

**TOWN OF BROOKLYN
Inland Wetlands and Watercourses Commission
Special Meeting Minutes
Virtual Webex Meeting
July 28, 2020**

Call to Order: The meeting was called to order at 6:03 p.m.

Members Present: Jeffrey Arends, Richard Oliverson, George Sipila, James Paquin.

Absent: None.

Staff Present: Margaret Washburn, Wetlands Agent, Rick Ives, First Selectman, Audrey Cross-Lussier, Recording Secretary.

Also Present: David Held, Paul Archer, Paul Terwilliger, Bill Perron, Bob Russo, Bob Deluca.

Roll Call: All members present stated their name for the record.

Seating of Alternates: None.

Election of Vice Chairman: A motion was made by Jim Paquin to nominate Richard Oliverson for Vice Chairman. Chairman Arends seconds this motion. Mr. Oliverson accepts the Vice Chairman nomination. No discussion held. The motion passes unanimously.

Public Commentary: None.

Additions to the Agenda: None.

Approval of Minutes:

1. Regular Meeting Minutes June 9, 2020. Minutes approved as written with no changes made.

Public Hearings: None.

Old Business:

1. 060920A Paul R. Lehto, Allen Hill Road, Map 32, Lot 148, RA Zone; Excavation of sand and gravel.

David Held, Provost and Rovero represents the applicant Paul R. Lehto. This is an expansion of a project the Commission approved in October of 2018. The project never went forward. This application includes an expansion to the south and to the east towards the Regis property and Town of Brooklyn property bordering the Quinebaug River. The proposal is an expansion of 6.7 acres in total, extracting approximately 90,000 cubic yards of sand and gravel. This will be done in 2 Phases. The majority of Phase 1 is the expansion. Phase 2 is essentially the same horizontal limits of what was previously approved, with lessening of depth into the grade. They will maintain a 50 ft buffer in the expansion area and similar buffer in Phase 2. Mr. Held discusses stormwater containment, grading, restoration phase. Mr. Held addresses the 7/14/20 Syl Pauley, Jr., P.E. #3 comments. (see attached). Mr. Held stated the wetland crossing is in good condition, there is a 24-inch concrete pipe with flared end sections, the side slopes are stable with vegetation. No evidence of excessive erosion or repair or remediation needed. There are no issues with continuing its use.

Chairman Arends discusses the wetlands crossing with Ms. Washburn and Mr. Held. He has no issues with the crossing. Discussion ensued.

Chairman Arends asked Mr. Held what length of time the project will take? Mr. Held commented approximately one year.

Mr. Sipila asked what will be used to mitigate the dust? Mr. Held commented that they will use calcium chloride or bring in a water truck for the dust mitigation.

Chairman Arends questioned the wetlands elevation of 180 ft. proposed and the bottom at 174 ft., will this get into the water table. Mr. Held addresses the data for the test pits on the site plan. There is 5 feet of separation groundwater from test pits.

A motion was made by Jim Paquin to approve application 060920A Paul R. Lehto, Allen Hill Road, Map 32, Lot 148, RA Zone, Excavation of sand and gravel with standard conditions. George Sipila seconds this motion. No discussion held. All in favor. The motion passes unanimously.

2. 060920B VBL Properties, LLC, Beecher Road, Map 22, Lot 38, RA Zone; 5-Lot Subdivision.

Paul Archer, Archer Surveying represents applicant VBL Properties, LLC. Robert Deluca Professional Engineer and Robert Russo, Soil Scientist, also join the meeting. This is a 14-acre parcel on the south side of Beecher Road. There is one proposed lot on the westerly side of the upland review area, and two proposed lots in the middle that are not in an upland review area. One lot on the west side of Blackwell's Brook has little in upland review area and one lot on Rukstela Road will have considerable work in the upland review area.

Wetlands were flagged years ago. Bob Russo verified the wetlands flagging. Ms. Washburn met with Mr. Archer, Mr. Russo and Mr. Deluca and did a site walk. NDDH approval is granted. Mr. Archer commented the review from Syl Pauley, NECCOG, P.E. are 95% PZC's concerns. Ms. Washburn's concern was with the septic system on the Rukstela Road Lot 38. Mr. Archer commented this system has been moved 80 feet away from wetlands.

Bob Russo, Soil Scientist, CLA Engineers, has verified the delineation done on site and managed to find old flags. GPS was done out in field and the locations that were compared and verified on the plan reflect the wetland boundary in the field.

Mr. Russo, Soil Scientist, CLA Engineers, discusses the contents of his letter dated 7/28/20; site setting; surficial geology and soils; soil types and properties at the VBL site; wetland descriptions and functions; potential for impacts; summary (see attached).

Chairman Arends comments on the 175- ft. upland review line. Mr. Russo comments there is a 125 ft. line. Mr. Archer commented the 175-ft. line is from the stream not wetlands, what is shown is the 125-ft. line. If it is necessary to place the 175-ft. line from the center of the brook on the plans Mr. Archer will comply. Chairman Arends is amenable to this.

Mr. Paquin commented it should be measured from the edge of the brook not the center.

Chairman Arends addresses his concerns with regards to a possible failure of the septic system on Lot 38 and what might be the impact on the resource area.

Mr. Russo commented the septic system is designed to meet CT health code. Any failed system that has water/sewage coming up to top will cause pollution in the stream. The soils mapped out are sandy and porous, it is likely if the system failed on this site it would likely be due to lack of maintenance.

Mr. Paquin questioned if there are any historical artifacts on Lot 35 and Lot 38. Mr. Archer commented they are in the process of working with UConn due to the historic nature of the area and Blackwell's Brook, however, there are no definitive answers today. Mr. Paquin asked when will the results be available? Mr. Paquin feels a proper decision cannot be made without this information. Mr. Archer is unsure when the results will be available.

Mr. Archer feels this is a PZC issue rather than IWWC. If there were artifacts found the septic systems would be moved. The area of the artifacts would be preserved. Mr. Archer commented there was a similar case with a site developed by Mr. Jeffrey Weaver.

Chairman Arends addresses Syl Pauley, P.E., NECCOG's comments. Mr. Archer commented that 95% of Mr. Pauley's review pertains to PZC issues. Mr. Pauley stated the scale has been changed, subdivision plan 2 frontage corrected, 100-year flood has been added on the plan, all comments will be addressed.

Mr. Arends questioned if a conservation subdivision was looked at? Mr. Archer feels it does not set up for a conservation subdivision due to the narrowness of the lots.

The land is 300-feet deep. Conservation subdivisions set up for road lots with open space. Mr. Archer commented they are in the process of looking for open space subdivision with PZC. The south part of the project abuts Town land. This gives the possibility to deed over part of Blackwell's Brook to the Town of Brooklyn for this project.

Chairman Arends addressed his reservations with a duplex on Lot 38 with the grading to the brook once the project is finished, i.e., fertilizer going into brook, swimming pools, chlorine. Mr. Archer stated the duplex will contain 2 units with 2 bedrooms on each side. The lot is very flat. Mr. Archer addressed Chairman Arends concerns.

Mr. Archer commented they are in talks with the Town of Brooklyn to purchase this lot with open space funds that are available. It attaches to the Town's piece and walking trail to Blackwell's Brook.

Mr. Paquin asked if the offer is in writing? Selectman Ives stated no. Mr. Paquin would like to see it in writing and as evidence. Selectman Ives stated the Town has been asked if they have any interest.

Ms. Washburn reviews and discusses Syl Pauley, P.E. NECCOG letter from July 16, 2020 with Commission Members (see attached). Discussion held. Mr. Archer addresses all of Ms. Washburn's concerns.

Mr. Archer stated that all plans will be signed and stamped when ready to be filed.

Mr. Archer commented that the 100-year flood line it is just a layer turned off on the plans. When the plans are finalized it will be placed on the plan.

Mr. Paquin comments on his level of frustrations with the Webex meetings and inability to read the site plans off of the website. Chairman Arends echoes Mr. Paquin's comment.

Mr. Deluca, CLA Engineers, commented that he has seen other Towns use a full screen with a plan on it that is shared with the presenter. This may be something to look into for future Webex meetings.

Ms. Washburn further reviews Syl Pauley, P.E. NECCOG review of July 16, 2020. Mr. Archer addressed Ms. Washburn's concerns. Plans will be revised accordingly. Mr. Deluca answered questions with regards to slopes and septic concerns. Discussion ensued.

Mr. Paquin agrees with the Town purchasing the lot; Selectman Ives agrees it is worth discussing.

Chairman Arends requests revised plans for the next meeting. Mr. Paquin asked if large plan sets could be printed out and given to members for the next meeting. Mr. Archer will comply with this request for Commission Members.

A motion was made by Jim Paquin to continue application 060920B to the next regularly scheduled meeting August 11, 2020. Richard Oliverson seconds this motion. No discussion held. All in favor. The motion passes unanimously.

3. 060920C A. Kausch & Sons, Tripp Hollow Road, Map 15, Lot 4, RA Zone; 2-Lot Subdivision; Single family homes, driveways, septic, well and minor grading.

Paul Archer, Archer Surveying represents the applicant A. Kausch and Sons, along with Bob Deluca and Bob Russo from CLA Engineers. The wetlands were flagged by Joe Theroux. Mr. Russo verified the flags.

Mr. Archer stated Mr. Paquin previously asked if the septic systems could be moved up to contour line 386. Per revised plans all septic systems have been moved per last month's meeting request. Department of Health approval has been granted.

Syl Pauley P.E., NECCOG, commented on the close proximity of the septic systems to wetlands. Since last month's meeting the septic systems have been moved away from the wetlands as requested.

Ms. Washburn has no further comments.

A motion was made by Jim Paquin to approve application 060920C A. Kausch & Sons, Tripp Hollow Road, Map 15, Lot 4, RA Zone; 2-Lot Subdivision; Single family homes, driveways, septic, well and minor grading with standard conditions. Richard Oliverson seconds this motion. No discussion held. All in favor. The motion passes unanimously.

4. 011420C River Junction Estates, LLC, south of Rukstela Road, Map 29, Lot 1, Map 30, Lot 16; Grading and restoration of a previously disturbed gravel excavation area. Restoration will establish a vegetation cover on 4+/- acres of disturbed area. The restored area will be used for agricultural crop production.

Ms. Washburn has visited the site. Most of grading has been done except at the northern property line which will eventually be regraded. The vast majority has been graded per restoration plan and is naturally revegetating. It is not clear at this time if it will remain as open space or be part of a solar farm. In the interest of trying to close this out in a timely manner, Ms. Washburn feels that it would be okay to say this enforcement issue is closed and rescind the enforcement order issued in 2014.

Chairman Arends is happy with the photographs of the restoration, as are Jim Paquin and Richard Oliverson.

A motion as made by Jim Paquin to approve the restoration as completed and rescind the 2014 enforcement order. Rich Oliverson seconds this motion. No discussion held. Motion passes with one abstention George Sipila.

New Business:

1. Hearing for violation at Map 18/Lot 28 Woodward Road, Owners William and Kathie Perron. Cease and Desist order on 7/2/20 for site work consisting of mining and spreading gravel in the upland review area to Blackwell's Brook.

Chairman Arends and Ms. Washburn visited the site. Chairman Arends stated that Mr. Perron excavated some gravel close to the brook without a permit. Mr. Perron claims he had a permit. Chairman Arends stated that Mr. Perron provided no approved gravel removal permit nor was there one found in the office that was issued.

Chairman Arends asked Mr. Perron to stop digging next to the brook as he was doing this without any engineering skill and fear of what damage could be caused to the wetlands.

Mr. Perron claims he did not damage the wetlands. He is not digging in the brook; it is all vegetated. Chairman Arends asked Mr. Perron if he hit groundwater, Mr. Perron stated no.

Chairman Arends stated the recent application 071420C submitted by Mr. Perron is incomplete. There was no site plan submitted, no purpose or activity description given as to what was to be done. Mr. Perron agrees to submit a site plan for the next meeting. A cease and desist order will be given to Mr. Perron so that no more digging will be done.

Mr. Perron would like to take the top of the bank off and put it back in the hole. Chairman Arends asked him to stop digging and leave it alone.

Commission Members reviewed Ms. Washburn's report. Mr. Oliverson suggests continuing to next month's meeting August 11, 2020.

A motion was made by Jim Paquin to move item # 4 071420C up to item #2 under New Business. Richard Oliverson seconds this motion. No discussion held. Motion passes with one abstention George Sipila.

2. 071420C William and Kathie Perron, Map 18, Lot 28, Woodward Road; Break down bank to provide access to brook and use gravel on property. (Note: the receipt of this application was the date of the next regularly scheduled meeting, which was 7/14/20).

Chairman Arends requests Ms. Washburn issue a cease and desist order.

Ms. Washburn asked if the Commission requests the additional information for the next regularly scheduled meeting August 11, 2020. Commission members agreed.

Chairman Arends asked Mr. Perron to provide with the application a map showing what he would like to do; wetlands delineation; how much gravel is going to be removed; engineering input may be required.

Chairman Arends pleads with Mr. Perron to stop all work.

Commission Members agreed to do a site walk. Friday August 7th at 1 p.m. Members are to meet at the site.

071420B David and Nancy Bell, 131 Prince Hill Road, Map 34, Lot 52, RA Zone; 3-Lot Subdivision. (Note: the date of receipt of this application was the date of the next regularly scheduled meeting, which was 7/14/20).

Paul Terwilliger, from PC Survey represents the applicant. The Bells own an 8-acre piece of land on Prince Hill Road with an existing house which will become a free split with 2 acres. The rest of the 6 acres remaining will be subdivided into 3 building lots. There is a small pocket of wetlands that abuts the Ennis Farm property. There is approximately 2,000 sq. ft. of wetlands on the property. There will be some activity on one lot within the 125-ft. regulated area.

There is clearing up to 80-ft from the wetlands and there is a septic system on that lot which is 92 feet away from the wetlands.

They are also proposing a conservation easement that surrounds the wetlands area as a buffer between the farmland where the 3 lots will be. Erosion and sedimentation barriers will be placed between activity and the wetland area. There is 80-ft of undisturbed land between the wetland and the activity.

Ms. Washburn stated the work is pretty far from the wetlands.

Chairman Arends asked what are the slopes?

Steep slope, steepest 15%, greater in 10% area where the proposed house and septic area is. Perpendicular to slope flows away from where the wetland is due to the nature of the contours.

Ms. Washburn commented there is a natural detention basin between the property and Prince Hill Road elevation 316, driveway entrance. There is skunk cabbage there.

The wetlands were flagged by Joe Theroux November 2019.

There was a proposed retention area to alleviate any run-off from the side slope where the road is with a 4-inch PVC pipe under the driveway. There is no Dept. of Health approval.

A motion was made by Jim Paquin to continue application 0714120A to the next regularly scheduled meeting August 11, 2020. Richard Oliverson seconds. No discussion held. Motion passes unanimously.

Site walk was scheduled for Friday, August 7, 2020 at 2:00 p.m. Members are to meet at the site.

071420B David and Nancy Bell, Church Street, Map 35, Lot 4, RA Zone; 3-Lot Subdivision (Note: The date of receipt of this application was the date of the next regularly scheduled meeting, which was 7/14/2020).

Paul Terwilliger, PC Survey represents the applicant. The property is the remaining 25.5-acre portion of Kingswood Estate located off of Malbone Lane that was slated to be developed back in the 1980's which did not happen. They are proposing a 3-lot subdivision of the remaining land with a 50 ft. access strip to the lot connecting Church Street. There will be a common driveway to access the lots. One lot is 2.6-acres, second lot is 3.35-acres and the remaining lot is 16-acres.

There are five wetland areas on property. One at Church Street, there is a ponding area where road drainage collects. There is a slope to the south that slopes northerly, a depression which runs through a culvert across the road. There is a wetland area on Lot 17 at the toe of a slope, a flat area where the run-off and ground water bleed out to collect. There is not a lot of wetland vegetation. There is a wetland associated with seasonal run off on the north side of proposed Lot 18 with a clear ravine that the brook runs seasonally through. There are two isolated wetland pockets out in the middle of the back lot. The wetlands were all delineated in 2007 by Mike Shaefer. The flags were located and are mapped. The two pocketed wetlands in back may have some vernal pool significance. They are creating a conservation easement corridor to connect the two so there is no activity to disrupt any traveling from one to the other, extending to the north side of the property, and connecting to the intermittent brook area. The other isolated wetland in the middle will also be protected with a conservation easement. Soil testing shows the two rear lots require non-engineered septic system; the front lot requires an engineered septic system due to the seasonal high ground water. The back lots have gravelly soil. This has been submitted and reviewed by the Dept of Health. As far as drainage, the property slopes down away from road down to the back. Drainage is proposed along the side of the driveway where there is a cut into the slope. Curtain drains are placed on the edge to collect ground water bleed out across driveway. A larger rip-rap lined ditch along the south side of the driveway with a splash pad for outlet is proposed which is northwest to isolated wetland pocket.

Chairman Arends asked Mr. Terwilliger to put the 175-ft. boundary mark from edge of the pond as well as the 125-ft. from the wetlands on the site plan. Mr. Terwilliger stated they are not full-fledged ponds, more like vernal pools. They are not proposing any activity in that area. Mr. Terwilliger can add the setbacks on the site plans as requested.

A site walk was scheduled for Friday, August 7, 2020 at 2:30 p.m. Members are to meet at the site.

A motion as made by Jim Paquin to continue application 071420B to next month's regularly scheduled meeting August 11, 2020. Richard Oliverson seconds this motion. No discussion held. All in favor. The motion passes unanimously.

Communications:

1. Budget update – reviewed.
2. Wetlands Agent Monthly Report:


Ms. Washburn discussed the submission of documents and policy statement for virtual meeting deadlines. Members agreed to place this as an agenda item for discussion at next month's meeting.

Public Commentary: None.

Selectman Ives asked if the Commission would like to have an in-person meeting for next month. Chairman Arends agrees. Selectman Ives will look into the possibility of a Commission Member in person meeting with the applicants connecting via Webex.

Chairman Arends commented to Selectman Ives that the Wetlands Commission needs more members. Selectman Ives stated he is working on this and asked if they would be interested in a five-member commission. Chairman Arends stated yes. This will be placed as an item on next month's agenda for discussion.

Adjourn: A motion was made by Richard Oliverson to adjourn the meeting at 7:37 p.m. Jim Paquin seconds this motion. No discussion held. All in favor. The motion passes unanimously.


Audrey Cross-Lussier
Recording Secretary

NORTHEASTERN CONNECTICUT COUNCIL OF GOVERNMENTS

Engineering Plan Review Pertaining to Proposed Gravel Excavation

PAUL R. LEHTO
(RIVER WALK DRIVE)

BROOKLYN, CT

(July 14, 2020)

The comments contained herein pertain to my review of plans for a gravel removal operation. The plans under review (7 sheets) are entitled "Proposed Gravel Excavation, Easterly of Allen Hill Road, Brooklyn, Connecticut, Owner/Applicant: Paul R. Lehto," prepared by Provost & Rovero, Inc. and Archer Surveying, LLC, dated June 2, 2020. This review was made in accordance with most recent Town of Brooklyn Zoning and Wetlands Regulations and Public Improvement Specifications.

1. On Sheet 2 of 7, "Existing Conditions," Note 6 states that the existing topographical information was created using aerial photography (and photogrammetric mapping?) from WSP Group. The dates for the photography and mapping should be included in the note.
2. If not already done, the CT State Historic Preservation Office should be contacted regarding any possible archaeological/historical significance to this portion of the site, since it sits high above and only about a quarter mile from the Quinebaug River. The CT Department of Energy and Environmental Protection (DEEP) "Natural Diversity Database" should also be consulted.
3. The haul road running through the previously excavated area to River Walk Drive (see Sheet 2 of 7) crosses a wetland. It is recommended that the Applicant's engineer evaluate and describe the crossing, which has been in place for many years, to determine if it is in good condition for future heavy loads and if any erosion has occurred around it that would require some reconstruction. Additionally, it is important to establish erosion and sediment control systems on both sides of the crossing and other methods to help protect the wetlands from the heavy truck traffic, dust, and material that may fly off haul trucks. Erosion and sediment control system(s), if required, should be shown for the affected area on a plan at a scale of no less than 1" = 40'.
4. There is no estimated time of completion of the proposed gravel removal operation in the "Excavation Notes" on Sheet 5 of 7.
5. Noise and dust from heavy truck traffic may cause an issue with residents living along River Walk Drive and its connected side roads.

By:


Syl Pauley, Jr., P.E., NECCOG Regional Engineer

7/14/2020

CLA Engineers, Inc.

Civil • Structural • Survey

317 MAIN STREET

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July 8, 2020

Inland Wetlands Commission
Town of Brooklyn
69 South Main Street
Suite 22
Brooklyn, CT 06234

RE: CLA 6382
VBL Properties LLC Subdivision
Beecher Rd

To the Commission:

CLA Engineers was retained by VBL Properties LLC to conduct a wetlands investigation and functional assessment on the parcel of land, located at Beecher and Rukstella Roads that is proposed to be developed for a residential subdivision. The 14.68 acre site is located within the Town of Brooklyn and is currently a combination of farm field and wooded undeveloped land. The approximate site location is shown on the cover sheet of the site plans. The purposes of the investigation were to: confirm the wetland delineation, provide background data in the form of determining wetland functions, and assess the potential for wetland impacts due to the proposed development.

Wetlands were previously delineated by John Ianni of Highland Soils according to the State of Connecticut statutory definition as described in Section 22a of the State Statutes. CLA conducted field work in June and July of 2020 and confirmed that the previous wetland delineation is substantially correct. Several old wetland flags were found and re-flagged and new flags were hung along virtually the same line that was previously determined.

After wetland delineation confirmation was complete, the wetland resources of the site were surveyed by conducting a deliberate walk through of the site, traversing each wetland in order to collect data characteristic of that wetland. During the walk through, vegetation identifiable was noted, described and divided into communities.

Site Setting

The VBL site has several vegetative cover types that were established by past land use. Portions of the site have been used for agriculture and a farm fields is still present. Other areas were used for agriculture and then allowed to revert to woodland at various times in

the past. The abundant stonewalls indicate that nearly all of the land was previously cleared and used (as was most of Connecticut) for farm fields until the early 20th century.

The upland forest type is mixed hardwood uplands and the wetland is a combination of floodplain forest and red maple swamp. The areas of upland have mixed hardwoods such as red maple, red oak, locust and black birch. The wetlands are dominated by red maple trees with other species such as yellow birch and pin oak in lesser numbers.

The land uses surrounding the site include residential, agricultural and woodland. The residential development is primarily located to the east. Undeveloped farmland and woodland surrounds the site to the north, west and south.

Throughout the site slopes vary from moderate to nearly flat. The surface water drains to Blackwell's Brook on the eastern side of the site and to an on-site wetland on the western side of the site. The slopes on the east and west side of Blackwell's Brook are abrupt at the edge of the wetland and indicate the transition from upland soils to the edge of the alluvial soils that flank the brook.

Surficial Geology and Soils

Southern New England was overlain by glacial ice as recently as 12,000-15,000 years ago. The materials that the glaciers deposited over top the local bedrock determine the surficial geology of the region and of the VBL site. Glacial deposits are generally divided into three categories: glacial till (un-stratified sand, silt and rock), glaciofluvial (water sorted, stratified sand and gravel), and glaciolacustrine (stratified sand, silt and clay that settled out in lakebeds). The type of glacial deposits present on the site includes both glacial till and glacial outwash. In addition, the soils along Blackwell's Brook were deposited by that stream after the glacier retreated and are regulated by the State of Connecticut as wetland soils.

The soils formed in till deposits typically have sandy loam to silt loam textures and in this case they are coarser, sandy loams. The slopes are moderate to flat throughout the site and this leads to differences in soil mapping classification as listed by the NRCS.

The soils formed in glacial outwash are stratified and contain layers of sand and gravel.

The alluvial soils on this site are also all either poorly or very poorly drained and have variable textures that include layers of sand, gravel, silt and organic matter. All of these soils have been delineated as wetland.

Table 1 is a summary table of the soils found on the site.

Table 1 - Soil Types and Properties at the VBL Site

<u>Soil Series</u>	<u>Parent Material</u>	<u>Drainage Class</u>	<u>Texture/Characteristics</u>
*108 Saco	Alluvium	Very Poorly Drained	Fine Sandy Loam Extremely Stony
*17 Scarboro muck	Decayed organic matter	Very poorly drained	Mucky
*3 Ridgebury, Leicester and Whitman	Glacial Till	Somewhat poorly to very poorly drained	Stony sandy loam
60 Canton and Charlton	Glacial Till	Well Drained	Fine sandy loam
701 Ninigret	Glacial Outwash	Moderately Well Drained	Sandy loam
38 Hinckley	Glacial Outwash	Excessively drained	Loamy sand
*13 Walpole	Glacial Outwash	Poorly	Sandy loam

* Wetland soil types

Wetland Descriptions and Functions

This VBL site site has one wetland system that surrounds Blackwell's Brook and a second system that occupies a depression on the site's west side. Under the USFWS system, the Blackwell's Brook system is classified as Riverine, upper perennial (RU) with a rock bottom while the western wetland is a palustrine deciduous swamp (PF01) that is seasonally flooded/saturated. It has gentle slopes and is sparsely vegetated.

The typical vegetation of both wetlands includes: trees such as red maple trees and saplings, yellow birch trees and saplings; shrubs such as spice bush, highbush blueberry, winterberry holly, sweet pepperbush, clammy azalea, and alder and plants such as skunk cabbage, cinnamon fern, sphagnum, royal fern, and sensitive fern.

The principle functions of these wetlands are numerous, especially those associated with Blackwell's Brook .The CTDEEP NDDB (December 2019) shows no known habitat of threatened, endangered or special concern species. The functions were found to include:

- Wildlife habitat
- Fish/shellfish habitat
- Floodwater retention/detention
- Groundwater recharge/discharge
- Biomass production export
- Sediment/toxicant reduction
- Nutrient processing
- Shoreline stabilization
- Recreation
- Aesthetics
- Educational opportunities

These values are mainly associated with the Blackwell's Brook wetland and are supported by several important features of that wetland:

- Presence of a perennial stream
- Areas of undeveloped buffer
- Limited development within the watershed
- Evidence of use by a diversity of wildlife species.

Potential for Impacts

As shown on the project plans there are no proposed activities in the inland wetlands. However, work in the upland review zone will include:

- Clearing and grading
- Construction of driveways, houses and septic systems
- Installation of erosion and sedimentation controls
- Construction of utilities

These activities in the upland review zone present limited potential for wetland impacts. The site has only moderate slopes and short length of slope. CLA believes that the Best Management Practices (BMPs) measures shown on the plans for erosion and sediment control and stormwater management will be adequate in preventing wetland impacts if properly installed and maintained.

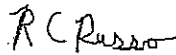
CLA notes that in order to minimize the potential for impacts to wetlands, the E&S has been designed in compliance with the CTDEEP 2002 E&S Manual.

Summary

The proposed development activities will not directly impact wetlands. The work in the upland review zone can be managed with BMPS so as to not impact wetlands during construction. The post construction stormwater treatment is protective of the wetlands. In summary, if the proposed erosion and sedimentation control measures are adhered to, CLA believes that there will be no adverse wetland impacts.

Please contact me if you have any questions.

Very truly yours,

A handwritten signature in dark ink, appearing to read "RC Russo". The signature is written in a cursive, somewhat stylized font.

Robert C. Russo
Soil Scientist

NORTHEASTERN CONNECTICUT COUNCIL OF GOVERNMENTS

VERSION 3 ENGINEERING PLAN REVIEW

PERTAINING TO 5-LOT SUBDIVISION (ASSESSOR'S MAP 38, LOT 22)

BEECHER ROAD BROOKLYN, CT (July 16, 2020)

The comments contained herein pertain to my review of the third version of plans, consisting of eight (8) sheets, entitled "Subdivision Application, 5 Lot Subdivision, Prepared for VBL Properties, LLC, Beecher Road, Brooklyn, Connecticut," prepared by Archer Surveying, LLC and CLA Engineers, Inc., dated June 4, 2020 with revisions as recent as July 8, 2020. Most recent Town of Brooklyn Zoning, Subdivision and Wetlands Regulations and Public Improvement Specifications were researched for this review.

Sheet 1 of 8 – Cover Sheet (Archer Sheet 1 of 8)

1. The "Index of Drawings" prepared by professionals should be revised to reflect titles on the respective plans in the plan set, as follows:

Cover Sheet	Sheet 1 of 8
Existing Condition Plan	Sheet 2 of 8
Subdivision Plan	Sheet 3 of 8
Grading & Septic Design Plan 1 of 2	Sheet 4 of 8
Grading & Septic Design Plan 2 of 2	Sheet 5 of 8
Driveway Sightline Plan & Profile	Sheet 6 of 8
Construction Details	Sheet 7 of 8
History Plan	Sheet 8 of 8

This suggestion is to avoid confusion and accurately describe what is in the plan set.

Sheet 2 of 8 – Existing Condition Plan

1. The plan's title block designates this plan as Sheet 2 of 9. This should be changed to Sheet 2 of 8.
2. Previous versions of this plan did not include contour lines, wetlands flagging, 100-year flood hazard boundaries, and expanded map references. Also, "Notes" was expanded from 3 to 12 notes, which are repetitious of those found on Sheet 3 of 8, "Subdivision Plan."
3. A 100-year flood hazard boundary is located at the northwest corner of the property opposite CL&P Utility Poles #300 & #301, however, the flood hazard zone is not shown on Sheet 4 of 8, "Grading & Septic Design Plan 1 of 1."

4. The 100-year flood hazard boundary symbol needs to be included in the plan "Legend."
5. The professional land surveyor's seal and signature is missing on this plan.
6. The soil scientists name and signature is missing on this plan.

Sheet 3 of 8 – Subdivision Plan

1. The scale of this plan is noted as 1" = 70'. However, when an engineer's scale ruler is used, the scale is actually 1" = 60', the same as that for Sheet 2 of 8, "Existing Condition Plan." The scale annotation should be changed to 1" = 60' along with the numbers on the graphic scale bar.
2. The front property line of proposed Lot 38-2, from its northwest corner to approximately 40'-50' easterly along said property line, does not appear to be in conformity with Subdivision Regulation 10.6. The first paragraph of this regulation states *"Existing Streets: Proposed subdivisions abutting an existing Town street shall provide for proper widening of the right-of-way of such street to the width appropriate for the classification give such street in accordance with the Town Plan of Development."* To conform to this regulation, the distance from the centerline of the actual road to the property line should be no more than 25' (see Public Improvement Specifications Figure No. 7, "Improvements to Existing Town Roads," on Page 29). The property line orientation in question should be checked by the Applicant's land surveyor and, if necessary, be brought into compliance with the regulation and the lot area recalculated to ensure compliance with minimum lot size.
3. The 100-year flood hazard boundaries associated with Blackwells Brook and across the majority of the frontage of Lot #38-2 is noted on this plan, however, the boundaries do not appear on Sheet 4 of 8, "Grading & Septic Design Plan 1 of 2" and Sheet 5 of 8, "Grading & Septic Design Plan 2 of 2." Neither plan has the 100-year flood hazard boundary symbol in the "Legend."
4. The professional land surveyor's seal and signature is missing on this plan.

Sheet 4 of 8 – Grading & Septic Design Plan 1 of 2

1. The 100-year flood hazard boundary is not shown along the frontage of Lot #38-2. Based upon the location of the boundary shown on Sheet 2 of 8, the depicted location of the well for this lot may be in or on the edge of the flood hazard zone. It is recommended that another location be considered for the well if the designer feels this has the potential for well contamination with an opinion stated in writing to the Commission.
2. The 100-year flood hazard boundary symbol is not included in the "Legend."

Sheet 5 of 8 – Grading & Septic Design Plan 2 of 2

1. Lot No. 38 on Sheet 5 of 8 is almost entirely contained within a regulated wetland upland area. No one can argue that Blackwells Brook is an important watercourse in the town of Brooklyn and as such any development or land disturbance close to it, especially within the wetland upland review area as shown, should be done with extreme care, if at all. The proposed lot, if approved as shown, is to be developed with a two-family house, paved driveway and significant clearing/regrading of the lot as close as 100' from the stream. Introducing habitation in this area provides no guarantees that the future residents will recognize the importance of protecting the water quality of this stream and not create further modification (e.g. cutting trees) of the upland area to, for example, increase more usable yard space,

provide more natural light in the yard or install a swimming pool, all of which can be detrimental to the wetland. Considering this, I believe very careful thought must be given as to whether or not this lot should be created at all—especially with a duplex dwelling—due to the potential negative impact to the Blackwells Brook wetland system.

2. The 100-year flood hazard boundary is not shown along Blackwells Brook on Lot #38.
3. The 100-year flood hazard boundary symbol is not included in the "Legend."

Sheet 7 of 8 – Construction Details

1. A staked hay bale sediment control detail and stone check dam detail should be included on this plan as the use of the same is noted under "Erosion & Sediment Control Narrative" on this plan.
2. In Note No. 9 under the "Erosion & Sediment Control Narrative," it states that slopes steeper than 3H:1V should be constructed with erosion control matting. Slopes steeper than 3H:1V should be avoided to minimize soil erosion and sediment transport due to difficulty in reestablishing and maintaining vegetation on steeper slopes, especially in shady areas. Therefore, it is recommended that no regarded slope exceeds 3H:1V.
3. The professional engineer's seal and signature is missing on this plan.

General Comments

1. Under "Notes" on a few of the plan sheets there is a statement that there are no known endangered species or species of special concern, which is fine. However, seeing that a major stream —Blackwells Brook — is within the proposed subdivision, has the Applicant's consultant(s) contacted the State Historical Preservation Office (SHPO), in writing, as to whether or not there is suspicion or archaeological evidence found of any prehistoric people that lived on this land and was this confirmed in writing?
2. Also under "Notes," electrical services are stated to be installed underground. What about telephone, cable TV, etc.?
3. The plans do not indicate any land in the proposed subdivision to be dedicated to "open space." In Section 8, "Open Space," of the subdivision regulations, the proposed subdivision has the vast majority of the elements described in Section 8.0 as warrants for duly requiring the dedication of open space. It is my professional opinion that the area surrounding Blackwells Brook should be preserved and is important and significant enough to be deemed "open space" and not be part of any individual private lot ownership.

By:  P.E. 7/14/2020
Syl Pauley, Jr., P.E., NECCOG Regional Engineer