To Whom It May Concern:

GZA GeoEnvironmental, Inc. (GZA), on behalf of Wynn MA, LLC (Wynn MA), has prepared this Release Abatement Measure Plan Modification (RAM Plan Modification) to describe Response Actions pursuant to the Massachusetts Contingency Plan (MCP) that will be completed during the construction of the Wynn Boston Harbor (formerly known as the Wynn Resort in Everett) at the former Everett Staging Yard Disposal Site (the Site). This RAM Plan Modification was prepared to address modifications to engineering controls that will be installed to mitigate the potential for future exposure to contaminant-impacted soils on the upland portion of the former Everett Staging Yard disposal area as shown on Figure 1. The engineering control modifications included herein have previously been reviewed with the Massachusetts Department of Environmental Protection (MassDEP) Bureau of Waste Site Clean-up (BWSC). In addition, this RAM Plan Modification includes the removal of two (2) Airlogics© perimeter air monitoring stations to reflect the reduction in active remediation areas based on work completed to date.

EXECUTIVE SUMMARY

Construction activities at the Site are being conducted following the provisions in the RAM Plan previously submitted to MassDEP on May 3, 2016 (the May 3 RAM Plan), the first RAM Plan Modification submitted to MassDEP on November 16, 2016 (Modification No. 1), and the second RAM Plan Modification submitted on February 17, 2017 (Modification No. 2). The May 3 RAM Plan details the Site history, Site releases, Site conditions and surrounding receptors, and RAM implementation. The provisions of the May 3 RAM Plan have been and will continue to stay in effect during subsequent construction activities at the Site with the exception of asbestos in soil management work, which has been and will be performed in accordance with Modifications Nos. 1 and 2. Engineering controls including clean soil cover materials, marker layers, shovel resistant materials, and hardscape materials that will be installed as part of final grading activities at the Site are described as part of this RAM Plan Modification.
As remedial activities involving large-scale soil excavation are substantially complete, this RAM Plan Modification also documents the planned reduction in the number of active perimeter air monitoring stations from four to two.

BACKGROUND

The Site is identified by the MassDEP as Release Tracking Number (RTN) 3-13341. The RAM Project area and Disposal Site Boundaries are shown on Figure 1. Portions of this area that will be subject to the provisions of this revised RAM Plan Modification are shown on Figures 2A through 2F and Figure 4. Please note that some areas outside of the Disposal Site Boundary for the former Everett Staging Yard will include engineering controls as described herein, including the properties identified as 150 Alford Street, 20 Broadway, 38-50 Broadway, and Parcel 1 (former portion of MBTA Facility). Refer to Figure 1 for these areas.

This RAM Plan Modification has been prepared in accordance with 310 CMR 40.0444 of the MCP, and with the Limitations in Appendix A. This RAM Plan Modification will be submitted electronically through the MassDEP eDEP online filing system. A copy of the RAM transmittal form (BWSC-106) is included in Appendix B.

Construction activities at the Site have been conducted following provisions in the May 3 RAM Plan as well as Modifications Nos. 1 and 2. The May 3 RAM Plan details the Site history, description of releases, Site conditions and surrounding receptors, and RAM implementation. The provisions of the May 3 RAM Plan and Modifications Nos. 1 and 2 will stay in effect during subsequent construction activities at the Site, but engineering controls to be installed during final grading activities will be modified as described in this RAM Plan Modification.

The Site is a Public Involvement Plan (PIP) site under the MCP. As the modifications listed below do not substantially alter or expand the May 3 RAM Plan, this submittal is not subject to an additional comment period per Section 40.1405(6)(e)(2) of the MCP.

PERSON ASSUMING RESPONSIBILITY FOR RAM PLAN MODIFICATION

The entity assuming responsibility for this RAM Plan Modification No. 3 is Wynn MA, LLC. Contact information for the representative from Wynn MA, LLC is provided below:

Mr. Robert DeSalvio  
President  
Wynn MA, LLC  
101 Station Landing, Suite 2200  
Medford, Massachusetts 02155  
Tel: 857-770-7801

RAM MODIFICATION IMPLEMENTATION

OBJECTIVES AND SCHEDULE

The objective of this RAM Plan Modification is to update information on the engineering controls that will be implemented to mitigate the potential for future exposure to contaminant-impacted soils at the Site. This RAM Plan Modification also discusses the reduction of perimeter air monitoring stations (from four stations to two stations), which is anticipated to occur in mid-October 2017. This reduction in air monitoring stations is advisable because the bulk of Site excavation work has been completed, and remaining soil excavation activities at the Site are limited in area.
ENGINEERING CONTROLS

The proposed final surface of the Site consists of the following types of materials, depending on the proposed uses of specific areas: bituminous concrete, concrete, artificial turf, and landscaping materials. Engineering controls to be employed include soil and clean fill material of varying thicknesses, high visibility marker layers, shovel-resistant layers, and expanded polystyrene block (EPS block) material. A summary of these areas, including proposed site development over the In-Situ Stabilization Area (ISS Area) and the final surface material is described below. Please also refer to the attached Figure 3 entitled “Clean Soil Cover Options” dated September 2017 for cross-section details of the clean soil cover materials.

- **Roadways for vehicular traffic**: Finish material will be a minimum of 7 inches of bituminous concrete underlain by 12 inches of imported base course soils underlain by high visibility marker geotextile fabric (Detail B).

- **Sidewalks, walkways, and harborwalk for pedestrian traffic**: Finish material will be a minimum of 5 inches of concrete underlain by 8 inches of imported base course soils and 10 inches of clean granular soils underlain by high visibility marker geotextile fabric (Detail B). Some walkways (including the harborwalk) will consist of a minimum 3-inch brick asphaltic bedding material underlain by 3 inches of bituminous pavement and 18 inches of imported base course material.

- **Synthetic turf areas for public use/pedestrian traffic**: Finish material will be artificial turf underlain by a minimum 18 inches of imported turf support soils underlain by a high visibility, high durability geotextile fabric (Detail A). In areas where ISS materials are below artificial turf, the turf support soils will be a minimum of 24 inches thick and will be underlain by a high visibility polyethylene sheeting to promote collection and drainage of irrigation/precipitation water. For this area, the artificial turf has been determined by MassDEP to meet the requirements of a shovel-resistant layer.

- **Landscape areas**: Finish material will be natural grass and/or other landscape materials (mulch, stone, etc.) with shrubs/trees. Some areas may include a minimum of 18 inches of soil/stone below finished grade underlain by a shovel-resistant geotextile material (Detail D). Other areas will have a minimum of 24 inches of soil/stone below finish grade underlain by a high visibility geosynthetic fabric (Detail C).

- **Landscape areas over ISS Area**: Finish material will be natural grass and/or other landscape materials (mulch, stone, etc.) with shrubs/trees. Where landscape areas are present over the ISS, there will be a minimum of 24 inches of soil/stone below finish grade underlain by a high visibility polyethylene layer to promote the collection and drainage of irrigation/precipitation water (Detail J).

- **EPS Foam Block areas**: Finish materials will be natural grass and/or other landscape materials, concrete, or bituminous concrete. EPS Foam Block will be installed at a minimum thickness of 2.5 feet directly below the finish surface materials. The EPS Foam Block has been approved as a “marker layer” in and of itself if clean soils are placed over the EPS Foam Block (Detail E). If on-Site soils are used for some portion of the fill over the EPS Foam Block, then the cross-sections described as Detail F, Detail G, Detail H, and Detail I, as shown on Figure 3, will apply.

ENGINEERING CONTROL MATERIALS

Engineering control materials including surface materials, support materials, marker layers, shovel-resistant layers, and EPS Foam Block are described below. Marker and/or shovel-resistant materials are not proposed within the building limits, as materials below the building floor slabs are considered inaccessible. Please note that paved and landscape areas
that are part of the Service Road portion of the site north of the site property limits do not require marker layers because installed utilities were backfilled with clean, off-Site fill material and contaminant concentrations in soil below landscape areas do not pose an exposure risk.

**Pavement/Bituminous Concrete**

Pavement for roadways will consist of a minimum 7 inches of bituminous concrete consisting of a 5-inch thick binder course and a 2-inch thick finish course. This material will be underlain by a minimum of 12 inches of imported, clean, base course soils. In some locations, EPS foam block and associated soils above the block for buoyancy will be installed below the base course soils. Marker layers will be installed below base course soils as described above and on **Figures 2A through 2F**.

**Sidewalk/Walkways**

Sidewalks and walkways around the Site will consist of a minimum of 5 inches of concrete underlain by a minimum of 8 inches of imported, clean, base course soils and 10 inches of clean granular soil. In some locations, EPS foam block and associated soils above the block for buoyancy will be installed below the base course soils. Marker layers will be installed below base course soils as described above and on **Figures 2A through 2F**.

**Synthetic Turf Areas**

The event lawn area (and other locations outside of the ISS area) will consist of a shovel-resistant layer of artificial turf underlain by 18 inches of artificial turf support soil (clean, imported granular fill material) underlain by high visibility marker layer geotextile material (Mirafi FW700). The high visibility marker layer will be placed directly over on-Site soils. Where synthetic turf is installed over the ISS area, the turf will be underlain by a minimum of 24 inches of artificial turf support soil underlain by high visibility polyethylene sheeting placed directly over on-Site/ISS materials.

**Landscape Areas**

Landscape areas will be finished with either natural grass or other landscape materials (mulch, stone, etc.). Regardless of the finish material, imported clean soil or other aggregate material will be installed to a minimum of 18 inches below grade. A shovel-resistant geosythetic material (Mirafi RS380i) will be placed directly over on-Site soils and below the imported clean materials.

In areas where greater than 2 feet of clean imported soil will be placed over on-Site soils, a high-visibility marker layer (Geotex 401 OR) will be installed over on-Site soils. This cover system will be implemented in areas where larger plantings (bushes and trees) that require 2 feet or more of vegetative support soil will be installed. In areas where landscape features require excavation into ISS materials, the marker layer will consist of Stego Wrap Class A Vapor Retarder polyethylene sheeting.

**EPS Foam Block**

EPS foam block (ShelterFoam Type XIV manufactured by Shelter Enterprises, Inc.) will be installed in lieu of soils in areas where increases in site grade would cause settlement of underlying organic soils and clays. EPS foam block is currently proposed in some areas of the Site (primarily the south east and east portions) below pavement, concrete, and landscape areas. EPS foam block with thicknesses varying from 2.5 to 12.5 feet will be installed below the finish materials in these areas. Three to five feet of soil/material is required over the EPS foam block for resistance against buoyancy. In addition, where EPS foam block is used in the access road area, an HDPE geomembrane will be placed over the blocks. Accordingly,
no marker or shovel resistant materials are proposed in the EPS Foam Block areas unless on-Site soils are used as part of the three to five feet of cover material described above. Refer to Details E through I on Figure 3 for proposed EPS Foam Block clean cover sections.

Please refer to the attached Figures 2A through 2F for the locations where the cross-sections described on Figure 3 will be implemented. Applicable sections on Figure 3 are referenced by letter designation on Figures 2A through 2F. Please refer to Appendix C for manufacturer information and lab testing data on the above-described marker layer and shovel-resistant materials.

PERIMETER AIR MONITORING MODIFICATIONS

Currently, perimeter air monitoring for total dust is performed using four Airlogics© stations located around the perimeter of the Site as Shown on Figure 4. Remediation activities in the northern, western, and eastern portions of the building area are substantially complete. As a result, air monitoring stations 1 and 2 will be demobilized from the Site; stations 3 and 4 will be shifted as shown on Figure 4 to provide dust monitoring in the southern peninsula and southeast portions of the Site, where remediation activities and/or soil management work will continue. It is anticipated that air monitoring stations 1 and 2 will be removed from the Site on or about October 15, 2017.

Should future activities (either additional remediation activities, soil management, and/or other construction activities related to remediation work) have the potential to cause dust propagation outside of the areas where perimeter dust monitoring is being performed, existing stations will either be relocated to monitor those areas or an additional station(s) will be returned to the Site.

LSP SEAL AND SIGNATURE (310 CMR 40.044(1)(G))

The seal and signature of the Licensed Site Professional (LSP) for this revised RAM Plan Modification (Lawrence Feldman, LSP #8107) are provided on the attached transmittal form in Appendix B.

If you should require any further information concerning the planned RAM activities, please do not hesitate to contact the undersigned at (781) 278-3700.

Very truly yours,

GZA GEOENVIRONMENTAL, INC.

Matthew M. Smith
Associate Principal

David E. Leone
Consultant/Reviewer

Lawrence Feldman, LSP
Senior Principal
Attachments:

- Figure 1  Disposal Area Upland Portion
- Figure 2A  Clean Cover Layout Plan
- Figure 2B  Clean Cover Layout Plan
- Figure 2C  Clean Cover Layout Plan
- Figure 2D  Clean Cover Layout Plan
- Figure 2E  Clean Cover Layout Plan
- Figure 2F  Clean Cover Layout Plan
- Figure 3  Clean Soil Cover Options
- Figure 4  Air logics© Station Locations

- Appendix A  Limitations
- Appendix B  Transmittal Forms BWSC106
- Appendix C  Material Information and Testing Data - Marker Layers
USE OF REPORT

1. GZA GeoEnvironmental, Inc. (GZA) prepared this report on behalf of, and for the exclusive use of our Client for the stated purpose(s) and location(s) identified in the Proposal for Services and/or Report. Use of this report, in whole or in part, at other locations, or for other purposes, may lead to inappropriate conclusions; and we do not accept any responsibility for the consequences of such use(s). Further, reliance by any party not expressly identified in the agreement, for any use, without our prior written permission, shall be at that party’s sole risk, and without any liability to GZA.

STANDARD OF CARE

2. GZA’s findings and conclusions are based on the work conducted as part of the Scope of Services set forth in the Proposal for Services and/or Report and reflect our professional judgment. These findings and conclusions must be considered not as scientific or engineering certainties, but rather as our professional opinions concerning the limited data gathered during the course of our work. Conditions other than described in this report may be found at the subject location(s).

3. GZA’s services were performed using the degree of skill and care ordinarily exercised by qualified professionals performing the same type of services, at the same time, under similar conditions, at the same or a similar property. No warranty, expressed or implied, is made. Specifically, GZA does not and cannot represent that the Site contains no hazardous material, oil, or other latent condition beyond that observed by GZA during its study. Additionally, GZA makes no warranty that any response action or recommended action will achieve all of its objectives or that the findings of this study will be upheld by a local, state or federal agency.

4. In conducting our work, GZA relied upon certain information made available by public agencies, Client and/or others. GZA did not attempt to independently verify the accuracy or completeness of that information. Inconsistencies in this information which we have noted, if any, are discussed in the Report.

SUBSURFACE CONDITIONS

5. The generalized soil profile(s) provided in our Report are based on widely-spaced subsurface explorations and are intended only to convey trends in subsurface conditions. The boundaries between strata are approximate and idealized, and were based on our assessment of subsurface conditions. The composition of strata, and the transitions between strata, may be more variable and more complex than indicated. For more specific information on soil conditions at a specific location refer to the exploration logs. The nature and extent of variations between these explorations may not become evident until further exploration or construction. If variations or other latent conditions then become evident, it will be necessary to reevaluate the conclusions and recommendations of this report.

6. Water level readings have been made, as described in this Report, in and monitoring wells at the specified times and under the stated conditions. These data have been reviewed and interpretations have been made in this report. Fluctuations in the level of the groundwater however occur due to temporal or spatial variations in areal recharge rates, soil heterogeneities, the presence of subsurface utilities, and/or natural or artificially induced perturbations. The observed water table may be other than indicated in the Report.

COMPLIANCE WITH CODES AND REGULATIONS

7. We used reasonable care in identifying and interpreting applicable codes and regulations necessary to execute our scope of work. These codes and regulations are subject to various, and possibly contradictory, interpretations. Interpretations and compliance with codes and regulations by other parties is beyond our control.
SCREENING AND ANALYTICAL TESTING

8. GZA collected environmental samples at the locations identified in the Report. These samples were analyzed for the specific parameters identified in the report. Additional constituents, for which analyses were not conducted, may be present in soil, groundwater, surface water, sediment and/or air. Future Site activities and uses may result in a requirement for additional testing.

9. Our interpretation of field screening and laboratory data is presented in the Report. Unless otherwise noted, we relied upon the laboratory’s QA/QC program to validate these data.

10. Variations in the types and concentrations of contaminants observed at a given location or time may occur due to release mechanisms, disposal practices, changes in flow paths, and/or the influence of various physical, chemical, biological or radiological processes. Subsequently observed concentrations may be other than indicated in the Report.

INTERPRETATION OF DATA

11. Our opinions are based on available information as described in the Report, and on our professional judgment. Additional observations made over time, and/or space, may not support the opinions provided in the Report.

ADDITIONAL INFORMATION

12. In the event that the Client or others authorized to use this report obtain additional information on environmental or hazardous waste issues at the Site not contained in this report, such information shall be brought to GZA’s attention forthwith. GZA will evaluate such information and, on the basis of this evaluation, may modify the conclusions stated in this report.

ADDITIONAL SERVICES

13. GZA recommends that we be retained to provide services during any future investigations, design, implementation activities, construction, and/or property development/redevelopment at the Site. This will allow us the opportunity to: i) observe conditions and compliance with our design concepts and opinions; ii) allow for changes in the event that conditions are other than anticipated; iii) provide modifications to our design; and iv) assess the consequences of changes in technologies and/or regulations.

CONCEPTUAL SITE MODEL

14. Our opinions were developed, in part, based upon a comparison of site data to conditions anticipated within our Conceptual Site Model (CSM). The CSM is based on available information, and professional judgment. There are rarely sufficient data to develop a unique CSM. Therefore observations over time, and/or space, may vary from those depicted in the CSM provided in this report. In addition, the CSM should be evaluated and refined (as appropriate) whenever significant new information and/or data is obtained.

RISK CHARACTERIZATION

15. Our risk evaluation was performed in accordance with generally accepted practices of appropriate Federal and/or state regulatory agencies, and of other consultants undertaking similar studies at the same time, for similar purposes, and under similar circumstances. The findings of the risk evaluation are dependent on the numerous assumptions and uncertainties inherent in the risk characterization process. Sources of the uncertainty may include Site conditions; Site use; the nature, extent, concentration and distribution of contaminants; and the available toxicity and/or health/risk based regulatory information. Consequently, the findings of the risk characterization are not an absolute
characterization of actual risks; but rather serve to highlight potential incremental risks associated with activities indicated in the Report. Actual risks may be other than indicated in the Report.
Massachusetts Department of Environmental Protection

Bureau of Waste Site Cleanup

RELEASE ABATEMENT MEASURE (RAM)
TRANSMITTAL FORM

Pursuant to 310 CMR 40.0444 - 0446 (Subpart D)

A. SITE LOCATION:

1. Site Name/Location Aid: EVERETT STAGING YARD
2. Street Address: 1 HORIZON WAY
3. City/Town: EVERETT
4. Zip Code: 021490000

☐ 5. Check here if the disposal site that is the source of the release is Tier Classified. Check the current Tier Classification Category.

☐ a. Tier I ☐ b. Tier ID ☐ c. Tier II

B. THIS FORM IS BEING USED TO: (check all that apply)


☐ a. Check here if the RAM is being conducted as part of the construction of a permanent structure. If checked, you must specify what type of permanent structure is to be erected in or in the immediate vicinity of the area where the RAM is to be conducted.

☐ b. Specify type of permanent structure: (check all that apply) ☐ i. School ☐ ii. Residential ☐ iii. Commercial

☐ iv. Industrial ☐ v. Other Specify: ____________________________


☐ 5. Submit a Remedial Monitoring Report. (This report can only be submitted through eDEP, concurrent with a RAM Status Report.)

a. Type of Report: (check one) ☐ i. Initial Report ☐ ii. Interim Report ☐ iii. Final Report

b. Frequency of Submittal:

☐ i. A Remedial Monitoring Report(s) submitted every six months, concurrent with a RAM Status Report.

☐ ii. A Remedial Monitoring Report(s) submitted annually, concurrent with a RAM Status Report.

c. Number of Remedial Systems and/or Monitoring Programs:

A separate BWSC106A, RAM Remedial Monitoring Report, must be filled out for each Remedial System and/or Monitoring Program addressed by this transmittal form.

☐ 6. Submit a RAM Completion Statement.

☐ 7. Submit a Revised RAM Completion Statement.

8. Provide Additional RTNs:

☐ a. Check here if this RAM Submittal covers additional Release Tracking Numbers (RTNs). RTNs that have been previously linked to a Primary Tier Classified RTN do not need to be listed here. This section is intended to allow a RAM to cover more than one unclassified RTN and not show permanent linkage to a Primary Tier Classified RTN.

b. Provide the additional Release Tracking Number(s) covered by this RAM Submittal.

☐ 9. Include in the RAM Plan or Modified RAM Plan a Plan for the Application of Remedial Additives near a sensitive receptor, pursuant to 310 CMR 40.0046(3).

(All sections of this transmittal form must be filled out unless otherwise noted above)
C. RELEASE OR THREAT OF RELEASE CONDITIONS THAT WARRANT RAM:

1. Media Impacted and Receptors Affected: (check all that apply)  
   - a. Paved Surface  
   - b. Basement  
   - c. School  
   - d. Public Water Supply  
   - e. Surface Water  
   - f. Zone 2  
   - g. Private Well  
   - h. Residence  
   - i. Soil  
   - j. Ground Water  
   - k. Sediments  
   - l. Wetland  
   - m. Storm Drain  
   - n. Indoor Air  
   - o. Air  
   - p. Soil Gas  
   - q. Sub-Slab Soil Gas  
   - r. Critical Exposure Pathway  
   - s. NAPL  
   - t. Unknown  
   - u. Others Specify: ___________________________

2. Sources of the Release or TOR: (check all that apply)  
   - a. Transformer  
   - b. Fuel Tank  
   - c. Pipe  
   - d. OHM Delivery  
   - e. AST  
   - f. Drums  
   - g. Tanker Truck  
   - h. Hose  
   - i. Line  
   - j. UST  
   - k. Vehicle  
   - l. Boat/Vessel  
   - m. Unknown  
   - n. Other: ___________________________  HISTORIC FILL AND MANUFACTURING

3. Type of Release or TOR: (check all that apply)  
   - a. Dumping  
   - b. Fire  
   - c. AST Removal  
   - d. Overfill  
   - e. Rupture  
   - f. Vehicle Accident  
   - g. Leak  
   - h. Spill  
   - i. Test Failure  
   - j. TOR Only  
   - k. UST Removal  
   - l. Unknown  
   - m. Other: ___________________________  HISTORIC FILL AND MANUFACTURING

4. Identify Oils and Hazardous Materials Released: (check all that apply)  
   - a. Oils  
   - b. Chlorinated Solvents  
   - c. Heavy Metals  
   - d. Others Specify: PCBS, ASBESTOS-CONTAINING MATERIAL

D. DESCRIPTION OF RESPONSE ACTIONS:  
(check all that apply, for volumes list cumulative amounts)

1. Assessment and/or Monitoring Only  
2. Temporary Covers or Caps  
3. Deployment of Absorbent or Containment Materials  
4. Temporary Water Supplies  
5. Structure Venting System/HVAC Modification System  
6. Temporary Evacuation or Relocation of Residents  
7. Product or NAPL Recovery  
8. Fencing and Sign Posting  
9. Groundwater Treatment Systems  
10. Soil Vapor Extraction  
11. Remedial Additives  
12. Air Sparging  
13. Active Exposure Pathway Mitigation System  
14. Passive Exposure Pathway Mitigation System  
15. Monitored Natural Attenuation  
16. In-Situ Chemical Oxidation
D. DESCRIPTION OF RESPONSE ACTIONS (cont.):  (check all that apply, for volumes list cumulative amounts)

☐ 17. Excavation of Contaminated Soils
   a. Re-use, Recycling or Treatment  ☐ i. On Site  Estimated volume in cubic yards
      ☐ ii. Off Site  Estimated volume in cubic yards
      iia. Receiving Facility:  ________________________  Town:  ____________  State:  ____________
      iib. Receiving Facility:  ________________________  Town:  ____________  State:  ____________
      iii. Describe:

☐ b. Store  ☐ i. On Site  Estimated volume in cubic yards
     ☐ ii. Off Site  Estimated volume in cubic yards
      iia. Receiving Facility:  ________________________  Town:  ____________  State:  ____________
      iib. Receiving Facility:  ________________________  Town:  ____________  State:  ____________

☐ c. Landfill  ☐ i. Cover  Estimated volume in cubic yards
     ☐ ii. Disposal  Estimated volume in cubic yards
      Receiving Facility:  ________________________  Town:  ____________  State:  ____________

☐ 18. Removal of Drums, Tanks or Containers:
   a. Describe Quantity and Amount:

      b. Receiving Facility:  ________________________  Town:  ____________  State:  ____________
      c. Receiving Facility:  ________________________  Town:  ____________  State:  ____________

☐ 19. Removal of Other Contaminated Media:
   a. Specify Type and Volume:

      b. Receiving Facility:  ________________________  Town:  ____________  State:  ____________
      c. Receiving Facility:  ________________________  Town:  ____________  State:  ____________

☐ 20. Other Response Actions:
   Describe:  MODIFICATION OF PROPOSED PROTECTIVE SOIL BARRIERS AND CAPS, AND PERIMETER AIR MONITORING

☐ 21. Use of Innovative Technologies:
   Describe:

Revised: 8/5/2013
E. LSP SIGNATURE AND STAMP:

I attest under the pains and penalties of perjury that I have personally examined and am familiar with this transmittal form, including any and all documents accompanying this submittal. In my professional opinion and judgment based upon application of (i) the standard of care in 309 CMR 4.02(1), (ii) the applicable provisions of 309 CMR 4.02(2) and (3), and 309 CMR 4.03(2), and (iii) the provisions of 309 CMR 4.03(3), to the best of my knowledge, information and belief,

> if Section B of this form indicates that a Release Abatement Measure Plan is being submitted, the response action(s) that is (are) the subject of this submittal (i) has (have) been developed in accordance with the applicable provisions of M.G.L. c. 21E and 310 CMR 40.0000, (ii) is (are) appropriate and reasonable to accomplish the purposes of such response action(s) as set forth in the applicable provisions of M.G.L. c. 21E and 310 CMR 40.0000 and (iii) comply(ies) with the identified provisions of all orders, permits, and approvals identified in this submittal;

> if Section B of this form indicates that a Release Abatement Measure Status Report and/or Remedial Monitoring Report is being submitted, the response action(s) that is (are) the subject of this submittal (i) is (are) being implemented in accordance with the applicable provisions of M.G.L. c. 21E and 310 CMR 40.0000, (ii) is (are) appropriate and reasonable to accomplish the purposes of such response action(s) as set forth in the applicable provisions of M.G.L. c. 21E and 310 CMR 40.0000 and (iii) comply(ies) with the identified provisions of all orders, permits, and approvals identified in this submittal;

> if Section B of this form indicates that a Release Abatement Measure Completion Statement is being submitted, the response action(s) that is (are) the subject of this submittal (i) has (have) been developed and implemented in accordance with the applicable provisions of M.G.L. c. 21E and 310 CMR 40.0000, (ii) is (are) appropriate and reasonable to accomplish the purposes of such response action(s) as set forth in the applicable provisions of M.G.L. c. 21E and 310 CMR 40.0000 and (iii) comply(ies) with the identified provisions of all orders, permits, and approvals identified in this submittal;

I am aware that significant penalties may result, including, but not limited to, possible fines and imprisonment, if I submit information which I know to be false, inaccurate or materially incomplete.

1. LSP #: 8107
2. First Name: LAWRENCE
3. Last Name: FELDMAN
4. Telephone: 7812783700
5. Ext.: 
6. Email: 
7. Signature: 
8. Date: (mm/dd/yyyy)
9. LSP Stamp:

Revised: 8/5/2013
F. PERSON UNDERTAKING RAM:

1. Check all that apply: □ a. change in contact name □ b. change of address □ c. change in the person undertaking response actions

2. Name of Organization: WYNN MA LLC

3. Contact First Name: ROBERT
4. Last Name: DESALVIO

5. Street: 101 STATION LANDING 2ND FLOOR
6. Title: PRESIDENT

7. City/Town: MEDFORD
8. State: MA
9. ZIP Code: 021550000

10. Telephone: 8577707801
11. Ext.: 
12. Email: 

G. RELATIONSHIP TO RELEASE OR THREAT OF RELEASE OF PERSON UNDERTAKING RAM:

□ Check here to change relationship

☑ 1. RP or PRP □ a. Owner □ b. Operator □ c. Generator □ d. Transporter □ e. Other RP or PRP

Specify: ELIGIBLE OWNER/OPERATOR

☐ 2. Fiduciary, Secured Lender or Municipality with Exempt Status (as defined by M.G.L. c. 21E, s. 2)

☐ 3. Agency or Public Utility on a Right of Way (as defined by M.G.L. c. 21E, s. 5(j))

☐ 4. Any Other Person Undertaking RAM
Specify Relationship: 

H. REQUIRED ATTACHMENT AND SUBMITTALS:

☐ 1. Check here if any Remediation Waste, generated as a result of this RAM, will be stored, treated, managed, recycled or reused at the site following submission of the RAM Completion Statement. You must submit a Phase IV Remedy Implementation Plan along with the appropriate transmittal form (BWSC108).

☐ 2. Check here if the Response Action(s) on which this opinion is based, if any, are (were) subject to any order(s), permit(s) and/or approval(s) issued by DEP or EPA. If the box is checked, you MUST attach a statement identifying the applicable provisions thereof.

☐ 3. Check here to certify that the Chief Municipal Officer and the Local Board of Health have been notified of the implementation of a Release Abatement Measure.

☐ 4. Check here if any non-updatable information provided on this form is incorrect, e.g. Release Address/Location Aid. Send corrections to bwsc.edep@state.ma.us.

☐ 5. If a RAM Compliance Fee is required for this RAM, check here to certify that a RAM Compliance Fee was submitted to DEP, P. O. Box 4062, Boston, MA 02211.

☑ 6. Check here to certify that the LSP Opinion containing the material facts, data, and other information is attached.
Massachusetts Department of Environmental Protection
Bureau of Waste Site Cleanup

RELEASE ABATEMENT MEASURE (RAM)
TRANSMITTAL FORM
Pursuant to 310 CMR 40.0444 - 0446 (Subpart D)

Release Tracking Number
3 - 13341

I. CERTIFICATION OF PERSON UNDERTAKING RAM:

1. I, __________________________________________, attest under the pains and penalties of perjury (i) that I have personally examined and am familiar with the information contained in this submittal, including any and all documents accompanying this transmittal form, (ii) that, based on my inquiry of those individuals immediately responsible for obtaining the information, the material information contained in this submittal is, to the best of my knowledge and belief, true, accurate and complete, and (iii) that I am fully authorized to make this attestation on behalf of the entity legally responsible for this submittal. I/the person or entity on whose behalf this submittal is made am/is aware that there are significant penalties, including, but not limited to, possible fines and imprisonment, for willfully submitting false, inaccurate, or incomplete information.

2. By: ________________________________________ 3. Title: __________________________ 
(Signature) 5. Date: ____________________________
4. For: ________________________________________ 6. If a RAM Compliance Fee is required for this RAM, check here to certify that a RAM Compliance Fee was submitted to DEP, P. O. Box 1118, Boston, MA 02201.

__________________________________________
(Name of person or entity recorded in Section F)

6. Check here if the address of the person providing certification is different from address recorded in Section F.

7. Street: ______________________________________


YOU ARE SUBJECT TO AN ANNUAL COMPLIANCE ASSURANCE FEE OF UP TO $10,000 PER BILLABLE YEAR FOR THIS DISPOSAL SITE. YOU MUST LEGIBLY COMPLETE ALL RELEVANT SECTIONS OF THIS FORM OR DEP MAY RETURN THE DOCUMENT AS INCOMPLETE. IF YOU SUBMIT AN INCOMPLETE FORM, YOU MAY BE PENALIZED FOR MISSING A REQUIRED DEADLINE.

Date Stamp (DEP USE ONLY:)

Revised: 8/5/2013 Page 6 of 6
APPENDIX C - MATERIAL INFORMATION AND TESTING DATA- GEOSYNTHETICS
Mirafi® FW700 geotextile is composed of high-tenacity monofilament polypropylene yarns, which are woven into a stable network such that the yarns retain their relative position. Mirafi® FW700 geotextile is inert to biological degradation and resists naturally encountered chemicals, alkalis, and acids.

TenCate Geosynthetics Americas Laboratories are accredited by Geosynthetic Accreditation Institute – Laboratory Accreditation Program (GAI-LAP). NTPEP Listed

<table>
<thead>
<tr>
<th>Mechanical Properties</th>
<th>Test Method</th>
<th>Unit</th>
<th>Minimum Average Roll Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Grab Tensile Strength</td>
<td>ASTM D4632</td>
<td>lbs (N)</td>
<td>370 (1647)</td>
</tr>
<tr>
<td>Grab Tensile Elongation</td>
<td>ASTM D4632</td>
<td>%</td>
<td>15</td>
</tr>
<tr>
<td>Trapezoid Tear Strength</td>
<td>ASTM D4533</td>
<td>lbs (N)</td>
<td>100 (445)</td>
</tr>
<tr>
<td>CBR Puncture Strength</td>
<td>ASTM D6241</td>
<td>lbs (N)</td>
<td>950 (4228)</td>
</tr>
<tr>
<td>Percent Open Area</td>
<td>COE-02215</td>
<td>%</td>
<td>4</td>
</tr>
<tr>
<td>Permittivity</td>
<td>ASTM D4491</td>
<td>sec⁻¹</td>
<td>0.28</td>
</tr>
<tr>
<td>Flow Rate</td>
<td>ASTM D4491</td>
<td>gal/min/ft²/(l/min/m²)</td>
<td>18 (733)</td>
</tr>
<tr>
<td>Apparent Opening Size (AOS)</td>
<td>ASTM D4751</td>
<td>U.S. Sieve (mm)</td>
<td>70 (0.212)</td>
</tr>
<tr>
<td>UV Resistance (at 500 hours)</td>
<td>ASTM D4355</td>
<td>% strength retained</td>
<td>90</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Physical Properties</th>
<th>Unit</th>
<th>Roll Size</th>
</tr>
</thead>
<tbody>
<tr>
<td>Roll Dimensions (width x length)</td>
<td>ft (m)</td>
<td>12 x 300 (3.7 x 91)</td>
</tr>
<tr>
<td>Roll Area</td>
<td>yd² (m²)</td>
<td>400 (334)</td>
</tr>
</tbody>
</table>

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Mirafi® is a registered trademark of Nicolon Corporation. Copyright © 2015 Nicolon Corporation. All Rights Reserved.
Mirafi® RS380i is a revolutionary geotextile with orange identification yarns and super high-tenacity polypropylene filaments formed into an innovative weave to provide superior reinforcement strength and soil interaction integrated with high water flow and soil retention capabilities.

TenCate Geosynthetics Americas Laboratories are accredited by Geosynthetic Accreditation Institute – Laboratory Accreditation Program (GAI-LAP).

<table>
<thead>
<tr>
<th>Mechanical Properties</th>
<th>Test Method</th>
<th>Unit</th>
<th>Typical Roll Value</th>
<th>Minimum Average Roll Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tensile Strength @ 2% strain (MD)</td>
<td>ASTM D4595</td>
<td>lbs/ft (kN/m)</td>
<td>720 (10.5)</td>
<td>600 (8.8)</td>
</tr>
<tr>
<td>Tensile Strength at 2% Strain (CD)</td>
<td>ASTM D4595</td>
<td>lbs/ft (kN/m)</td>
<td>1200 (17.5)</td>
<td>1020 (14.9)</td>
</tr>
<tr>
<td>Tensile Strength @ 5% strain (MD)</td>
<td>ASTM D4595</td>
<td>lbs/ft (kN/m)</td>
<td>2100 (30.6)</td>
<td>1800 (26.3)</td>
</tr>
<tr>
<td>Tensile Strength @ 5% strain (CD)</td>
<td>ASTM D4595</td>
<td>lbs/ft (kN/m)</td>
<td>2580 (37.6)</td>
<td>2256 (32.9)</td>
</tr>
<tr>
<td>Flow Rate</td>
<td>ASTM D4491</td>
<td>gal/min ft² (l/min/m²)</td>
<td>85 (3463)</td>
<td>75 (3056)</td>
</tr>
<tr>
<td>Permeability</td>
<td>ASTM D4491</td>
<td>sec⁻¹</td>
<td>1.2</td>
<td>0.91</td>
</tr>
</tbody>
</table>

| Pore Size 0.055 | ASTM D6767 | microns | 365 |
| Pore Size 0.060 | ASTM D6767 | microns | 185 |

<table>
<thead>
<tr>
<th>Apparent Opening Size (AOS)</th>
<th>ASTM D4751</th>
<th>U.S. Sieve (mm)</th>
<th>Maximum Opening Size</th>
</tr>
</thead>
<tbody>
<tr>
<td>Interaction Coefficient²</td>
<td>ASTM D6706</td>
<td>--</td>
<td>0.89</td>
</tr>
<tr>
<td>Factory Sewn Seam</td>
<td>ASTM D4884</td>
<td>lbs/ft (kN/m)</td>
<td>2700 (39.4)</td>
</tr>
<tr>
<td>UV Resistance (at 500 hours)</td>
<td>ASTM D4355</td>
<td>% strength retained</td>
<td>90</td>
</tr>
</tbody>
</table>

1 Minimum Roll Value
2 Interaction Coefficient value is for sand or gravel based on testing conducted by SGI Testing Services.

<table>
<thead>
<tr>
<th>Physical Properties</th>
<th>Unit</th>
<th>Roll Sizes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Roll Dimensions (width x length)</td>
<td>ft (m)</td>
<td>15 x 300 (4.57 x 91)</td>
</tr>
<tr>
<td>Roll Area</td>
<td>yd² (m²)</td>
<td>500 (419)</td>
</tr>
</tbody>
</table>

U.S. Patent 8,333,220 and Pending

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1. **Product Name**
Stego Wrap Class A Vapor Retarder

2. **Manufacturer**
Stego Industries, LLC  
216 Avenida Fabricante, Suite 101  
San Clemente, CA 92672  
Sales, Technical Assistance  
Ph: (877) 464-7834  
Fx: (949) 257-4113  
www.stegoindustries.com

3. **Product Description**
USES: Stego Wrap Class A is used as an exceptional vapor retarder.  
COMPOSITION: Stego Wrap Class A is a multi-layer plastic extrusion manufactured with only high grade prime, virgin, polyolefin resins.  
ENVIRONMENTAL FACTORS: Stego Wrap Class A can be used in systems for the control of soil gases (radon, methane), soil poisons (oil by-products) and sulfates.

4. **Installation**
UNDER SLAB: Unroll Stego Wrap Class A over an aggregate, sand or tamped earth base. Overlap all seams a minimum of six inches and tape using Stego Tape or Crete Claw® Tape. All penetrations must be sealed using a combination of Stego Wrap and Stego accessories.

For additional information, please refer to Stego’s complete installation instructions.

5. **Availability & Cost**
Stego Wrap Class A is available nationally via building supply distributors. For current cost information, contact your local Stego Wrap distributor or Stego Industries’ sales department.

6. **Warranty**
Stego Industries, LLC believes to the best of its knowledge, that specifications and recommendations herein are accurate and reliable. However, since site conditions are not within its control, Stego Industries does not guarantee results from the use of the information provided and disclaims all liability from any loss or damage. NO WARRANTY, EXPRESS, IMPLIED OR STATUTORY, IS GIVEN AS TO THE MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, OR OTHERWISE WITH RESPECT TO THE PRODUCTS REFERRED TO. Please see www.stegoindustries.com/legal.

7. **Maintenance**
None required.

8. **Technical Services**
Technical advice, custom CAD drawings, and additional information can be obtained by contacting Stego Industries’ technical assistance department or via the website.

9. **Filing Systems**
- www.stegoindustries.com
- Buildsite
- 4Specs

10. **Table 1: Physical Properties of Stego Wrap Class A Vapor Retarder**

<table>
<thead>
<tr>
<th>PROPERTY</th>
<th>TEST</th>
<th>RESULTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Under Slab Vapor Retarders</td>
<td>ASTM E1745 Class A, B &amp; C – Standard Specification for Water Vapor Retarders Used in Contact with Soil or Granular Fill under Concrete Slabs</td>
<td>Exceeds Class A, B &amp; C</td>
</tr>
<tr>
<td>Water Vapor Permeance</td>
<td>ASTM F1249 – Test Method for Water Vapor Transmission Rate Through Plastic Film and Sheeting Using a Modulated Infrared Sensor</td>
<td>0.0254 perms</td>
</tr>
<tr>
<td>Puncture Resistance</td>
<td>ASTM D1709 – Test Methods for Impact Resistance of Plastic Film by Free-Falling Dart Method</td>
<td>3006 grams</td>
</tr>
<tr>
<td>Tensile Strength</td>
<td>ASTM D882 – Test Method for Tensile Properties of Thin Plastic Sheeting</td>
<td>50.60 lb/in.</td>
</tr>
</tbody>
</table>
| Permeance After Conditioning      | ASTM E154 Section 8, F1249 – Permeance after wetting, drying, and soaking  
(ASTM E1745 Sections 7.1.2 - 7.1.5)  
ASTM E154 Section 11, F1249 – Permeance after heat conditioning  
ASTM E154 Section 12, F1249 – Permeance after low temperature conditioning  
ASTM E154 Section 13, F1249 – Permeance after soil organism exposure | 0.0258 perms  
0.0259 perms  
0.0241 perms  
0.0245 perms |
| Thickness                         |                                                                     | 10 mils                                      |
| Roll Dimensions                   |                                                                     | 14 ft, wide x 210 ft. long or 2,940 ft²      |
| Roll Weight                       |                                                                     | 140 lbs                                      |

Note: perm unit = grains/(ft² * hr * in.Hg)
GEOTEX® 401OR is a polypropylene, staple fiber, needlepunched nonwoven geotextile produced by Propex, and will meet the following Typical Values when tested in accordance with the methods listed below. The fibers are needled to form a stable network that retains dimensional stability relative to each other. The geotextile is resistant to biological and chemical environments normally found in soils.

GEOTEX 401OR conforms to the property values listed below. Propex performs internal Manufacturing Quality Control (MQC) tests that have been accredited by the Geosynthetic Accreditation Institute – Laboratory Accreditation Program (GAI-LAP).

### Typical Values

<table>
<thead>
<tr>
<th>PROPERTY</th>
<th>TEST METHOD</th>
<th>ENGLISH</th>
<th>METRIC</th>
</tr>
</thead>
<tbody>
<tr>
<td>% U.S. Manufactured Inputs</td>
<td></td>
<td>100%</td>
<td>100%</td>
</tr>
<tr>
<td>% U.S. Manufactured</td>
<td></td>
<td>100%</td>
<td>100%</td>
</tr>
<tr>
<td><strong>MECHANICAL</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tensile Strength (Grab)</td>
<td>ASTM D-4632</td>
<td>120 lbs</td>
<td>534 N</td>
</tr>
<tr>
<td>Elongation</td>
<td>ASTM D-4632</td>
<td>70%</td>
<td>70%</td>
</tr>
<tr>
<td>CBR Puncture</td>
<td>ASTM D-6241</td>
<td>310 lbs</td>
<td>1380 N</td>
</tr>
<tr>
<td>Trapezoidal Tear</td>
<td>ASTM D-4533</td>
<td>50 lbs</td>
<td>222 N</td>
</tr>
<tr>
<td><strong>HYDRAULIC</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Apparent Opening Size (AOS)³</td>
<td>ASTM D-4751</td>
<td>70 US Std. Sieve</td>
<td>0.212 mm</td>
</tr>
<tr>
<td>Permittivity</td>
<td>ASTM D-4491</td>
<td>2.0 sec⁻¹</td>
<td>2.0 sec⁻¹</td>
</tr>
<tr>
<td>Water Flow Rate</td>
<td>ASTM D-4491</td>
<td>150 gpm/ft²</td>
<td>6112 l/min/m²</td>
</tr>
</tbody>
</table>

**ROLL SIZES**

| 15 ft x 360 ft | 4.57 m x 109.8 m |

**NOTES:**

1. The property values listed above are effective 04/2011 and are subject to change without notice.
2. Values shown are in weaker principal direction. All values are typical based on the testing listed in the table.
3. Maximum average roll value.