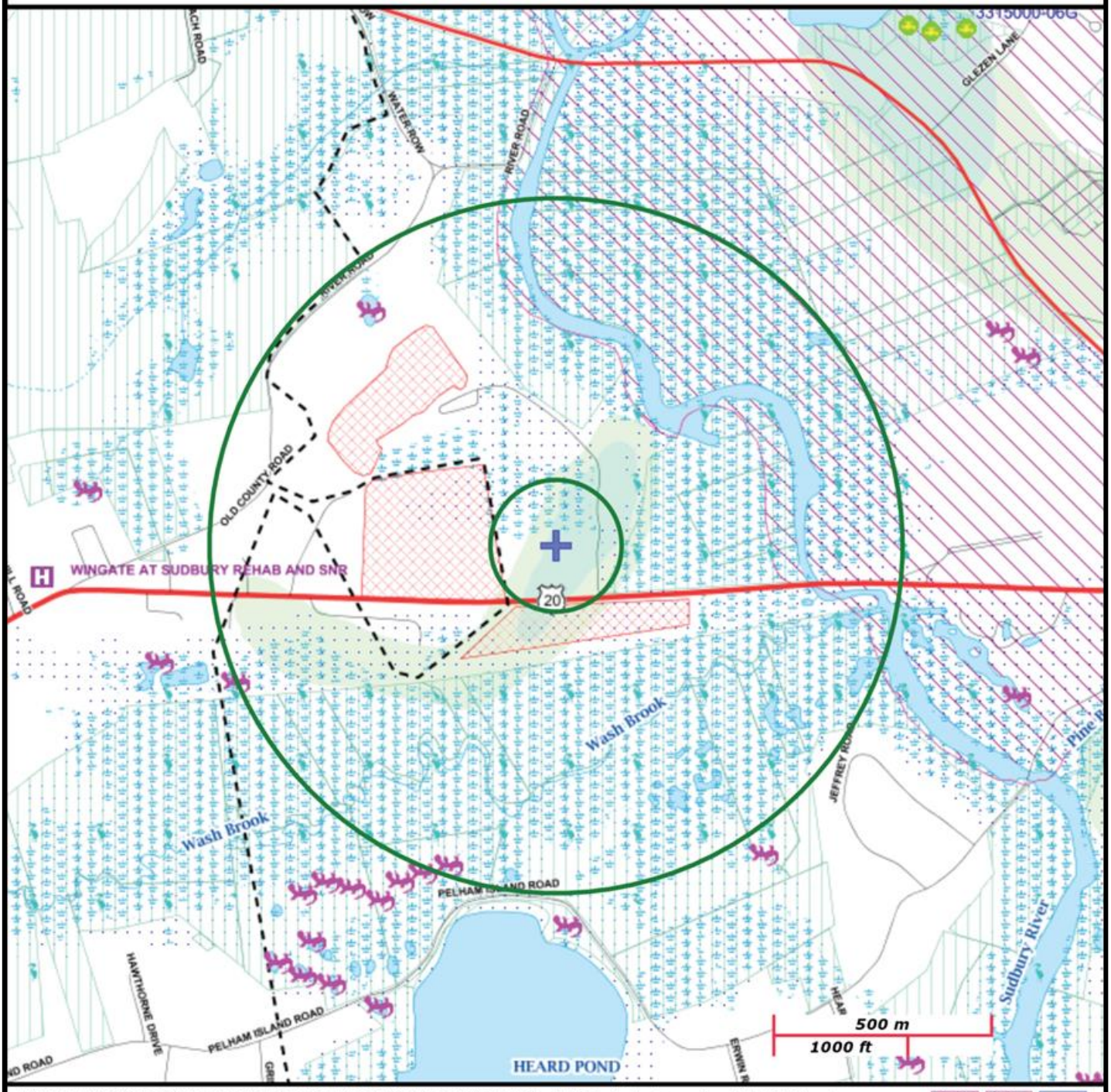
MassDEP - Bureau of Waste Site Cleanup

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

October 9, 2017

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

Re: **Notice of Immediate Response Action (IRA)**
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)(b), that the Town of Wayland intends to conduct an IRA at the above-referenced property.

Local officials interested in reviewing the IRA Plan may download an electronic copy from http://public.dep.state.ma.us/SearchableSites2/Search.aspx (the DEP 'Reportable Releases Look Up' 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 "BWSC105."

Sincerely,
CMG ENVIRONMENTAL, INC.

Benson R. Gould, LSP, LEP
Principal

cc: Massachusetts DEP, Northeast Regional Office

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

560 SOUTH MAIN STREET
NEW BRITAIN, CT 06051
PHONE (866) 304-7625
FAX (860) 223-5454

October 9, 2017

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

Re: **Notice of Immediate Response Action (IRA)**
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)(b), that the Town of Wayland intends to conduct an IRA at the above-referenced property.

Local officials interested in reviewing the IRA Plan may download an electronic copy from http://public.dep.state.ma.us/SearchableSites2/Search.aspx (the DEP 'Reportable Releases Look Up' 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 "BWSC105."

Sincerely,
CMG ENVIRONMENTAL, INC.

Benson R. Gould, LSP, LEP
Principal

cc: Massachusetts DEP, Northeast Regional Office

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

560 SOUTH MAIN STREET
NEW BRITAIN, CT 06051
PHONE (866) 304-7625
FAX (860) 223-5454

APPENDIX B

NON-TRADITIONAL ASBESTOS WORK PLAN*
(SEPTEMBER 20, 2017 DRAFT)

*Prepared by The Vertex Companies, Inc. (Boston MA)

DRAFT

NON-TRADITIONAL ASBESTOS WORK PLAN

Town of Wayland
Former Public Works Staging Yard
484-490 Boston Post Road
Wayland, Massachusetts

Prepared By:
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Prepared For:
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Submitted To:
Massachusetts Department of Environmental Protection
Northeast Regional Office
Attention: Asbestos Section
205B Lowell Street
Wilmington, MA 01887

VERTEX Project No. 46047

September 20, 2017

TABLE OF CONTENTS

Tables

Figures

Appendices

CERTIFICATION OF RESULTS

This Work Plan has been prepared by The Vertex Companies, Inc. (VERTEX) on behalf of the Town of Wayland (the Owner). The Work Plan will be used by site workers for management of the asbestos-containing waste material (ACWM) found at the Former Public Works Staging Yard (referred to hereinafter as "Site" or "Subject Site"). Photocopying of this document by parties other than those designated by the Client, or use of this document for purposes other than it is intended, is prohibited.

Respectfully submitted this 20th day of September, 2017.

Prepared By:

_____
Vincent Agostino, Asbestos Designer AD-00026

1.0 INTRODUCTION

1.1 BACKGROUND

The Site is an approximately 7-acre property located on the north side of Boston Post Road (Rout 20) in Wayland, Massachusetts. A Site locus is included as Figure 1.

An approximately 32,000 cubic yard (CY) stockpile of soil is located in the center of the property. It is our understanding that the stockpile is composed of excess material generated from Town of Wayland underground utility work and construction projects in the Town of Wayland over several years. The original configuration of the stockpile is shown in the aerial photograph of the Site, included as Figure 2.

Working on the behalf of a potential buyer of the property, VERTEX oversaw the partial grading of the 32,000-CY stockpile at the Site by the Greener Group (Greener). The intent of the grading activities was to move the existing stockpile into a more manageable configuration, to allow the stockpile to be sampled and characterized for potential reuse or off-site disposal. The current configuration of the stockpile (e.g. partially graded stockpile) was generated using global positioning system (GPS) coordinates, and is depicted as Figure 3.

During grading activities, a small amount of suspect asbestos-containing waste material (ACWM) consisting of pieces of 3 to 4-inch diameter transite pipe was observed on the surface at the top of the stockpile in the area shown on Figure 2. The suspect ACWM was secured in an area away from the pile grading operations. As grading activities continued, additional pieces of pipe and pieces of vinyl floor tile were identified primarily at the top of the stockpile with some suspect ACWM along the western side slope, and the volume of suspect ACWM debris increased beyond the presumed de minimis condition (e.g. less than 1 pound of ACWM debris). As such, grading activities were halted and the suspect ACWM debris was sampled. The approximate area of suspect ACWM is shown on Figure 2.

Six samples of the suspect ACWM were placed into plastic bags and were submitted to EMSL Analytical, Inc. (EMSL) of Woburn, Massachusetts for Asbestos Analysis of Bulk Materials using the United States Environmental Protection Agency (USEPA) 600/R-93/116 method using Polarized Light Microscopy (PLM). As shown in Table 1 (see following Section 1.2), five of the six samples contained greater than one percent (>1%) asbestos. Therefore, earthwork has not been re-started.

At the time that the suspect ACWM was sampled, six samples of soil (designated TP-1 through TP-6) from shallow test pits excavated in areas near the suspect ACWM were also collected. The locations of the soil samples are depicted on Figure 3. Each soil sample was a composite created from three points in each area. The soil samples were placed in plastic bags and were submitted to CEI Labs (CEI) of Cary, North Carolina for Quantitative asbestos analysis of soils using USEPA 600/R-93/116 method, with the California Air Resources Board (CARB)-435 prep methodology. As shown in Table 2 (see following Section 1.3), the soil samples did not contain asbestos. Note, as shown on Figure 3, samples TP-2, TP-3, and TP-4 were collected of undisturbed soil within the stockpile. Other soils from the area of ACWM had previously been moved from their original location prior to the identification of the debris. For the purposes of the investigation, VERTEX noted the original soil locations and where it was moved. Samples TP-1, TP-4 and TP-5 were collected of soil that was

originally near the ACWM area, and had been moved during the grading operations. The approximate original locations of the soil that composed samples TP-1, TP-4, and TP-5 and the locations where those samples were collected are shown on Figure 3. For example, soil sample TP-1 was collected from soil that originated from Test Pit #1.

On August 17, 2017, VERTEX met on Site with Massachusetts Department of Environmental Protection (MassDEP) Northeast Regional Office, Bureau of Air and Waste representative Mr. Peter Seward at the Site to review the Site conditions. Mr. Seward viewed the stockpile and the area where the suspect (now confirmed) ACWM was stored and identified two additional pieces of suspect ACWM in the stockpile in the same general area where the previous pieces had been identified. Mr. Seward indicated that a Non-traditional Workplan (NTWP) would be required to abate the asbestos. In addition, in a phone call to VERTEX on August 24, 2017, the MassDEP indicated that they will require additional sampling and analysis to evaluate the potential presence of asbestos in soil, prior to allowing the soil stockpile to be graded as non-ACWM.

1.2 ACWM SAMPLING

During grading activities, a Massachusetts Licensed Asbestos Inspector was on Site to identify suspect ACWM. The suspect materials were segregated and stored in plastic 5-gallon buckets on Site. In addition, the potentially impacted soil underneath the suspect ACWM debris was collected and stored on plastic sheeting. Once the volume of debris and soil increased beyond the presumed de minimis condition (e.g. less than 1 pound of suspect ACWM debris), samples of the suspect ACWM were collected and sent to EMSL) of Woburn, Massachusetts. Sample collection was conducted by a Massachusetts Licensed Asbestos inspector. The laboratory analytical data is summarized in Table 1 and the laboratory analytical reports are included in Appendix A.

Table 1: ACWM Sampling Results

Sample ID	Description	Approximate Location [1]	Results
B-0810-001A	**Yellow speckled floor tile**	**East corner**	**3% Chrysotile**
B-0810-001B	**Yellow speckled floor tile**	**East corner**	**3% Chrysotile**
B-0810-002A	**Mastic associated with yellow speckled floor tile**	**East corner**	**6% Chrysotile**
B-0810-002B	**Mastic associated with yellow speckled floor tile**	**East corner**	**6% Chrysotile**
B-0810-003A	**Yellow stone pattern linoleum**	**North**	**15% Chrysotile**
B-0810-003B	**Yellow stone pattern linoleum**	**North**	**15% Chrysotile**
B-0810-004A	**Green/red linoleum**	**North**	**10% Chrysotile**
B-0810-004B	**Green/red linoleum**	**North**	**10% Chrysotile**
B-0810-005A	Black tar paper	East corner	ND
B-0810-005B	Black tar paper	East corner	ND
B-0810-006A	**Transite pipe**	**East corner**	**10% Chrysotile 3% Crocidolite**
B-0810-006B	**Transite pipe**	**East corner**	**10% Chrysotile 3% Crocidolite**

Notes:
Bold indicates representative bulk sample analyzed positive for Asbestos.

Table 1: ACWM Sampling Results

Sample ID	Description	Approximate Location [1]	Results
ND indicates representative bulk sample did not contain Asbestos. [1] = The ACWM sample locations on the chain-of-custody documentation refer to the location of the samples within the approximate area of identified ACWM, found at the top of the stockpile. Please refer to Figure 3.			

1.3 SOIL SAMPLING

Concurrent with the ACWM debris sampling, VERTEX collected samples of the stockpiled soil, that was adjacent to or below ACWM debris at the locations shown on Figure 3. Sample collection was conducted by a Massachusetts Licensed Asbestos Inspector. Samples were collected in re-sealable plastic bags and were shipped overnight to CEI Labs, for analysis by PLM with the CARB-435 preparation methodology. The laboratory analytical data is summarized in Table 2 and the laboratory analytical reports are included in Appendix A.

Table 2: Soil Sampling Results

Sample ID	Sample Description	Approximate Location [1]	Results
TP-1	Silty sand	East side of stockpile	ND
TP-2	Sand	South side of stockpile	ND
TP-3	Clay	Northwest side of stockpile	ND
TP-4	Sandy silt	Northwest side of stockpile	ND
TP-5	Soil stockpile sample	Stockpile of soil that was in contact with suspect ACWM and that was segregated from main stockpile	ND
TP-6	Construction debris	East side of stockpile	ND
Notes: **ND** indicates representative bulk sample did not contain Asbestos. [1] = Refer to Figure 3 for graphic depiction of sample locations.			

1.4 REGULATED WORK AREAS

The purpose for this NTWP is to provide the requirements for removal of the ACWM debris identified on the top of the stockpile (See Figure 2), additional suspect ACWM that may be identified, and potentially impacted soil in contact with the identified ACWM and suspect ACWM.

Given that the scope of work includes the removal of confirmed ACWM debris staged at the base of the stockpile and suspect ACWM on the surface of the 32,000 CY stockpile, the work will be conducted within two controlled regulated areas (open containment) with a remote three chamber decontamination facility at the entrance and exit of each Regulated Work Area. The size and extent of the regulated work areas shall be determined by the VERTEX project monitor and the Massachusetts-licensed abatement contractor, NorthStar Contracting Group, Inc. (Northstar) of Everett, Massachusetts, based on the visual inspection of the surface of the stockpile. Areas that have been found to contain ACWM debris on the surface are designated as Regulated Work Areas under this NTWP.

Upon the start of any ACWM debris-removal activities, only properly trained authorized personnel donning the appropriate personal protective equipment (PPE) (Section 4.0) may enter the Regulated Work Area. A designated "competent person" will supervise the collection of the ACWM debris and underlying soil excavation performed in the area. Access to Regulated Work Areas will be controlled in accordance with the procedures in Section 3.1.

In addition, VERTEX will conduct a limited evaluation of the remainder of the 32,000 CY stockpile prior to resuming grading activities at the Site. If warranted based on the results of the limited evaluation, VERTEX will submit a modification to this NTWP.

Following approval of the NTWP, the abatement contractor will submit a completed Asbestos Notification Form (ANF-001) to the MassDEP Northeast Regional Office (NERO) and the Massachusetts Department of Labor Standards (MassDLS). Earthwork and management of ACWM will not proceed before 10 business days after the ANF-001 is submitted, unless a waiver to this waiting period is obtained from the MassDEP. Therefore, to proceed with the Work Plan procedures, **an emergency waiver of the ten-working day notification from MassDEP is requested.**

2.0 OVERVIEW OF WORK PLAN PROCEDURES

Work procedures covered by this NTWP include the collection of ACWM debris; excavation of soil underlying the ACWM debris; and packaging, transport, and disposal of ACWM debris and soil from the Site.

2.1 GENERAL WORK PLAN SEQUENCE

Based on the current project at the Site, VERTEX is proposing the following general sequence to address the ACWM debris and potentially-impacted soil, and to evaluate the existing 32,000 CY stockpile for the presence of asbestos. Additional details regarding each step in the sequence is provided in remaining subsections of Section 2.

Phase 1 – Initial Cleaning of Surface Impacts

1. Containerization of segregated soil and existing ACWM debris piles currently stored in the ACWM and Associated Soil Temporary Stockpile Area shown on Figure 3.
2. Inspection of the surface and sides of the stockpile for additional ACWM debris. Each debris location will be flagged.
3. Contractor to hand abate of existing ACWM debris and 2 inches of underlying soil, concurrent with surface inspection.
4. Visual inspection by the VERTEX licensed project monitor.

Phase 2 – Initial Site Characterization

5. At the completion of debris and soil removal, collect up to 30 surface soil samples from depths of 0 to 2-inches in the stockpile in the approximate locations shown on Figure 4, in order to demonstrate that remaining surface soil is not contaminated with asbestos fibers.
6. Mobilize a truck-mounted, direct-push drill rig to advance soil borings to a depth of approximately 12 feet in 4 locations in the area where identified ACWM impacts have been removed. Up to 12 subsurface soil samples (3 samples per boring) will be collected in 4-foot depth intervals (e.g., 0-4 ft, 4-8 ft, and 8-12 ft).
7. If asbestos fibers are not detected in the samples collected in items 5 and 6, the Greener Group will be remobilized to the Site to continue with stockpile grading activities.
8. Should asbestos fibers be detected in the samples collected in items 5 and 6 above (either at the surface or at depth), a modification to the NTWP will be submitted to MassDEP prior to continuing any activities at the Site.

Phase 3 – Completion of Grading Activities

9. Completion of grading under oversight of a VERTEX project monitor and a 2-person asbestos abatement crew to hand-abate any identified suspect ACWM, as well as 2-inches of underlying soil, as needed, as described in Phase 1. Grading activities will be initiated immediately upon receipt of analytical data indicating that asbestos fibers were not detected in the surface and subsurface samples collected in items 5 and 6 above.
10. After grading activities are completed, VERTEX will complete 64 test pits (approximately 1 sample per 500 CY) at the Site, to characterize soil for reuse or off-site disposal. During test

pitting, should any suspect ACWM be encountered, work activities for that test pit shall cease, and MassDEP shall be notified. Abatement contractor shall return to the Site to address the additional ACWM impacts, as described in Phase 1.

2.2 ROLES UNDER NTWP

The parties involved in the implementation of this NTWP are described in the table below:

Role	Party	Contact
Responsible Party/Owner	Town of Wayland 41 Cochituate Road Wayland, MA 01778	Mr. Paul Brinkman Town Engineer 66 River Road Wayland, MA 01778 t: 508-358-3672
Asbestos Abatement Contractor	NorthStar Contracting Group, Inc. 401-S Second Street Everett, MA 02149 Massachusetts License #: AC000097	Mr. Paul Holtslag Superintendent c: 617-892-3983
Environmental/Asbestos Designer/Monitor	The Vertex Companies, Inc. 398 Libbey Parkway Weymouth, MA 02189	Mr. William Gibbons Sr. Project Manager t: 617-275-5407 c: 781-698-7654 Mr. Vincent Agostino Assistant Vice President t: 781-952-6000 c: 781-603-9542
Disposal Facilities	Primary Facility WM, Turnkey Landfill 90 Rochester Neck Rd. Rochester, NH 03839 Main Receiving Facility	Ellen Bellio Waste Approvals Manager t: 603- 330-2102
Waste Haulers	Charles George Companies, Inc. PO Box 857 Londonderry, NH 03053	Megan Hook t: 888.568.7274

2.3 NEGATIVE EXPOSURE ASSESSMENT

Based on the Occupational Safety and Health Administration (OSHA) asbestos standard for the construction industry (29 CFR Part 1926.1101), for any specific asbestos job that trained employees perform, employers may show that exposure will be below the Permissible Exposure Level (PEL) by performing a Negative Exposure Assessment (NEA). A NEA is defined as an assessment of an asbestos job(s) through a series of air samples that shows exposure will be less than the OSHA PEL of 0.1 f/cc as an 8-hour time weighted average (PEL) and/or less than 1.0 f/cc as an averaged over a sampling period of 30-minute short-term exposure limit (STEL) to ensure that no employee is exposed to an airborne concentration of asbestos.

ACWM debris collection and removal of the underlying 2-inches of soil will be conducted by licensed and trained asbestos workers from NorthStar (the Contractor) wearing Tyvek suits and respirators. Excavation will be under a controlled regulated area (open containment) with a remote three chamber decontamination facility at the entrance and exit of the Regulated Work Area (see Section 5.0). Simultaneous to the initial work activities, a NEA can be performed by the Contractor to determine the appropriate level of respiratory protection. OSHA air sampling will be performed by Phase Contrast Microscopy (PCM) in general accordance with NIOSH 7400. Specific management means and methods protocol outlined in this Work Plan will be followed as part of the NEA to ensure that future activities "closely resemble" those of the NEA to evaluate if the ACWM debris removal activities result in exposure above the PEL or STEL.

If the conditions for an NEA are met, future work may be conducted by workers without respirators, if the earthwork means and methods do not meaningfully change. Work Area demarcations (e.g. barrier tape and cones), signage, worker and equipment decontamination, medical examinations, and perimeter air monitoring by a licensed Massachusetts Department of Labor Standards (MassDLS) Project Monitor in accordance with Section 8.2 will be maintained following the NEA regardless of any change in respiratory protection requirements.

2.4 WORK PLAN PROCEDURES – PHASE 1

For work within each ACWM Regulated Work Areas for Phase 1 (Figure 4), the following procedures will be followed for the duration of this phase of the project.

1. Work is expected to start at 7:00am and continue to 4:00pm. Work times will be modified as needed.
2. A remote three chamber decontamination facility will be installed on Site (see Figure 4) for each Regulated Work Area. Workers shall be required to enter and exit the Regulated Work Areas through the decontamination facilities.
3. Prior to the start of any removal activities, the VERTEX project monitor and Northstar will visually inspect the surface of the stockpile and shall flag or otherwise indicate the locations of visible debris.
4. The abatement contractor will establish a Regulated Work Area (RA-1), to encompass the segregated soil and existing ACWM debris piles. This Regulated Work Area shall extend approximately 25 feet beyond the existing storage area.
5. Licensed asbestos workers will wet the segregated soil and existing ACWM debris piles before it is loaded into 6-mil bags or boxes.
6. The abatement contractor will establish the Regulated Work Area (RA-2), to encompass the ACWM debris and underlying soil. This Regulated Work Area shall extend, at a minimum, 25 feet beyond the extent of visible ACWM debris on the surface of the stockpile and shall include routes and pathways through which workers may transport ACWM to the decontamination facility.
7. A portable water sprayer, filled with surfactant-amended water, will be in use while removing ACWM debris and underlying soils. Due to the nature of the Site, amended water will be brought by NorthStar.

8. Licensed asbestos workers will wet the ACWM debris and underlying soil before it is loaded into 6-mil bags or boxes.
9. ACWM debris and underlying soil shall be manually abated (e.g. using hand tools) from the surface of the stockpile and placed into 6-mil bags or boxes.
10. Bags will be wiped clean before being removed from the Regulated Work Area. Once cleaned, waste bags shall be double-bagged before being transported to the waste storage area.
11. The equipment and materials will be washed and cleaned. Once cleaned, equipment and materials will be removed from the Site. Any water generated during cleaning activities will be containerized and collected and shipped under the Asbestos Waste Shipment Record.
12. VERTEX will be on Site during the excavation process. VERTEX will perform full time perimeter work zone monitoring and visual clearances for both RA-1 and RA-2. Generator, gas, and extension cords will be provided by VERTEX and the Contractor.
13. At the completion of ACWM debris and underlying soil removal activities, VERTEX will conduct a visual inspection of each Regulated Work Area for of any visible debris or contamination. If the visual inspection does not reveal any debris or other signs of contamination, this phase of the NTWP shall be considered complete.

2.5 WASTE DISPOSAL

ACWM generated under this NTWP may include, but are not limited to, the following:

- ACWM debris
- Soil in contact with ACWM debris
- PPE or other disposable items used during ACWM collection and containerization
- Polyethylene sheeting
- Decontamination fluids
- Any other material potentially contaminated with asbestos fibers.

ACWM from the Regulated Work Area will be sent for off-site disposal as follows:

1. ACWM will be loaded into 6-mil bags or boxes for removal. The primary transport will be via dumpsters. Each dumpster will be lined with two-layers of 6-mil polyethylene sheeting prior to loading.
2. Each waste bag will be double-bagged, before being loaded for transport.
3. Once the dumpster is loaded, DLS licensed asbestos workers will properly seal, wash down, and label the dumpster with 2212 placards on all four sides for Asbestos Waste as a Class 9 Hazardous Material prior to leaving the Project Site.
4. Material will be shipped under a Bill-of-Lading (BOL) and an asbestos Waste Shipment Record (WSR). A copy of the waste shipment forms will be emailed to the MassDEP Bureau of Air and Waste (BAW) on the day the waste leaves the Site for disposal.
5. Dumpsters used for removing ACWM will be in good condition, with no holes or damaged areas within the storage portion.

2.6 WORK PLAN PROCEDURES – PHASE 2

To confirm that the remaining surface soil is not contaminated with asbestos fibers, after the completion of surface abatement activities (e.g. Phase 1), VERTEX will collect additional surface samples from the undisturbed section of the stockpile, in proximity to the Regulated Work Area RA-2, the ramp leading up to the top of the stockpile, and in locations across the stockpile. Each sample will be analyzed for the presence of asbestos fibers, by PLM methodology with a CARB-435 preparation method.

Should the collected surface samples indicate that asbestos is not found in the surface soil samples, VERTEX will mobilize a truck-mounted, direct-push drill rig to collect subsurface soil samples in the area of identified ACWM impacts. The subsurface samples will be collected in 4-foot depth intervals in four (4) locations. Soil samples will be collected in acetate sleeves which will be presented unopened to a Licensed Asbestos Inspector. The Licensed Asbestos Inspector will open the acetate sleeves and collect the samples from the recovered soil. Samples will be analyzed using PLM methodology with a CARB-435 preparation methodology. Based on the results of the surface and subsurface soil sampling and analysis, a modification to this NTWP may be necessary, if asbestos is detected in the soil samples. If necessary (e.g. asbestos is found), the modification to the NTWP will be submitted to MassDEP prior to continuing any activities at the Site.

2.7 WORK PLAN PROCEDURES – PHASE 3

If asbestos is not detected in the surface soils and soils at depth, VERTEX will oversee the completion of grading by Greener Group. The grading will commence immediately upon receipt of analytical data confirming asbestos is not present in the surface and subsurface soil samples collected in Phase 2. The grading will be performed under oversight of a VERTEX project monitor and perimeter work-zone air monitoring will be conducted throughout the grading activities. The asbestos contractor (NorthStar) shall have a two-person asbestos abatement crew on stand-by at the Site, to hand-abate any identified suspect ACWM, as well as 2-inches of underlying soil, as needed. Hand abatement will be conducted under the work plan procedures for Phase 1, as described in Section 2.4 of this NTWP.

Once grading activities are completed, VERTEX will complete 64 test pits (approximately 1 sample per 500 CY) at the Site, for the purpose waste characterization. During test pitting, should any suspect ACWM be encountered, work activities for that test pit shall cease, and NorthStar and MassDEP shall be notified. NorthStar shall return to the Site to address the additional ACWM impacts. Hand abatement will be conducted under the work plan procedures for Phase 1, as described in Section 2.4 of this NTWP.

Should any ACWM be encountered during grading activities that cannot be hand abated, a modification to the NTWP will be submitted to MassDEP prior to continuing any activities at the Site. If heavy equipment is needed to continue the project, MassDEP will be contacted and this NTWP will be modified to include any necessary live-loading of ACWM.

3.0 ACCESS RESTRICTIONS

3.1 REGULATED WORK AREAS

Regulated Work Areas will be surrounded by temporary orange snow fence and/or Barrier Caution Tape (Asbestos Marked) to minimize the number of persons within the area, prevent access by unauthorized personnel, and protect persons outside the area from exposure to airborne particulates. Asbestos Warning Signage will be used to define the Regulated Work Area. Additionally, proper asbestos warning signs will be prominently displayed at points of access to the regulated area. The signs will bear the following information:

DANGER
ASBESTOS
MAY CAUSE CANCER
CAUSES DAMAGE TO LUNGS
AUTHORIZED PERSONNEL ONLY
WEAR RESPIRATORY PROTECTION AND
PROTECTIVE CLOTHING IN THIS AREA

The Contractor will provide its employees with appropriate respirators that may be modified based on the NEA. Visitors will only be permitted to enter the Regulated Work Area provided they are qualified and medically approved to wear negative pressure air purifying respirators and enter areas where exposure is possible.

Employees will not eat, drink, smoke, chew tobacco or gum, or apply cosmetics in regulated areas.

The contractor will inform Site occupants of the following:

1. Nature of the work;
2. Regulated work area requirements; and
3. Measures taken to protect employees.

4.0 PERSONAL PROTECTIVE EQUIPMENT

4.1 RESPIRATORY PROTECTION

Prior to the successful demonstration of Negative Exposure per the NEA described in Section 2.22, respirators will be used during the following activities:

a. Work performed within a regulated area where respirators are required;
b. Work where employees are or may be exposed to airborne asbestos fiber concentrations at or above the OSHA permissible exposure limit (PEL).

The Contractor will be responsible for the proper execution of this asbestos Work Plan and provide proper waste packaging as required for this project. Contractor will provide respirators to the asbestos removal workers, selecting the appropriate type from among those approved by the National Institute of Occupational Safety and Health (NIOSH) Administration.

The Contractor shall have written respiratory protection programs that will be in force for this project. The respiratory protection program shall comply with governing regulations and will include respirator selection and use, medical clearance for respirator use and medical surveillance (reference 29 CFR 1910.134). The contractor will provide, at minimum, half-mask air purifying respirators equipped with high-efficiency particulate air (HEPA) filters for this project.

The Contractor may no longer require the use of respiratory protection following the NEA provided the means and methods for the work procedures do not meaningfully change.

4.2 PROTECTIVE CLOTHING

The Contractor will require workers to wear protective clothing in Regulated Areas consisting of, at minimum, disposable suits. As appropriate this will include head and foot coverings and gloves. The protective clothing will be required for all work.

The contractors will package, transport and dispose of used PPE as asbestos contaminated materials in sealed, impermeable bags or other approved containers bearing appropriate asbestos warning labels. The Supervisor will periodically examine employee protective clothing to ensure compliance with this NTWP. Rips or tears found while the employee is working must be mended or replaced immediately.

5.0 HYGIENE FACILITIES

The Contractor will establish a remote three-chamber decontamination facility (DF), which shall also be utilized for all work pertaining to that area. All equipment and the surfaces of containers filled with waste will be cleaned prior to removal. The Contractor will ensure employees enter and exit the regulated work area through the DF. This DF shall be used throughout work until all material is removed. A MassDLS licensed asbestos contractor will seal waste loads and complete decontamination of trucks and equipment used during the asbestos work at the Site.

The DF will be equipped with wash stations consisting of water (hot and cold or warm), soap, disposable towels and other items necessary for the proper containment and control of particulates/dust/fibers. These facilities will be located at the exit/entrance of each Regulated Area. Wash stations will be located at the exit/entrance of the Work Plan Area.

6.0 HOUSEKEEPING

Asbestos waste, scrap, debris, bags, containers, equipment, and contaminated clothing consigned for disposal will be collected and disposed of in sealed, labeled, impermeable bags or other approved impermeable containers and not left to accumulate on Site at end of shift.

Appropriate personnel per Section 2.2 will affix warning labels to all asbestos containers. Labels will be printed in large, bold letters on a contrasting background and used in accordance with the OSHA Hazard Communication Standard (29 CFR 1910.1200). Labels will contain a warning statement against breathing fibers and contain the following wording:

DANGER
CONTAINS ASBESTOS FIBERS
MAY CAUSE CANCER
CAUSES DAMAGE TO LUNGS
DO NOT BREATHE DUST
AVOID CREATING DUST

7.0 ACCESS AND NOTIFICATION OF OTHER WORKERS AT MULTI-EMPLOYER WORKSITE

Personnel conducting any activities subject to the NTWP will be required to read the NTWP before they are permitted to enter the Regulated Work Areas at the Site. Access to the Regulated Work Areas will be limited to personnel with proper training and licensing.

Non-trained workers will not be allowed in Regulated Work Areas. It is anticipated that only licensed VERTEX project monitor(s) and licensed NorthStar supervisor(s) and worker(s) will be present during Phase 1 work activities.

While Phases 2 and 3 do not involve Regulated Work Areas, VERTEX personnel and sub-contractors will be required to review this NTWP prior to any further activities at the Site.

8.0 PROJECT MONITORING

8.1 PERSONAL MONITORING

The contractors shall have a "competent person" (as defined by OSHA) oversee exposure monitoring to accurately calculate the airborne concentrations to which employees may be exposed. This monitoring shall be conducted in accordance with the OSHA Construction Standard (29 CFR 1926.1101). A sufficient number of workers performing removal activities will be monitored by the contractors to effectively monitor worker exposure for specific work activities.

Workers will be using low-flow personal air pumps to collect all air samples that will be worn within the workers "breathing zone." These pumps will be calibrated prior to use in accordance with manufacturer's instructions and checked daily with quality rotometers. Samples will be analyzed by properly qualified and licensed personnel.

Personal monitoring and any exposure assessment monitoring shall be conducted by NorthStar; any changes to respiratory protection utilized in the project, in response to an initial or negative exposure assessment, shall be conducted by NorthStar.

8.2 WORK ZONE PERIMETER MONITORING

VERTEX Asbestos Project Monitors will conduct full time work zone perimeter air monitoring in all areas where the work, as described in this NTWP, is being conducted. All air sample results shall be forwarded to DEP NERO daily by email at NERO.Asbestos@state.ma.us.

Work zone perimeter air monitoring shall be performed on the four sides of the Regulated Work Area, on a continuous basis during the activities described in this NTWP. Analysis of the air samples shall be done on Site so that corrections in the work practices can be made immediately.

Work zone perimeter air monitoring shall be performed by VERTEX personnel who are properly trained and licensed in the Commonwealth of Massachusetts as Asbestos Project Monitors. Perimeter air samples shall be collected in the breathing zone is a location at a minimum of fifty-four inches (54") and a maximum of seventy-two inches (72") above the ground level. Samples collected utilizing high flow pumps shall be collected at a flow rate between eight and twelve (8-12) Liters per minute (L/min) with a minimum volume of 1,080 Liters per sample. Air samples will be analyzed by Phase Contrast Microscopy (PCM). The collection and analysis of PCM air samples shall be in accordance with the NIOSH 7400 Method. All sample analysis will be conducted by licensed Project Monitors with NIOSH 582 training. Samples will be analyzed at 4 hour intervals (e.g. twice per 8-hour shift). If needed, air filter cassettes shall be changed periodically to prevent particulate overloading. Each air filter cassettes shall have the start and stop time and associated start and stop flow rates recorded in the consultants' Site log for review by MassDEP.

If the ambient air monitoring results exceed the Massachusetts Division of Occupational Safety's clean air criteria of 0.010 f/cc of air, then work shall stop. The work methods shall be evaluated prior to continuing further work and the MassDEP shall be notified by telephone immediately. If the airborne fiber concentrations on the personal air monitors reach or exceed the OSHA PEL of 0.1 f/cc of air, then work shall stop, work methods shall be evaluated prior to continuing further work, and

MassDEP shall be notified by telephone immediately. Work shall re-commence at the direction of the MassDEP.

9.0 RELATED CODES AND STANDARDS

The publications listed below form part of this Non-traditional Work Plan to the extent referenced and applicable to the work described herein. The work procedures of this Work Plan have been developed to incorporate the substantive requirements of these codes and standards. The current edition of each reference shall be applicable.

1. Environmental Protection Agency:

    a. 40 CFR Part 61 National Emissions Standards for Hazardous Air Pollutants
    b. USEPA 340/1-90-019 Asbestos/NESHAP Adequately Wet Guidance (December 1990)
    c. USEPA 340/1-90-018 Asbestos/NESHAP Regulated Asbestos Containing Materials Guidance (1990)
    d. USEPA 560/5-85-024 Guidance for Controlling Asbestos Containing Materials in Buildings (1985)
    e. USEPA 340/1-92-013 A Guide to Normal Demolition Practices Under the Asbestos NESHAP

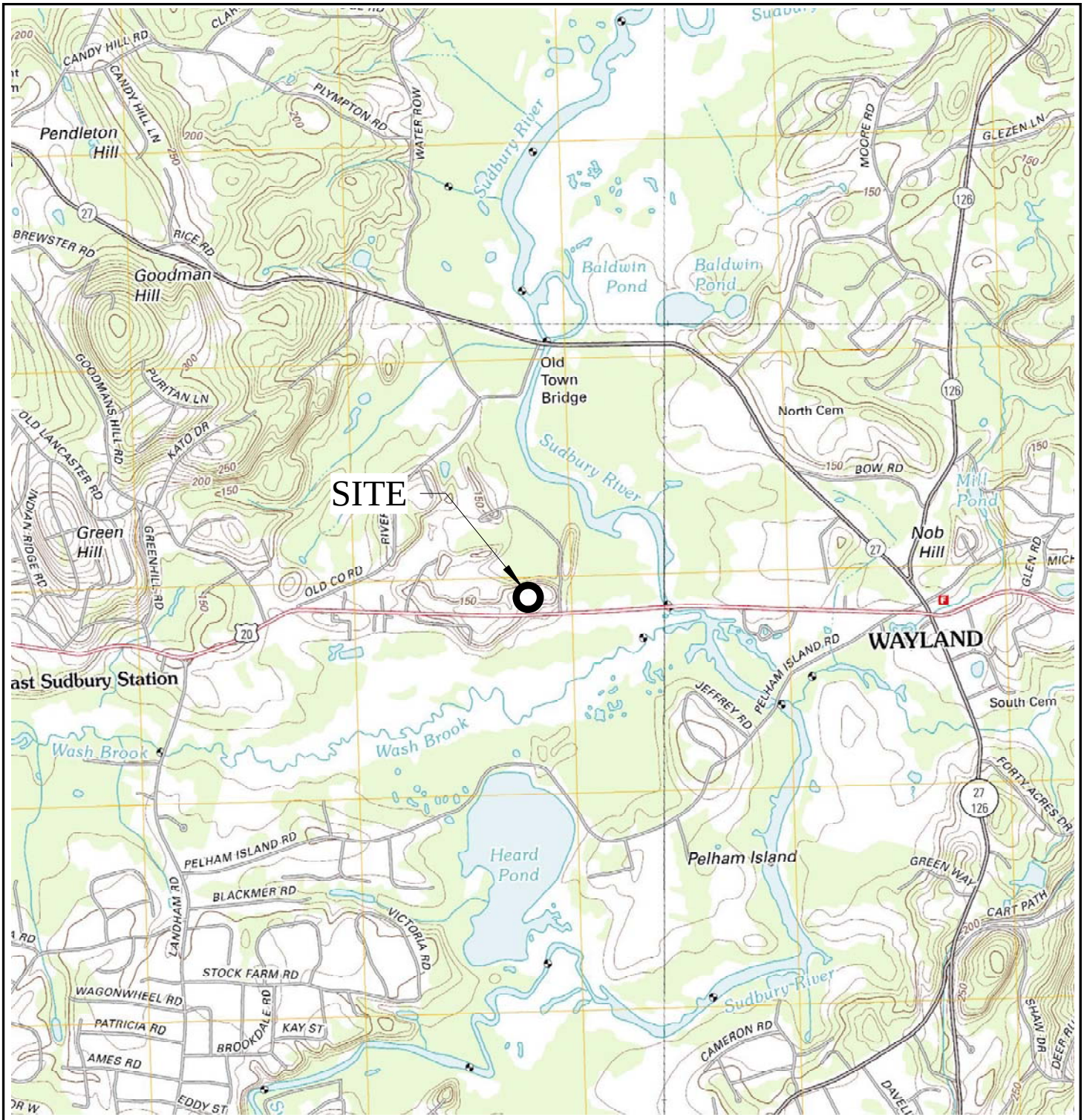
2. Commonwealth of Massachusetts Department of Environmental Protection:

    a. 310 CMR 7.00 Air Pollution Control Regulation
    b. 310 CMR 18.00 and 19.00 Solid Waste Regulations
    c. 310 CMR 40.00 Massachusetts Contingency Plan Regulations

3. Commonwealth of Massachusetts Department of Labor and Workforce Development:
    a. 453 CMR 6.00 The Removal, Containment, or Encapsulation of Asbestos

4. Occupational Health and Safety Administration (OSHA):

    a. 29 CFR 1910.1001 General Industry
    b. 29 CFR 1926.1101 Asbestos Standard for the Construction Industry
    c. 29 CFR 1910.1001/29 CFR 1926.58 Amendment
    d. 29 CFR Part 1910.134



SOURCE: UNITED STATES GEOLOGICAL SURVEY MAP, FRAMINGHAM, MA, QUADRANGLE 7.5 MINUTE SERIES (2012)

SITE LOCUS

FORMER PUBLIC WORKS STAGING YARD
484-490 Boston Post Road
Wayland, Massachusetts

File No.:	NA
Date:	09/19/2017
Drawn:	FC
Checked:	WJG
Job No.:	46047

FIGURE 1

VERTEX®
VERTEXENG.COM
1 CONGRESS STREET, 10TH FL.
BOSTON, MA 02114
617.275.5407

Z:\Shared\Projects\...\46047.River's Edge - Wayland\NTWP

AMMUNITION STORAGE TRAILERS

FIRING RANGE

ACWM AND ASSOCIATED SOIL TEMPORARY STORAGE AREA

STORAGE BINS

APPROXIMATE AREA OF IDENTIFIED ACWM

CONCRETE DEBRIS PILE

ORIGINAL EXTENT OF SOIL STOCKPILE

CURRENT EXTENT OF SOIL STOCKPILE

BUS PARKING / FORMER WASTEWATER TREATMENT PLANT

TRANSFER STATION ACCESS ROAD

Wayland Town Dump

Google

Map

EXISTING CONDITIONS AERIAL PHOTOGRAPH

FORMER PUBLIC WORKS STAGING YARD
484-490 Boston Post Road
Wayland, Massachusetts

File No.:	NA
Date:	09/15/2017
Drawn:	FC
Checked:	WJG
Job No.:	46047

FIGURE 2

REVISIONS

VERTEX
1 CONGRESS STREET, 10TH FL.
BOSTON, MA 02114
617.275.5407
VERTEXENG.COM

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AMMUNITION STORAGE TRAILERS

FIRING RANGE

ACWM AND ASSOCIATED SOIL TEMPORARY STORAGE AREA

TP-5

STORAGE BINS

Test Pit #3

Test Pit #1

Test Pit #6

TP-3

TP-4

Test Pit #4

Test Pit #5

APPROXIMATE AREA OF IDENTIFIED ACWM

CONCRETE DEBRIS PILE

TP-1

TP-6

ORIGINAL EXTENT OF SOIL STOCKPILE

CURRENT EXTENT OF SOIL STOCKPILE

Test Pit #2

TP-2

BUS PARKING / FORMER WASTEWATER TREATMENT PLANT

TRANSFER STATION ACCESS ROAD

LEGEND:

ORIGINAL LOCATION OF SOIL WITHIN STOCKPILE

SOIL SAMPLE LOCATION

0 50 100 150

SCALE: 1" = 50'-0"

(WHEN PRINTED AT 11x17)

Z:\Shared\Projects\...\46047.River's Edge - Wayland\NTWP

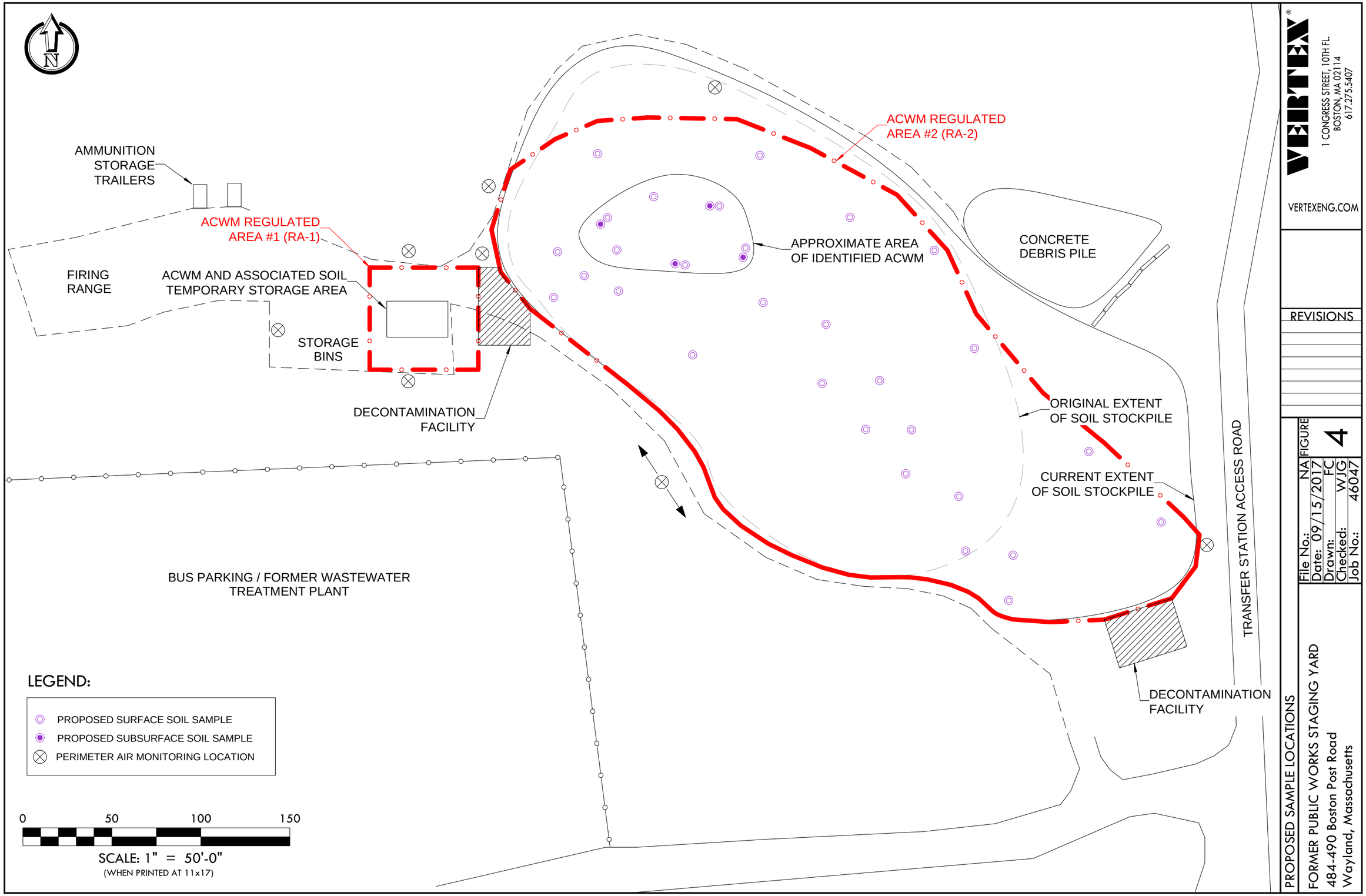
VERTEX
1 CONGRESS STREET, 10TH FL.
BOSTON, MA 02114
617.275.5407
VERTEXENG.COM

REVISIONS

SAMPLE LOCATION PLAN

FORMER PUBLIC WORKS STAGING YARD
484-490 Boston Post Road
Wayland, Massachusetts

File No.: NA FIGURE 3
Date: 09/15/2017
Drawn: FC
Checked: WJG
Job No.: 46047



VERTEX
1 CONGRESS STREET, 10TH FL.
BOSTON, MA 02114
617.275.5407
VERTEXENG.COM

REVISIONS

PROPOSED SAMPLE LOCATIONS

FIGURE 4

File No.: NA
Date: 09/15/2017
Drawn: FC
Checked: WJG
Job No.: 46047

FORMER PUBLIC WORKS STAGING YARD
484-490 Boston Post Road
Wayland, Massachusetts

Z:\Shared\Projects\...\46047.River's Edge - Wayland\NTWP

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

CEI LABS
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 / 781-917-5360
Address: 398 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

ASBESTOS SAMPLING FORM

CEI LABS

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	1gal	PLM ~~CARB~~ CARB 435	TEM
TP-2	Sand Sample	1gal	PLM ✓ Carb 435	TEM
TP-3	Clay Sample	1gal	PLM ✓ Carb 435	TEM
TP-4	Sandy Silt Sample	1gal	PLM ✓ Carb 435	TEM
TP-5	Stockpile Sample	1gal	PLM ✓ CARB 435	TEM
TP-6	Construction debris composite	1gal	PLM ✓ Carb 435	TEM
			PLM	TEM
			PLM	TEM
			PLM	TEM
			PLM	TEM
			PLM	TEM
			PLM	TEM
			PLM	TEM
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			PLM	TEM
			PLM	TEM
			PLM	TEM
			PLM	TEM
			PLM	TEM
			PLM	TEM

Asbestos

From: Carly Johnson
Sent: Monday, August 14, 2017 11:20 AM
To: Asbestos
Subject: FW: Vertex Sample Shipment 8/14/17 - Rush Request

Hey there,

Can you help me keep a lookout for these samples and get a 4 hour TAT on them?

Thanks!

From: Kristen Sarson -- Vertex [mailto:ksarson@vertexeng.com]
Sent: Monday, August 14, 2017 9:09 AM
To: Carly Johnson <carly@ceilabs.com>
Subject: Vertex Sample Shipment 8/14/17 - Rush Request

Good afternoon Carly,

Brendan Phelan provided me your contact information.

We FedEx'd some soil samples on Thursday (8/10/17) that are scheduled to arrive today. Our client just informed us that they would like the results ASAP.

Could you keep me updated on the arrival, and the best TAT that you could provide?

Feel free to call or email (contact information below) if you need any further details or have any questions.

Thank you,

~~~~~~

Kristen Sarson, EPt
Assistant Project Manager
THE VERTEX COMPANIES, INC.
One Congress Street | Boston, MA 02114 | USA
OFFICE 617.275.5407 | **DIRECT** 857.263.2795 | **MOBILE** 781.917.5360
Website | LinkedIn

An employee owned company.
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