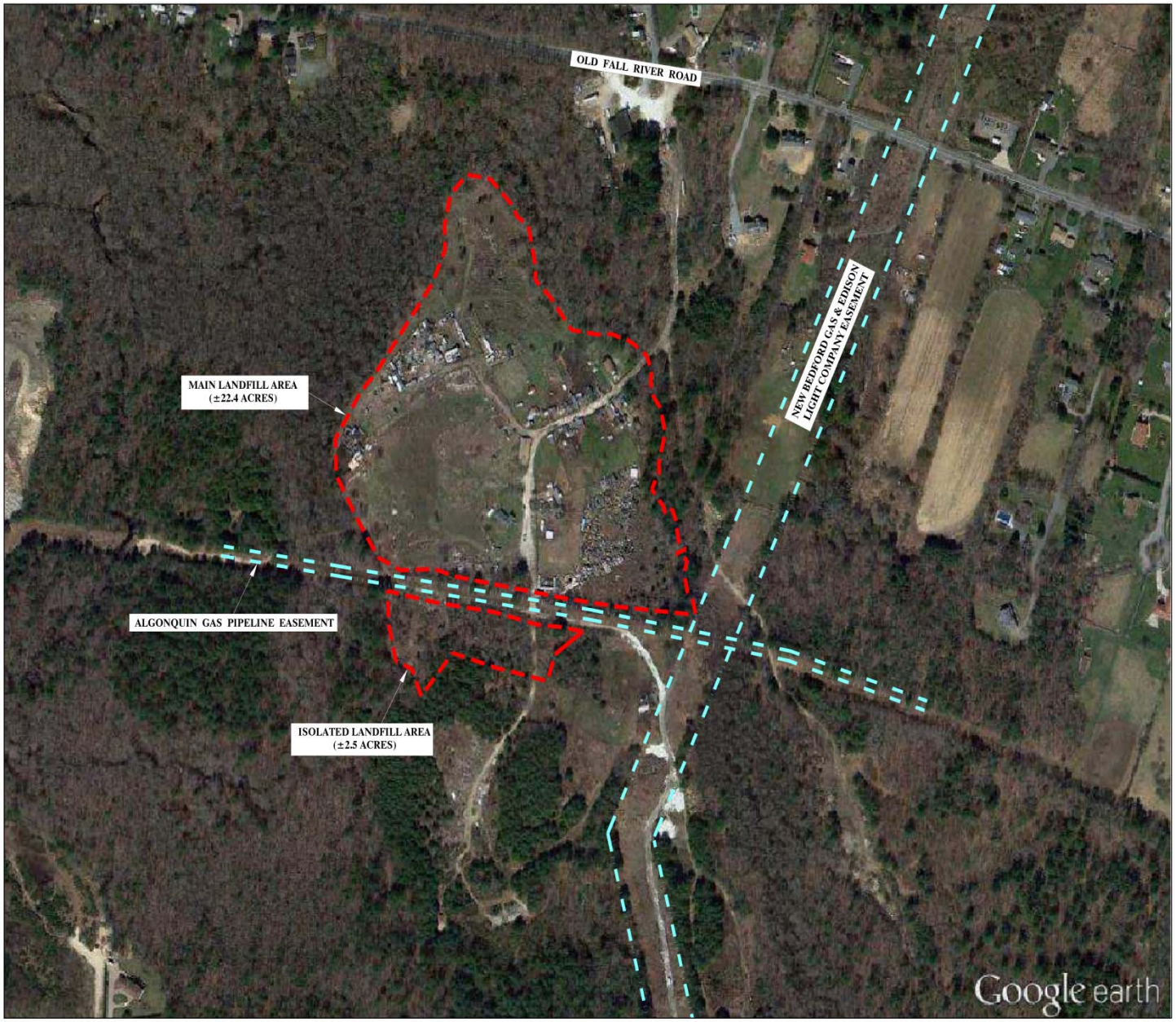
PUBLIC INFORMATIONAL MEETING
for the
CECIL SMITH LANDFILL
FINAL CLOSURE PROJECT

Project Applicant: *Boston Environmental Corporation*
Property Owner: *Ms. Mary Robinson*
Engineering Consultant: *SITEC Environmental, Inc.*



0' 150' 300' 450'
SCALE IN FEET: 1"=150'

No.	Date	Revision Description	Chkd by	Appvd by

scale: 1"=150'
date: FEB. 1, 2013
drawn: JAC
checked:
approved:
sheet 1 of 1
drawing number: GIS-1

project: CECIL SMITH LANDFILL – FINAL CLOSURE
427 OLD FALL RIVER ROAD
DARTMOUTH, MA

client: BOSTON ENVIRONMENTAL CORP.
539 HOWARD STREET
BROCKTON, MA

drawing title: EXISTING CONDITOINS AERIAL EXHIBIT

SITEC ENVIRONMENTAL
Civil and Environmental Engineering
Land Use Planning and Surveying
Hazardous and Solid Waste Consultants
769 Plain Street, Unit C
Marshfield, MA 02050
Phone: (781) 319-3100
Fax: (781) 834-4783

Acad No. SE10-868 GIS.dwg
File No. SE10-868

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Acct. No. SE10-868
File No. SE10-868 GIS.dwg

project: CECIL SMITH LANDFILL – FINAL CLOSURE
452 OLD FALL RIVER ROAD
DARTMOUTH, MA

client: BOSTON ENVIRONMENTAL CORP.
338 HOWARD STREET
BROCKTON, MA

drawing title: EXISTING CONDITOINS AERIAL EXHIBIT

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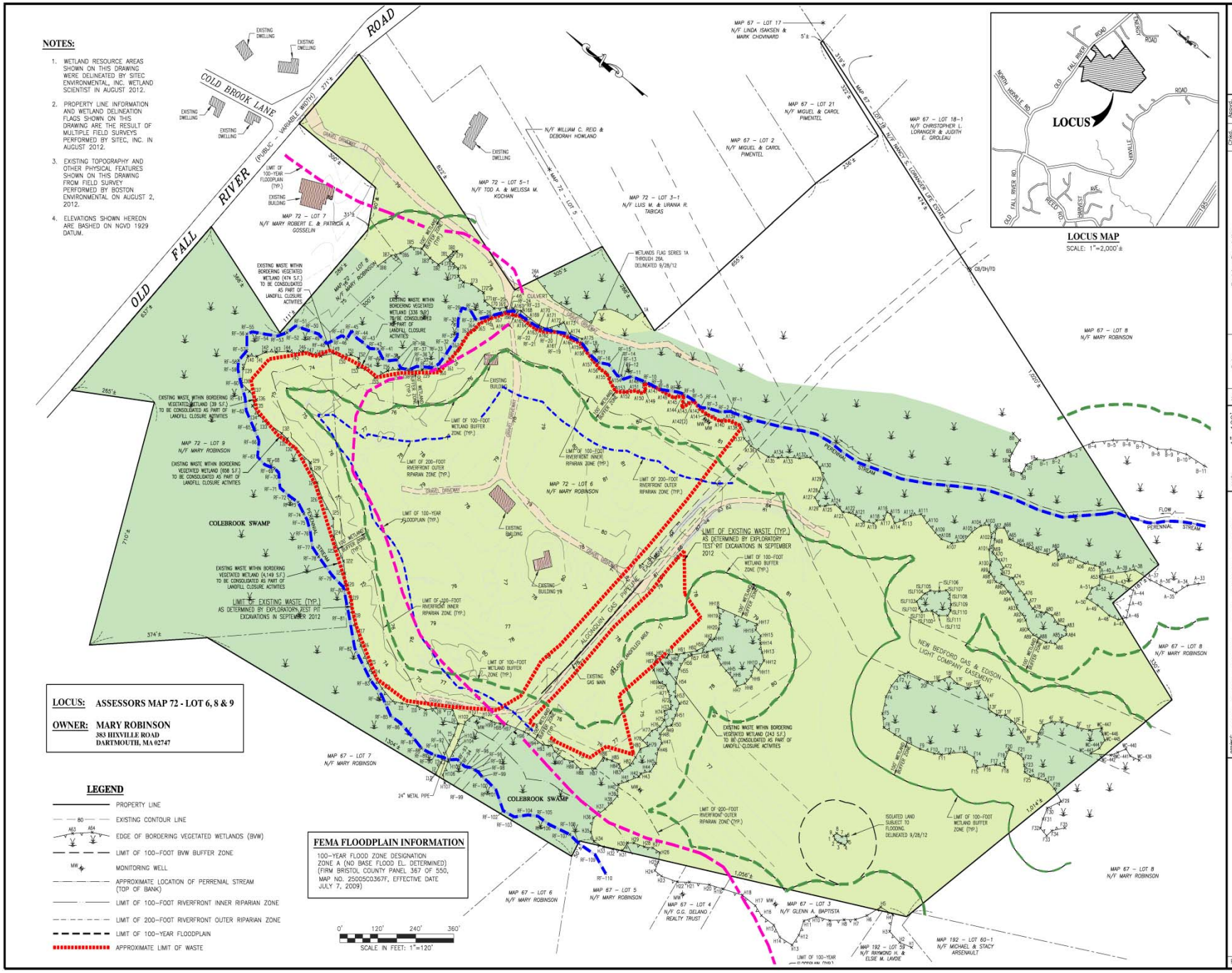

NOTES:

1. WETLAND RESOURCE AREAS SHOWN ON THIS DRAWING WERE DELINEATED BY SITEC ENVIRONMENTAL, INC. WETLAND SCIENTIST IN AUGUST 2012.
2. PROPERTY LINE INFORMATION AND WETLAND DELINEATION FLAGS SHOWN ON THIS DRAWING ARE THE RESULT OF MULTIPLE FIELD SURVEYS PERFORMED BY SITEC, INC. IN AUGUST 2012.
3. EXISTING TOPOGRAPHY AND OTHER PHYSICAL FEATURES SHOWN ON THIS DRAWING FROM FIELD SURVEY PERFORMED BY BOSTON ENVIRONMENTAL ON AUGUST 2, 2012.
4. ELEVATIONS SHOWN HEREON ARE BASHED ON NGVD 1929 DATUM.

No.	Date	Revision Description	Chkd. by	Apprd. by
4	3/7/13	Added Limit of Waste Line & Areas of Waste Within Adjacent BVW	MQ	ARQ
3	10/9/12	Added Wetland Series 1A through 26A Along Northeast Corner (9/28/12)	MQ	ARQ
2	10/9/12	Connected Flags H42 with H58 and H43 with H58 South of Gas Easement	MQ	ARQ
1	10/9/12	Added LSF Delineation Flags 1 through 9, Southeast Side (9/28/12)	MQ	ARQ

scale: 1"=120'
date: AUG. 28, 2012
drawn: JAC
checked: MQ
approved: ARQ
drawing number: SP-1

project: CECIL SMITH LANDFILL – FINAL CLOSURE PROJECT
452 OLD FALL RIVER ROAD
DARTMOUTH, MASSACHUSETTS

client: BOSTON ENVIRONMENTAL CORPORATION
338 HOWARD STREET
BROCKTON, MASSACHUSETTS

drawing title: EXISTING CONDITIONS PLAN

SITEC ENVIRONMENTAL
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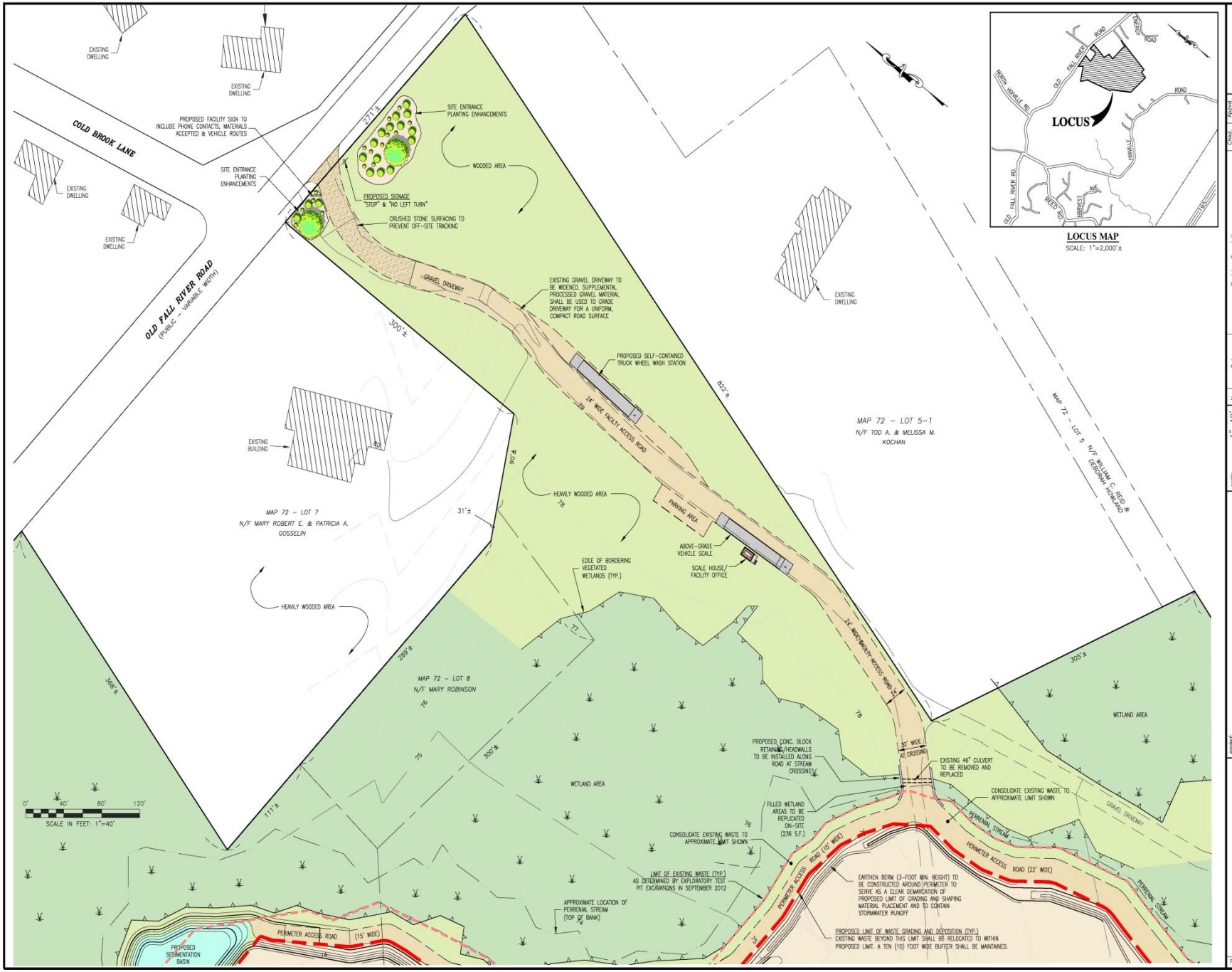
File No. SE11-920

Final Closure Construction - Overview

- *Major Final Closure Construction Activities:*
  - *Installation of temporary and long-term erosion controls and entrance road improvements;*
  - *Project infrastructure: truck scale, office trailer, truck wheel wash station;*
  - *Initial Landfill site clean-up;*
  - *Excavation and consolidation of buried waste from within Wetlands;*
  - *Consolidation of buried waste at the perimeter of the Landfill to create buffer, construct perimeter roads and define limit of closure;*
  - *Replication of disturbed Wetlands;*
  - *Initial site preparation activities including surface grading and stormwater controls;*
  - *Acceptance and placement of approved grading and shaping materials in order to establish grades and elevations in preparation for final cap construction;*
  - *Phased construction of final cover system with initial focus on northerly slopes;*
  - *Construction of final stormwater management system controls on and adjacent to the landfill.*



LOCUS MAP
SCALE: 1"=2,000'±

No.	Date	Revision Description	Chkd. by	Appvd. by

scale: 1"=40'
date: MAR. 7, 2013
drawn: JAC
checked: MQ
approved: ARQ
drawing number: SP-3

project: CECIL SMITH LANDFILL – FINAL CLOSURE PROJECT
452 OLD FALL RIVER ROAD
DARTMOUTH, MASSACHUSETTS

client: BOSTON ENVIRONMENTAL CORPORATION
338 HOWARD STREET
BROCKTON, MASSACHUSETTS

drawing title: FACILITY ACCESS ROAD AND ENTRANCE IMPROVEMENTS

SITEC ENVIRONMENTAL
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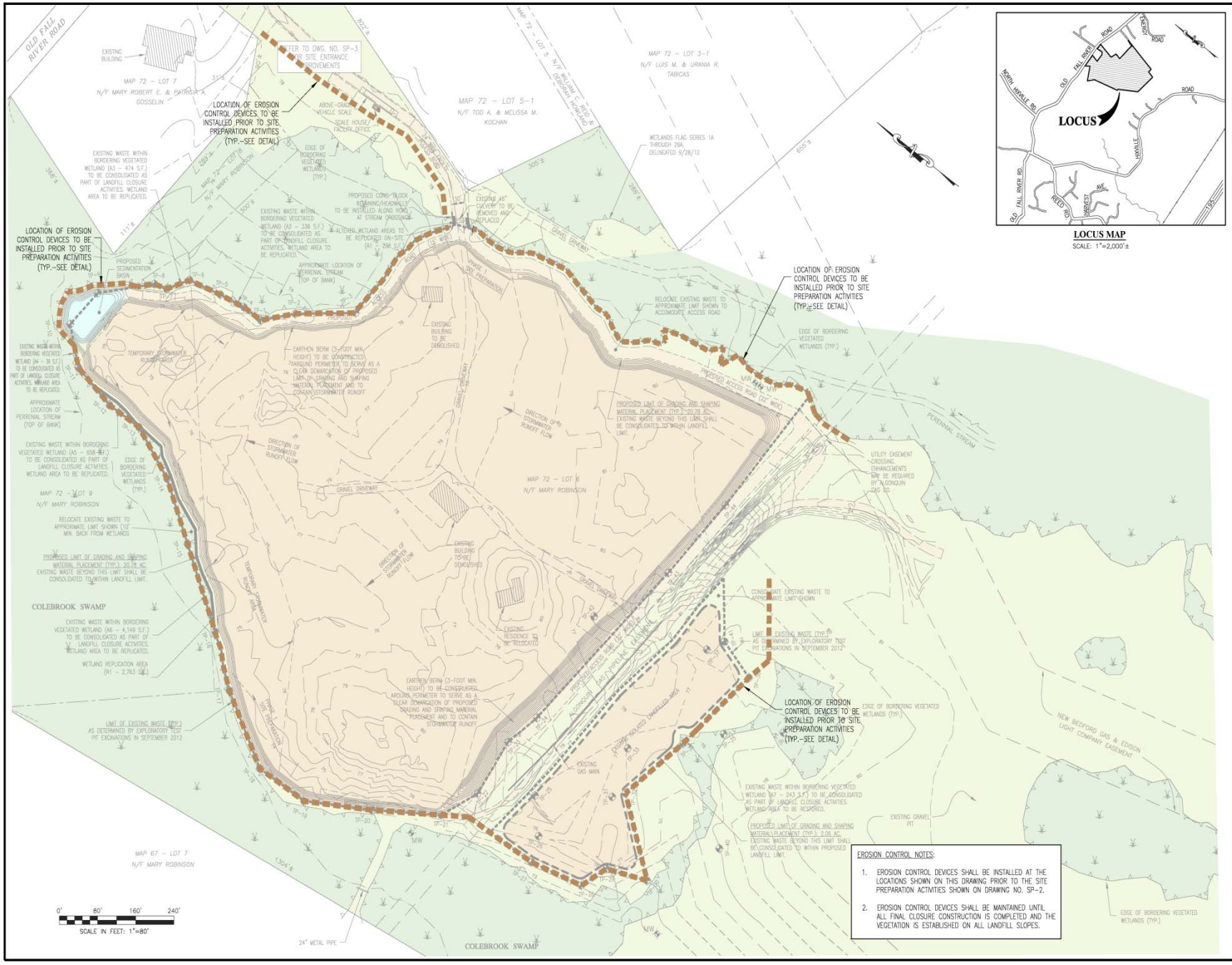
File No. SE11-920



EROSION CONTROL NOTES:

1. EROSION CONTROL DEVICES SHALL BE INSTALLED AT THE LOCATIONS SHOWN ON THIS DRAWING PRIOR TO THE SITE PREPARATION ACTIVITIES SHOWN ON DRAWING NO. SP-2.
2. EROSION CONTROL DEVICES SHALL BE MAINTAINED UNTIL ALL FINAL CLOSURE CONSTRUCTION IS COMPLETED AND THE VEGETATION IS ESTABLISHED ON ALL LANDFILL SLOPES.

No.	Date	Revision Description	Chkd. by	Appvd. by

project: CECIL SMITH LANDFILL – FINAL CLOSURE PROJECT
452 OLD FALL RIVER ROAD
DARTMOUTH, MASSACHUSETTS

client: BOSTON ENVIRONMENTAL CORPORATION
535 HOWARD STREET
BROCKTON, MASSACHUSETTS

scale: 1"=80'
date: MAR. 7, 2013
drawn: JAC
checked: MQ
approved: ARQ

drawing number: EC-1

drawing title: EROSION CONTROL PLAN

SITEC ENVIRONMENTAL
Civil and Environmental Engineering
Land Surveying and Mapping
Hazardous and Solid Waste Consultants
768 Pleasant Street, Unit C
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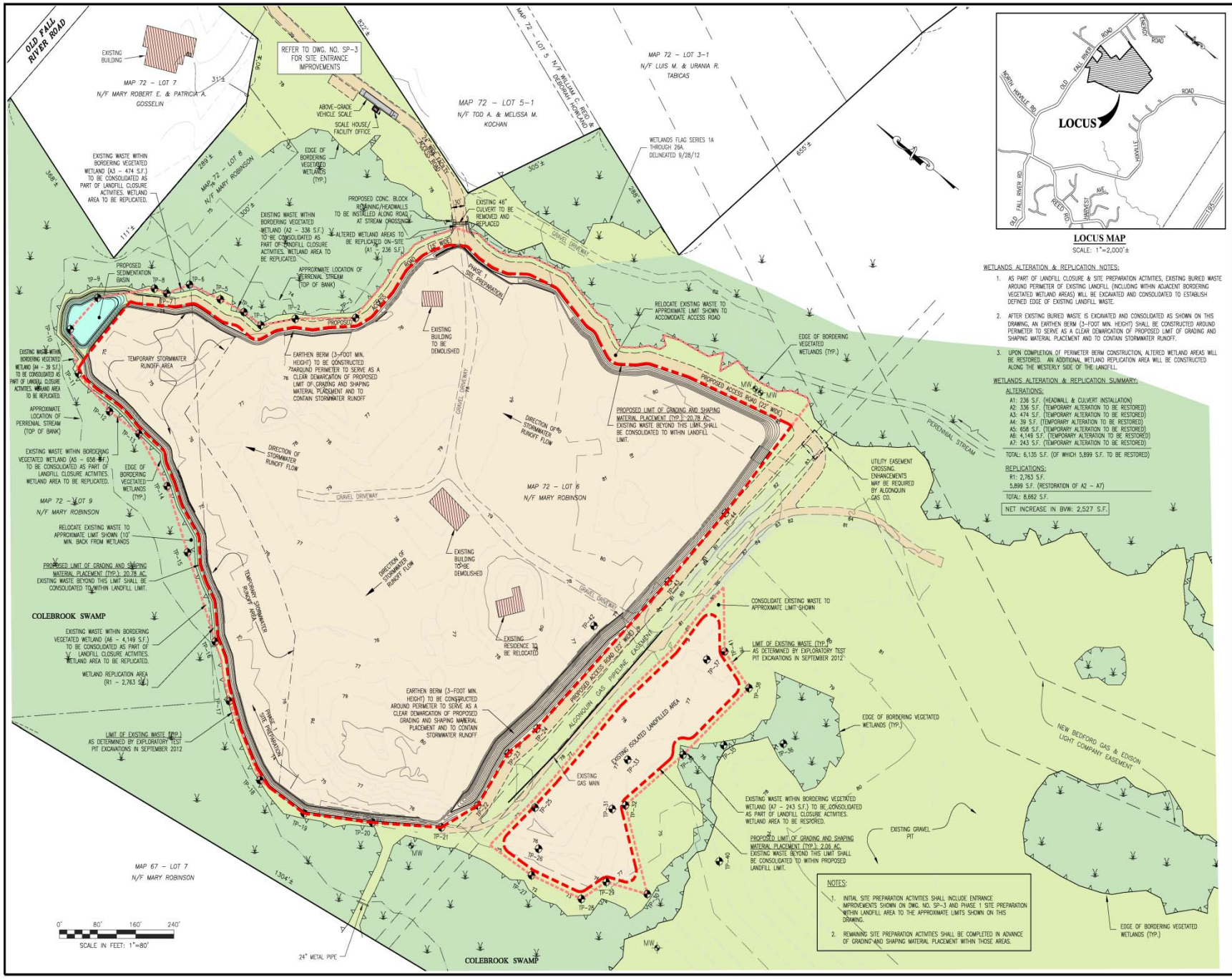
File No. SE11-920



LOCUS MAP

SCALE: 1"=2,000'±

WETLANDS ALTERATION & REPLICATION NOTES:

1. AS PART OF LANDFILL CLOSURE & SITE PREPARATION ACTIVITIES, EXISTING BURIED WASTE AROUND PERIMETER OF EXISTING LANDFILL (INCLUDING WITHIN ADJACENT BORDERING VEGETATED WETLAND AREAS) WILL BE EXCAVATED AND CONSOLIDATED TO ESTABLISH DEFINED EDGE OF EXISTING LANDFILL WASTE.
2. AFTER EXISTING BURIED WASTE IS EXCAVATED AND CONSOLIDATED AS SHOWN ON THIS DRAWING, AN EARTHEN BERM (3-FOOT MIN. HEIGHT) SHALL BE CONSTRUCTED AROUND PERIMETER TO SERVE AS A CLEAR DEMARCATION OF PROPOSED LIMIT OF GRADING AND SHAPING MATERIAL PLACEMENT AND TO CONTAIN STORMWATER RUNOFF.
3. UPON COMPLETION OF PERIMETER BERM CONSTRUCTION, ALTERED WETLAND AREAS WILL BE RESTORED. AN ADDITIONAL WETLAND REPLICATION AREA WILL BE CONSTRUCTED ALONG THE WESTERLY SIDE OF THE LANDFILL.

WETLANDS ALTERATION & REPLICATION SUMMARY:

ALTERATIONS:

A1: 236 S.F. (HEADWALL & CULVERT INSTALLATION)
A2: 336 S.F. (TEMPORARY ALTERATION TO BE RESTORED)
A3: 474 S.F. (TEMPORARY ALTERATION TO BE RESTORED)
A4: 39 S.F. (TEMPORARY ALTERATION TO BE RESTORED)
A5: 658 S.F. (TEMPORARY ALTERATION TO BE RESTORED)
A6: 4,149 S.F. (TEMPORARY ALTERATION TO BE RESTORED)
A7: 243 S.F. (TEMPORARY ALTERATION TO BE RESTORED)

TOTAL: 6,135 S.F. (OF WHICH 5,899 S.F. TO BE RESTORED)

REPLICATIONS:

R1: 2,763 S.F.
5,899 S.F. (RESTORATION OF A2 – A7)

TOTAL: 8,662 S.F.

NET INCREASE IN BVW: 2,527 S.F.

NOTES:

1. INITIAL SITE PREPARATION ACTIVITIES SHALL INCLUDE ENTRANCE IMPROVEMENTS SHOWN ON DWG. NO. SP-3 AND PHASE 1 SITE PREPARATION WITHIN LANDFILL AREA TO THE APPROXIMATE LIMITS SHOWN ON THIS DRAWING.
2. REMAINING SITE PREPARATION ACTIVITIES SHALL BE COMPLETED IN ADVANCE OF GRADING AND SHAPING MATERIAL PLACEMENT WITHIN THOSE AREAS.

No.	Date	Revision Description	Chkd by	Appvd by

project: CECIL SMITH LANDFILL – FINAL CLOSURE PROJECT
452 OLD FALL RIVER ROAD
DARTMOUTH, MASSACHUSETTS

client: BOSTON ENVIRONMENTAL CORPORATION
30 SOUTH WIND STREET
BROCKTON, MASSACHUSETTS

scale: 1"=80'
date: MAR. 7, 2013
drawn: JAC
checked: MQ
approved: ARQ
drawing number: SP-2

drawing title: SITE PREPARATION GRADING PLAN

SITEC ENVIRONMENTAL
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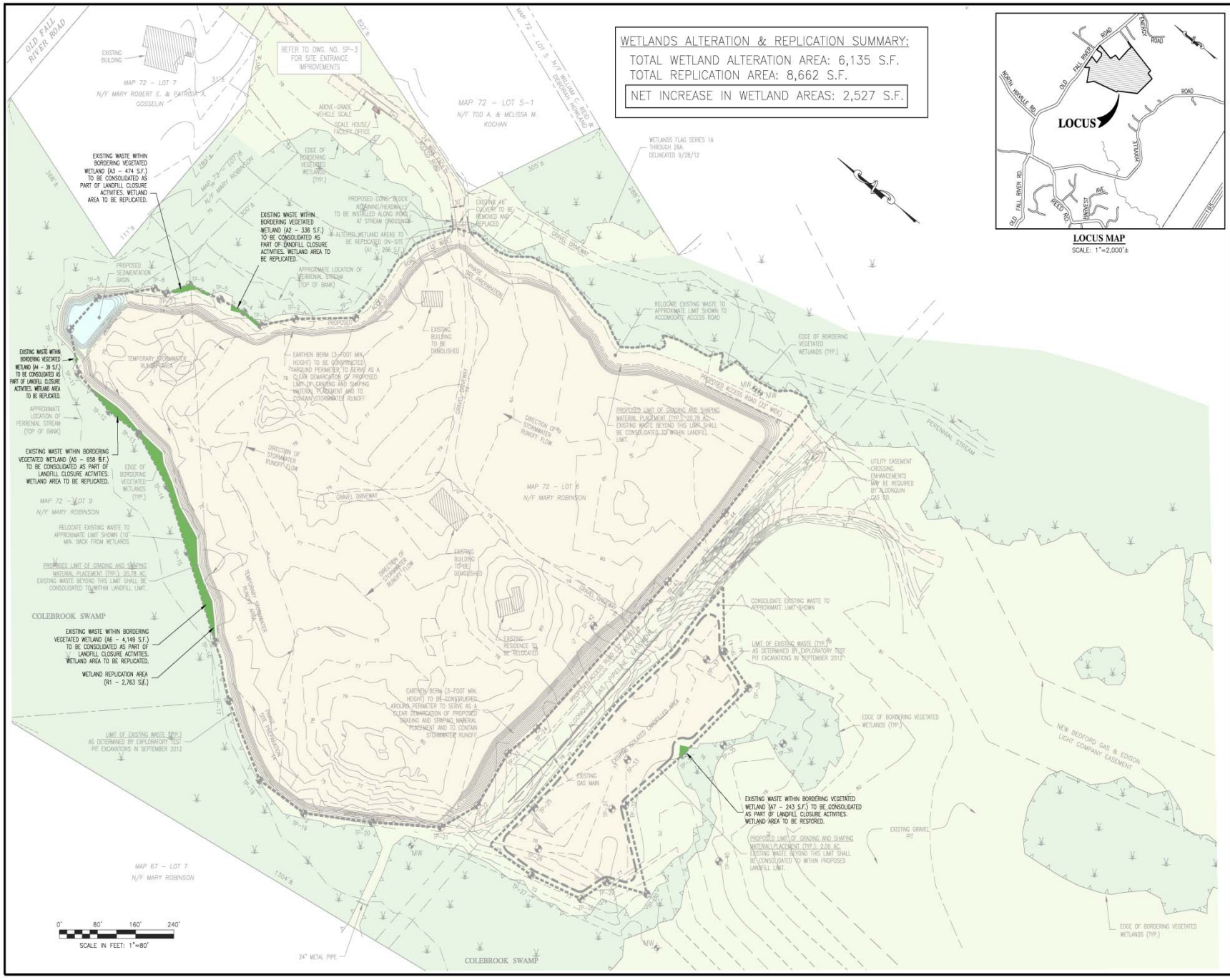
File No. SE11-920



No.	Date	Revision Description	Chkd. by	Apprd. by

scale: 1"=80'
date: MAR. 7, 2013
drawn: JAC
checked: MQ
approved: ARQ
drawing number: EC-1

project: CECIL SMITH LANDFILL – FINAL CLOSURE PROJECT
452 OLD FALL RIVER ROAD
DARTMOUTH, MASSACHUSETTS

client: BOSTON ENVIRONMENTAL CORPORATION
338 HOWARD STREET
BROCKTON, MASSACHUSETTS

drawing title: WETLAND REPLICATION AREAS PLAN

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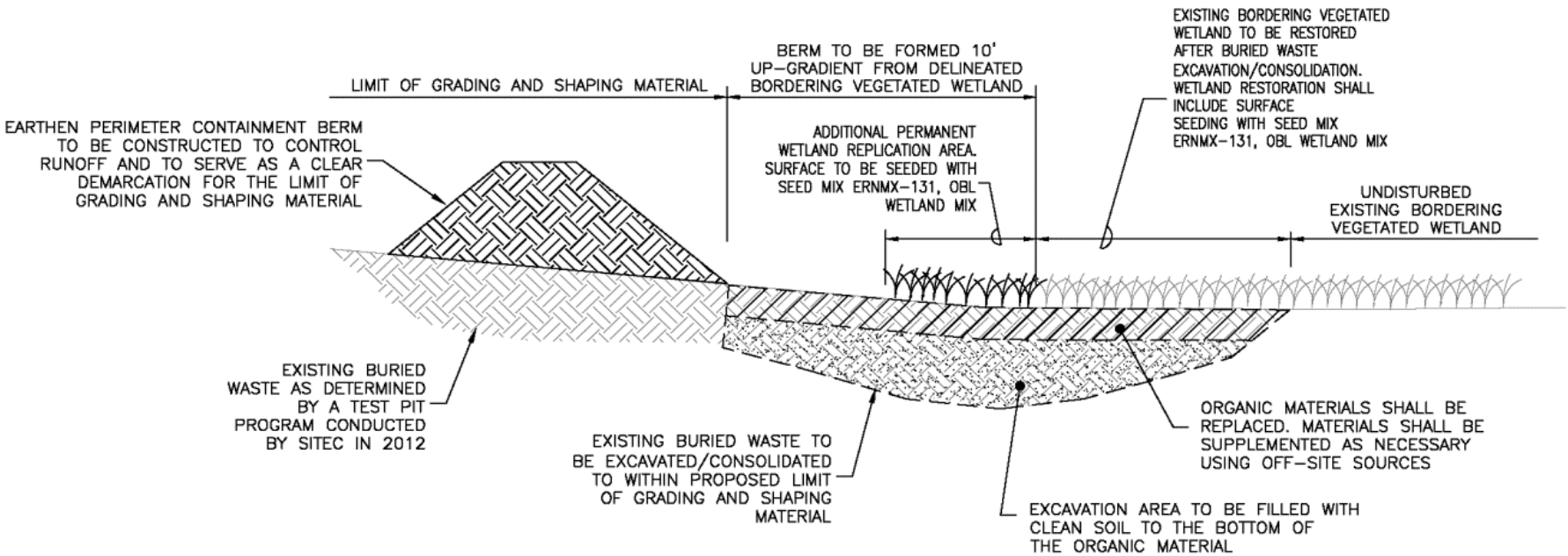
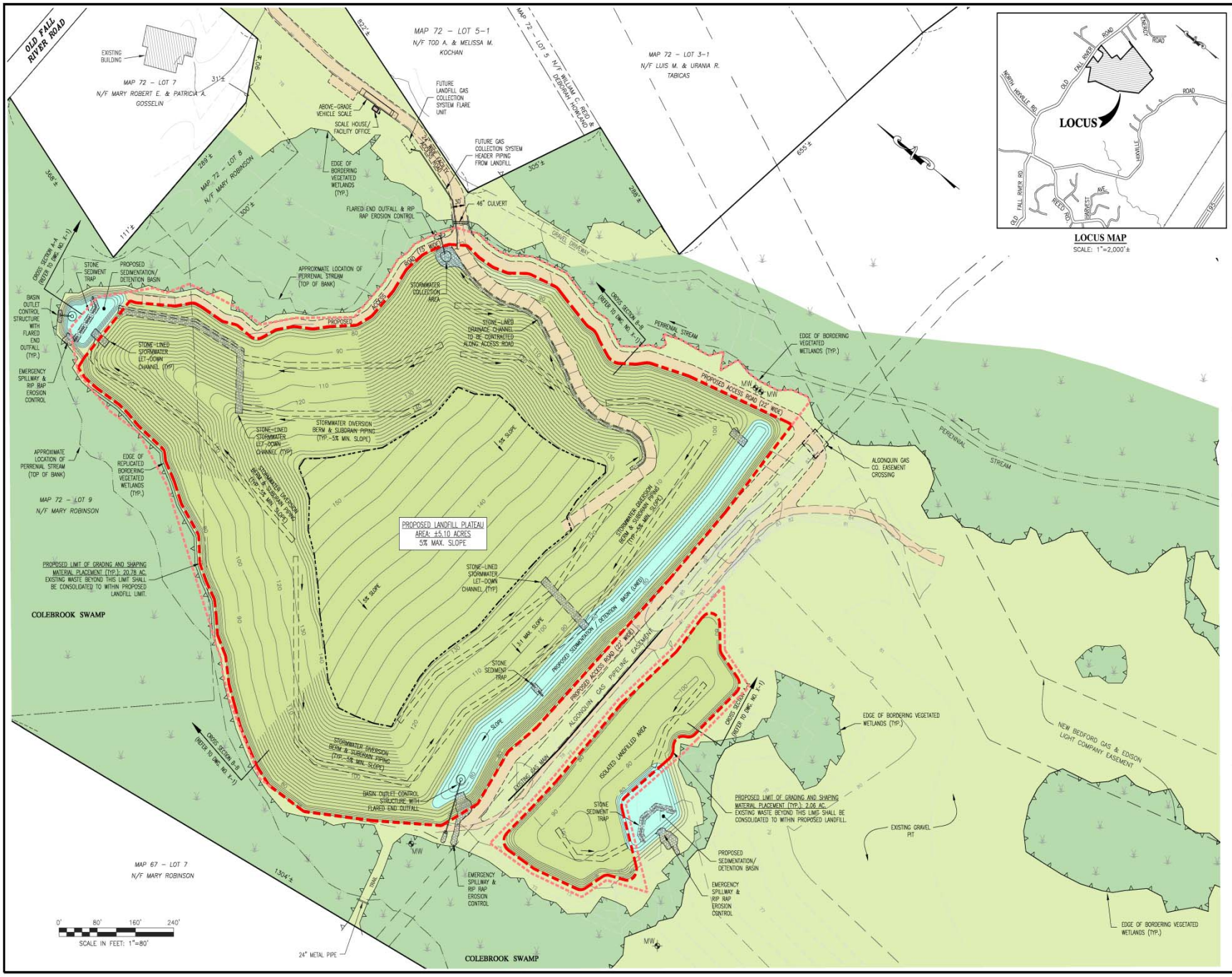
File No. SE11-920



BURIED WASTE CONSOLIDATION
& WETLAND RESTORATION DETAIL

NOT TO SCALE



No.	Date	Revision Description	Chkd. by	Apprvd. by

scale: 1"=80'
date: MAR. 7, 2013
drawn: JAC
checked: MQ
approved: ARQ
drawing number: SP-4

project: CECIL SMITH LANDFILL – FINAL CLOSURE PROJECT
452 OLD FALL RIVER ROAD
DARTMOUTH, MASSACHUSETTS

client: BOSTON ENVIRONMENTAL CORPORATION
338 HOWARD STREET
BROCKTON, MASSACHUSETTS

drawing title: FINAL DESIGN GRADING PLAN

SITEC ENVIRONMENTAL
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Land Use Planning and Surveying
Hazardous and Solid Waste Consultants
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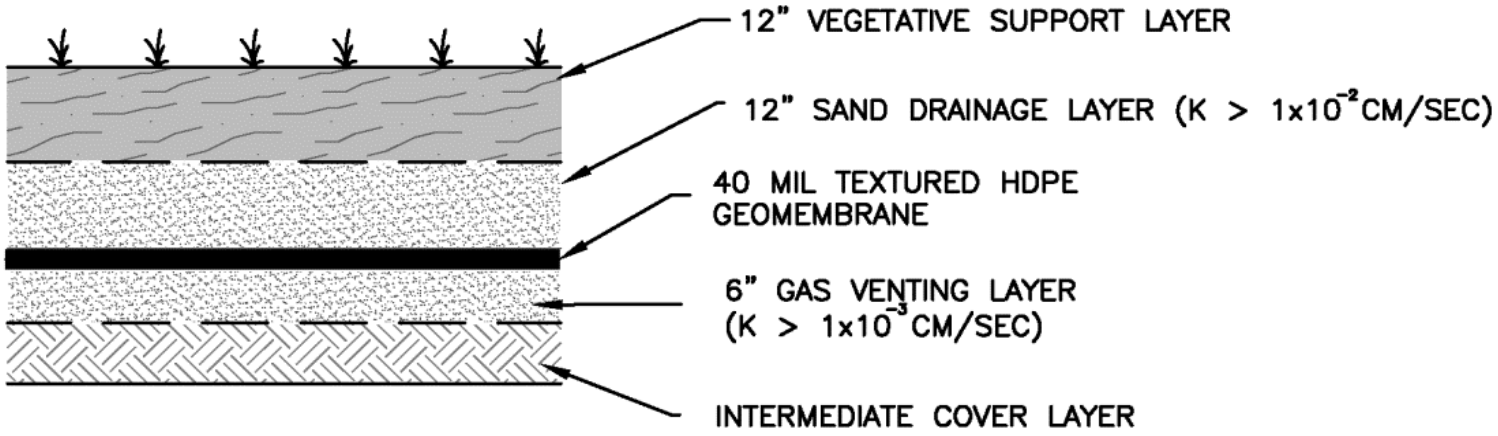
File No. SE11-920



FINAL COVER DETAIL

NOT TO SCALE

Grading and Shaping Materials

- *MassDEP has determined that certain materials can safely be used to bring sites to proper grade for closure, to provide an adequate foundation layer for final cover materials and to help defray the cost of closure.*

- *BEC is proposing to accept and utilize only those materials determined by the MassDEP as being safe for use on this application.*
  - *Clean soil; Street sweepings;*
  - *Soil as defined by DEP Policy COMM-97-001;*
  - *Approved grading and shaping materials (C&D fines, coal ash, etc.);*
  - *Catch basin cleanings (de-watered) from separate storm sewers);*
  - *dredge spoils (de-watered) (DEP Policy COMM-94-007);*
  - *residuals from C&D processing facilities; and,*
  - *residuals from Materials Recycling Facilities (recycling facilities, composting facilities, etc.)*

- *Most of the material to be used will be soils. BEC is proposing that each of the above material types be considered suitable for grading and shaping use on this closure project.*

- *A Material Acceptance Plan will be approved by the MassDEP prior to bringing grading and shaping materials to the landfill. The Plan will include the following:*
  - *Pre-acceptance review process conducted by Licensed Site Professionals (LSPs);*
  - *Provisions for the review of ALL analytical data by a Licensed Site Professional (LSP) to determine if the material is suitable for acceptance and use as grading and shaping material on this project.*
  - *Procedures to be followed for screening incoming loads for unacceptable material,*
  - *Contingency measures to be implemented should unacceptable materials be detected,*
  - *Recording mechanisms for tracking the providers of materials to this landfill closure,*
- *Material testing (chemical, physical, etc.) requirements will be specified within the Material Acceptance Plan to determine whether it is suitable for use on this project.*

Environmental Assessments

- *MassDEP requires that environmental assessments be completed as part of the landfill final closure process.*

- *Landfill assessment process comprised of two (2) components:*
  - *Initial Site Assessment (ISA); and*
  - *Comprehensive Site Assessment (CSA)*

- *Landfill assessments will be done concurrent with final closure construction as quarterly sampling and analysis of groundwater and surface water quality will be evaluated.*

- *The Town of Dartmouth will receive copies of all site assessment documents submitted to the MassDEP and will have the opportunity to offer comments for MassDEP consideration as they perform their reviews.*

Initial Site Assessment (ISA)

- *Initial Site Assessment (ISA) and Scope of Work for a Comprehensive Site Assessment (CSA) . The ISA will include:*
  - *Historical document review;*
  - *An evaluation of existing data;*
  - *Identification of sensitive receptors;*
  - *A review of files available at the Town of Dartmouth and at the MassDEP;*
  - *A review of other published documents such as those prepared by the USEPA; and*
  - *Mapping of the area.*

- *Groundwater Monitoring Well Investigations:*
  - *Existing groundwater monitoring wells will be evaluated (conditions, locations, depths);*
  - *If not suitable for monitoring and assessment purposes, additional well installations will be proposed within the CSA-Scope of Work.*

- *The information gathered during the ISA will be used to develop a Comprehensive Site Assessment (CSA) - Scope of Work (SOW) .*

Comprehensive Site Assessment (CSA)

The CSA will include the following:

- *Initial Site Assessment (ISA) Summary:*
- *Site Mapping:*
- *Environmental Monitoring Program:*
  - *Ground Water, Surface Water, Sediments, Landfill Gas Migration*
- *Sampling and Analysis Plan:*
  - *Groundwater and surface water sampling to be conducted quarterly for one (1) year;*
- *Comprehensive Site Assessment Report:*
  - *Evaluation of groundwater, surface water and sediment quality;*
  - *Evaluation of site hydrogeology with respect to local geology;*
  - *Identification and evaluation of risk to potential human and environmental sensitive receptors.*
- *Risk Assessments (Qualitative and Quantitative):*
  - *Identification of potential human and environmental sensitive receptors (From Initial Site Assessment),*
  - *Summary of contaminants and level of contamination (from sampling program).*
  - *Summary of all pathways (in ground or surface water, soil or air) by which existing contamination may reach identified public health or environmental sensitive receptors.*
  - *A Quantitative Risk Assessment, as appropriate.*

Post-Closure Maintenance and Monitoring

- Post-Closure Maintenance and Monitoring will be required for a 30 year period by MassDEP regulation;
- Post Closure requirements will be the responsibility of the Owner;
- A Financial Assurance Mechanism will be established and will be made available only for the Post-Closure Maintenance and Monitoring;
- Post-Closure Maintenance and Monitoring includes:
  - Groundwater and surface water sampling, analysis and reporting;
  - Landfill inspections by a qualified engineer,
  - Landfill surface maintenance including mowing and surface repairs as may be required.