

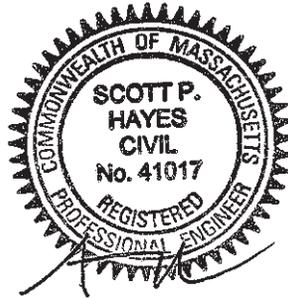


16 Gleasondale Rd., Suite 1-1  
Stow, Massachusetts 01775  
Phone: (978) 461-2350  
Fax: (978) 841-4102  
www.foresite1.com

## NOTICE OF INTENT

LOT 3 HAYWARD FARM  
8 HUTCHINSON WAY  
ACTON, MASSACHUSETTS

Portion of Assessors Map E-2 Parcels 261-2, 261-3, 262, 272 & 273



Date: March 19, 2015

**Prepared for:**

Acton Management, Inc.  
P.O. Box 2350  
Acton, Massachusetts 01720

**Prepared by:**

FORESITE Engineering Associates, Inc.  
16 Gleasondale Road, Suite 1-1  
Stow, Massachusetts 01775

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1. WPA Form 3: Notice of Intent
2. NOI Wetland Fee Transmittal Form
3. Copies of Filing Fee Checks
4. Certified List of Abutters
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6. Affidavit of Service under Massachusetts Wetland Protection Act
7. Order of Resource Area Delineation dated April 17, 2014
8. USGS Locus Map, Maynard Quadrangle, 1987; Scale 1" = 2000'
9. "Sewage Disposal System Design Plan, Lot 3 Hayward Farm, 8 Hutchinson Way, Acton, MA" prepared by FORESITE Engineering, revised March 9, 2015, Scale: 1"=20'



# WPA Form 3 – Notice of Intent

Massachusetts Wetlands Protection Act M.G.L. c. 131, §40

Provided by MassDEP:

MassDEP File Number

Document Transaction Number

Acton

City/Town

**Important:**  
When filling out forms on the computer, use only the tab key to move your cursor - do not use the return key.



Note:  
Before completing this form consult your local Conservation Commission regarding any municipal bylaw or ordinance.

## A. General Information

### 1. Project Location (**Note:** electronic filers will click on button to locate project site):

<u>8 Hutchinson Way (Lot 3)</u>	<u>Acton</u>	<u>01720</u>
a. Street Address	b. City/Town	c. Zip Code
Latitude and Longitude:		
<u>42° 28' 59" N</u>	<u>71° 27' 47" W</u>	
d. Latitude	e. Longitude	
<u>Parcels 261-2, 261-3, 262, 272 &amp; 273</u>		
f. Assessors Map/Plat Number	g. Parcel /Lot Number	

### 2. Applicant:

<u>Stephen</u>	<u>Steinberg</u>	
a. First Name	b. Last Name	
<u>Acton Management, Inc.</u>		
c. Organization		
<u>P.O. Box 2350</u>		
d. Street Address		
<u>Acton</u>	<u>MA</u>	<u>01720</u>
e. City/Town	f. State	g. Zip Code
<u>(978) 263-2989 x2</u>	<u>(978) 263-0403</u>	<u>actonmgt@verizon.net</u>
h. Phone Number	i. Fax Number	j. Email Address

### 3. Property owner (required if different from applicant): Check if more than one owner

<u>Dean</u>	<u>Charter</u>	
a. First Name	b. Last Name	
c. Organization		
<u>81 Charter Road</u>		
d. Street Address		
<u>Acton</u>	<u>MA</u>	<u>01720</u>
e. City/Town	f. State	g. Zip Code
<u>(508) 277-6601</u>	<u>dcharter@acton-ma.gov</u>	
h. Phone Number	i. Fax Number	j. Email address

### 4. Representative (if any):

<u>Scott</u>	<u>Hayes</u>	
a. First Name	b. Last Name	
<u>FORESITE Engineering Associates, Inc.</u>		
c. Company		
<u>16 Gleasondale Road, Suite 1-1</u>		
d. Street Address		
<u>Stow</u>	<u>MA</u>	<u>01775</u>
e. City/Town	f. State	g. Zip Code
<u>(978) 461-2350</u>	<u>(978) 841-4102</u>	<u>scott@foresite1.com</u>
h. Phone Number	i. Fax Number	j. Email address

### 5. Total WPA Fee Paid (from NOI Wetland Fee Transmittal Form):

<u>\$500.00</u>	<u>\$237.50</u>	<u>\$262.50</u>
a. Total Fee Paid	b. State Fee Paid	c. City/Town Fee Paid



WPA Form 3 - Notice of Intent

Massachusetts Wetlands Protection Act M.G.L. c. 131, §40

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A. General Information (continued)

6. General Project Description:

Construction of a single family dwelling and associated utilities and grading within 100-ft of an intermittent stream.

7a. Project Type Checklist:

- 1. [X] Single Family Home
2. [ ] Residential Subdivision
3. [ ] Limited Project Driveway Crossing
4. [ ] Commercial/Industrial
5. [ ] Dock/Pier
6. [ ] Utilities
7. [ ] Coastal Engineering Structure
8. [ ] Agriculture (e.g., cranberries, forestry)
9. [ ] Transportation
10. [ ] Other

7b. Is any portion of the proposed activity eligible to be treated as a limited project subject to 310 CMR 10.24 (coastal) or 310 CMR 10.53 (inland)?

1. [ ] Yes [X] No If yes, describe which limited project applies to this project:

2. Limited Project

8. Property recorded at the Registry of Deeds for:

Middlesex South 243257, 243258, 243259
a. County b. Certificate # (if registered land)
52019 285, 287
c. Book d. Page Number

B. Buffer Zone & Resource Area Impacts (temporary & permanent)

- 1. [X] Buffer Zone Only - Check if the project is located only in the Buffer Zone of a Bordering Vegetated Wetland, Inland Bank, or Coastal Resource Area.
2. [ ] Inland Resource Areas (see 310 CMR 10.54-10.58; if not applicable, go to Section B.3, Coastal Resource Areas).

Check all that apply below. Attach narrative and any supporting documentation describing how the project will meet all performance standards for each of the resource areas altered, including standards requiring consideration of alternative project design or location.

For all projects affecting other Resource Areas, please attach a narrative explaining how the resource area was delineated.

Table with 3 columns: Resource Area, Size of Proposed Alteration, Proposed Replacement (if any). Rows include Bank, Bordering Vegetated Wetland, and Land Under Waterbodies and Waterways.



WPA Form 3 - Notice of Intent

Massachusetts Wetlands Protection Act M.G.L. c. 131, §40

Provided by MassDEP:
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B. Buffer Zone & Resource Area Impacts (temporary & permanent) (cont'd)

Resource Area, Size of Proposed Alteration, Proposed Replacement (if any)
d. Bordering Land Subject to Flooding
e. Isolated Land Subject to Flooding
f. Riverfront Area
2. Width of Riverfront Area (check one):
3. Total area of Riverfront Area on the site of the proposed project:
4. Proposed alteration of the Riverfront Area:
5. Has an alternatives analysis been done and is it attached to this NOI?
6. Was the lot where the activity is proposed created prior to August 1, 1996?

3. Coastal Resource Areas: (See 310 CMR 10.25-10.35)

Check all that apply below. Attach narrative and supporting documentation describing how the project will meet all performance standards for each of the resource areas altered, including standards requiring consideration of alternative project design or location.

Online Users: Include your document transaction number (provided on your receipt page) with all supplementary information you submit to the Department.

Resource Area, Size of Proposed Alteration, Proposed Replacement (if any)
a. Designated Port Areas
b. Land Under the Ocean
c. Barrier Beach
d. Coastal Beaches
e. Coastal Dunes



# WPA Form 3 – Notice of Intent

Massachusetts Wetlands Protection Act M.G.L. c. 131, §40

Provided by MassDEP:
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## B. Buffer Zone & Resource Area Impacts (temporary & permanent) (cont'd)

	<u>Size of Proposed Alteration</u>	<u>Proposed Replacement (if any)</u>
f. <input type="checkbox"/> Coastal Banks	1. linear feet	
g. <input type="checkbox"/> Rocky Intertidal Shores	1. square feet	
h. <input type="checkbox"/> Salt Marshes	1. square feet	2. sq ft restoration, rehab., creation
i. <input type="checkbox"/> Land Under Salt Ponds	1. square feet	
	2. cubic yards dredged	
j. <input type="checkbox"/> Land Containing Shellfish	1. square feet	
k. <input type="checkbox"/> Fish Runs	Indicate size under Coastal Banks, inland Bank, Land Under the Ocean, and/or inland Land Under Waterbodies and Waterways, above	
	1. cubic yards dredged	
l. <input type="checkbox"/> Land Subject to Coastal Storm Flowage	1. square feet	
4. <input type="checkbox"/> Restoration/Enhancement	If the project is for the purpose of restoring or enhancing a wetland resource area in addition to the square footage that has been entered in Section B.2.b or B.3.h above, please enter the additional amount here.	
	a. square feet of BVW	b. square feet of Salt Marsh
5. <input type="checkbox"/> Project Involves Stream Crossings		
	a. number of new stream crossings	b. number of replacement stream crossings

## C. Other Applicable Standards and Requirements

### Streamlined Massachusetts Endangered Species Act/Wetlands Protection Act Review

1. Is any portion of the proposed project located in **Estimated Habitat of Rare Wildlife** as indicated on the most recent Estimated Habitat Map of State-Listed Rare Wetland Wildlife published by the Natural Heritage and Endangered Species Program (NHESP)? To view habitat maps, see the *Massachusetts Natural Heritage Atlas* or go to [http://maps.massgis.state.ma.us/PRI\\_EST\\_HAB/viewer.htm](http://maps.massgis.state.ma.us/PRI_EST_HAB/viewer.htm).

a.  Yes  No **If yes, include proof of mailing or hand delivery of NOI to:**

**Natural Heritage and Endangered Species Program  
Division of Fisheries and Wildlife  
100 Hartwell Street, Suite 230  
West Boylston, MA 01583**

2008  
b. Date of map



# WPA Form 3 – Notice of Intent

Massachusetts Wetlands Protection Act M.G.L. c. 131, §40

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## C. Other Applicable Standards and Requirements (cont'd)

If yes, the project is also subject to Massachusetts Endangered Species Act (MESA) review (321 CMR 10.18). To qualify for a streamlined, 30-day, MESA/Wetlands Protection Act review, please complete Section C.1.C, and include requested materials with this Notice of Intent (NOI); *OR* complete Section C.1.d, if applicable. *If MESA supplemental information is not included with the NOI, by completing Section 1 of this form, the NHESP will require a separate MESA filing which may take up to 90 days to review (unless noted exceptions in Section 2 apply, see below).*

### 1. c. Submit Supplemental Information for Endangered Species Review\*

1.  Percentage/acreage of property to be altered:
  - (a) within wetland Resource Area \_\_\_\_\_ percentage/acreage
  - (b) outside Resource Area \_\_\_\_\_ percentage/acreage
2.  Assessor's Map or right-of-way plan of site
3.  Project plans for entire project site, including wetland resource areas and areas outside of wetlands jurisdiction, showing existing and proposed conditions, existing and proposed tree/vegetation clearing line, and clearly demarcated limits of work \*\*\*
  - (a)  Project description (including description of impacts outside of wetland resource area & buffer zone)
  - (b)  Photographs representative of the site
  - (c)  MESA filing fee (fee information available at <http://www.mass.gov/eea/agencies/dfg/dfw/natural-heritage/regulatory-review/mass-endangered-species-act-mesa/mesa-fee-schedule.html>). Make check payable to "Commonwealth of Massachusetts - NHESP" and **mail to NHESP** at above address  
*Projects altering 10 or more acres of land, also submit:*
  - (d)  Vegetation cover type map of site
  - (e)  Project plans showing Priority & Estimated Habitat boundaries

### d. OR Check One of the Following

1.  Project is exempt from MESA review.  
Attach applicant letter indicating which MESA exemption applies. (See 321 CMR 10.14, <http://www.mass.gov/eea/agencies/dfg/dfw/laws-regulations/cmr/321-cmr-1000-massachusetts-endangered-species-act.html#10.14>; the NOI must still be sent to NHESP if the project is within estimated habitat pursuant to 310 CMR 10.37 and 10.59.)
2.  Separate MESA review ongoing. \_\_\_\_\_ a. NHESP Tracking # \_\_\_\_\_ b. Date submitted to NHESP

\* Some projects **not** in Estimated Habitat may be located in Priority Habitat, and require NHESP review (see <http://www.mass.gov/eea/agencies/dfg/dfw/natural-heritage/regulatory-review/>). Priority Habitat includes habitat for state-listed plants and strictly upland species not protected by the Wetlands Protection Act.

\*\* MESA projects may not be segmented (321 CMR 10.16). The applicant must disclose full development plans even if such plans are not required as part of the Notice of Intent process.



# WPA Form 3 – Notice of Intent

Massachusetts Wetlands Protection Act M.G.L. c. 131, §40

Provided by MassDEP:
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## C. Other Applicable Standards and Requirements (cont'd)

3.  Separate MESA review completed.  
Include copy of NHESP "no Take" determination or valid Conservation & Management Permit with approved plan.

2. For coastal projects only, is any portion of the proposed project located below the mean high water line or in a fish run?

a.  Not applicable – project is in inland resource area only

b.  Yes  No If yes, include proof of mailing or hand delivery of NOI to either:

South Shore - Cohasset to Rhode Island, and the Cape & Islands:

North Shore - Hull to New Hampshire:

Division of Marine Fisheries -  
Southeast Marine Fisheries Station  
Attn: Environmental Reviewer  
1213 Purchase Street – 3rd Floor  
New Bedford, MA 02740-6694

Division of Marine Fisheries -  
North Shore Office  
Attn: Environmental Reviewer  
30 Emerson Avenue  
Gloucester, MA 01930

Also if yes, the project may require a Chapter 91 license. For coastal towns in the Northeast Region, please contact MassDEP's Boston Office. For coastal towns in the Southeast Region, please contact MassDEP's Southeast Regional Office.

3. Is any portion of the proposed project within an Area of Critical Environmental Concern (ACEC)?

a.  Yes  No If yes, provide name of ACEC (see instructions to WPA Form 3 or MassDEP Website for ACEC locations). **Note:** electronic filers click on Website.

b. ACEC

4. Is any portion of the proposed project within an area designated as an Outstanding Resource Water (ORW) as designated in the Massachusetts Surface Water Quality Standards, 314 CMR 4.00?

a.  Yes  No

5. Is any portion of the site subject to a Wetlands Restriction Order under the Inland Wetlands Restriction Act (M.G.L. c. 131, § 40A) or the Coastal Wetlands Restriction Act (M.G.L. c. 130, § 105)?

a.  Yes  No

6. Is this project subject to provisions of the MassDEP Stormwater Management Standards?

a.  Yes. Attach a copy of the Stormwater Report as required by the Stormwater Management Standards per 310 CMR 10.05(6)(k)-(q) and check if:

1.  Applying for Low Impact Development (LID) site design credits (as described in Stormwater Management Handbook Vol. 2, Chapter 3)

2.  A portion of the site constitutes redevelopment

3.  Proprietary BMPs are included in the Stormwater Management System.

b.  No. Check why the project is exempt:

1.  Single-family house

**Online Users:**  
Include your document transaction number (provided on your receipt page) with all supplementary information you submit to the Department.



# WPA Form 3 – Notice of Intent

Massachusetts Wetlands Protection Act M.G.L. c. 131, §40

Provided by MassDEP:

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Acton

City/Town

## C. Other Applicable Standards and Requirements (cont'd)

- 2.  Emergency road repair
- 3.  Small Residential Subdivision (less than or equal to 4 single-family houses or less than or equal to 4 units in multi-family housing project) with no discharge to Critical Areas.

## D. Additional Information

Applicants must include the following with this Notice of Intent (NOI). See instructions for details.

**Online Users:** Attach the document transaction number (provided on your receipt page) for any of the following information you submit to the Department.

- 1.  USGS or other map of the area (along with a narrative description, if necessary) containing sufficient information for the Conservation Commission and the Department to locate the site. (Electronic filers may omit this item.)
- 2.  Plans identifying the location of proposed activities (including activities proposed to serve as a Bordering Vegetated Wetland [BVW] replication area or other mitigating measure) relative to the boundaries of each affected resource area.
- 3.  Identify the method for BVW and other resource area boundary delineations (MassDEP BVW Field Data Form(s), Determination of Applicability, Order of Resource Area Delineation, etc.), and attach documentation of the methodology.
- 4.  List the titles and dates for all plans and other materials submitted with this NOI.

Sewage Disposal System Design Plan, Lot 3 Hayward Farm, #8 Hutchinson Way, Acton, MA

a. Plan Title

FORESITE Engineering

b. Prepared By

March 9, 2015

d. Final Revision Date

Scott Hayes, PE

c. Signed and Stamped by

1"=20'

e. Scale

f. Additional Plan or Document Title

g. Date

- 5.  If there is more than one property owner, please attach a list of these property owners not listed on this form.
- 6.  Attach proof of mailing for Natural Heritage and Endangered Species Program, if needed.
- 7.  Attach proof of mailing for Massachusetts Division of Marine Fisheries, if needed.
- 8.  Attach NOI Wetland Fee Transmittal Form
- 9.  Attach Stormwater Report, if needed.



**Massachusetts Department of Environmental Protection**  
 Bureau of Resource Protection - Wetlands  
**WPA Form 3 – Notice of Intent**  
 Massachusetts Wetlands Protection Act M.G.L. c. 131, §40

Provided by MassDEP:  
 \_\_\_\_\_  
 MassDEP File Number  
 \_\_\_\_\_  
 Document Transaction Number  
**ACTON**  
 \_\_\_\_\_  
 City/Town

**E. Fees**

1.  Fee Exempt: No filing fee shall be assessed for projects of any city, town, county, or district of the Commonwealth, federally recognized Indian tribe housing authority, municipal housing authority, or the Massachusetts Bay Transportation Authority.

Applicants must submit the following information (in addition to pages 1 and 2 of the NOI Wetland Fee Transmittal Form) to confirm fee payment:

2. Municipal Check Number	<u>7205</u>	3. Check date	<u>1/7/15</u>
4. State Check Number	<u>7204</u>	5. Check date	<u>1/7/15</u>
Acton Management, Inc.			
6. Payor name on check: First Name		7. Payor name on check: Last Name	

**F. Signatures and Submittal Requirements**

I hereby certify under the penalties of perjury that the foregoing Notice of Intent and accompanying plans, documents, and supporting data are true and complete to the best of my knowledge. I understand that the Conservation Commission will place notification of this Notice in a local newspaper at the expense of the applicant in accordance with the wetlands regulations, 310 CMR 10.05(5)(a).

I further certify under penalties of perjury that all abutters were notified of this application, pursuant to the requirements of M.G.L. c. 131, § 40. Notice must be made by Certificate of Mailing or in writing by hand delivery or certified mail (return receipt requested) to all abutters within 100 feet of the property line of the project location.

1. Signature of Applicant	<u><i>Stephen P. Stenberg</i></u>	2. Date	<u>1/7/15</u>
3. Signature of Property Owner (if different)	<u><i>[Signature]</i></u>	4. Date	<u>3/20/15</u>
5. Signature of Representative (if any)	<u><i>[Signature]</i></u>	6. Date	<u>3/20/15</u>

**For Conservation Commission:**

Two copies of the completed Notice of Intent (Form 3), including supporting plans and documents, two copies of the NOI Wetland Fee Transmittal Form, and the city/town fee payment, to the Conservation Commission by certified mail or hand delivery.

**For MassDEP:**

One copy of the completed Notice of Intent (Form 3), including supporting plans and documents, one copy of the NOI Wetland Fee Transmittal Form, and a copy of the state fee payment to the MassDEP Regional Office (see Instructions) by certified mail or hand delivery.

**Other:**

If the applicant has checked the "yes" box in any part of Section C, Item 3, above, refer to that section and the Instructions for additional submittal requirements.

The original and copies must be sent simultaneously. Failure by the applicant to send copies in a timely manner may result in dismissal of the Notice of Intent.



**Massachusetts Department of Environmental Protection**  
 Bureau of Resource Protection - Wetlands  
**NOI Wetland Fee Transmittal Form**  
 Massachusetts Wetlands Protection Act M.G.L. c. 131, §40

**Important:** When filling out forms on the computer, use only the tab key to move your cursor - do not use the return key.



**A. Applicant Information**

1. Location of Project:

8 Hutchinson Way (Lot 3) Acton  
 a. Street Address b. City/Town

c. Check number d. Fee amount

2. Applicant Mailing Address:

Stephen Steinberg  
 a. First Name b. Last Name

Acton Management, Inc.  
 c. Organization

P.O. Box 2350  
 d. Mailing Address

Acton MA 01720  
 e. City/Town f. State g. Zip Code

(978) 263-2989 x2 (978) 263-0403 actonmgt@verizon.net  
 h. Phone Number i. Fax Number j. Email Address

3. Property Owner (if different):

Dean Charter  
 a. First Name b. Last Name

c. Organization

81 Charter Road  
 d. Mailing Address

Acton MA 01720  
 e. City/Town f. State g. Zip Code

(508) 277-6601  dcharter@acton-ma.gov  
 h. Phone Number i. Fax Number j. Email Address

**B. Fees**

Fee should be calculated using the following process & worksheet. **Please see Instructions before filling out worksheet.**

**Step 1/Type of Activity:** Describe each type of activity that will occur in wetland resource area and buffer zone.

**Step 2/Number of Activities:** Identify the number of each type of activity.

**Step 3/Individual Activity Fee:** Identify each activity fee from the six project categories listed in the instructions.

**Step 4/Subtotal Activity Fee:** Multiply the number of activities (identified in Step 2) times the fee per category (identified in Step 3) to reach a subtotal fee amount. Note: If any of these activities are in a Riverfront Area in addition to another Resource Area or the Buffer Zone, the fee per activity should be multiplied by 1.5 and then added to the subtotal amount.

**Step 5/Total Project Fee:** Determine the total project fee by adding the subtotal amounts from Step 4.

**Step 6/Fee Payments:** To calculate the state share of the fee, divide the total fee in half and subtract \$12.50. To calculate the city/town share of the fee, divide the total fee in half and add \$12.50.



**Massachusetts Department of Environmental Protection**  
 Bureau of Resource Protection - Wetlands  
**NOI Wetland Fee Transmittal Form**  
 Massachusetts Wetlands Protection Act M.G.L. c. 131, §40

**B. Fees** (continued)

Step 1/Type of Activity	Step 2/Number of Activities	Step 3/Individual Activity Fee	Step 4/Subtotal Activity Fee
1.a. Construction of single family house	1	\$500.00	\$500.00
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
<b>Step 5/Total Project Fee:</b>			\$500.00
<b>Step 6/Fee Payments:</b>			
Total Project Fee:			\$500.00
			a. Total Fee from Step 5
State share of filing Fee:			\$237.50
			b. 1/2 Total Fee <b>less</b> \$12.50
City/Town share of filing Fee:			\$267.50
			c. 1/2 Total Fee <b>plus</b> \$12.50

**C. Submittal Requirements**

a.) Complete pages 1 and 2 and send with a check or money order for the state share of the fee, payable to the Commonwealth of Massachusetts.

Department of Environmental Protection  
 Box 4062  
 Boston, MA 02211

b.) **To the Conservation Commission:** Send the Notice of Intent or Abbreviated Notice of Intent; a **copy** of this form; and the city/town fee payment.

**To MassDEP Regional Office** (see Instructions): Send a copy of the Notice of Intent or Abbreviated Notice of Intent; a **copy** of this form; and a **copy** of the state fee payment. (E-filers of Notices of Intent may submit these electronically.)

HOLD TO LIGHT TO VIEW WATERMARK IN PAPER HEAT SENSITIVE RED IMAGE DISAPPEARS WITH HEAT DETECTION CIRCLE REVEALS A LOCK WHEN TESTED

7205

**ACTON MANAGEMENT, INC.**

69 GREAT ROAD  
P.O. BOX 2350  
ACTON, MASSACHUSETTS 01720

**Citizens Bank®**

EZShield™ Check Fraud  
Protection for Business

5-7017-2110

1/7/2015

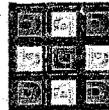
Security features. Details on back.

PAY TO THE  
ORDER OF Town of Acton

\$ \*\*352.50

Three Hundred Fifty-Two and 50/100\*\*\*\*\* DOLLARS

Town of Acton



*[Signature]*  
AUTHORIZED SIGNATURE

MEMO

Lot 3 - notice of intent - wetland permit

⑈007205⑈ ⑆211070175⑆ 1200685730⑈

HOLD TO LIGHT TO VIEW WATERMARK IN PAPER HEAT SENSITIVE RED IMAGE DISAPPEARS WITH HEAT DETECTION CIRCLE REVEALS A LOCK WHEN TESTED

7204

**ACTON MANAGEMENT, INC.**

69 GREAT ROAD  
P.O. BOX 2350  
ACTON, MASSACHUSETTS 01720

**Citizens Bank®**

EZShield™ Check Fraud  
Protection for Business

5-7017-2110

1/7/2015

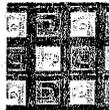
Security features. Details on back.

PAY TO THE  
ORDER OF Commonwealth of MA

\$ \*\*237.50

Two Hundred Thirty-Seven and 50/100\*\*\*\*\* DOLLARS

Commonwealth of Massachusetts



*[Signature]*  
AUTHORIZED SIGNATURE

MEMO

Lot 3 - notice of intent - wetland permit

⑈007204⑈ ⑆211070175⑆ 1200685730⑈



Town of Acton  
 472 Main Street  
 Acton, MA 01720  
 Telephone (978) 929-6621  
 Fax (978) 929-6340

Brian McMullen

Locus: 121 HAYWARD RD  
 Parcel ID: E2-261-2, E2-261-3, E2-262, E2-272, E2-273

Parcel ID	Location	Owner	Co-Owner	Mailing Address	City
E2-237-1	1 KENNEDY LANE	MAGASANIK JOANN L		1 KENNEDY LANE	ACTON, MA 01720
E2-237-2	3 KENNEDY LANE	LOWE CHARLES E + AMY M		3 KENNEDY LANE	ACTON, MA 01720
E2-237-3	5 KENNEDY LANE	GELLER MARNE		5 KENNEDY LANE	ACTON, MA 01720
E2-237-4	7 KENNEDY LANE	LONGWELL CATHERINE	HASHEMI TANAZ	7 KENNEDY LANE	ACTON, MA 01720
E2-237-5	9 KENNEDY LANE	LI TAO	YANG HUANGUANG	9 KENNEDY LANE	ACTON, MA 01720
E2-266	115 HAYWARD RD	EICHMAN JOHN		115 HAYWARD RD	ACTON, MA 01720
E2-285	132 HAYWARD RD	MURPHY ARTHUR W	MARY LYNN	132 HAYWARD RD	ACTON, MA 01720
E2-256	122 HAYWARD RD	SMITH IRA D + BARBARA K		122 HAYWARD RD	ACTON, MA 01720
E2-261-1	68 CHARTER RD	BENNETT EDWARD MET UX TR	YANG HUANGUANG	68 CHARTER RD	ACTON, MA 01720
E2-266	135 HAYWARD RD	LI TAO		135 HAYWARD RD	ACTON, MA 01720
E2-267	115 HAYWARD RD	LARSON GEOFFREY G		115 HAYWARD RD	ACTON, MA 01720
E2-287	111 HAYWARD RD	BAKERMAN THOMAS J TR	BAKERMAN JUDITH TR	111 HAYWARD RD	ACTON, MA 01720
E2-287	114 HAYWARD RD	BAKERMAN THOMAS J TR		114 HAYWARD RD	ACTON, MA 01720

The owner of sharing a common boundary or corner with the site of the proposed activity (100 feet) in any direction, including land located directly across a street, way, creek, river, stream, brook or canal. The above are as they appear on the most recent applicable taxes.

Marty Abbott  
 Action Assessors Office

2-Apr-14

**NOTIFICATION TO ABUTTERS  
UNDER THE MASSACHUSETTS WETLANDS PROTECTION ACT  
AND THE TOWN OF ACTON WETLANDS BYLAW**

In accordance with the second paragraph of Massachusetts General Laws Chapter 131, Section 40 and the Town of Acton Bylaws, you are hereby notified of the following:

The Applicant: Acton Management, Inc.

Address: P.O. Box 2350, Acton, MA 01720 Phone: (978) 263-2989 x2

has filed a Notice of Intent with the Acton Conservation Commission seeking to alter, fill or dredge an area subject to protection under the Wetlands Protection Act and Town of Acton Wetland Bylaw.

Applicant's Representative: Scott Hayes, PE – FORESITE Engineering

Address: 16 Gleasondale Road, Suite 1-1, Stow, MA 01775 Phone: (978) 461-2350

The address of the property where the activity is proposed #8 Hutchinson Way (Lot 3 Hayward Farm Subdivision at 121 Hayward Road)

Town Atlas Plate/Map E-2 Parcel/Lot 261-2, 261-3, 262, 272 & 273

Project Description: Construction of a single family dwelling and associated utilities and grading within 100-ft of an area subject to protection under the Wetlands Protection Act & Acton Wetland Bylaw.

Copies of the Notice of Intent may be examined at the Conservation Office, 33 Nagog Park, 2<sup>nd</sup> Floor, Acton between the hours of 9:00 A.M. and 4:30 P.M. Monday through Friday. For more information please call the Conservation Office at 978-929-6634.

A Public Hearing will be held at the Acton Town Hall, 472 Main Street, on Wednesday,  
April 1, 2015 at 7:55 P.M.  
(date)

The notice of the public hearing will be published at least five (5) days in advance in the Acton edition of the *Beacon* newspaper or *Metrowest Daily News*.

NOTE: You may also contact your local conservation commission or the nearest Department of Environmental Protection Regional Office\* for the information about this application or, the Wetlands Protection Act. Acton is in the Central Region. To contact DEP, call:

**\*DEP Central Region: 508-792-7650  
627 Main Street, Worcester MA 01608**

**AFFIDAVIT OF SERVICE**

**Under the Massachusetts Wetlands Protection Act**

I, SCOTT HAYES, hereby certify under the pains and penalties of perjury that on March 20, 2015, I gave notification to abutters in compliance with the second paragraph of the Massachusetts General Laws, Chapter 131, Section 40 and the DEP Guide to Abutter Notification in connection with the following matter:

A NOTICE OF INTENT application was filed under the Massachusetts Wetlands Protection Act and Acton Wetland Bylaw by ACTON MANAGEMENT, INC. with the Acton Conservation Commission on March 20, 2015 for property located at 8 HUTCHINSON WAY (LOT 3 HAYWARD FARM), ACTON (a portion of ASSESSORS MAP E-2 PARCELS 261-2, 261-3, 262, 272 & 273)

The form of notification and the list of abutters to whom it was given and their addresses are attached to this Affidavit of Service.



\_\_\_\_\_  
Signature

3/20/15

\_\_\_\_\_  
Date

**BOTH WAYS**

Massachusetts Department of Environmental Protection  
Bureau of Resource Protection - Wetlands

Provided by MassDEP:

**085-1150**

MassDEP File Number



**WPA Form 4B – Order of Resource Area Delineation**

eDEP Transaction Number

Acton

City/Town

Massachusetts Wetlands Protection Act M.G.L. c. 131, §40

**A. General Information**

From: Acton  
1. Conservation Commission



2014 00056713

Bk: 63567 Pg: 113 Doc: ORD

Page: 1 of 4 05/02/2014 11:24 AM

2. This Issuance is for (check one):

- a.  Order of Resource Area Delineation
- b.  Amended Order of Resource Area Delineation

3. Applicant:

Stephen Steinberg  
 a. First Name b. Last Name  
Acton Management Inc.  
 c. Organization  
P.O. Box 2350  
 d. Mailing Address  
Acton MA 01720  
 e. City/Town f. State g. Zip Code

4. Property Owner (if different from applicant): \* Deed References below

Dean Charter *Elizabeth J Charter*  
 a. First Name b. Last Name  
 c. Organization  
81 Charter Road  
 d. Mailing Address  
Acton MA 01720  
 e. City/Town f. State g. Zip Code

5. Project Location:

121 Hayward Road Acton 01720  
 a. Street Address b. City/Town c. Zip Code  
E-2 261-2, 261-3, 262, 272, 273  
 d. Assessors Map/Plat Number e. Parcel/Lot Number  
 Latitude and Longitude (in degrees, minutes, seconds):  
 \_\_\_\_\_ d m s \_\_\_\_\_ d m s  
 f. Latitude g. Longitude

6. Dates: April 2, 2014 April 16, 2014  
 a. Date ANRAD filed b. Date Public Hearing Closed c. Date of Issuance

7. Title and Date (or Revised Date if applicable) of Final Plans and Other Documents:

Resource Area Location Plan, 121 Hayward Road, Acton, MA March 27, 2014  
 a. Title b. Date  
 c. Title d. Date

- \* Recorded Land - Book 52019, Page 285 ✓
- Recorded Land - Book 52019, Page 287 ✓
- Land Court - Document 01488214 on Cert. of Title 243257 *Lot C*
- Land Court - Document 01488218 on Cert. of Title 243258 *Lot 10*
- Land Court - Document 01488219 on Cert. of Title 243259 *Lot 11*

MARGINAL REFERENCE REQUESTED  
BOOK 52019 PAGE 287

MARGINAL REFERENCE REQUESTED  
BOOK 52019 PAGE 285



Massachusetts Department of Environmental Protection  
Bureau of Resource Protection - Wetlands

**WPA Form 4B – Order of Resource Area  
Delineation**

Massachusetts Wetlands Protection Act M.G.L. c. 131, §40

Provided by MassDEP:

**085-1150**

MassDEP File Number

eDEP Transaction Number

Acton

City/Town

**B. Order of Delineation**

1. The Conservation Commission has determined the following (check whichever is applicable):

a.  **Accurate:** The boundaries described on the referenced plan(s) above and in the Abbreviated Notice of Resource Area Delineation are accurately drawn for the following resource area(s):

1.  Bordering Vegetated Wetlands

2.  Other resource area(s), specifically:

a. Intermittent stream, w/poorly defined bank on the site.

b.  **Modified:** The boundaries described on the plan(s) referenced above, as modified by the Conservation Commission from the plans contained in the Abbreviated Notice of Resource Area Delineation, are accurately drawn from the following resource area(s):

1.  Bordering Vegetated Wetlands

2.  Other resource area(s), specifically:

a.

c.  **Inaccurate:** The boundaries described on the referenced plan(s) and in the Abbreviated Notice of Resource Area Delineation were found to be inaccurate and cannot be confirmed for the following resource area(s):

1.  Bordering Vegetated Wetlands

2.  Other resource area(s), specifically:

3.  The boundaries were determined to be inaccurate because:



**Massachusetts Department of Environmental Protection**  
Bureau of Resource Protection - Wetlands

## **WPA Form 4B – Order of Resource Area Delineation**

Massachusetts Wetlands Protection Act M.G.L. c. 131, §40

Provided by MassDEP:

**085-1150**

MassDEP File Number

eDEP Transaction Number

Acton

City/Town

### **C. Findings**

This Order of Resource Area Delineation determines that the boundaries of those resource areas noted above, have been delineated and approved by the Commission and are binding as to all decisions rendered pursuant to the Massachusetts Wetlands Protection Act (M.G.L. c.131, § 40) and its regulations (310 CMR 10.00). This Order does not, however, determine the boundaries of any resource area or Buffer Zone to any resource area not specifically noted above, regardless of whether such boundaries are contained on the plans attached to this Order or to the Abbreviated Notice of Resource Area Delineation.

This Order must be signed by a majority of the Conservation Commission. The Order must be sent by certified mail (return receipt requested) or hand delivered to the applicant. A copy also must be mailed or hand delivered at the same time to the appropriate DEP Regional Office (see <http://www.mass.gov/dep/about/region/findyour.htm>).

### **D. Appeals**

The applicant, the owner, any person aggrieved by this Order, any owner of land abutting the land subject to this Order, or any ten residents of the city or town in which such land is located, are hereby notified of their right to request the appropriate DEP Regional Office to issue a Superseding Order of Resource Area Delineation. When requested to issue a Superseding Order of Resource Area Delineation, the Department's review is limited to the objections to the resource area delineation(s) stated in the appeal request. The request must be made by certified mail or hand delivery to the Department, with the appropriate filing fee and a completed Request for Departmental Action Fee Transmittal Form, as provided in 310 CMR 10.03(7) within ten business days from the date of issuance of this Order. A copy of the request shall at the same time be sent by certified mail or hand delivery to the Conservation Commission and to the applicant, if he/she is not the appellant.

Any appellants seeking to appeal the Department's Superseding Order of Resource Area Delineation will be required to demonstrate prior participation in the review of this project. Previous participation in the permit proceeding means the submission of written information to the Conservation Commission prior to the close of the public hearing, requesting a Superseding Order or Determination, or providing written information to the Department prior to issuance of a Superseding Order or Determination.

The request shall state clearly and concisely the objections to the Order which is being appealed and how the Order does not contribute to the protection of the interests identified in the Massachusetts Wetlands Protection Act, (M.G.L. c. 131, § 40) and is inconsistent with the wetlands regulations (310 CMR 10.00). To the extent that the Order is based on a municipal bylaw or ordinance, and not on the Massachusetts Wetlands Protection Act or regulations, the Department of Environmental Protection has no appellate jurisdiction.



**Massachusetts Department of Environmental Protection**  
**Bureau of Resource Protection - Wetlands**  
**WPA Form 4B – Order of Resource Area**  
**Delineation**

Provided by MassDEP:

**085-1150**

MassDEP File Number

eDEP Transaction Number

Acton

City/Town

Massachusetts Wetlands Protection Act M.G.L. c. 131, §40

**E. Signatures**

4/16/2014  
Date of Issuance

Please indicate the number of members who will sign this form.

6  
1. Number of Signers

[Signature]  
Signature of Conservation Commission Member  
[Signature]  
Signature of Conservation Commission Member  
[Signature]  
Signature of Conservation Commission Member  
[Signature]  
Signature of Conservation Commission Member

[Signature]  
Signature of Conservation Commission Member  
[Signature]  
Signature of Conservation Commission Member  
[Signature]  
Signature of Conservation Commission Member

**This Order is valid for three years from the date of issuance.**

If this Order constitutes an Amended Order of Resource Area Delineation, this Order does not extend the issuance date of the original Final Order, which expires on \_\_\_\_\_ unless extended in writing by the issuing authority.

This Order is issued to the applicant and the property owner (if different) as follows:

2.  By hand delivery on \_\_\_\_\_

3.  By certified mail, return receipt requested on \_\_\_\_\_

a. Date

a. Date

4/17/2014

**BOTH WAYS**

Doc 01670176

Southern Middlesex Land Court  
Registry District

RECEIVED FOR REGISTRATION

On: May 02, 2014 at 11:02A

Document Fee 75.00

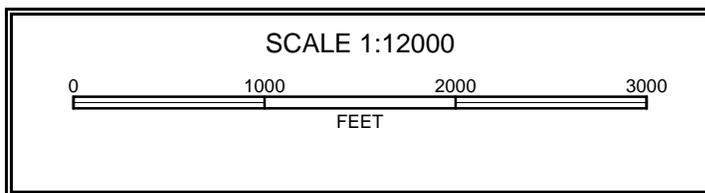
Receipt Total: #225.00

NOTED ON: CERT 243257 BK 01363 PG 48

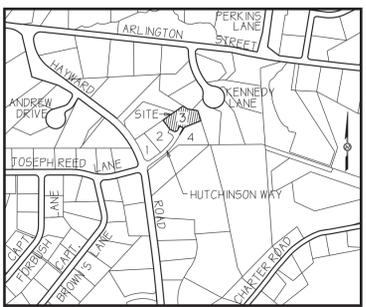
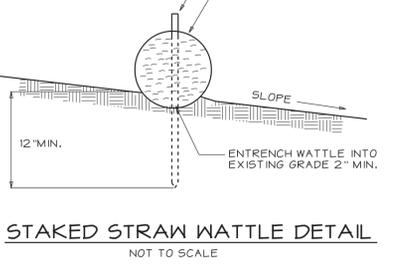
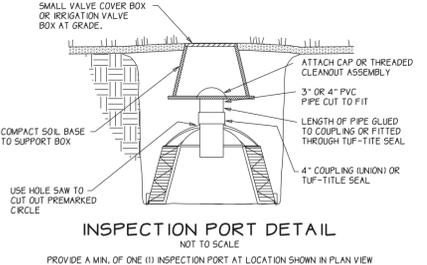
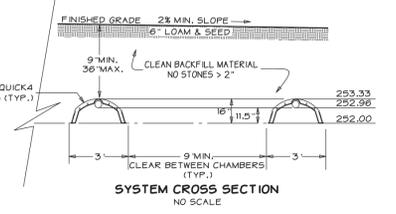
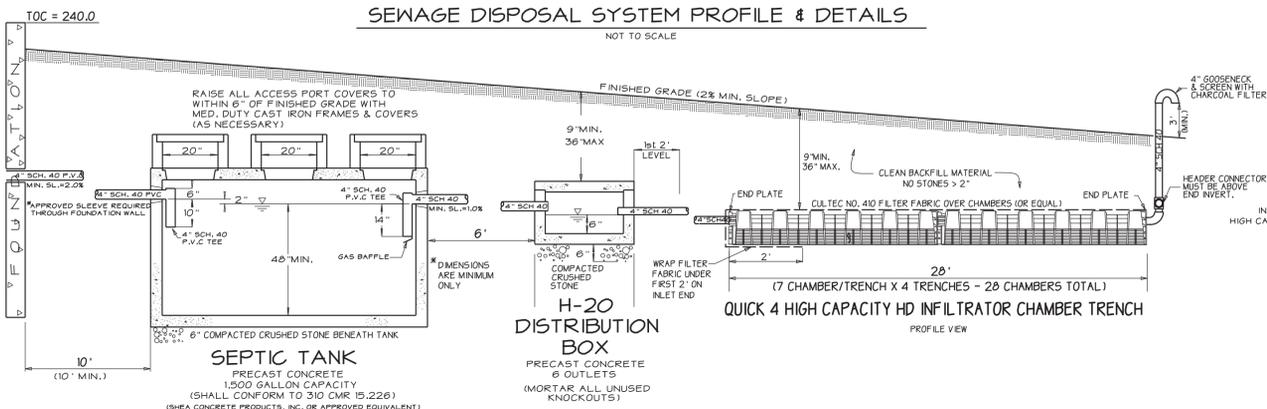
ALSO NOTED ON: CERT 243258 BK 1363 PG 49

CERT 243259 BK 1363 PG 50

WILSON & ORTEGA, PC  
NAME 978 204 4770  
STREET ADDRESS  
CITY OR TOWN  
ZIP



**SEWAGE DISPOSAL SYSTEM PROFILE & DETAILS**



**DESIGN CALCULATIONS**

- SEWAGE DISPOSAL SYSTEM IS NOT DESIGNED FOR USE WITH A GARBAGE GRINDER.
- SEPTIC TANK: A VOLUME EQUAL TO TWICE THE DESIGN FLOW OR A MINIMUM VOLUME OF 1,500 GALLONS IS REQUIRED. A 1,500 GALLON TANK IS REQUIRED.
- DESIGN CRITERIA:
  - NUMBER OF BEDROOMS: 4
  - DESIGN FLOW: 440
  - SOIL TEXTURAL CLASS: 1
  - PERCOLATION RATE: 9 MP1
  - APPLICATION RATE: 0.60 GPD/SF
  - DESIGN GROUNDWATER ELEVATION: 230.0
  - GROUNDWATER OFFSET: 4-FT
- LEACHING FACILITY SIZING: AREA REQUIRED IS EQUAL TO THE DESIGN FLOW DIVIDED BY THE APPLICATION RATE:
 
$$\frac{440 \text{ GPD}}{0.60 \text{ GPD/SF}} = 734 \text{ S.F. (800 S.F. MIN.)}$$

- UTILIZE QUICK4 HIGH CAPACITY HD INFILTRATOR SYSTEMS INC. CHAMBERS IN TRENCH CONFIGURATION
- LOADING RATE 7.93 SF/LF (TABLE 2)  
MIN. LINEAR FOOTAGE REQ'D = 800 / 7.93 = 139 L.F.
- PROVIDE 4 ROWS OF 7 QUICK4 HIGH CAP. HD CHAMBERS PER ROW IN TRENCH CONFIGURATION
- TRENCH SPACING:  
12' ON CENTER; 9' MIN. CLEAR BETWEEN TRENCHES
5. HYDRAULIC LOADING CAPACITY:  
7.93 SF/LF X 28 LF X 4 ROWS X 0.60 GPD/SF = 461 GPD EFF. LEACHING AREA = 7.93 SF/LF X 28 L.F. X 4 = 888 S.F.
6. CONVENTIONAL TITLE 5 SYSTEM DESIGN:  
(4) 3' W X 2' D X 29' L CRUSHED STONE TRENCHES  
9' CLEAR SPACING; PROVIDE 812 S.F. LEACHING AREA.

**ELEVATION SCHEDULE**

ITEM	ELEVATION
TOP OF FOUNDATION	240.00
SYSTEM ELEVATIONS	
INV. AT FOUNDATION	236.00
INV. AT SEPTIC TANK INLET	235.75
INV. AT SEPTIC TANK OUTLET	235.50
INV. AT D-BOX INLET	235.23
INV. AT D-BOX OUTLET	235.06
INV. AT CHAMBER INLET	234.96
BOTTOM OF CHAMBER	234.00
TOP OF CHAMBER	235.33

**PERCOLATION TESTS**

SOIL EVALUATOR: SCOTT HAYES, P.E. - FORESITE ENG.  
BOH AGENT: EVAN CARLONI, ACTON HEALTH DEPT.

	PT-C	PT-D
DATE	6/18/14	6/18/14
DEPTH	60"	44"
RATE (MP1)	4 MP1	9 MP1

**LEGEND**

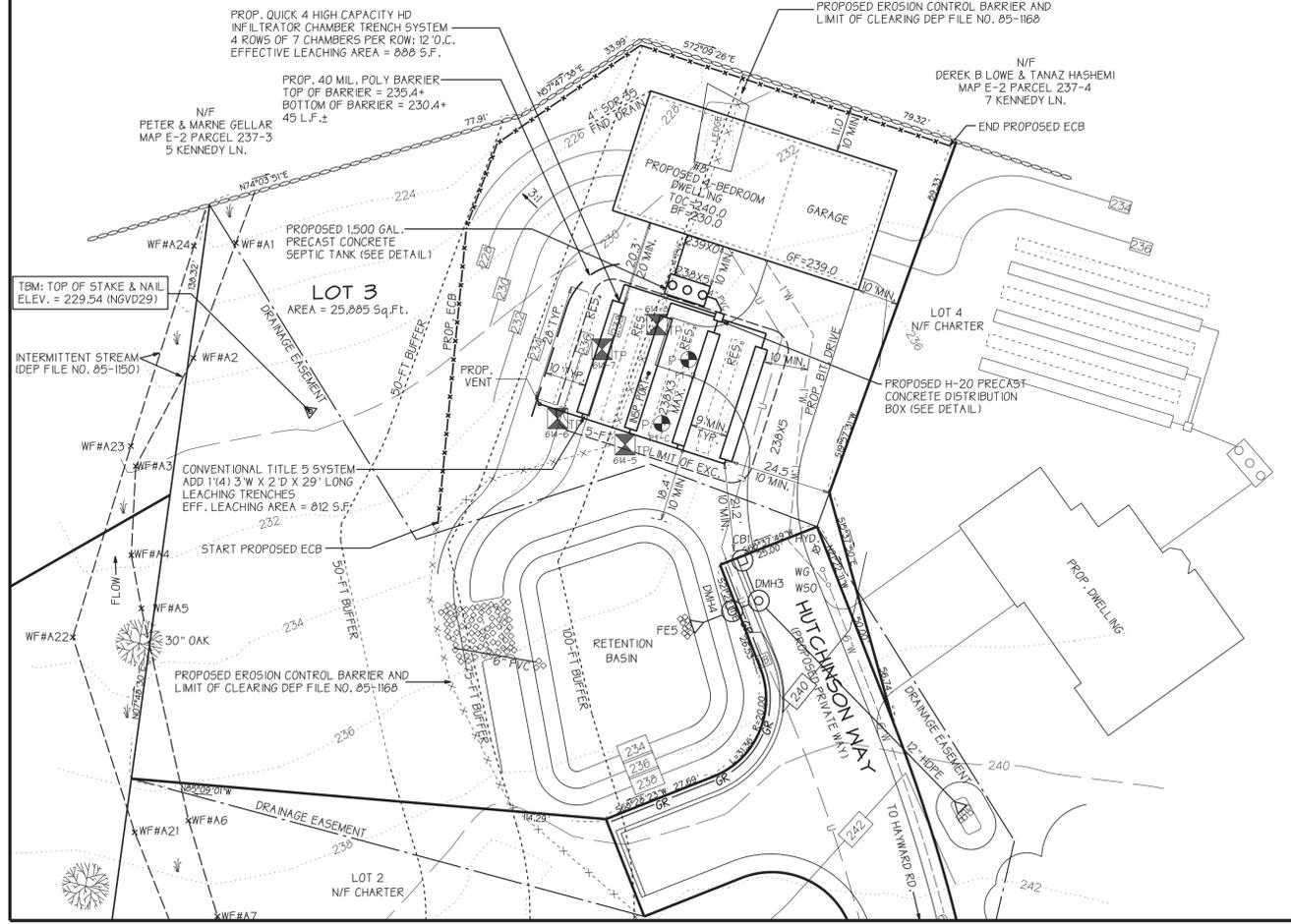
- S.T. PROPOSED 1,500 GAL. PRECAST CONCRETE SEPTIC TANK
- D-BOX PROPOSED 6-OUTLET PRECAST CONCRETE DISTRIBUTION BOX
- TP DEEP TEST HOLE
- P PERCOLATION TEST
- 255X0 PROPOSED SPOT ELEVATION (TYP.)
- 250- EXISTING 10-FT CONTOUR (TYP.)
- 252- EXISTING 2-FT CONTOUR (TYP.)
- 252- PROPOSED CONTOUR (TYP.)
- ECB PROPOSED STAKED STRAW WATTLE EROSION CONTROL BARRIER - LIMIT OF WORK (SEE DETAIL)

**GENERAL NOTES**

- THIS PLAN IS FOR THE CONSTRUCTION OF THE PROPOSED SEWAGE DISPOSAL SYSTEM ONLY. OTHER LOCAL REGULATIONS MAY BE APPLICABLE TO THE PROJECT (I.E. ZONING, WETLANDS, ETC.).
- CONTRACTOR SHALL REPORT ANY DISCREPANCIES BETWEEN OBSERVED FIELD CONDITIONS AND THIS DESIGN PLAN PRIOR TO INITIATING CONSTRUCTION.
- PROPERTY BOUNDARIES SHOWN ARE A PROPOSED SUBDIVISION OF LAND LOCATED AT 121 HAYWARD ROAD ENTITLED "HAYWARD FARM" DEFINITIVE SUBDIVISION RESIDENTIAL COMPOUND.
- THE SYSTEM IS NOT DESIGNED FOR USE WITH A GARBAGE GRINDER.
- THE SEPTIC TANK SHALL BE PUMPED WHEN THE SLUDGE DEPTH EXCEEDS 1/8 OF THE LIQUID CAPACITY OF THE SEPTIC TANK (ABOUT ONCE EVERY 2 YEARS) OR AS REQUIRED BY THE LOCAL BOARD OF HEALTH.
- ANY PROPOSED WORK WITHIN 100 FEET OF A BORDERING VEGETATED WETLAND OR OTHER PROTECTED RESOURCE AREA IS UNDER THE JURISDICTION OF THE WETLANDS PROTECTION ACT AND THE LOCAL CONSERVATION COMMISSION.
- ALL KNOWN DRINKING WATER WELLS WITHIN 200 FEET OF THE PROPOSED SEWAGE DISPOSAL SYSTEM ARE SHOWN OR INDICATED.
- SITE IS WITHIN TOWN OF ACTON GROUNDWATER PROTECTION DISTRICT ZONE 4.
- SITE IS NOT WITHIN A DEP APPROVED INTERM WELL-HEAD PROTECTION AREA (WPA) OR DEP APPROVED ZONE II.

**CONSTRUCTION NOTES**

- CONTRACTOR SHALL CONTACT 'DIGSAFE' AT 1-800-344-7233 AT LEAST 72 HOURS BEFORE EXCAVATING ON PUBLIC OR PRIVATE PROPERTY.
- CONSTRUCTION MATERIALS AND CONSTRUCTION METHODOLOGY SHALL CONFORM TO THIS PLAN, TITLE 5, AND THE REQUIREMENTS OF THE BOARD OF HEALTH.
- ANY DEVIATION IN CONSTRUCTION FROM THIS PLAN SHALL VOID ANY CERTIFICATION MADE RELATIVE TO THE SYSTEM UNLESS APPROVED IN WRITING BY THE LOCAL APPROVING AUTHORITY AND FORESITE ENGINEERING ASSOCIATES, INC.
- ALL TANKS INCLUDING SEPTIC TANKS, DISTRIBUTION BOXES, DOSING CHAMBERS AND GREASE TRAPS, SHALL EITHER BE WATER TIGHT BY MANUFACTURER'S SPECIFICATIONS AND WARRANTY OR MADE WATER TIGHT WITH ASPHALT OR POLYMER SEALER.
- ALL PRECAST CONCRETE TANKS AND DISTRIBUTION BOXES SHALL BE SET ON A MINIMUM OF SIX INCHES OF WELL COMPACTED CRUSHED STONE AND SHALL BE MADE WATER TIGHT.
- DISTRIBUTION BOX OUTLET PIPES SHALL BE LAID LEVEL FOR THE FIRST TWO FEET OUT OF THE BOX.
- DISTRIBUTION BOX SHALL BE SET ON A FIRM BASE OF EITHER SIX INCHES OF COMPACTED CRUSHED STONE OR A SIX-INCH THICK CONCRETE PAD WITH AN AREA 1.5 TIMES THE BOTTOM AREA OF THE DISTRIBUTION BOX.
- AN INLET TEE SHALL BE INSTALLED IN THE DISTRIBUTION BOX WHEN THE SYSTEM IS A PUMP SYSTEM OR WHEN THE SLOPE OF THE INLET PIPE EXCEEDS 8%.
- SYSTEM SHALL BE VENTED THROUGH THE BUILDING PLUMBING OR AS SHOWN ON THE SYSTEM PROFILE.
- ALL SURFACES SHALL BE SCARIFIED PRIOR TO THE PLACEMENT OF FILL.
- ALL UNSUITABLE MATERIAL ENCOUNTERED IN THE EXCAVATION SHALL BE REMOVED.
- ALL CRUSHED STONE USED IN THE CONSTRUCTION OF THE SEWAGE DISPOSAL SYSTEM SHALL BE THE SIZE SPECIFIED, DURABLE AND DOUBLE WASHED.
- WHEN GRAVEL FILL IS REQUIRED, ALL ORGANIC MATERIAL WITHIN 5 FEET OF THE PROPOSED LEACHING FACILITY SHALL BE REMOVED AND REPLACED WITH WELL COMPACTED GRANULAR FILL MEETING THE REQUIREMENTS OF 310 CMR 15.255.
- ALL BACKFILL AND BREAKOUT FILL REQUIRED SHALL BE CLEAN EARTHEN MATERIAL FREE OF CONSTRUCTION DEBRIS, STUMPS, BOULDERS AND FROZEN EARTH. FILL MATERIAL SHALL BE PLACED IN A MANNER THAT WILL ENSURE RUNOFF AND PREVENT EROSION.
- SEWAGE DISPOSAL SYSTEM CORNERS SHALL BE STAKED AND FLAGGED BY A PROFESSIONAL ENGINEER OR PROFESSIONAL LAND SURVEYOR PRIOR TO THE START OF CONSTRUCTION.
- ALL SYSTEM COMPONENTS SHALL BE MARKED WITH MAGNETIC MARKING TAPE OR OTHER COMPARABLE MEANS IN ORDER TO LOCATE THEM ONCE BURIED.



**DEEP OBSERVATION HOLE LOGS**

TEST HOLE: 014-5  
DATE: 6/18/14  
SURFACE EL.: 234.6  
SOIL EVALUATOR: SCOTT HAYES, P.E.  
B.O.H. AGENT: EVAN CARLONI, R.S.

DEPTH	HORIZON	TEXTURE	COLOR	MOTTLING	REMARKS
0'-8"	A	SL	10YR3/2	NONE	WEAK, FRIABLE
8'-28"	Bw	SL	10YR5/6	NONE	WEAK, MASSIVE
28'-96"	C	LS	2.5Y5/4	>5% # 56"	WEAK TO MOD. FRM. MANY BOULDERS, MANY COBBLES

DEPTH TO:  
BEDROCK: 96"  
STANDING WATER: NONE  
SEEPAGE: NONE  
ESTIMATED SEASONAL HIGH GROUNDWATER: 56" (230.0)

TEST HOLE: 014-6  
DATE: 6/18/14  
SURFACE EL.: 234.0  
SOIL EVALUATOR: SCOTT HAYES, P.E.  
B.O.H. AGENT: EVAN CARLONI, R.S.

DEPTH	HORIZON	TEXTURE	COLOR	MOTTLING	REMARKS
0'-8"	A	SL	10YR3/2	NONE	WEAK, FRIABLE
8'-30"	Bw	SL	10YR5/6	NONE	WEAK, MASSIVE
30'-84"	C	LS	2.5Y5/4	>5% # 52"	WEAK TO MOD. FRM. MANY BOULDERS, MANY COBBLES

DEPTH TO:  
BEDROCK: 84"  
STANDING WATER: NONE  
SEEPAGE: NONE  
ESTIMATED SEASONAL HIGH GROUNDWATER: 52" (229.7)

TEST HOLE: 014-7  
DATE: 6/18/14  
SURFACE EL.: 232.9  
SOIL EVALUATOR: SCOTT HAYES, P.E.  
B.O.H. AGENT: EVAN CARLONI, R.S.

DEPTH	HORIZON	TEXTURE	COLOR	MOTTLING	REMARKS
0'-8"	A	SL	10YR3/2	NONE	WEAK, FRIABLE
8'-30"	Bw	SL	10YR5/6	NONE	WEAK, MASSIVE
30'-84"	C	LS	2.5Y5/4	>5% # 56"	WEAK TO MOD. FRM. MANY BOULDERS, MANY COBBLES

DEPTH TO:  
BEDROCK: 84"  
STANDING WATER: NONE  
SEEPAGE: NONE  
ESTIMATED SEASONAL HIGH GROUNDWATER: 52" (229.3)

TEST HOLE: 014-8  
DATE: 6/18/14  
SURFACE EL.: 233.2  
SOIL EVALUATOR: SCOTT HAYES, P.E.  
B.O.H. AGENT: EVAN CARLONI, R.S.

DEPTH	HORIZON	TEXTURE	COLOR	MOTTLING	REMARKS
0'-8"	A	SL	10YR3/2	NONE	WEAK, FRIABLE
8'-28"	Bw	SL	10YR5/6	NONE	WEAK, MASSIVE
28'-78"	C	LS	2.5Y5/4	>5% # 54"	WEAK TO MOD. FRM. MANY BOULDERS, MANY COBBLES

DEPTH TO:  
BEDROCK: 78"  
STANDING WATER: NONE  
SEEPAGE: NONE  
ESTIMATED SEASONAL HIGH GROUNDWATER: 54" (229.7)



**SEWAGE DISPOSAL SYSTEM DESIGN PLAN**

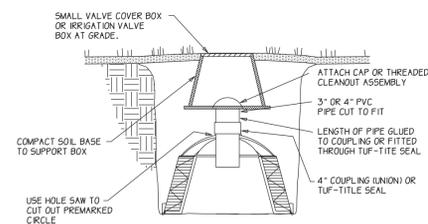
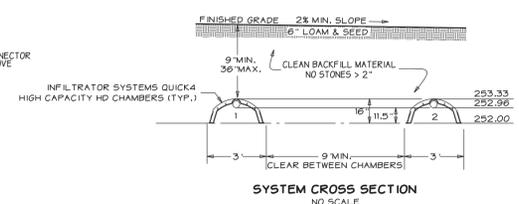
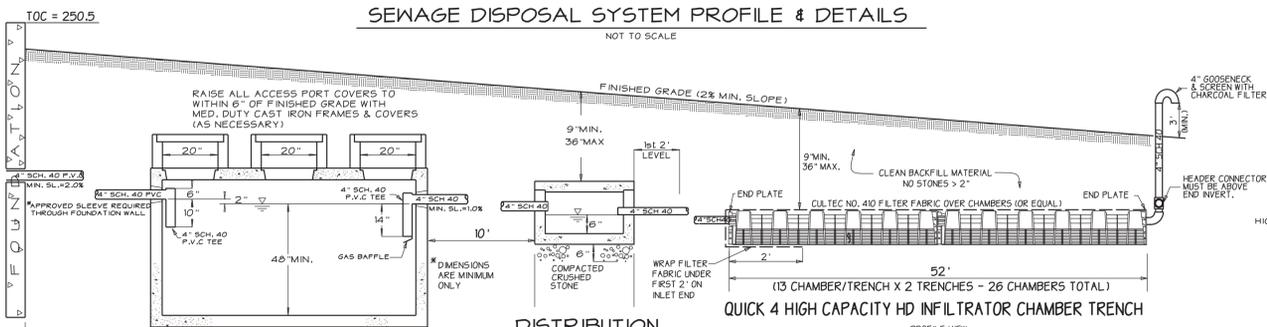
LOCATION: **LOT 3 HAYWARD FARM**  
8 HUTCHINSON WAY  
ACTON, MASSACHUSETTS

PREPARED FOR:  
**ACTON MANAGEMENT**  
P.O. BOX 2350  
ACTON, MASSACHUSETTS 01720

DATE: MARCH 9, 2015 SCALE: 1 INCH = 20 FEET

**FORESITE ENGINEERING**  
ENGINEERING · SURVEYING · PLANNING  
16 Gleasondale Road Suite 1-1  
Stow, Massachusetts 01775  
Phone: (978) 461-2350

**SEWAGE DISPOSAL SYSTEM PROFILE & DETAILS**



**DEEP OBSERVATION HOLE LOGS**

TEST HOLE:	DATE:	SOIL EVALUATOR:			
014-9	6/19/14	SCOTT HAYES, P.E. B.O.H. AGENT: EVAN CARLONI, R.S.			
SURFACE EL.: 248.9					
DEPTH	HORIZON	TEXTURE	COLOR	MOTTLING	REMARKS
0'-6"	A	SL	10YR3/2	NONE	WEAK, FRIABLE
6'-22"	Bw	SL	10YR5/0	NONE	WEAK, MASSIVE
28'-102"	C	SL	2.5Y5/4	>5% # 56"	WEAK TO MOD. FRM. SOME BOULDERS, SOME GRAVEL
DEPTH TO: BEDROCK: 102"					
STANDING WATER: NONE					
SEEPAGE: NONE					
ESTIMATED SEASONAL HIGH GROUNDWATER: 56" (242.3)					

TEST HOLE:	DATE:	SOIL EVALUATOR:			
014-10	6/19/14	SCOTT HAYES, P.E. B.O.H. AGENT: EVAN CARLONI, R.S.			
SURFACE EL.: 247.1					
DEPTH	HORIZON	TEXTURE	COLOR	MOTTLING	REMARKS
0'-8"	A	SL	10YR3/2	NONE	WEAK, FRIABLE
8'-32"	Bw	SL	10YR5/0	NONE	WEAK, MASSIVE
32'-96"	C	SL	2.5Y5/4	>5% # 56"	WEAK TO MOD. FRM. FEW BOULDERS, SOME COBBLES
DEPTH TO: BEDROCK: 96"					
STANDING WATER: NONE					
SEEPAGE: NONE					
ESTIMATED SEASONAL HIGH GROUNDWATER: 56" (242.5)					

TEST HOLE:	DATE:	SOIL EVALUATOR:			
014-11	6/19/14	SCOTT HAYES, P.E. B.O.H. AGENT: EVAN CARLONI, R.S.			
SURFACE EL.: 248.6					
DEPTH	HORIZON	TEXTURE	COLOR	MOTTLING	REMARKS
0'-8"	A	SL	10YR3/2	NONE	WEAK, FRIABLE
8'-32"	Bw	SL	10YR5/0	NONE	WEAK, MASSIVE
32'-100"	C	SL	2.5Y5/4	>5% # 56"	WEAK TO MOD. FRM. FEW BOULDERS, SOME COBBLES
DEPTH TO: BEDROCK: 100"					
STANDING WATER: NONE					
SEEPAGE: NONE					
ESTIMATED SEASONAL HIGH GROUNDWATER: 56" (242.2)					

TEST HOLE:	DATE:	SOIL EVALUATOR:			
014-12	6/19/14	SCOTT HAYES, P.E. B.O.H. AGENT: EVAN CARLONI, R.S.			
SURFACE EL.: 246.8					
DEPTH	HORIZON	TEXTURE	COLOR	MOTTLING	REMARKS
0'-6"	A	SL	10YR3/2	NONE	WEAK, FRIABLE
6'-30"	Bw	SL	10YR5/0	NONE	WEAK, MASSIVE
30'-100"	C	SL	2.5Y5/4	>5% # 56"	WEAK TO MOD. FRM. FEW BOULDERS, SOME COBBLES
DEPTH TO: BEDROCK: 100"					
STANDING WATER: NONE					
SEEPAGE: NONE					
ESTIMATED SEASONAL HIGH GROUNDWATER: 56" (242.2)					

**DESIGN CALCULATIONS**

- SEWAGE DISPOSAL SYSTEM IS NOT DESIGNED FOR USE WITH A GARBAGE GRINDER.
- SEPTIC TANK: A VOLUME EQUAL TO TWICE THE DESIGN FLOW OR A MINIMUM VOLUME OF 1,500 GALLONS IS REQUIRED. A 1,500 GALLON TANK IS REQUIRED.
- DESIGN CRITERIA:

NUMBER OF BEDROOMS: 4  
 DESIGN FLOW: 440  
 SOIL TEXTURAL CLASS: II  
 PERCOLATION RATE: 14 MPI  
 APPLICATION RATE: 0.56 GPD/SF  
 DESIGN GROUNDWATER ELEVATION: 242.5  
 GROUNDWATER OFFSET: 4-FT

- LEACHING FACILITY SIZING: AREA REQUIRED IS EQUAL TO THE DESIGN FLOW DIVIDED BY THE APPLICATION RATE:

$$\frac{440 \text{ GPD}}{0.56 \text{ GPD/SF}} = 786 \text{ S.F. (800 S.F. MIN.)}$$

UTILIZE QUICK4 HIGH CAPACITY HD INFILTRATOR SYSTEMS INC. CHAMBERS IN TRENCH CONFIGURATION

LOADING RATE 7.93 SF/LF (TABLE 2)  
 MIN. LINEAR FOOTAGE REQ 'D' = 800 / 7.93 = 139 L.F.

PROVIDE 2 ROWS OF 13 QUICK4 HIGH CAP. HD CHAMBERS PER ROW IN TRENCH CONFIGURATION

TRENCH SPACING:  
 12' ON CENTER; 9' MIN. CLEAR BETWEEN TRENCHES

- HYDRAULIC LOADING CAPACITY:

$$7.93 \text{ SF/LF} \times 52 \text{ LF} \times 2 \text{ ROWS} \times 0.56 \text{ GPD/SF} = 461 \text{ GPD EFF. LEACHING AREA} = 7.93 \text{ SF/LF} \times 52 \text{ L.F.} \times 2 = 824 \text{ S.F.}$$

- CONVENTIONAL TITLE 5 SYSTEM DESIGN:

(2) 3' W X 2' D X 57.5' L CRUSHED STONE TRENCHES  
 9' CLEAR SPACING; PROVIDE 805 S.F. LEACHING AREA.

**ELEVATION SCHEDULE**

SYSTEM ELEVATIONS	ELEVATION
TOP OF FOUNDATION	250.50
INV. AT FOUNDATION	248.50
INV. AT SEPTIC TANK INLET	248.15
INV. AT SEPTIC TANK OUTLET	247.90
INV. AT D-BOX INLET	247.73
INV. AT D-BOX OUTLET	247.56
INV. AT CHAMBER INLET	247.46
BOTTOM OF CHAMBER	246.50
TOP OF CHAMBER	247.83

**PERCOLATION TESTS**

SOIL EVALUATOR: SCOTT HAYES, P.E. - FORESITE ENG.  
 BOH AGENT: EVAN CARLONI, ACTON HEALTH DEPT.

	PT-E	PT-F
DATE	6/19/14	6/19/14
DEPTH	54"	52"
RATE (MPI)	8 MPI	14 MPI

**LEGEND**

- S.T. PROPOSED 1,500 GAL. PRECAST CONCRETE SEPTIC TANK
- D-BOX PROPOSED 6-OUTLET PRECAST CONCRETE DISTRIBUTION BOX
- TP DEEP TEST HOLE
- P PERCOLATION TEST
- 255X0 PROPOSED SPOT ELEVATION (TYP.)
- 250- EXISTING 10-FT CONTOUR (TYP.)
- 252- EXISTING 2-FT CONTOUR (TYP.)
- 252- PROPOSED CONTOUR (TYP.)
- ECB PROPOSED STAKED STRAW WATTLE EROSION CONTROL BARRIER - LIMIT OF WORK (SEE DETAIL)

**GENERAL NOTES**

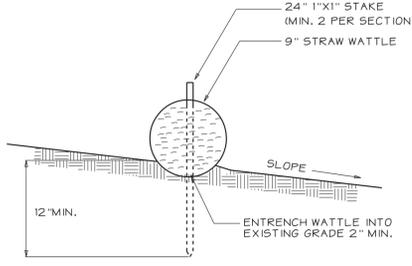
- THIS PLAN IS FOR THE CONSTRUCTION OF THE PROPOSED SEWAGE DISPOSAL SYSTEM ONLY. OTHER LOCAL REGULATIONS MAY BE APPLICABLE TO THE PROJECT (I.E. ZONING, WETLANDS, ETC.).
- CONTRACTOR SHALL REPORT ANY DISCREPANCIES BETWEEN OBSERVED FIELD CONDITIONS AND THIS DESIGN PLAN PRIOR TO INITIATING CONSTRUCTION.
- PROPERTY BOUNDARIES SHOWN ARE A PROPOSED SUBDIVISION OF LAND LOCATED AT 121 HAYWARD ROAD ENTITLED "HAYWARD FARM" DEFINITIVE SUBDIVISION RESIDENTIAL COMPOUND.
- THE SYSTEM IS NOT DESIGNED FOR USE WITH A GARBAGE GRINDER.
- THE SEPTIC TANK SHALL BE PUMPED WHEN THE SLUDGE DEPTH EXCEEDS 1/8 OF THE LIQUID CAPACITY OF THE SEPTIC TANK (ABOUT ONCE EVERY 2 YEARS) OR AS REQUIRED BY THE LOCAL BOARD OF HEALTH.
- ANY PROPOSED WORK WITHIN 100 FEET OF A BORDERING VEGETATED WETLAND OR OTHER PROTECTED RESOURCE AREA IS UNDER THE JURISDICTION OF THE WETLANDS PROTECTION ACT AND THE LOCAL CONSERVATION COMMISSION.
- ALL KNOWN DRINKING WATER WELLS WITHIN 200 FEET OF THE PROPOSED SEWAGE DISPOSAL SYSTEM ARE SHOWN OR INDICATED.
- SITE IS WITHIN TOWN OF ACTON GROUNDWATER PROTECTION DISTRICT ZONE 4.
- SITE IS NOT WITHIN A DEP APPROVED INTERM WELL-HEAD PROTECTION AREA (WPA) OR DEP APPROVED ZONE II.

**CONSTRUCTION NOTES**

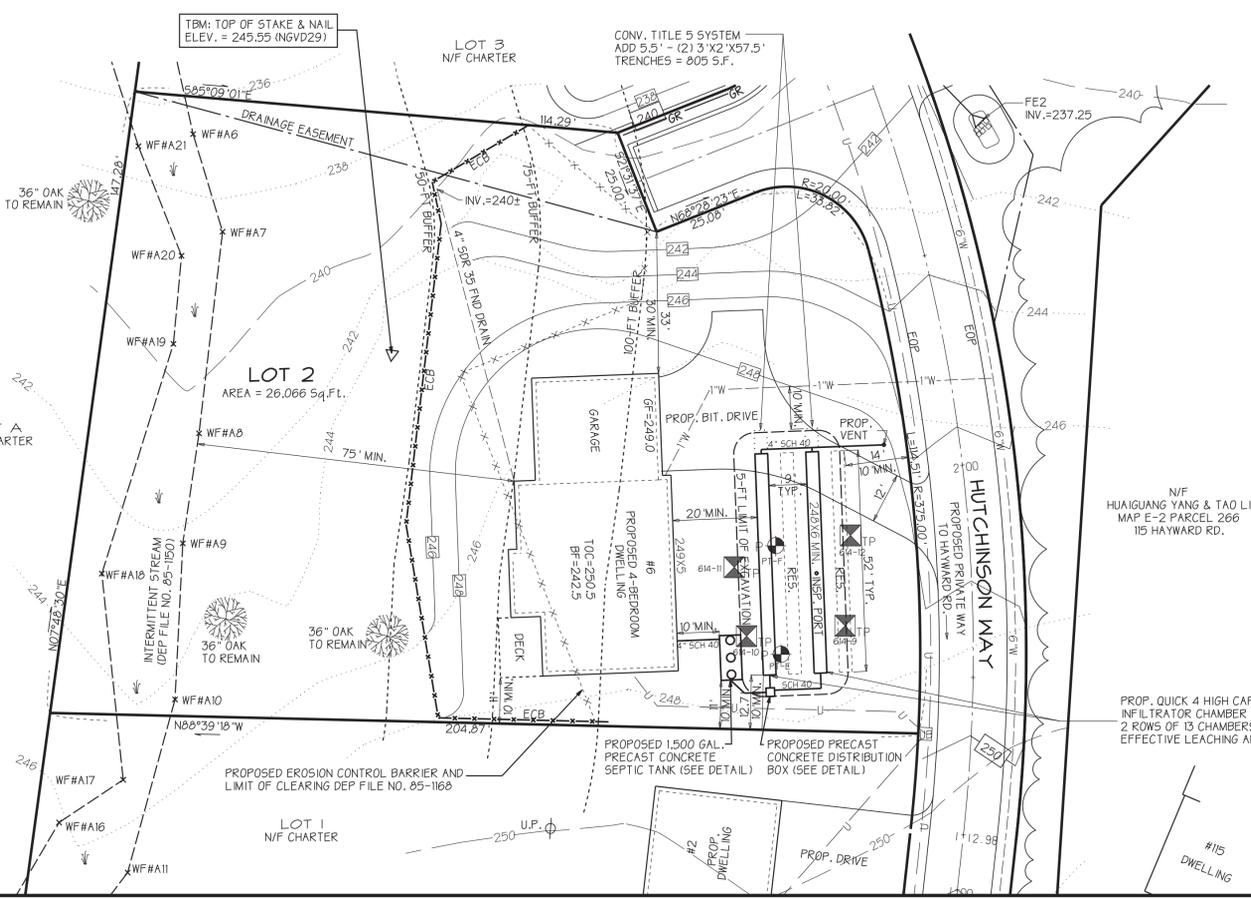
- CONTRACTOR SHALL CONTACT 'DIGSAFE' AT 1-800-344-7233 AT LEAST 72 HOURS BEFORE EXCAVATING ON PUBLIC OR PRIVATE PROPERTY.
- CONSTRUCTION MATERIALS AND CONSTRUCTION METHODOLOGY SHALL CONFORM TO THIS PLAN, TITLE 5, AND THE REQUIREMENTS OF THE BOARD OF HEALTH.
- ANY DEVIATION IN CONSTRUCTION FROM THIS PLAN SHALL VOID ANY CERTIFICATION MADE RELATIVE TO THE SYSTEM UNLESS APPROVED IN WRITING BY THE LOCAL APPROVING AUTHORITY AND FORESITE ENGINEERING ASSOCIATES, INC.
- ALL TANKS INCLUDING SEPTIC TANKS, DISTRIBUTION BOXES, DOSING CHAMBERS AND GREASE TRAPS, SHALL EITHER BE WATERTIGHT BY MANUFACTURER'S SPECIFICATIONS AND WARRANTY OR MADE WATERTIGHT WITH ASPHALT OR POLYMER SEALER.
- ALL PRECAST CONCRETE TANKS AND DISTRIBUTION BOXES SHALL BE SET ON A MINIMUM OF SIX INCHES OF WELL COMPACTED CRUSHED STONE AND SHALL BE MADE WATER TIGHT.
- DISTRIBUTION BOX OUTLET PIPES SHALL BE LAID LEVEL FOR THE FIRST TWO FEET OUT OF THE BOX.
- DISTRIBUTION BOX SHALL BE SET ON A FIRM BASE OF EITHER SIX INCHES OF COMPACTED CRUSHED STONE OR A SIX-INCH THICK CONCRETE PAD WITH AN AREA 1.5 TIMES THE BOTTOM AREA OF THE DISTRIBUTION BOX.
- AN INLET TEE SHALL BE INSTALLED IN THE DISTRIBUTION BOX WHEN THE SYSTEM IS A PUMP SYSTEM OR WHEN THE SLOPE OF THE INLET PIPE EXCEEDS 0.8%.
- SYSTEM SHALL BE VENTED THROUGH THE BUILDING PLUMBING OR AS SHOWN ON THE SYSTEM PROFILE.
- ALL SURFACES SHALL BE SCARIFIED PRIOR TO THE PLACEMENT OF FILL.
- ALL UNSUITABLE MATERIAL ENCOUNTERED IN THE EXCAVATION SHALL BE REMOVED.
- ALL CRUSHED STONE USED IN THE CONSTRUCTION OF THE SEWAGE DISPOSAL SYSTEM SHALL BE THE SIZE SPECIFIED, DURABLE AND DOUBLE WASHED.
- WHEN GRAVEL FILL IS REQUIRED, ALL ORGANIC MATERIAL WITHIN 5 FEET OF THE PROPOSED LEACHING FACILITY SHALL BE REMOVED AND REPLACED WITH WELL COMPACTED GRANULAR FILL MEETING THE REQUIREMENTS OF 310 CMR 15.255.
- ALL BACKFILL AND BREAKOUT FILL REQUIRED SHALL BE CLEAN EARTHEN MATERIAL FREE OF CONSTRUCTION DEBRIS, STUMPS, BOULDERS AND FROZEN EARTH. FILL MATERIAL SHALL BE PLACED IN A MANNER THAT WILL ENSURE RUNOFF AND PREVENT EROSION.
- SEWAGE DISPOSAL SYSTEM CORNERS SHALL BE STAKED AND FLAGGED BY A PROFESSIONAL ENGINEER OR PROFESSIONAL LAND SURVEYOR PRIOR TO THE START OF CONSTRUCTION.
- ALL SYSTEM COMPONENTS SHALL BE MARKED WITH MAGNETIC MARKING TAPE OR OTHER COMPARABLE MEANS IN ORDER TO LOCATE THEM ONCE BURIED.



**LOCUS MAP**  
 SCALE: 1" = 600'



**STAKED STRAW WATTLE DETAIL**  
 NOT TO SCALE



**SEWAGE DISPOSAL SYSTEM DESIGN PLAN**

LOCATION: **LOT 2 HAYWARD FARM**  
 6 HUTCHINSON WAY  
 ACTON, MASSACHUSETTS

PREPARED FOR:  
**ACTON MANAGEMENT**  
 P.O. BOX 2350  
 ACTON, MASSACHUSETTS 01720

REV. 3/13/15  
 DATE: MARCH 4, 2015

SCALE: 1 INCH = 20 FEET

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