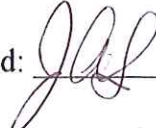


SUTTON CONSERVATION COMMISSION

January 22, 2014

MINUTES

Approved: _____



Present: Mark Briggs, Chairman, Joyce Smith, Co-Chair, Alyse Aubin, Daniel Moroney, Robert Tefft
Staff: Wanda M. Bien, Secretary
Brandon Faneuf, Consultant

NEW PUBLIC HEARING

219 Manchaug Road

DEP#303-0772

The Public Hearing was opened at 7:00pm. M. Briggs read the hearing notice as it appeared in the Millbury Sutton Chronicle.

The project consists of construction of a single family house and driveway within the buffer zone of a BVW.

Present: Robert Murphy & Assoc., Stephen & Susan Strassner, owners, Mike McGovern, subdivision owner/contractor, Robert Nunnemacher, abutter.

A. Aubin stepped down as an abutter.

R. Murphy explained the plans for the construction. The septic and driveway are 80 percent outside the buffer zone and the detention basin is outside of the buffer zone. He explained what took place with the clear cut logging before the new owner purchased this property. They will be fixing the ruts left behind by the logging.

M. Briggs stated that this is a worst case scenario of forestry practices gone awry, like a hit and run. Now restoration of plantings and re-grading is necessary. A mitigation plan for the runoff problems and revegetation of the area is needed.

B. Faneuf summarized his site visit using a video.

See attachment #1 Ecosystem Solutions Report

B. Faneuf summed up Mr. Nunnemacher's comments in his report saying that:

1. He had concerns that the infiltration basins are shallow-to-ledge and won't do their job. Mr. Murphy does not have soil logs to prove depth to the ledge, or any other infiltration rate data. He recommends that the applicant provide assurance in this regard.

2. The property lines should be marked every 50' by the Strassners.

Mr. Faneuf replied that Mr. Nunnemacher's property can't be conditioned under the WPA or Bylaw, but can be worked out between the two parties.

R. Tefft asked how this problem would be corrected.

Mr. Nunnemacher, a land abutter who had to leave early, would be contacted to talk about the stream flow alteration and see how that can get fixed.

M. McGovern agreed to restore the stream flow in the correct direction on Mr. Nunnemacher's land, and would contact Mr. Nunnemacher.

January 22, 2014

Mr. Murphy replied that a Notice of Intent would be required, and that Mr. Nunnemacher would have to agree because it is his land.

B. Faneuf didn't agree that an NOI was necessary because the logging was done under Ch. 132 and can be fixed under Ch. 132. Regardless, it is something that could be done via Emergency Certificate if need be. Mr. Nunnemacher will be contacted in this regard but is only mentioned here because the only access to Mr. Nunnemacher's land is over the subject parcel.

Motion: To continue, with the applicant's permission, to February 5, 2014, by J. Smith
2nd: D. Moroney
Vote: 4-0-1 A. Aubin

9 Point Way

DEP#303-0771

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

The project consists of construction of a single family house, associated landscaping and driveway within the buffer zone of Lake Singletary.

Present: Robert Murphy & Assoc., Arthur and Debra Remillard, owners

R. Murphy reviewed the plans to rebuild the existing house on this property. They will take down the existing house and replace it with a new house facing the lake in a different direction.

M. Briggs said the old and new septic system details need to be on the plans so they understand where things are relative to one another.

R. Murphy replied they are replacing the old septic and house with the new septic and new house. There are six trees that they would take out and replace with native trees. There are also invasive species (Norway maples) near the lake that they would like to take out and replace with a native species.

M. Briggs replied he would like to see some of the replaced trees planted down by the lake.

B. Faneuf summarized his site visit using a video. One suggestion was to extend the temporary limit of work all around the property, except where the trees are to be cut.

See attachment #2 Ecosystem Solutions Report

Motion: To continue, with the applicant's permission, to February 5, 2014, by J. Smith
2nd: A. Aubin
Vote: 5-0-0

January 22, 2014

**78 Torrey Road
DEP#303-0775**

The Public Hearing was opened at 9:00pm. M. Briggs read the hearing notice as it appeared in the Millbury Sutton Chronicle.

The project consists of construction of a driveway to a single family home requiring wetland fill under 5,000 s.f.

Present: Paul Hutnak, Andrews Survey, Stephen & Charla Kroll, owners, Edward Avizinis, Wetlands & Wildlife Consultant, for Leland Mello, and John & Rose Pelczarski, abutters.

P. Hutnak explained the wetland crossing of the driveway, the creation of two potential vernal pools from the logging operation, and to re-create the wetlands destroyed by the logging. They are proposing to fill in 4238s.f. of the wetlands and 732s.f. of that fill is within the existing landing area of the logging that was done. The two replication areas would be 4775s.f.

E. Avizinis explained the replication areas and how they would work, and the replanting of 20 trees.

B. Faneuf summarized his site visit using a video.
See attachment #3 Ecosystem Solutions Report

R. Tefft said to identify wherever materials are going to be stored and stabilize that area.

Abutter:

A letter of concern was received by John & Rosemary Pelczarski, 74 Torrey Road, who have concerns of the driveway backing up water onto their property, which happened when the logging was done back in 1981. In 2010 a road went in for the second logging activity which created a dam effect. The wetlands expanded more on his property than what was there before the logging began. Mr. Pelczarski asked if they could move the driveway towards the south, once they enter the property.

It was explained, that if they had to move the driveway away from the current location, it would cause the Kroll's having to get three more permits from MEPA, FEMA and DEP, as the Commission cannot issue an Order for over 5000s.f. of wetland being filled in.

M. Briggs explained the series of pipes in Manchaug Road so water doesn't back up into the neighbors' properties on the street.

Motion: To continue, with the applicant's permission, to February 5, 2014, by J. Smith
2nd: A. Aubin
Vote: 5-0-0

CONTINUATIONS

**223 Worcester Providence Turnpike/Atlas Box
DEP#303-0770 from 12-18-13**

The continuation was opened at 10:30pm. M. Briggs read the hearing notice as it appeared in the

January 22, 2014

Millbury Sutton Chronicle.

The project consists of expansion of an existing manufacturing facility with associated access drives, loading area and stormwater improvements.

Present: Brian Millicent, Whitman Bingham, for Anthony Cleaves, Art Mahassel & Frank Tavares, Atlas Box, William Babin, from RB Massello, their Contractor.

B. Millicent explained the updated information for Phase II using the plans showing the well was moved back inside of the building. He reviewed the plants to be put in the back slope area of the basin, the area to be planted with special berry bushes.

W. Babin reviewed the green roof and the information including the cost of this project, and explained that the owners do not want to go forward with this because of the expense.

B. Faneuf summarized his site visit using a video.
See attachment #4 Ecosystem Solutions Report

Motion: To continue, with the applicant's permission, to February 5, 2014, by A. Aubin
2nd: J. Smith
Vote: 5-0-0

56 – 58 Main Street

DEP#303-0757 from 10-17-12

The continuation was opened at 11:10pm. M. Briggs read the hearing notice as it appeared in the Millbury Sutton Chronicle.

The project consists of construction of two quadraplex housing buildings (total of 8 units) built townhouse style in the uplands area.

Not Present: Alton Stone, Alton Engineering, Thomas Finacom, owner

This has been continued, with the applicant's permission to February 5, 2014

Motion: To continue, with the applicant's permission, to February 5, 2014, by J. Smith
2nd: A. Aubin
Vote: 5-0-0

34 Bond Hollow Road

DEP#303-0769 from 10-02-13

The continuation was opened at 11:11pm. M. Briggs read the hearing notice as it appeared in the Millbury Sutton Chronicle.

The project consists of construction of a new single family home with private water and septic on site.

Not Present: Glenn Krevosky, EBT, Inc., David Marois, owner

J. Smith stepped down as an abutter.

This has been continued, with the applicant's permission to February 5, 2014

Motion: To continue, with the applicant's permission, to February 5, 2014, by A. Aubin
2nd: D. Moroney
Vote: 4-0-0

January 22, 2014

Project Updates

Main Street-Northbridge/Sutton/Nat Grid

B. Faneuf explained the waste spill in the soils, which were dug out and they had plenty of erosion controls in the area. He told National Grid if they need to do more work to apply for an Emergency Certificate.

114 Manchaug Road

B. Faneuf explained the applicant was to check on other State permits that they may or may not need to go forward with this project.

297 Manchaug Road

B. Faneuf explained the house was up and the replication area was in, but is not complete yet until another growing season.

The Board did not go into Executive Session

BOARD BUSINESS

Wetland Concerns and Updates:

42 Bond Hollow Road - this area is stable for the winter.

The Board voted on the minutes of January 8, 2014.

Motion: To accept the minutes of January 8, 2014, by J. Smith
2nd: D. Moroney
Vote: 5-0-0

There were no Permits to endorse at this meeting.

The Board signed the Routing Slip for 44 Lackey Road.

A site visit was done before the meeting and the Board signed a Certificate of Compliance for 58 Hartness Road.

The Board reviewed the Correspondence

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.

Motion: To adjourn, by J. Smith
2nd: A. Aubin
Vote: 5-0-0

Adjourned at 11:25pm.

Brandon B. Faneuf, Conservation Consultant
Sutton Conservation Commission

Application Type: Notice of Intent
Project Location: 219 Manchaug Road / Old Holbrook Place
Map 48, Parcel 78, Lot "2"
Applicant: Stephan M. Strassner
Owner: Same
Representative: Robert Murphy, Robert G. Murphy Associates, Inc.
Inspection Date: 1/10/14 (snow & frozen conds) &
1/15/14 (no snow and thawed conditions)
Memo Date: 1/16/14

Introduction

The location is 219 Manchaug Road, which is an ANR "Form A" subdivision lot that is a portion of the former Wesley Helgesen property at 217R, 229, and 231R (Map 48, Lots 53, 54, and 52, respectively) Manchaug Rd. A partial history of the site can be cross-referenced via DEP file no. 303-0763, whereas the Helgesen's moved across the street to their property at 236 Manchaug Rd. and sold the above, all of which have been subsequently subdivided as mentioned above. There are a total of 7 lots in the subdivision, one which is the lot on which the original house still stands at 229 Manchaug Rd. This application deals specifically with subdivision lot "2," which has not yet been assigned a parcel number.

The three former parcels were harvested for lumber with a DCR approved Forest Management Plan (FMP), Christian Kruger being the plan preparer. Lots 52 through 54 were taken out of Chapter 61 in order for the property to be subdivided and re-classified as residential. The FMP (attached) explains more of the history of the site. A large part of the original Lot 54 was clearcut (which the driveway will cross over), while the original Lot 53 exhibits more selective cutting practices. See below for more commentary on the harvesting practices and how it has affected wetland resource areas on-site.

The different Form A lots have varying frontage (subdivision plan attached). Four of the seven have considerable frontage on Manchaug Rd., while three have 50' of frontage and extend east by many hundreds of feet before "opening up" to the east. Lot "2" is one of such lots.

Topographical elevations increase moderately from Manchaug Rd. as you travel east. Elevations rise abruptly where Lot "2" opens up in the eastern portion of the lot, where there are ledge outcrops present. In fact, once you went east of a stone wall of the clearcut area on the old Lot 54, the depth to bedrock tended to be shallow.

Wetland Resource Areas On-Site

1. Bordering Vegetated Wetland (BVW) and associated 100' Buffer Zone (BZ) and Adjacent Upland Resource Area (AURA)
2. Inland Bank and associated 100' Buffer Zone (BZ) and Adjacent Upland Resource Area (AURA)

*There should be discussion about potential jurisdiction of the ditch on the east side of Manchaug Rd., to be discussed below.

BVW on-site is associated with a drainageway with a stream in the middle that bisects the eastern portion of the parcel. The wetland is wider off-site to the east, but runs downhill in a westerly direction where it narrows in a ledge-controlled valley past the proposed house site. It continues its run downhill to the west where it eventually narrows to just the stream channel. At this point it continues traveling off-site to the north and west, with the exception of some changes in hydrology due to skid trails through the wetland and over the stream on Lot 56, to be discussed below.

Past Forestry Cutting Practices

The cutting practices did not, in my observations, meet the standards of M.G.L. 132 (Forestry Cutting Practices Act) and the Massachusetts Forestry Best Management Practices Manual. It is clear that Filter Strips were not maintained near the stream. In fact, I observed two crossings of the stream without proper temporary crossing BMP's, one of which has altered the path of the stream. Cutting was performed within the wetland itself, which is allowed if they are dry, frozen, or stable enough to prevent damage, but the wetland area was not depicted accurately enough on the FMP at this location. As a result, the portions of the wetland in which harvesting occurred have been extensively rutted by harvesting equipment. This makes me believe that harvesting was done at a time when the ground was not frozen or otherwise in a stable condition. And as mentioned, the ruts have altered the path of the stream itself.

I also observed some fill material at one location that seemed out-of-place. It is in the proximity of Infiltration Basin (IB) #2. Under the fill was a $\pm 12"$ horizon of black, mucky soil that directly overlaid bedrock. Unfortunately, due to shallow-to-bedrock conditions, I was unable to auger up any low chroma subsoil, but this isolated area is suspect as filled wetland.

It also doesn't appear that all of the harvesting occurred on old Helgesen property (Lots 53 & 54, in this case). In fact, it appears that harvesting occurred on Lot 56 (189 Manchaug Rd) owned by Robert Nunnemacher. I do not know of there being an approved FMP for Lot 56. If one cannot be found, the cutting on that lot does not have exemptions applied to it via M.G.L. 132 and the harvester could be held liable for violations to the Wetlands Protection Act, at a minimum.

This is especially pertinent because the crossing that altered the course of the stream occurs on Lot 56.

During the January 10 inspection, the entire site was covered with snow and frozen solid due to the "Polar Vortex" that visited that week and brought temperatures down into the single digits and lower. I noticed that the lower clearcut area between the road and the first interior stone wall was an ice sheet. Portions of the eastern part of the site were frozen as well and walking was treacherous. During the January 15 inspection, unbelievably, a rainstorm and weather in the 50's had melted the snow and thawed the soil, so I could conduct a more complete inspection. What I found was a sheet of water travelling diagonally through the lower clearcut area to the northwest corner of the site (the old Lot 54 and now Lots "1" through "3"). In some places, the beginnings of a channel were forming. I was able to find a recent, man-made break in the inner stone wall that let water through. On the east side of the inner wall was a ponded area on a skid trail where there was significant harvest equipment traffic. Water from the east side of the wall, mostly forming and traveling in the skid trails, needed to be relieved once it hit the wall and ponded, so a breach was made. As a result, the lower clearcut area is currently getting flooded to a significant degree. None of this is technically wetland (unless it gets so bad that a channel is formed), but it overflows into a ditch on the east side of Manchaug Road.

Ditch

The ditch along Manchaug Rd. drains to the north, where it travels under several man-made culverts and eventually takes a sharp west turn just before 188 Manchaug Rd. through a culvert under the road. I can tell you that once water from the ditch discharges onto land to the west of Manchaug Rd., the Commission has already determined it to be an intermittent stream as it flows through the woods and down to the pond via DEP no. 303-0724. A stream flows into the ditch from points east, but further north of the subject Property. At the time of inspection, the ditch was flowing with water without direct precipitation input. So I think it prudent to discuss whether the ditch should be considered jurisdictional or not. Regardless, the potential discharge of polluted water into the ditch will eventually lead to Manchaug Pond, which creates a direct, hydrological connection between the site and the pond, so a review of the western portions of the site, at a minimum, are germane to the Public Interests.

Current Proposal

Lot 2 shares a driveway with Lots "1" and "3." The driveway 'intersections' approximately 170' east of Manchaug Rd. The driveway type (bituminous, gravel, etc.) is not specified. Temporary settling basins are proposed on the north and south sides of the driveway at 80' and 400' west of Manchaug Rd., respectively. Two infiltration basins are proposed in the eastern portion of the site where the land 'opens up.' It is in this area that the slope of the land increases steepness, and depth to ledge becomes more shallow. Infiltration Basins 1 & 2 are both proposed on the north side of the driveway, \pm 420' and 600' ft. from Manchaug Road, respectively. Another temporary settling basin has

been sited on the south side of the driveway another $\pm 320'$ east of Infiltration Basin #1.

A drainage swale is proposed on either side of the driveway in this section, beginning at the house and leading to the basins. There are no erosion controls shown in association with the driveway or basins, or even the temporary settling basins closer to the road. There is also no Limit of Disturbance/Work depicted on the plan on the wetland side of the driveway or house. Grading associated with basin #1 is sited 10' from the wetland boundary at flag 28. A portion of the driveway is within the 100' BZ/AURA of the BVW.

The driveway winds up and around the south side of house site, which is sited between two ledge outcrops. The septic system has been placed in the southeast corner of the Property >100' from the BVW and stream. The house is partially within the 100' BZ/AURA, and clearing has been depicted as occurring up to 45' from the BVW around the house.

Again, much of the area on which the current Property sits has been extensively harvested for timber.

Comments

1. Per Section 7 (specifically 7.1, 7.2, and 7.9), please state why the house, driveway, drainage swale, Infiltration Basin #1, utilities, and any clearing and grading could not be shifted away and outside of the 100' BZ/AURA. If alterations are unavoidable, please state what design changes could be made to minimize impacts to keep alterations as far away from wetland resource areas as possible. In general, and especially for new construction, the Commission has in the past required a minimum 25' clearance between wetland resource areas and permanent disturbance. If alterations cannot be avoided, the Commission normally asks for a survey of 5"+ diameter trees as a means of quantifying wildlife habitat, but this method is not appropriate due to the recent timber harvest. The applicant must still mitigate for lost wildlife habitat in the BZ/AURA and shown/explain how this will be done on the site plan.
2. Outline areas of permanent and/or temporary disturbance with appropriate Limit of Disturbance/Work boundary lines.
3. Add a Limit of Work/Disturbance on the north side of proposed alterations so that they completely encapsulate the work area from areas to be left undisturbed. A line that leads from property line to property line is appropriate here.
4. Additional erosion/sedimentation controls are necessary. The entire area on the north side of the driveway, wherever it is finally placed, must be perimetered with erosion controls. Check dams seem appropriate in the

drainage swale, either temporary or permanent. It is really too stony and too shallow-to-ledge for silt fence, straw wattles *with 100% biodegradable sheathing* is appropriate here. If possible, an orange snow fence should be erected along the north side of the driveway at the LOD/LOW to keep vehicles away from wetland areas. Erosion/sedimentation controls will be needed all the way down to Manchaug Road. Please depict the locations of E/S controls throughout the site, including around temporary settling basins on other lots that are associated with driveway construction. Jute matting *may* be necessary on steeper portions but can be dealt with as construction begins.

5. What form of driveway will be constructed?
6. The construction entrance should be 50' in length, and underlain with woven filter fabric. It must be replaced/refreshed on an as-needed basis by the contractor, or Conservation Commission upon inspection. Please revise the plans to show this and make a notation on the plan to this effect.
7. The current site conditions with the flooding and re-direction of water via skid tracks must be rectified and brought back as close to its original condition as possible. This begins at a crossing just below the proposed house site, all the way down to the first interior stone wall where skid trails dominate the landscape. The breach in the stone wall allows water to enter the lower cleared area where the driveway will sit, as well as Lots "1" and "3." If the sites are built up and nothing is done about drainage, there will be significant problems affecting houses and infrastructure. Water currently travels to and pools in the northwestern corner of Lot "1." If the driveway(s) are built and houses constructed, grades changed, etc., there will be significant issues if nothing is done about the current state of drainage. Excess water will drain to the ditch on Manchaug Rd. and lead down to Manchaug Pond, potentially causing pollution problems *and* increasing flow to the point where the existing ditch culverts may not be able to handle flow. Further, the current state of the lower clearcut area is such that water is starting to form the beginning of channels, which I am sure the applicant wants to avoid because they could eventually be interpreted to be intermittent streams.
8. An investigation and rectification of the skid trail that is re-directing flow from the stream on Lot 56 must be conducted. If left alone, there is a chance that the stream will re-form along the northern property boundary line of Lot "1" and change the wetland jurisdictional boundaries, at a minimum, to extend onto it. As of now, the original stream channel is $\geq 100'$ away from the boundary of Lot "1." Either way, there is a violation there that must be remedied.
9. Further investigation of the filled area in the vicinity of Infiltration Basin #2 is warranted to determine if it is a filled wetland.

10. Due to the fact that this is part of a larger subdivision with a shared driveway, I recommend the applicant eventually submit an as-built plan, as opposed to just a letter, when a COC is requested.

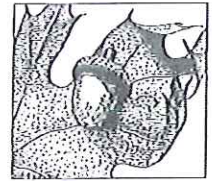
Sincerely,
Ecosystem Solutions, Inc.
Brandon B. Faneuf, Principal
PWS, RPSS, CPESC, CWB





FOREST MANAGEMENT PLAN

Submitted to: Massachusetts Department of Conservation and Recreation
For enrollment in CH61/61A/61B and/or Forest Stewardship Program



CHECK-OFFS

CH61	CH61A	CH61B	STWSHP	C-S
cert. <input type="checkbox"/>	cert. <input checked="" type="checkbox"/>	cert. <input type="checkbox"/>	new <input checked="" type="checkbox"/>	EEA <input type="checkbox"/>
recert. <input type="checkbox"/>	recert. <input type="checkbox"/>	recert. <input type="checkbox"/>	renew <input type="checkbox"/>	Other <input type="checkbox"/>
amend <input type="checkbox"/>	amend <input checked="" type="checkbox"/>	amend <input type="checkbox"/>	Green Cert <input type="checkbox"/>	
Plan Change: <u>2013</u> to <u>2021</u>			Conservation Rest. <input type="checkbox"/>	
			CR Holder	

Administrative Box

Case No.	Orig. Case No.	
Owner ID	Add. Case No.	
Date Rec'd	Ecoregion	
Plan Period	Topo Name	Oxford
Rare Spp. Hab.	River Basin	Blk Stone

OWNER, PROPERTY, and PREPARER INFORMATION

Property Owner(s) Wesley and Carole Helgesen
Mailing Address 229 Manchaug Rd Sutton MA 01590 Phone 508-476-5052

Property Location: Town(s) Sutton Road(s) Manchaug Rd

Plan Preparer Christian Kruger Mass. Forester License # 262
Mailing Address 101 Hampton Rd Pomfret CT 06259 Phone 860-428-8762

RECORDS

Assessor's Map No.	Lot/Parcel No.	Deed Book	Deed Page	Total Acres	Ch61/61A 61B Excluded Acres	Ch61/61A 61B Certified Acres	Stewshp Excluded Acres	Stewshp Acres
48	62	7644	326	8	1.74	6.26	1.74	6.26
TOTALS				8	1.74	6.26	1.74	6.26

Excluded Area Description(s) (if additional space needed, continue on separate paper)

Log Cabin area: 125ft by 150ft consisting of 0.43acres northern side of a the drive way a fieldconsisting of 1.31acres

HISTORY Year acquired _____ Year management began 2010

Are boundaries blazed/painted? Yes ☐ No ☐ Partially ☒

What treatments have been prescribed, but not carried out (last 10 years if plan is a recert.)?

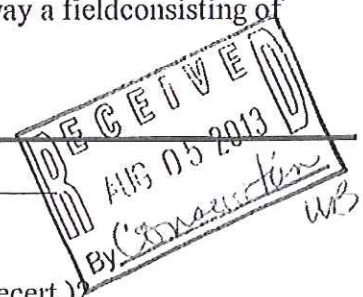
stand no. _____ treatment _____ reason _____

(if additional space needed, continue on separate page)

Previous Management Practices (last 10 years)

Stand #	Cutting Plan #	Treatment	Yield	Value	Acres	Date
---------	----------------	-----------	-------	-------	-------	------

Remarks: (if additional space needed, continue on separate page)



STAND DESCRIPTIONS

OBJ	STD NO	TYPE	AC	MSD OR SIZE-CLASS	BA/AC	VOL/AC	SITE INDEX
Ch61A/Stew	1	WO	6.26acs	12.0"	80sqft	7.16mbf 2cds	RO-70 WP-75

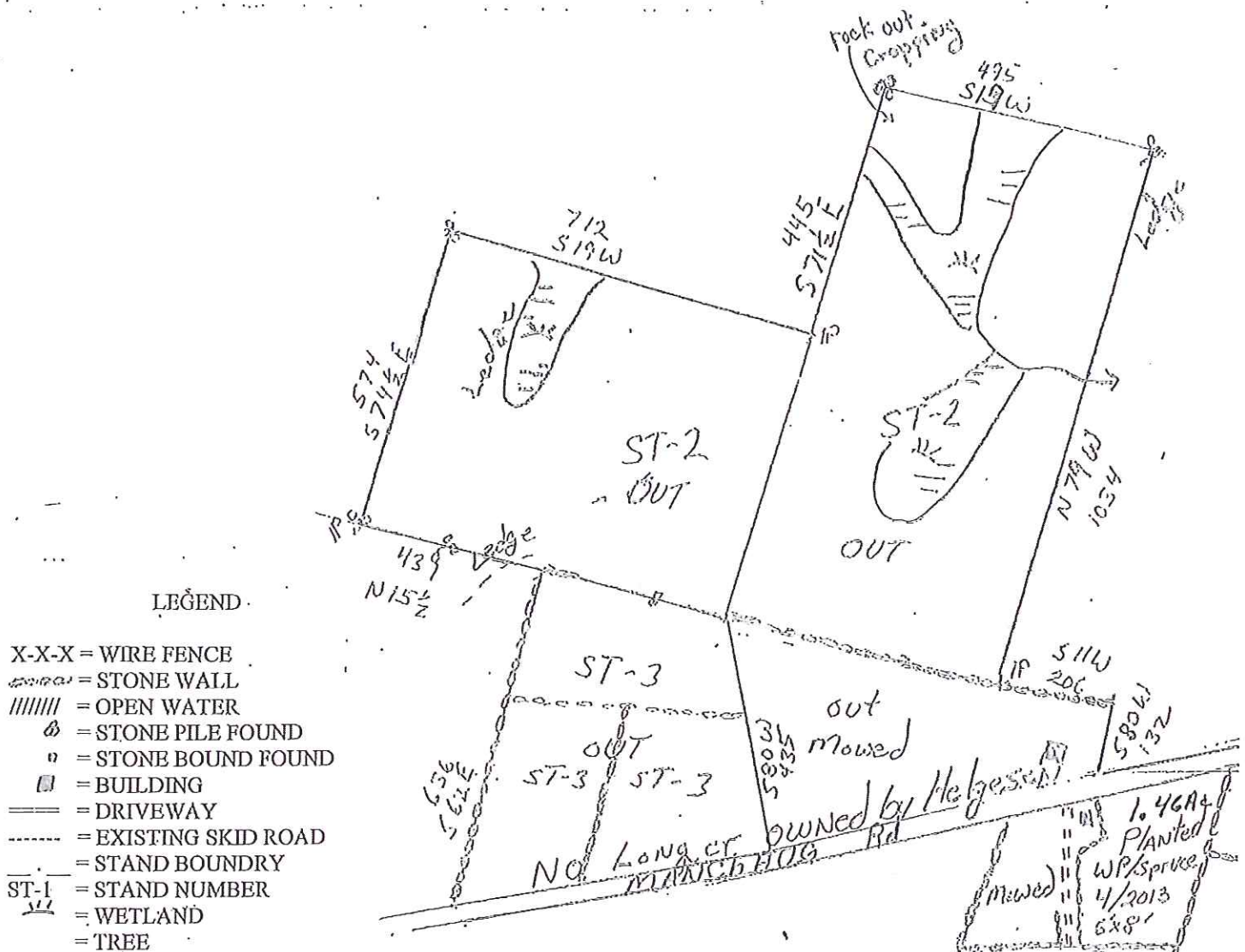
This stand is an even age stand of mixed white pine and hard woods. There is no regeneration or shrub layer in the under story. There has been a harvest in 2013 that was recommend in an earlier plan and has been carried out. There should be plenty of sun light to reach the forest floor to start regeneration now. Carole & Wes are building a new log cabin to live in on this side of the street and have sold their homestead every thing east of Manchaug road to a Mr. McGovern to build houses in the summer of 2013& is the reason of this amendment. The old cottage along the the lake will be removed at completion on the building & will be managed as part of the chapter 61A plan. there were a few oak and white pine marked for harevest that were not cut to maintain seeding stock in this area along the water front. The existing cart path will remain as a source of access for future management . The field to the south has been planted with different soft woods during April 2013 to increase production area. The rows are 6ft by 8ft and reasonable stock per chapter requiurements with the state forester's viewals confrimation in May or June of the same year

The soil is a Montauk, well drained gentle rolling slope well suited for tree growth.

The futrue condition of the stand is to maintai the even age stand of mostly hard woods with white pine and hemlock.

OBJECTIVE CODE: CH61 = stands classified under CH61/61A/61B STEW= stands not classified under CH61/61A/61B
 STD= stand AC= acre MSD= mean stand diameter MBF= thousand board feet BA= basal area VOL= volume

All bearing and distances have been and are taken from field observations and or from
Survey, Deeds, and assessor maps



Wesley & Carol Helgesen
229 Manchaug Rd
Sutton MA
Location: 229 Manchaug Rd
Consisting: 31.7acs plus other land
26.92acs-Chapter 61A:

Scale 1"=300ft

Prepared by: Christian Kruger
101 Hampton Rd
Pomfret Center CT 06259
(860)974-2083 office
(860)428-8762 cell
(508)949-7682 home
Lic.Forester #262/ Certified Forester
Date 7/10/13

*Note #1 = Cottage to be demolished After new log cabin construction of Lot size 125ft x 50ft N 14°E 125' S 43°E 198'
 *Note #2 New Construction of Log Cabin Lot size 125ft x 50ft N 14°E 125' S 43°E 198'
 *Note #3 Southern field was planted in W. pine & Norway Spruce 6ft x 8ft Spruce. Planted Date: 4/2013

360,593 SF

S73°37'35"E
467.91'

S14°00'01"W
142.65'

10F

S74°32'15"E

451.68'

"R" FACTOR LINE

LOT 4
268,691 SF

S78°08'19"E
965.88'

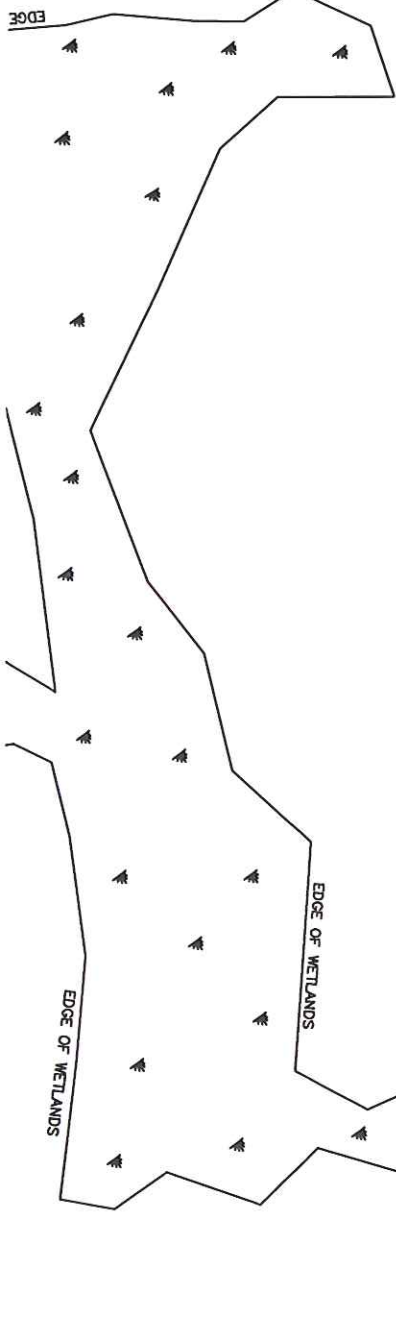
N79°33'02"E
150.00'

222.77'
250.00'

LOT 6
455,860 SF

EDGE OF WETLANDS

EDGE OF WETLANDS



S10°21'44"E
200.44'

S79°33'02"W
367.05'

50.00'

27.23'

S10°26'58"E

250.00'

222.77'

LOT 3
80,000 sq.ft.
1.84 ACRES
FRONTAGE = 250.00'
REGULARITY = 0.99

N79°33'02"E
320.00'

LOT 5
80,000 sq.ft.
1.84 ACRES
FRONTAGE = 250.00'
REGULARITY = 0.98

DRIVEWAY
12' WIDE
3% GRADE

250.00'

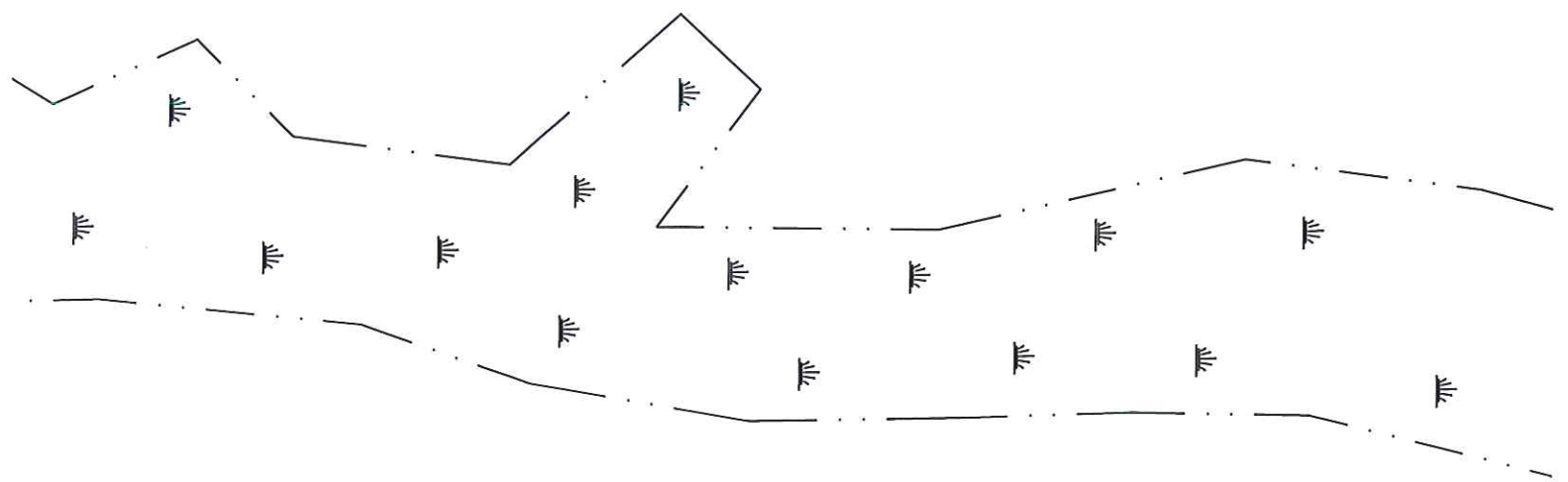
50' SETBACK LINE

250.00'

50' SETBACK LINE

LOT 2
360,593 S.F.
8.28 ACRES
FRONTAGE = 50.19'
UPLAND = 156,986 S.F. ±
REGULARITY = 0.49

S73°37'35"E
467.91'



Brandon B. Faneuf, Conservation Consultant
Sutton Conservation Commission

Application Type: Notice of Intent
Project Location: 9 Point Way
Map 9, Parcel 103
Applicant: Arthur Remillard
Owner: Same
Representative: Robert Murphy, Robert G. Murphy & Associates, Inc.
Inspection Date: 1/10/14

Memo Date: 1/18/14

Introduction

The location is 9 Point Way, which is the house at the end of the road on the left (south) side. It is the former home of Dominic Triola. The property abuts Lake Singletary at the lake's southeastern corner. The property is almost entirely developed, either with the existing house, detached garage, dock, beach area, and extensive landscaping. With the exception of the area where the dock and beach sit, there is a vegetated, if landscaped, buffer adjacent to the lake.

The lot is fairly level, with drops in elevation right as you enter the property from the road, and as the property extends to the south and west toward Lake Singletary.

I have received the "Site Plan for Arthur & Debra Remillard" by Robert G. Murphy & Associates, Inc. with a date of 1/2/14.

Wetland Resource Areas On-Site

1. Inland Bank of Lake Singletary, a Great Pond, and associated 200' Riverfront District. The bank extends around the south and west sides of the property.
2. Bordering Land Subject to Flooding associated with the 100yr. floodplain of Lake Singletary. A base flood elevation of 559 is given.

The bank was not flagged, but is depicted accurately on the site plan.

Current Proposal

Although not specifically stated, the proposal appears to be a demo-rebuild. The site plan does not outline the location of the existing house and how the proposed 5 bedroom house relates to it. Whether portions of the existing house will remain is unknown. I also don't know for sure if the septic system location on the plan is at the same location as the one that already exists, or if it is a new

location. The existing gravel drive leading to the detached garage will be re-located in order to make room for the septic system. Regardless, all proposed work will occur in previously disturbed areas.

The most significant work, in relation to the Wetlands Protection Act and Sutton Bylaw has to do with the elimination of 25 trees. The applicant states on the plan under "Special Conditions" that 25 trees are to be removed and that 25 new trees are to be planted as shown on the landscape plan." The plan I have received does not appear to be the landscape plan.

The new house will have an attached garage, what appears to be a patio on the lake side, a septic system and three separate Cultec infiltration chambers for stormwater associated with impervious surfaces associated with the house.

Comments

1. Work will occur on the "cul-de-sac" circle, which is Parcel 102 according to the Assessor's office, but has not been included as a parcel on which activities occur (and is within 200' of the lake). The site plan depicts it as Parcel "2A." In fact, Parcel 103, which is the bulk of the site, is depicted as "Lot 2," and Parcel 102 (Windle) to the east is depicted as "Lot A-1." This should be rectified.
2. I can't tell from this plan what trees are being removed and which are being replaced. The site plan states that 25 trees will be replaced per the "landscape plan." If this is a separate plan, I need to see it in order to be able to finish my review.
3. Will there be any loss of vegetative buffer between the lawn and lake?
4. The Limit of Work should be extended to completely encapsulate the work area. If there are areas that should be labeled as 'permanent limit of work', 'temporary limit of work', etc. multiple limits of work can be depicted.
5. Where is the existing septic system? Outline on plan.
6. Where is the existing house in relation to the proposed house? Outline on plan.
7. The use of zero phosphorus fertilizer can be conditioned here.
8. Will the paved drive just be shedding into the lawn or are they also draining into the Cultec chambers?

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



Brandon B. Faneuf, Conservation Consultant
Sutton Conservation Commission

Application Type: Notice of Intent
Project Location: 78 Torrey Road
Map 53, Parcel 1
Applicant: Stephen & Charla Kroll
Owner: Same
Representative: Stephen O'Connell; Andrews Survey & Engineering, Inc.
Hearing Date: 1/22/14
Memo Date: 1/23/14

Public Hearing Synopsis

Points brought up at the 1/22/14 public hearing, to the best of my ability. Paul Hutnak of Andrews Survey, and Edward Avizinis of Natural Resource Services were representing the Krolls.

1. Per Mark Briggs, the big choke-point is the pipe under Torrey Rd. Make sure the pipe is functioning properly.
2. Per Mark Briggs, gray or white is a better color for the driveway than black. Avoid bituminous pavement if necessary.
3. Applicant will depict railings w/ reflectors at the ends at the Terre Arch culverts.
4. Per Bob Tefft, any slash or soil material that is transported to the uplands in the western part of the site must >100' from wetlands and be perimetered by erosion controls on the low side.
5. Riprap slopes will be eliminated. They will now be seeded and stabilized with jute mesh.
6. The concrete retaining wall on the north side of the driveway, west of the Terre Arch culverts, will be eliminated. It will now be a vegetated slope just like the rest of the driveway.
7. The Terre Arch culverts will remain and a "logging bridge" is no longer under consideration.
8. The applicant will revisit the configuration, location, size, etc. of the Terre Arch culverts in order to assure that they are adequate enough to assure that Mr. Pelczarski's land does not flood as a result of the construction of the driveway.
9. Bob Tefft required that a note be placed on the plan to the effect that the restoration of the landing area will contribute to the positive drainage of water toward the pipe at the road which the stream flows through. He wants the landing restoration to be designed with elevations shown, with +/- 3" of play, but with the final word being that it *must* work or further work will be required.

10. The applicant will revisit the size, location, configuration of the wetland replication area per Brandon's comments that it be as close to the wetland as possible and not on a slope.
11. The proposed vernal pool will be re-located away from the driveway as a safety measure per Brandon's report.
12. Slash will be removed from around the vernal pools created due to logging equipment. A temporary LOW should be extended to include those areas.
13. The landing area, which was proposed to be converted to wet meadow, and was recommended by Brandon to stay wet meadow, will be allowed to revert to forest instead.
14. The hand dug ditch that leaves one of the new vernal pools will contribute to positive drainage away from Mr. Pelczarski's land.
15. A construction entrance will be depicted on the plan.
16. The estimated location of the house will be depicted on the Overview plan.
17. Mr. Hutnak states that the bounds of the shared property line w/ Pelczarski were ground-survey located and the boundary is depicted accurately.
18. Issues with the 5' wide riprap apron on the side of the driveway have been resolved.
19. Depict construction sequence on the plans. The driveway will be built first, followed immediately after by the restoration of the landing area and construction of the wetland replication area and vernal pool.

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



TO: Mark Briggs, Chairman, Sutton Conservation Commission

FROM: John Pelczarski, 74 Torrey Road, Sutton, Mass.

SUBJECT: NOI - Proposed Driveway Plan for 78 Torrey Road

DATE: January 21, 2014

I am writing to the Sutton Conservation Commission to express my concerns regarding construction of a proposed driveway on a 58 acre parcel of land owned by Stephen and Charla Kroll located at 78 Torrey Road in the Town of Sutton. The land abuts my property at 74 Torrey Road. The proposed driveway would be constructed several feet off of the common boundary line between the two properties. My concern is that the location of the proposed driveway will impede the natural flow of surface water runoff and below ground drainage from the adjacent upland and cause it to backup and pool on my property. I have already had this experience as a result of the corduroy logging road that was constructed during a timber harvesting operation several years ago (2010) . The trail was composed of logs laid over the wetland area to provide a crossing for the skidder. The combination of logs and mud resulted in having a "beaver dam" effect that obstructed the natural flow of surface water from reaching the large wetland area to the south of my property. The obstruction of surface water flow resulted in water backing up onto my property. While a small area in the southwest corner of my 2 acre lot had contained some wetland, the area has been expanding due to the obstruction of surface water flow caused by the corduroy skidding trail built by the logger. The soil which used to be dry ground has become increasingly saturated, muddy, and soft to walk on. A condition which did not exist until the timber harvesting operation constructed the logging trail in 2010.

I have reviewed the Conservation & Overview Plan and Construction Drawings for the proposed driveway at 78 Torrey Road that was prepared by Andrews Survey and Engineering, Inc. and dated December 18, 2013. While the plan does provide a 19 foot wide, Terre 4 Arch culvert for the passage of surface water under a section of the driveway in the wetland area, I am still concerned about possible water backup along other sections of the driveway. I believe that the proposed construction of a driveway along the full length of the common boundary line will have the same adverse effect on my property; it will create a "dam" effect that will impede the natural flow of surface water and subsurface drainage from higher ground into the larger wetland area to the south of my property. I will again experience further soil saturation and the pooling of surface water on my property, perhaps to a greater extent due to the driveway running the full length of my southern property line (430 feet).

While I am not opposed to the construction of a driveway on the Kroll's property, I would prefer that the driveway be constructed far enough away (50 feet) from the common boundary line so that if surface water does back up and pool, it will do so on the Kroll's property and not on mine. My house lot contains only two acres of land, I do not wish to increase the size of the wetland area on my property. The Kroll's lot contains 58 acres of land including 12 acres of wetlands and

over 1,000 feet of road frontage on Torrey Road. Moving the driveway away from the common boundary line in the wetland area by 50 feet to avoid possibly creating a flooding problem on my property could be accomplished without adversely affecting the wetland species that currently utilize this habitat. I wish to quote from page 9, paragraph 3 of The Wildlife Habitat Evaluation Narrative prepared by Leland Mello, M.S., Wildlife Biologist, Natural Resource Services, Inc. Harrisville, Rhode Island and included in the NOI: *"while the proposed driveway will impact vernal pool habitat associated with the vernal pool depressions in the haul road, this habitat was created as a result of poor management practices associated with past logging activities and would not be present if the haul road had been restored upon completion of timber harvesting. Prior to the development of this vernal pool habitat, it is likely that the species observed within the pools would have utilized flooded portions of the BVW to the south of the landing and haul road for breeding, etc. given that this area likely holds substantial water in spots, as evidenced by the pronounced microtopography observed within the area."*

Also, from page 10, paragraph 3 of the same document: *"The animals that currently utilize this habitat were likely present within the area prior development of the pools, and therefore are not dependent upon it for continued existence on the site. In addition, alternative breeding areas are present on site, which were likely utilized for such purposes prior to the development of the subject vernal pools."*

These conclusions indicate to me that the proposed driveway could be located in the area of the logging road and not be required to be positioned adjacent to the common boundary line. Besides providing a 50 foot buffer zone to allow for potential surface water backup on the Kroll's property instead of my property, the 50 foot buffer zone would also minimize the adverse visual impact the 19 foot long by 3 feet high Terre 4 Arch culvert would have when viewing the area from my property.

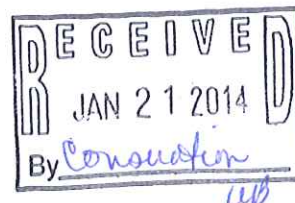
In conclusion, I believe that we can work together and come to some consensus on the location of the driveway so that the wetland area can be restored, the wildlife habitat can be protected, the driveway can be constructed, and I do not have to worry about my property being flooded.

Thank you for your time and consideration of this matter.

Sincerely,



John P. Pelczarski



Brandon B. Faneuf, Conservation Consultant
Sutton Conservation Commission

Application Type: Notice of Intent
Project Location: 223 Worcester-Providence Turnpike / Map 18, Parcel 28
Applicant: Atlas Box, LLC
Owner: Same
Representative: Whitman & Bingham Associates, LLC
Inspection Date: N/A
Memo Date: 1/20/13

Graves Engineering has completed their peer review of the stormwater & engineering aspects of this application. Jeff Walsh wrote me an email which stated the following:

Brandon,

I took the Commission's comments into consideration while I was reviewing the Atlas Box documents for the Planning Board. I didn't feel comfortable putting the following thoughts in our review letter to the Planning Board.

- Green Roof: There are mechanical systems on the roof of the existing building. I expect there will also be mechanical systems on the roof of the building expansion. Not that these systems cover the entire roof area, but that's another issue to deal with if a green roof is being considered. I agree that the cost of a green roof would likely be expensive – there are probably building structural issues to address in addition to the rooftop components of a green roof.
- I didn't see any other significantly different location to put Basin C. The sizing of both Basin B and Basin C are based in part upon an infiltration rate from a table in the DEP Stormwater Handbook. Some engineers feel the rate is conservatively low (and hence infiltration basins conservatively large). During my site visit today I saw evidence of Basin B having held about a foot or less of water at one time but I don't know how recently that occurred. The basin was empty today. MADEP does allow higher rates if in-situ permeability testing is performed. The downside of using in-situ rates is that it eliminates a possible over-sizing of the basin that was the basis of another comment further below in your list of comments.
- The storage volume lost in Basin B due to the retaining wall is pretty minimal.
- Stone could be used on the bottom of the basin as could grass, or even a coarse sand bottom. The bottom surface of basin B is essentially sand and is working fine. I believe the bottom of one or more of the infiltration basins at South Sutton Commerce Park is also sand. Top soil from a sandy site such as this also usually

works fine but there may not be enough existing topsoil at the site for the expansion project. If topsoil is imported it must have a high sand content. I've seen a situation where imported fine-grained topsoil placed on an infiltration basin bottom actually inhibited infiltration to the underlying sand. The topsoil was ultimately removed and the basin then infiltrated much better.

- I have no issue with the Commission requesting a gauge to monitor sediment accumulation. I didn't feel comfortable suggesting that to the Planning Board considering this project is more or less a revision (albeit an expansion) to an already-approved Phase II. The cost of one or two gauges is minimal.
- The paved area of the revised Phase II isn't substantially larger than the paved area of the already-approved Phase II. The truck loading area is also about the same size as what was already approved. The design engineer relied on the existing proprietary BMPs at Basin B and the roof runoff from the east side of the building goes to Basin C. I didn't see the need to revisit the existing BMP sizing.

I hope these comments help in your review and the Commission's review.

Respectfully submitted,

JEFFREY M. WALSH, P.E.

Project Manager

I have not yet seen the full report by Graves. However, it is clear that in order to construct the building in its current configuration, encroachment into the BZ/AURA of the BVW is necessary.

I have also reviewed updated plan sheets showing a revised Limit of Work line that keeps work at least 25' away from the BVW. One sheet shows the locations of >5" diameter trees that will be felled, and a table with what size trees will be felled. A total of 86 >5" diameter trees will need to be felled in order to place the basin, as currently configured. This is more than a minimal change and can be defined as 'adverse' under the Bylaw.

Adverse is defined in the Sutton Bylaw as:

That effect a proposed project or phase of such project, which by its area, scope, and/or duration, appears to represent more than a minimal change or modification, often cumulative, to the natural undisturbed and unencumbered characteristics, functions and values of any freshwater wetland(s), adjacent upland resource area(s), bordering vegetated wetland(s), watershed, or water body that may indicate significance to the interests of this Bylaw.

The current project presents more than a minimal change or modification to the natural undisturbed and unencumbered characteristics, functions and values of the AURA, at a minimum.

Wildlife Habitat will be specifically impacted in an adverse manner. Adverse impact in relation to wildlife habitat is prohibited for greater than two seasons without sufficient mitigation per Section 7.2.4 of the Bylaw. Significant adverse impact in regards to wildlife habitat, which includes the Adjacent Upland Resource Area, will occur if impacts will:

- a) result in a measurable decrease in the extant wildlife populations or biological composition, structure or richness on the site or in the vicinity exclusive of the present or future state of adjacent and nearby properties, or
- b) impair damage, destroy or reduce in value for wildlife purposes certain specific habitat features and characteristics, and/or
- c) result in a net loss of wetlands.

Impacts apply to a) and b) above.

It is important to note here that the Sutton Bylaw does not specify a strict and unbending 25' "no-touch" or "no build" zone, so adhering to a strict setback is not applicable. A 25' 'no-touch' zone has been an unwritten guideline the Commission has followed that allows for a minimum level of protection to wetland resource areas. Mitigation for impacts in the rest of the BZ/AURA is still required. Per Section 7.9 of the Bylaw (Alternatives Analysis), the entire BZ/AURA (or Riverfront District) is taken into consideration. As stated in Section 7.9 of the Bylaw:

If, in the Commission's view, there are no practical alternatives, project impact(s) must be minimized and mitigated so there are no adverse impacts to the resource areas(s). If the Commission determines that the project will have significant adverse impact(s) on the resource areas then the project will be denied.

Under Section 7 of the Bylaw, mitigation must counterbalance impacts. With the current plan, mitigation for loss of forest has not been done. It is clear that the loss of forest and associated habitat represents more than a minimal change or modification to the natural, undisturbed and unencumbered characteristics, functions and values to the Adjacent Upland Resource Area, and adjacent BVW and stream. The applicant must create a mitigation plan acceptable to the Commission for the loss of habitat in order to comply with the Sutton Bylaw.

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



Date: 1-22-14

219 menschens Interessel