


SUTTON CONSERVATION COMMISSION

August 6, 2014

MINUTES

Approved: 

Present: Daniel Moroney, Chairman, Joyce Smith, Co-Chair, Lauren Rothermich, Robert Tefft,  
Unavailable: William Wence  
Staff: Wanda M. Bien, Secretary  
Brandon Faneuf, Consultant

**Project Update**

**7:00pm**

**171 Worc. Prov. Tpke/Pleasant Valley Crossing**

**DEP#303-0604**

Present: Pat Doherty, Mid-Point

P. Doherty submitted the new plans to the Board and gave an update since one year ago. The modifications on these plans were reviewed. He asked for a Determination of Applicability if these changes are minor enough, or asked if they need to do another Notice of Intent.

He then explained the original submitted plans in 2008, and reviewed the approved plans in 2013. He spoke of the appeal from the project across Route 146. They would like to start the construction as soon as possible and would set up a pre-construction meeting with Mr. Faneuf.

Their replication area is in the Right-of-Way of National Grid. Galaxy will put in a driveway for National Grid to access through their ROW, without having to go through the wetlands and the replication area. He asked if they need to submit a new NOI.

J. Smith said they need to get an agreement with National Grid for the use of the ROW if they are going to go use it to access their power lines.

B. Faneuf suggested that they re-advertise, notify the abutters, attend another Public Hearing, and updated the Order of Conditions with a set of new plans.

P. Doherty said they would return to the next meeting with further updates and information from National Grid.

This was continued for further information, to August 20, 2014.

**New Public Hearings**

**7:30pm**

**172 Manchaug Road**

**DEP#303-0789**

The Public Hearing was opened at 8:52pm. D. Moroney read the hearing notice as it appeared in the Millbury Sutton Chronicle.

The project consists of demolition and reconstruction of the existing house, construction of a new septic system, installation of new well and associated grading.

Present: Michael Weaver, Guerriere & Halnon, Michael & Karen Bronson, owners

M. Weaver explained the project to raze the house and rebuild a new home with an on-site well, and

a Title V septic. The Board of Health required a one bedroom house deed restriction.

B. Faneuf summarized his site visit on the property and reviewed the six items needed to complete the filing for the Certificate of Compliance from 2008. A COC for 2008 is needed to go forward with this filing.

See Attachment #1 Ecosystem Solutions

R. Tefft questioned the scale of 1" = 10'. It was explained that the scale was used because it is such a small lot. The silt fence needs to be moved five feet away from the house to be effective in the lower corner. He also asked about the septic break out and if it was approved by the Board of Health.

The Commission signed the Certificate of Compliance from the previous Order of Conditions DEP#303-0675, dated 10-15-08, for the wall and dock. It didn't need an "As-Built", so this project can go forward, starting with a new Order of Conditions.

Motion: To continue, with the applicant's permission, to August 20, 2014, by J. Smith  
2nd: R. Tefft  
Vote: 4-0-0

**7:45pm**

**11 Ramshorn Road**

**DEP#303-0791**

The Public Hearing was opened at 8:35pm. D. Moroney read the hearing notice as it appeared in the Millbury Sutton Chronicle.

The project consists of repair the septic system for existing single family house.

Not Present: Bob Murphy, Murphy Assoc., Donald Kendrick, owner

This was tabled to the end of the meeting. At that time it was continued to September 3, 2014 meeting, due to a no show.

B. Faneuf would not summarize his site visit until the next scheduled meeting.

See Attachment #2 Ecosystem Solutions

Motion: To continue, with the applicant's permission, to September 3, 2014, by J. Smith  
2nd: R. Tefft  
Vote: 4-0-0

**8:00pm**

**51 Pierce Road**

**DEP#303-0790**

The Public Hearing was opened at 8:40pm. D. Moroney read the hearing notice as it appeared in the Millbury Sutton Chronicle.

The project consists of construction activities related to the installation of an in ground pool by previous home owner.

Present: Mike Yerka, Civil Site Engineering, James Sutterlund, owner

M. Yerka asked for a waiver on the bylaw and consult fees because of the previous filing. It was not granted. The work had been done without and notification to the Conservation Commission.

B. Faneuf summarized his site visit on the property for the pool area in question. However he said the fees still needed to be paid before they could go forward with the new filing, because this area is within the wetland boundaries and so is the pool, shed, etc.

Motion: To close the Public Hearing, by J. Smith  
2nd: R. Tefft  
Vote: 4-0-0

Motion: To issue an Order of Conditions subject to the minor change in the plans, addition of 11A and payment of the fees, by J. Smith  
2<sup>nd</sup>: R. Tefft  
Vote: 4-0-0

**8:15pm**

**85 Eight Lots Road**

**DEP#303-0792**

The Public Hearing was opened at 8:45pm. D. Moroney read the hearing notice as it appeared in the Millbury Sutton Chronicle.

The project consists of construction of a horse barn, paddocks, riding area, grading and associated site work.

Present: Scott Morrison, Eco Tec, Paul & Monica Gilbody, owner

S. Morrison explained the project, which is all outside of the 100' buffer zone.

B. Faneuf summarized and reviewed his site visit on the property.

See Attachment #3 Ecosystem Solutions

Motion: To continue, with the applicant's permission, to August 20, 2014, by J. Smith  
2nd: R. Tefft  
Vote: 4-0-0

## **CONTINUATIONS**

**28 Horne Drive**

**DEP#303-0788** from 07-16-14

The Public Hearing was opened at 9:15pm. D. Moroney read the hearing notice as it appeared in the Millbury Sutton Chronicle.

The project consists of a septic system repair.

Present: Tim Callahan, Hawk Consulting, Andrew DeWolfe, owner

T. Callahan explained the proposed project to do the septic repair. They need to cut the understory of the area and need a 12' access driveway to get the truck in to do the swale for the repair.

B. Faneuf reviewed his site visit report on the property for the septic.

See Attachment #4 Ecosystem Solutions

Motion: To continue, with the applicant's permission, to August 20, 2014, by J. Smith  
2nd: L. Rothermich  
Vote: 4-0-0

The Board waved the reading of hearing for:

**34 Bond Hollow Road**

**DEP#303-0769** from 10-02-13 and 07-16-14

The Public Hearing was opened at 10:00pm. D. Moroney waived the read of the hearing notice as it appeared in the Millbury Sutton Chronicle.

The meeting will discuss modifications made to the proposed plan to construct a single family home, driveway, private water, septic, grading and utilities.

Not Present: David Marois, owner

This has been continued, with the applicant's permission, to August 20, 2014.

B. Faneuf summarized his site visit on the property.

See Attachment # Ecosystem Solutions

Motion: To continue, with the applicant's permission, to August 20, 2014, by J. Smith

2nd: L. Rothermich

Vote: 4-0-0

**BOARD BUSINESS**

**Wetland Concerns and Updates:**

**42 Bond Hollow Road - *this area is stable until further work commences.***

B. Faneuf gave an update on these projects:

**355 Boston Rd.** – This project has been completed. They need to file a request for their Certificate.

**Waters Farm Forestry** - He did the wetland delineation for the Foresters to go forward in the Fall.

**Pleasant Valley Crossing** – There will be a pre-construction meeting on Friday August 20<sup>th</sup> at 9:30am then they will do a site visit at the site.

**\*10 Clark Hill Road** – He summarized his site visit. He checked the erosion controls that are in place, but needs the limit of work to be at the 100' line. The owner was told they need to submit the fees and file for the ANRAD, due to the house being outside the buffer zone.

The Board voted on the minutes of June 25, 2014 and July 16, 2014.

Motion: To accept the minutes of June 25, 2014, and July 16, 2014, by J. Smith

2nd: R. Tefft

Vote: 4-0-0

Endorsed a new letter for T. Harrison, Accountant, as to who will sign budget pages for bill payments.

Motion: To sign and submit the pay voucher page to the Town Accountant, by J. Smith

2<sup>nd</sup>: R. Tefft

Vote: 4-0-0

**Emergency Cert.:** 103 W. Sutton Road/Ken Rapp, owner - Needs Dangerous Storm Tree removed?

The Board didn't feel as though this was an emergency situation. The owner should file an RDA for the next meeting, along with the associated fees.

Discussions:

**Rt. 146/Boston Road** – Bill Clougherty, the District Manager, will be coming in on August 29<sup>th</sup> meeting with a Public Meeting to discuss the drainage changes on Route 146, and the alternative proposed drainage.

**96 Armsby Road-Subdivision** – The ANRAD from 2006 was reviewed. A letter will be sent to the owner on the present activities taking place, asking what they are proposing.

**Putnam Pond** – Bill Davis would like to remove the phragmites. This may be State, however they are not exempt from filing an NOI.

**Unexpected Business**

B. Faneuf gave an up-date on these two projects on **44 Lackey Road**, and **219 Manchaug Road**.  
**7 Point Way** - D. Moroney will do a site visit for this project.

Anyone interested in purchasing the DVD for any public hearing at this meeting, please contact Pam Nichols in the Cable office or you can view the minutes and video at [www.suttonma.org](http://www.suttonma.org).

Motion: To adjourn, by J. Smith  
2<sup>nd</sup>: L. Rothermich  
Vote: 4-0-0

Adjourned at 10:30pm.

ATTACHMENT #1

<b>Brandon B. Faneuf, Conservation Consultant</b> <b>Sutton Conservation Commission</b>
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**Application Type:** Notice of Intent  
**Project Location:** 172 Manchaug Rd. / Map 42, Parcel 13  
**Applicant:** Karen T. & Michael A. Bronson  
**Owner:** Same  
**Representative:** Guerriere & Halnon, Inc.  
**Inspection Date:**  
**Memo Date:** 8/5/14

Introduction

The location is 172 Manchaug Rd., which is the last house on the left (pond side) of the road going north before the curve with no houses next to the pond. There is an existing house there, built in 1950, with a lawn, well, and dock. An application for this site came to the Commission, which I reviewed, in 2008. The purpose of the application (DEP file no. 303-0675) was to repair the retaining wall at the bank of Manchaug Pond. An Order of Conditions was issued for that work, although I have been informed by Wanda that a COC was never issued. If work occurred, and a COC has not been issued, then it should be executed before this public hearing is closed.

There was also an Enforcement Order for this site going back to 2006 for unauthorized cutting and clearing of trees and shrubs.

The site is on 0.19 acres of land. In 2008, the site was using an out-house/ port-a-john for blackwater. The current plan has a new septic system proposed. Almost the entirety of the site is developed, either with the house or the lawn. The area with the highest concentration of trees >5", or understory (mainly mountain laurel) occurs along the slope near the road where the septic system is proposed.

Wetland Resource Areas

1. Inland Bank w/ 100' Buffer Zone (BZ) and 200' Riverfront District associated with Manchaug Pond, a Great Pond of the Commonwealth. The bank is the retaining wall at the pond. The top-of-bank is the top of the wall.
2. Bordering Land Subject to Flooding (BLSF). This is the 100 year floodplain associated with Manchaug Pond. The BLSF cuts across the lawn between the house and the pond.

The entire site is within 100' of the retaining wall/bank.

### Current Proposal

The project purpose involves the demolition of the existing house, replacement with a larger house, new driveway, construction of a new septic system, removal of the outhouse, abandonment of the existing well, installation of a new well, and removal of 19 trees with a dbh of 5" or greater.

### Compliance with 310CMR 10.00

This is all Buffer Zone work at an existing single-family residence. Performance standards include the prevention of sediment from reaching the resource area. In this case, the Applicant has proposed straw wattles and silt fence at the Limit of Work for most of its length. No grading is proposed within the BLSF, so there are no issues with complying with BLSF performance standards.

### Compliance w/ Bylaw

The main concern in regards to the Bylaw has to do with mitigation for impacts per Section 7. It is evident that the existing house is in need of a Title V compliant septic system, and the location where the system is proposed appears to be the most *practicable* location given distances to the water and adjacent wells (including the proposed well). Consistent with the Commission's past practice, the Applicant should mitigate for the loss of trees and understory by placing replacements as close to the water as possible.

### Recommendations

1. Execute the COC for the retaining wall construction before this public hearing is closed.
2. Discerning between trees to remain and trees to be removed isn't as easy as it looks when the plan is in black and white.. Currently, trees to remain are in black and trees to be removed are gray/light gray. I recommend coming up with another way of showing this.
3. Hay bales are not allowed. Please change any details and descriptions to 100% biodegradable straw wattle or 100% biodegradable compost sock. I don't believe silt fence is necessary at this location because, despite the proximity to the water, grades are shallow. If a barrier is needed to prevent machinery from going into the water, I think an orange snow fence is applicable in this situation.
4. Add "Limit of Work" at the sedimentation control barrier.
5. Ten (10) blueberry bushes is not adequate mitigation for the loss of 19 trees, and even more mountain laurel. The Commission has in the past accepted a 1:1 tree-to-tree replacement ratio, and that there be a 2:1 or greater tree-to-shrub replacement ratio. And has also been past practice, the Commission requires that replacement plantings be placed as close to the water as possible. I would prefer to see a mix of trees and shrubs,

with trees near the water so as to provide shade over the water for aquatic life. Please depict on the site plan. If this cannot be done, then a reduction in the size and scope of the project should be contemplated.

6. For construction of the well, how will the well-rig access the proposed well location? Will additional grading be necessary so the well rig can get on even footing? Depict a sump pit with wattles on the pond-side for pumped/excavated materials.
7. Due to the limited space available and proximity to the water, where will construction equipment be parked and re-fueled?
8. Will the deck between the house and the pond remain?

Sincerely,

**Ecosystem Solutions, Inc.**

Brandon B. Faneuf

PWS, RPSS, CPESC, CWB

Principal



**Brandon B. Faneuf, Conservation Consultant**  
**Sutton Conservation Commission**

**Application Type:** Notice of Intent  
**Project Location:** 11 Ramshorn Rd. / Map  
**Applicant:** Donald Kendrick  
**Owner:** Same  
**Representative:** Robert G. Murphy & Associates, Inc.  
**Inspection Date:** 8/1/14  
**Memo Date:** 8/5/14

Introduction

The location is 11 Ramshorn Rd. It is the site of a single family home, built in 1974, on the western shores of Ramshorn Pond. The parcel across the street with a garage is under common ownership where a well and water service is proposed. Almost the entire property is disturbed and in some kind of use. The most 'natural' area on-site (vegetated with trees and shrubs and not lawn) is between the house and a small parking area next to Ramshorn Pond, which is also the area where a septic system is proposed to repair/replace the old one. A retaining wall made up of wooden piers divides the lawn from the slope leading up to the road. At the time of inspection, I found out that the house is currently abandoned.

Wetland Resource Areas

1. Inland Bank w/ 200' Riverfront District associated with Ramshorn Pond, a Great Pond of the Commonwealth;

The bank of the pond is a well-defined fieldstone masonry retaining wall. Top-of-bank is the top of the retaining wall.

Current Proposal

The project purpose is to repair/replace the existing septic system and install a new well, with water service from the well to the house. The new septic system will utilize the existing septic tank. The leach field will be in the forested area between the house and the road, necessitating the removal of some large pine trees and understory mainly consisting of mountain laurel.

Compliance with 310CMR 10.00

The best guidance for this kind of project exists in 310 CMR 10.03(3): "Presumption Concerning 310 CMR 15.000: Subsurface Disposal of Sanitary Sewage." This section states that you can't construct a system in a resource area, and makes statements on setbacks from resource areas. In this case, we will consider bank of Ramshorn Pond as the resource area.

Per 310 CMR 10.03(3), Title V compliant septic systems are presumed to protect the eight interests of the Wetlands Protection Act ('Act') if the soil absorption system (i.e. leaching field) is set back at least **50 ft.** horizontally from a the BVW boundary. This applies to *new* construction. Performance for repairs are more lenient, stating that the system must be placed as far away from resource areas as practicable. In this case, the leach field is greater than 100' from the bank of Ramshorn Pond and therefore complies with the performance standards of 310CMR 10.00. There is a small amount of clearing of vegetation and grading within 100' of the pond, which is what would necessitate a filing with the Conservation Commission.

#### Compliance w/ Bylaw

Section 3.1 of the Bylaw (Conditional Exceptions) exempts the repair of "appurtenances." Septic systems are included under this definition. Part of this equation, however, includes the clearing of vegetation, including six (6) large white pine trees and understory. So the only question regarding compliance with the Bylaw has to do with mitigation for loss of habitat associated with the trees and understory.

#### Recommendations

1. In accordance with Conservation Commission past practice, I recommend the Applicant mitigate for the loss of the six pine trees and understory by planting new trees and/or shrubs along the bank of Ramshorn Pond. There isn't a tremendous amount of room, but there appears to be space for planting in the northwest corner, at a minimum.
2. Where is the existing leach field? Can it be outlined on the plan?
3. It should be noted that the slopes around the leach field will be planted with turf, per General Note 16. If not, I would recommend erosion control blankets. General Note 16 conflicts with Construction Sequence & Erosion Controls note no. 6.
4. Where will stockpiles be located, if any? And if not, will excess material be trucked off-site? Any stockpile areas must be secured with sedimentation controls along the downhill side. Depict on the site plan.
5. Inlet protection for the catch basin on Ramshorn Pond is recommended, to be depicted on the site plan.
6. Note on the straw wattle detail that wattles must be made of 100% biodegradable materials.
7. This plan necessitates the removal of the wooden pier retaining wall and replacement with a versa-lock concrete retaining wall. Equipment will presumably be needed to transport certain materials, such as the pump

chamber, to its intended location. Will there be a temporary graded slope leading down the hill? Where will equipment access the property? I say this because the only relatively easy way to access the site with equipment appears to be from the property to the south. Additional erosion controls may be necessary.

8. Excess materials, such as the wooden piers, will be taken off-site?

If the applicant can provide a planting plan that the Commission is satisfied with, along the bank of the pond, and adequately answer the questions above, this application will comply with the provisions of the Bylaw and be an approvable site plan. All plantings must be native.

Sincerely,  
**Ecosystem Solutions, Inc.**  
Brandon B. Faneuf  
PWS, RPSS, CPESC, CWB  
Principal



**Brandon B. Faneuf, Conservation Consultant**  
**Sutton Conservation Commission**

**Application Type:** Notice of Intent  
**Project Location:** 85 Eight Lots Rd. / Map 22, Lots 17, 18, & 105  
**Applicant:** Paul & Monica Gilbody  
**Owner:** Same  
**Representative:** Scott Morrison; EcoTec, Inc.  
**Inspection Date:** 8/1/14  
**Memo Date:** 8/5/14

Introduction

The location is 85 Eight Lots Road, which is located on the west side of the road. It is the site of a single-family house and detached barn, recreational yard, wetlands and forest.

Wetland Resource Areas

1. Bordering Vegetated Wetland (BVW) w/ 100' Buffer Zone (BZ) and Adjacent Upland Resource Area (AURA).
2. Inland Bank of intermittent stream within the A-Series wetland on the south side of the proposed riding area. The stream appears to have been channeled out at least 50 yrs. ago, based on the size of the trees on the spoil material deposited on either side of the stream.

Current Proposal

The project purpose involves the construction of a barn, short driveway, paddocks, riding area, and grading, which includes a 12"x6" deep grassed swale on the west side of the riding area. A drain leading from the barn will outlet just before reaching the limits of the 100' BZ/AURA. This compound is proposed on the west side of the existing house and barn and partially within the BZ/AURA of the A and B-Series BVW's.

Compliance with 310CMR 10.00

This is all Buffer Zone work at an existing single-family residence. Performance standards include the prevention of sediment from reaching the resource area. In this case, the Applicant has proposed straw wattles and silt fence at the Limit of Work for most of its length.

Compliance w/ Bylaw

In cases like these, the Applicant must first justify that the size and scope of disturbance is necessary at the proposed location and within jurisdictional areas. That being said, my assessment of the area where permanent disturbance is proposed has revealed extensive amounts of invasive species including, but not limited to Oriental bittersweet, multiflora rose, and winged euonymus. Yes, there

is an established, mature overstory that provides wildlife habitat, at a minimum, within the BZ/AURA, but it is my opinion that a well executed invasive plant eradication plan *and* some screen plantings along the LOW in the BZ/AURA of the A and B-Series wetlands can adequately mitigate for proposed permanent impacts in jurisdictional areas. It is up to the Applicant to propose and show mitigation work on the site plan.

I also would like to comment on a manure management plan for this compound. Specifically, where will the designated manure stockpile area be located and how will it be controlled to keep from going past the Limit of Work in a washout event.

#### Recommendations

1. Propose mitigation for lost of wildlife habitat and runoff characteristics from forest to open, unvegetated paddock and riding area in the form of screen plantings along the LOW adjacent the A and B-Series wetlands and an invasive plant eradication plan (written). Herbicides must consist of 'aquatic approved' types. If someone is hired for this work, they must be a MA approved pesticide applicator. Eradication work may occur within the BZ/AURA and/or Resource Areas such as Inland Bank or BVW. However, a new "Temporary Limit of Work" must be depicted showing the limits of invasive plant eradication work.
2. What will the substrate of the riding area consist of? Is there a special substrate required for the riding area?
3. What is the long-term manure management plan? Specifically, is there a designated manure stockpile area, and if so, how will it be contained to prevent it from entering jurisdictional areas outside of the Limit of Work in a washout event?
4. I recommend placing crushed stone or riprap at the end of the grassed swale, and depicting some straw wattle check dams along its length while it is establishing itself with grass.
5. All erosion controls must be made of 100% biodegradable materials, including the erosion control blankets.
6. Make a note on Sheet 2 of 3 that the straw wattles must be 100% biodegradable, as well as in the erosion control detail on Sheet 3 of 3.

Sincerely,  
**Ecosystem Solutions, Inc.**  
Brandon B. Faneuf  
PWS, RPSS, CPESC, CWB  
Principal



**Brandon B. Faneuf, Conservation Consultant**  
**Sutton Conservation Commission**

**Application Type:** Notice of Intent  
**Project Location:** 85 Eight Lots Rd. / Map 22, Lots 17, 18, & 105  
**Applicant:** Paul & Monica Gilbody  
**Owner:** Same  
**Representative:** Scott Morrison; EcoTec, Inc.  
**Meeting Date:** 8/6/14  
**Memo Date:** 8/7/14

The following is a synopsis of the 8/6/14 public hearing, to the best of my ability. Scott Morrison of Ecotec, Inc. represented the Applicant.

1. The Commission asked that, although the barn is outside of jurisdictional areas, that due to the nature of the site (unvegetated paddocks and riding area with the potential for manure transport), that the Applicant infiltrate stormwater from the barn roof.
2. Bob Tefft *suggested* an interceptor swale along the western slope.
3. There was an agreement that a screen of plantings along the LOW was not needed.
4. Mitigation for permanent loss of A.U.R.A. was determined to be invasive plant eradication at a ratio of 2:1. That is, for every square foot of permanent disturbance in the A.U.R.A., the Applicant would perform invasive species eradication in two square feet of A.U.R.A.
5. Bob Tefft recommended expanding the Limit of Work on the northwest side of the barn and paddock area. Everyone agreed this is a practical arrangement and that the invasive species management area would be increased accordingly per the above.
6. Straw wattle check dams along the length of the grassed swale until the swale is grassed and stable, and 6-8" stone at the end of the swale only commensurate with the expected volume of water coming from the swale.

Sincerely,  
**Ecosystem Solutions, Inc.**  
Brandon B. Faneuf  
PWS, RPSS, CPESC, CWB  
Principal

**Brandon B. Faneuf, Conservation Consultant**  
**Sutton Conservation Commission**

**Application Type:** Notice of Intent  
**Project Location:** 28 Horne Drive / Map 15, Parcel 45  
**Applicant:** Andrew & Tara DeWolfe  
**Owner:** Same  
**Representative:** Hawk Consulting, Inc.  
**Inspection Date:** n/a  
**Memo Date:** 8/5/14

This memo is a review of materials submitted between my last review and July 28, 2014. Materials submitted in support of the application include:

- A revised site plan;
- Project synopsis;
- Mitigation analysis by Judy Schmitz, dated July 25, 2014

The Applicant proposes to "reclaim" lawn in areas where forest now stands. Limits of existing lawn are now depicted on the site plan. Trees with a dbh of >5" have been depicted on the site plan with a legend.

There are still a number of questions, comments, and recommendations I have about the site plan, and include:

1. A legend, showing tree symbols with one symbol for trees to be removed and another symbol for trees to remain would be useful, in addition to the table presented. As it is, I see four different symbols used in association with trees, but don't necessarily know what they mean.
2. Tree #14: what does "E Alive" mean?
3. The existing path goes right into a proposed arborvitae. This doesn't make sense unless there is a new proposed access route. Is this the case? If so, a separate application will need to be made for areas within 200' of Lake Singletary.
4. The jurisdiction from the lake is 200'. The "Limits of 100' AURA" depicted on the site plan is misleading and incorrect. The entire site is within jurisdiction as the 200' Riverfront District of Lake Singletary.
5. Tree #'s 15, 22, & 23 are off-site and cannot be permitted through this application. A separate application for that property would be required, as that area is within the 200' Riverfront District.
6. There are still a number of questions in the Recommendations section of my last report dated 6/20/14 that haven't been answered.

7. For the most part, the applicant proposes invasive species removal as mitigation for the felling of trees in the 200' Riverfront District. This is, and has been, a valid form of mitigation for work within jurisdictional areas. However, the Applicant proposes to keep English Ivy and variegated vine in "areas where lawn or landscaping is proposed." Any garden/landscape area on-site has been abandoned for so long that they have essentially reverted back into a natural state and cannot be considered "existing/maintained" any longer. This area is mainly along the stockade fence on the east side of the house. The Commission has not allowed invasive species or horticultural species to be planted in proposed landscape areas in jurisdictional areas. All species must be native. And in this case, *all* invasives should be removed in order to be counted towards mitigation for tree removal (and therefore permanent alteration of wildlife habitat, at a minimum).
8. As mentioned in my previous report, the majority of existing disturbance lies between the existing path and the lake. There is a limited amount of invasive/nuisance plant species between the path and the southern property line. There is a natural, mostly native understory and herbaceous layer that is significant to Wildlife Habitat under the Bylaw. Conversion of the area between the path and the southern property line to lawn, even with the retention of some of the trees would result in adverse impact to Wildlife Habitat under the current plan. I do not recommend the area between the path and southern property boundary be converted to lawn, or even allow cutting of trees >5" dbh.
9. Another consideration to the above has to do with the fact that lawn does not have the same runoff coefficient as forest, the trees take up a lot of near-surface water in the growing season, and the loss of forest is expected to increase runoff toward the house and lake.
10. The above being said, I can agree that the conversion of the forested area with hemlocks and yellow birch to lawn between the path and the lake, *with an invasive/nuisance species eradication plan* that covers the entire lot will mitigate for the permanent loss of habitat offered in this area. I do not, however, agree that the white ash (tree # 11) needs to be removed.
11. Arborvitae offers *some* wildlife value, but is mostly a screen plant and in this case, I do not consider it a valid mitigative measure for loss of trees/forest habitat.
12. A "Permanent Limit of Disturbance" line should be depicted along the path/existing lawn, with the area where the swale is proposed having a "Temporary Limit of Disturbance." The area where the swale is proposed should be seeded with a Conservation seed mix, as mentioned by Ms. Schmitz.

13. I recommend depiction of straw wattle check dams along the swale route to break up the slope and prevent sediment going into the lake.

Sincerely,  
**Ecosystem Solutions, Inc.**  
Brandon B. Faneuf  
PWS, RPSS, CPESC, CWB  
Principal



**Date:** 8-6-14

[illegible]