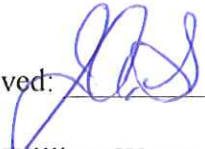


SUTTON CONSERVATION COMMISSION

March 4, 2015

MINUTES

Approved: _____



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

Public Hearing (Cont.)

7:00pm 198 (AKA 208 Lot#2) Manchaug Road
DEP#303-0808

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

The project consists of construction of a single-family house, driveway, well, utilities, and septic system with associated grading.

Present: Lance Anderson, Heritage Design Group, Mr. & Mrs. Kevin Steele, owner, Attorney Tom Wickstrom.

L. Anderson reviewed the changes from the last meeting for plan changes, the reduced view corridor with a 59" limited clearing and erosion controls. He explained there would be 26 trees within the jurisdiction that would come down.

R. Tefft questioned the groundwater protection district and asked if the septic system is within the area. He also questioned the wildlife value and the filtering of water being directed along the property line. He doesn't want to see any ditches, but suggested a French drain, swales and possibly a rain garden.

L. Anderson replied there is a public water supply for the YMCA and that is why the groundwater protection district is on the plans. The State approved the plans. They will look into the drainage issue.

J. Smith stated she would like to see everything staked out on the ground, for a site visit. A 2 dimensional perspective on a plan is difficult to translate to reality and she would like to actually see where things would be to better understand this project.

B. Faneuf read Section 7 of the Bylaw for mitigation on a 1 to 1, tree for tree for disturbance. Since this is a forested lot, it is up to the Commission to determine what mitigation is sufficient.

Motion: To continue, with the applicant's permission, to March 18, 2015 at 8:15pm, by J. Smith
2nd: W. Wence
Vote: 4-0-0

Public Hearing (New)

7:15pm 80 Worc. Prov. Tpke. Solar Farm
DEP#303-0806

The Public Hearing was opened at 7:25pm. D. Moroney read the hearing notice as it appeared in the Millbury Sutton Chronicle.

The project consists of construction of a Solar Farm.

Present: Norman Gamache, Guerriere & Halnon, Inc., Greg Carey, Clean Energy Collective, and Art Allen, Eco Tec

N. Gamache reviewed the plans from the last meeting and what is being proposed for this Solar Array project. They need to improve the width of the driveway per the Planning Board. The information from the Isolated Wetland area from the ANRAD helped them to place the solar panels. They would clean up the area of the abandoned old house and remove the house. There would be a forest matt to the grassy area under the panels for maintenance. A swale would be along the lot line, with a riprap slope to slow down the water coming off the hillside, behind the properties along Worc. Prov. Tpke. This would lead to the stormwater drains, with manholes, leading to the infiltration basin area.

G. Carey stated that they would be 30' away from the wetlands. Trees would be cut but the stumps would remain in place. This Solar Farm would be selling to residential customers in Sutton and surrounding areas.

A. Allen explained the mitigation plan and replication area changes to make sure the culvert under the driveway is functional.

J. Smith questioned the erosion at the panel drip line and asked if there are panels with holes for the water to infiltrate into the ground.

N. Gamache told the Board that the time-line for construction would be about six to eight weeks. They would make a parting stage area to the left of the driveway, which is out of the buffer zone, because they can't park on Route 146 during construction.

R. Tefft would like to see a wide row of stump grindings beside the swale. He suggested using hay fiber mulch on the slopes during the loaming and seeding.

B. Faneuf summarized the information from the suggestions made, which they took into consideration.

Motion: To continue, with the applicant's permission, to March 18, 2015 at 8:30pm, by W. Wence
2nd: R. Tefft
Vote: 3-0-1 D. Moroney stepped down

Project Update

BOARD BUSINESS

The Board approved the minutes February 18, 2015

Motion: To approve the minutes February 18, 2015, by J. Smith
2nd: W. Wence
Vote: 4-0-0

A site visit for the Certificate of Compliance would be done for 187 W. Sutton Road - Adams Pond Dam in the spring after the snow melts.

Discussions:

The Board reviewed the Annual Report that was sent to the Town Clerks office.

These two items were tabled to the next meeting when all Commissioners are available.

Bylaw Review – sent to Laura on February 26th

Create a Wetlands Pamphlet – to give out to people.

No Site visits until the snow melts

The Tracking Sheets and the Correspondence were reviewed.

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 W. Wence

2nd: J. Smith

Vote: 4-0-0

Adjourned at 8:25pm.

Brandon B. Faneuf, Conservation Consultant
Sutton Conservation Commission

Application Type: Notice of Intent
Project Location: 80 Providence-Worcester Turnpike
Map 10, Parcel 15
Applicant: Greg Carey; Clean Energy Collective
Owner: Debra Couture
Representative: Normand Gamache, PLS; Guerriere & Halnon, Inc.
Inspection Date: 1/21/15 (ANRAD inspection, which was snow-free)
Memo Date: 2/24/15

Introduction

The location is 80 Providence-Worcester Turnpike (MA Rt. 146). It is a ±12.1 acre site on the west side of Rt. 146. The lot has frontage on Rt. 146 between 76 and 86 Prov-Worc Tnpk., which are both single-family homes. There is an existing driveway that leads uphill to 86 Prov-Worc Tnpk, and appears to be the only means of ingress and egress for that property. The property doglegs to the north behind 76 Worc-Prov Tnpk (single family house), Minardi Landscaping (DEP File no. 303-0765) at 72 Worc-Prov Tnpk, TLC Pet Haven at 68 Worc-Prov Tnpk, and a retail plaza where the Great Canadian canoe company is located at 68 Worc-Prov Tnpk. The portion of the subject site behind the above-mentioned properties is in an uphill position. In fact, this stretch of land on the west side of Rt. 146 sits on a drumlin, which is an elongated hill with dense (lodgement) till that sees seasonally perched water tables.

With the exception of the driveway leading to 86 Prov-Worc Tnpk., the rest of the site is undeveloped and occupied by forest. There is, however, a dilapidated single family house on the north side of the driveway that has more or less been reclaimed by nature. One interesting landscape feature occurs in the southwest portion of the site where an excavated ditch is present. Based on the size of the trees on the spoils laid on either side of the ditch, it had to have been dug at least 20 years ago. Besides being a linear ditch, there were no signs of a water channel within it and no flowing water at the time of inspection. I would expect that water *possibly* exits the ditch during an extreme event, but other than that it is a non-jurisdictional feature and not subject to the Wetlands Protection Act or the Sutton Wetlands and Riverfront District Administration Bylaw.

Wetlands do exist, however, in the southeast corner of the Property near the highway, and a stream flows through the B-Series wetland. Rt. 146 acts as an aquaclude for the A and B series wetlands. Rt. 146 was built up and it acts as a kind of dam. Concrete culverts allow water to flow under the highway and release water from both the A and B-Series wetlands. The stream in the B-Series wetland starts in the rear of 76 Worc.-Prov Tnpk. right at the outlet of the stormwater structures at Minardi's Lawn Care, and which was given an Order of Conditions from the Conservation Commission in 2013. The site plan depicts a 6" pipe that connects the A and B-Series wetlands.

There is another, isolated wetland more or less in the center of the Property, and right uphill from Minardi's. I observed this wetland back in 2013 when Minardi's came in with an NOI, and pointed it out to Art Allen during our site walk on January 21, 2015. He agreed that it was a wetland, and flagged it while I was on-site with him.

Wetland Resource Areas

1. Bordering Vegetated Wetlands (BVW) w/ 100' Buffer Zone/AURA. The wetlands are labeled as the A and B-Series flags, specifically A1-A20 and B1-B40. Per the site plan, a 6" pipe that connects them under the driveway.
2. Isolated Vegetated Wetland (IVW) w/ 100' AURA under the Bylaw *only*. It is non-jurisdictional under MGL c131, §40 and 310CMR 10.00. It is flagged as WFIVW-1 through 7. It is located uphill and west of Minardi's Lawn Care, Inc.

An intermittent stream is present within the B-Series wetland but was not flagged. It does not need to be flagged unless the applicant wants its position verified. This paragraph just states its existence should it be an issue in the future.

Wetland Boundary Review & Recommendations

The BVW and IVW boundary were verified in an ORAD (DEP file no. 303-0805), issued on 2/5/15.

Public Interests significant to Wetland Resource Areas under 310CMR 10.00 and the Bylaw

BVW & IVW* : Public and Private Water supply (both)
 Groundwater Supply (both)
 Flood Control (both)
 Storm Damage Prevention (both)
 Prevention of Pollution (both)
 Fisheries Habitat (both)
 Wildlife Habitat (both)
 Erosion & Sedimentation Control (Bylaw only)
 Water Quality & Level Water Pollution Control (Bylaw only)
 Wild and Aquatic Life Habitats (Bylaw only)
 Recreation & Aesthetic Values (Bylaw only)

*The IVW is, in my opinion, most valuable toward the Interest of Flood Control, although it does retain some, albeit reduced Wildlife Habitat, Storm Damage Prevention, Prevention of Pollution, and Groundwater Supply values. The same goes for the AURA surrounding the IVW.

Current Proposal

The applicant (Applicant) has proposed a ground-mounted photovoltaic panel, community solar array (Solar Array) with associated inverter equipment, pole mounted sharp cutoff light, crushed stone vehicle turnaround area, associated grading, open grass swale with check dams, 6' high chain-link fence w/ 1' extension arms, riprap swale, Contech® stormwater treatment unit, concrete catch basin in driveway, HDPE pipe trench, ductile iron pipe trench, cast-in-place concrete trench drain, Stormtech SC-740 stormwater chambers, bituminous concrete berm and bituminous concrete pavement, 3' high retaining wall, partial stone wall removal, temporary staging area, and landscaping (arborvitae and grass/clover seed mix). The site plans depict most of the area to be affected as being on the west side of the A and B-Series BVW's, and area west of 64

through 76 Worc-Prov Tnpg, including portions of the AURA associated with the BVW's and AURA associated with the IVW.

With regard to impact to wetland Resource Areas, the Applicant has proposed alteration of different jurisdictional areas on-site, which include:

- Permanent filling of 397sf of the A-Series BVW along the driveway to "widen driveway for emergency service vehicles." The filled portion of the BVW will be replicated in the AURA of the B-Series BVW between flags B32 and B37. Replication will be 820sf.
- 98sf of temporary disturbance of the A-Series BVW for "wall construction." This will occur in association with the fill mentioned above.
- Clearcutting into the AURA of the A-Series wetland, with the permanent limit of disturbance 30' from the BVW boundary. Cutting will occur on the west side of the BVW.
- Clearcutting into the AURA of the B-Series wetland. Cutting will occur on the west side of the BVW.
- Riprap swale at the end of the grassed swale that will run along the property boundary with #64 through 76 Worc-Prov Tnpg. will encroach into the AURA associated with the B-Series BVW. Water from the proposed stormwater system will also discharge to the end of the riprap swale right at the 100' AURA boundary.
- Clearcutting into the AURA on the south and west sides of the IVW.
- The dilapidated house at 80 Worc-Prov Tnpg, within the AURA of the B-Series BVW, is proposed to be removed. The stone well associated with the house, which is in the BVW, will be filled with clean gravel. It will be filled to within 1ft. of the surface. I don't consider this to be BVW fill and is best done for safety reasons.

Compliance with 310CMR 10.00

Jurisdiction applies to the A and B-Series BVW's only, although with the changes in grades outside of the Buffer Zone and stormwater leading into and discharging to the Buffer Zone, it gives the ConCom jurisdiction over the areas outside of the Buffer Zone *in regards to stormwater*. As such, this project requires stormwater review. Graves Engineering is performing the engineering peer review for Planning Board. I leave it to the Commission to decide if they want a ConCom specific engineering peer review. Otherwise I concur with the comments made by Graves Engineering, in their letter of 2/19/15. *I would request to be present when said testing is performed. I would also request that the SWPPP be forwarded to the Conservation Commission before start of construction.*

I didn't see any details regarding erosion and sedimentation controls other than the "typical cross section" on the Wetland Replication plan (sheet 8 of 8). The Grading & Erosion Control (sheet 4 of 8) plan has a notation that states "erosion control barrier within 100' of any wetland shall be silt fence and haybales, areas outside the buffer shall be silt fence." *Haybales are not allowed in Sutton under Conservation Commission policy.*

When less than 5,000sf of BVW is proposed to be filled, the Conservation Commission is given discretionary authority to allow or deny under 310CMR 10.55(4). The total amount of fill is 397sf. It is for the specific purpose of upgrading the driveway for emergency vehicles, there is no other means of ingress or egress unless an easement is

granted from an abutter, and replication is at least 1:1 in ratio, so I don't see why it should be denied.

Clearcutting and structures in the Buffer Zone is allowed under 310CMR 10.00 as long as alterations do not alter a wetland resource area, meaning the performance standards for work are liberal. This usually means that some form of erosion/sedimentation control device is proposed that keeps sediment from reaching the resource area. Again, haybales are not allowed in Sutton, and I would like to see a more specific detail on the erosion and sedimentation controls, *including any erosion control matting/blankets* to be put on steep slopes.

Compliance w/ Bylaw

The BVWs and IVW are jurisdictional under the Bylaw. Portions of the proposed project occur within jurisdictional areas, including BVW of the A-Series BVW and AURA to the A and B-Series BVW's, as well as the IVW.

I will start by stating that I have the same opinion regarding the 397sf of BVW fill as above. A poignant reason was stated for the need for widening the driveway, and there is no other means of ingress or egress to the site without need for an easement from an abutter. Impact is minimal. Further, a 3' high retaining wall on the south side of the driveway is proposed to minimize further impact to the A-Series BVW. That being said, impacts are currently so small that I would not necessarily object to a grassed slope all the way down to the bottom. I would like to see the total disturbance numbers first, though. My only objection comes with regard to the placement of the replication area. I am not convinced that the replication area will have "an unrestricted hydraulic connection to the same waterbody or waterway as the lost area" under 310CMR 10.55(4). The A and B-Series BVW's are hydrologically bifurcated by the driveway, and leave the site via different culverts. They may eventually end up in the same waterway or waterbody on the opposite side of Rt. 146, but no evidence has been put forth in that regard. Even so, the waterbody or waterway they may connect to is likely to be far enough away that the nexus between the two is too weak to consider the fill area and the replication area as being hydraulically connected. In order to rectify the situation, I have two suggestions:

- Relocated the replication area to the A-Series BVW, or
- Repair/replace the culvert under the driveway and maintain it in an open condition so water can pass freely between the A and B-Series BVW's.

Section 7 of the Bylaw is the main, guiding section of the Bylaw for placement of projects and activities in jurisdictional areas under the Bylaw. In this case, the Adjacent Upland Resource Area of the intermittent stream and Riverfront District of Manchaug Pond apply. Section 7.2 of the Bylaw states that:

"...the Conservation Commission shall begin with the presumption that lands within the adjacent upland resource area(s) of a wetlands resource are best left in an undisturbed state."

Section 7.2.6 clarifies that:

"The applicant shall carry the burden of proof for demonstrating to the Conservation Commission's satisfaction that the proposed work or activities in the adjacent upland resource area(s) are *necessary* [emphasis added] and that

reasonable alternatives, including reducing the scale and scope of the project, do not exist using best management practices and scientific techniques."

The above being said, the Commission has, under Section 7.2, the discretion (not obligation) to entertain proposals for "temporary, limited, or permanent disturbance" within jurisdictional areas:

"...as it deems appropriate, when the applicant can demonstrate to the Commission's satisfaction that the proposed work or activity will not affect wetland values, singularly or cumulatively, and that reasonable alternatives to the proposed work or activity do not exist."

Further, Section 7.9 of the Bylaw specifically states that:

"...proposed projects and associated disturbances should be located outside of any resource area(s) that falls under the Jurisdiction, Rules and Regulations, of this Bylaw, including all adjacent upland resource area(s). Practical alternatives to locate the project outside these areas must be investigated and should one or more prove feasible the plan must be amended to relocate or redesign such activities accordingly."

"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 resource area(s). If the Commission determines that the project will have significant adverse impact(s) on the resource area(s) then the project should be denied."

The applicant has not provided an alternatives analysis for work within the AURA of the A and B-Series BVW's, or for work within the AURA of the IVW. I will reiterate that the main Interest of the IVW has to do with Flood Control, due to its geographical position above Minardi's Lawn Care, although it does retain *some* value in regards to Wildlife Habitat, Storm Damage Prevention, Prevention of Pollution, and Groundwater Supply Interests. The applicant has proposed a stormwater swale along the property line below the IVW, which, pending Graves's review, answers the question regarding flood control.

The main questions regarding incursion into the AURA of the A and B-Series BVW's, as well as the IVW, are:

- Why is it absolutely necessary to clearcut into the A and B-Series BVW's, to within 30' of the wetland boundaries?
- Why can't the photovoltaic panels in the AURA of the B-Series BVW be placed further upslope and stay outside of the AURA entirely? For example, there is a gap between a short and long section that could potentially be used for panels and not grass.
- Why is it absolutely necessary to clearcut into the AURA of the IVW?
- Can impacts to AURA be minimized by reconfiguring the solar arrays in a different manner to keep disturbance completely outside, or at least further away from Resource Areas?
- Can the riprap swale at the end of the vegetated swale, in the AURA of the B-Series BVW, be shortened so it remains completely outside of the AURA?
- If the applicant cannot avoid impact in AURA, and the Commission agrees with the rationale, some form of mitigation must be proposed to offset permanent impact. A wildlife habitat analysis may be helpful in this regard.

- In order to quantify disturbance for mitigation and lead to a fruitful discussion, please provide a calculation of how many square feet of AURA are proposed, total, discounting temporary impact associated with the razing of the house and construction of the wetland replication area, and discounting disturbance within the existing driveway. Please break them down by resource area (A/B-Series BVW, IVW). Basically concerning AURA that is currently forested on the west sides of the A and B-Series BVW's, and the AURA of the IVW.

It should be noted that, there being no Riverfront Area, costs associated with construction, or even the long-term profitability of the Solar Array is something the Conservation Commission does not have to take into consideration.

Recommendations

1. Answer bulleted questions above and provide an Alternatives Analysis under Section 7.9 of the Bylaw.
2. Move the replication area to the A-Series wetland side, or replace/repair the existing culvert under the driveway so that a hydraulic connection between the A and B-Series wetlands are re-established.
3. Perform an exercise showing a 2:1 grassed slope down the south side of the driveway instead of a retaining wall, and let me know how many additional sf of disturbance to BVW it would create. This may be better than a retaining wall that could limit small wildlife passage.

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



Conservation Sign in Sheet

Date: 3-4-15

Name	Address & or Email	Agenda Address
LANCE ANDERSON	One Main St	208 Marchway RD
Thomas Wickstrom	60 Church St Whitinsville	"
Kevin Steele	375 Hill St Whitinsville	"
Bonnie Steele	375 Hill St Whitinsville	"
Art Alton	EcoTec, Inc., 102 Grove St, Ware	80 Ware - Prov. Tpk.
GREG CARNEY	CLEAN ENERGY COLLECTIVE	80 WINCHESTER PROV. TPK.