

TOWN OF WINCHENDON



Conservation Commission

Telephone (978)-297-5410

Regular Meeting/Public Hearing

July 9, 2020

Via Zoom conference call

Meeting ID: 928 2072 0074 Password: 0275766

PRESENT: Chairman Kyle Bradley, Vice-Chairman David Whitaker, Melissa Blanchard, Alison Manugian (Conservation Agent), members of the public & applicants

MATERIALS: Agenda & Notice of Meeting: July 9, 2020
Informational Packet presented to Commissioners for review in advance

CALL TO ORDER: Chairman Kyle Bradley called the meeting to order at 6:00PM

MINUTES: NONE

6:05 p.m. Notice of Intent Hearing continuation
Applicant: Jamison VanDyke & Representative: Paul Grasewicz of Graz Engineering.
Project Address: 49, & 69 Kemp Street; Assessor's Map 5B1, Parcels 37 & 39
Description: Two new single family homes each with well, septic system and associated grading and landscaping.

D. Whitaker recused himself for this application due to his role as land owner.
M. Blanchard will need to invoke the Mullin Rule to participate in this hearing.

P. Grasewicz outlined the intent and summarized the revised plans for these two new residential structures. Both homes have been pulled out of the 100' buffer to the maximum extent practical and septic systems have been adjusted to accommodate these shifts. Drainage design has been updated to include two concrete recharge basins on each parcel and eliminate the need for maintenance easements.

L. Clark, Engineer for the abutters, issued an updated letter of concerns and suggested conditions, which were discussed.

Erosion controls will be installed at the wells and along the 50' wetland setback line. No clearing work will be done beyond this 50' setback and boulders shall be permanently placed along the 50' setback.

Unless the submissions to do so are overwhelmingly onerous, the newly located vernal pool be certified with NHESP.

The limit of 40,000sf combined site disturbance was acknowledge and P. Grasewicz will update the plans prior to construction to indicate additional areas where there will be no disturbance. Current plans show approximately 46,000sf of disturbance.

D. Whitaker motioned to continue the hearing to 6:10pm on August 13, 200 and M. Blanchard seconded the motion. All voted in the affirmative via roll call vote.

6:15p.m. Notice of Intent Hearing continuation
Applicant: Chris and Lauren McNamara
Project Address: 85 Beachview Drive; Assessor's Map 10, Parcel 53
Description: Addition of a farmer's porch on the front of the home, expansion of the screened porch lakeside and expansion of the roof overhangs.

M. Blanchard will need to invoke the Mullin Rule to participate in this hearing.

The applicant briefly outlined their intended project – to include extended roof overhangs and an expansion of the screened porch to 42' off of Lake Monomonac. Since the last meeting all members present have visited the project site for discussion with the homeowners. Members indicated a strong consensus to hold firm to the 50' no build zone.

On site and at the meeting members suggested expanding the existing screened porch to the sides rather than toward the lake. D. Whitaker suggested consideration of a cantilevered structure pulling the foundation back to at least 50' off of the lake. Neither of these approaches will work for the applicants and the commission suggested a redesign and continuation.

D. Whitaker motioned to continue the hearing to 6:20pm on August 13, 200 and M. Blanchard seconded the motion. All voted in the affirmative via roll call vote.

6:20 pm Notice of Intent Hearing
Applicant: Matthew Kotoski
Project Address: 195 Beachview Ave, Assessor's Map 12, Parcel 50
Description: Substantively completed (unpermitted) reconstruction of existing stone wall at water's edge. Creation of 1000sf patio area and additional retaining wall and addition of walkway to Lake for future dock.

This project came to our attention following a call that work was being done without erosion controls and inquiring about permits. Agent visit confirmed that there was no permit for the retaining wall under construction at the very edge of the lake. Reconstruction of the wall, with the addition of erosion controls, was allowed given the detriment to the lake of leaving the dismantled wall and exposed soil.

The applicant briefly outlined their intended project – installation of a patio area of 3x5 pavers, walkway to future dock, and a new retaining wall between tiers of patio; in addition to the lake side retaining wall.

Consensus of members was that the applicant should have applied prior to beginning the work and that an additional 50% local permitting fee is due. An Order of Conditions with the standard conditions is likely to be the Commission decision. As no DEP number has been assigned the hearing can't be closed so no decision can be rendered.

D. Whitaker motioned to continue the hearing to 6:00pm on July 23, 200 and M. Blanchard seconded the motion. All voted in the affirmative via roll call vote.

6:30pm Notice of Intent Hearing
Applicant: Ecos Energy, LLC
Project Address: Spring Street; Assessor's Map 9, Parcels 97 & 98
Description: Construction of a 9MW ground mounted solar array including work in wetland buffers and wetland crossings.

R. Galton presented a summary of the existing site – a 72 acre parcel on the border with Ashburnham. The existing site has two existing wetland crossings and access roads remaining from the former gravelling operation. The proposed project will enclose 52 acres with fencing and include installation of 9MW of solar array. The existing roadways and crossings will be reused and disturbance is likely only in the buffer areas. Drainage basins are proposed to attenuate peak flows. No treatment of the runoff is proposed. Access to the site will be off of Spring Street.

A member questioned the intent to control weeds and the applicant indicated that their standing preference is to utilize sheep rather than herbicides. A ban on herbicides will likely be a condition of a final decision. As no DEP number has been assigned the hearing can't be closed so no decision can be rendered.

D. Whitaker motioned to continue the hearing to 6:05pm on July 23, 200 and M. Blanchard seconded the motion. All voted in the affirmative via roll call vote.

6:40pm Notice of Intent Hearing
Applicant: Tien Phu
Project Address: 94 Lincoln Ave, Assessor's Map 5B2, Parcel 54
Description: Restoration of wetland buffer disturbed w/ unpermitted tree removals.

An enforcement order was issued and required NOI and restoration plan be filed with the Conservation Commission. The applicant did so and was present to answer any questions on the proposed work. Approximately 10 mature trees were removed in the buffer and the applicant has proposed replacement with 10 trees at least 3 years old. The members agreed that the site is regenerating well on it's own and that tree replanting is a sufficient restoration. As no DEP number has been assigned the hearing can't be closed so no decision can be rendered.

D. Whitaker motioned to continue the hearing to 6:10pm on July 23, 200 and M. Blanchard seconded the motion. All voted in the affirmative via roll call vote.

Discussion/guidance to Agent – what information should come with tree removal applications?

In general the photos and sketches have been helpful. Trees to be removed should be marked in the field for site visits. When the condition of the tree(s) tagged for removal isn't clear an arborist decision should be provided. The potential conflict between a tree removal company opinion and their desire to remove trees was expressed.

6:55p.m. Request for Determination of Applicability (RDA) Hearing
Applicant: Wayne Huard
Project Address: 136 Beachview; Assessor's Map 11, Parcel 15
Description: Removal of a single large pine tree located on the beach.

The applicant provided a summary of his desire to remove the pine on his beach. The tree is dropping limbs and the roots on the beach are a trip hazard. This type of tree draws ants and this situation bothers the neighbor.

The tree appears to be healthy, but there may be an issue that an arborist could identify. Concerns about runoff and erosion should the tree be removed were discussed; the location has some ground cover in addition to this tree. The Commission indicated an inability to render a decision without arborist input.

D. Whitaker motioned to continue the hearing to 6:25pm on August 13, 200 and M. Blanchard seconded the motion. All voted in the affirmative via roll call vote.

7:00p.m. Request for Determination of Applicability (RDA) Hearing
Cynthia Kendall
Project Address: 146 Beachview; Assessor's Map 11, Parcel 15
Description: Removal of oak and maple trees located on the beach.

The applicant provided a summary of her desire to remove the oak tree on the beach as the branches that fall and the acorns present a fall hazard. The maple trees will need to come down primarily to accommodate a future deck.

Members expressed concerns that these appear to be healthy trees. The oak trees are not growing into the deck and causing a damage/safety issue there. The acorns are largely a seasonal impact and are only an inconvenience.

D. Whitaker motioned to close the RDA hearing and M. Blanchard seconded the motion. All voted in the affirmative via roll call vote.

D. Whitaker motioned to issue a positive RDA decision, which will require a NOI filing if the applicant wishes to proceed, and M. Blanchard seconded the motion. All voted in the affirmative via roll call vote.

7:05p.m. Request for Determination of Applicability (RDA) Hearing
Michael Casey
Project Address: 156 Beachview; Assessor's Map 11, Parcel19
Description: Replacement of railroad tie retaining wall along road with stone wall.

The applicant provided a summary of the intended project – replacement of deteriorating railroad ties near the edge of pavement. The project will replace these with a stone wall in the same location that is slightly taller.

D. Whitaker motioned to close the RDA hearing and M. Blanchard seconded the motion. All voted in the affirmative via roll call vote.

D. Whitaker motioned to issue a negative RDA decision and M. Blanchard seconded the motion. All voted in the affirmative via roll call vote.

Certificate of Compliance Request- Happy Hollow Solar Project- 345-0647

The request for the Certificate of Compliance was made to close out the open Order of Conditions (345-0647) dated April 21, 2017. The Conservation Agent reported visiting the site and all is in compliance with the plans and Order. The solar installation is completed and the site is stable; previous agent wanted to see another growing season, which has passed successfully.

D. Whitaker motioned to grant the Certificate of Compliance and M. Blanchard seconded the motion. All voted in the affirmative via roll call vote.

Certificate of Compliance Request -- Steven Curtis – 210 Alger Street - 345-0676

The request for the Certificate of Compliance was made to close out the open Order of Conditions (345-0676) dated August 10, 2019.

D. Whitaker motioned to grant the Certificate of Compliance and M. Blanchard seconded the motion. All voted in the affirmative via roll call vote.

Discussion of potential violation at 6 Island Road- Cindy Fitch

Trees were removed last December in the buffer that were outside of the 50' buffer. The owner put forth discussion last summer that the former agent granted verbal permission. Trees were removed as the first step of a major renovation to the existing home. Members discussed the likelihood that the tree removals would have been granted, but that a permit should have been sought.

D Whitaker motioned that given the extent of the remaining project this work will be incorporated into the NOI for the whole project, M. Blanchard seconded and all voted in the affirmative via roll call vote.

Discussion of potential violation at 376 Beachview – April Mills – Removal of trees in buffer

Discussion of potential violation at 386 Beachview – Chad Leblanc – Removal of trees in buffer

While these two parcels and projects have separate owners they were discussed together at times in response to a petition filed by other lake area residents. Said petition asserted that the Conservation Commission, acting on these cases at the last meeting, ignored evidence that trees were removed in both sites without permissions. A. Mills obtained an after the fact negative finding on an application to remove 6 trees, 9 were removed (including two on town right of way). C. Leblanc also received a negative finding on his application and acknowledged removal of

multiple trees from his beach area last fall. (Note that April Mills was present on 7/9 but Chad Leblanc was unable to attend due to travel.)

Concerns raised by commission members included factual inaccuracies in the petition, concerns about long term erosion controls as stumps rot, and possible work done solely to make the beach more usable. The Chair stated that he values the integrity of the Board, as he knows all members do, and that no issues before the Board have been ignored.

Concerns raised by Mark Tambling included restoration, decision making of the commission to allow work on sites with violations, possible inaccuracy of measurements on proposal from C. Leblanc at the last meeting. In addition to the petition a sketch of this project was provided and a photo taken last summer (or previously) showing trees on both sites. He indicated it wasn't his intent to question the Board integrity and that the issue here may be failure of the Agent to get information to the Board. The Agent summarized the process of getting information to the Board in advance of the meeting allowing time to review and that indeed materials received in an untimely fashion may not get to the Board in advance.

A Mills reiterated her project summary from the previous meeting, including the condition of the trees listed in the application. Her intent is to keep the stumps in place, preventing erosion for another year or so. When financially able, she will seek to install a retaining wall and plant vegetation on the north end of her beach area. A. Mills indicated a willingness to do plantings this fall if necessary. She also stated that she would hire an attorney if the commission requires her to plant trees and keep the existing stumps in place.

Commission members stated a need for a restoration plan that would stabilize the beach and allow for understanding of the longer term plan. An Order of Conditions is good for 3 years without renewal, which is likely enough time to complete the work.

The commission reached consensus that A. Mills and C. Leblance each need to file a Notice of Intent w/ Restoration application for the August 13, 2020 meeting.

Endorsement of Enforcement Order- 385 Glenallen Street – Richard Jameson

Complaint was received by phone that owner was filling Lake Monomonac with machinery. Agent site visit confirmed this and an Enforcement Order was delivered by hand with the explanation that all work must stop immediately. Agent indicated at a return site visit on 7/8 showed that large wood chips have been placed in some areas and additional concrete blocks added at the very edge of the lake. Photos show the clearly disturbed land and filling. The owner did not attend the Conservation Meeting.

The Agent summarized the Enforcement Order, including requirement to file an NOI with the Commission prior to July 2, 2020; which did not happen. D. Whitaker motioned that given the commission endorse the Enforcement Order, M. Blanchard seconded and all voted in the affirmative via roll call vote.

Discussion continued around the egregious nature of this violation and that past conversations have been had with this owner around violations. The consensus was that the Notice of Intent will require professional assistance to ensure that restoration work does not harm the Lake. Fines were discussed favorably.

D. Whitaker motioned that a certified letter go to the owner on 7/13 notifying him that fines will be levied beginning on July 27, 2020. M. Blanchard seconded and all voted in the affirmative via roll call vote.

Ongoing discussion of violation- sheds & storage in buffer at 16 Monomonac- Phillip White.

The owner was not present to discuss the situation on his parcel, first brought to the attention of the Commission by his indicated interest in joining the Board. Consensus of the Board is that the owner shall receive a request to attend the August meeting via certified mail.

Ongoing discussion of violation- storage in buffer at 162 Main Street- Phillip Favart.

The owner was not present to discuss the situation on his parcel, a difficult one given the proximity of significant wetlands. The members acknowledged that the site has been cleaned up some since the initial complaint, and that the possible presence of metal on the path near the wetland is likely the remaining final issue. Members indicated a desire to review the site in person and will try to do so this weekend. This item will return again on the July 23rd agenda.

Brief discussion was held with Ken Wante about the responsibilities and expectations of Conservation Commission members. He indicated an ongoing interest in serving on the Board and existing members supported his interest.

D. Whitaker motioned to adjourn at 8:43pm, M. Blanchard seconded and all voted in the affirmative via roll call vote and the Chair closed the meeting.

Respectfully submitted,



Alison Manugian – Conservation Agent

Kyle Bradley, Chairman

David Whitaker, Vice-Chairman

Michael Mimnaugh

Melissa Blanchard

TOWN OF WINCHENDON



Conservation Commission

Telephone (978)-297-5410

Regular Meeting/Public Hearing

July 23, 2020

Via Zoom conference call

Meeting ID: 918 5393 0513

Password: 6627730

PRESENT: Michael Mimnaugh, Alison Manugian (Conservation Agent), & applicants.
Melissa Blanchard arrived at 6:10pm

MATERIALS: Agenda & Notice of Meeting: July 23, 2020
Informational Packet presented to Commissioners for review in advance

CALL TO ORDER: A quorum of members wasn't present so no meeting was held

MINUTES: NONE

Notice of Intent Hearing continued to August 13, 2020 6:15pm

- Applicant: Matthew Kotoski
- Project Address: 195 Beachview Ave, Assessor's Map 12, Parcel 50
- Description: Substantively completed (unpermitted) reconstruction of existing stone wall at water's edge. Creation of 1000sf patio area and additional retaining wall and addition of walkway to Lake for future dock.

Notice of Intent Hearing continued to August 13, 2020 6:35pm

- Applicant: Ecos Energy, LLC
- Project Address: Spring Street; Assessor's Map 9, Parcels 97 & 98
- Description: Construction of a 9MW ground mounted solar array including work in wetland buffers and wetland crossings.

Notice of Intent Hearing continued to August 13, 6:45pm

- Applicant: Tien Phu
- Project Address: 94 Lincoln Ave, Assessor's Map 5B2, Parcel 54
- Description: Restoration of wetland buffer disturbed w/ unpermitted tree removals.

Additional agenda items to be handled on August 13, 2020.

Respectfully submitted,

Alison Manugian – Conservation Agent

Kyle Bradley, Chairman

David Whitaker, Vice-Chairman

Michael Mimnaugh

Ken Wante

Melissa Blanchard

TOWN OF WINCHENDON

Conservation Commission



Telephone (978) 297-5410

109 Front Street
Winchendon, Massachusetts 01475-1758

(Please publish in The Gardner News no later than August 6th)

Legal Notice Winchendon Conservation Commission

Pursuant to the provisions of M.G.L. Chapter 131, Section 40, and the Town of Winchendon Wetlands Protection Bylaw, the Winchendon Conservation Commission will hold public hearings on Thursday, August 13, 2020 at 6:05 pm to consider the Notice of Intent filed by Matthew Olson of Ashoryn, LLC for work within the 100-foot Buffer Zone to Bordering Vegetated Wetlands on Mill Glen Road, Assessor's Map 10, Lot 66. The proposed work includes construction of a single family 3 bedroom home with driveway, septic system, well and related site work and grading. The hearing will be held remotely via www.zoom.com or if it is safe to do so, in the 2nd Floor Auditorium of the Winchendon Town Hall, 109 Front Street.

The Notice of Intent is available by emailing amanugian@townofwinchendon.com.

Join Zoom Meeting Meeting ID: 977 6739 7749 Password: 0343903
<https://winchendonk12.zoom.us/j/97767397749?pwd=YUdVVmpzMmk3OEJwaVowVDBNZE5nZz09>
or Dial by location +1 929 436 2866 US (New York)

Why did I get this notice?

We send this notice to comply with Massachusetts law and/or local regulations that require notice to applicants, abutters and other parties in interest of a pending land issue.

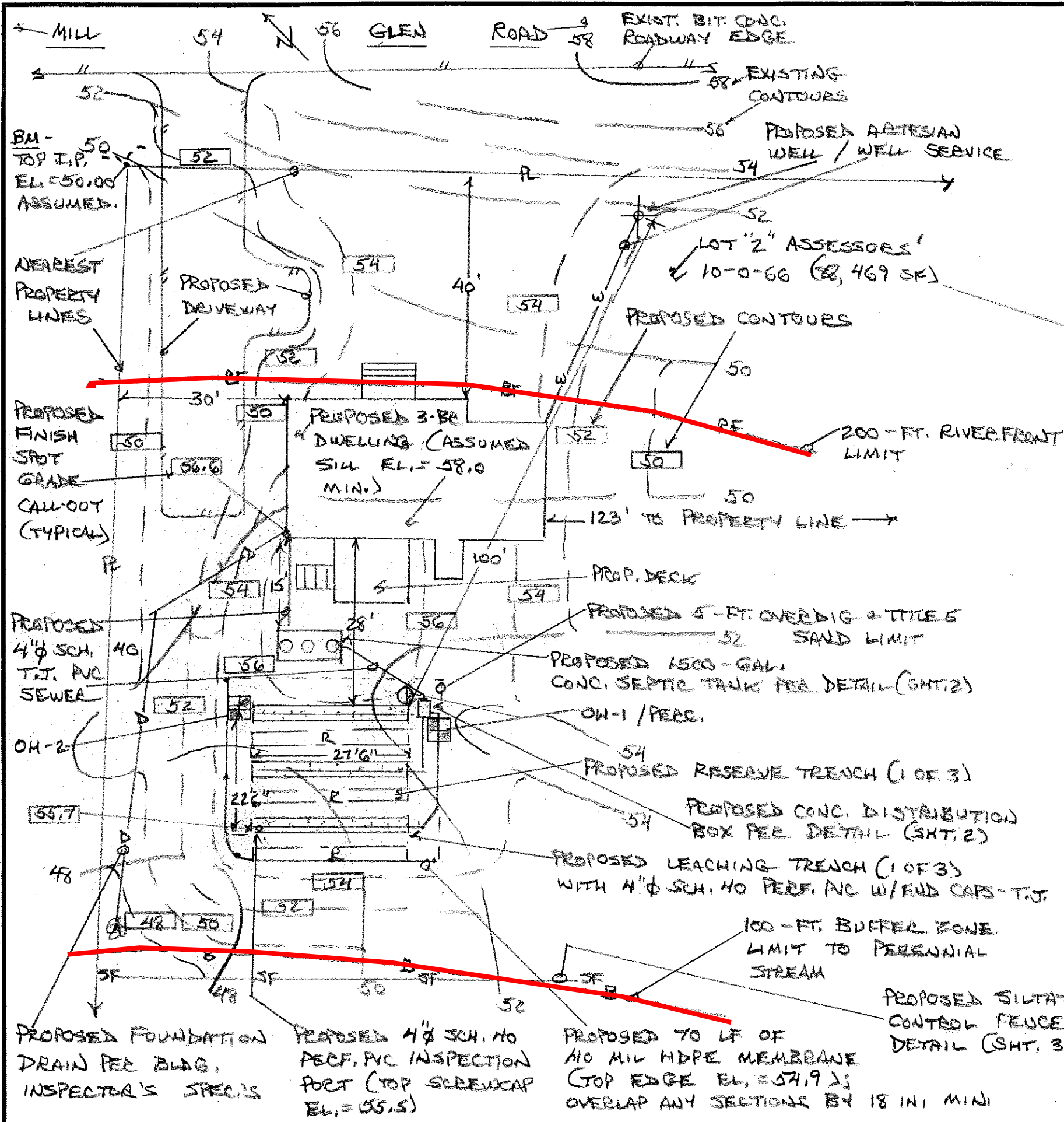
If this is a notice of public hearing or project application you have the right to attend the hearing and participate.

If this is a notice of decision you may have the right to appeal the decision within a limited time period.

If you have questions please email Alison Manugian at amanugian@townofwinchendon.com

WPA Form 3 Narrative / Resource Delineation / Alternatives Analysis: Ashoryn, LLC – Lot 2 Mill Glen Rd., Winchendon, MA

The site is an 88,463 sf residentially-zoned lot recorded at the Registry of Deeds June 9, 1988, following ANR plan approval by the Winchendon Planning Board April 19, 1987. The parcel is bisected by an unnamed brook appearing on USGS quadrangle maps as a perennial stream. The 100-ft. buffer zone limit and 200-ft. Riverfront limits have been delineated on the accompanying Site Plan based upon the apparent high water mark / inland bank of the brook. No other DEP-mapped wetland resources have been identified on or within the vicinity of the proposed work. The project involves the construction of a 3-bedroom single family home, with driveway, Title S subsurface sewage disposal system, foundation drain, artesian well and utility connections on the parcel. Only an estimated 11,000 sf of the parcel falls outside of the 200-ft. Riverfront area, so no-build is the only alternative to the project. The Site Plan has been developed to minimize the extent of facilities placement within the Riverfront portion of the lot, including maintaining the minimum building setback of the residence from the public way allowed under local zoning and limiting essentially all clearing / construction to beyond the 100-ft. buffer limit. The proposed artesian well installation and the majority of the proposed driveway will occur beyond the 200-ft. Riverfront limit. The proposed disruption of the Riverfront on the largely forested parcel comprises less than 12% of the overall lot size.

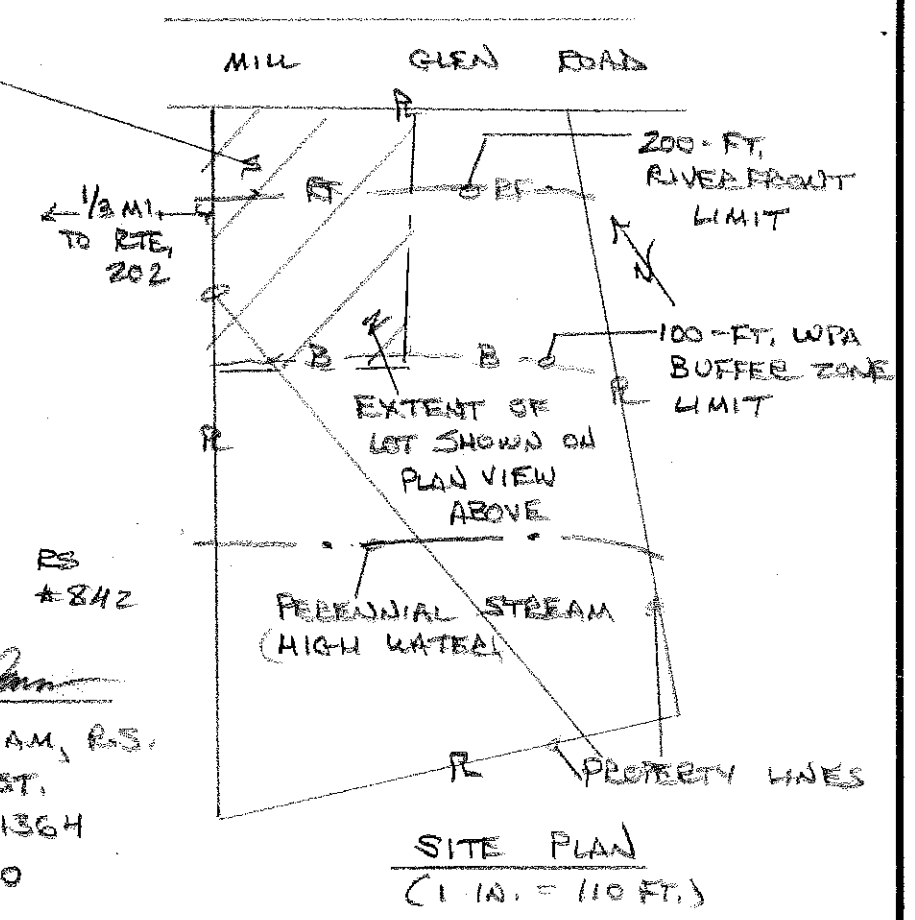


DESIGN DATA

- 3 BEDROOMS X 110 GAL./DAY/BR = 330 GPD. NO GARBAGE DISPOSAL ALLOWED. SEPTIC TANK MIN. CAPACITY = 1500 GAL. PROVIDED.
- LEACHING TRENCHES - BASED ON 5 MIN. PER IN. PERCOLATION RATE AND CLASS I (SAND) SOIL LTAE OF 0.74 GPD/SF. $330 \text{ GPD} \div 0.74 \text{ GPD/SF} = 446 \text{ SF MIN. REQUIRED}$. A 30-IN. WIDE, 18-IN. DEEP TRENCH HAS 5.5 SF PER LF, SO $446 \text{ SF} \div 5.5 \text{ SF/LF} = 82.5 \text{ LF MIN.}$ 82.5 LF PROVIDED BY 3 - 27-FT., 6-IN. LONG TRENCHES.



Mark W. Popham, P.E.
 21 HIGHLAND ST.
 ORANGE, MA 01364
 978-544-2770



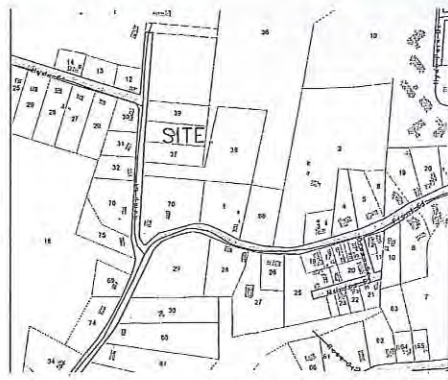
SITE PLAN / PLAN OF PROPOSED SUBSURFACE SEWAGE DISPOSAL SYSTEM		
SCALE: AS SHOWN	APPROVED BY: SHT. 1 OF 3	DRAWN BY: AMP
DATE: JULY 1, 2020		REVISED
ASHORYN, LLC - LOT 2 - MILL GLEN ROAD		
WINCHENDEN, MASSACHUSETTS		DRAWING NUMBER S20-4WI

(Please publish in The Gardner News no later than June 4th)

Legal Notice
Winchendon Conservation Commission

Pursuant to the provisions of M.G.L. Chapter 131, Section 40, and the Town of Winchendon Wetlands Protection Bylaw, the Winchendon Conservation Commission will hold public hearings on Thursday, June 11, 2020 at 6:15 pm to consider the Notices of Intent filed by Jamison VanDyke of Barkley Enterprises on behalf of property owner David Whitaker for proposed work within the 100-foot Buffer Zone to Bordering Vegetated Wetlands at 49, 59 & 69 First Street; Assessor's Map 5B1, Lots 37, 38 & 39. The separate project entails construction of a new single family home, well, septic system and associated grading and landscaping. The hearing will be held remotely via www.zoom.com or if it is safe to do so, in the 2nd Floor Auditorium of the Winchendon Town Hall, 109 Front Street.

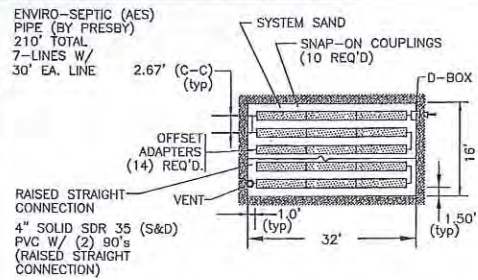
The Notice of Intent is available by emailing amanugian@townofwinchendon.com.



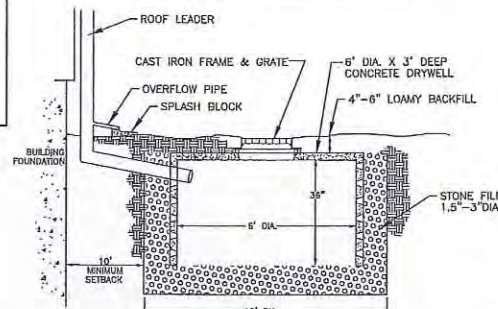
LOCUS NTS

LEGEND

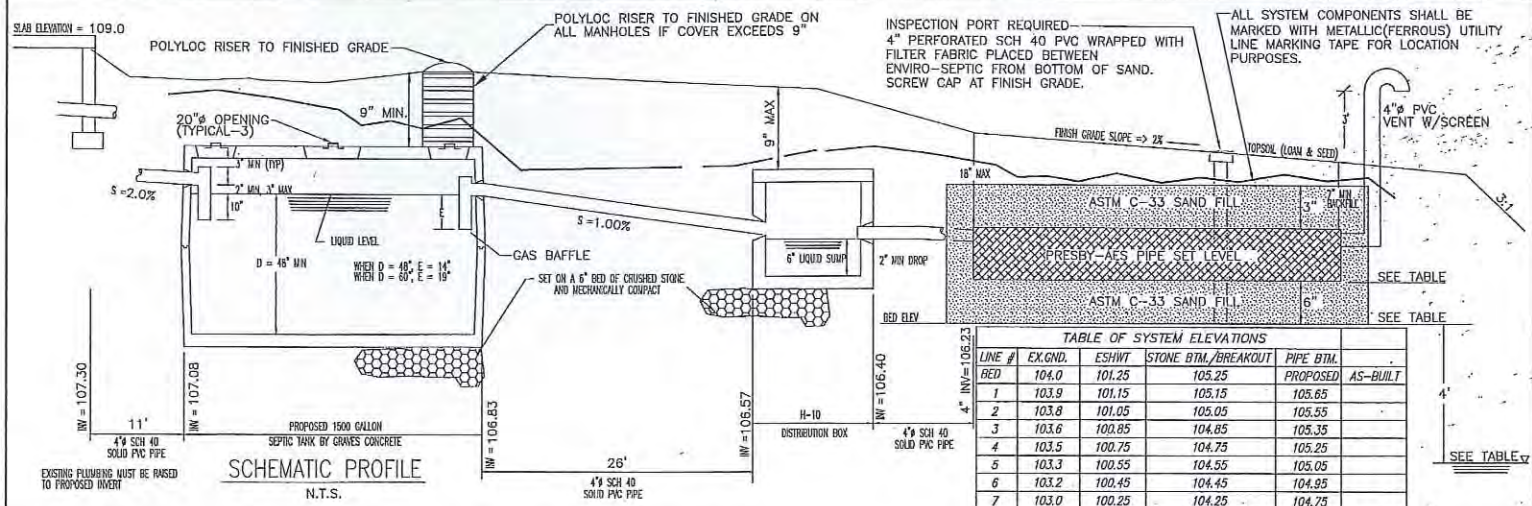
- 242 EXISTING CONTOUR
- 242 PROPOSED CONTOUR
- TP-A-1 DEEP HOLE TEST PIT
- x238.6(OG) EXISTING SPOT ELEVATION
- + 238.6 PROPOSED SPOT ELEVATION
- W WATER SERVICE
- P-1A PERCOLATION TEST



PARTIAL BED PLAN NTS



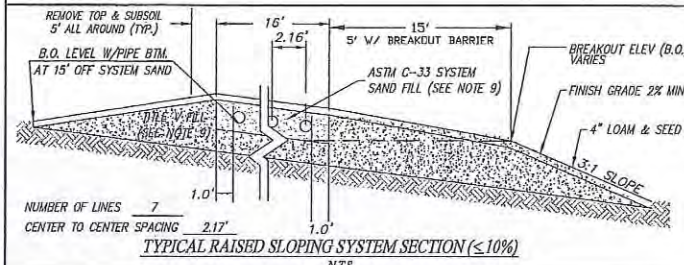
DRY WELL DETAIL NTS



SCHEMATIC PROFILE N.T.S.

TABLE OF SYSTEM ELEVATIONS

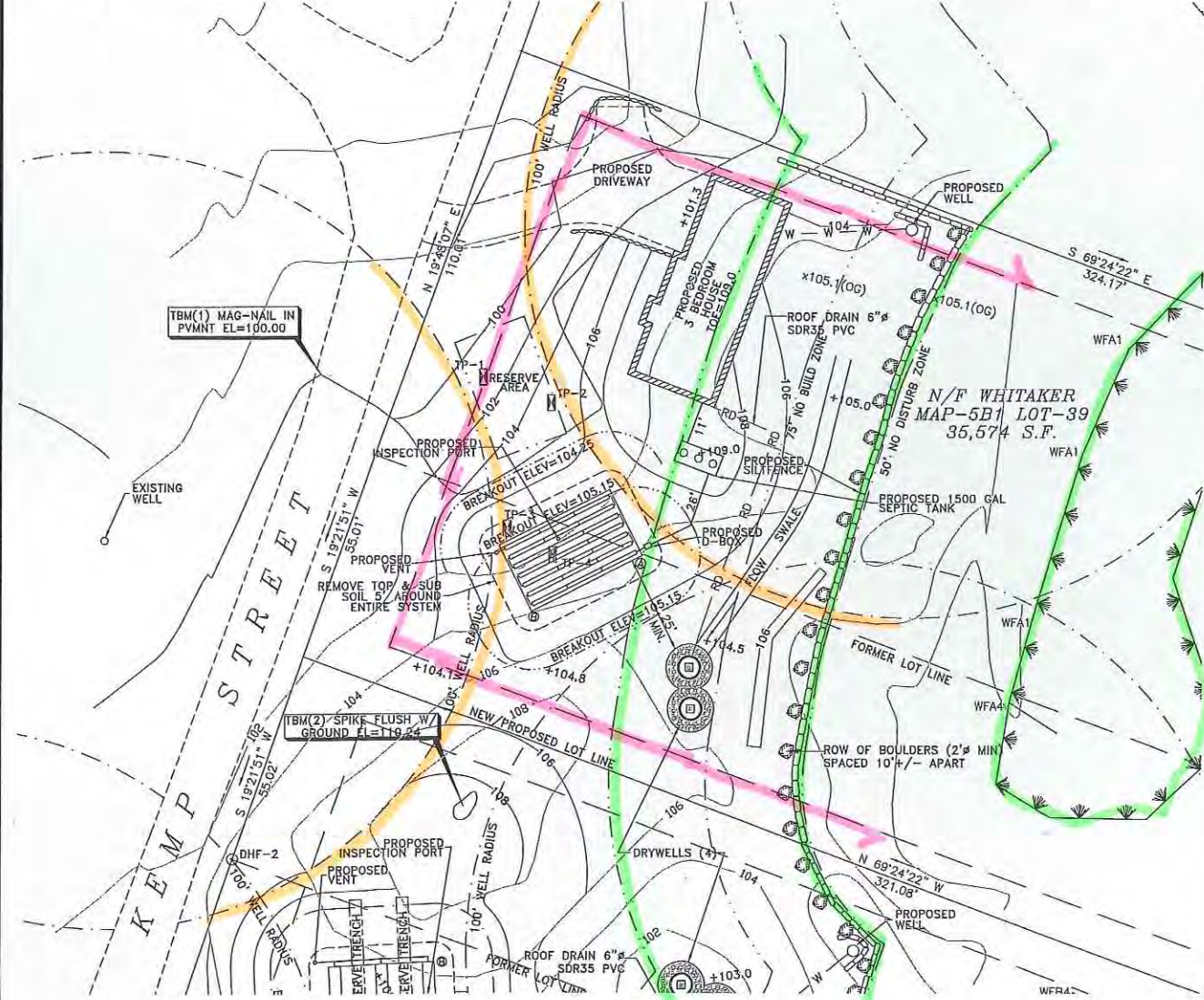
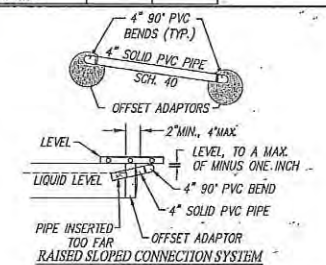
LINE #	EX.GND.	ESHW	STONE BTM/BREAKOUT	PIPE BTM	AS-BUILT
1	104.0	101.25	105.25	105.65	
2	103.8	101.05	105.05	105.55	
3	103.6	100.85	104.85	105.35	
4	103.5	100.75	104.75	105.25	
5	103.3	100.55	104.55	105.05	
6	103.2	100.45	104.45	104.95	
7	103.0	100.25	104.25	104.75	
BED	102.9	100.15	104.15		



TYPICAL RAISED SLOPING SYSTEM SECTION (<=10%) N.T.S.

DESIGN CRITERIA

- Estimated Hydraulic Loading
3 bedrooms at 110 gals/day/bedroom = 330 gpd.
Garbage disposal shall not be allowed with this system.
- Septic tank size = 1,500 gallons
- Leaching Area Design Criteria
Percolation Rate = 8 mpi
Required linear feet of Presby AES pipe = 210
Linear feet of Enviro-septic pipe provided = 210 L.F.
Square footage required by Title V = 330 GPD / 0.56 = 590 S.F.
NO REDUCTION OF AREA ALLOWED (WINCHENDON REG)
Square footage provided = 608 S.F. (min)



PLAN

PROPOSED SEPTIC TIES

	TBM(1)	TBM(2)
PRESBY CORN-A	95.3'	81.9'
PRESBY CORN-B	79.2'	53.0'

- NOTES
- Unless otherwise noted, property lines shown are compiled from existing plans and/or deeds.
 - Underground utility data is plotted from visible field locations and available records. The locations are approximate only and verification must be made in the field and Dig-Safe notified.
 - All work shall be performed by a Licensed Installer and construction shall conform to the State of Massachusetts requirements as established in 310CMR 15.00. Installation of the Advanced Enviro-Septic system shall conform to the AES Design and Installation Handbook. (ADVANCED ENVIRO-SEPTIC MASSACHUSETTS DESIGN AND INSTALLATION MANUAL)
 - The contractor shall install the system exactly as shown on this plan. If changes are necessary, the contractor must contact the Engineer in advance.
 - Heavy machinery shall not be permitted to pass over the leaching area.
 - All piping shall be polyvinyl chloride (PVC) pipe per ASTM D1785 for sch.40 and ASTM D3034 for SDR 35 where indicated on the profile, unless otherwise noted. S&D pipe shall be SDR 35 PVC.
 - Septic tank shall be a proposed 1,500 gallon reinforced concrete tank by Graves Concrete or equivalent. A distribution box (D-box) is required.
 - All topsoil, roots and impervious material, if any, must be excavated and removed below and 5' beyond the soil absorption system area (and the 3:1 fill slope). The natural soil shall be hand raked. The system sand (ASTM C-33) shall be used above, between, 12" beyond sides and 6" below AES. The system sand shall meet ASTM C-33. The system installer shall provide the system owner and the local approving authority with a bill of lading certifying that the sand fill meets ASTM C-33.
 - For proper performance, septic tank should be inspected at least once a year and pumped when the combined thickness of the sludge (bottom) and scum (surface) equals 1/3 or more of the tank depth.
 - Refer to Massachusetts DEP 1/A Approval & Presby Operation and Maintenance documents.
 - Sand fill (except for ASTM C-33 around Enviro-septic) shall be per title V, a clean granular sand, free from organic matter and deleterious substances. Mixtures and layers of different classes of soil not be used. The sand fill shall not contain any material larger than 2 inches. A sieve analysis, using a #4 sieve, shall be performed on a representative sample of the fill. Up to 45% by weight of the fill sample may be retained on the #4 sieve. Sieve analysis also shall be performed on the fraction of the fill sample passing the #4 sieve, such analysis must demonstrate that the material meets or exceeds each of the following specifications: 100% passing #4 sieve; 10%-100% passing #50 sieve; 0%-20% passing #100 sieve; 0%-5% passing #200 sieve. (11/95 DEP SPEC)
 - ENVIRO-SEPTIC DESIGN CERTIFICATE NUMBER: 2488MAES
 - The installer & designer must certify that the installation meets the DEP GENERAL Use Approval.
 - All trees in the area of the septic system to be removed.

SOIL TEST DATA

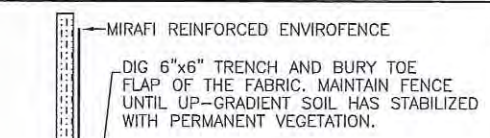
DEEP HOLE & PERC TESTS

PERFORMED BY: JOHN DELINE, P.E.

WITNESSED BY: JIM ABARE, B.O.H. WINCHENDON

DATE: SEPTEMBER 11, 2017

DEEP HOLE #	DEPTH	SOIL TYPE	PERC RATE
DEEP HOLE # TP-1	0"	FINE SANDY LOAM 10YR 3/3	8 MPI
	8"	FINE SANDY LOAM 10YR 5/4	5 MPI
	20"	LOAMY SAND 2.5Y 5/6	4 MPI
	80"		13 MPI
DEEP HOLE # TP-2	0"	FINE SANDY LOAM 10YR 3/3	8 MPI
	9"	FINE SANDY LOAM 10YR 4/6	5 MPI
	21"	LOAMY SAND 2.5Y 5/6	4 MPI
	78"		13 MPI
DEEP HOLE # TP-3	0"	FINE SANDY LOAM 10YR 3/4	8 MPI
	9"	FINE SANDY LOAM 10YR 4/6	5 MPI
	22"	LOAMY SAND 5Y 6/4	4 MPI
	80"		13 MPI
DEEP HOLE # TP-4	0"	FINE SANDY LOAM 10YR 3/3	8 MPI
	7"	FINE SANDY LOAM 7.5YR 4/6	5 MPI
	25"	LOAMY SAND 5Y 6/4	4 MPI
	82"		13 MPI



SILT FENCE N.T.S.

NO.	DESCRIPTION	DATE	BY
2	REVISED PER CONCOMM COMMENTS	7/2/20	JJJ
1	REVISED PER ECOTEC FLAGGING	6/4/20	TWF

DESIGNED BY TWF
 DRAWN BY TWF
 CHECKED BY PFG
 DATE 5/28/20
 SCALE 1"=20'
 JOB NUMBER 20116

SEPTIC SYSTEM & NOI SITE PLAN
 MAP-5B1 LOT-39
 69 KEMP ST; WINCHENDON, MA
 PREPARED FOR:
 BARKLEY ENTERPRISES, LLC
 1032 N.H. ROUTE 119
 RINDGE, NH 03461

GRAZ Engineering, LLC
 WWW.GRAZENGINEERING.COM
 323 WEST LAKE RD.; FITZWILLIAM, NH 03447; (603) 585-6959

FIELD BOOK NO. PAGES
 SHEET 1 OF 1

July 9, 2020

Via: email: AManugian@townofwinchendon.com

Winchendon Conservation Commission
109 Front Street
Winchendon, Massachusetts

Reference: 49 & 69 Kemp Street Notice of Intent
Winchendon, MA 01475

Dear Commission Members;

On behalf of the abutters Mr. and Mrs. James and Paula Whitaker and Mr. Joshua Whitaker, I Elizabeth Clark, PE, respectfully submit the following comments on Revised Notice of Intent Applications for 49 and 69 Kemp Street, in Winchendon Massachusetts (the Project). The Project entails the development of two (3) bedroom single family homes, associated driveways, private wells, and septic systems.

I received the following materials electronically for the basis of this review from the Winchendon Conservation Commission on July 7, 2020: Septic and NOI Site Plan for 49 Kemp Street revised July 2, 2020 and Septic and NOI Site Plan for 69 Kemp revised July 2, 2020.

These documents have been reviewed for compliance with Massachusetts Wetlands Protection Act, MGL, Chapter 131, Section 40 and associated Regulations at 310 CMR 10.00 (collectively referred to as the Act) and the Winchendon Wetlands Protection Bylaw (the Bylaw). Accordingly, I offer the following comments:

1. The Applicant has adjusted the plans to reduce the scope of work inside the 100-foot buffer zone. On behalf of the abutters the following changes are requested to be considered. For clarity mark-ups of the plans has been provided:
 - On 49 Kemp Street can the house be shifted entirely outside of the 100-buffer?
 - Can the house on 49 Kemp Street be positioned further from the property line of 39 Kemp Street?
 - Can the house on 69 Kemp Street be shifted entirely outside the 100-foot buffer?
 - Can the house on 69 Kemp Street be positioned further from the shared property line with 20 Kemp Street?
2. The Applicant has shown dry wells to infiltrate runoff from the proposed roof areas and overland flow. The dry wells have a depth of at least 48-inches. The soil testing on both lots indicated seasonal high groundwater is approximately 39"-45" below existing grade. To ensure the dry wells can function as intended and not be located within the seasonal high groundwater table a shallower infiltrator type unit may be more appropriate.
3. The Applicant has indicated that disturbance will be less than 40,000 sf total for the two parcels and therefore the Project is not subject to the EPA's National Pollution Discharge Elimination System (NPDES) Construction General Permit (CGP). A review of the plans indicates that approximately 46,000± sf of disturbance appears to be shown. We request that the Applicant revise the plans to show a limit of work that clearly limits disturbance to 40,000 sf.

As noted in previous letters and at the public hearing on June 11, 2020 we request the following conditions as part of the approval:

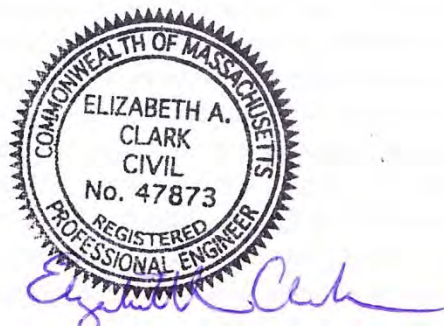
1. It is acknowledged that the plans depict not work beyond the silt fence, however as a precaution we request that the Commission condition their approval to prohibit clearing beyond the silt fence and/ or the limit of work as shown on the plans during construction.
2. The Applicant has acknowledged that the pond on the subject property is a vernal pool. We request that the Commission condition their approval to require that the pond be certified as a vernal pool with the Natural Heritage and Endangered Species Program (NHESP) prior to a certificate of compliance being issued.
3. We request that the Commission condition their approval to require a permanent delineation of the 50-foot no-disturb zone, such as a stone border, signage, fencing, ect be installed to deter future owners from further clearing.
4. The Applicant has indicated that disturbance will be less than 40,000 sf and therefore the Project is not subject to the EPA's National Pollution Discharge Elimination System (NPDES) Construction General Permit (CGP) is required. We request that the Commission condition their approval to limit disturbance to no more than 40,000 sf and that the plans be updated and submitted prior to construction to clearly delineate the limit of work.

Additionally, we recommend the following condition:

5. As with most of the State the Subject Property is listed as habitat for the Northern Long Eared Bat. An official endangered species list was generated from the Federal US Fish and Wildlife Ipac tool noting this is attached. To ensure compliance with the Endangered Species Act 4(d) rule pertaining to the Northern Long Eared Bat we request that the Commission condition their approval to prohibit tree clearing during the pup season (June 1 through July 31).

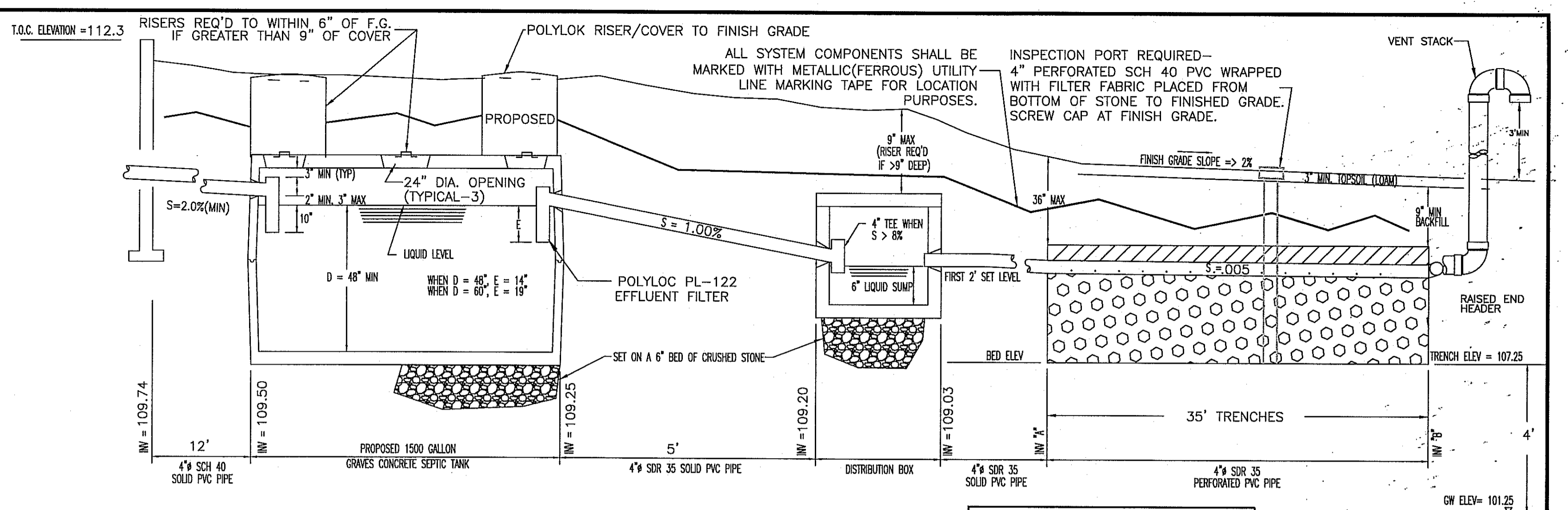
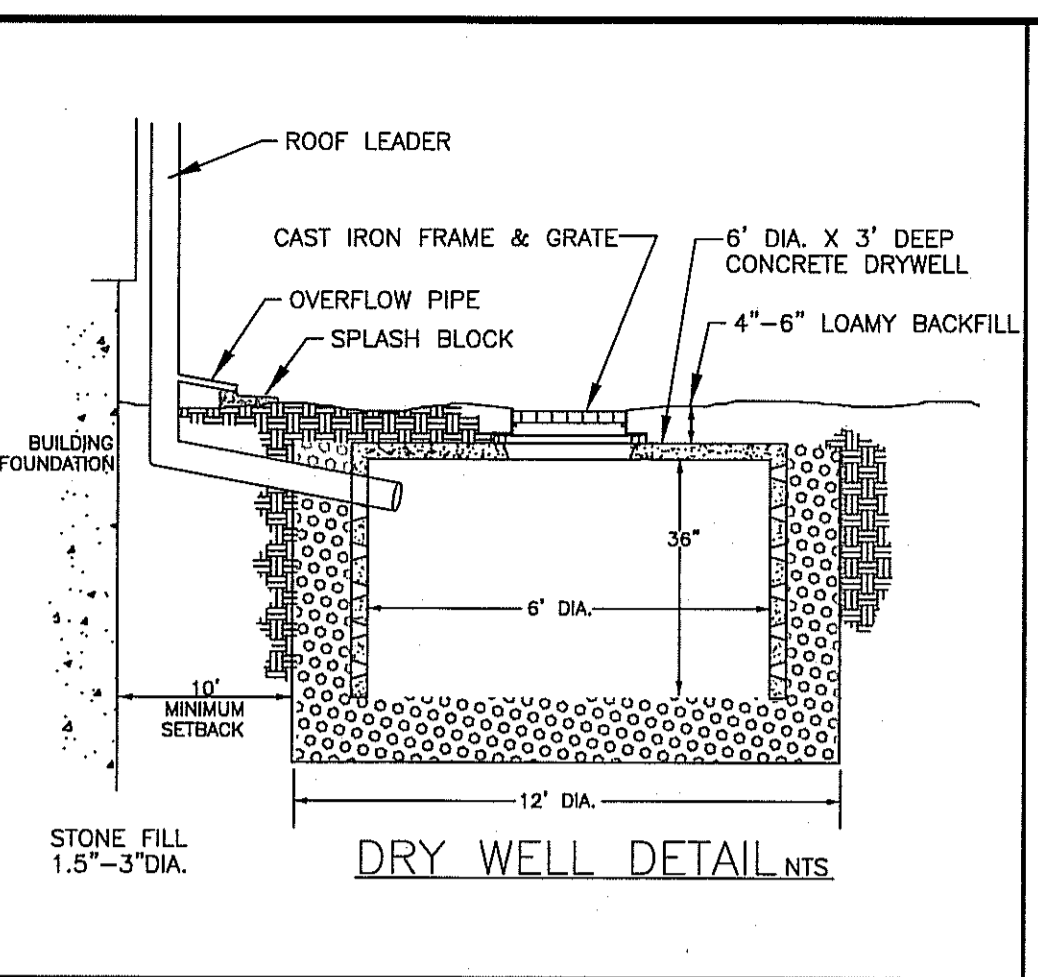
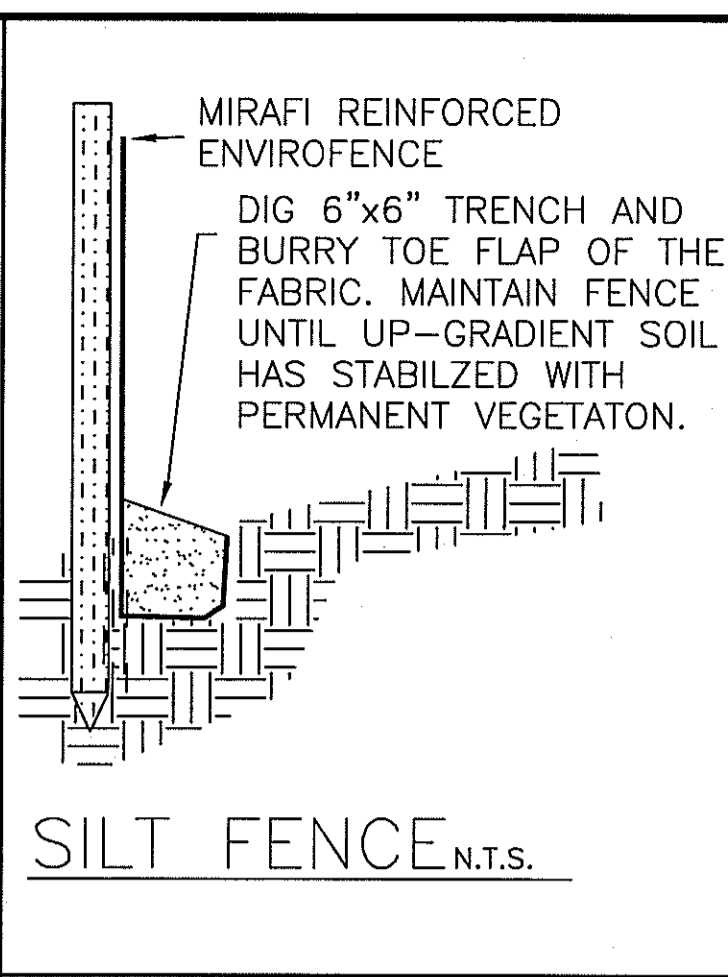
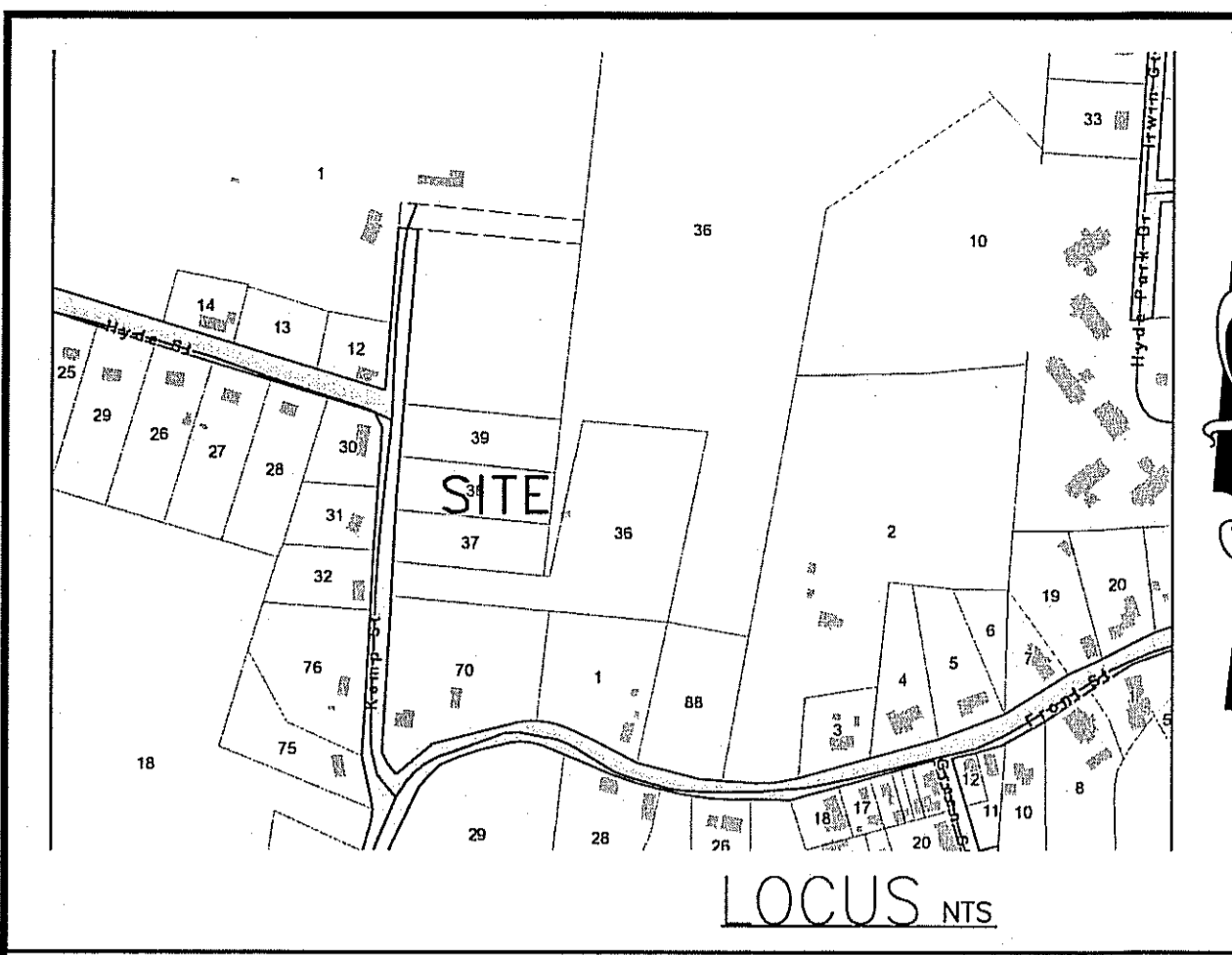
Should you have any questions regarding this matter or require additional information, please contact me at (508) 612-1919. Thank-you for your consideration.

Very truly yours,



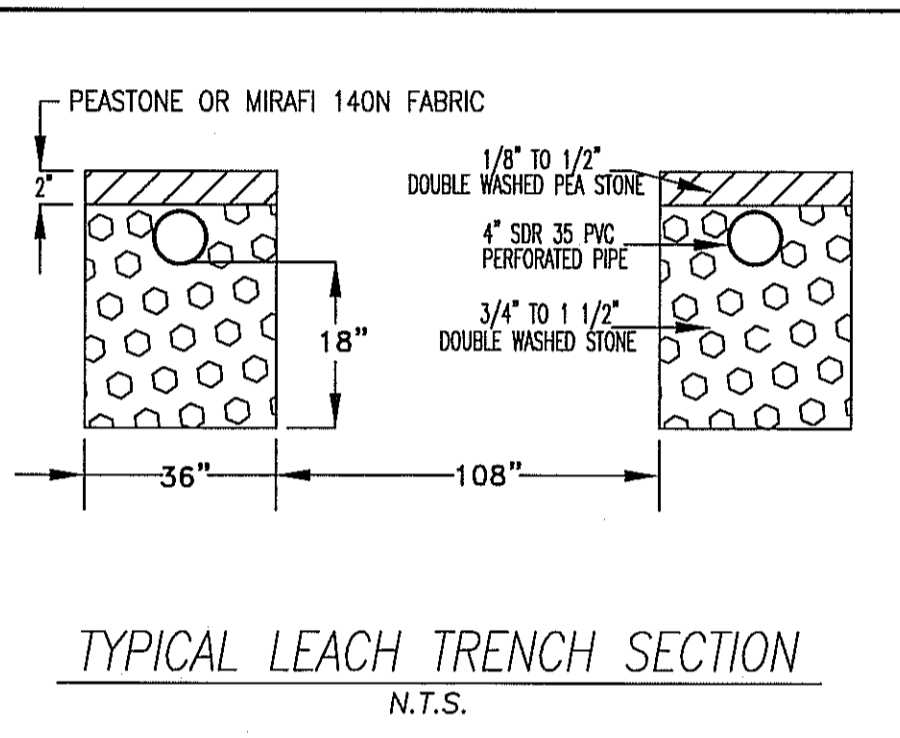
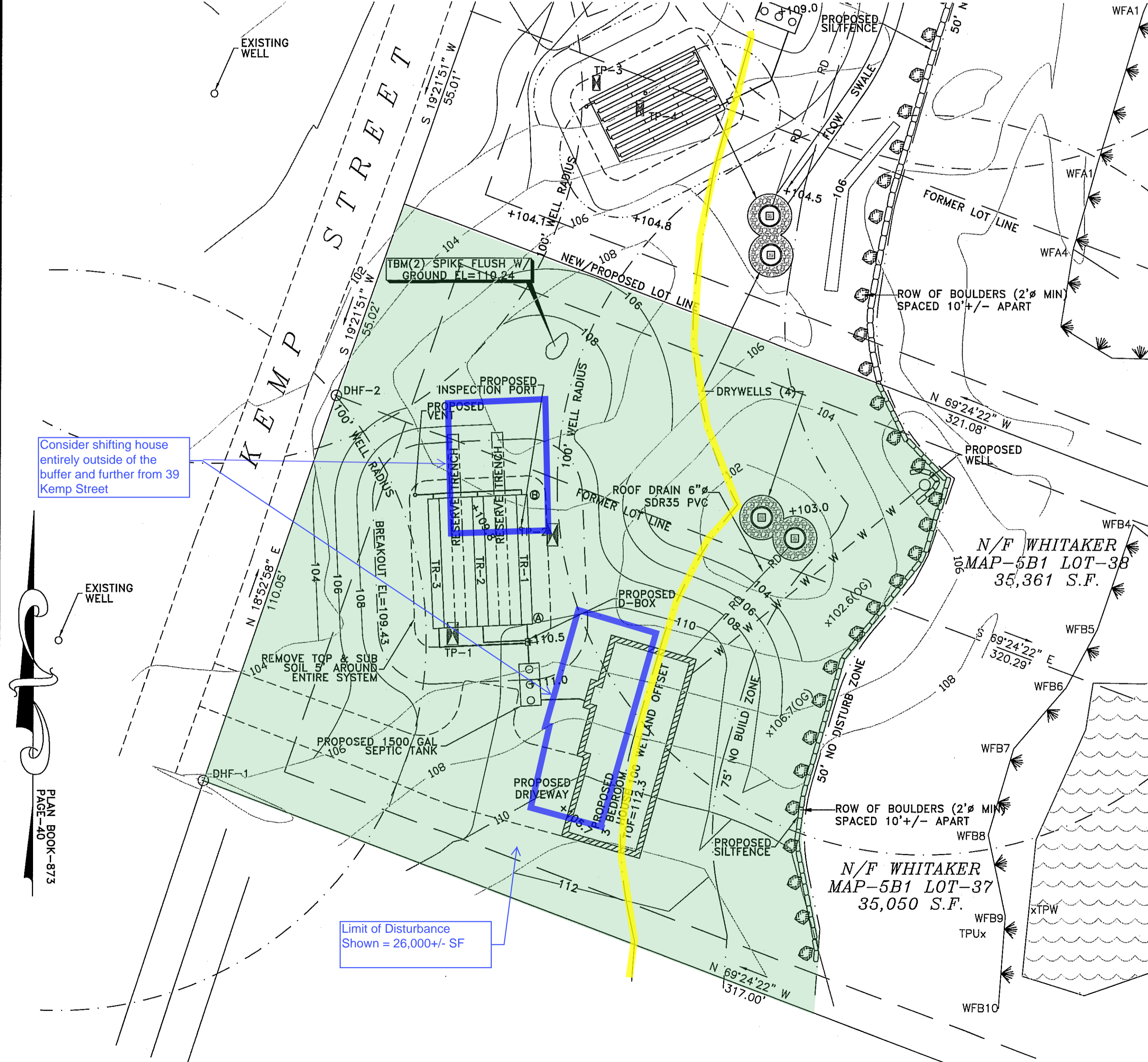
Elizabeth Clark, PE

cc: Paul F. Grasewicz, PE, PLS GRAZ Engineering, LLCv (via email: paul@grazengineering.com)
James and Paula Whitaker
Joshua Whitaker



TRENCH ELEVATIONS				
TRENCH #	PIPE INV 'A'	PIPE INV 'B'	TRENCH ELEV	BREAKOUT EX. GND. EL
1	108.93	108.75	107.25	109.43
				106.5
				103.25

*NON-SLOPED SYSTEM, ALL TRENCHES USING THE SAME INVERTS



DESIGN CRITERIA

- Estimated Hydraulic Loading
3 bedrooms at 110 gals/day/bedroom = 330 gpd
Garbage disposal shall not be allowed with this system.
- Septic tank size = 1500 gallons.
- Leaching Area Design Criteria
Percolation Rate = 18 MPI
Soil Class Type = II (SANDY LOAM)
Allowable Loading Rate = 53 gpd/sf
Required Leaching Area = 330 gpd / 53 gpd/sf = 623 sf (Title V)
Leaching Area Provided = 3 trenches X 35 ft trench length X 6 sf/ft = 630 sf
Leaching Area Provided = 3 trenches X 35 ft trench length X 6 sf/ft = 630 sf
- Breakout (BO)
Breakout Elevation = 107.43
Breakout Distance = 15 ft
Distance Provided = 15 ft

LEGEND

- 242 EXISTING CONTOUR
- 242 PROPOSED CONTOUR
- TP-1 DEEP HOLE TEST PIT
- PH-1 PERCOLATION TEST
- + 238.6 PROPOSED SPOT ELEVATION
- x238.6(OG) EXISTING SPOT ELEVATION

GENERAL NOTES

- Unless otherwise noted, property lines shown are compiled from existing plans and deeds of record. Proposed buildings and septic system should be located by instrument survey prior to construction.
- All construction to conform to 310 CMR 15.000, "The State Environmental Code, Title 5" and the Board of Health requirements for the Town of Winchendon.
- The contractor shall install the system exactly as shown on this plan. If changes are necessary, the contractor must contact the Engineer in advance.
- Heavy machinery shall not be permitted to pass over the leaching area and the contractor shall stake and flag the soil absorption/leaching area perimeter upon completion.
- All piping shall be polyvinyl chloride (PVC) pipe per ASTM D1785 for sch.40 and ASTM D3034 for SDR35 where indicated on the profile, unless otherwise noted.
- The septic tank shall be a Graves Concrete H-10 1500 gallon monolithic tank.
- The distribution box (D-box) shall be a 5 outlet reinforced concrete box of H-10 load design (min.) with a watertight cover and conform to all the requirements of 310 CMR 15.232.
- All topsoil, subsoil and impervious material, if any, must be excavated and removed below and 5' beyond the soil absorption system area. Fill material shall consist of a clean granular sand, free from organic matter and deleterious substances. Mixtures and layers of different classes of soil not be used. The sand fill shall not contain any material larger than 2 inches. A sieve analysis, using a #4 sieve, shall be performed on a representative sample of the fill. Up to 45% by weight of the fill sample may be retained on the #4 sieve. Sieve analyses also shall be performed on the fraction of the fill sample passing the #4 sieve, such analyses must demonstrate that the material meets or exceeds each of the following specifications: 100% passing #4 sieve; 10%-100% passing #50 sieve; 0%-20% passing #100 sieve; 0%-5% passing #200 sieve. (11/95 DEP SPEC)
- For proper performance, septic tank should be inspected at least once a year and pumped when the top of the sludge or solids layer is within 12" or less of the bottom of the outlet tee or the bottom of the scum layer is within 2 inches of the bottom of outlet tee (every 2 or 3 years). INSPECT & CLEAN THE TANK OUTLET FILTER EVERY YEAR!
- There are no other wells within 150' of the system.
- Final cover over system shall be stabilized and graded to preclude puddling, and vegetated to minimize erosion. Finish grade shall have a minimum slope of 2%.
- An NOI is required to be filed with the conservation commission.

SOIL TEST DATA

DEEP HOLE & PERC TESTS

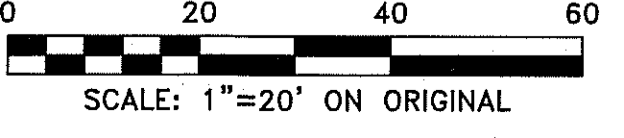
PERFORMED BY: JOHN DELINE, P.E.
WITNESSED BY: JIM ABARE, B.O.H. WINCHENDON
DATE: SEPTEMBER 11, 2017

DEEP HOLE #	DEPTH	PERC RATE	NOTES
P-1	46"	15 MPI	
P-2	45"	18 MPI	

PROPOSED SEPTIC TIES

	DHF-1	DHF-2
CL-TR-A	103.5'	81.9'
CL-TR-B	80.8'	53.0'

PLAN 1"=20'



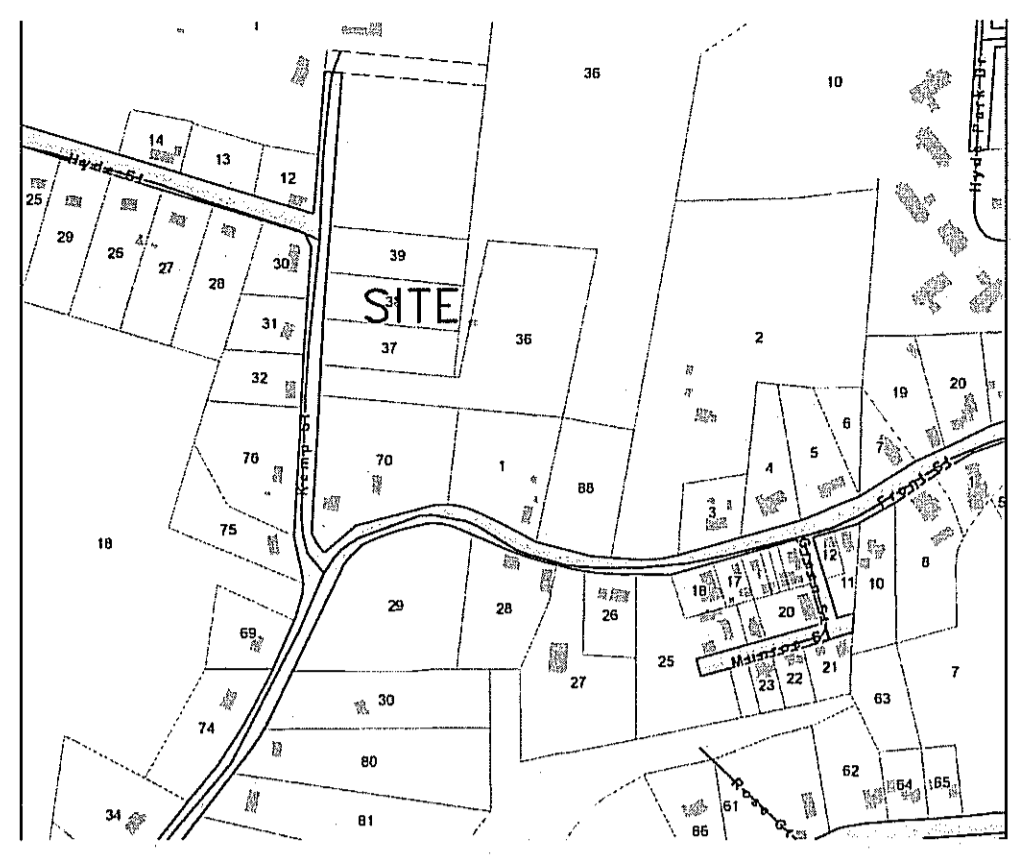
NO.	DESCRIPTION	DATE	BY
2	REVISED PER CONCOMM COMMENTS	7/2/20	JJJ
1	REVISED PER ECOTEC FLAGGING	6/4/20	TWF

DESIGNED BY TWF
DRAWN BY TWF
CHECKED BY PFG
DATE 4/2/20
SCALE 1"=20'
JOB NUMBER 20116

SEPTIC SYSTEM & NOI SITE PLAN
MAP-5B1 LOT-37
49 KEMP ST; WINCHENDON, MA
PREPARED FOR:
BARKLEY ENTERPRISES, LLC
1032 N.H. ROUTE 119
RINDGE, NH 03461

GRAZ Engineering, LLC
323 WEST LAKE RD.; FITZWILLIAM, NH 03447; (603) 585-6959

SHEET 1 OF 1



LOCUS NTS

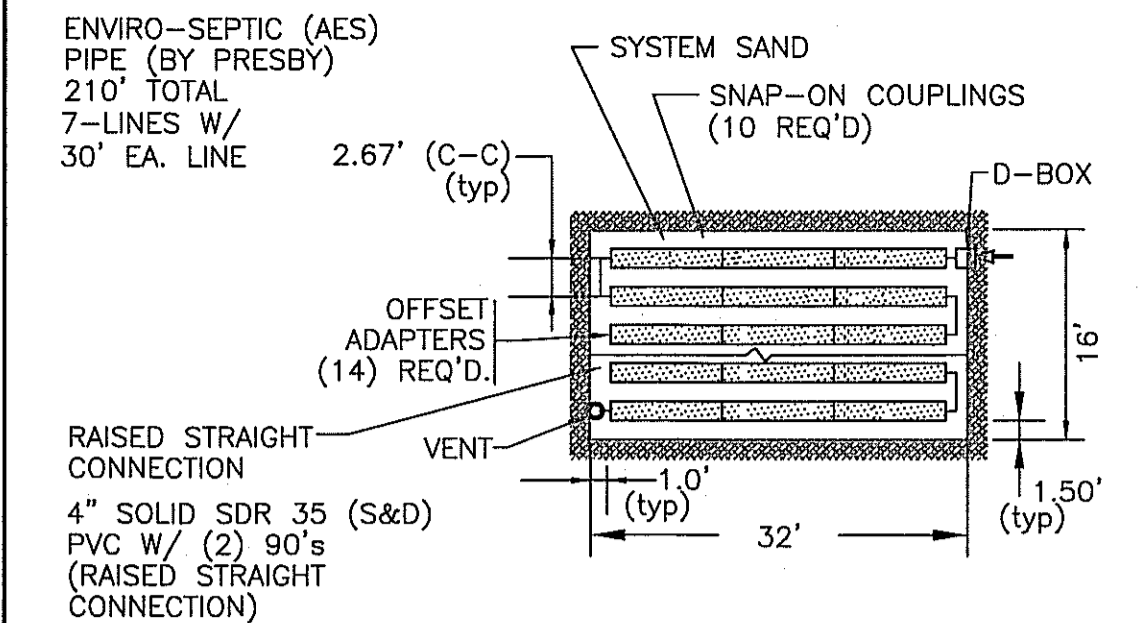
LEGEND

- EXISTING CONTOUR
- PROPOSED CONTOUR
- DEEP HOLE TEST PIT
- EXISTING SPOT ELEVATION
- PROPOSED SPOT ELEVATION
- WATER SERVICE
- PERCOLATION TEST

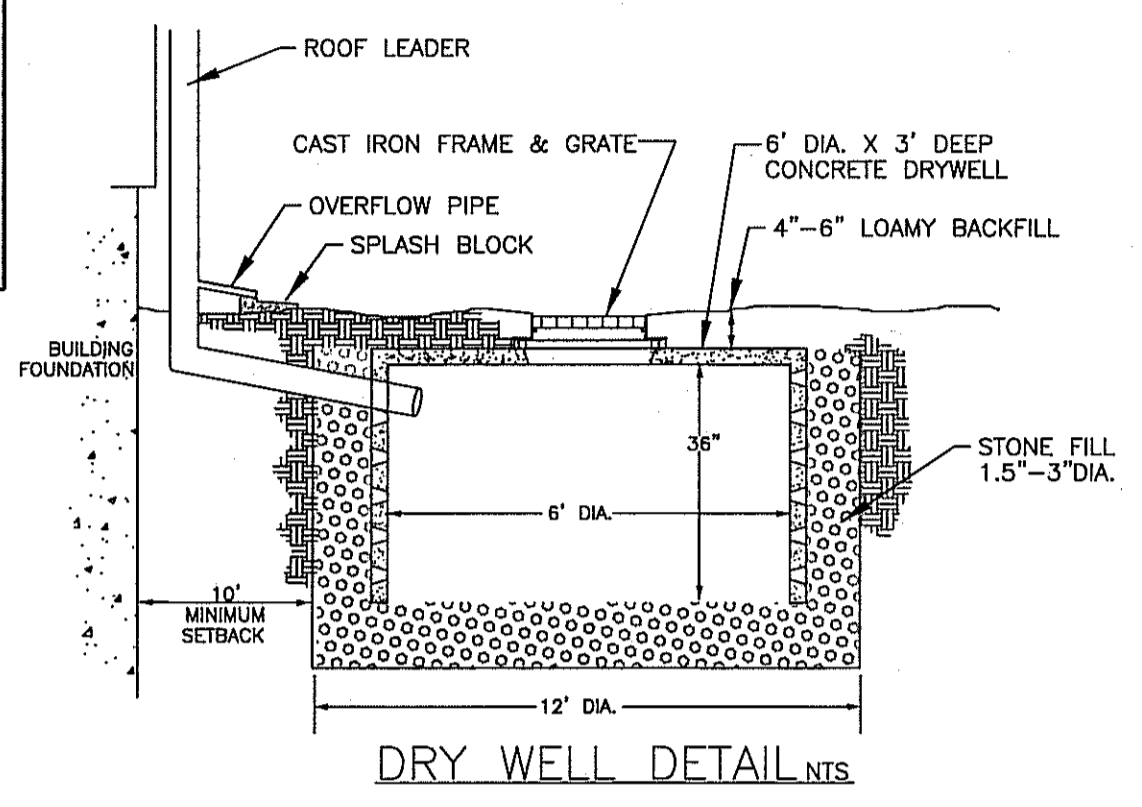
Approximate Disturbance = 20,000+ SF

Shift house outside of 100-foot buffer and away from shared property line with 20 Kemp Street

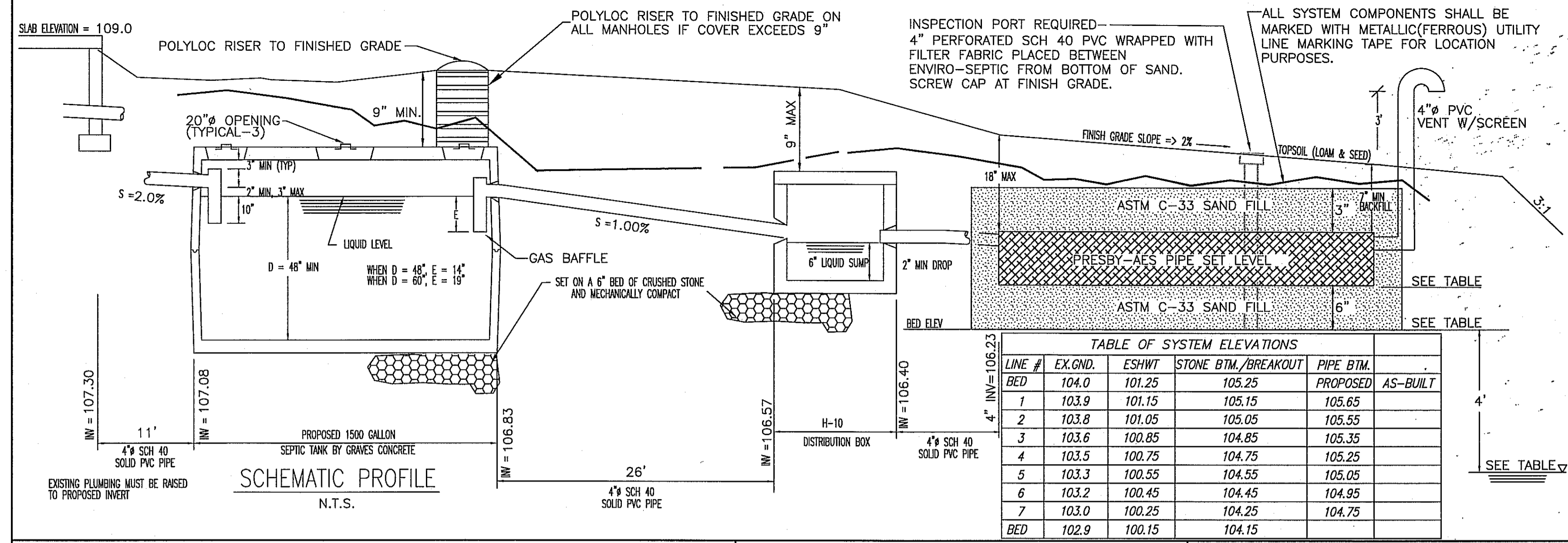
Configure with reserve between trenches. If needed pump.



PARTIAL BED PLAN NTS

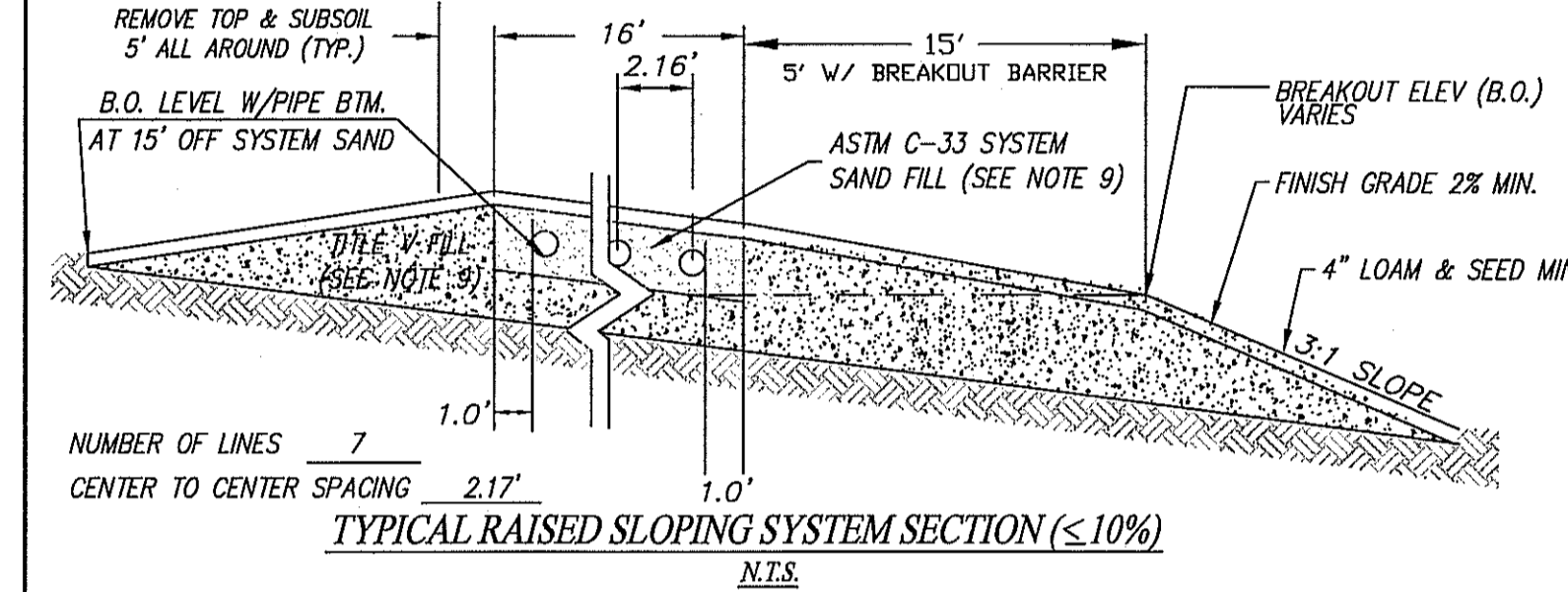


DRY WELL DETAIL NTS



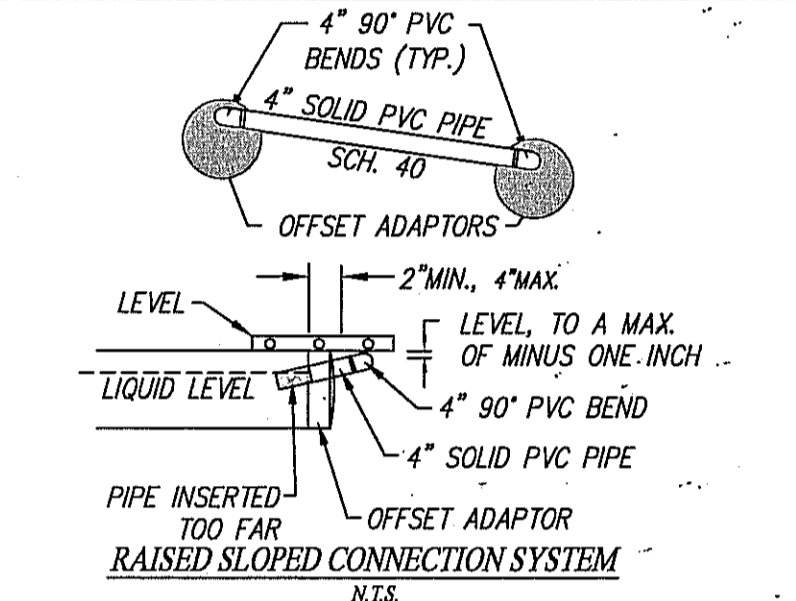
SCHEMATIC PROFILE N.T.S.

LINE #	EX.GND.	ESHT	STONE BTM./BREAKOUT	PIPE BTM.	PROPOSED	AS-BUILT
BED	104.0	101.25	105.25	105.65		
1	103.9	101.15	105.15	105.55		
2	103.8	101.05	105.05	105.55		
3	103.6	100.85	104.85	105.35		
4	103.5	100.75	104.75	105.25		
5	103.3	100.55	104.55	105.05		
6	103.2	100.45	104.45	104.95		
7	103.0	100.25	104.25	104.75		
BED	102.9	100.15	104.15			



TYPICAL RAISED SLOPING SYSTEM SECTION (<=10%) N.T.S.

- DESIGN CRITERIA**
- Estimated Hydraulic Loading
3 bedrooms at 110 gals/day/bedroom = 330 gpd.
Garbage disposal shall not be allowed with this system.
 - Septic tank size = 1,500 gallons
 - Leaching Area Design Criteria
Percolation Rate = 8 mpm
Required linear feet of Presby AES pipe = 210
Linear feet of Enviro-septic pipe provided = 210 L.F.
Square footage required by Title V = 330 GPD/0.56 = 590 S.F.
NO REDUCTION OF AREA ALLOWED (WINCHENDON REG)
Square footage provided = 608 S.F. (min)



RAISED SLOPED CONNECTION SYSTEM N.T.S.

NOTES

- Unless otherwise noted, property lines shown are compiled from existing plans and/or deeds.
- Underground utility data is plotted from visible field locations and available records. The locations are approximate only and verification must be made in the field and Dig-Safe notified.
- All work shall be performed by a Licensed Installer and construction shall conform to the State of Massachusetts requirements as established in 310CMR 15.00. Installation of the Advanced Enviro-Septic leaching system shall conform to the AES Design and Installation Handbook. (ADVANCED ENVIRO-SEPTIC MASSACHUSETTS DESIGN AND INSTALLATION MANUAL)
- The contractor shall install the system exactly as shown on this plan. If changes are necessary, the contractor must contact the Engineer in advance.
- Heavy machinery shall not be permitted to pass over the leaching area.
- All piping shall be polyvinyl chloride (PVC) pipe per ASTM D1785 for sch.40 and ASTM D3034 for SDR 35 where indicated on the profile, unless otherwise noted. S&D pipe shall be SDR 35 PVC.
- Septic tank shall be a proposed 1,500 gallon reinforced concrete tank by Graves Concrete or equivalent.
- A distribution box (D-box) is required.
- All topsoil, roots and impervious material, if any, must be excavated and removed below and 5' beyond the soil absorption system area (and the 3:1 fill slope). The natural soil shall be hand raked. system sand (ASTM C-33) shall be used above, between, 12" beyond sides and 6" below AES. The system sand shall meet ASTM C-33. The system installer shall provide the system owner and the local approving authority with a bill of lading certifying that the sand fill meets ASTM C-33.
- For proper performance, septic tank should be inspected at least once a year and pumped when the combined thickness of the sludge (bottom) and scum (surface) equals 1/3 or more of the tank depth.
- Refer to Massachusetts DEP 1/A Approval & Presby Operation and Maintenance documents.
- Sand fill (except for ASTM C-33 around Enviro-septic) shall be per title V, a clean granular sand, free from organic matter and deleterious substances. Mixtures and layers of different classes of soil not be used. The sand fill shall not contain any material larger than 2 inches. A sieve analysis, using a #4 sieve, shall be performed on a representative sample of the fill. Up to 45% by weight of the fill sample may be retained on the #4 sieve. Sieve analyses also shall be performed on the fraction of the fill sample passing the #4 sieve, such analyses must demonstrate that the material meets or exceeds each of the following specifications: 100% passing #4 sieve; 10R-100% passing #50 sieve; 0%-20% passing #100 sieve; 0%-5% passing #200 sieve. (11/95 DEP SPEC)
- ENVIRO-SEPTIC DESIGN CERTIFICATE NUMBER: 248BMAES
- The installer & designer must certify that the installation meets the DEP GENERAL Use Approval.
- All trees in the area of the septic system to be removed.

SOIL TEST DATA

DEEP HOLE & PERC TESTS

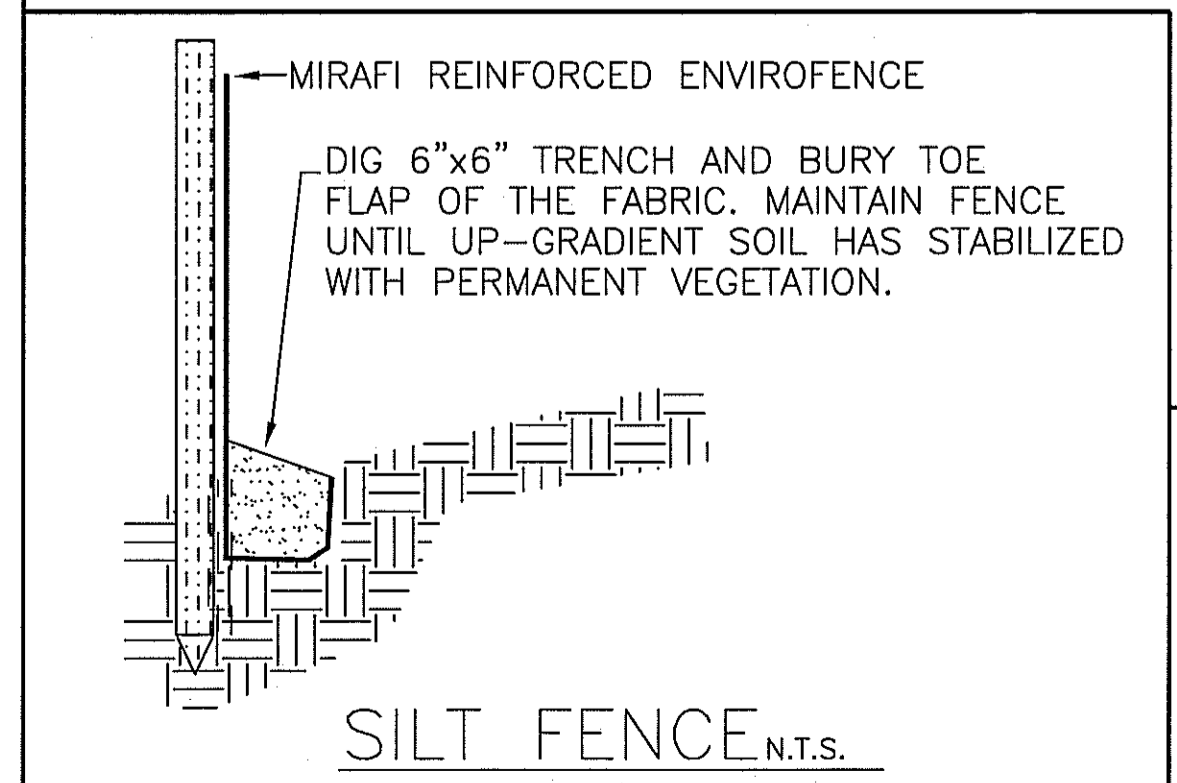
PERFORMED BY: JOHN DELINE, P.E.

WITNESSED BY: JIM ABARE, B.O.H. WINCHENDON

DATE: SEPTEMBER 11, 2017

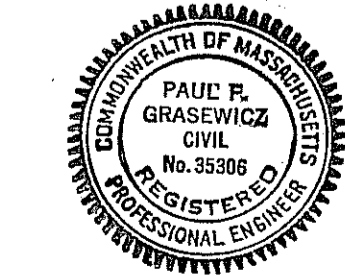
DEEP HOLE # TP-1	DEEP HOLE # TP-2	DEEP HOLE # TP-3	DEEP HOLE # TP-4
FINE SANDY LOAM 10YR 3/3	FINE SANDY LOAM 10YR 3/3	FINE SANDY LOAM 10YR 3/4	FINE SANDY LOAM 10YR 3/3
8"	8"	9"	7"
FINE SANDY LOAM 10YR 5/4	FINE SANDY LOAM 10YR 4/6	FINE SANDY LOAM 10YR 4/6	FINE SANDY LOAM 7.5YR 4/6
20"	21"	21"	25"
LOAMY SAND 2.5Y 5/6	LOAMY SAND 2.5Y 5/6	LOAMY SAND 5Y 6/4	LOAMY SAND 5Y 6/4
80"	78"	80"	82"
ESWT = 34" 10YR 5/8 STANDING WATER = -	ESWT = 33" 2.5Y 5/2 STANDING WATER = -	ESWT = 39" 10YR 5/8 STANDING WATER = -	ESWT = 45" 2.5Y 6/8 STANDING WATER = -
GRD EL. 98.3 ESHWT EL. 95.5 WATER EL. N/A	GRD EL. 99.1 ESHWT EL. 96.35 WATER EL. N/A	GRD EL. 101.2 ESHWT EL. 97.95 WATER EL. N/A	GRD EL. 102.0 ESHWT EL. 98.25 WATER EL. N/A

PERC TEST NUMBER	DEPTH	PERC RATE	NOTES
P-1	39"	8 MPI	
P-2	45"	5 MPI	
P-3	43"	4 MPI	
P-4	44"	13 MPI	



SILT FENCE N.T.S.

DESIGNED BY TWF
DRAWN BY TWF
CHECKED BY PFG
DATE 5/28/20
SCALE 1"=20'
JOB NUMBER 20116



SEPTIC SYSTEM & NOI SITE PLAN
MAP-5B1 LOT-39
69 KEMP ST; WINCHENDON, MA
PREPARED FOR:
BARKLEY ENTERPRISES, LLC
1032 N.H. ROUTE 119
RINDGE, NH 03461

NO.	DESCRIPTION	DATE	BY
2	REVISED PER CONCOMM COMMENTS	7/2/20	JJJ
1	REVISED PER ECOTEC FLAGGING	6/4/20	TWF

GRAZ Engineering, LLC
WWW.GRAZENGINEERING.COM
323 WEST LAKE RD.; FITZ WILLIAM, NH 03447; (603) 585-6959

FIELD BOOK NO. PAGES
SHEET 1 OF 1

PROPOSED SEPTIC TIES

	TBM(1)	TBM(2)
PRESBY CORN-A	95.3'	81.9'
PRESBY CORN-B	79.2'	53.0'

PLAN

TOWN OF WINCHENDON

Conservation Commission



Telephone (978) 297-5410

109 Front Street
Winchendon, Massachusetts 01475-1758

Legal Notice Winchendon Conservation Commission

Pursuant to the provisions of M.G.L. Chapter 131, Section 40, and the Town of Winchendon Wetlands Protection Bylaw, the Winchendon Conservation Commission will hold a public hearing on Thursday, July 9, 2020 at 6:20 pm to consider the Notice of Intent filed by Matthew Kotoski for proposed work within the 100-foot Buffer Zone to Bordering Vegetated Wetlands at 195 Beachview Dr., Assessor's Map 12 Parcel 50. The proposed work includes reconstruction the existing stone wall near the lake, creation of an approximately 1,000 sf two tiered patio area and addition of a walkway to the lake for a dock. The hearing will be held remotely via www.zoom.com or if it is safe to do so, in the 2nd Floor Auditorium of the Winchendon Town Hall, 109 Front Street.

The Notice of Intent is available by emailing amanugian@townofwinchendon.com.



195 Beachview

Winchendon, MA

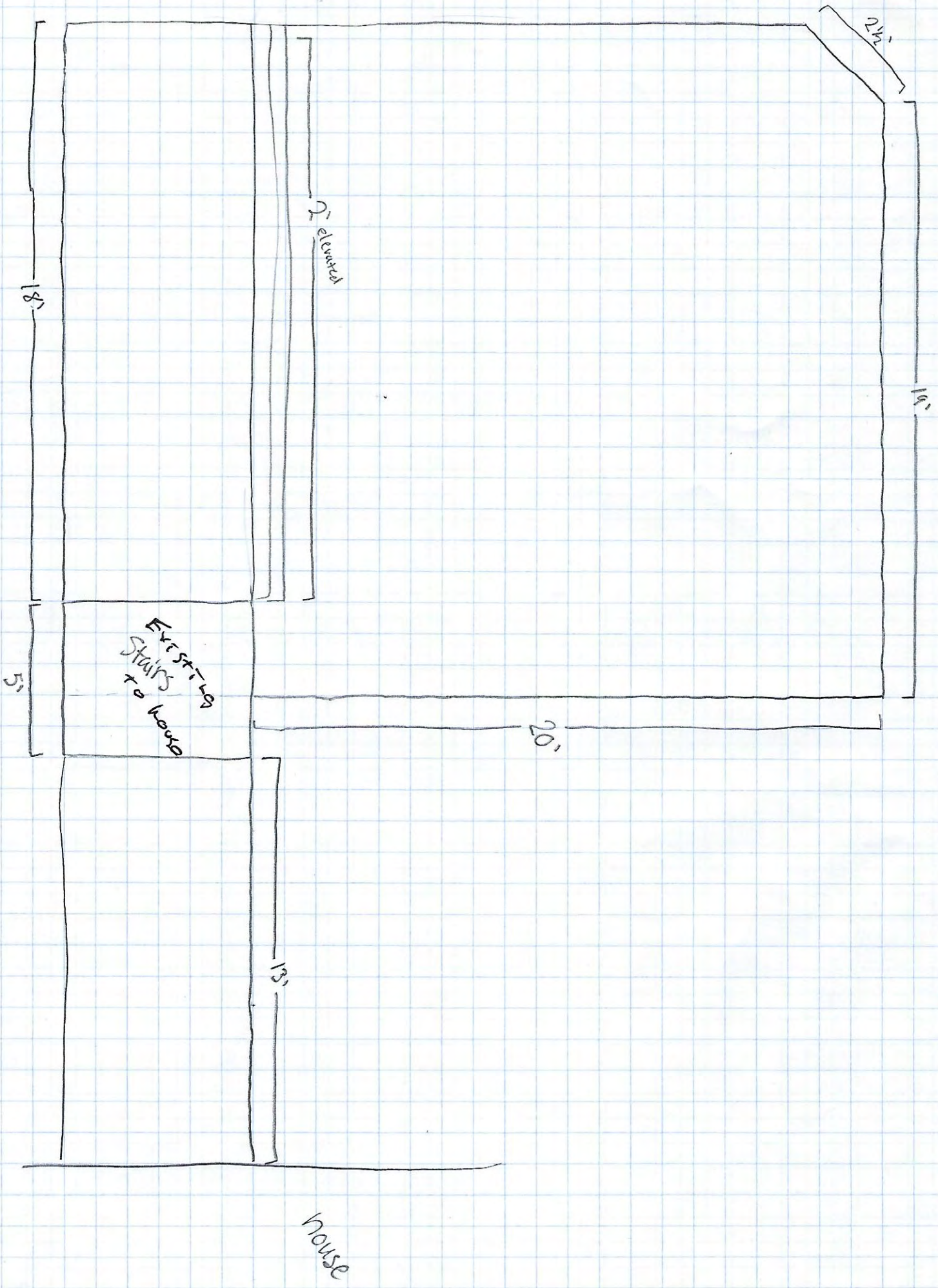
1 inch = 75 Feet



June 22, 2020



Data shown on this map is provided for planning and informational purposes only. The municipality and CAI Technologies are not responsible for any use for other purposes or misuse or misrepresentation of this map.



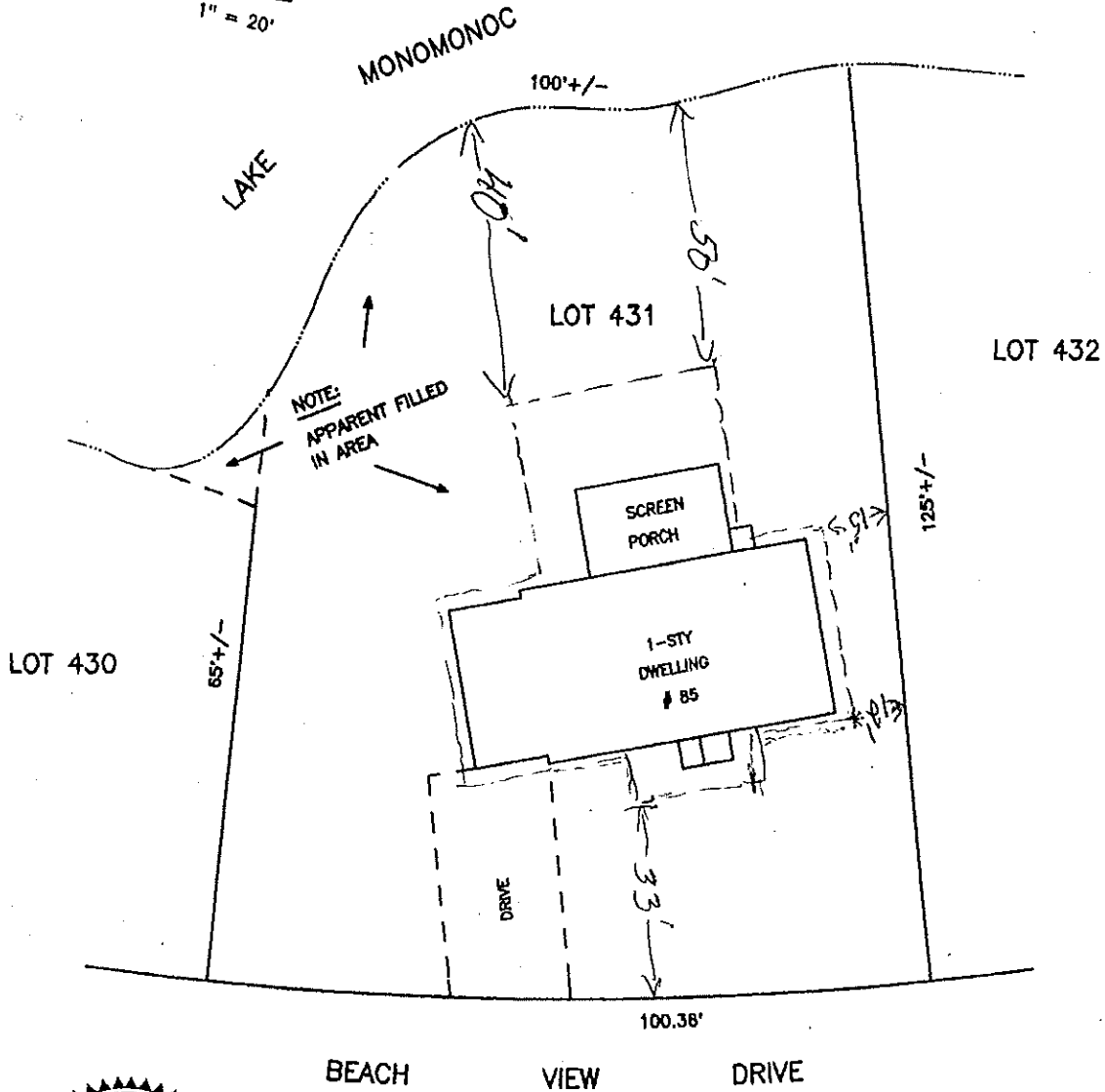
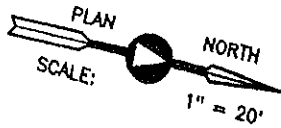
(Please publish in The Gardner News no later than June 4th)

Legal Notice
Winchendon Conservation Commission

Pursuant to the provisions of M.G.L. Chapter 131, Section 40, and the Town of Winchendon Wetlands Protection Bylaw, the Winchendon Conservation Commission will hold public hearings on Thursday, June 11, 2020 at 6:30 pm to consider the Notice of Intent filed by Chris and Lauren McNamara for proposed work within the 100-foot Buffer Zone to Bordering Vegetated Wetlands at 85 Beachview Drive, Assessor's Map 10, Lot 53. The proposed work includes expansion of the existing screened porch lakeside, a new farmer's porch at the front entry and expansion of the roof overhangs. The hearing will be held remotely via www.zoom.com or if it is safe to do so, in the 2nd Floor Auditorium of the Winchendon Town Hall, 109 Front Street.

The Notice of Intent is available by emailing amanugian@townofwinchendon.com.

NOTE: THIS DOCUMENT IS COPYRIGHTED AND WAS PREPARED FOR THE EXCLUSIVE USE OF THE NAMED CLIENT, LENDER AND LENDER'S TITLE INSURANCE COMPANY FOR THIS ENGAGEMENT ONLY. IT SHOULD NOT BE REPRODUCED OR BE USED BY ANY OTHER PARTY(S) FOR ANY PURPOSE OR ENGAGEMENT, WITHOUT THE WRITTEN PERMISSION OF CABCO CONSULT.

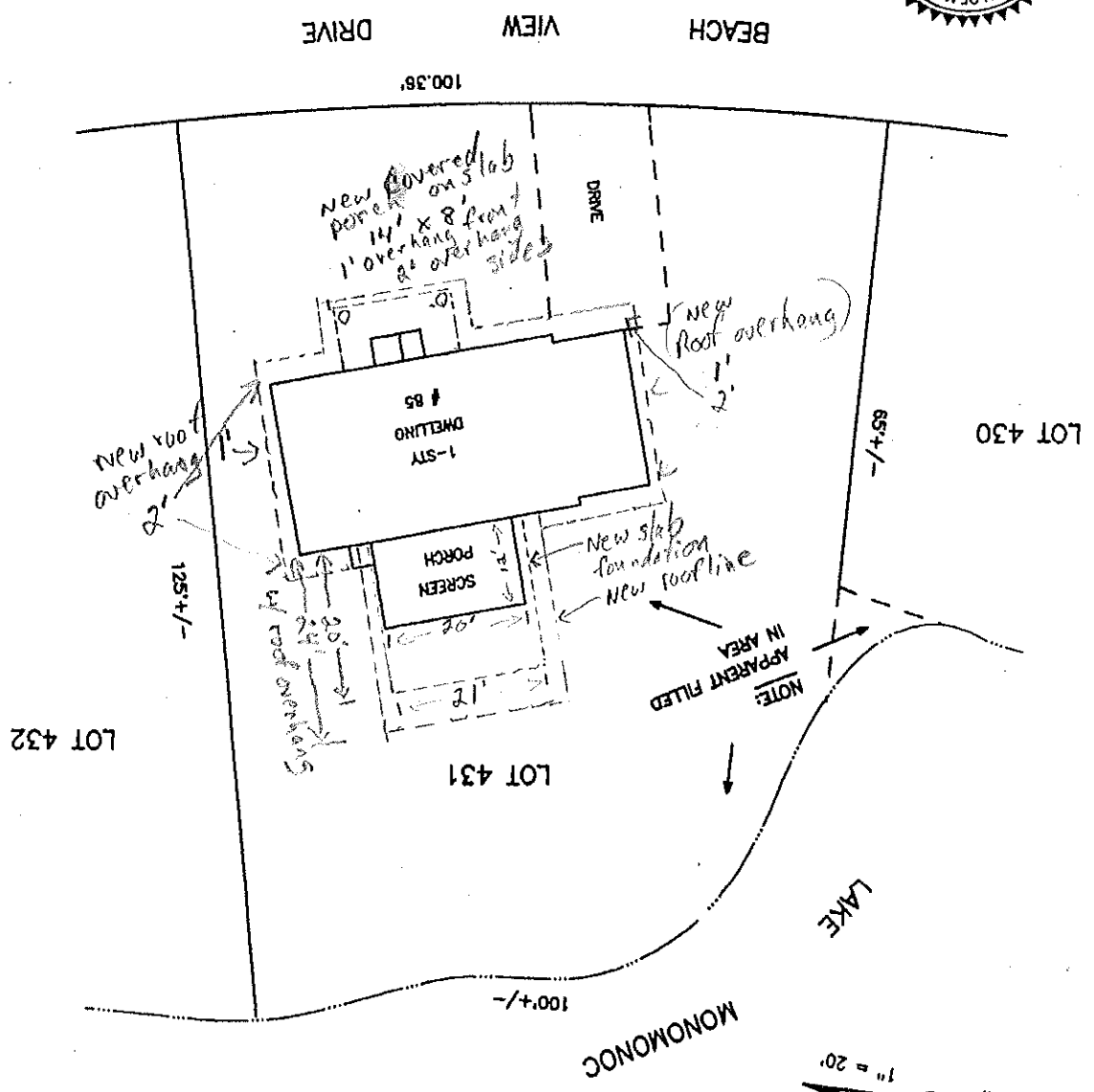
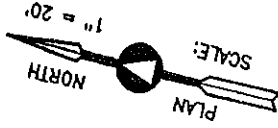


I, C.A. BUONICK,
A REGISTERED LAND SURVEYOR, DO
HEREBY CERTIFY THAT THE ABOVE
MORTGAGE INSPECTION PLAN WAS
PREPARED FOR:
FIDELITY CO-OPERATIVE BANK

IN CONNECTION WITH A NEW MORTGAGE AND IS NOT INTENDED OR REPRESENTED TO BE A LAND OR PROPERTY LINE SURVEY. NO CORNERS WERE SET, IT CANNOT BE USED FOR ESTABLISHING FENCE, LANDSCAPING, OR BUILDING LINES. NO RESPONSIBILITY IS EXTENDED HEREIN FOR ENCROACHMENT, OR TITLE MATTERS THAT MAY SUBSEQUENTLY BE DISCOVERED BY AN INSTRUMENT SURVEY. THE LAND SHOWN HEREON IS BASED ON CLIENT FURNISHED INFORMATION AND MAY BE SUBJECT TO FURTHER OUT-SALES, TAXINGS, EASEMENTS AND RIGHTS OF WAY.

MORTGAGE		LOAN		PLOT		PLAN												
				MORTGAGE LOAN PLOT PLANS														
				LAND SURVEYING AND MAPPING														
				CIVIL ENGINEERING SERVICES														
				ENVIRONMENTAL CONSULTING SERVICES														
P.O. BOX 14 CLINTON, MA. 01510		TEL: 800-875-1591 FAX: 978-365-7419		RECORDED AT: <u>WORCESTER</u> COUNTY REGISTRY OF DEEDS				BOOK: <u>48086</u> PAGE: <u>221</u> L.C. CERT # _____										
DATE: <u>JULY 29, 2013</u>		CLIENT: <u>REYNOLDS LAW OFFICES</u>		PLAN REFERENCE: <u>PR 230 PL 88</u>				DRAWN PER TOWN / CITY OF _____ ASSESSOR'S MAP # _____ PARCEL # _____ DATED: _____										
CLIENT REF: <u>N/A</u>		P.D. # <u>332613</u>		ADDRESS: <u>85 BEACHVIEW DRIVE</u>				BORROWER: <u>CHRISTOPHER P. & LAUREN A. MCNAMARA</u>										
				SUBJECT DWELLING IS IN FLOOD ZONE " <u>C</u> " NOT IN A FLOOD HAZARD AREA														
				AS SHOWN ON NATIONAL FLOOD INSURANCE PROGRAM FLOOD INSURANCE RATE MAP DATED: <u>JUNE 15, 1982</u>														
				COMMUNITY-PANEL # <u>260348 0010B</u>														
				<table border="1"> <tr> <td>FILED</td> <td>DRAFTED</td> <td>CHECKED</td> </tr> <tr> <td>CS</td> <td>CS</td> <td>CAB</td> </tr> <tr> <td>27-JUL-13</td> <td>28-JUL-13</td> <td>29-JUL-13</td> </tr> </table>				FILED	DRAFTED	CHECKED	CS	CS	CAB	27-JUL-13	28-JUL-13	29-JUL-13	WOR343.10	
FILED	DRAFTED	CHECKED																
CS	CS	CAB																
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BY: _____		DATE: _____						F.B. JF PGE. 5										

NOTE: THIS DOCUMENT IS COPYRIGHTED AND WAS PREPARED FOR THE EXCLUSIVE USE OF THE ABOVE CLIENT. LENDERS AND OTHERS TITLE INSURANCE COMPANY FOR THIS EMBLEMMENT ONLY. IT SHOULD NOT BE REPRODUCED OR BE USED BY ANY OTHER PARTY(S) FOR ANY PURPOSE OR EMBLEMMENT, WITHOUT THE WRITTEN PERMISSION OF CABCO CONSULT.



I, CA BUDNICK
A REGISTERED LAND SURVEYOR, DO HEREBY CERTIFY THAT THE ABOVE MORTGAGE INSPECTION PLAN WAS PREPARED FOR:
FIDELITY CO-OPERATIVE BANK
IN CONNECTION WITH A NEW MORTGAGE AND NOT INTENDED OR REPRESENTED TO BE A LAND OR APPLICABLE ZONING BYLAW IN EFFECT WHEN HEREDON EITHER WAS IN COMPLIANCE WITH THE LOCAL CONSTRUCTION (WITH RESPECT TO HORIZONTAL DIMENSIONAL REQUIREMENTS ONLY), OR IS EXCEPT FROM VIOLATION ENFORCEMENT ACTION UNDER MASS. OT. TITLE 91A CHAPTER 91A, UNLESS OTHERWISE NOTED OR SHOWN HEREDON. IF ANY IMPROVEMENTS ARE SITUATED WITHIN 1' OF AN APPLICABLE PROPERTY LINE, AN INSTRUMENT SURVEY IS RECOMMENDED.

MORTGAGE PLAN
LOAN PLAN
PLOT PLAN
MORTGAGE LOAN PLOT PLANS
LAND SURVEYING AND MAPPING
CIVIL ENGINEERING SERVICES
ENVIRONMENTAL CONSULTING SERVICES

P.O. BOX 14
CLINTON, MA 01610
TEL: 800-676-1591
FAX: 978-365-7419

CABCO CONSULT

DATE: JULY 29, 2013
CLIENT: REYNOLDS LAW OFFICES
CLIENT REF: N/A
P.D. #: 333613

RECORDED AT: WORCESTER
BOOK: 4486
PAGE: 221
L.C. CERT #

PLAN REFERENCE: PB 230 PL 68
DRAWN PER TOWN/CITY OF: ASSESSOR'S

MAP #
PARCEL #
DATED:

ADDRESS: 85 BEACHVIEW DRIVE
BORROWER: WINCHESTER, MA 01475
CHRISTOPHER P. & LAUREN A. MCNAMARA

SUBJECT DWELLING IS IN FLOOD ZONE 'C'.
FLOOD HAZARD AREA
NOT IN A
AS SHOWN ON NATIONAL FLOOD INSURANCE PROGRAM FLOOD INSURANCE RATE MAP DATED: JUNE 16, 1982
COMMUNITY-PANEL # 260348 00108

FILED
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28-JUL-13

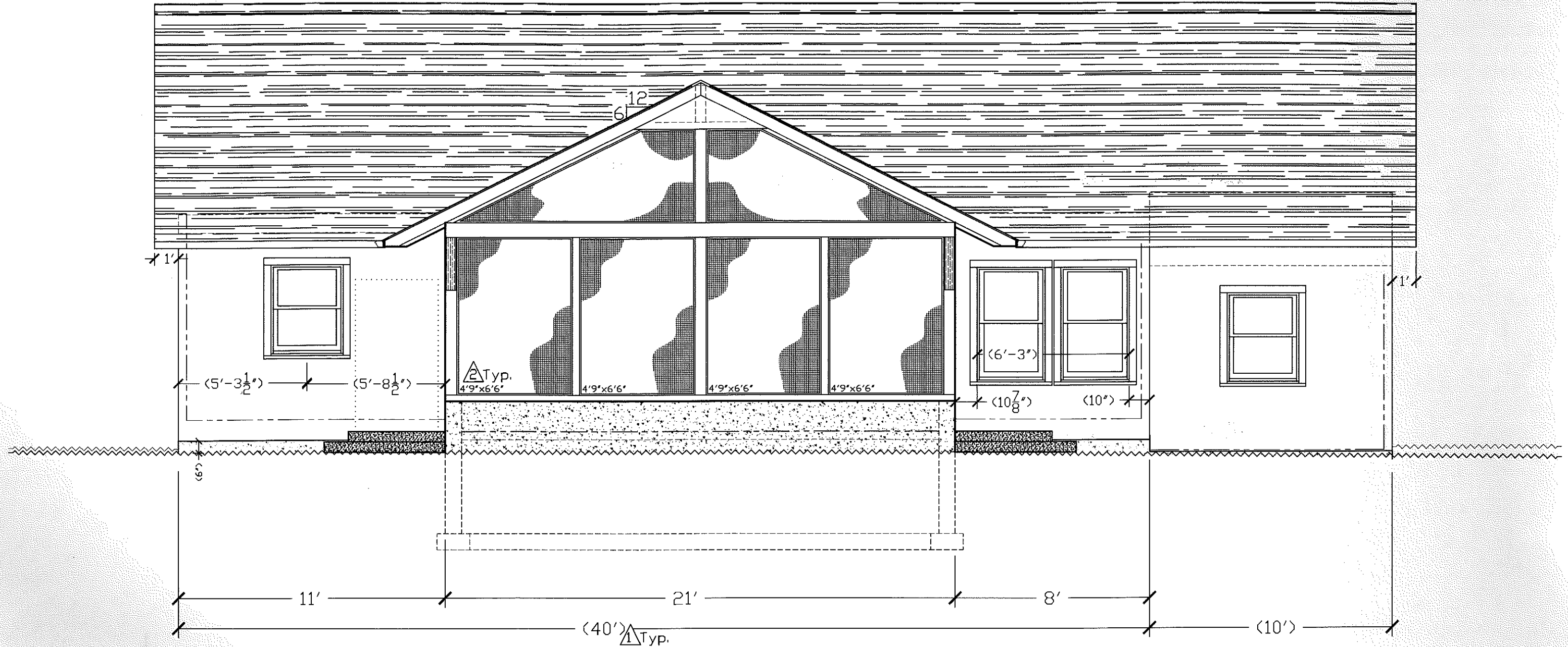
DATE: F.B. JF PGE. 5
WOR343.10

1 Dimensions in Parentheses (n'-n") Are For Reference Only And May Be Approximate

2 Final Screen Dimensions May Vary Based On Construction Methods

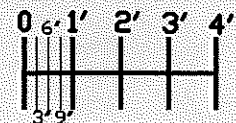
Sheet	Title
A01	Revised Lakeside Elevation
A02	Revised Roadside Elevation
A03	Revised Left Side Elevation
A04	Revised Right Side Elevation
A05	Revised Floor Plan Lakeside

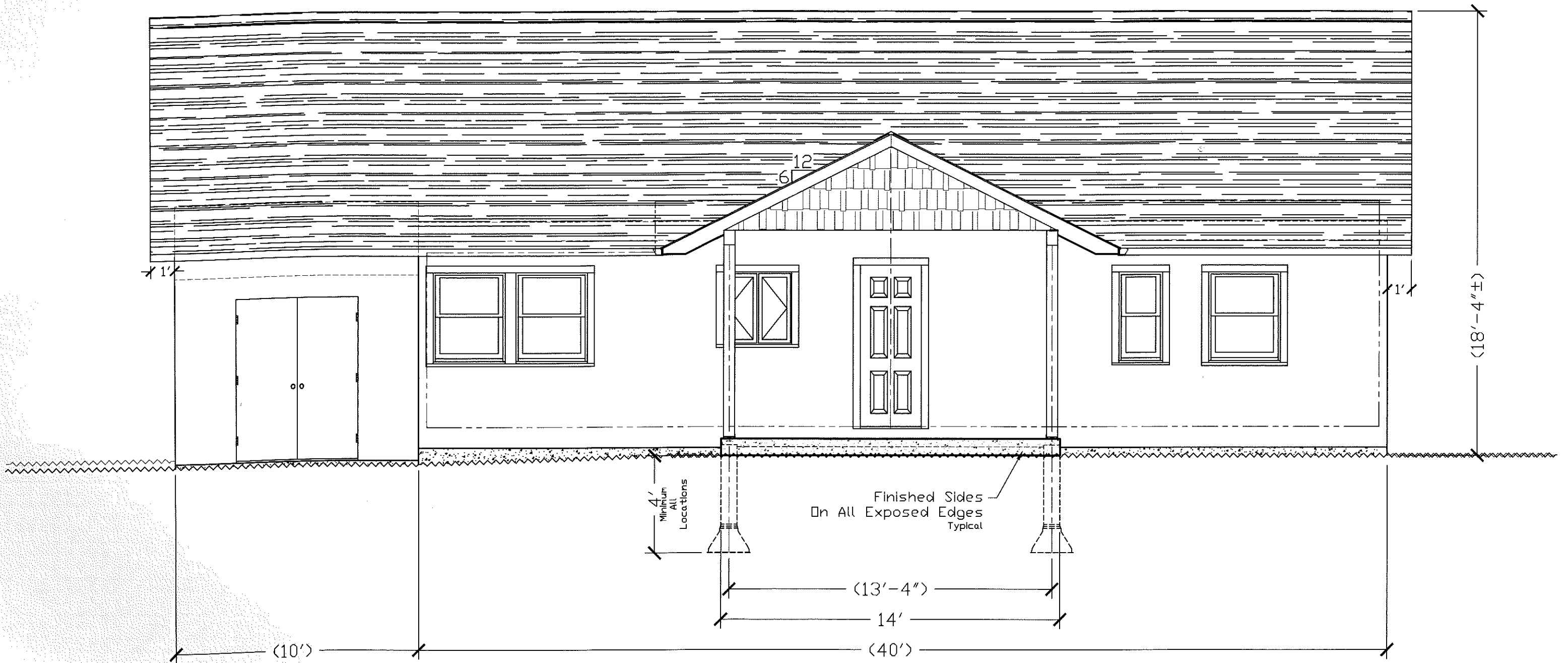
Sheet	Title
A06	Revised Floor Plan Roadside
A07	Revised Sections A-A, B-B
A08	Section C-C Lakeside Porch
A09	Section D-D Roadside Porch
A10	Notes



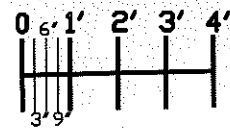
Revised Lakeside Elevation

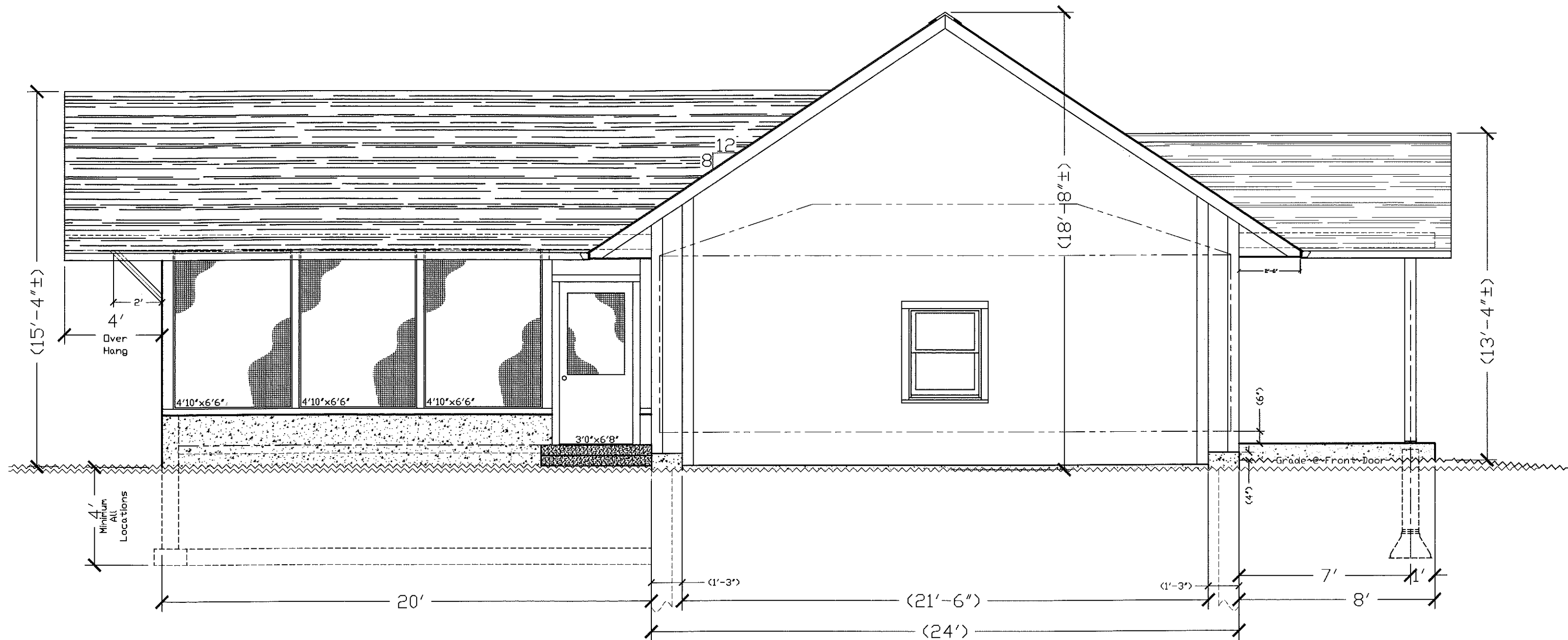
All Building Dimensions Are To The Foundation NOT The Siding



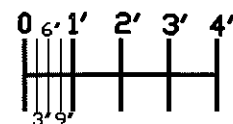


Revised Roadside Elevation

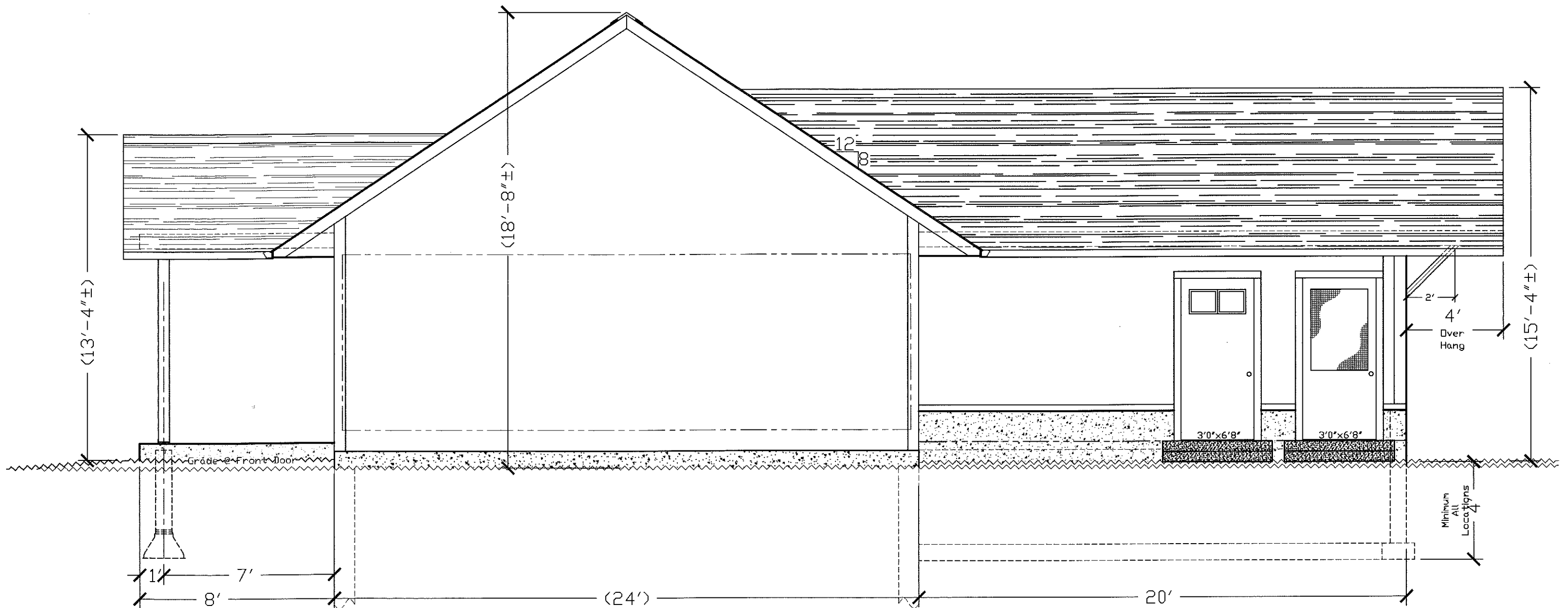




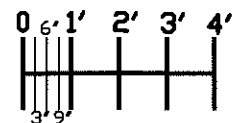
Revised Left Side Elevation



All Building Dimensions Are To
The Foundation NOT The Siding

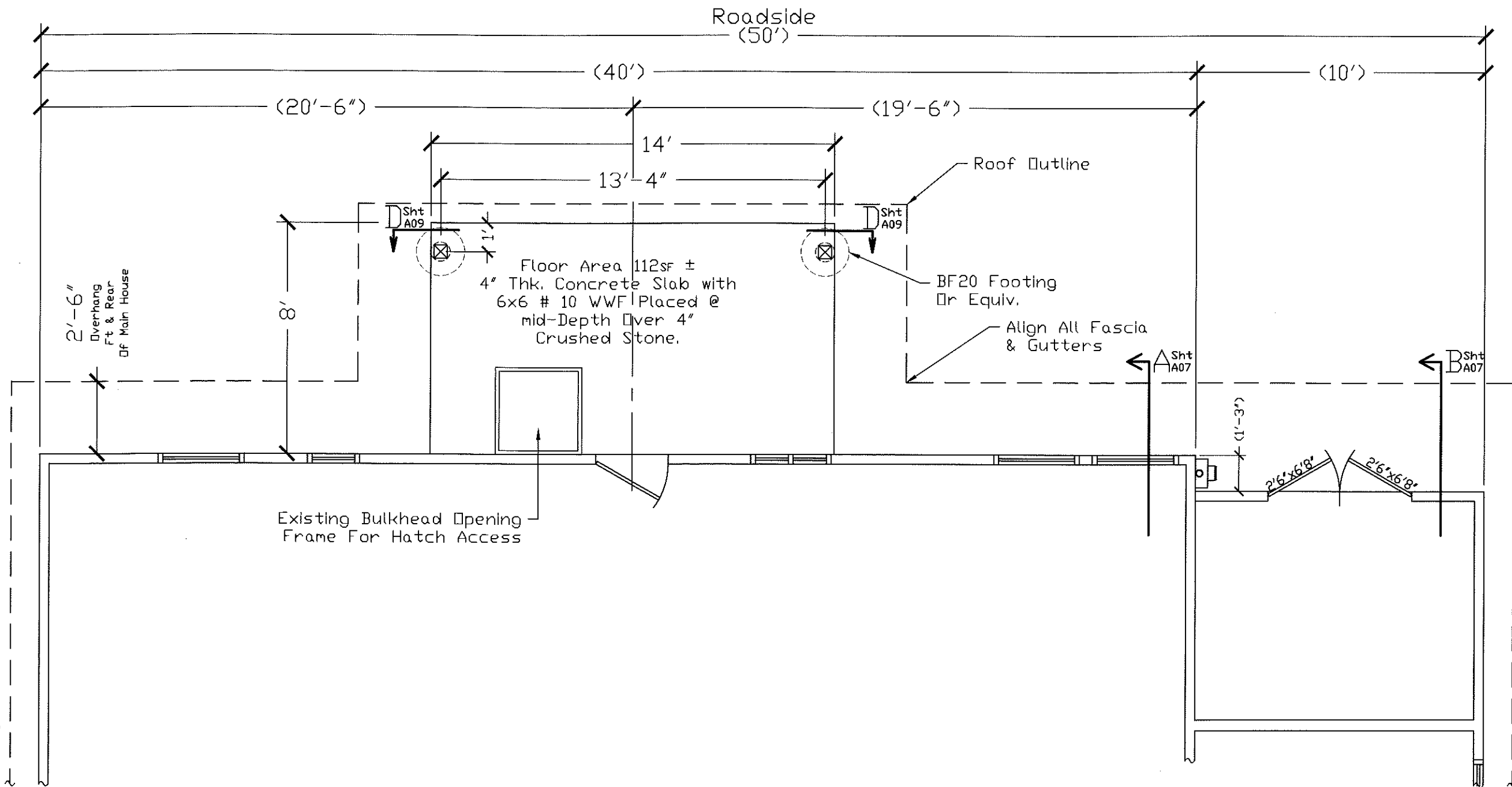


Revised Right Side Elevation



All Building Dimensions Are To
The Foundation NOT The Siding

All Building Dimensions Are To
The Foundation NOT The Siding



TOWN OF WINCHENDON

Conservation Commission



Telephone (978) 297-5410

109 Front Street
Winchendon, Massachusetts 01475-1758

Legal Notice Winchendon Conservation Commission

Pursuant to the provisions of M.G.L. Chapter 131, Section 40, and the Town of Winchendon Wetlands Protection Bylaw, the Winchendon Conservation Commission will hold a public hearing on Thursday, July 9, 2020 at 6:55 pm to consider the Request for Determination of Applicability filed by Wayne Huard for proposed work within the 100-foot Buffer Zone to Bordering Vegetated Wetlands at 136 Beachview Dr., Assessor's Map 11 Parcel 15. The proposed work includes removal of a single large pine tree located on the beach. The hearing will be held remotely via www.zoom.com or if it is safe to do so, in the 2nd Floor Auditorium of the Winchendon Town Hall, 109 Front Street.

The Request for Determination of Applicability application is available by emailing amanugian@townofwinchendon.com.



WPA Form 1- Request for Determination of Applicability

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

C. Project Description

1. a. Project Location (use maps and plans to identify the location of the area subject to this request):

136 Beachview Drive

Street Address

Winchendon

City/Town

M11 0

Assessors Map/Plat Number

14

Parcel/Lot Number

- b. Area Description (use additional paper, if necessary):

Large pine tree on beach, roots coming up destroying the beach. Large limbs fall after heavy winds. It's on the line with the neighbors property causing anxiety for the children. I think it has a large amount of carpenter ants.

- c. Plan and/or Map Reference(s):

Title

Date

Title

Date

Title

Date

2. a. Work Description (use additional paper and/or provide plan(s) of work, if necessary):

Take down one large pine tree



TOWN OF WINCHENDON

Conservation Commission



Telephone (978) 297-5410

109 Front Street
Winchendon, Massachusetts 01475-1758

(Please publish in The Gardner News no later than August 6th)

Legal Notice Winchendon Conservation Commission

Pursuant to the provisions of M.G.L. Chapter 131, Section 40, and the Town of Winchendon Wetlands Protection Bylaw, the Winchendon Conservation Commission will hold public hearings on Thursday, August 13, 2020 at 6:30 pm to consider the Request for Determination of Applicability filed by Vincent Cass for proposed work within the 100-foot Buffer Zone to Bordering Vegetated Wetlands at 255 W. Monomonac Road, Assessor's Map 6, Lot 37. The proposed work includes removal of a 100' pine tree in the wetland buffer. The hearing will be held remotely via www.zoom.com or if it is safe to do so, in the 2nd Floor Auditorium of the Winchendon Town Hall, 109 Front Street.

The Notice of Intent is available by emailing amanugian@townofwinchendon.com.



WPA Form 1- Request for Determination of Applicability

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

C. Project Description

1. a. Project Location (use maps and plans to identify the location of the area subject to this request):

255 Monomonic Drive West Winchendon
Street Address City/Town
MG 37
Assessor's Map/Plat Number Parcel/Lot Number

b. Area Description (use additional paper, if necessary):
Lot is divided by Monomonic Drive West

- c. Plan and/or Map Reference(s):

Title	Date

2. a. Work Description (use additional paper and/or provide plan(s) of work, if necessary):

Remove 100± pine tree on section of lot on the house side of road. Tree is in 100' buffer zone.

TOWN OF WINCHENDON

Conservation Commission



Telephone (978) 297-5410

109 Front Street
Winchendon, Massachusetts 01475-1758

Legal Notice Winchendon Conservation Commission

Pursuant to the provisions of M.G.L. Chapter 131, Section 40, and the Town of Winchendon Wetlands Protection Bylaw, the Winchendon Conservation Commission will hold a public hearing on Thursday, July 9, 2020 at 6:30 pm to consider the Notice of Intent filed by Rodney Galton of Ecos Energy, LLC for proposed work within the 100-foot Buffer Zone to Bordering Vegetated Wetlands on Spring Street, Assessor's Map 9 Parcels 97 & 98. The proposed work includes construction of a 9 MW ground mounted solar array installation including work in wetland buffers and wetland crossings. The hearing will be held remotely via www.zoom.com or if it is safe to do so, in the 2nd Floor Auditorium of the Winchendon Town Hall, 109 Front Street.

The Notice of Intent is available by emailing amanugian@townofwinchendon.com.

LEGEND:

- EXISTING PROPERTY LINE
- PROPOSED FENCE
- PROPOSED GRAVEL ACCESS ROAD
- PROPOSED SINGLE AXIS TRACKER (24 MODULE STRING)

- 100' BVW BUFFER
- WETLAND DELINEATION LINE
- WETLAND DELINEATION FLAGGING
- *WETLAND DELINEATED BY NEW ENGLAND ENVIRONMENTAL DEIGN, LLC ON 10/22/18

BASIN OUTLET

PROJECT INFORMATION:

EXISTING ZONING : INDUSTRIAL
 PROPOSED USE : SOLAR ENERGY COLLECTION SYSTEM

SPECIFIC SITE NOTES:

1. NO LIGHTING PROPOSED WITH THE PROJECT
2. NO AUDIBLE NOISE GREATER THAN THE SITES EXISTING AMBIENT NOISE LEVEL SHALL BE DETECTABLE AT OR BEYOND THE PROPERTY LINE OF THE PROJECT
3. EMERGENCY VEHICULAR & SITE ACCESS TO BE PROVIDED TO ALL LOCAL RESPONDERS (POLICE, FIRE, ETC...)

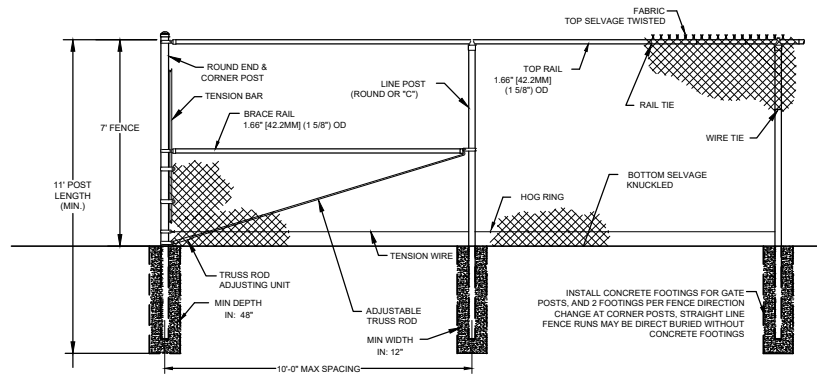
PROJECT AREAS & IMPACTS:

TOTAL SITE AREA:
 PARCEL 9-0-97 22.8 ACRES
 PARCEL 9-0-98 48.4 ACRES
 TOTAL 71.2 ACRES

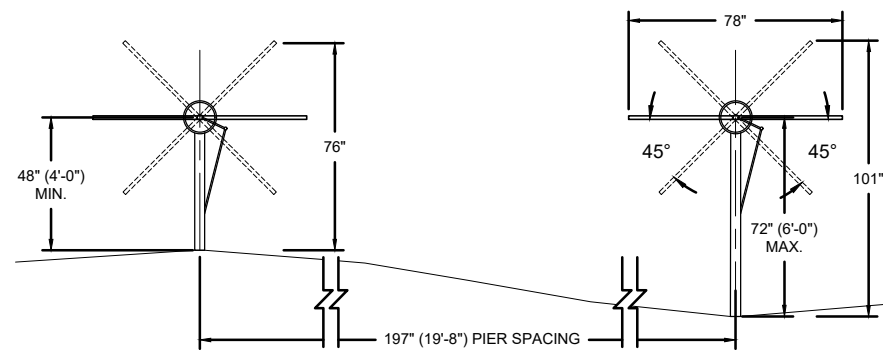
TOTAL ARRAY FOOTPRINT (FENCE LIMITS) = 58.7 ACRES

TOTAL PROPOSED IMPERVIOUS:
 GRAVEL ACCESS ROAD, STRUCTURAL POSTS & EQUIPMENT PADS
 SITE TOTAL = 1.55 ACRES

PERIMETER FENCE DETAIL:



RACKING PROFILE DETAIL:



TEST PIT LOGS:

Testing location #1
 0'-5" A SL 10yr 3/2
 5'-30" B SL 10yr 5/6
 30"-76" C SL 2.5y 5/3
 Redox @ 48"

Testing location #2
 0'-72" Very dense fill. Dark Grey in color
 Redox @ 24"
 Weeping @ 60"

Testing location #3
 0'-12" Fill
 12"-80" C S & G 10yr 5/6
 Redox/Weeping @ 36"

Testing location #4
 0'-8" A SL 10yr 3/2
 8'-32" B SL 10yr 5/6
 32"-80" C SL 2.5y 5/3
 Redox @ 48"

Testing location #5
 0'-8" A SL 10yr 3/2
 8'-30" B SL 10yr 5/6
 30"-84" C SL 2.5y 5/3
 Redox @ 48"

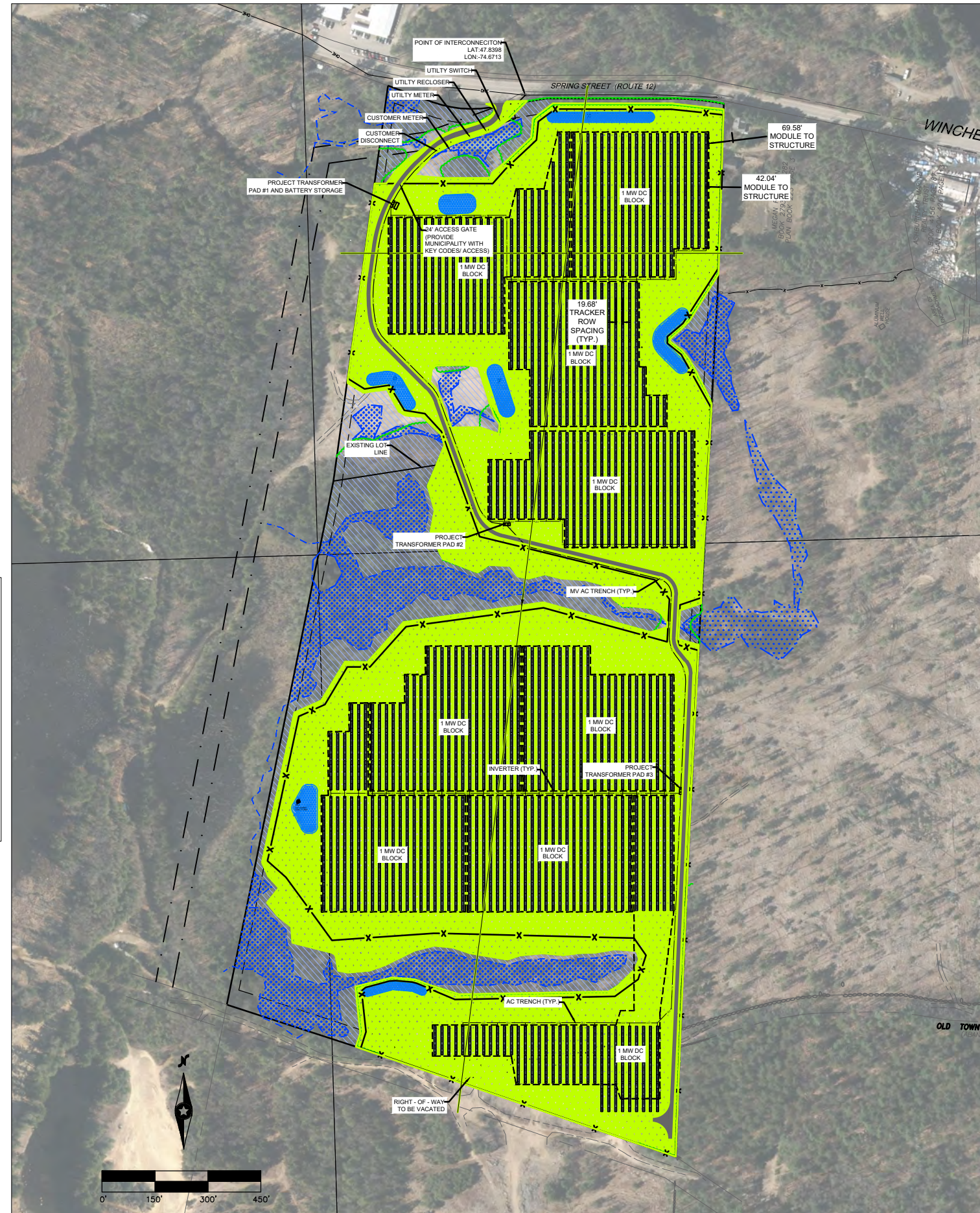
Testing location #6
 0'-12" A SL 10yr 3/2
 12'-30" B SL 2.5y 5/3
 30"-84" C S & G 10yr 5/6
 Redox @ 24"
 Weeping @ 36"

Testing location #7
 0'-6" A SL 10yr 3/2
 6'-30" B SL 10yr 3/6
 30"-78" C S & G 10yr 5/6
 Redox @ 40"

Testing location #8
 0'-4" A SL 10yr 3/2
 4'-12" Gleyed layer
 12'-100" C S 10yr 5/4
 Redox @ 24"
 Weeping @ 84"

Testing location #9
 0'-2" A SL 10yr 3/2
 2'-100" C S 10yr 3/6
 Redox @ 96"

Testing location #10
 0'-12" A SL Greyed
 12'-70" C1 S 10yr 5/6
 70"-102" C2 S 10yr 3/6
 Redox @ 80"



REVISION LOG:
 4/8/2020 - CC SUBMISSION

WINCHENDON SOLAR
 PARCEL # 9-0-97 & 9-0-98
 SPRING STREET
 WINCHENDON, MASSACHUSETTS 01430
 WORCESTER COUNTY

OVERALL SITE PLAN

W-1157073
July 27, 2020

Alison Manugian, Conservation Agent
Winchendon Conservation Commission
Town Hall, 109 Front Street
Winchendon, MA 01475

Re: Winchendon Solar Spring Street – Peer Review

Dear Alison and Members of the Commission:

Tighe & Bond has been retained by the Town of Winchendon to provide peer review services to the Conservation Commission in their review of the Notice of Intent submitted by Ecos Energy, LLC (Ecos). The Notice of Intent was submitted in regard to the proposed solar photovoltaic array off of Spring Street (Route 12) in Winchendon, Massachusetts. The Applicant, Ecos, has provided the following documents for review:

- WPA Form 3 – Notice of Intent and Checklist for Stormwater Report, dated April 20, 2020
- Winchendon Solar Spring Street Stormwater Report, prepared by Ecos Energy, undated
- **Site Plans, entitled “Winchendon Solar, Conservation Commission Documents”,** prepared by Ecos Energy, revised April 8, 2020

The Notice of Intent documents were reviewed for compliance with the Massachusetts Wetlands Protection Act (WPA; M.G.L. c. 131 § 40) and its implementing regulations (310 CMR 10.00), along with the Winchendon Wetlands Protection Bylaws, as well as the Massachusetts Stormwater Management Standards (Standards) and the Massachusetts Stormwater Handbook (Handbook).

The following comments are provided by Tighe & Bond in response to the documents referenced above, prepared by Ecos, and in addition to the MassDEP File Number Notification and comments dated July 23, 2020.

Wetland Delineation:

A review of the wetland delineation was conducted by a Tighe & Bond wetland scientist (Jeremy Degler, PWS, CWS) on July 15, 2020. In general, Tighe & Bond concurred with the wetland resource area boundaries as shown on the Project Drawings. Tighe & Bond also conducted a desktop review of public information available for the Project Locus and surrounding area. However, several potential vegetated wetlands and other wetland resource areas were identified, as described in the following comments.

1. The Millers River, a perennial stream as shown on the USGS topographic map (Ashburnham, Mass., 1988), flows through the northwest corner of the Parcel 9-0-97 of the Project Locus. **The project drawings show the “wetland delineation” symbol and buffer zone symbol in this area, as well as an undefined linetype (dash-dot-dash) off-site to the west.** There are no wetland delineation flag symbols or flag ids associated with the two wetland areas shown in this northwest corner. It appears that neither the Bank or the Mean Annual High Water (MAHW) of the Millers River were delineated in the field or identified on the project drawings.



We recommend the Commission require confirmation of the location of Bank/MAHW of the Millers River so that the extent of the 200-foot Riverfront Area can be determined within the Project Locus.

2. Tighe & Bond observed that the linear wetland located west of the existing access road and hydraulically connected to the L-series wetland by a culvert was not flagged in the field or identified on the Wetland Report drawings but is depicted on the Project Drawings submitted with the NOI.
3. Tighe & Bond observed numerous wetlands (potentially isolated) shown on the Heritage Surveys, Inc. *ALTA/NSPS Land Title Survey Plan of Land in Winchendon, Massachusetts Surveyed for Ecos Energy* and dated June 12, 2019, as provided with the Project Drawings. These wetlands are within the limits of Parcel A to the east of the J-series and were not observed to be flagged in the field.

We recommend the Commission require further third-party field evaluation of these areas and, if any of these areas meets the criteria to be delineated as a vegetated wetland, that the areas be flagged in the field and added to the Project Drawings. We further note that if determined to be vegetated wetlands, the adjoining lands within 100 feet are subject to protection under Article 29.

4. We note that the wetland delineation data forms submitted as part of the NOI application reference hemlock (*Tsuga canadensis*) with a "FACU" wetland indicator status. We further note that *T. canadensis* is specifically identified as a wetland indicator species in the WPA. This observation applies to the forms documenting transects A4 (upland, wetland), 7 (upland, wetland), 16 (wetland), 24 (upland, wetland), 27 (upland, wetland), 38 (upland, wetland), 45 (upland, wetland), 57 (upland, wetland), 76 (upland, wetland), 84 (upland, wetland), 90 (upland, wetland), 106 (upland, wetland), 119 (upland, wetland), and 138 (upland, wetland). We further note that the locations of data transects are not identified on the Project Drawings and do not appear to correspond to flag ids. We recommend the Commission request clarification of the transect locations for review and future reference.
5. **The area identified as a "pond" and defined by the A-series flagging**, as shown on Sheet 7 of 12 of the Project Drawings in close proximity to flag F-106, extends to the east. NHESP has identified the A-series wetland resource area as a Potential Vernal Pool (PVP 693). **Per the definition of "vernal pool" in Article 29, the Commission establishes jurisdiction over vernal pools regardless of whether or not the area has been certified by the Massachusetts Division of Fisheries and Wildlife.**

We recommend the Commission require an evaluation of the extent of potential vernal pool habitat within the A-series wetland resource area. We further recommend the Commission require submission of the qualifications of the individual(s) to perform said vernal pool evaluation for the **Commission's review and approval prior to the completion of the evaluation.**

Site Plans:

We offer the following comments that pertain to the contents of the Site Plans:

6. We note that the proposed access road does not include any hydrologic/hydraulic connections between wetland resource areas. While we understand that the access road will be constructed along existing wetland crossings, we are unable to determine if water flows over that existing access road in those areas during storm events. We recommend the Applicant evaluate areas where the road passes between wetland areas and determine if additional storm drainage infrastructure may be necessary.



7. We note that the contour elevations relative to the FEMA mapping for BLSF are **inconsistent. Contour elevations on the drawings are in the 1000' range, while the FEMA mapping indicates elevations in the 300-range.** The vertical datum for the elevations provided is unknown. We recommend the Applicant note the vertical datum used.

Stormwater Management Report:

The project has been designed to generally meet the requirements of the Massachusetts Stormwater Standards (Standards), with the minor exceptions as noted below. We offer the following comments that pertain to the contents of the Stormwater Management Report **and the project's compliance with the Standards:**

8. Standard 1 – The Standard has been met.
9. Standard 2 – The Standard has been met.
10. Standard 3 – We note the proposed basins are designed to infiltrate. The Standards require there must be at least a two-foot separation between the bottom of the infiltration feature and the seasonal high groundwater table. The Applicant should confirm this separation to seasonal high groundwater based on test pits in the locations of the proposed infiltrative features.

The Applicant should provide a mounding analysis if the vertical separation from the bottom of an exfiltration system to seasonal high groundwater is less than four feet and the recharge system is proposed to attenuate the peak discharge from a 10-year or higher 24-hour storm. The mounding analysis should demonstrate that the Required Recharge Volume is fully dewatered within 72 hours and the groundwater mound that forms under the recharge system will not break out above the land of water surface of a wetland.

The Applicant provided a table of drawdown times for each infiltrative feature. The Applicant should confirm these times are reported in hours.

11. Standard 4 – We note the infiltration basins for the project have been designed to hold and infiltrate the 2-year storm event and that the Applicant states this volume is greater than the water quality volume. The Applicant should provide water quality volume calculations to confirm this volume is less than that of the 2-year storm event.
12. Standard 5 – The Standard is not applicable.
13. Standard 6 – The Standard has been met.
14. Standard 7 – The Standard is not applicable.
15. Standard 8 – The Standard has been met.
16. Standard 9 – The Applicant should provide a plan drawn to scale that shows locations of all stormwater BMPs for inclusion in the Long Term Pollution Prevention and Stormwater Management System Operation and Maintenance Plan per the requirements of Standard 9.
17. Standard 10 – The Applicant should provide a signed Illicit Discharge Compliance Statement prior to construction.

The following comments pertain to the stormwater design as it relates to general engineering practice:

18. The Applicant should provide figures which depict the drainage area delineations and time of concentration flow paths referenced in the hydrologic calculations for review.
19. The time of concentration for Subcatchment 8S: Pre-8 is 2.2 minutes. The minimum time of concentration used in TR-55 is 0.1 hour, or 6 minutes. We recommend the



Commission require that the Applicant revise this value to reflect the standard minimum time of concentration.

20. We note the Applicant did not consider the solar panels impervious in their calculations. While we agree the entire array should not be considered impervious, we recommend the Applicant revise their calculations to consider the most upgradient panels in each subcatchment impervious. This recommendation is based on *Hydrologic Response of Solar Farms* by L.M. Cook and R.H. McCuen published in 2013.

Notice of Intent

The NOI presents work that is within areas subject to protection and jurisdiction under the Massachusetts Wetlands Protection Act (M.G.L. c. 131, s. 40) and regulations (310 CMR 10.00), and the Town of Winchendon Wetlands Protection Bylaw (Article 29).

The following comments pertain specifically to the NOI application:

21. Documentation of public notice (legal advertisement, abutter notification) was not provided with the materials for this review. We recommend the Commission verify that the legal advertisement was published in the local newspaper and abutter notifications were sent in accordance with the requirements of 310 CMR 10.04(a).
22. A review of the FEMA Flood Insurance Study (FIS; 250348V000, effective 06/15/1982) and Flood Insurance Rate Map (FIRM; Panel 2503480019B, effective 06/15/1982) for the Project Locus and surrounding area indicates that FEMA determined the limits of 100-year flooding associated with the Millers River to be between elevation 1019 and 1020 feet (NGVD 1929) in the general area of the northwest corner of the Project Locus. Note 4 on the Heritage Surveys, Inc. *ALTA/NSPS Land Title Survey Plan of Land in Winchendon, Massachusetts Surveyed for Ecos Energy* and dated June 12, 2019, as provided with the Project Drawings, documents the presence of 100-year flood limits in the northwest corner. We note that the vertical datum of the Project Drawings does not appear to match the FEMA datum.

The Project Drawings do not call out or otherwise identify the limits of Bordering Land Subject to Flooding (BLSF; aka limits of FEMA 100-year flooding). We note that any activities proposed within the limits of BLSF must meet the General Performance Standards set forth at 310 CMR 10.57(4)(a). We recommend the Commission require verification of the limits of BLSF within the Project Locus and determine if any proposed work encroaches upon the limits of BLSF.

23. As noted in Comment 1, if work is proposed within the 200-foot Riverfront Area of the Millers River, then the project is not limited to Buffer Zone and is subject to the General Performance Standards for Riverfront Area as set forth at 310 CMR 10.58(4) or (5).

We recommend the Commission require an evaluation of the extent of Riverfront Area within the Project Locus and any alterations proposed therein relative to the General Performance Standards for Riverfront Area as set forth at 310 CMR 10.58(4) or (5), as appropriate.

24. In the event that greater than 5,000 square feet (sf) of work is proposed in undeveloped Riverfront Area, we recommend the Commission consider the exercise of discretion afforded the issuing authority at 310 CMR 10.58(4)(d)(1)(c) and require a Wildlife Habitat Evaluation study under 310 CMR 10.60. We further recommend the Commission require the submission of qualifications of the individual(s) to perform **said Wildlife Habitat Evaluation for the Commission's review and approval prior to the completion of this study.**
25. In the event that work is proposed in Riverfront Area, we recommend the Commission require a review of project alternatives to avoid, minimize, and mitigate activities within the Riverfront Area wetland resource area.



26. In the event that activities are proposed in Riverfront Area, we recommend the Commission review the NOI filing fee total as presented on the NOI Wetland Fee Transmittal Form. Per 310 CMR 10.03(7)(c), when the work involves activities within the Riverfront Area, the fee shall be determined by adding an additional 50% of the fee calculated for activities in Riverfront Area.

27. Based on the project drawings/stormwater report, the project will result in the cumulative disturbance of approximately 50 acres of land within the perimeter fence, though clearing/land disturbance is shown outside the perimeter fence.

We recommend the Commission require a quantitative assessment of proposed activities, including but not limited to land clearing and site preparation. We further recommend that the Commission request impacts to wetland resource areas and buffer zone(s) be documented.

28. The project documentation provided with the NOI does not include a summary of jurisdictional wetland resource areas subject to the WPA and/or Article 29. We recommend the Commission request a summary of all wetland resource areas on-site, including inland Bank and/or Mean Annual High Water (MAHW), Bordering and/or Isolated Vegetated Wetlands, BLSF, Riverfront Area, and vernal pool habitat.

29. The project drawings show the limit of work extending up to within less than five to ten feet of extensive portions of BVW boundaries. In accordance with 310 CMR 10.03(1)(a)1 through 3, it is the burden of the applicant to demonstrate to the issuing authority that the wetland resource areas on-site are not significant to the interests of the Act, that the work proposed within a resource area (e.g. Riverfront Area) will contribute to the protection of the interests of the Act, and that the proposed work in Buffer Zone will contribute to the interest of the Acts. Further, where work in the Buffer Zone is also in Riverfront Area it shall comply with the performance standards at 310 CMR 10.58.

We recommend the Commission require the applicant meet the burden of proof as noted at 310 CMR 10.03, particularly with regard to potential changes in light regime and hydrology resulting from the change in tree canopy and biomass immediately adjacent to BVW boundaries.

30. Extensive work is proposed in the vicinity of the potential isolated wetlands noted in Comment 3. We recommend the Commission require an evaluation of proposed alterations in and near these areas in the event any are delineated as vegetated wetlands by a competent third party.

31. **Sheet 6 of 12 of the Project Drawings indicates a "wetland crossing to occur at original crossing location" at the J-series BVW.** A crossing structure (e.g. culvert) is not shown, nor was one observed in the field, in the vicinity of flags J-40 to J-42. Please note that text labels and hatching partially obscure flag labels on the various Project Drawings.

We recommend the Commission require clarification of proposed means and methods of protecting the crossing both during and post-construction, as well as any potential proposed access improvements at this location, as the work may result in direct impacts to BVW **that have not been quantified for the Commission's review.**

32. Sheet 7 of 12 of the Project Drawings shows the footprint of access road improvements in close proximity to A-series flagging (flags A1 and A46) and flag F-105. As noted in Comment 5, this area is mapped as a Potential Vernal Pool and may support vernal pool habitat subject to Article 29.

We recommend the Commission require clarification of proposed means and methods of protecting the crossing both during and post-construction, as well as any potential proposed access improvements at this location, as the work may result in direct



impacts to BVW and/or vernal pool habitat that have not been quantified for the **Commission's review.**

33. Sheet 9 of 12 of the Project Drawings indicates the application of a **"50% / 50% clover/fescue mix or engineer approved alternate seed mix"** at all disturbed areas of the Project Site including Buffer Zone (and potential Riverfront Area) and exclusive of the proposed infiltration treatment basin(s). We note that many species of clover and fescue are not native to Massachusetts per *The Vascular Plants of Massachusetts* (Cullina, Connolly, Sorrie and Somers, 2011).

We recommend the Commission require clarification of the proposed seed mix to be used throughout the site (exclusive of the proposed infiltration treatment basin(s)) and consider requiring the use of a seed mix of species native to Worcester County, Massachusetts.

34. As noted on WPA Form 3, the Project Locus is within the limits of mapped Estimated Habitat of Rare Wildlife. We also note that the Applicant indicated that separate Massachusetts Endangered Species Act (MESA) review is ongoing (NHESP Tracking #10-028278). Review under MESA does not supersede review under the WPA. Per 310 CMR 10.59, if the project is within Estimated Habitat, a fully-completed copy of the NOI (including all plans, reports, and other materials) shall be sent to the Massachusetts Natural Heritage and Endangered Species Program (NHESP). The WPA Form 3 for this NOI does not indicate or include proof of mailing to NHESP. A copy of the NOI shall be submitted to NHESP no later than the date of the filing of the NOI with the issuing authority.

In accordance with 310 CMR 10.59, we recommend the Commission require documentation of submittal of the NOI to NHESP and note that NHESP has 30 (calendar) days to complete their review and, further, that the Commission shall not issue an Order of Conditions (approving or denying the project) until at least 30 days after NHESP has received the NOI under the WPA.

35. Section 29.9 of the Bylaw establishes setbacks for activities as minimum distances (setbacks) from the edge of wetlands. Per Section 29.9, no activity shall be allowed within these setbacks. More specifically, the Bylaw establishes a 50-foot setback of undisturbed natural vegetation and a 75-foot setback of no build/structure zone. Neither the 50- or 75-foot setbacks are shown on the Project Drawings. Further, the information provided for this review did not include a demonstration of hardship or request for waiver from these setbacks.

We recommend the Commission evaluate the proximity and extent of work proposed within the 50- and 75-foot setbacks, including maintaining or enhancing the function and value of land within the existing setbacks, relative to the interests of the WPA and Article 29.

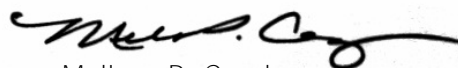
We trust this information will be satisfactory for the Conservation Commission in your review of the Winchendon Solar Spring Street Notice of Intent. Please do not hesitate to contact either of us should you have any questions or need additional information at the contact information below.

Very truly yours,

TIGHE & BOND, INC.



Jean E. Christy, PE
Senior Engineer
413.572.3238
jchristy@tighebond.com



Melissa P. Coady
Project Manager
413.572.3224
mpcoady@tighebond.com

J:\W\W1157 Winchendon\073 EcosEnergy NOI Peer Review\Correspondence\Outgoing\Ecos Spring Street Review Comments 1.docx

TOWN OF WINCHENDON

Conservation Commission



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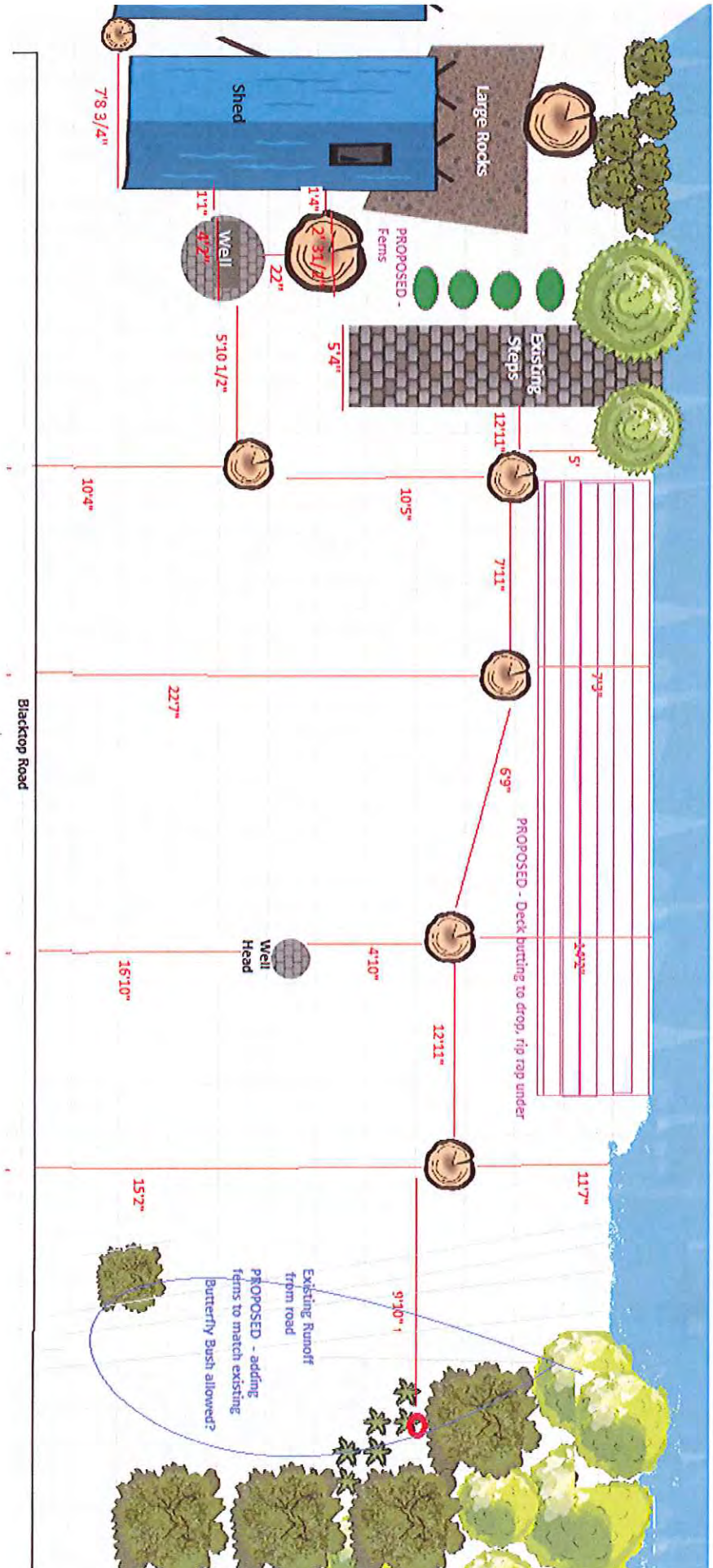
109 Front Street
Winchendon, Massachusetts 01475-1758

(Please publish in The Gardner News no later than August 6th)

Legal Notice Winchendon Conservation Commission

Pursuant to the provisions of M.G.L. Chapter 131, Section 40, and the Town of Winchendon Wetlands Protection Bylaw, the Winchendon Conservation Commission will hold public hearings on Thursday, August 13, 2020 at 6:40 pm to consider the Notice of Intent filed by April Mills for proposed work within the 100-foot Buffer Zone to Bordering Vegetated Wetlands at 376 Beachview Drive, Assessor's Map 15, Lot 18. The proposed work includes installation of plantings and a deck on the beach to restore vegetation and control erosion. The hearing will be held remotely via www.zoom.com or if it is safe to do so, in the 2nd Floor Auditorium of the Winchendon Town Hall, 109 Front Street.

The Notice of Intent is available by emailing amanugian@townofwinchendon.com.



TOWN OF WINCHENDON

Conservation Commission



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109 Front Street
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Legal Notice Winchendon Conservation Commission

Pursuant to the provisions of M.G.L. Chapter 131, Section 40, and the Town of Winchendon Wetlands Protection Bylaw, the Winchendon Conservation Commission will hold a public hearing on Thursday, July 9, 2020 at 6:40 pm to consider the Notice of Intent filed by Tien Phu for proposed work within the 100-foot Buffer Zone to Bordering Vegetated Wetlands on Lincoln Ave., Assessor's Map 5B2 Parcel 54. The proposed work includes reconstruction of the area near the onsite brook where trees were cleared. The hearing will be held remotely via www.zoom.com or if it is safe to do so, in the 2nd Floor Auditorium of the Winchendon Town Hall, 109 Front Street.

The Notice of Intent is available by emailing amanugian@townofwinchendon.com.

5/30/20

To Whom it may concern,
Here is the plan for
restoration of the wetland area
that has been disturbed.

1) The area affected had Large trees removed and to remedy this I plan on Replanting and maintaining Trees native to the area. There will be Maples, Beech, Birch and Conifers 10 Trees Total that are 3 years or older. Planted near stumps of the cut trees. (Dispersed.) There will be no machinery involved during planting. Long term Care for these trees will be monitored and continued.

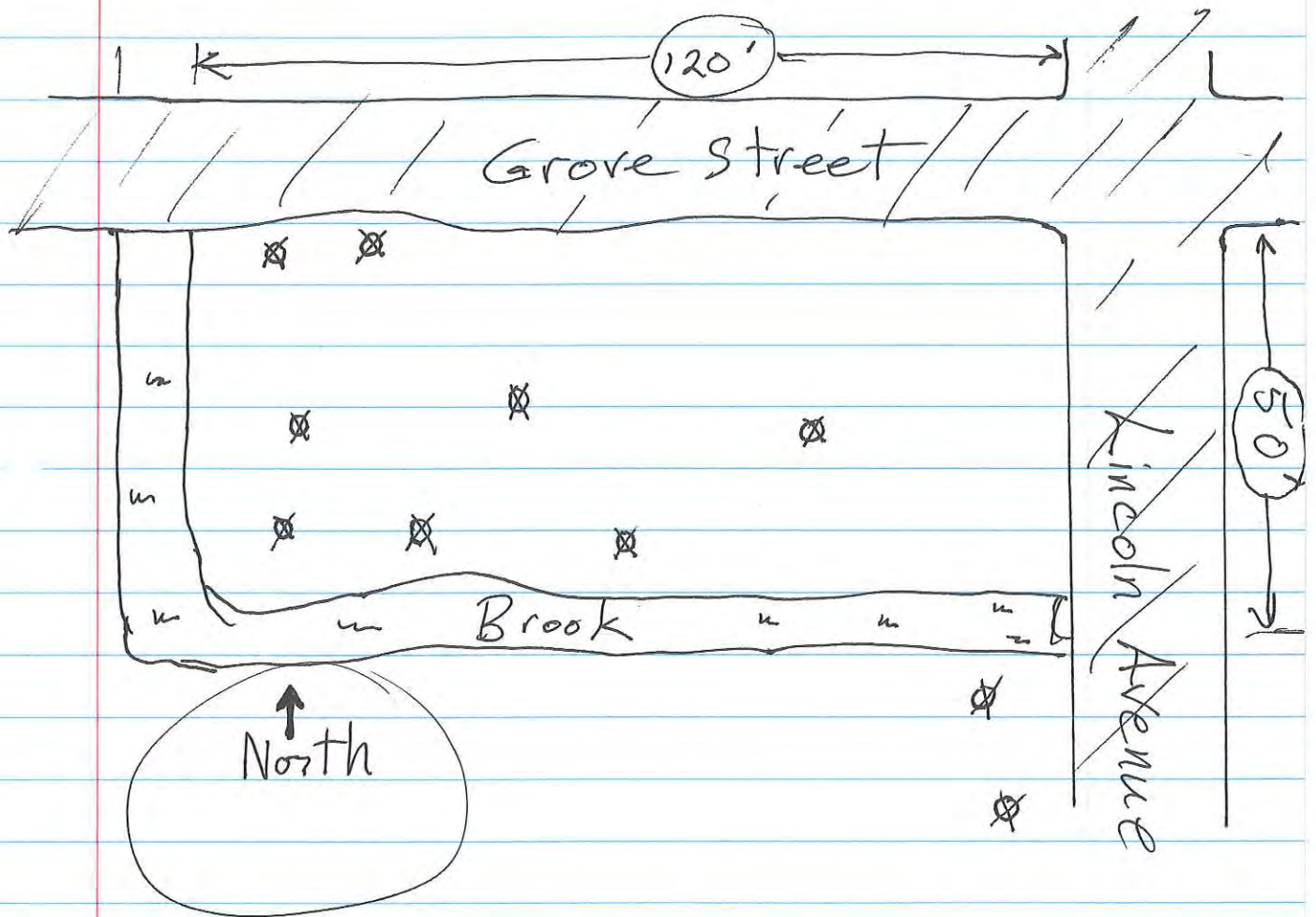
2) The fire Pit will be Relocated outside of the Buffer zone.

3) The cut wood will be Removed.

- Tien Phu

5/31/20

- Site plan sketch
for the restoration of affected
Wetland Located on:
Map 5B2-0-54 Grove Street.



⊗ = Location of trees to
be planted.

- Tien Phu

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Legal Notice Winchendon Conservation Commission

Pursuant to the provisions of M.G.L. Chapter 131, Section 40, and the Town of Winchendon Wetlands Protection Bylaw, the Winchendon Conservation Commission will hold public hearings on Thursday, August 13, 2020 at 6:50 pm to consider the Notice of Intent filed by Chad LeBlanc for proposed work within the 100-foot Buffer Zone to Bordering Vegetated Wetlands at 386 Beachview Drive, Assessor's Map 15, Lot 31. The proposed work includes plantings on the beach near Lake Monomonac. The hearing will be held remotely via www.zoom.com or if it is safe to do so, in the 2nd Floor Auditorium of the Winchendon Town Hall, 109 Front Street.

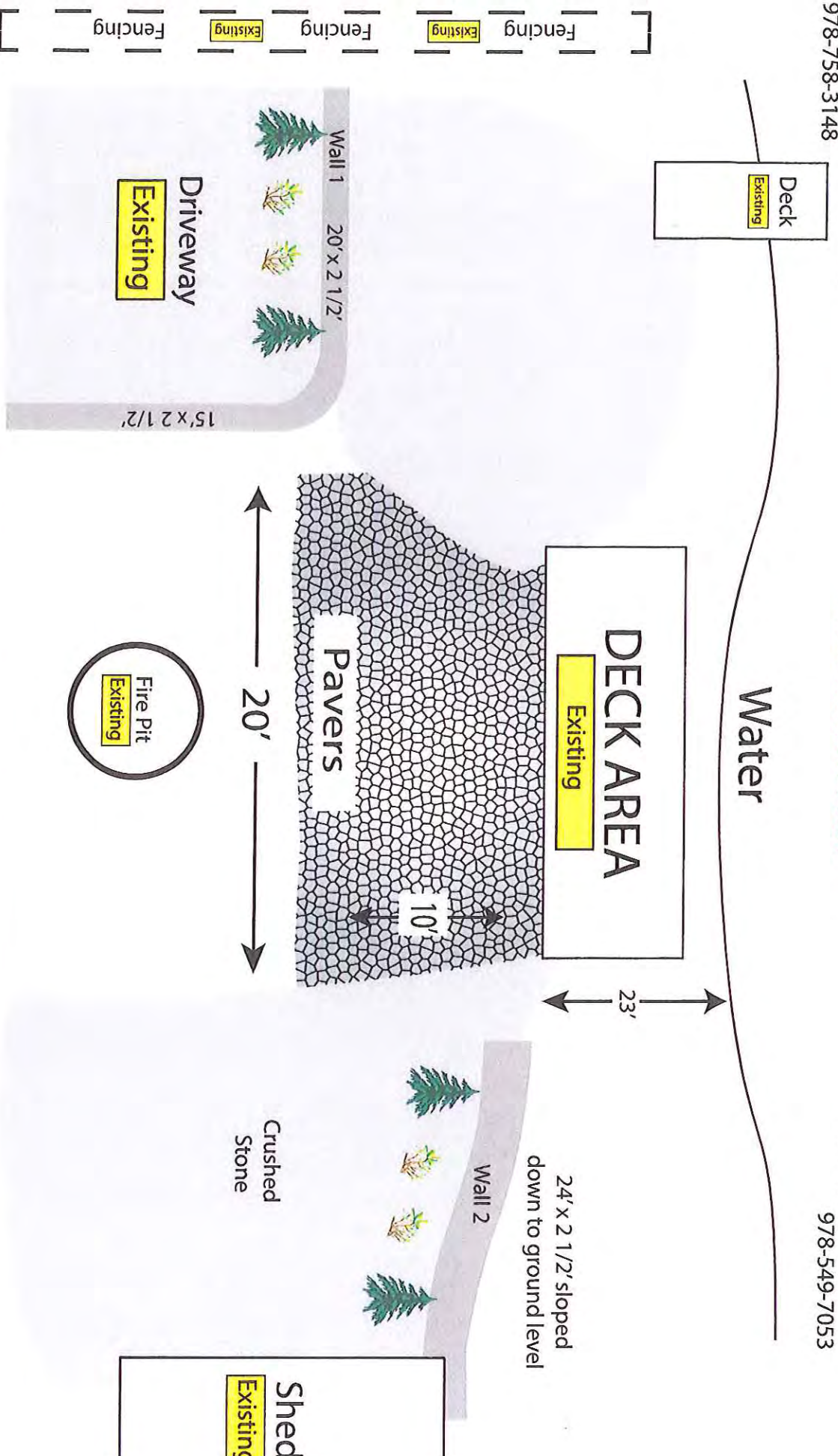
The Notice of Intent is available by emailing amanugian@townofwinchendon.com.

386 Beachview

Property Owner: Chad LeBlanc
978-758-3148

**386 Beachview Planting
Restoration Plan**

Keith D
Landscape Construction
978-549-7053



- 4 Arborvitae Trees
- 4 Hosta Plants

Beach View Road

TOWN OF WINCHENDON

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Legal Notice Winchendon Conservation Commission

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The Notice of Intent is available by emailing amanugian@townofwinchendon.com.

e. City/Town Wichendon, MA 01475 g. Zip Code
 h. Phone Number 978 490 9532 i. Fax Number j. Email address tenneyremodeling@gmail.com
 5. Total WPA Fee Paid (from NOI Wetland Fee Transmittal Form):
 a. Total Fee Paid b. State Fee Paid c. City/Town Fee Paid

A. General Information (continued)

6. General Project Description:

Extend current existing wood frame deck 6'. currently 65' from shore, new deck to be 59' from water. New footings to be helical piers.

7a. Project Type Checklist: (Limited Project Types see Section A. 7b.)

- | | |
|---|----------------------------------|
| 1. <input checked="" type="checkbox"/> Single Family Home | 2. Residential Subdivision |
| 3. Commercial/Industrial | 4. Dock/Pier |
| 5. Utilities | 6. Coastal engineering Structure |
| 7. Agriculture (e.g., cranberries, forestry) | 8. Transportation |
| 9. Other | |

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

1. Yes No If yes, describe which limited project applies to this project. (See 310 CMR 10.24 and 10.53 for a complete list and description of limited project types)

2. Limited Project Type

If the proposed activity is eligible to be treated as an Ecological Restoration Limited Project (310 CMR 10.24(8), 310 CMR 10.53(4)), complete and attach Appendix A: Ecological Restoration Limited Project Checklist and Signed Certification.

8. Property recorded at the Registry of Deeds for:

- | | |
|----------------------------|---------------------------------------|
| a. County <u>Worcester</u> | b. Certificate # (if registered land) |
| c. Book <u>41457</u> | d. Page Number <u>227</u> |

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

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

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

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

TOWN OF WINCHENDON

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Legal Notice Winchendon Conservation Commission

Pursuant to the provisions of M.G.L. Chapter 131, Section 40, and the Town of Winchendon Wetlands Protection Bylaw, the Winchendon Conservation Commission will hold public hearings on Thursday, August 13, 2020 at 7:05 pm to consider the Notice of Intent filed by Earl Haight for proposed work within the 100-foot Buffer Zone to Bordering Vegetated Wetlands at 96 E. Monomonac Road, Assessor's Map 8, Lot 14. The proposed work includes trimming and removal of trees in the wetland buffer and construction of hardscaped area. The hearing will be held remotely via www.zoom.com or if it is safe to do so, in the 2nd Floor Auditorium of the Winchendon Town Hall, 109 Front Street.

The Notice of Intent is available by emailing amanugian@townofwinchendon.com.

LAKE

TRIM
BRANCH
OAK

WALL

WALL

WALL

PATIO

REMOVE
2-OAK
1-PINE

HOUSE

96

○ TRIM
PINE
BRANCHES
ON
ROOF

EAST MONOMONAC RD

TOWN OF WINCHENDON

Conservation Commission



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Legal Notice Winchendon Conservation Commission

Pursuant to the provisions of M.G.L. Chapter 131, Section 40, and the Town of Winchendon Wetlands Protection Bylaw, the Winchendon Conservation Commission will hold public hearings on Thursday, August 13, 2020 at 7:10 pm to consider the Request for Determination of Applicability filed by the Winchendon Community Park Committee for proposed work within the 100-foot Buffer Zone to Bordering Vegetated Wetlands at Winchendon Community Park, Assessor's Map 5A3, Lot 348. The proposed work includes construction of access trail to the fishing point in two phases; the first to be 200' long x 30" wide and the second to be an additional 100' long x 30" wide. The hearing will be held remotely via www.zoom.com or if it is safe to do so, in the 2nd Floor Auditorium of the Winchendon Town Hall, 109 Front Street.

The Notice of Intent is available by emailing amanugian@townofwinchendon.com.

RE: Fishing Point Trail Work Description

To Winchendon Conservation Commission,

North Quabbin Trail Association President Bobby Curley here.

NQTA has been providing trail creation, remediation and customization in the stewardship professionalization of all trails at the Winchendon Community Park for the past 3 seasons.

The trail currently leading to Fishing Point leading is at an unsustainable angle of at least 12°.

NQTA proposes and has installed a 6' trail benching example of the Fishing Point relocation solution along the NQTA blue flagged proposed Fishing Point 200' relocation for your review.

This Fishing Point relocation trail as currently constituted must have a trail processing technique of benching, cribbing and rock steps installation to ensure a safe and sustainable trail, eliminating the unsafe, twisted angled current proposed trail section.

This is an authorized U.S Park Service techniques taught to me and has been applied to over 50 locations.

This requires the use of a specialty hand rogue hoe angled at 3° to ensure creating a properly angled cut into the upside of the embankment trail and cutting down creating a 2 and a 1/2 foot flat trail tread.

This cut leveled trail tread is then secured with wood cribbing on the downward slope off of this 2 and a 1/2 foot level trail tread on the downward slope along the needed benching area to create a long lasting sustainable trail.

Along this 200' section various levels of this benching technique will be utilized and at its deepest downward angle 4 rock steps will be put in to create along with the benching and cribbing a highly sustainable professionally designed trail that creates an immediate solution on access to the Fishing Point relocation.

Of very important note is that this is a simple hand tool stewardship job that requires removal of excess leaf debris and duff and is not disturbing any sustainable or hardened soil.

NQTA will commence this highly laborious trail creation with a trained crew of 4 upon authorization and I am available to answer any and all questions.

On a side note to the Winchendon Con Com, this park as witnessed by myself being there several times a week is now being used by all types of outdoor citizens of Winchendon and beyond with many, many positive reviews.

In direct partnership with WCP with our conjoined vision of Trail Utilization this park is becoming a long lasting and outstanding asset desperately needed for all in this time for the Town of Winchendon and NQTA is in it for the long haul of stewardship and promotional partnership with WCP.

Happy Trails,

Bobby Curley
NQTA President nqta.org

Build Contour Trails With Full Bench Cut And Outslope

Jan and Mike Riter, Subaru/IMBA Trail Care Crew

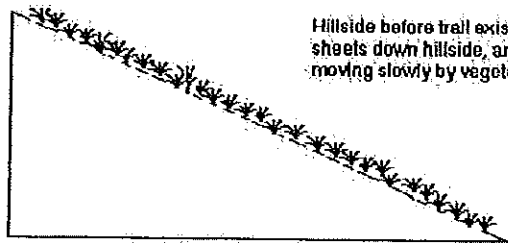
Every person engaged in trail building and maintenance should understand the interrelated concepts of bench cuts and fill slopes, outslope, fall-line versus contour routes, and maintenance by deberming.

A bench cut is the result of cutting a section of tread across the side of a hill. If you look at the side profile of this cut it looks like a bench, hence the name. The two basic designs are known as "full bench" and "partial bench." Full bench construction means that the full width of the tread is cut into the side of a hill. The entire tread is dug down to compacted mineral soil. Viewed in cross-section, the tread angles slightly downhill at 3-5%. This is known as outslope. A partial or balanced bench means that part of the hill is cut away and the soil that has been removed is placed at the lower edge of the trail to try to establish the desired width. This is known as a fill slope.

We have yet to run into an area that did not require a full bench cut.

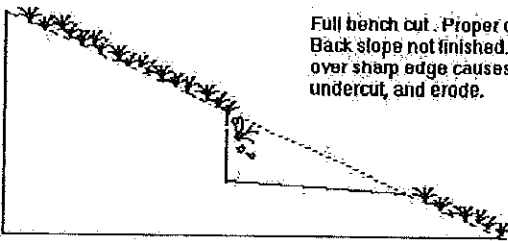
Full Bench Construction

Full bench design avoids problems inherent in partial bench cuts. Partial bench often requires problematic cribbing (the act of putting logs or rocks on the downhill edge of the trail) to hold the fill soil that is added to the edge of the trail. The fill soil is soft and uncompacted, often forming a berm, which will cause water to flow down the trail rather than across it. The end result: Your new or reconditioned trail ends up being the poster child for erosion damage. And if a user finds their way onto this soft edge, they can lose their balance and end up off the trail, or push the soft dirt down the side slope causing the tread to terrace or become uneven.



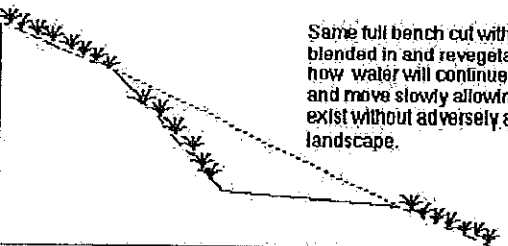
Hillside before trail existed. Water sheets down hillside, and is kept moving slowly by vegetation.

Bench cut and fill relates directly to trail layout. We always recommend building trails that contour across a slope, climbing and descending gradually, rather than running directly up and down the fall line. (The fall line is the most direct route downhill from any particular point.)



Full bench cut. Proper out slope on tread. Back slope not finished. Water flowing over sharp edge causes back slope to undercut, and erode.

Water generally runs down the fall line, and fall line trails provide a conduit to move a lot of water down a hill. Water flowing down a trail will build velocity and will quickly erode deep ruts into the tread. Fall line constructed trails erode at a terribly fast rate, are nearly impossible to maintain, and fuel the fires of people who are looking to ban bikes from trails. Too many unskilled riders skid or ride out of control on fall line trails.

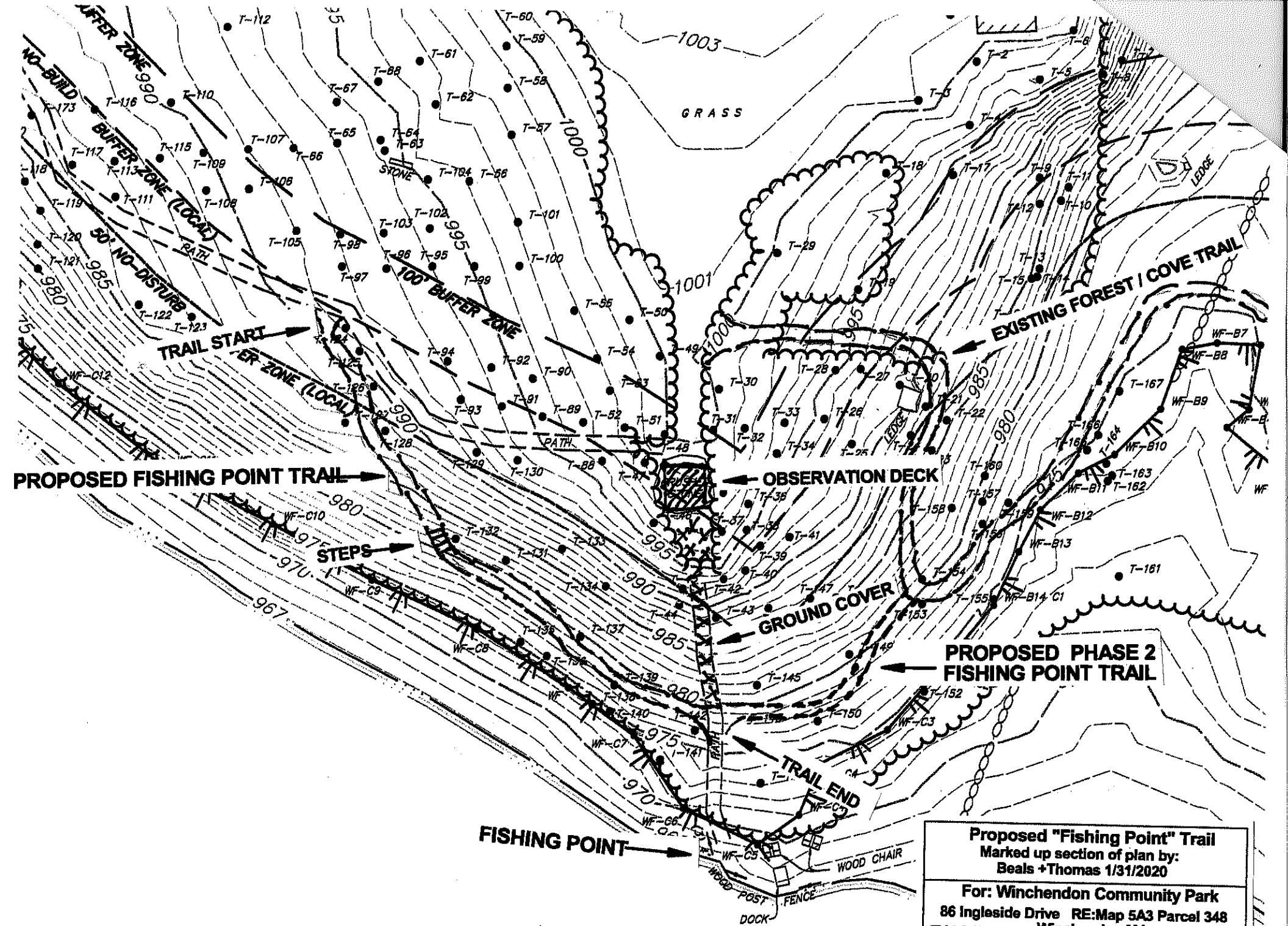


Same full bench cut with back slope blended in and revegetated. Note how water will continue to sheet and move slowly allowing the trail to exist without adversely affecting the landscape.

On the other hand, contour trail are curvy, fun to ride, easier to maintain, yet still provide significant challenge for even the most skilled riders. Contour trails should be built with outslope so water will sheet across the trail and continue down the hill, rather than diverting into the trail tread and causing erosion. If a drainage problem does develop on a contour, full bench trail, it can be dealt with easily and effectively.

Contour, full bench, and gradual trails will require less maintenance and fewer water diversion dips than fall-line, partial bench, or steep trails.

Some time after a trail tread has been properly cut in and outsloped, the tread will settle from compaction. This is normal. However, the lower edge of the tread will not compress as much as the center, creating a berm. Berms can also form from erosion. Fortunately the cure is simple and very effective. Using simple hand tools (McLeod, Pulaski, adz hoe, pick, etc.), remove the berm to create outslope, being careful not to disturb the already compacted center of the trail any more than necessary. Varying by soil types and climate, many trail segments will require another deberming five or more years later. This is perhaps the most common maintenance needed on trails, but also the easiest and most effective.



Proposed "Fishing Point" Trail
 Marked up section of plan by:
 Beals + Thomas 1/31/2020

For: Winchendon Community Park
 86 Ingleside Drive RE:Map 5A3 Parcel 348
 7/12/2020 Winchendon MA. 1 of 1

SCALE 1" = 40 FT

TOWN OF WINCHENDON

Conservation Commission



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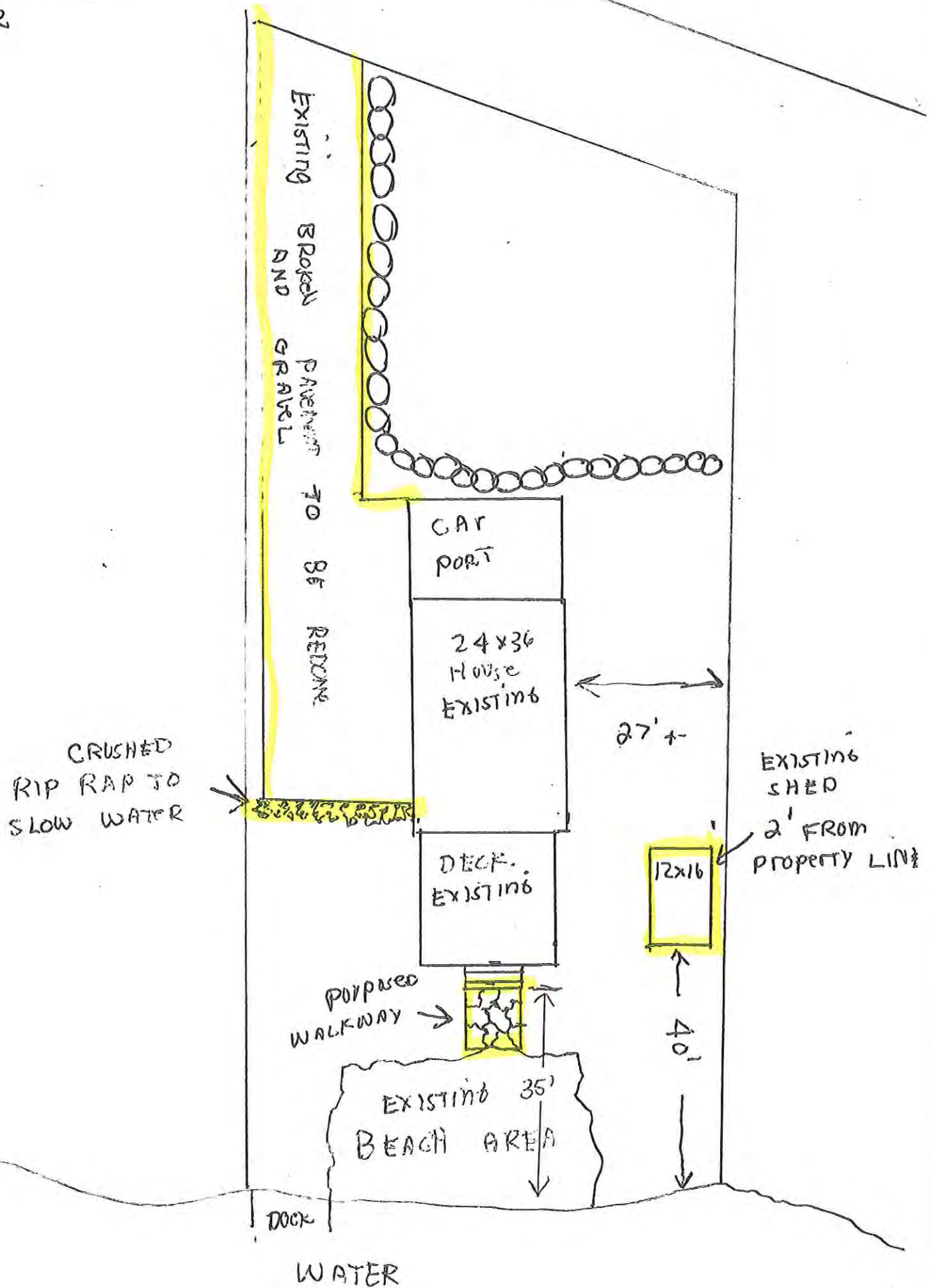
(Please publish in The Gardner News no later than August 6th)

Legal Notice Winchendon Conservation Commission

Pursuant to the provisions of M.G.L. Chapter 131, Section 40, and the Town of Winchendon Wetlands Protection Bylaw, the Winchendon Conservation Commission will hold a public hearing on Thursday, August 13, 2020 at 7:15 pm to consider the Notice of Intent filed by Warren Field for proposed work within the 100-foot Buffer Zone to Bordering Vegetated Wetlands at 356 Lakeview Drive, Assessor's Map 15, Lot 8. The proposed work includes construction of a shed, walkway made of pavers and driveway paving near Lake Monomonac. The hearing will be held remotely via www.zoom.com or if it is safe to do so, in the 2nd Floor Auditorium of the Winchendon Town Hall, 109 Front Street.

The Notice of Intent is available by emailing amanugian@townofwinchendon.com.

356 BEACHVIEW
DRIVE



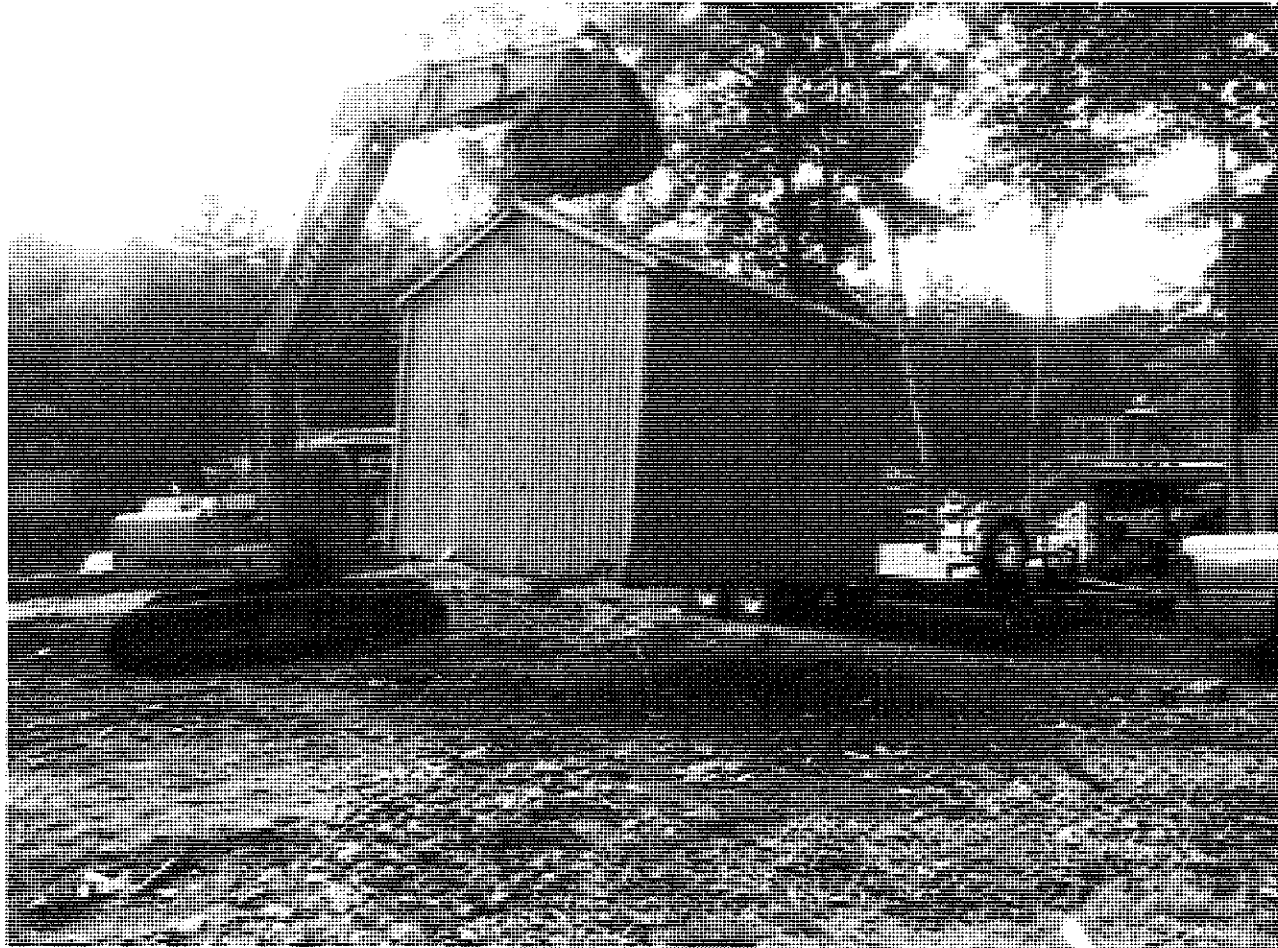
PURPOSED WORK

- ① NEW PAVEMENT WALKWAY TO BEACH AREA FROM EXISTING STAIRS
- ② RE PAVE EXISTING PAVED, GRAVEL DRIVEWAY
- ③ PERMITTING OF EXISTING SHED THAT WAS MOVED DURING SEPTIC INSTALLATION IN THE PAST
- ④ RETAINING WALL IN FRONT OF HOUSE WHICH IS GREATER THAN 100', FROM WATER AND NOT UNDER CONSIDERATION



EXISTING
SHED ON
LEFT PROPERTY
LINE

356 LAKEVIEW DRIVE



temporarily
THIS PICTURE WAS
REMOVING SHED TO ALLOW MORE
ROOM TO CONSTRUCT HOUSE

Legal Notice
Winchendon Conservation Commission

Pursuant to the provisions of M.G.L. Chapter 131, Section 40, and the Town of Winchendon Wetlands Protection Bylaw, the Winchendon Conservation Commission will hold a public meeting on Thursday, August 13, 2020 at 7:20 pm to consider the Request for Determination of Applicability filed by property owner Fred Calvin Miller for proposed work within the 100-foot Buffer Zone to Lake Monomonac at 165 Fourth Street; Assessor's Map M-4, Parcel 3. The project entails the replacement of a retaining wall and the top stairs of wood/brick construction; a deck rail is proposed on top of the wall. The project also includes removal of a large oak and other improvements to steps and walkways. The hearing will be held remotely via www.zoom.com or if it is safe to do so, in the 2nd Floor Auditorium of the Winchendon Town Hall, 109 Front Street.

More information is available by emailing amanugian@townofwinchendon.com.

165 Fourth Street
Winchendon, Ma 01475
July 23, 2020

Alison Manugian
Conservation Commission
Town of Winchendon
109 Front Street
Winchendon, MA 01475

Dear Ms. Manugian:

I am Fred Calvin Miller. My wife and I are second generation property owners of 165 Fourth Street on Lake Monomonac. Map/lot parcel M4-0-3

On October 17, 2013 we received a positive determination from the Winchendon Conservation Commission to replace our 12' x 4' x 8" retaining wall on our south side waterfront. Because of weather and water levels and availability I was not able to complete this work at that time or in the three subsequent years.

In preparing for 2020 fall draw down on Lake Monomonac, I would like perform this approved work.

In addition to replacing the retaining wall, I also need to replace the top 3 stairs of the wood and brick construction for the wood has deteriorated. I would also like to install a deck railing on top of the wall.

I also need to have a large oak tree removed because of its size and it is three feet from my house. It is approximately 15 feet from the water's edge.

Because of deterioration of the ground contact landscape ties, I also would like to improve steps and walkways.

I will be submitting form WPA form 1.

Please advise me how to proceed.

This work would be done during the 2020 October drawdown.

Please advise,

Respectfully,
F. Calvin Miller

Fred Calvin and Valorie Marie Miller
165 Fourth Street
Lake Monomonic, Winchendon, MA
Parcel/Lot Number: M4-0-3

Area A: Current retaining wall and stair Replacement at south waterline
Area B is the center of the property at the waterline
Area C is the south side of the property line
Area D is the north side of the proper line
Area E the street side of the property

See *Determination of Applicability* approval 10/17/13 (Work never started)

Proposed Work Description

Area A-1 at South side on the waterline

- Pic 1
Pic 2
- Remove and replace south side current poured concrete retaining wall and stairs
Possible Change of material to block type for wall and stairs
Stairs will be wider. Current 7 step stairway at 30 inches wide will be changed to no more than 48 inches wide.
Stair Material will be block stairs with a bluestone treads to match north side stairs.
 - The current wall will be brought up to meet the current center wall height
 - The wall will be topped with a wooden railing systems that meets code requirements

Area A-2

- Pic 3
Pic 4
- Remove current 2' x 16' concrete walkway and replace with paver block then lining it up with new stairs and possible increase width to no more than 4' wide.
 - Remove current 3' x 10' concrete retaining wall with block type wall matching waterline wall. (This wall is 16' from the waterline retaining wall in area A-1.)
 - Extend the current 16' walkway to a new length 25' to meet the new proposed stairs in Area A-3.

Area A-3

- Pic 5
Pic 5A
Pic 5A
- Replace/extend current 6 step concrete stairway and widen 3' to the south.
Material for these stairs will either be a preformed or block stairs like the A-1
Material will be block stairs with a bluestone treads.
 - Create new 6' x 4' platform landing at top of stairs to meet with current paver stairs and walkways

Area B-1 Center wall

- Proposed: The wall will be topped with a matching wooden railing systems that meets code requirements*

Area C This area is the north side poured concrete wall topped with block to reach the height of the center wall a and 5' wide stairs. See 1990 permit attached.

Pic 6

- Repair and replace the 3 wooden stairs and door platform with block and pavers.

Area D The North side of property lot.

pic 7 + 7A

- Remove the large oak tree that stands approximately 3' from the house and 17' from the waterline of the lake.
- Create a stair way and walkway to preserve integrity of slope toward the lake. Material for the walkway will be block and pavers
- The walkway/stair way will be approximately 30 feet and meet at front door's side steps by oil tank filler pipe.

7B.

Area E: The street side of the property

pic 8

- Replace landscape ground contact wood as needed
- Possible change of material to block and pavers.

Pic 1



- IMG_2487.JPG (140 KB)
- IMG_2485.JPG (161 KB)
- IMG_2482.JPG (207 KB)
- IMG_2483.JPG (206 KB)



Pic 3



- IMG_2505.JPG (61 KB)
- IMG_2495.JPG (63 KB)
- IMG_2492.JPG (57 KB)

Pic 4

Calvin Miller <fcmiller1@comcast.net>

7/23/2020 1:42 PM

Pic3

3' retaining wall

To CALVIN MILLER <fcmiller1@comcast.net>

Sent from my iPhone



Pic 5

7/23/2020 1:38 PM

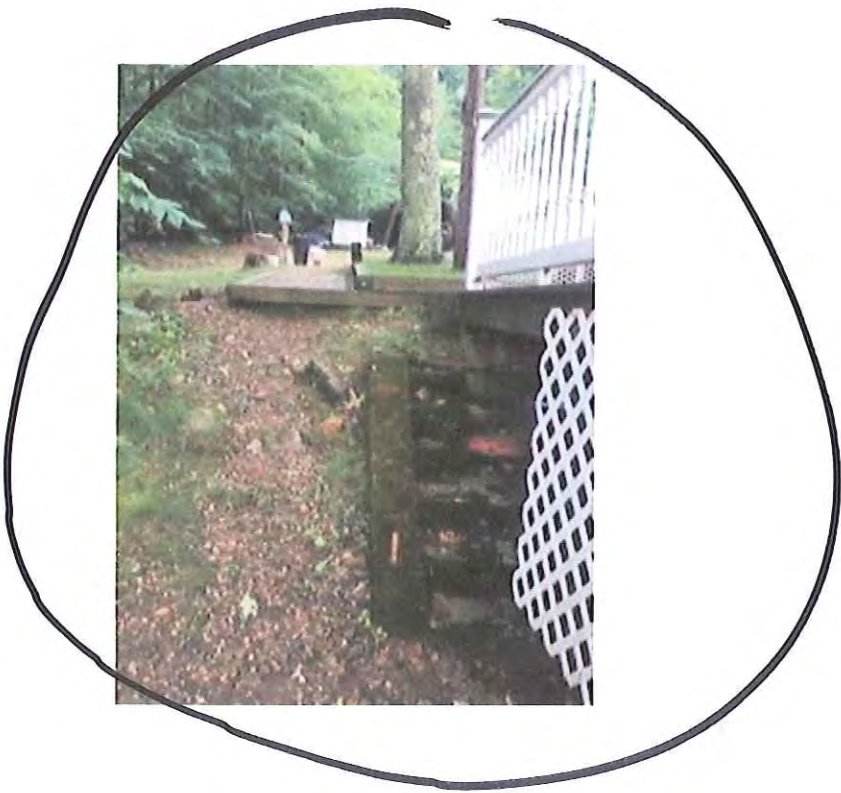
Calvin Miller <fcmiller1@comcast.net>

Pis2

View from lake.

To CALVIN MILLER <fcmiller1@comcast.net>

Sent from my iPhone



Pic 5A



- IMG_2493.JPG (5 MB)
- IMG_2496.JPG (4 MB)
- IMG_2498.JPG (5 MB)
- IMG_2501.JPG (5 MB)
- IMG_2503.JPG (6 MB)

1. View from street.
Current stairs in circle.
2. Platform will connect
side door entrance + walkway
in bottom of this picture.

Pic. 5B



Platform connecting side entrance + front walkway.

https://connect.xfinity.com/appsuite/v=7.10.3-6.20200722.052513/print.html?print_1595526295255

Pic Co

Calvin Miller <fcmiller1@comcast.net>

7/23/2020 1:21 PM

Pics

To CALVIN MILLER <fcmiller1@comcast.net>

Cc app

Sent from my iPhone



- IMG_2485.JPG (4 MB)

Calvin Miller <fcmiller1@comcast.net>

7/15/2020 2:25 PM

Pics

To CALVIN MILLER <fcmiller1@comcast.net>

Print

Sent from my iPhone



North side
street view.

Pic 7a



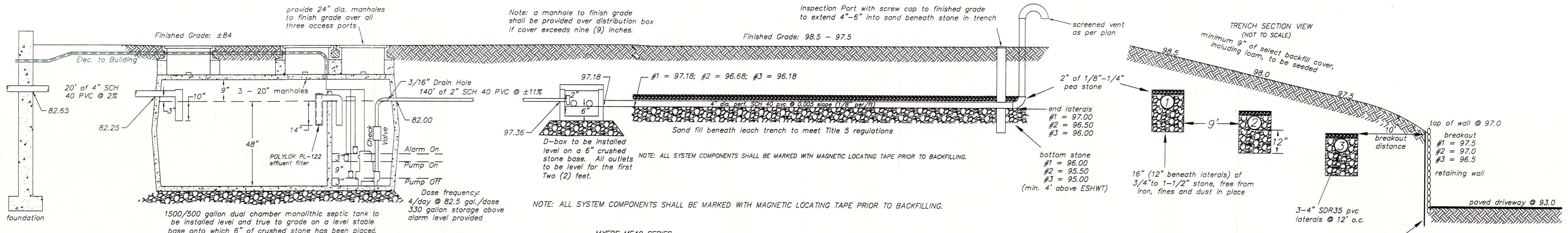
North side lake view

Pic 7B
Connect with
stair landing at
bottom

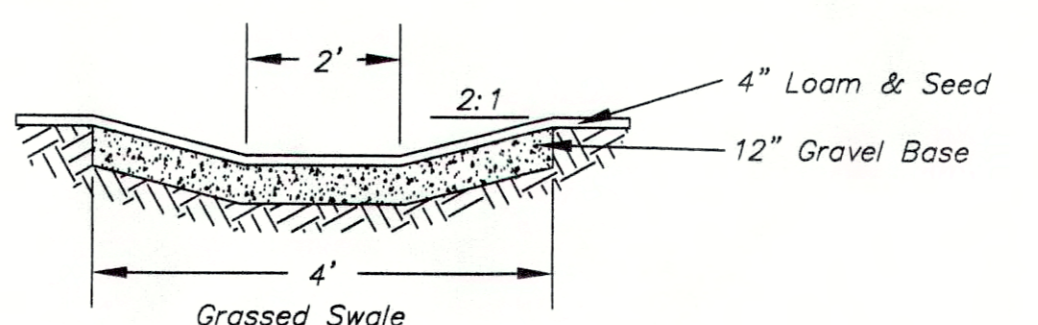
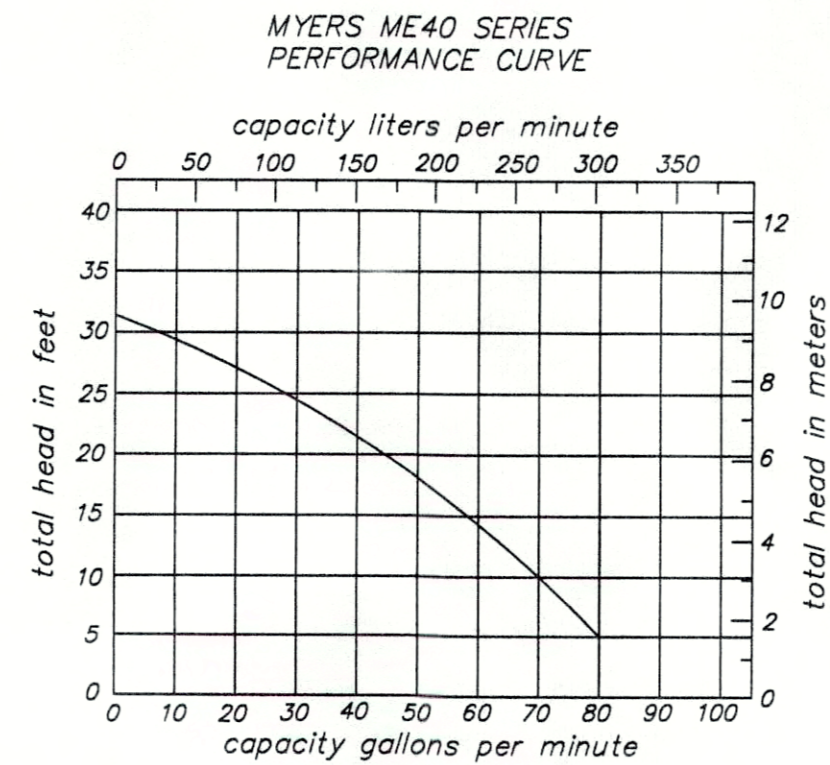




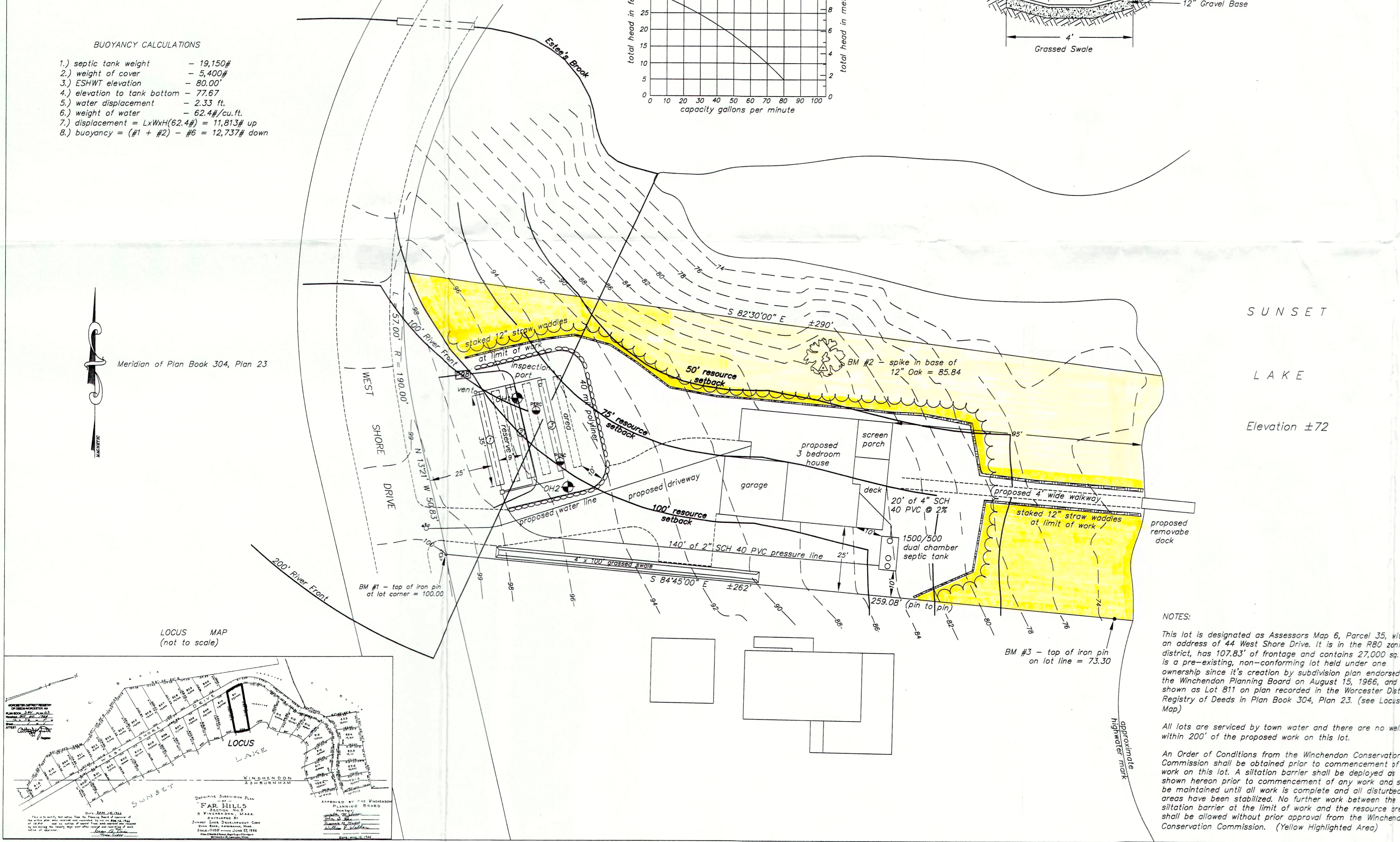
Street side walkway steps
needing repair + replacement.



Pump to be Myers Model ME40 or equivalent, and shall be capable of passing 1 1/4" diameter solids. Pump to be installed in accordance with manufacturer's specifications and Reg. 15.231, Title 5. Tank to be tested for watertightness prior to being placed in service. Pump alarm to be installed in building and shall be on a separate circuit.



- BUOYANCY CALCULATIONS**
- 1.) septic tank weight - 19,150#
 - 2.) weight of cover - 5,400#
 - 3.) ESHWT elevation - 80.00'
 - 4.) elevation to tank bottom - 77.67'
 - 5.) water displacement - 2.33 ft.
 - 6.) weight of water - 62.4#/cu.ft.
 - 7.) displacement = LxWxH(62.4#) = 11,813# up
 - 8.) buoyancy = (#1 + #2) - #6 = 12,737# down



SOIL EVALUATION - PERC TEST DATA
 SOIL EVALUATOR: Edward T. Berry WITNESS: Jim Abare DATE: June 6, 2017

depth from surface	horizon	soil texture	soil color	soil mottling	elevation
Existing surface elevation: 96.0					
0-7	A	ISL	10YR3-2		95.4
7-28	Bw	ISL	10YR5-6		93.7
				10YR5-8 @ 60"	91.0
28-108	C	ILS	2.5Y6-4		87.0
Existing surface elevation: 95.0					
0-10	A	ISL	10YR3-2		94.2
10-29	Bw	ISL	10YR5-4		92.6
				10YR5-6 @ 48"	91.0
29-108	C	ILS	2.5Y6-4		86.0

perc rate: #1 - 4 min./Inch @ 42" #2 - 8 min./Inch @ 36"

DESIGN CRITERIA
 3 bedrooms @ 110 gallons per day per bedroom = 330 gpd
 septic tank requirement: 330 gpd + 100% sludge storage = 660 gpd
 1500/500 gallon two compartment tank with Polylok PL122 effluent filter provided
 leach area requirement: 330 gpd + 0.66 (class 1 LTAR) = 500 s.f.
 leach area provided: 3 trenches - 3' wide x 35' long with 12" of stone beneath laterals = 175 sq.ft./trench x 3 trenches = 525 s.f.
 gpd capacity provided: 525 s.f. x 0.66 gpd/s.f. = 346.5 gpd

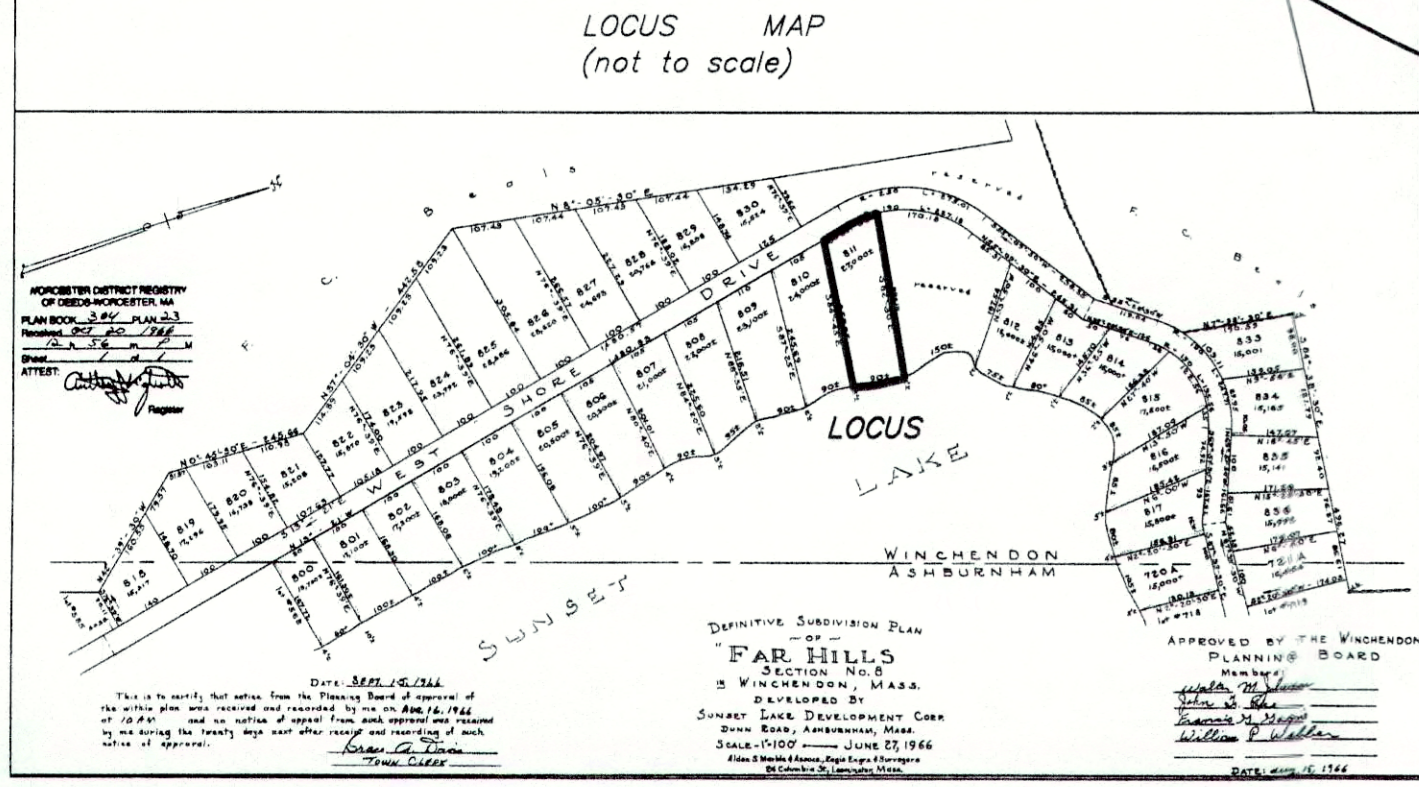
NOTES:
 All materials and workmanship shall comply with the provisions of Title 5, Mass. Sanitary Code 310 CMR. No modifications to this plan shall be made without prior approval of the local Board of Health and the designer.
 All A horizon and other impervious material to be removed for an additional 5 feet in all directions and replaced with clean granular sand prior to placement of fill.
 This system is not designed to accommodate a garbage disposal.

LEGEND

- - - = existing contours
- — — = proposed contours
- · - · - = wetlands delineation
- ⊙ = observation hole location
- ⊙ = perc test location
- ⊙ = Bench Mark location

NOTES:
 This lot is designated as Assessors Map 6, Parcel 35, with an address of 44 West Shore Drive. It is in the R80 zoning district, has 107.83' of frontage and contains 27,000 sq.ft. It is a pre-existing, non-conforming lot held under one ownership since its creation by subdivision plan endorsed by the Winchendon Planning Board on August 15, 1966, and is shown as Lot 811 on plan recorded in the Worcester District Registry of Deeds in Plan Book 304, Plan 23. (see Locus Map)

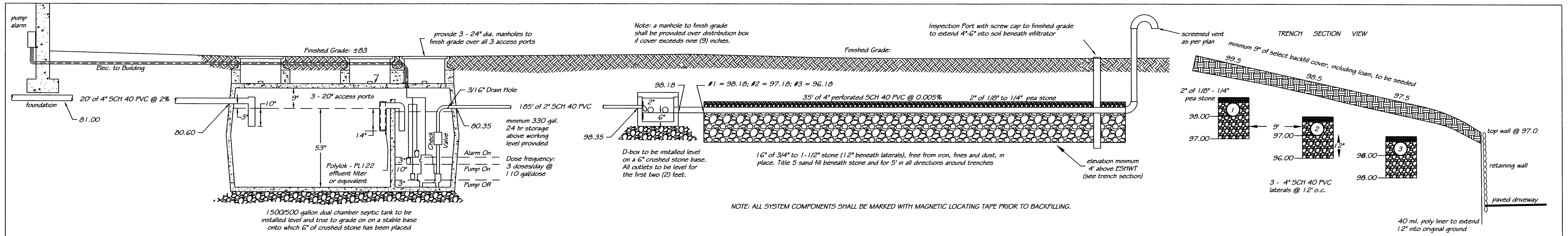
All lots are serviced by town water and there are no wells within 200' of the proposed work on this lot.
 An Order of Conditions from the Winchendon Conservation Commission shall be obtained prior to commencement of any work on this lot. A siltation barrier shall be deployed as shown hereon prior to commencement of any work and shall be maintained until all work is complete and all disturbed areas have been stabilized. No further work between the siltation barrier at the limit of work and the resource area shall be allowed without prior approval from the Winchendon Conservation Commission. (Yellow Highlighted Area)



SEWAGE DISPOSAL SYSTEM
 44 WEST SHORE DRIVE
 WINCHENDON, MA
 PREPARED FOR
 WILLIAM SCHWICK

18 August 2017
 Rev. 10/21/17

Edward T. Berry P.L.S. 113 Main St., Athol, MA
 Tel. (978)-249-8811 Fax (978)-249-8880
 RESIDENTIAL DEVELOPMENT CONSULTANT

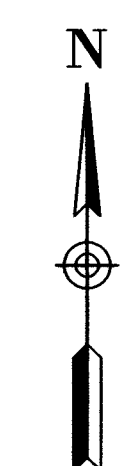
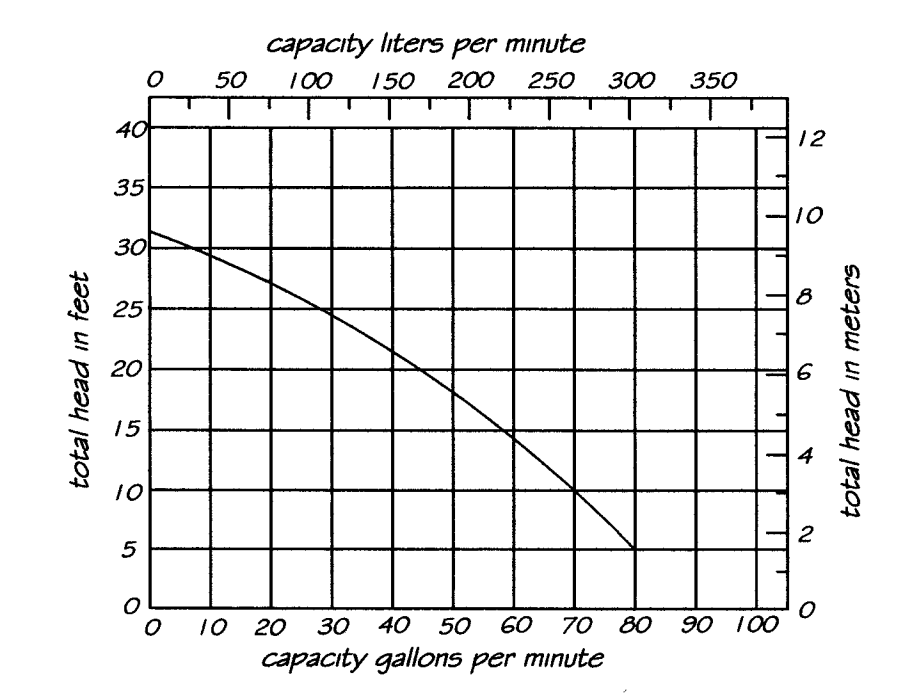


1500/500 gallon dual chamber septic tank to be installed level and true to grade on a stable base onto which 6\"/>

Pump to be Myers Model ME40 or equivalent. Pump to be installed in accordance with manufacturer's specifications and Reg. 15.231, Title 5. Tank to be tested for watertightness prior to being placed in service. Pump alarm to be installed in building and shall be on a separate circuit.

NOTE: ALL SYSTEM COMPONENTS SHALL BE MARKED WITH MAGNETIC LOCATING TAPE PRIOR TO BACKFILLING.

MYERS ME40 SERIES PERFORMANCE CURVE



BUOYANCY CALCULATIONS

1) septic tank weight	19,150 #
2) weight of cover	5,400 #
3) ESHWT elevation	80.0
4) elevation bottom tank	77.67
5) water displacement	2.33'
6) weight of water	62.4 #/cu.ft.
7) displacement (LxWxH)(62.4#)	11,813 # up
8) buoyancy (1 + 2) - 6	12,737 # down

INVERT ELEVATION SCHEDULE

invert @ foundation	= 81.00
invert in septic tank	= 80.60
invert out septic tank	= 80.35
invert in D-Box	= 98.36
invert out D-Box	= 98.18
invert end of lateral #1	= 97.00
invert end of lateral #2	= 97.00
invert end of lateral #3	= 96.00
bottom of trench #1	= 97.00
bottom of trench #2	= 96.00
bottom of trench #3	= 95.00
finish grade @ trench #1	= 99.5
finish grade @ trench #2	= 98.5
finish grade @ trench #3	= 97.5

SOIL EVALUATION - PERC TEST DATA

SOIL EVALUATOR: Edward T. Berry WITNESS: Jim Abare DATE: June 6, 2017

depth from surface	horizon	soil texture	soil color	soil mottling	elevation
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				10YR5-6 @ 48"	91.0
29-108	C	fLS	2.5Y6-4		86.0

perc rate: #1 - 4 min/inch @ 42" #2 - 8 min/inch @ 36"

DESIGN CRITERIA

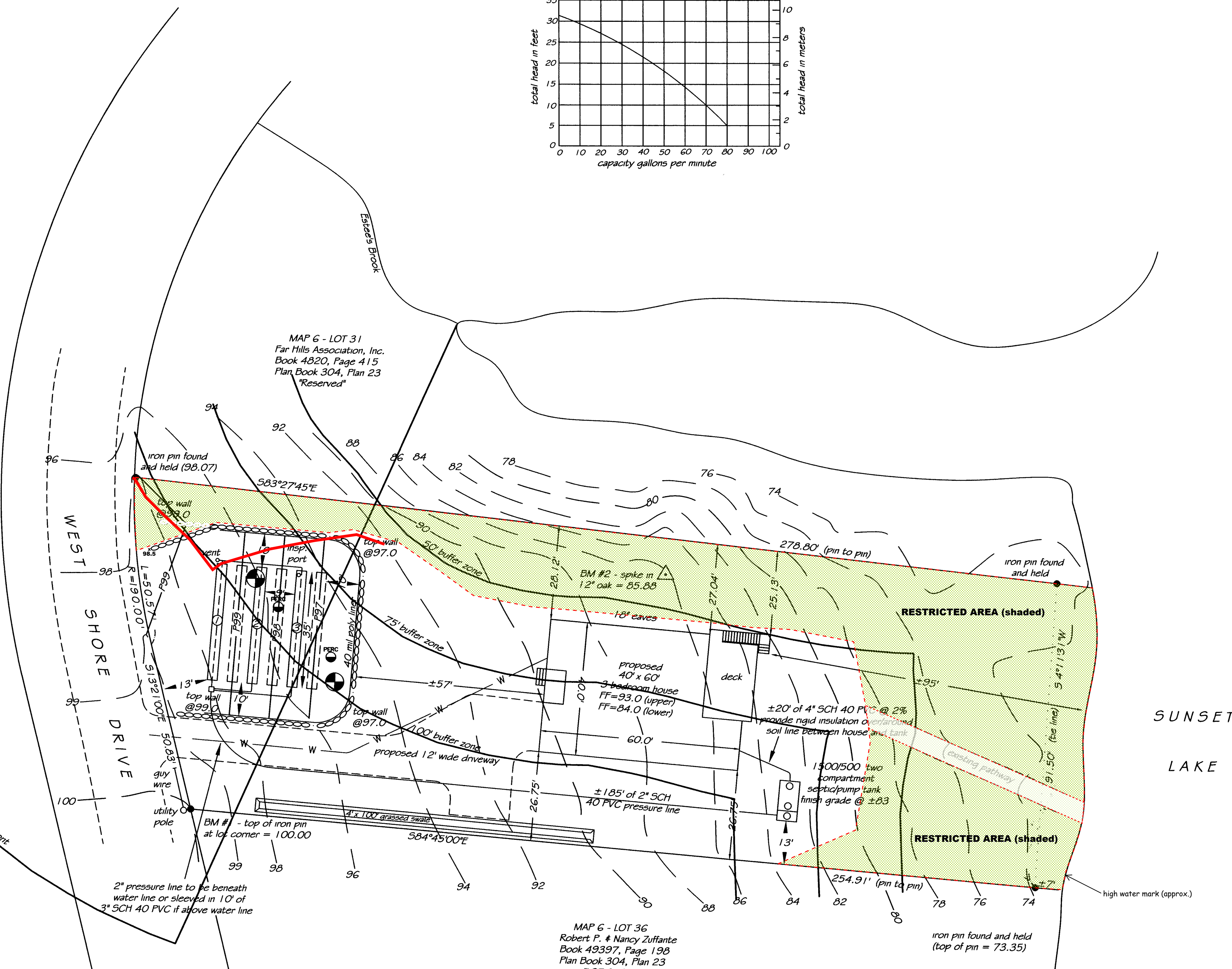
330 bedrooms @ 110 gallons per day per bedroom = 330 gpd
 septic tank requirement: 330 gpd + 100% sludge storage = 660 gpd
 1500/500 gallon, two compartment tank with effluent filter provided
 leach area requirement: 330 gpd + 0.66 (class 1 LTAR) = 500 s.f.
 leach area provided: 3 trenches - 3' wide x 35' long with 12" of stone beneath laterals = 175 sq.ft./trench x 3 trenches = 525 sq.ft.
 gpd capacity provided: 525 s.f. x 0.66 gpd/s.f. = 346.5 gpd

NOTES:

All materials and workmanship shall comply with the provisions of Title 5, Mass. Sanitary Code 310 CMR. No modifications to this plan shall be made without prior approval of the local Board of Health and the designer.
 All A horizon and other impervious material to be removed for an additional 5 feet in all directions and replaced with clean granular sand prior to placement of fill.
 This system is not designed to accommodate a garbage disposal.

LEGEND

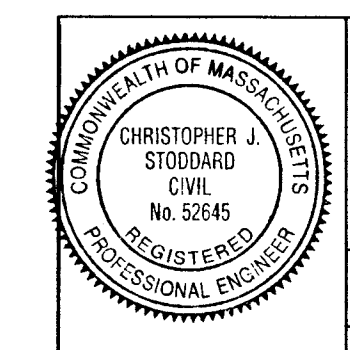
- - - - - = existing contours
- — — — — = proposed contours
- · - · - · - = wetlands delineation
- ⊙ = observation hole location
- ⊙ = perc test location
- △ = Bench Mark location



NOTES:
 Owner: Timothy & Karen Sullivan, 44 West Shore Drive, Winchendon, MA 01368
 Deed Reference: Book 60970, Page 127, See Plan Book 304, Plan 23, LOT 811
 see also, Winchendon Conservation Commission Order of Conditions recorded in Book 58544, Page 255, DEP File # 345-0651

MAP 6 - LOT 36
 Robert P. & Nancy Zuffante
 Book 49397, Page 198
 Plan Book 304, Plan 23
 LOT 810*

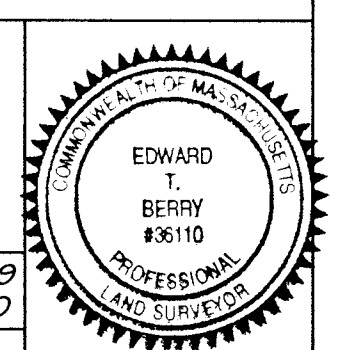
**ORDER OF CONDITIONS DEP FILE 345-0651
 ORIGINAL RESTRICTED AREA OCT. 21, 2017
 AMENDED RESTRICTED AREA JULY 28, 2020**

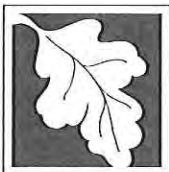


SEWAGE DISPOSAL SYSTEM
 44 WEST SHORE DRIVE
 WINCHENDON, MA
 PREPARED FOR
TIMOTHY SULLIVAN

November 14, 2019
 rev. Feb. 11, 2020

Edward T. Berry, P.L.S., 129 South Main St., Athol, MA 01331
 PO Box 188 (978) 249-8811 E-mail: eberry1@mass.rr.com
 RESIDENTIAL DEVELOPMENT CONSULTANT





Massachusetts Department of Environmental Protection
 Bureau of Resource Protection - Wetlands
WPA Form 8A – Request for Certificate of Compliance
 Massachusetts Wetlands Protection Act M.G.L. c. 131, §40

DEP File Number:
 345-0660
~~193-0646~~
 Provided by DEP

A. Project Information

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



Upon completion of the work authorized in an Order of Conditions, the property owner must request a Certificate of Compliance from the issuing authority stating that the work or portion of the work has been satisfactorily completed.

- This request is being made by:

Name: Peter Avdoulos

Mailing Address: 296 Beachview Dr

City/Town: Winchendon State: MA Zip Code: 01475

Phone Number: _____
- This request is in reference to work regulated by a final Order of Conditions issued to:

Applicant: Peter Avdoulos

Dated: ~~8-9-2018~~ 10-29-18 DEP File Number: 193-0646 345-0660
- The project site is located at:

Street Address: 296 Beachview Dr City/Town: Winchendon

Assessors Map/Plat Number: M12 Parcel/Lot Number: 67
- The final Order of Conditions was recorded at the Registry of Deeds for:

Property Owner (if different): _____

County: Worcester Book: 59663 Page: 104

Certificate (if registered land): _____
- This request is for certification that (check one):

the work regulated by the above-referenced Order of Conditions has been satisfactorily completed.

the following portions of the work regulated by the above-referenced Order of Conditions have been satisfactorily completed (use additional paper if necessary).

the above-referenced Order of Conditions has lapsed and is therefore no longer valid, and the work regulated by it was never started.



Massachusetts Department of Environmental Protection
Bureau of Resource Protection - Wetlands
WPA Form 8A – Request for Certificate of Compliance
Massachusetts Wetlands Protection Act M.G.L. c. 131, §40

DEP File Number:

345-0660
193-0646

Provided by DEP

A. Project Information (cont.)

6. Did the Order of Conditions for this project, or the portion of the project subject to this request, contain an approval of any plans stamped by a registered professional engineer, architect, landscape architect, or land surveyor?

Yes

If yes, attach a written statement by such a professional certifying substantial compliance with the plans and describing what deviation, if any, exists from the plans approved in the Order.

No

B. Submittal Requirements

Requests for Certificates of Compliance should be directed to the issuing authority that issued the final Order of Conditions (OOC). If the project received an OOC from the Conservation Commission, submit this request to that Commission. If the project was issued a Superseding Order of Conditions or was the subject of an Adjudicatory Hearing Final Decision, submit this request to the appropriate DEP Regional Office (see <http://www.mass.gov/dep/about/region/findyour.htm>).

Tobia Law Offices

*47 Parker Street
Gardner, Massachusetts 01440*

George N. Tobia

Geoffrey J. Tobia

Phone (978) 632-4129

Fax (978) 632-9679

July 27, 2020

Town of Winchendon
Conservation Commission
109 Front Street, Dept 11
Winchendon, MA 01475

Re: Request for Certificate of Compliance
682 Spring Street
DEP File No. 345-0420

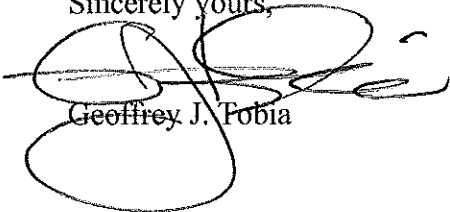
Dear Sirs:

In connection with the above, please find enclosed the following:

1. Request for Certificate of Compliance;
2. Letter in support of such request;
3. Check in the amount \$30.00 payable to the Town of Winchendon.

Please arrange for inspection of the site, and for presentation to the commission at the next meeting, as there is a closing in the sale of the property pending. If I may provide anything further in connection with this request, please do not hesitate to contact me.

Sincerely yours,


Geoffrey J. Tobia

GJT
Enclosure



Massachusetts Department of Environmental Protection
 Bureau of Resource Protection - Wetlands
WPA Form 8A – Request for Certificate of Compliance
 Massachusetts Wetlands Protection Act M.G.L. c. 131, §40

DEP File Number:

345-0420
 Provided by DEP

A. Project Information

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



Upon completion of the work authorized in an Order of Conditions, the property owner must request a Certificate of Compliance from the issuing authority stating that the work or portion of the work has been satisfactorily completed.

1. This request is being made by:

Geoffrey J. Tobia, Esq.

Name

47 Parker Street

Mailing Address

Gardner

MA
 State

01440
 Zip Code

City/Town

(978) 632-4129

Phone Number

2. This request is in reference to work regulated by a final Order of Conditions issued to:

Marla LaGrassa

Applicant

11/04/03

345-0420

Dated

DEP File Number

3. The project site is located at:

682 Spring Street

Street Address

Winchendon
 City/Town

9

157

Assessors Map/Plat Number

Parcel/Lot Number

4. The final Order of Conditions was recorded at the Registry of Deeds for:

Property Owner (if different)

Worcester

35623

345

County

Book

Page

Certificate (if registered land)

5. This request is for certification that (check one):

the work regulated by the above-referenced Order of Conditions has been satisfactorily completed.

the following portions of the work regulated by the above-referenced Order of Conditions have been satisfactorily completed (use additional paper if necessary).

the above-referenced Order of Conditions has lapsed and is therefore no longer valid, and the work regulated by it was never started.



WPA Form 8A – Request for Certificate of Compliance

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

A. Project Information (cont.)

6. Did the Order of Conditions for this project, or the portion of the project subject to this request, contain an approval of any plans stamped by a registered professional engineer, architect, landscape architect, or land surveyor?

Yes If yes, attach a written statement by such a professional certifying substantial compliance with the plans and describing what deviation, if any, exists from the plans approved in the Order.

No

B. Submittal Requirements

Requests for Certificates of Compliance should be directed to the issuing authority that issued the final Order of Conditions (OOC). If the project received an OOC from the Conservation Commission, submit this request to that Commission. If the project was issued a Superseding Order of Conditions or was the subject of an Adjudicatory Hearing Final Decision, submit this request to the appropriate DEP Regional Office (see <http://www.mass.gov/dep/about/region/findyour.htm>).

Tobia Law Offices

*47 Parker Street
Gardner, Massachusetts 01440*

George N. Tobia

Geoffrey J. Tobia

Phone (978) 632-4129

Fax (978) 632-9679

July 27, 2020

Town of Winchendon
Conservation Commission
109 Front Street, Dept 11
Winchendon, MA 01475

Re: Request for Certificate of Compliance
682 Spring Street
DEP File No. 345-0420

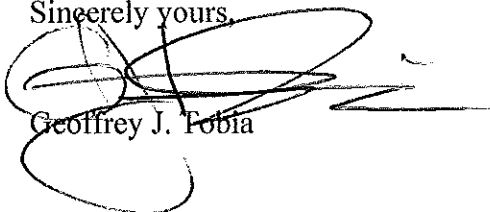
Dear Sirs:

Relative to an Order of Conditions on the above-referenced premises dated November 4, 2003 and recorded in the Worcester District Registry of Deed Book 35623, Page 345, the current owners have not been able to locate the engineers who submitted the plans in connection with the project, and therefore the plans are not available for review and certification. It is the opinion of the current owners that there are no outstanding issues or concerns relative to the conditions contained in said Order.

Accordingly, we are requesting a site review and presentation at the next meeting.

Thank you for your consideration of this matter.

Sincerely yours,


Geoffrey J. Tobia

GJT
Enclosure



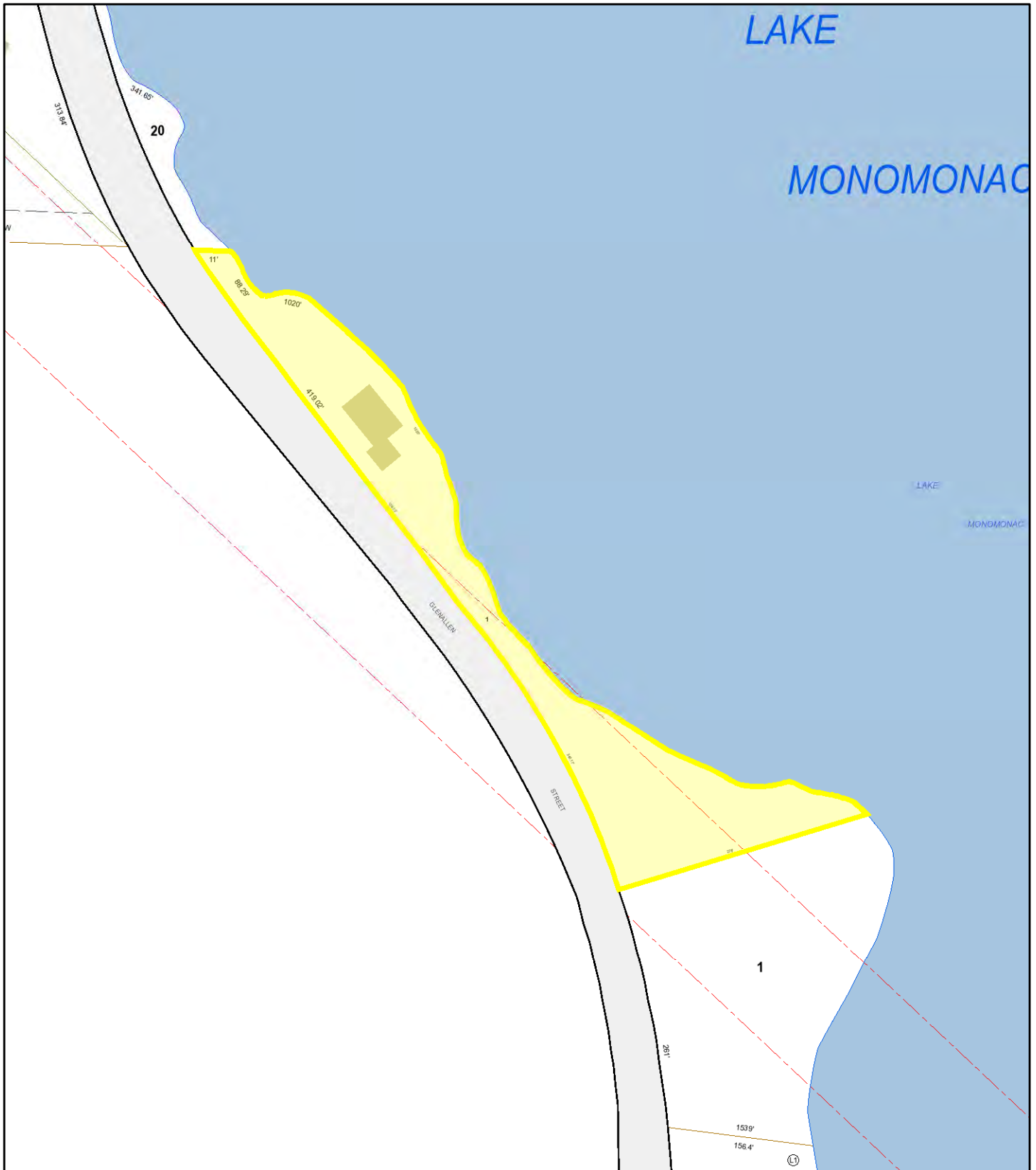
385 Glenallen

Winchendon, MA

1 inch = 150 Feet



July 1, 2020



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16 Monomonac Rd - East

2/25/2020



Winchendon, MA

1 inch = 60 Feet



May 27, 2020



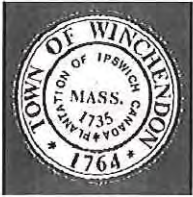
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162 Main Street



2/25/2020



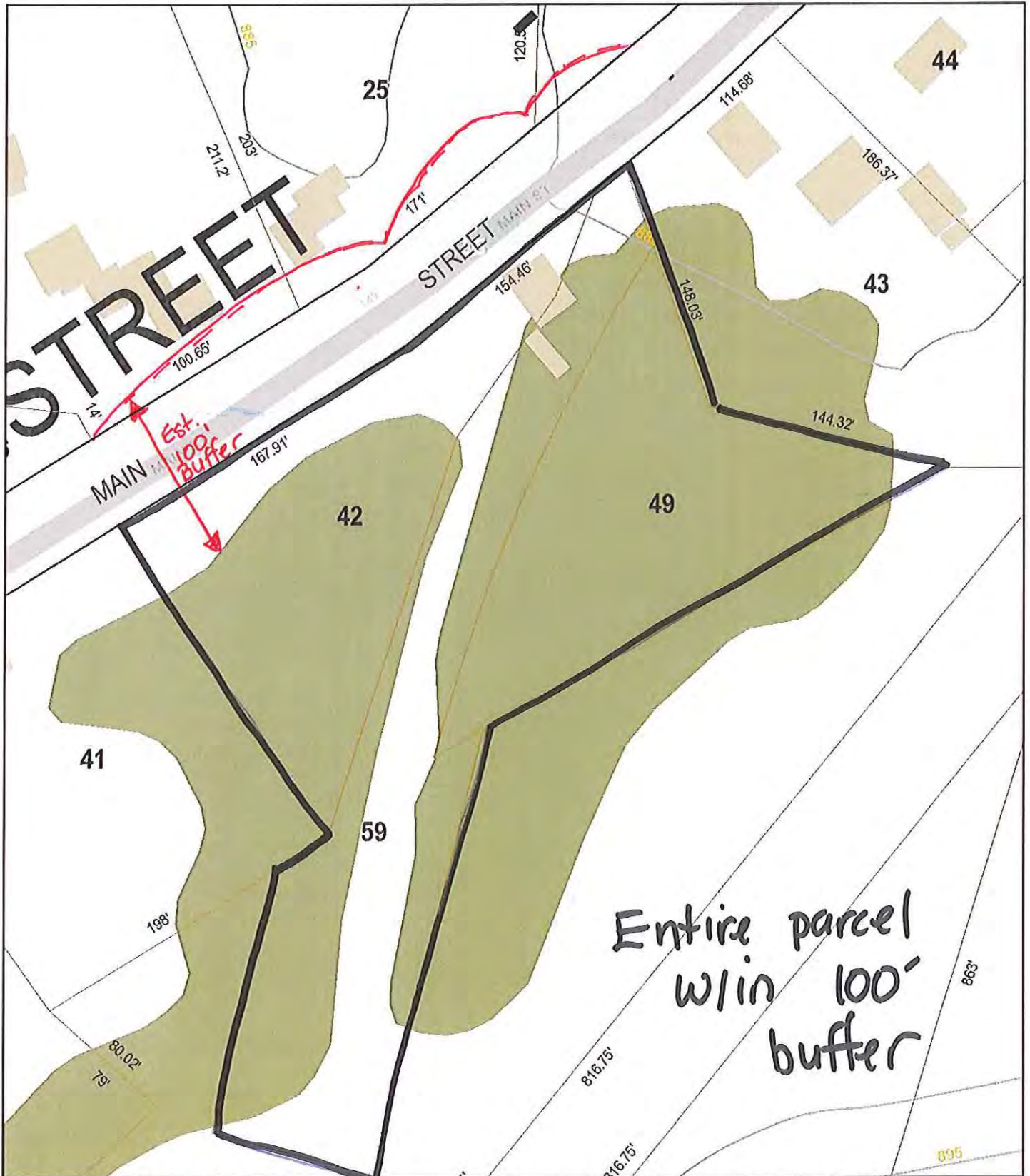
162 Main Street

Winchendon, MA

1 inch = 80 Feet



February 13, 2020



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