

TOWN OF LAKEVILLE MEETING POSTING & AGENDA

Town Clerk's Time Stamp
received & posted:

LAKEVILLE TOWN CLERK
RCUD 2023 JUN 16 AM 10:24

48-hr notice effective
when time stamped

Notice of every meeting of a local public body must be filed and time-stamped with the Town Clerk's Office at least 48 hours prior to such meeting (excluding Saturdays, Sundays and legal holidays) and posted thereafter in accordance with the provisions of the Open Meeting Law, MGL 30A §18-22 (Ch. 28-2009). Such notice shall contain a listing of topics the Chair reasonably anticipates will be discussed at the meeting.

Name of Board or Committee:	Planning Board
Date & Time of Meeting:	Thursday, June 22, 2023 at 7:00 p.m.
Location of Meeting:	Lakeville Police Station 323 Bedford Street, Lakeville, MA 02347
Clerk/Board Member posting notice:	Cathy Murray

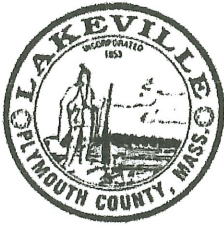
Cancelled/Postponed to: _____ (circle one)

Clerk/Board Member Cancelling/Postponing: _____

A G E N D A

1. ANR Plan – 10 Meadow Lane – Dave Maddigan
2. Public Hearing (7:00) 44 Clear Pond Road, continued – upon the application for Approval of a Definitive Plan submitted by Derek & Madelyn Maksy and Webster Realty Trust for a two (2) lot subdivision.
3. Public Hearing (7:00) Stowe Estates – 35 Myricks St, continued - upon the application for Approval of a Definitive Plan submitted by JIJ Properties, Inc., for a three (3) lot subdivision, Assessors Map 017, Block 004, Lot 003-01
4. Public Hearing (7:00) 13 Main St - upon the application for a Site Plan Review and Approval submitted by Main Street Real Estate Holdings, LLC for a proposed development with two (2) three (3)-story apartment buildings with a total of 40 age qualified residential units and associated site improvements.
5. Public Hearing (7:00) Site Plan Review – 156 Rhode Island Road, continued - T. Sikorski Realty, LLC -applicant
6. Discussion regarding Sign By-Law and Commercial Zoning Districts.
7. Approve the April 27, 2023 Meeting Minutes
8. Review correspondence
9. Next meeting. . . July 13, 2023 at the Lakeville Police Station
10. Any other business that may properly come before the Planning Board.
11. Adjourn

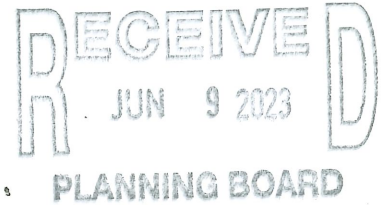
Please be aware that this agenda is subject to change. If other issues requiring immediate attention of the Planning Board arise after the posting of this agenda, they may be addressed at this meeting



Date Submitted: _____

Town of Lakeville

PLANNING BOARD
346 Bedford Street
Lakeville, MA 02347
508-946-8803



FORM A

APPLICATION FOR ENDORSEMENT OF PLAN BELIEVED NOT TO REQUIRE APPROVAL (ANR)

To the Planning Board:

The undersigned believing that the accompanying plan of this property in the Town of Lakeville does not constitute a subdivision within the meaning of the Subdivision Control Law, herewith submits said plan for determination and endorsement that Planning Board approval under this Subdivision Control Law is not required.

PLAN TITLE: Form A Plan of Land 10 Meadow Lane Date: 5-24-23

1. Owner's Signature: 1. ~~Barbara~~ & Amanda Foley
2. Barbara Assoun Susan Sylvia Date: 5/17/2023

2. Owner's Name (Please Print): 1. Ronald & Amanda Foley
2. Alan Butler Trustee

Owner's Address: 1. 10 Meadow Lane
2. 1 Susan Lane

3. Name of Land Surveyor: David Maddigan, Maddigan Land Surveying, LLC

Surveyor's Address: 88 East Grove St., Middleboro

Surveyor's Telephone: 774-213-5196

4. Deed of property recorded in _____ Registry,
Book _____ Page _____

5. Assessors' Map, Block and Lot (MBL) _____

6. Location and Description of Property: _____

7. Plan Contact Name and Telephone Number:

Contact Name: _____ Telephone: _____

HANCOCK ASSOCIATES

Surveyors | Engineers | Scientists

Lakeville Planning Board
346 Bedford Street
Lakeville, MA 02347

June 15, 2023

Attn.: Mr. Mark Knox, Chair

RE: 44 Clear Pond Road
Response to Peer Review Comments and Revised Definitive Subdivision Submittal

Dear Chairman Knox and Members of the Board:

On behalf of Webster Realty Trust (Derek A. and Madelyn Maksy), transmitted herewith please find revised Definitive Subdivision Plans incorporating the comments of the Board from the May 23rd public hearing and addressing the May 22, 2023, peer review comments prepared by Mr. Scott Turner, P.E. of Environmental Partners.

In addition, we offer the following written responses to the peer review comments for your consideration:

Town of Lakeville Rules and Regulations of the Planning Board Governing the Subdivision of Land

1. Section III.C.2.b requires benchmarks to be included on the plans. There is a reference to a benchmark on sheet C-1 but we were unable to find the benchmark on the plans.

As noted Sheet C-1 included a note referring to Existing Conditions Sheet EC-6 for benchmark locations and elevations. Sheet C-1 has been revised to also show the benchmark locations and elevations to address this comment.

2. Section III.C.2.h requires locations of all monuments. It does not appear the proposed project is proposing any monuments.

Proposed monuments were shown on Sheet L-2 as a dark square and labeled "DHSB" (To Be Set)(Typ.), for clarity a Proposed Legend has been added to Sheet L-2 identifying the symbols for proposed monumentation (stone bounds and iron rods).

3. Section III.C.2.k requires building setbacks be shown on the plans. We did not see building setback lines on the plans.

Building setback lines were shown on Sheets L-1 through L-6 and labeled "Zoning Setback Line (Typ.)", for clarity the line symbol and label have been added to the Proposed Legend on Sheet L-2.

4. Section III.C.2.p requires two benchmarks be shown on the plan and profile sheets. The plan and profile sheet includes a reference to a benchmark but no actual benchmarks.

The Plan and Profile Sheet (Sheet C-1) has been revised to show the benchmark locations and elevations.

33 Dover Street | Brockton, MA 02301 | V: 508-588-1877 | HancockAssociates.com

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5. Section III.C.2.u requires the locations and species of any proposed trees be shown on the plans. It does not appear the applicant is proposing any trees.

The proposed subdivision road follows the alignment of the existing access drive from Clear Pond Road, with existing mature wooded areas along both sides, accordingly the Applicant is requesting a waiver from this requirement. The Planning Board has indicated their support of this waiver request.

6. Section IV.A.1 requires proposed streets be constructed with the Standard Cross Section.

The Applicant is requesting a waiver of this requirement to provide "country drainage" with the roadway sloped to one side to a water quality drainage swale.

At the Planning Board's request, the Applicant also prepared a plan consistent with the Standard Cross Section and showing a conventional closed pipe drainage system. Both plans were reviewed with the Planning Board during the public hearings, and the Board determined that the country drainage plan was the best alternative and would support the waiver request.

7. The edge of pavement of the northeastern corner of the intersection of the proposed road with Clear Pond Road is located at the corner of the property line. There is virtually no right of way between the curb radius and the corner property line. The applicant does not control the abutting property in this area.

The proposed curb will be entirely within the Applicant's property and the Clear Pond Road layout.

8. Section IV.B.4.a requires the centerline grade of proposed roads to be no less than .5%. The stretch of road between stations 5+12 to 5+62 is .42%.

The proposed centerline profile has been revised to provide a minimum slope of 0.50 %.

9. Section IV.B.4.c requires vertical curves where the change in grade exceeds 1%. There is a low point on the road with a change of grade of 1.5% that does not include a vertical curve.

The proposed centerline profile has been revised to address this comment.

10. Section IV.B.5.b requires a landscaped island in the center of cul-de-sacs with a minimum radius of 40'. It appears the proposed landscaped island exceeds this size, but we recommend it be labelled for clarity.

Sheet C-1 has been revised to label the dimensions of the landscaped island as recommended.

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11. Section IV.B.7.a (Curbs and Berms) requires concrete berms and curbs be provided along each side of the road. The proposed project includes a berm on one side of the proposed street and flush pavement on the other side of the road.

Refer to response to comment 6 above, the Applicant is requesting a waiver from the Standard Cross Section and the requirement for curbing on both sides of the proposed roadway to provide country drainage. The Planning Board has indicated their support for this waiver request.

12. Section IV.B.7.c (Curb Cuts) requires driveways to slope toward the road at a grade not more than 8%. The proposed plan shows the driveway on lot 4 sloping to the road at 10%.

The proposed driveway on Lot 4 has been revised to reduce the slope to no more than 8%.

13. Section IV.B.8.c includes requirements for bituminous concrete sidewalk construction. There is no detail provided for bituminous concrete sidewalks.

A detail for the proposed bituminous concrete sidewalk has been added to Sheet C-3.

14. Section IV.C.s is regarding installation of utilities. It does not appear there are proposed utilities to be installed in the proposed road.

The Applicant is not proposing utilities to be installed in the roadway.

15. Section IV.D.2.c is regarding the installation of drainage systems. This section states that subdivisions can incorporate natural waterways and detention basins for management of stormwater. The proposed project includes drainage swales, infiltration basins, and rain gardens. We feel the proposed approach is consistent with this section. There are no closed drainage systems proposed. Therefore, the sections of the Regulations pertaining to closed drainage systems do not apply.

Agreed.

16. Section IV.D.2.f requires removal of 80% of sediments. See comments in the drainage section regarding removal of sediments.

A sediment forebay has been added to the proposed Rain Garden and updated TSS Removal Calculations are included herewith.

17. Section IV.F.4 states easements shall not be included in the lot area. Lots 3 and 4 include drainage easements. The applicant should confirm the easement areas are not included in the lot areas.

The plans have been revised to exclude the area of the drainage easements from the lot areas, refer to Sheet C-4.

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18. Section IV.G requires monuments be installed. The proposed project does not appear to have proposed monuments.

Proposed monuments were shown on Sheet L-2 as a dark square and labeled "DHSB" (To Be Set)(Typ.), for clarity a Proposed Legend has been added to Sheet L-2 identifying the symbols for proposed monumentation (stone bounds and iron rods).

19. Section IV.H requires street signs to be installed. The proposed plans do not show street signs.

Sheet C-1 has been revised to include a street name sign in plan view and also spell out the requirement in Note 4.

20. Section IV.I requires streetlights to be installed. It does not appear streetlights are proposed.

The original filing included a request to waive the requirement for installation of street lights. The Planning Board was not in favor of granting this waiver request and accordingly the revised plans call for street lights to be installed, refer to Sheet C-1.

21. Section IV.K is regarding street trees. It does not appear that street trees are proposed as part of this project.

The proposed subdivision road follows the alignment of the existing access drive from Clear Pond Road, with existing mature wooded areas along both sides, accordingly the Applicant is requesting a waiver from this requirement. The Planning Board has indicated their support of this waiver request.

Massachusetts Stormwater Management Standards

The project is a four lot subdivision. However, it provides access to two commercial facilities, the Lakeville Country Club, and a solar field. It also includes an increase in impervious surface of approximately 4,500 sf. Therefore, we feel the proposed project is required to meet the Stormwater Management Standards for new construction.

1. *Standard 1: No new untreated discharges*

The proposed design complies with Standard 1. All stormwater generated by the project is collected by swales and treated by an infiltration basin or rain garden.

Agreed.

2. *Standard 2: Peak rate attenuation*

The proposed design complies with Standard 2. There is a reduction in peak stormwater flows from the project.

Agreed.

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3. *Standard 3: Recharge*

The project complies with Standard 3. The recharge calculations were performed using an infiltration rate of 2.41 inches per hour, which is likely conservative based on the test hole observations.

Agreed.

4. *Standard 4: Water quality*

In our opinion, the project does not meet this Standard for the following reasons.

- a. The southern portion of the road and the parking lot from the Lakeville Country Club drains directly into the rain garden via a paved swale. There is no pretreatment prior to discharge to the rain garden. Per the Standards, rain gardens provide 90% TSS removal with adequate pretreatment. The proposed design does not provide any pretreatment. We recommend pre-treatment be provided.

A sediment forebay has been added to the Rain Garden for pretreatment of the runoff, refer to Sheet C-1.

- b. The TSS removal rate sheet describes a stormceptor water quality unit is to be used to treat stormwater discharging to the infiltration basin. The plans show a sediment forebay is to be used for pretreatment and not a stormceptor.

Agreed, the reference to a Stormceptor Water Quality Unit was an error, pretreatment is provided by the proposed sediment forebay.

5. *Standard 5: Land use with higher potential pollutant loads (LUHPPL)*

We do not believe the project is a LUHPPL. A LUHPPL is defined by specific land uses as well as parking facilities that generate over 1,000 vehicle trips per day. It is unclear whether the Lakeville Country Club generates over 1,000 vehicle trips per day. If so, the project would be required to meet this Standard to the maximum extent practicable.

Trip generation estimates (attached) indicate that an 18-hole golf course, such as the Lakeville Country Club, typically generate about 548 vehicle trips per day on a weekday, about 358 trips on a Saturday and about 340 trips on a Sunday. Well below the 1,000 trip threshold to be considered a LUHPPL.

6. *Standard 6: Critical areas*

The project does not lie within a critical area as defined within the Massachusetts Stormwater Handbook.

Agreed.

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7. *Standard 7: Redevelopment*

This project is a mix of new development and redevelopment. The project is currently developed and results in an increase of impervious surface of approximately 4500 sf. Therefore, the project should meet the Standards for new development.

Agreed – the proposed stormwater management system meets the Standards for new development.

8. *Standard 8: Construction period pollution prevention and erosion and sedimentation control*

Because the project disturbs more than one acre of land, it is required to obtain coverage under the NPDES Construction General Permit and prepare a Stormwater Pollution Prevention Plan (SWPPP). A draft SWPPP was not submitted. We recommend the Planning Board require the final SWPPP be submitted for review and approval prior to the commencement of construction.

Agreed, a SWPPP will be prepared, and an NOI filed with the EPA for coverage under the NPDES Construction General Permit in advance of any construction. A copy of the SWPPP can be provided to the Planning Board if required.

9. *Standard 9: Operation and Maintenance plan (O&M plan)*

Appendix VII of the Stormwater Management Report includes an Operation and Maintenance Plan consistent with the requirements outlined by Standard 9.

Agreed.

10. *Standard 10: Prohibition of illicit discharges*

A signed illicit discharge statement was not provided. An illicit discharge statement signed by the owner should be provided prior to any approval.

A signed illicit discharge statement is included herewith.

General Comments

1. We recommend a detail be provided for the proposed rain garden showing the appropriate planting soil consistent with the Stormwater Management Guidelines. It is unclear if there are plantings proposed as part of the rain garden design.

A detail for the proposed Rain Garden has been added to Sheet C-3 showing appropriate planting soil. Plantings will include a mix of herbaceous perennials and shrubs that can tolerate intermittent ponding and extended dry periods. A planting plan will be developed by the Applicant prior to construction.

2. We recommend the applicant provide forebay sizing calculations for the rain garden which comply with the Massachusetts Stormwater Management Standards.

Forebay sizing calculations are included herewith as recommended.

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3. The applicant used an exfiltration rate of 2.41 inches per hour which is likely conservative. Therefore, we believe the stormwater management system will perform better than modelled.

Agreed.

4. We recommend a Construction Detail for the standpipe in the rain garden be provided on the plans.

A detail for the standpipe has been added to Sheet C-3 as recommended.

5. The northern portion of the road does not discharge to the sediment forebay. Stormwater generated by the northern portion of the road flows to a pipe and into the infiltration basin, bypassing the sediment forebay. Pretreatment is provided by the proposed swale.

Agreed – pretreatment is provided by the water quality swale.

6. The proposed project conveys stormwater to a water quality swale located on the western side of the proposed road. During snow events, if snow is cleared to this side of the road, it will prevent water from being conveyed to the grassed swales, the sediment forebay, and the inlet to the rain garden. If these structures are not cleared properly, it will likely result in ponding, and possibly icing, in these areas. The entity responsible for maintenance will need to be diligent about clearing snow so stormwater can flow to these facilities.

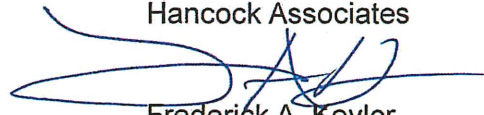
Agreed.

7. We recommend that Stone for Pipe Ends, consistent with MassDOT specifications, be installed at the flared end sections.

Agreed – the revised plans call for stone/rip-rap at the flared end sections.

We trust that the revised plans and responses above address the comments provided by the Board during the Public Hearings, and by Environmental Partners - the Board's peer review consultant. We look forward to reviewing these changes with the Board and to closing the Public Hearing on this matter at the next available meeting.

Very Truly Yours,
Hancock Associates



Frederick A. Keylor
Senior Project Manager

cc: Webster Realty Trust
Marc Resnick, Lakeville Town Planner
Scott Turner, P.E., Environmental Partners
Joseph Peznola, P.E., Hancock Associates

INSTRUCTIONS:

Non-automated: Mar. 4, 2008

1. Sheet is nonautomated. Print sheet and complete using hand calculations. Column A and B: See MassDEP Structural BMP Table
2. The calculations must be completed using the Column Headings specified in Chart and Not the Excel Column Headings
3. To complete Chart Column D, multiple Column B value within Row x Column C value within Row
4. To complete Chart Column E value, subtract Column D value within Row from Column C within Row
5. Total TSS Removal = Sum All Values in Column D

Location:

TSS Removal Calculation Worksheet

A BMP ¹	B TSS Removal Rate ¹	C Starting TSS Load*	D Amount Removed (B*C)	E Remaining Load (C-D)
Forebay	25%	1.00	0.25	0.75
Rain Garden	90%	0.75	0.67	0.8

Total TSS Removal =

Separate Form Needs to be Completed for Each Outlet or BMP Train

Project:
 Prepared By:
 Date:

*Equals remaining load from previous BMP (E) which enters the BMP

STORMWATER MANAGEMENT STANDARDS

STANDARD # 4

FORBAY PRETREATMENT VOLUME FOR PROPOSED INFILTRATION BASIN

VOLUME REQUIRED

IMPERVIOUS AREA TO INFILTRATION BASIN	=	<u>6,534 sf.</u>
PRETREATMENT VOLUME PER ACRE	=	<u>0.10 in.</u>
REQUIRED PRETREATMENT VOLUME	=	54.5 cf.

VOLUME PROVIDED

ELEVATION	AREA	ELEVATION DIFFERENCE	AVERAGE AREA	VOLUME
ft.	sf.	ft.		
82.5	63			
		0.5	93.5	46.8
83.0	124			
		0.25	141	35.25
83.25	158			

PROPOSED PRETREATMENT VOLUME = **82.0 cf.**

82.0 cf. >>> 54.5 cf

FOREBAY CALCULATION SATISFIED

CHECK DAM

DRAINAGE AREA	=	<u>6,534 sf</u>
LENGTH PER ACRE	=	<u>6.0 ft.</u>
REQUIRED LENGTH	=	0.9 ft.
PROVIDED LEGTH	=	9 ft

FOREBAY LENGTH CALCULATION SATISFIED

STORMWATER MANAGEMENT STANDARDS

STANDARD # 4

FORBAY PRETREATMENT VOLUME FOR PROPOSED RAIN GARDEN

VOLUME REQUIRED

IMPERVIOUS AREA TO RAIN GARDEN	=	12,161	sf.
PRETREATMENT VOLUME PER ACRE	=	0.10	in.
REQUIRED PRETREATMENT VOLUME	=	101.3	cf.

VOLUME PROVIDED

ELEVATION	AREA	ELEVATION DIFFERENCE	AVERAGE AREA	VOLUME
ft.	sf.	ft.		
83.0	68			
		1.0	131.0	131.0
84.0	194			
		0.50	235	117.5
84.50	276			

PROPOSED PRETREATMENT VOLUME = 248.5 cf.

248.5 cf. >>> 101.3 cf

FOREBAY CALCULATION SATISFIED

CHECK DAM

DRAINAGE AREA	=	12,161	sf
LENGTH PER ACRE	=	6.0	ft.
REQUIRED LENGTH	=	2	ft.
PROVIDED LEGTH	=	6	ft

FOREBAY LENGTH CALCULATION SATISFIED

Golf Course (430)

Vehicle Trip Ends vs: Holes
On a: Weekday

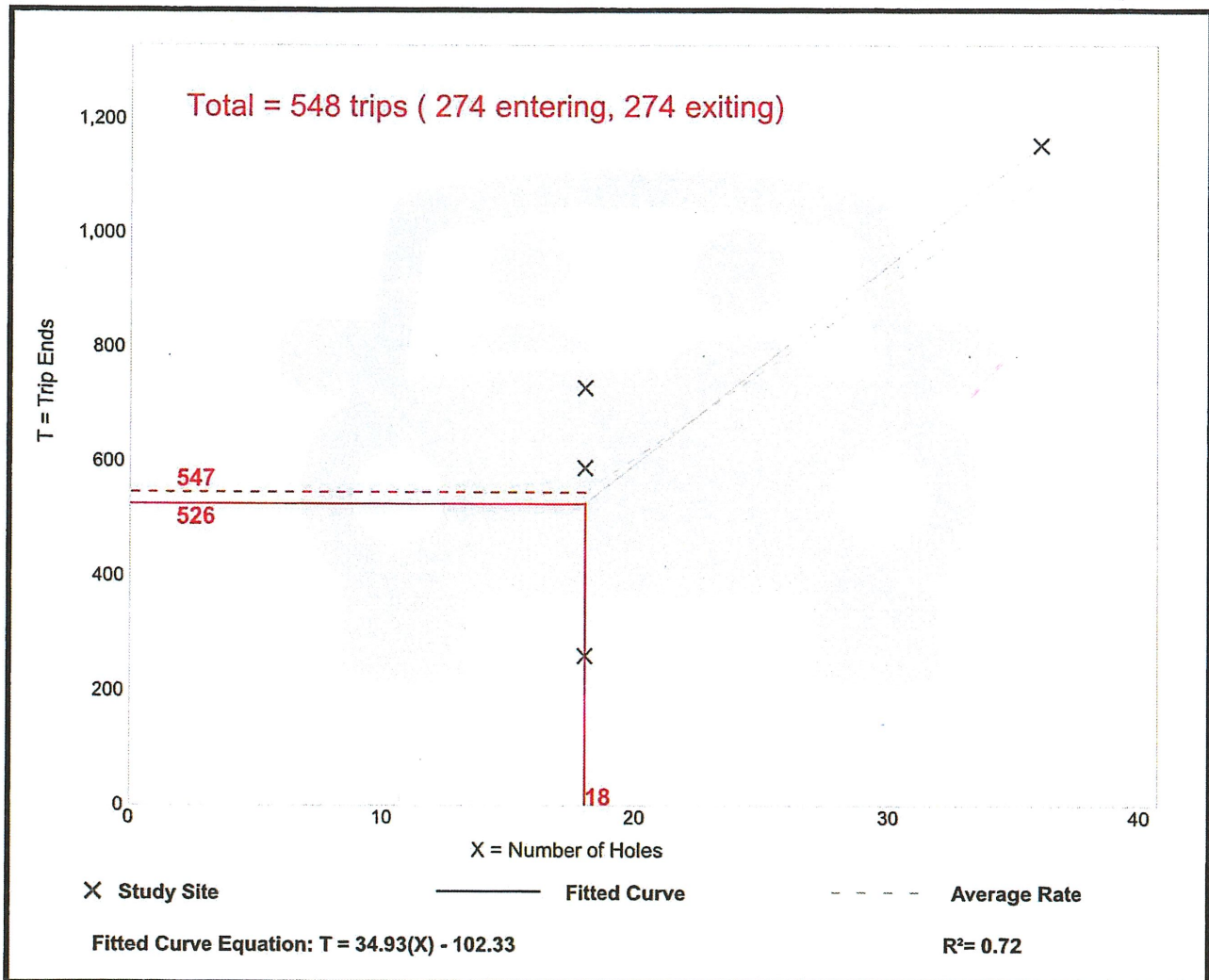
Setting/Location: General Urban/Suburban
Number of Studies: 4
Avg. Num. of Holes: 23
Directional Distribution: 50% entering, 50% exiting

Vehicle Trip Generation per Hole

Average Rate	Range of Rates	Standard Deviation
30.38	14.50 - 40.50	9.88

Data Plot and Equation

Caution – Small Sample Size



Golf Course (430)

Vehicle Trip Ends vs: Holes
On a: Saturday

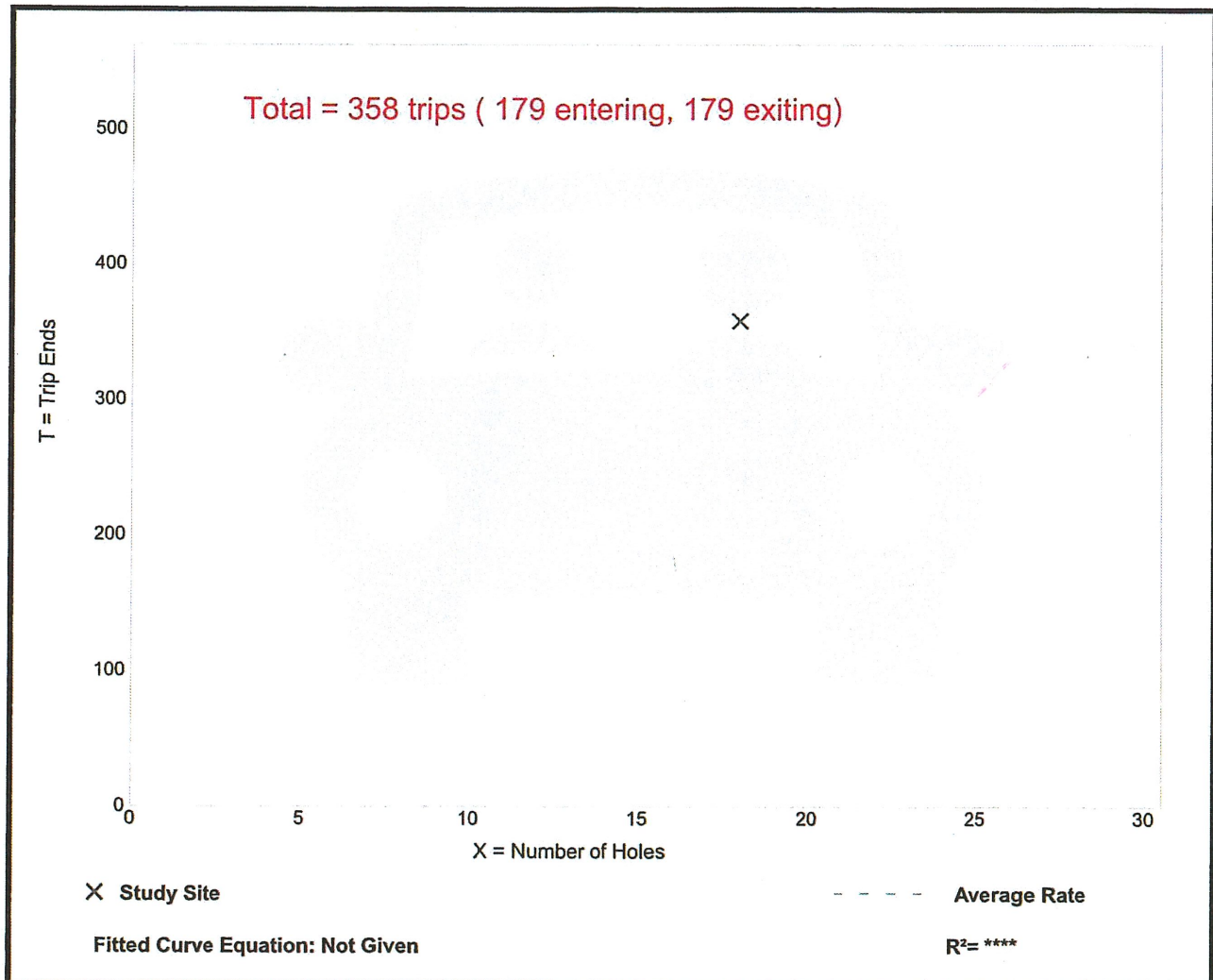
Setting/Location: General Urban/Suburban
Number of Studies: 1
Avg. Num. of Holes: 18
Directional Distribution: 50% entering, 50% exiting

Vehicle Trip Generation per Hole

Average Rate	Range of Rates	Standard Deviation
19.89	19.89 - 19.89	*

Data Plot and Equation

Caution – Small Sample Size



Golf Course (430)

Vehicle Trip Ends vs: Holes
On a: Sunday

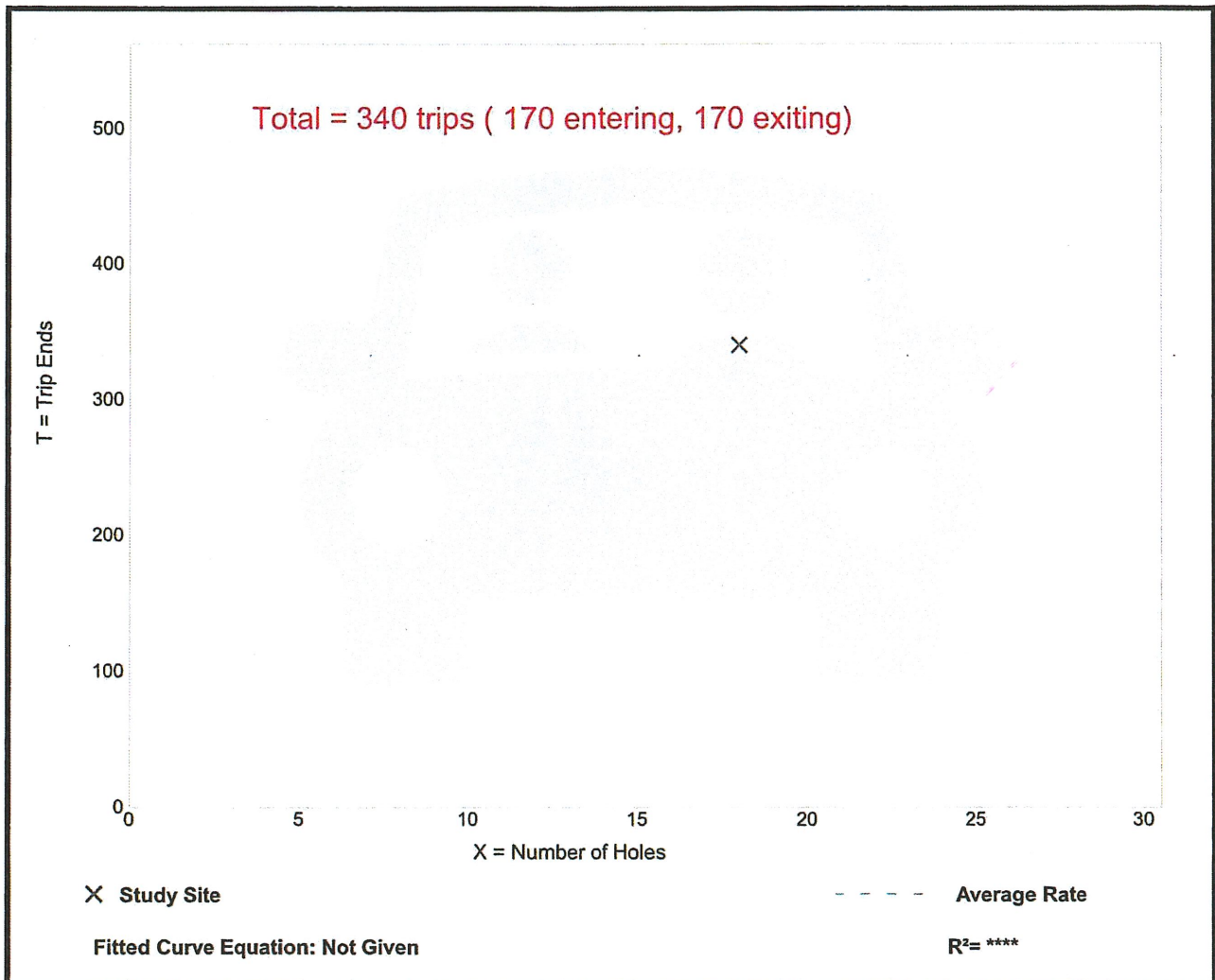
Setting/Location: General Urban/Suburban
Number of Studies: 1
Avg. Num. of Holes: 18
Directional Distribution: 50% entering, 50% exiting

Vehicle Trip Generation per Hole

Average Rate	Range of Rates	Standard Deviation
18.89	18.89 - 18.89	*

Data Plot and Equation

Caution – Small Sample Size



ILLICIT DISCHARGE COMPLIANCE STATEMENT

PROPERTY: 44 Clear Pond Road
Lakeville, Massachusetts

PROJECT: Lakeville Country Club
Lakeville, Massachusetts

The undersigned, DEREK A. MAKSY, hereby makes this certification as required under Standard #10 of the MassDEP Stormwater Management Standards.

I do hereby certify to the best of my knowledge and belief, as of the date set forth above, that there are no illicit sewage discharges to the existing or proposed site stormwater management system.

Dated as of: 6/14/2007

By:

Derek Maksy
Derek Maksy

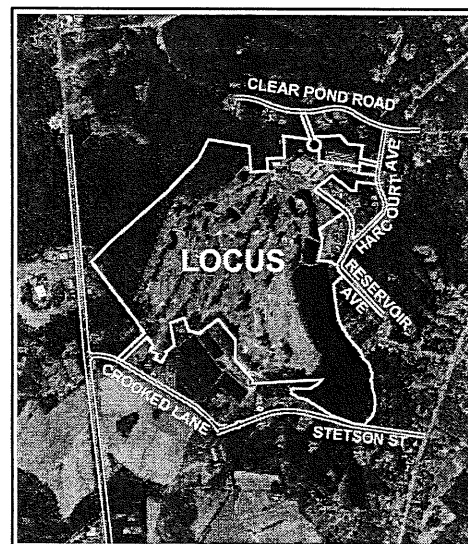
DEFINITIVE SUBDIVISION PLAN

GOLFERS WAY

A SUBDIVISION IN LAKEVILLE, MA

44 Clear Pond Road
Lakeville, Massachusetts 02347

Prepared for
Derek A. Maksy



VICINITY MAP
SCALE: 1"=1000'

OWNER:

DEREK A. MAKSY & MADELYN MAKSY, WEBSTER REALTY TRUST
44 CLEAR POND ROAD
LAKEVILLE, MASSACHUSETTS 02347

APPLICANT:

DEREK A. MAKSY & MADELYN MAKSY, WEBSTER REALTY TRUST
44 CLEAR POND ROAD
LAKEVILLE, MASSACHUSETTS 02347

SHEET INDEX

SHEET 1..... TITLE SHEET
SHEET 2..... EXISTING CONDITIONS PLAN (KEY PLAN)
SHEET 3..... EXISTING CONDITIONS PLAN (2)
SHEET 4..... EXISTING CONDITIONS PLAN (3)
SHEET 5..... EXISTING CONDITIONS PLAN (4)
SHEET 6..... EXISTING CONDITIONS PLAN (5)
SHEET 7..... EXISTING CONDITIONS PLAN (6)
SHEET 8..... LOTTING PLAN (KEY MAP)
SHEET 9..... LOTTING PLAN (2)
SHEET 10..... LOTTING PLAN (3)
SHEET 11..... LOTTING PLAN (4)
SHEET 12..... LOTTING PLAN (5)
SHEET 13..... LOTTING PLAN (6)
SHEET 14..... PLAN AND PROFILE
SHEET 15..... EROSION CONTROL PLAN
SHEET 16..... DETAILS SHEET
SHEET 17..... LOT COMPLIANCE EXHIBIT

WAIVERS REQUESTED

THE FOLLOWING WAIVERS ARE REQUESTED FROM THE TOWN OF LAKEVILLE RULES AND REGULATIONS OF THE PLANNING BOARD GOVERNING THE SUBDIVISION OF LAND:

- SECTION III C.2. F - SEPTIC AND WELL ON ADJUTING LOTS HAVE BEEN TO THE EXTENT AVAILABLE.
- SECTION IV B.2.D - PROPERTY LINES FOR CURB RADIUS - 30' PAVEMENT RADIUS IS PROVIDED.
- SECTION IV B.6.G - ROADWAY CONSTRUCTION - COUNTRY DRAINAGE WITH SUPERELEVATED ROAD
- SECTION IV B.7 - CURBS AND BERMS - CURB ON ONE SIDE ONLY TO SUPPORT COUNTRY DRAINAGE
- SECTION IV K - TREES - IN CONSIDERATION OF EXISTING MATURE TREES BEING RETAINED.

PROJECT TEAM

CIVIL ENGINEERS:

HANCOCK ASSOCIATES
315 ELM STREET
MARLBOROUGH, MASSACHUSETTS 01752

LAND SURVEYORS:

HANCOCK ASSOCIATES
315 ELM STREET
MARLBOROUGH, MASSACHUSETTS 01752

LAKEVILLE PLANNING BOARD
APPROVED UNDER THE SUBDIVISION CONTROL LAW

APPROVED: _____

ENDORSED _____

I HEREBY CERTIFY THAT THE NOTICE OF APPROVAL OF THIS PLAN BY THE LAKEVILLE PLANNING BOARD WAS RECEIVED AND RECORDED ON _____ AT THIS OFFICE, AND NO APPEAL WAS RECEIVED DURING THE TWENTY (20) DAYS NEXT AFTER SUCH RECEIPT OF RECORDING OF SAID NOTICE.

TOWN CLERK, LAKEVILLE, MA DATE _____

GENERAL NOTES

- THE CONTRACTOR SHALL VERIFY THE LOCATION AND RELATIVE ELEVATION OF BENCH MARKS PRIOR TO COMMENCEMENT OF CONSTRUCTION. ANY DISCREPANCY SHALL BE REPORTED TO THE ENGINEER.
- CONTRACTOR SHALL FURNISH CONSTRUCTION LAYOUT OF SITE IMPROVEMENTS. THIS WORK SHALL BE PERFORMED BY A PROFESSIONAL LAND SURVEYOR.
- SAFETY MEASURES, CONSTRUCTION METHODS AND CONTROL OF WORK SHALL BE RESPONSIBILITY OF THE CONTRACTOR.
- ALL SITE CONSTRUCTION SHALL COMPLY WITH THE LAKEVILLE DEPARTMENT OF PUBLIC WORKS STANDARDS.
- CONTRACTOR SHALL BE RESPONSIBLE FOR REPAIR AND/OR REPLACEMENT OF ANY EXISTING IMPROVEMENTS DAMAGED DURING CONSTRUCTION THAT ARE NOT DESIGNATED FOR DEMOLITION AND / OR REMOVAL HEREON. DAMAGED IMPROVEMENTS SHALL BE REPAIRED TO THE SATISFACTION OF THEIR RESPECTIVE OWNERS.
- ANY INTENDED REVISION OF THE HORIZONTAL AND/OR VERTICAL LOCATION OF IMPROVEMENTS TO BE CONSTRUCTED AS SHOWN HEREON SHALL BE REVIEWED AND APPROVED BY ENGINEER PRIOR TO IMPLEMENTATION.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR RECORDING HORIZONTAL AND VERTICAL MEASUREMENTS FOR ALL SUBSURFACE STRUCTURES. THIS INFORMATION SHALL BE REPORTED TO THE ENGINEER.
- ELEVATIONS REFER TO NAVD88 DATUM.

REGULATORY NOTES

- CONTRACTOR SHALL CONTACT "DIG-SAFE" FOR AN UNDERGROUND UTILITY MARKING AT 811 AT LEAST 72 HOURS PRIOR TO THE COMMENCEMENT OF ANY WORK.
- CONTRACTOR SHALL MAKE HIMSELF AWARE OF ALL CONSTRUCTION REQUIREMENTS, CONDITIONS AND LIMITATIONS IMPOSED BY PERMITS AND APPROVALS ISSUED BY REGULATORY AUTHORITIES PRIOR TO THE COMMENCEMENT OF ANY WORK. CONTRACTOR SHALL COORDINATE AND OBTAIN ALL CONSTRUCTION PERMITS REQUIRED BY REGULATORY AUTHORITIES.
- ALL WORK OUTSIDE OF THE BUILDING THAT IS LESS THAN 10 FEET FROM THE INSIDE FACE OF THE BUILDING FOUNDATION SHALL CONFORM WITH THE UNIFORM STATE PLUMBING CODE OF MASSACHUSETTS, 248 CMR 2.00.
- CONSTRUCTION ACTIVITIES SHALL CONFORM TO THE RULES AND REGULATIONS OF THE OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (OSHA).

GOLFERS WAY

(A DEFINITIVE SUBDIVISION IN LAKEVILLE, MA)

44 Clear Pond Road
Lakeville, Massachusetts 02347

ASSESSORS:

MAP	BLOCK	LOT
59	1	50

PREPARED FOR:

DEREK A. MAKSY

44 Clear Pond Road
Lakeville, Massachusetts 02347

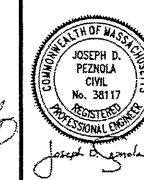
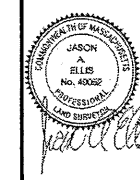
HANCOCK ASSOCIATES

Civil Engineers

Land Surveyors

Wetland Scientists

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VOICE (508) 460-1111, FAX (508) 460-1121
WWW.HANCOCKASSOCIATES.COM



NO.	BY	APP	DATE	ISSUE/REVISION DESCRIPTION
1	DTW	JP	6/7/23	PLANNING BOARD COMMENTS
1	DTW	JP	5/22/23	PLANNING BOARD COMMENTS
1	DTW	JP	5/2/23	PLANNING BOARD COMMENTS

DATE: 11/15/2022 DRAWN BY: JML
SCALE: AS SHOWN CHECK BY: JAE

TITLE SHEET

PLOT DATE: Jun 15, 2023 10:25 am

Path: \\hpc-004\01\2023-02\04 30 Projects\26623 - Maksy - Lakeville

DWG: 26623title.dwg

LAYOUT: T51

SHEET: 1 OF 17

PROJECT NO.: **26623**

1

#44
CLEAR
POND ROAD

Lakeville, Massachusetts 02347

PREPARED FOR

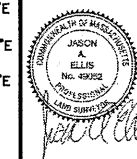
DEREK
A.
MAKSY

44 Clear Pond Road
Lakeville, Massachusetts 02347

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Wetland Scientists

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NO.	BY	APP.	DATE	ISSUE/REVISION DESCRIPTION

DATE: 11/15/2022 DRAWN BY: JML
SCALE: 1"=80' CHECK BY: JAE

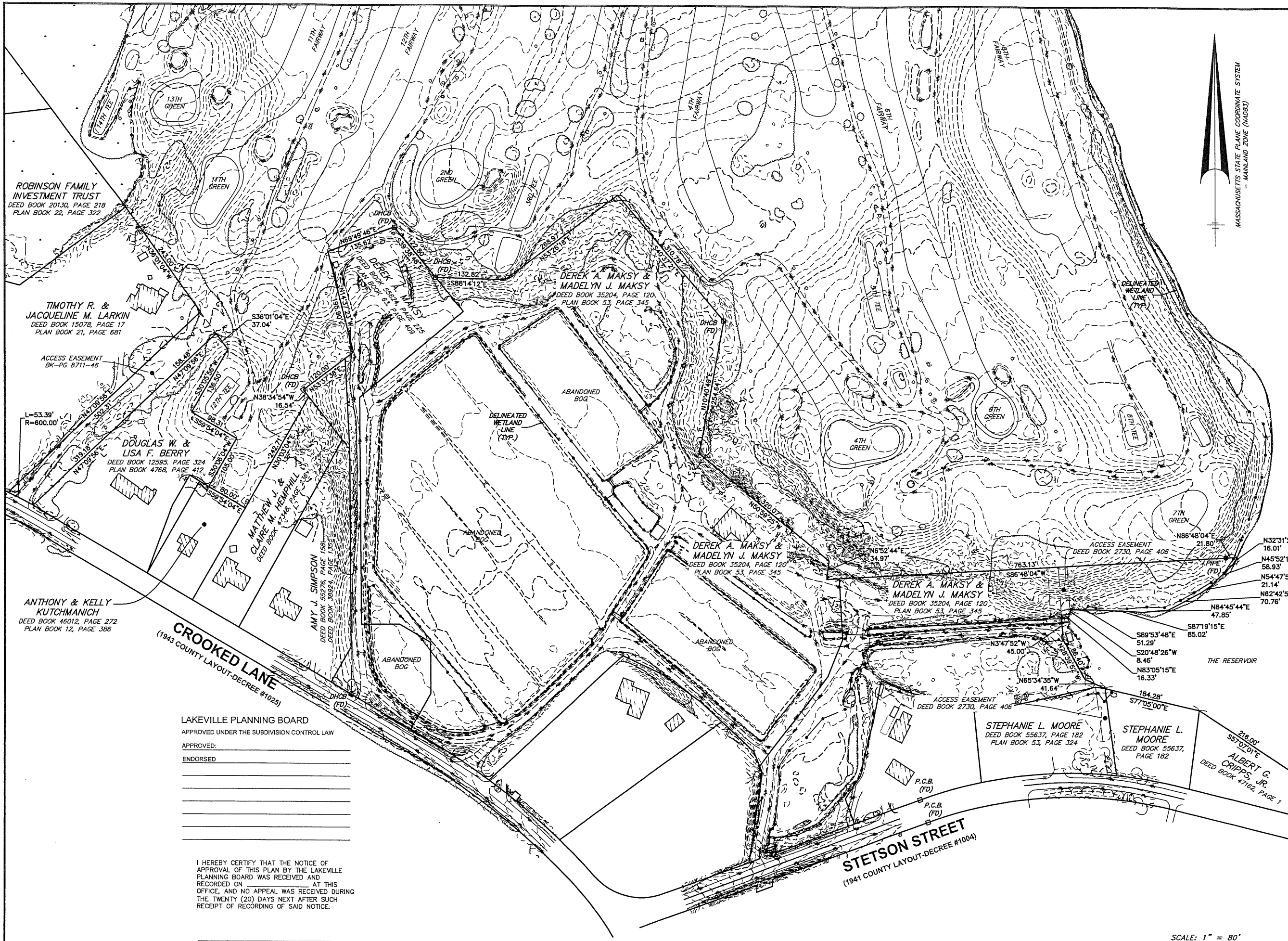
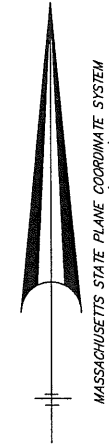
EXISTING CONDITIONS
PLAN OF LAND
IN
LAKEVILLE, MA

PLT DATE: Nov 16, 2022 4:11 pm
PATH: G:\2024 3D Projects\26623 - Maksy - Lakeville\26623.dwg

DWG: 26623sv.dwg
LAYOUT: EC (4)

SHEET: 5 OF 16

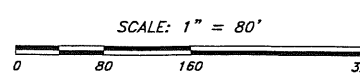
PROJECT NO.: 26623

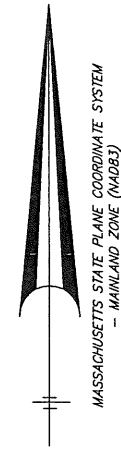
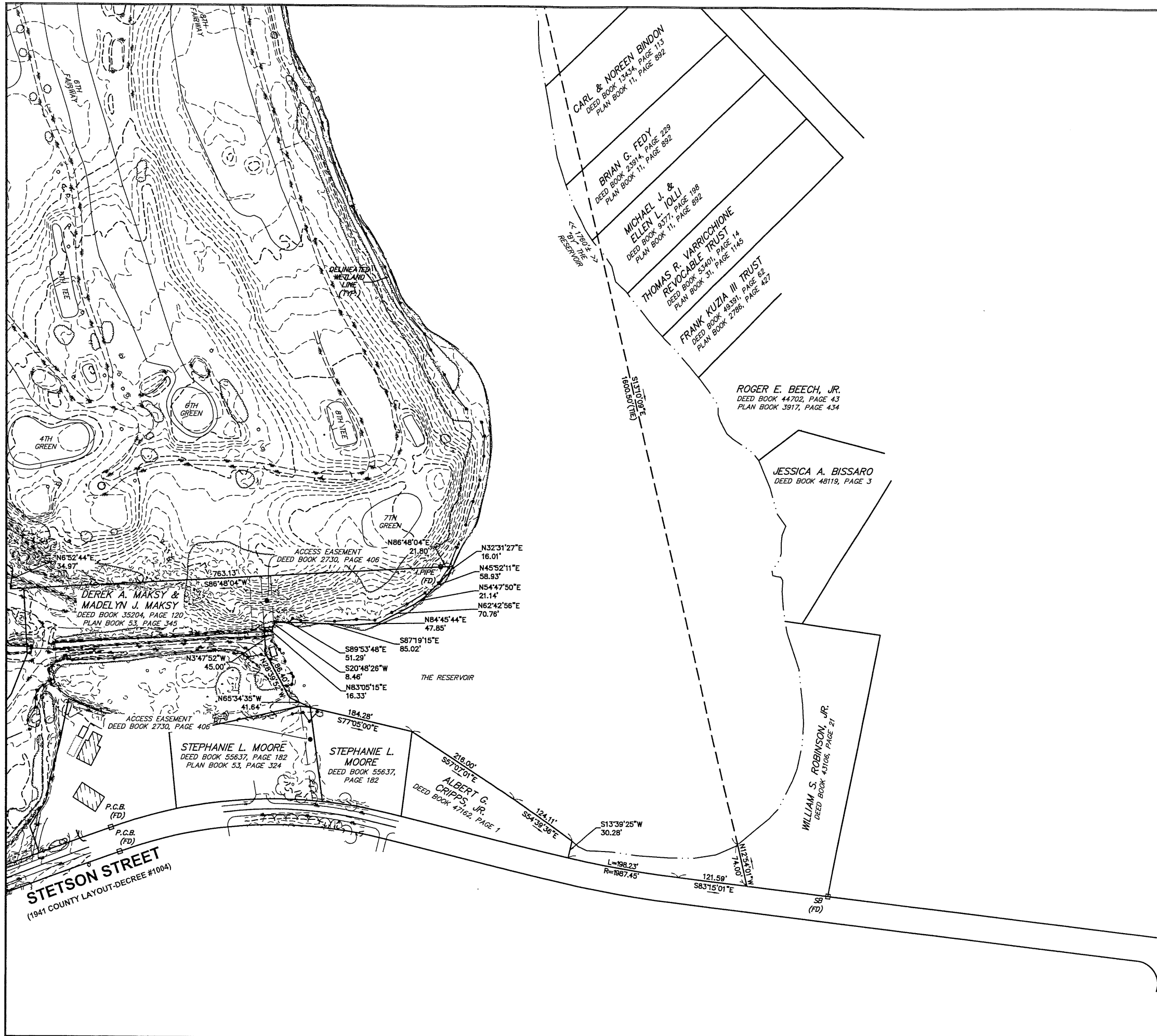


LAKEVILLE PLANNING BOARD
APPROVED UNDER THE SUBDIVISION CONTROL LAW
APPROVED: _____
ENDORSED: _____

I HEREBY CERTIFY THAT THE NOTICE OF APPROVAL OF THIS PLAN BY THE LAKEVILLE PLANNING BOARD WAS RECEIVED AND RECORDED ON _____ AT THIS OFFICE, AND NO APPEAL WAS RECEIVED DURING THE TWENTY (20) DAYS NEXT AFTER SUCH RECEIPT OF RECORDING OF SAID NOTICE.

TOWN CLERK, LAKEVILLE, MA DATE _____





LAKEVILLE PLANNING BOARD
APPROVED UNDER THE SUBDIVISION CONTROL LAW

APPROVED: _____
 ENDORSED _____

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TOWN CLERK, LAKEVILLE, MA DATE _____

#44 CLEAR POND ROAD

Lakeville, Massachusetts 02347

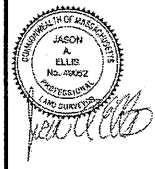
PREPARED FOR:
**DEREK
A.
MAKSY**

44 Clear Pond Road
Lakeville, Massachusetts 02347

HANCOCK ASSOCIATES

Civil Engineers
Land Surveyors
Wetland Scientists

315 ELM STREET, MARLBOROUGH, MA 01752
VOICE (508) 460-1111, FAX (508) 460-1121
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NO.	BY	APP	DATE	ISSUE/REVISION DESCRIPTION

DATE: 11/15/2022 DRAWN BY: JML
SCALE: 1"=80' CHECK BY: JAE

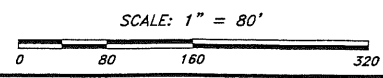
EXISTING CONDITIONS PLAN OF LAND IN LAKEVILLE, MA

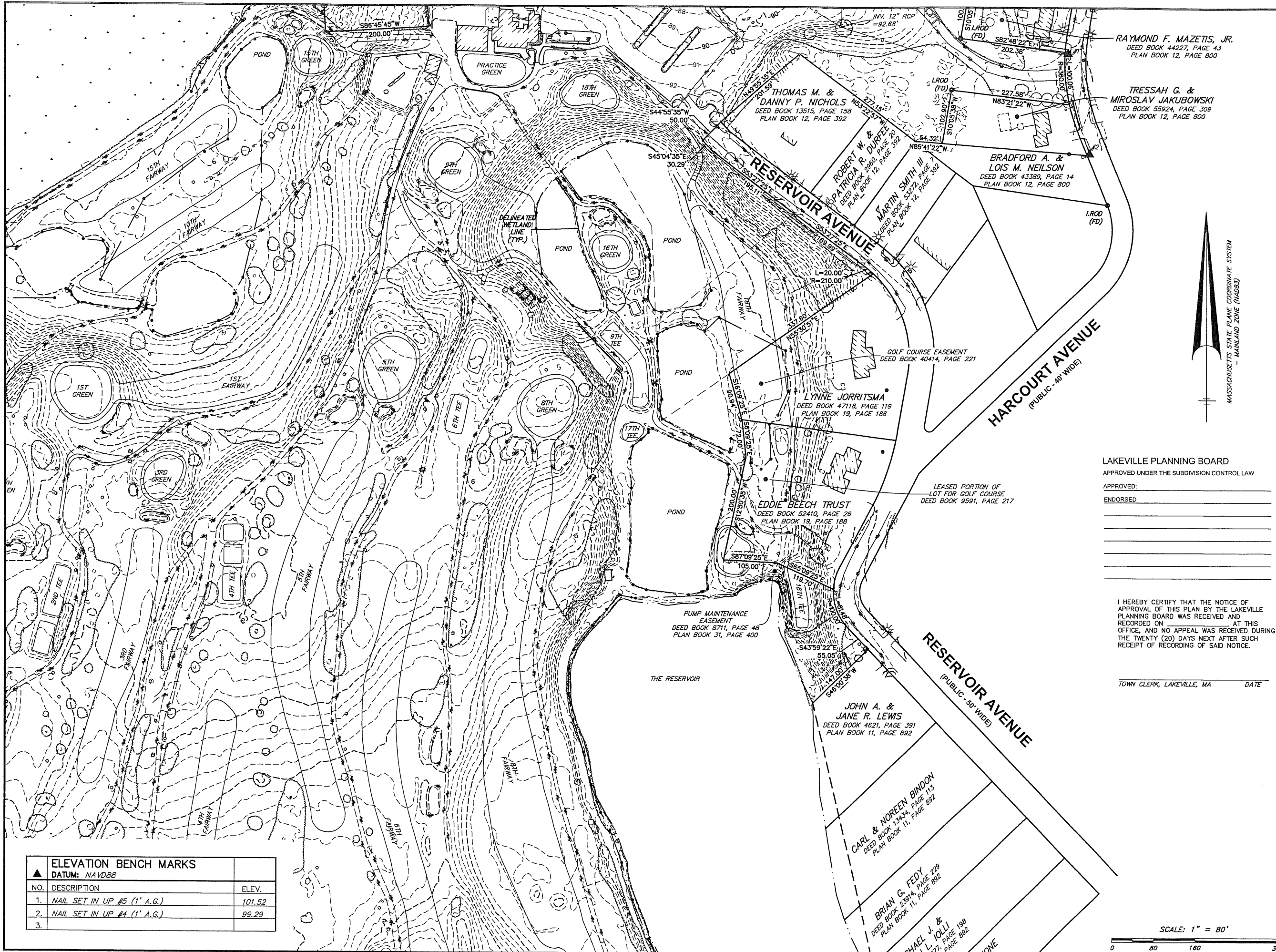
PLT DATE: Nov 16, 2022 4:11 pm
 FILE: G:\V4\30 Projects\26623 - Maksy - Lakeville\DWG\

DWG: 26623sv.dwg
LAYOUT: EC (5)
SHEET: 6 OF 16

EC-5

PROJECT NO.: 26623





#44
CLEAR
POND ROAD

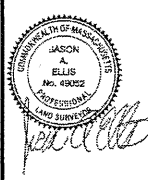
Lakeville, Massachusetts 02347

PREPARED FOR
**DEREK
A.
MAKSY**
44 Clear Pond Road
Lakeville, Massachusetts 02347

**HANCOCK
ASSOCIATES**

Civil Engineers
Land Surveyors
Wetland Scientists

315 ELM STREET, MARLBOROUGH, MA 01752
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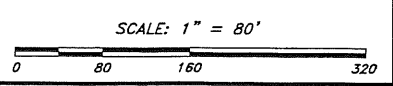


LAKEVILLE PLANNING BOARD
APPROVED UNDER THE SUBDIVISION CONTROL LAW
APPROVED: _____
ENDORSED: _____

I HEREBY CERTIFY THAT THE NOTICE OF APPROVAL OF THIS PLAN BY THE LAKEVILLE PLANNING BOARD WAS RECEIVED AND RECORDED ON _____ AT THIS OFFICE, AND NO APPEAL WAS RECEIVED DURING THE TWENTY (20) DAYS NEXT AFTER SUCH RECEIPT OF RECORDING OF SAID NOTICE.

TOWN CLERK, LAKEVILLE, MA DATE _____

ELEVATION BENCH MARKS		
DATUM: NAVD88		
NO.	DESCRIPTION	ELEV.
1.	NAIL SET IN UP #5 (1' A.G.)	101.52
2.	NAIL SET IN UP #4 (1' A.G.)	99.29
3.		

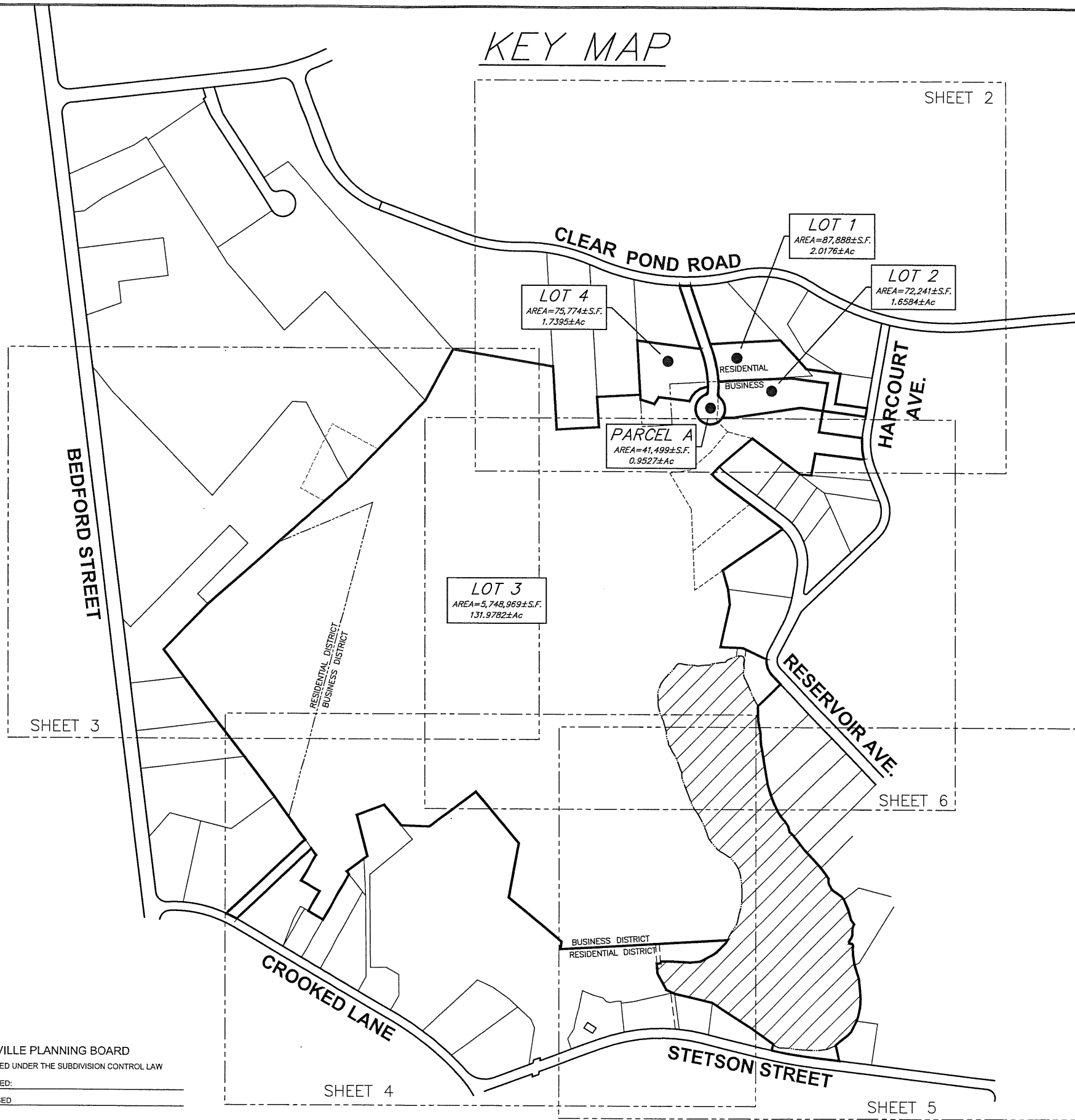


**EXISTING CONDITIONS
PLAN OF LAND
IN
LAKEVILLE, MA**

DATE: 11/15/2022 DRAWN BY: JML
SCALE: 1"=80' CHECK BY: JAE
DWG: 26623sv.dwg
LAYOUT: EC (6)
SHEET: 7 OF 16
PROJECT NO.: 26623

EC-6

KEY MAP



NOTES:

- 1) THE PURPOSE OF THIS PLAN IS TO SUBDIVIDE 44 CLEAR POND ROAD (MAP 59, BLOCK 1, LOT 50), 31 RESERVOIR AVENUE (MAP 59, BLOCK 1, LOT 50-2), 33 RESERVOIR AVENUE (MAP 59, BLOCK 1, LOT 50-3) AND 59 HARCOURT AVENUE (MAP 59, BLOCK 1, LOT 50-1) INTO TWO (4) BUILDABLE LOTS AND GOLFERS WAY (PARCEL A).
- 2) THE HORIZONTAL DATUM FOR THIS SURVEY IS THE MASSACHUSETTS COORDINATE SYSTEM, NAD 1983, MAINLAND ZONE. SAID DATUM WAS ESTABLISHED VIA GPS OBSERVATIONS UTILIZING NAD83 (NA2011) EPOCH 2010.00 (MYCS2) AND GEOID 18.
- 3) WETLANDS SHOWN HEREON WERE DELINEATED BY OTHERS AND LOCATED VIA FIELD SURVEY BY HANCOCK ASSOCIATES IN APRIL THROUGH AUGUST, 2022.
- 4) GOLFERS WAY IS A PROPOSED VARIABLE WIDTH PRIVATE RIGHT OF WAY.
- 5) LOCATION OF ABUTTING LAND OF JOHN E. BEECH SHOWN HEREON WAS COMPILED FROM TOWN OF LAKEVILLE GIS MAPPING SYSTEM. THE LOT COULD NOT BE ACCURATELY PLACED DUE TO POOR DEED DESCRIPTIONS AND LACK OF RECORD PLANS.

I HEREBY CERTIFY THAT THE NOTICE OF APPROVAL OF THIS PLAN BY THE LAKEVILLE PLANNING BOARD WAS RECEIVED AND RECORDED ON _____ AT THIS OFFICE, AND NO APPEAL WAS RECEIVED DURING THE TWENTY (20) DAYS NEXT AFTER SUCH RECEIPT OF RECORDING OF SAID NOTICE.

TOWN CLERK, LAKEVILLE, MA DATE _____

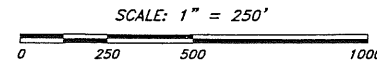
I CERTIFY THAT THIS PLAN CONFORMS TO THE RULES AND REGULATIONS OF THE REGISTERS OF DEEDS.

DATE _____ PROFESSIONAL LAND SURVEYOR

FOR REGISTRY USE

LAKEVILLE PLANNING BOARD
APPROVED UNDER THE SUBDIVISION CONTROL LAW

APPROVED: _____
ENDORSED _____



ASSESSORS:

- 44 CLEAR POND ROAD
MAP 59, BLOCK 1, LOT 50
- 31 RESERVOIR AVENUE
MAP 59, BLOCK 1, LOT 50-2
- 33 RESERVOIR AVENUE
MAP 59, BLOCK 1, LOT 50-3
- 59 HARCOURT AVENUE
MAP 59, BLOCK 1, LOT 50-1

REFERENCES:

- DEED BOOK 40414, PAGE 215 (TRACT I)
- DEED BOOK 48309, PAGE 345 (TRACT II)
- PLAN IN BOOK 6, PAGE 211
- PLAN IN BOOK 29, PAGE 374
- PLAN IN BOOK 40, PAGE 1008
- PLAN IN BOOK 40, PAGE 1105
- PLAN IN BOOK 53, PAGE 324
- PLAN IN BOOK 53, PAGE 345
- PLAN IN BOOK 56, PAGE 775
- PLAN IN BOOK 63, PAGE 489

RECORD OWNER:

WEBSTER REALTY TRUST
DEREK A. MAKSY, TRUSTEE

DEREK A. MAKSY
44 CLEAR POND ROAD
LAKEVILLE, MA 02347

ZONING:

(FROM TOWN OF LAKEVILLE ZONING MAP, DATED OCTOBER 11, 2018)
BUSINESS
RESIDENTIAL

ZONING TABLE

LOT 1		
	REQUIRED	PROPOSED
LOT AREA	70,000 S.F.	87,888±S.F. (TOTAL) 76,382±S.F. (EXCLUDING 40' WIDE PORTION OF LOT)
FRONTAGE (ON PROPOSED R.O.W.)	175 FEET	180.17 FEET
FRONTAGE (TOTAL ON ALL OTHER ROADS)	175 FEET	40.10 FEET

LOT 2		
	REQUIRED	PROPOSED
LOT AREA	70,000 S.F.	72,241± S.F.
FRONTAGE (ON PROPOSED R.O.W.)	175 FEET	176.27 FEET
FRONTAGE (TOTAL ON ALL OTHER ROADS)	175 FEET	0 FEET

LOT 3		
	REQUIRED	PROPOSED
LOT AREA	70,000 S.F.	5,748,969± S.F.
FRONTAGE (ON PROPOSED R.O.W.)	175 FEET	306.20 FEET
FRONTAGE (TOTAL ON ALL OTHER ROADS)	175 FEET	1,075 FEET

LOT 4		
	REQUIRED	PROPOSED
LOT AREA	70,000 S.F.	75,774± S.F. (TOTAL) 70,119± S.F. (EXCLUDING EASEMENT A)
FRONTAGE (ON PROPOSED R.O.W.)	175 FEET	176.90 FEET
FRONTAGE (TOTAL ON ALL OTHER ROADS)	175 FEET	0 FEET

SETBACKS		
FRONT YARD	40'(MIN.)	
SIDE YARD	40'(MIN.) (BUS.)	20'(MIN.) (RES.)
REAR YARD	40'(MIN.) (BUS.) 20'(MIN.) (RES.)	

GOLFERS WAY

(A DEFINITIVE SUBDIVISION IN LAKEVILLE, MA)

44 Clear Pond Road
Lakeville, Massachusetts 02347

ASSESSORS:

MAP	BLOCK	LOT
59	1	50

PREPARED FOR:

DEREK A. MAKSY

44 Clear Pond Road
Lakeville, Massachusetts 02347

HANCOCK ASSOCIATES

Civil Engineers
Land Surveyors
Wetland Scientists

315 ELM STREET, MARLBOROUGH, MA 01752
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NO.	BY	APP	DATE	ISSUE/REVISION DESCRIPTION
3.	J.M.L.	J.A.E.	6/7/23	PLANNING BOARD COMMENTS
2.	J.M.L.	J.A.E.	5/22/23	PLANNING BOARD COMMENTS
1.	J.M.L.	J.A.E.	5/4/23	PLANNING BOARD COMMENTS

DATE: 11/15/2022 DRAWN BY: J.M.L.
SCALE: 1"=250' CHECK BY: J.A.E.

DEFINITIVE SUBDIVISION PLAN OF LAND IN LAKEVILLE, MA

PLAT DATE: Jan 12, 2023 8:35 am
FILE: D:\2024 33 Proj\20240102\2023 - Maksy - Lakeville\DWG\DWG1

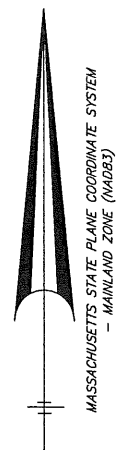
DWG: 26623sv3.dwg

LAYOUT: DT201A

SHEET: 8 OF 17

L-1

PROJECT NO.: 26623



NOTE:
SEE SHEET 1 FOR REFERENCES, ASSESSORS' INFORMATION, OWNERS, AND NOTES

LEGEND (EXISTING)

- EDGE OF PAVEMENT
- x—x— CHAIN LINK FENCE
- o—o— WOOD FENCE
- EDGE OF GRAVEL ROAD
- DHCB □ DRILL HOLE IN CONCRETE BOUND
- DHSB □ DRILL HOLE IN STONE BOUND
- I.P.I.P.E. ○ IRON PIPE
- I.ROD ○ IRON ROD
- P.C.B. ○ PLYMOUTH COUNTY BOUND

I CERTIFY THAT THIS PLAN CONFORMS TO THE RULES AND REGULATIONS OF THE REGISTERS OF DEEDS.

DATE _____ PROFESSIONAL LAND SURVEYOR _____

FOR REGISTRY USE

LEGEND (PROPOSED)

- DHSB ■ PROPOSED DRILL HOLE IN STONE BOUND
- I.ROD ● PROPOSED IRON ROD
- — — PROPOSED ZONING (BUILDING) SETBACK LINE

LAKEVILLE PLANNING BOARD
APPROVED UNDER THE SUBDIVISION CONTROL LAW

APPROVED: _____
ENDORSED: _____

I HEREBY CERTIFY THAT THE NOTICE OF APPROVAL OF THIS PLAN BY THE LAKEVILLE PLANNING BOARD WAS RECEIVED AND RECORDED ON _____ AT THIS OFFICE, AND NO APPEAL WAS RECEIVED DURING THE TWENTY (20) DAYS NEXT AFTER SUCH RECEIPT OF RECORDING OF SAID NOTICE.

TOWN CLERK, LAKEVILLE, MA DATE _____

GOLFERS WAY

(A DEFINITIVE SUBDIVISION IN LAKEVILLE, MA)

44 Clear Pond Road
Lakeville, Massachusetts 02347

ASSESSORS:

MAP 59 BLOCK 1 LOT 50

PREPARED FOR:

DEREK A. MAKSY

44 Clear Pond Road
Lakeville, Massachusetts 02347

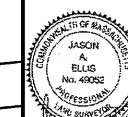
HANCOCK ASSOCIATES

Civil Engineers

Land Surveyors

Wetland Scientists

315 ELM STREET, MARLBOROUGH, MA 01752
VOICE (508) 460-1111, FAX (508) 460-1121
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3.	JML JAE	6/7/23	PLANNING BOARD COMMENTS
2.	JML JAE	5/22/23	PLANNING BOARD COMMENTS
1.	JML JAE	5/4/23	PLANNING BOARD COMMENTS

NO.	BY	APP	DATE	ISSUE/REVISION DESCRIPTION

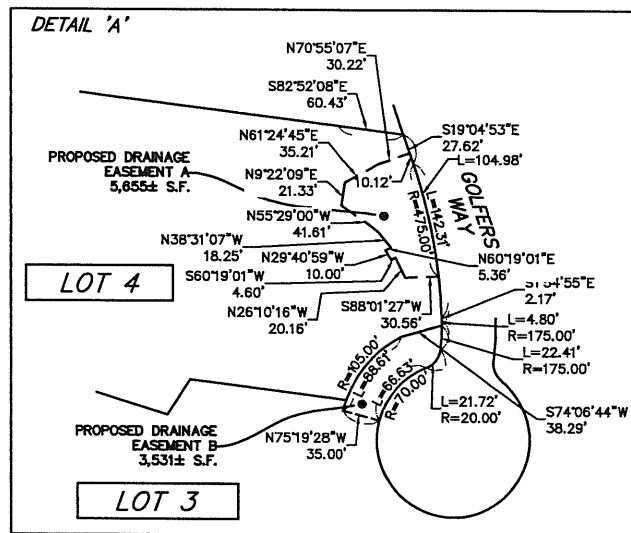
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SCALE: 1"=80' CHECK BY: JAE

DEFINITIVE SUBDIVISION PLAN OF LAND IN LAKEVILLE, MA

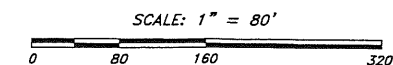
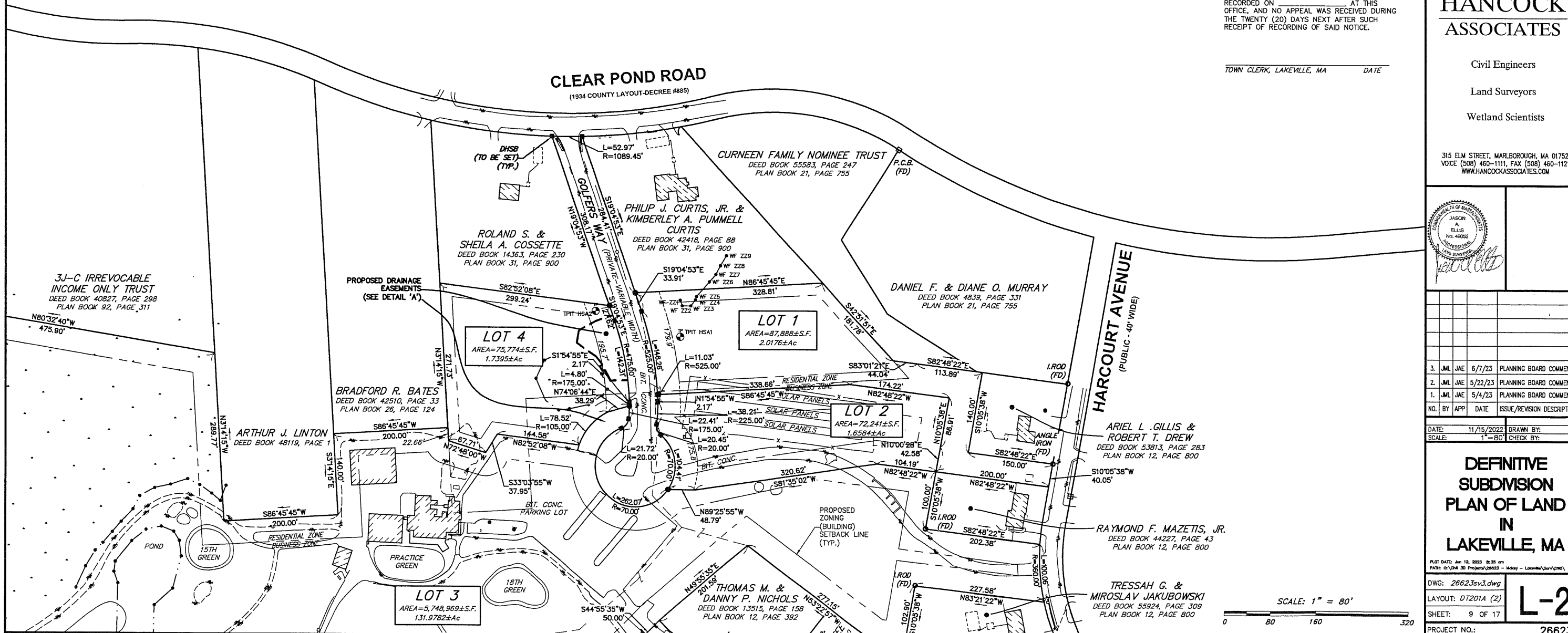
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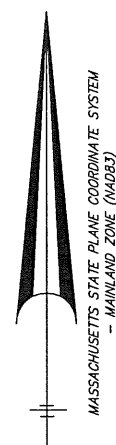
DWG: 26623sv3.dwg
LAYOUT: DT201A (2)
SHEET: 9 OF 17
PROJECT NO.: 26623

L-2



CLEAR POND ROAD
(1934 COUNTY LAYOUT-DECREE #885)





NOTE:
SEE SHEET 1 FOR REFERENCES, ASSESSORS' INFORMATION, OWNERS, AND NOTES

LAKEVILLE PLANNING BOARD
APPROVED UNDER THE SUBDIVISION CONTROL LAW
APPROVED: _____
ENDORSED: _____

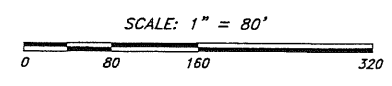
I HEREBY CERTIFY THAT THE NOTICE OF APPROVAL OF THIS PLAN BY THE LAKEVILLE PLANNING BOARD WAS RECEIVED AND RECORDED ON _____ AT THIS OFFICE, AND NO APPEAL WAS RECEIVED DURING THE TWENTY (20) DAYS NEXT AFTER SUCH RECEIPT OF RECORDING OF SAID NOTICE.

TOWN CLERK, LAKEVILLE, MA DATE _____

I CERTIFY THAT THIS PLAN CONFORMS TO THE RULES AND REGULATIONS OF THE REGISTERS OF DEEDS.

DATE _____ PROFESSIONAL LAND SURVEYOR

FOR REGISTRY USE



BEDFORD STREET
(PUBLIC - 66' WIDE)
(S.H.L.O. 2850)

DONNA STAGMAN
DEED BOOK 45776, PAGE 275
PLAN BOOK 5197, PAGE 238

DANIEL J. & KAREN P. CASIERI
DEED BOOK 6127, PAGE 59
PLAN BOOK 22, PAGE 322

GEORGE A. ROBINSON
DEED BOOK 43460, PAGE 225
PLAN BOOK 22, PAGE 322

JD REALTY TRUST
DEED BOOK 16392, PAGE 84

JOHN E. BEECH
DEED BOOK 6536, PAGE 64
COMPILED FROM LAKEVILLE ASSESSOR GIS MAPS
(SEE NOTE #5)

SOUTHCOAST REDEVELOPMENT, LLC
DEED BOOK 52901, PAGE 229
PLAN BOOK 56, PAGE 775

TIMOTHY P. & TARA J. WYNN
DEED BOOK 33547, PAGE 69
PLAN BOOK 41, PAGE 797

LOT 3
AREA=5,748,969±S.F.
131.9782±Ac

ZONING SETBACK LINE (TYP.)

DELINEATED WETLAND LINE (TYP.)

15TH FAIRWAY

10TH FAIRWAY

1ST FAIRWAY

14TH FAIRWAY

13TH FAIRWAY

11TH FAIRWAY

11TH TEE

10TH GREEN

12TH GREEN

1ST GREEN

3RD GREEN

2ND TEE

4TH TEE

POND

1 PIPE (FD)

N80°32'40"W
475.90'

S44°21'0"W
913.50'

N44°13'22"E
1642.88' (TYP.)
1640.31'(R)

S89°32'17"W
872.31'

S28°39'55"E
2489.80'

PLAN BOOK 92, PAGE 311

GOLFERS WAY

(A DEFINITIVE SUBDIVISION IN LAKEVILLE, MA)

44 Clear Pond Road
Lakeville, Massachusetts 02347

ASSESSORS:

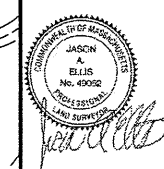
MAP	BLOCK	LOT
59	1	50

PREPARED FOR:
DEREK A. MAKSY
44 Clear Pond Road
Lakeville, Massachusetts 02347

HANCOCK ASSOCIATES

Civil Engineers
Land Surveyors
Wetland Scientists

315 ELM STREET, MARLBOROUGH, MA 01752
VOICE (508) 460-1111, FAX (508) 460-1121
WWW.HANCOCKASSOCIATES.COM



NO.	BY	APP	DATE	ISSUE/REVISION DESCRIPTION
3.	JML	JAE	6/7/23	PLANNING BOARD COMMENTS
2.	JML	JAE	5/22/23	PLANNING BOARD COMMENTS
1.	JML	JAE	5/4/23	PLANNING BOARD COMMENTS

DATE: 11/15/2022 DRAWN BY: JML
SCALE: 1"=80' CHECK BY: JAE

DEFINITIVE SUBDIVISION PLAN OF LAND IN LAKEVILLE, MA

PLOT DATE: Jan 12, 2023 8:35 am
PATH: C:\V04_30\Projects\26623 - Maksy - Lakeville\Plan\DWG\

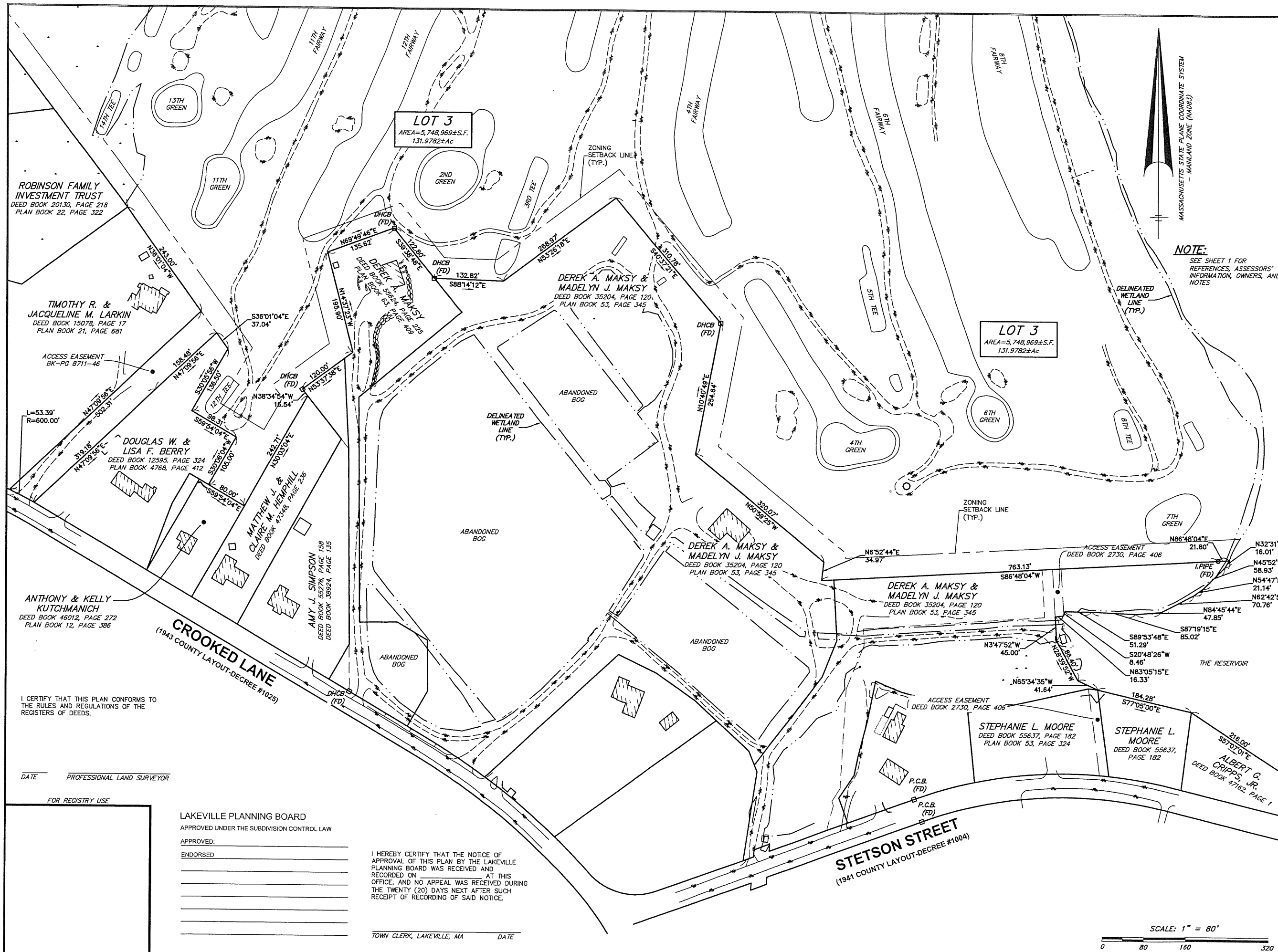
DWG: 26623sv3.dwg

LAYOUT: D7201A (3)

SHEET: 10 OF 17

PROJECT NO.: 26623

L-3

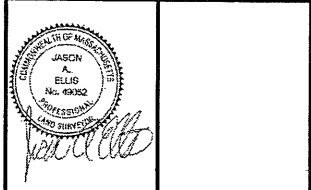


GOLFERS WAY
 (A DEFINITIVE SUBDIVISION IN LAKEVILLE, MA)
 44 Clear Pond Road
 Lakeville, Massachusetts 02347

ASSESSORS:
 MAP 59 BLOCK 1 LOT 50

PREPARED FOR:
DEREK A. MAKSY
 44 Clear Pond Road
 Lakeville, Massachusetts 02347

HANCOCK ASSOCIATES
 Civil Engineers
 Land Surveyors
 Wetland Scientists
 315 ELM STREET, MARLBOROUGH, MA 01752
 VOICE (508) 460-1111, FAX (508) 460-1121
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2.	JML	JAE	5/22/23	PLANNING BOARD COMMENTS
1.	JML	JAE	5/4/23	PLANNING BOARD COMMENTS

DATE: 11/15/2022 DRAWN BY: JML
 SCALE: 1"=80' CHECK BY: JAE

DEFINITIVE SUBDIVISION PLAN OF LAND IN LAKEVILLE, MA

PLAT DATE: Jun 12, 2023 10:35 AM
 FILE: G:\V04_30 Proj\2023\26623 - Maksy - Lakeville\Surf\DWG
 DWG: 26623sv3.dwg
 LAYOUT: DT201A (4)
 SHEET: 11 OF 17
 PROJECT NO.: 26623

ROBINSON FAMILY INVESTMENT TRUST
 DEED BOOK 20130, PAGE 218
 PLAN BOOK 22, PAGE 322

TIMOTHY R. & JACQUELINE M. LARKIN
 DEED BOOK 15078, PAGE 17
 PLAN BOOK 21, PAGE 681

DOUGLAS W. & LISA F. BERRY
 DEED BOOK 12595, PAGE 324
 PLAN BOOK 4768, PAGE 412

ANTHONY & KELLY KUTCHMANICH
 DEED BOOK 46012, PAGE 272
 PLAN BOOK 12, PAGE 386

MATTHEW J. & CLARE M. HEMPHILL
 DEED BOOK 47348, PAGE 236

AMY J. SIMPSON
 DEED BOOK 55276, PAGE 158
 DEED BOOK 38924, PAGE 135

DEREK A. MAKSY & MADELYN J. MAKSY
 DEED BOOK 35204, PAGE 120
 PLAN BOOK 53, PAGE 345

DEREK A. MAKSY & MADELYN J. MAKSY
 DEED BOOK 35204, PAGE 120
 PLAN BOOK 53, PAGE 345

STEPHANIE L. MOORE
 DEED BOOK 55637, PAGE 182
 PLAN BOOK 53, PAGE 324

STEPHANIE L. MOORE
 DEED BOOK 55637, PAGE 182

ALBERT G. CRIPPS, JR.
 DEED BOOK 47162, PAGE 1

I CERTIFY THAT THIS PLAN CONFORMS TO THE RULES AND REGULATIONS OF THE REGISTERS OF DEEDS.

DATE _____ PROFESSIONAL LAND SURVEYOR

FOR REGISTRY USE

LAKEVILLE PLANNING BOARD
 APPROVED UNDER THE SUBDIVISION CONTROL LAW

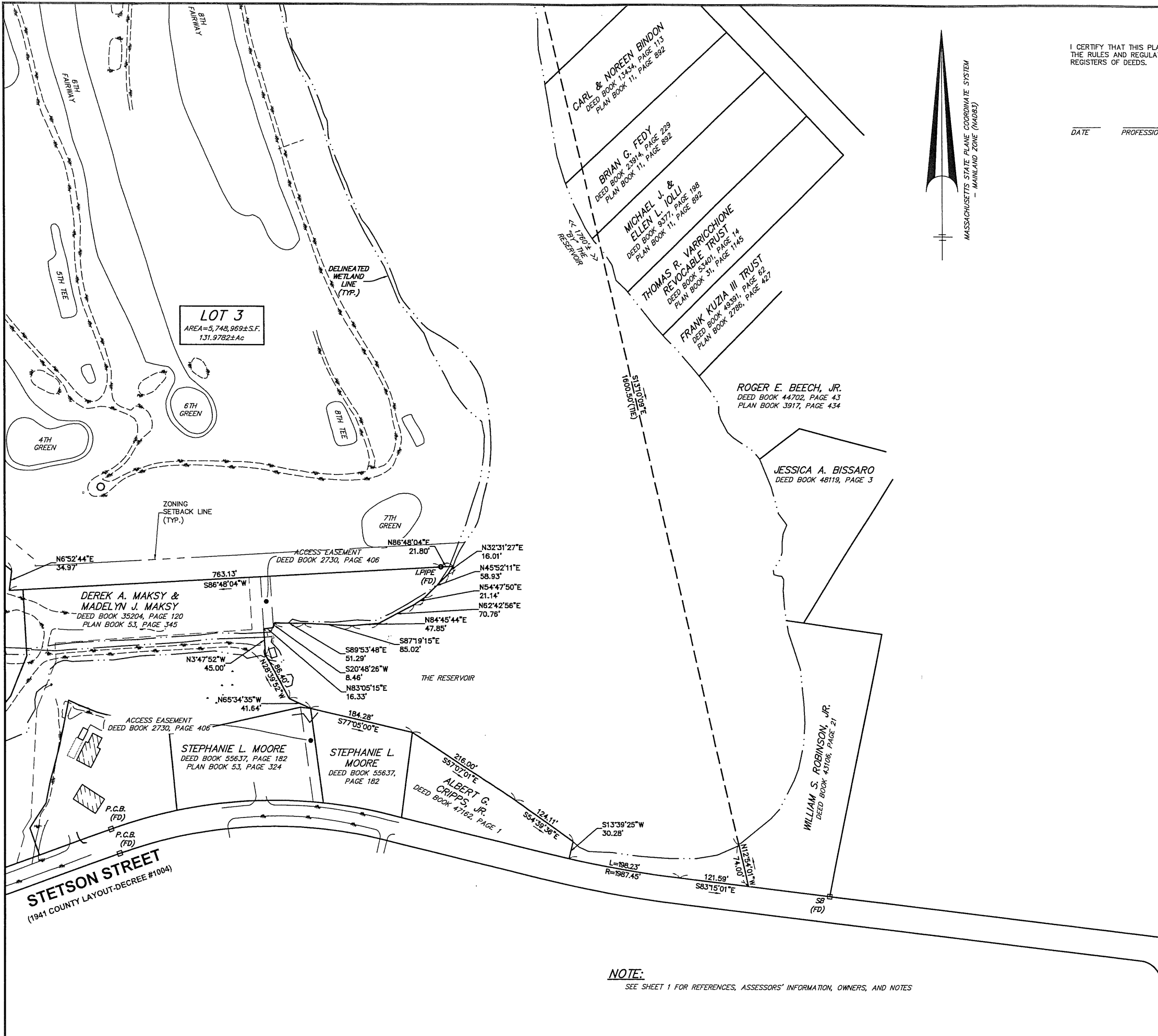
APPROVED: _____
 ENDORSED: _____

I HEREBY CERTIFY THAT THE NOTICE OF APPROVAL OF THIS PLAN BY THE LAKEVILLE PLANNING BOARD WAS RECEIVED AND RECORDED ON _____ AT THIS OFFICE, AND NO APPEAL WAS RECEIVED DURING THE TWENTY (20) DAYS NEXT AFTER SUCH RECEIPT OF RECORDING OF SAID NOTICE.

TOWN CLERK, LAKEVILLE, MA DATE _____

SCALE: 1" = 80'
 0 80 160 320

L-4



I CERTIFY THAT THIS PLAN CONFORMS TO THE RULES AND REGULATIONS OF THE REGISTERS OF DEEDS.

DATE _____ PROFESSIONAL LAND SURVEYOR

FOR REGISTRY USE

LAKEVILLE PLANNING BOARD
APPROVED UNDER THE SUBDIVISION CONTROL LAW

APPROVED: _____
ENDORSED: _____

I HEREBY CERTIFY THAT THE NOTICE OF APPROVAL OF THIS PLAN BY THE LAKEVILLE PLANNING BOARD WAS RECEIVED AND RECORDED ON _____ AT THIS OFFICE, AND NO APPEAL WAS RECEIVED DURING THE TWENTY (20) DAYS NEXT AFTER SUCH RECEIPT OF RECORDING OF SAID NOTICE.

TOWN CLERK, LAKEVILLE, MA DATE _____

GOLFERS WAY
(A DEFINITIVE SUBDIVISION IN LAKEVILLE, MA)

44 Clear Pond Road
Lakeville, Massachusetts 02347

ASSESSORS:

MAP	BLOCK	LOT
59	1	50

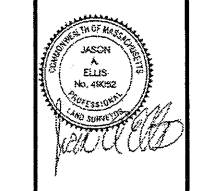
PREPARED FOR:

DEREK A. MAKSY
44 Clear Pond Road
Lakeville, Massachusetts 02347

HANCOCK ASSOCIATES

Civil Engineers
Land Surveyors
Wetland Scientists

315 ELM STREET, MARLBOROUGH, MA 01752
VOICE (508) 460-1111, FAX (508) 460-1121
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NO.	BY	APP	DATE	ISSUE/REVISION DESCRIPTION
3.	JML	JAE	6/7/23	PLANNING BOARD COMMENTS
2.	JML	JAE	5/22/23	PLANNING BOARD COMMENTS
1.	JML	JAE	5/4/23	PLANNING BOARD COMMENTS

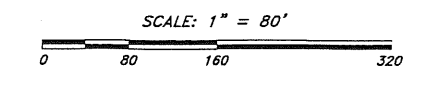
DATE: 11/5/2022 DRAWN BY: JML
SCALE: 1"=80' CHECK BY: JAE

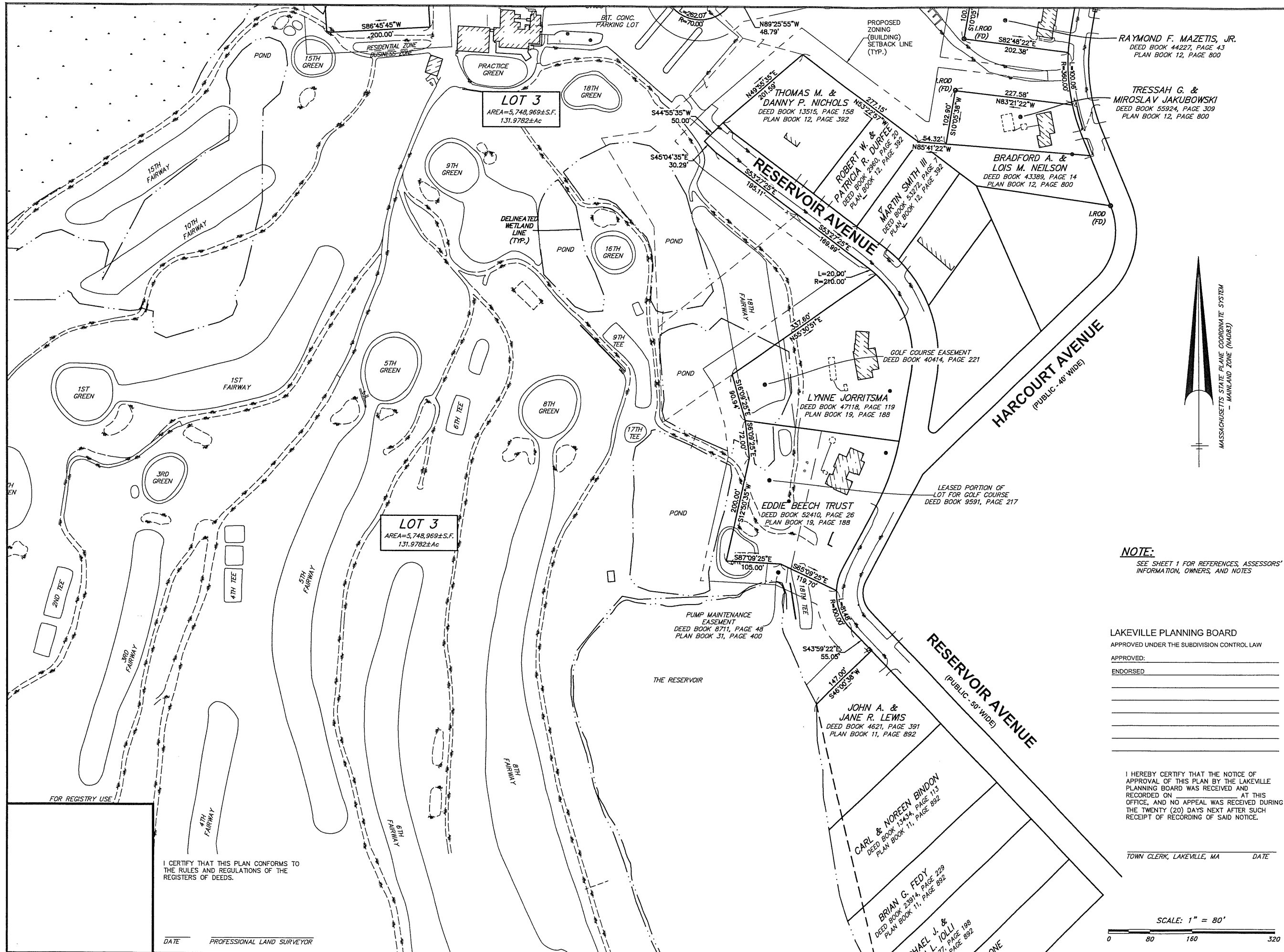
DEFINITIVE SUBDIVISION PLAN OF LAND IN LAKEVILLE, MA

PLATT DATE: Jan 12, 2023 8:38 am
PATH: G:\DWM\20 Proj\2023\2023-11-Maksy - Lakeville\Surv\DWG\

DWG: 26623sv3.dwg
LAYOUT: DT201A (5)
SHEET: 12 OF 17
PROJECT NO.: 26623

NOTE:
SEE SHEET 1 FOR REFERENCES, ASSESSORS' INFORMATION, OWNERS, AND NOTES





NOTE:
SEE SHEET 1 FOR REFERENCES, ASSESSORS' INFORMATION, OWNERS, AND NOTES

LAKEVILLE PLANNING BOARD
APPROVED UNDER THE SUBDIVISION CONTROL LAW

APPROVED: _____

ENDORSED _____

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TOWN CLERK, LAKEVILLE, MA DATE _____

SCALE: 1" = 80'

0 80 160 320

I CERTIFY THAT THIS PLAN CONFORMS TO THE RULES AND REGULATIONS OF THE REGISTERS OF DEEDS.

DATE _____ PROFESSIONAL LAND SURVEYOR

GOLFERS WAY
(A DEFINITIVE SUBDIVISION IN LAKEVILLE, MA)

44 Clear Pond Road
Lakeville, Massachusetts 02347

ASSESSORS:
MAP 59 BLOCK 1 LOT 50

PREPARED FOR:
DEREK A. MAKSY
44 Clear Pond Road
Lakeville, Massachusetts 02347

HANCOCK ASSOCIATES
Civil Engineers
Land Surveyors
Wetland Scientists

315 ELM STREET, MARLBOROUGH, MA 01752
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DEFINITIVE SUBDIVISION PLAN OF LAND IN LAKEVILLE, MA

DATE: 11/15/2022 DRAWN BY: JML
SCALE: 1"=80' CHECK BY: JAE

3.	JML	JAE	6/7/23	PLANNING BOARD COMMENTS
2.	JML	JAE	5/22/23	PLANNING BOARD COMMENTS
1.	JML	JAE	5/4/23	PLANNING BOARD COMMENTS
NO.	BY	APP	DATE	ISSUE/REVISION DESCRIPTION

DWG: 26623sv3.dwg
LAYOUT: DT201A (6)
SHEET: 13 OF 17
PROJECT NO.: 26623

L-6

GOLFERS WAY

44 Clear Pond Road
Lakeville, Massachusetts 02347

ASSESSORS:

MAP 59 BLOCK 1 LOT 50

PREPARED FOR:

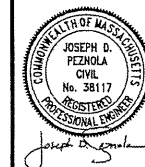
DEREK A. MAKSY

44 Clear Pond Road
Lakeville, Massachusetts 02347

HANCOCK ASSOCIATES

Civil Engineers
Land Surveyors
Wetland Scientists

315 ELM STREET, MARLBOROUGH, MA 01752
VOICE (978) 777-3050, FAX (978) 774-7816
WWW.HANCOCKASSOCIATES.COM



Joseph D. Pezola

- NOTES:**
- THE PURPOSE OF THIS PLAN IS TO SHOW ROADWAY IMPROVEMENTS
 - NO PROPOSED WORK ON LOTS 1, 2, AND 4 OUTSIDE OF WHAT IS SHOWN HEREON
 - REFER TO SHEET L-2 FOR LOCATIONS OF PROPOSED MONUMENTS STONE (GRANITE) BOUNDS AND IRON RODS
 - PROPOSED STREET NAME SIGN TO CONFORM WITH STANDARD ESTABLISHED BY THE HIGHWAY SURVEYOR. SIGN POST TO INCLUDE A "PRIVATE WAY" SIGN UNTIL SUCH TIME AS THE STREET IS ACCEPTED AS A PUBLIC WAY.
- BENCHMARK INFORMATION**
- FOR BENCHMARK INFORMATION REFER TO EXISTING CONDITIONS PLAN EC-6, PLAN SET SHEET 7
 - VERTICAL DATUM OF THIS PLAN IS NAVD88

3	DTW	JP	6/1/2023	PEER REVIEW COMMENTS
2	DTW	JP	5/22/2023	PLANNING BOARD COMMENTS
1	DTW	JP	5/4/2023	PLANNING BOARD COMMENTS
NO. BY APP DATE ISSUE/REVISION DESCRIPTION				
DATE:		11/15/22		DESIGN BY: DTW
SCALE:		AS NOTED		DRAWN BY: JML
APPRVD. BY:		JP		CHECK BY: MC

PLAN AND PROFILE

PLT DATE: Jan 14, 2023 10:15 am
PATH: \\user-mas001\2023-2\04-30 Projects\26623 - Midway - Lakeville\dwg\

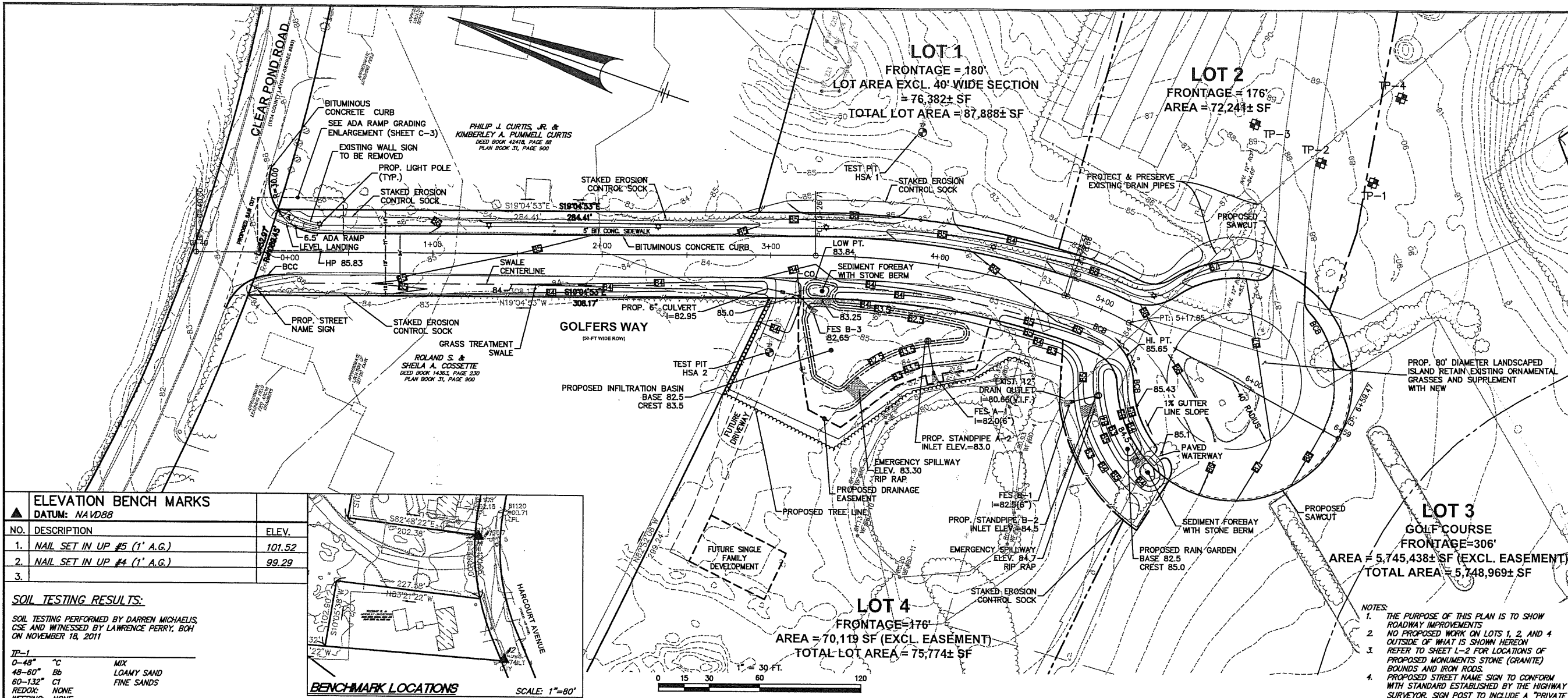
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LAYOUT: C-1

SHEET: 14 OF 17

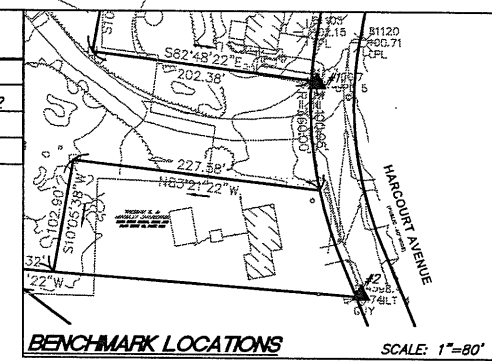
PROJECT NO.: 26623

C-1



ELEVATION BENCH MARKS
DATUM: NAVD88

NO.	DESCRIPTION	ELEV.
1.	NAIL SET IN UP #5 (1' A.G.)	101.52
2.	NAIL SET IN UP #4 (1' A.G.)	99.29
3.		



SOIL TESTING RESULTS:

SOIL TESTING PERFORMED BY DARREN MICHAELIS, CSE AND WITNESSED BY LAWRENCE PERRY, BOH ON NOVEMBER 18, 2011

TP-1

0-48"	°C	MIX
48-60"	Bb	LOAMY SAND
60-132"	C1	FINE SANDS
REDOX:	NONE	
WEEPING:	NONE	
DEPTH TO GROUNDWATER:	>132"	

TP-2

0-38"	°C	MIX
38-48"	Bb	LOAMY SAND
48-108"	C1	FINE SANDS
REDOX:	NONE	
WEEPING:	NONE	
DEPTH TO GROUNDWATER:	>132"	

TP-3

0-72"	°C	MIX
72-120"	C1	SANDS
REDOX:	NONE	
WEEPING:	NONE	
DEPTH TO GROUNDWATER:	>132"	

TP-4

0-72"	°C	MIX
72-120"	C1	SANDS
REDOX:	NONE	
WEEPING:	NONE	
DEPTH TO GROUNDWATER:	>132"	

PERCOLATION TEST

OBSERVATION HOLE #	1	4	A
DEPTH OF PERC	60-78"	62-80"	50-68"
START PRE-SOAK	9:58	10:07	10:59
END PRE-SOAK	10:13	10:22	11:14
TIME AT 12"	10:13		11:14
TIME AT 9"	10:26		11:19
TIME AT 6"	10:41	10:10	11:25
TIME FROM 9"-6"	15		6
RATE (MIN/INCH)	5 MPI	<2 MPI	2 MPI

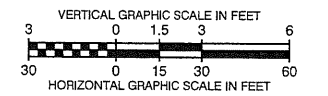
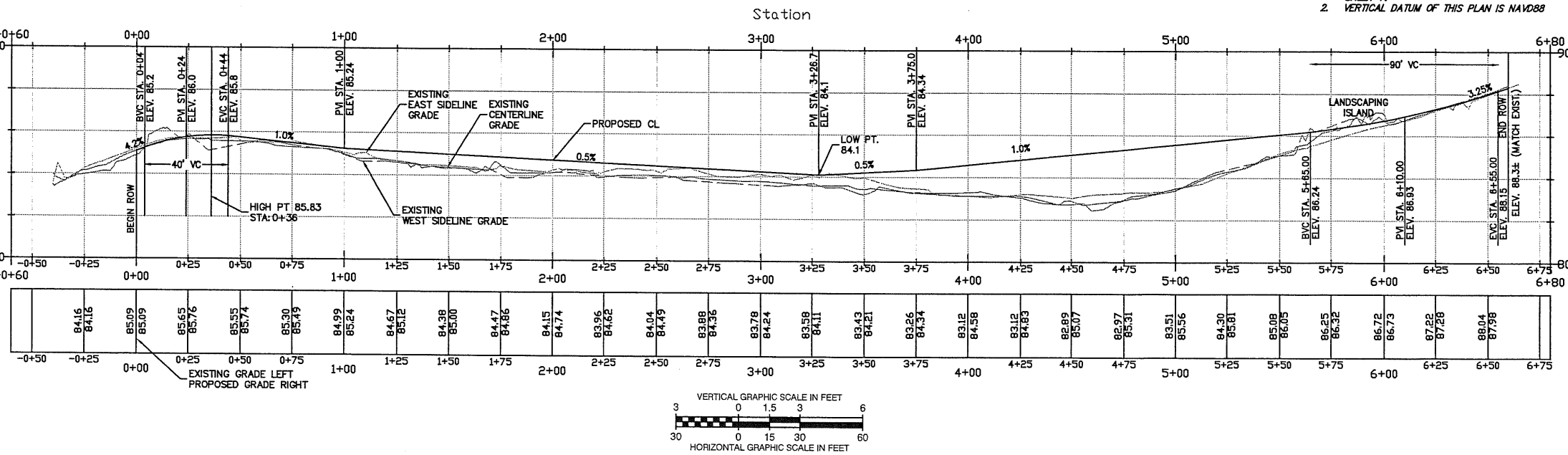
TP-HSA 1

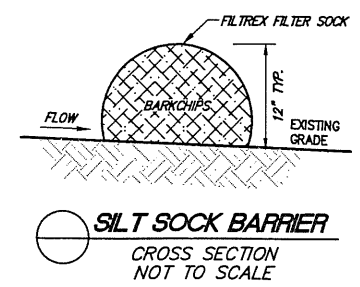
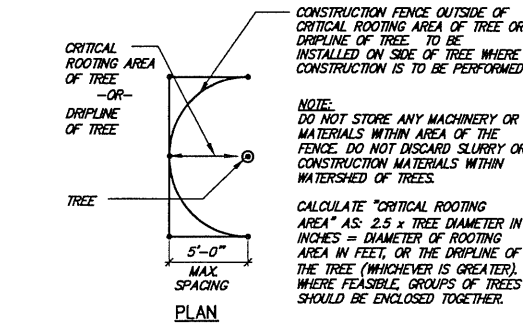
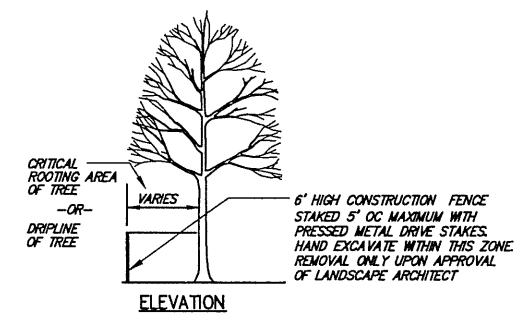
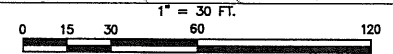
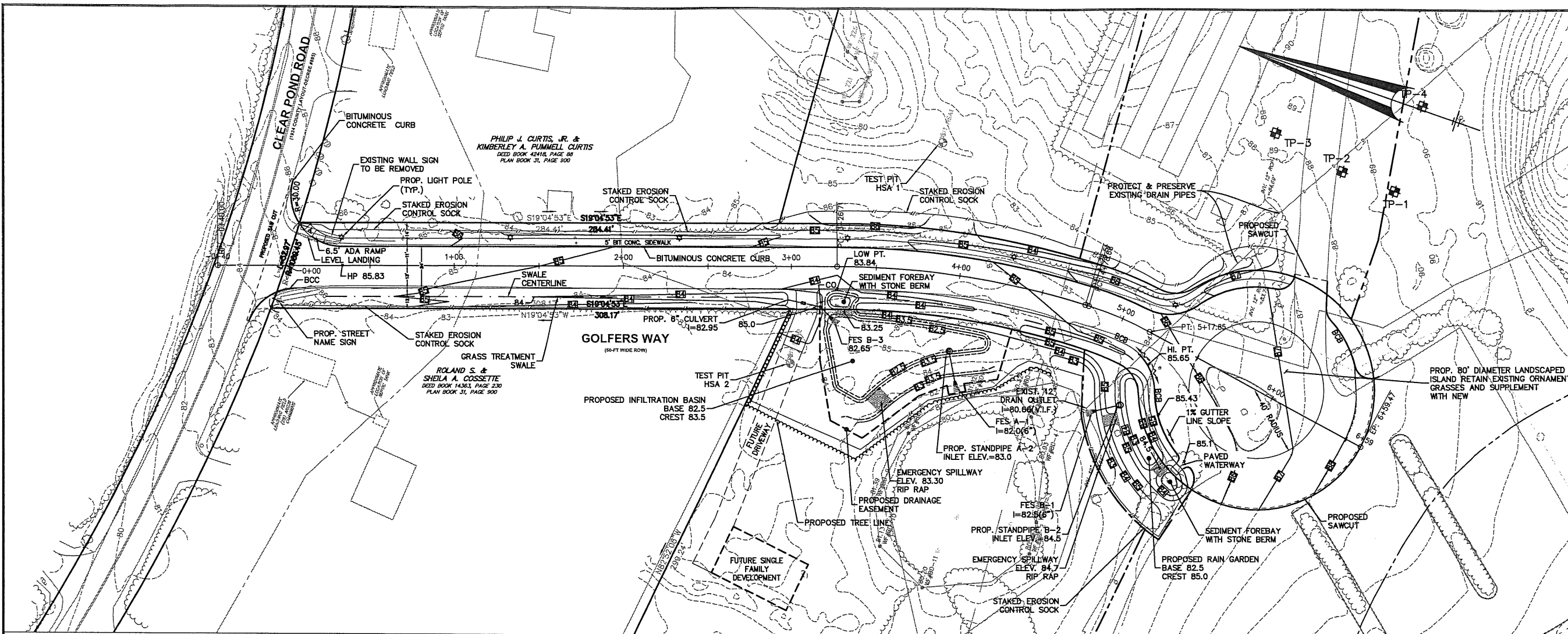
0-6"	LOAM
6-62"	FINE SANDS
ESHGW:	32" BGS, ELEV. 79.3

TP-HSA 2

0-6"	LOAM
6-72"	FINE SANDS
ESHGW:	42" BGS, ELEV. 80.5

Proposed Right of Way-Center PROFILE





EROSION & SEDIMENT CONTROL NOTES

- ALL SEDIMENT AND EROSION CONTROL MEASURES SHALL BE DONE AS SET FORTH IN THE MOST CURRENT STATE SEDIMENT AND EROSION CONTROL MANUAL.
- THOSE AREAS UNDERGOING ACTUAL CONSTRUCTION WILL BE LEFT IN AN UNTREATED OR UNVEGETATED CONDITION FOR A MINIMUM TIME. AREAS SHALL BE PERMANENTLY STABILIZED WITHIN 15 DAYS OF FINAL GRADING AND TEMPORARILY STABILIZED WITHIN 30 DAYS OF INITIAL DISTURBANCE OF THE SOIL. IF THE DISTURBANCE IS WITHIN 100 FEET OF A STREAM OR POND, THE AREA SHALL BE STABILIZED WITHIN 7 DAYS OR PRIOR TO ANY STORM EVENT (THIS WOULD INCLUDE WETLANDS).
- SEDIMENT BARRIERS (SILT FENCE, STRAW BARRIERS, ETC.) SHOULD BE INSTALLED PRIOR TO ANY SOIL DISTURBANCE OF THE CONTRIBUTING DRAINAGE AREA ABOVE THEM. MULCH NETTING SHALL BE USED TO ANCHOR MULCH IN ALL AREAS WITH SLOPES GREATER THAN 15% AFTER OCTOBER 1ST THE SAME APPLIES FOR ALL SLOPES GREATER THAN 8%.
- INSTALL SILTATION BARRIER AT TOE OF SLOPE TO FILTER SILT FROM RUNOFF. SEE SILTATION BARRIER DETAILS FOR PROPER INSTALLATION. SILTATION BARRIER WILL REMAIN IN PLACE PER NOTE #5.
- ALL EROSION CONTROL STRUCTURES WILL BE INSPECTED, REPLACED AND/OR REPAIRED EVERY 7 DAYS AND IMMEDIATELY FOLLOWING ANY SIGNIFICANT RAINFALL OR SNOW MELT OR WHEN NO LONGER SERVICEABLE DUE TO SEDIMENT ACCUMULATION OR DECOMPOSITION. SEDIMENT DEPOSITS SHOULD BE REMOVED AFTER EACH STORM EVENT. THEY MUST BE REMOVED WHEN DEPOSITS REACH APPROXIMATELY ONE HALF THE HEIGHT OF THE BARRIER. SEDIMENT CONTROL DEVICES SHALL REMAIN IN PLACE AND BE MAINTAINED BY THE CONTRACTOR UNTIL AREAS UPSLOPE ARE STABILIZED BY TURF.
- NO SLOPES, EITHER PERMANENT OR TEMPORARY, SHALL BE STEEPER THAN TWO TO ONE (2:1).
- TEMPORARY SEEDING OF DISTURBED AREAS THAT HAVE NOT BEEN FINAL GRADED SHALL BE COMPLETED 45 DAYS PRIOR TO THE FIRST KILLING FROST TO PROTECT FROM SPRING RUNOFF PROBLEMS.
- DURING THE CONSTRUCTION PHASE, INTERCEPTED SEDIMENT WILL BE RETURNED TO THE SITE AND REGRADED ONTO OPEN AREAS.

GOLFERS WAY

44 Clear Pond Road
Lakeville, Massachusetts 02347

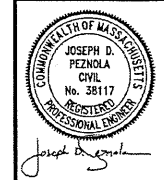
ASSESSORS:
MAP 59 BLOCK 1 LOT 50

PREPARED FOR:
DEREK A. MAKSY
44 Clear Pond Road
Lakeville, Massachusetts 02347

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315 ELM STREET, MARLBOROUGH, MA 01752
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2	DTW	JP	5/22/2023	PLANNING BOARD COMMENTS
1	DTW	JP	5/4/2023	PLANNING BOARD COMMENTS

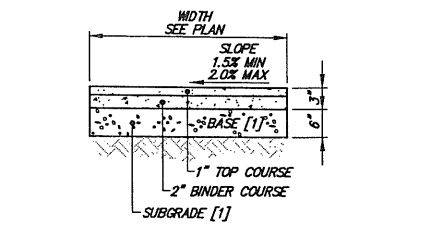
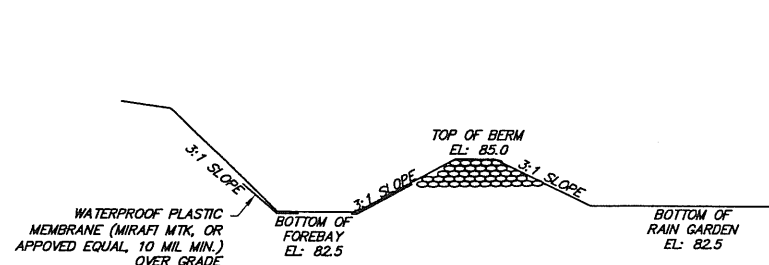
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SCALE: 1" = 30' DRAWN BY: JML
APPRVD. BY: JP CHECK BY: MC

EROSION CONTROL PLAN

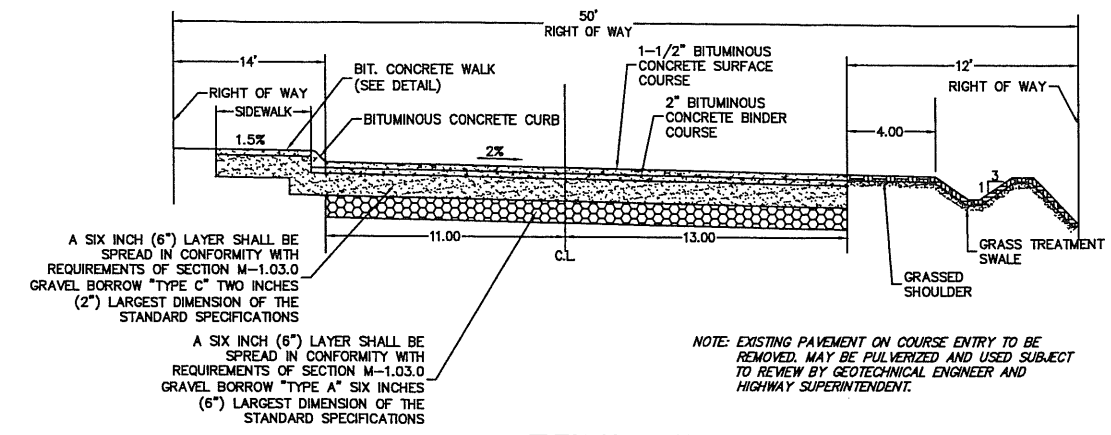
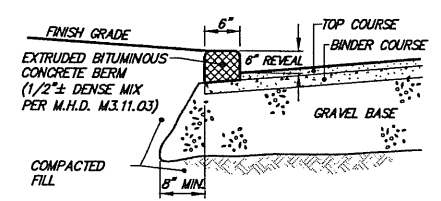
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DWG: 26623sp6.dwg
LAYOUT: C-2
SHEET: 15 OF 17
PROJECT NO.: 26623

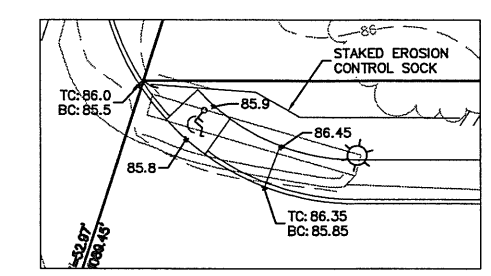
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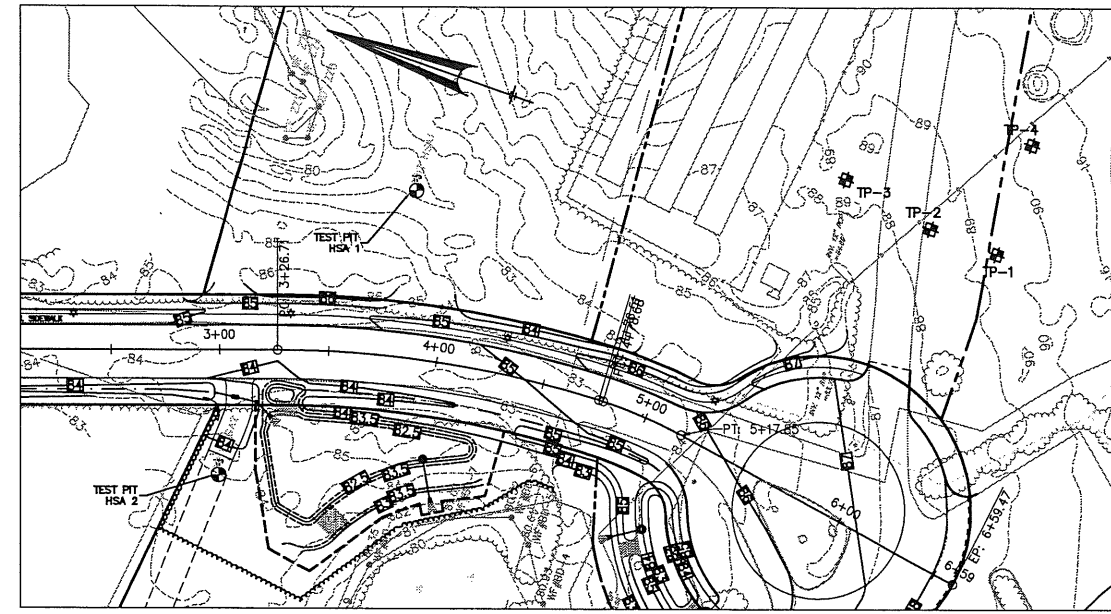
NOTE [1]: COMPACT TO 95% PER ASTM D-1557



TYPICAL ROADWAY CROSS SECTION
NOT TO SCALE



ADA RAMP GRADING ENLARGEMENT
SCALE: 1"=10'



TEST PIT LOCATIONS
SCALE: 1"=40'

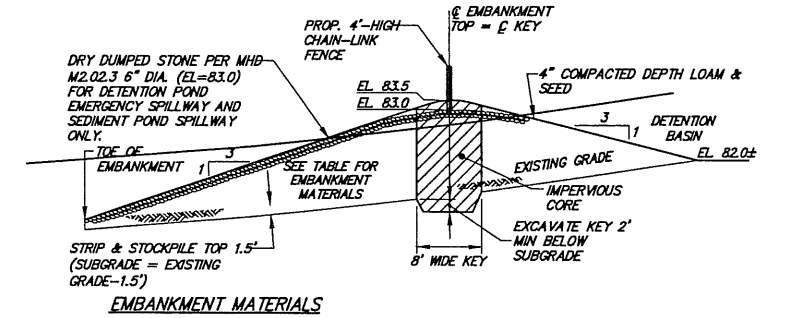
SOIL TESTING RESULTS:

SOIL TESTING PERFORMED BY DARREN MICHAELIS, CSE AND WITNESSED BY LAWRENCE PERRY, BOH ON NOVEMBER 18, 2011

TEST PIT	DEPTH	SOIL TYPE	REDOX	WEEPING	DEPTH TO GROUNDWATER
TP-1	0-48" C	MIX	NONE	NONE	>132"
	48-60" Bb	LOAMY SAND	NONE	NONE	
	60-132" C1	FINE SANDS	NONE	NONE	
TP-2	0-38" C	MIX	NONE	NONE	>132"
	38-48" Bb	LOAMY SAND	NONE	NONE	
	48-108" C1	FINE SANDS	NONE	NONE	
TP-3	0-72" C	MIX	NONE	NONE	>132"
	72-120" C1	SANDS	NONE	NONE	
TP-HSA 1	0-6" LOAM				
	6"-62" FINE SANDS				
	ESHGW: 32" BGS, ELEV. 79.3				
TP-HSA 2	0-6" LOAM				
	6"-72" FINE SANDS				
	ESHGW: 42" BGS, ELEV. 80.5				

PERCOLATION TEST

OBSERVATION HOLE #	1	4	A
DEPTH OF PERC.	60-78"	62-80"	50-68"
START PRE-SOAK	9:58	10:07	10:59
END PRE-SOAK	10:13	10:22	11:14
TIME AT 12"	10:13	10:22	11:14
TIME AT 9"	10:26	11:19	11:19
TIME AT 6"	10:41	10:10	11:25
TIME FROM 9"-6"	15	6	6
RATE (MIN/INCH)	5 MPI	<2 MPI	2 MPI

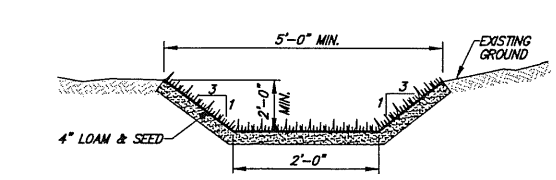


EMBANKMENT MATERIALS

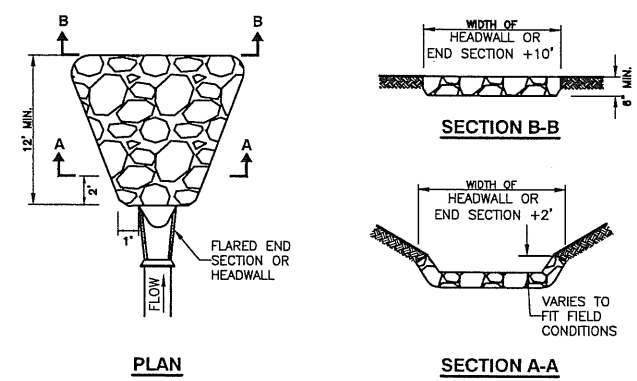
LOCATION	MATERIAL	MAX PARTICLE SIZE (IN)	LOOSE LIFT THICKNESS (IN)	COMPACTION REQUIREMENT (% MOD [1])
KEY	NATIVE PARENT SOIL [2]	6	12 MAX	92 [3]
EMBANKMENT	NATIVE PARENT SOIL [2]	6	12 MAX	92 [3]
LOAM COVER	NATIVE TOPSOIL	1	8 MIN	80
IMPERVIOUS CORE	SOIL WITH AT LEAST 30% CLAY AND SILT CONTENT	6	12 MAX	92 [3]

[1] MOD: MAXIMUM DRY DENSITY.
[2] ACCEPTABLE TO ENGINEER.
[3] COMPACT TO TEST AVERAGE OF 92% NO TEST LESS THAN 90%

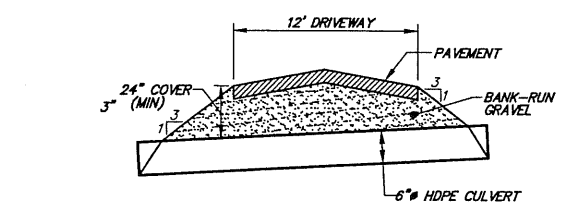
INFILTRATION BASIN EMBANKMENT
TYPICAL CROSS SECTION NOT TO SCALE



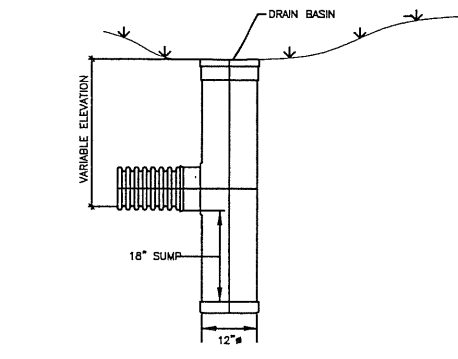
GRASS DRAINAGE SWALE
NOT TO SCALE



FLARED END SECTION
NOT TO SCALE



SURFACE FLOW CROSSING
NOT TO SCALE



NYLOPLAST STANDPIPE
TYPICAL CROSS SECTION NOT TO SCALE

GRADING AND UTILITY NOTES

- LOCATIONS OF EXISTING UNDERGROUND UTILITIES/OBSTRUCTIONS/SYSTEMS SHOWN HEREON ARE APPROXIMATE ONLY. ALL UTILITIES/OBSTRUCTIONS/SYSTEMS MAY NOT BE SHOWN. CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATING AND PROTECTING ALL UNDERGROUND UTILITIES/OBSTRUCTIONS/SYSTEMS, WHETHER OR NOT SHOWN HEREON.
- STRUCTURE DETAILS FROM INDEPENDENT VENDORS ARE CONSTANTLY CHANGING. PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL VERIFY THAT DETAILS SHOWN MATCH CURRENT DETAILS AND SPECIFICATIONS FROM VENDORS.
- EXCAVATION REQUIRED WITHIN PROXIMITY OF EXISTING UTILITY LINES SHALL BE DONE BY HAND. CONTRACTOR SHALL REPAIR ANY DAMAGE TO EXISTING UTILITY LINES OR STRUCTURES INCURRED DURING CONSTRUCTION OPERATIONS AT NO ADDITIONAL COST TO THE OWNER.
- ALL DISTURBED AREAS NOT COVERED WITH PAVEMENT, STRUCTURES, INDIVIDUAL PLANTINGS, OR MULCH SHALL HAVE LOAM AND SOD.
- ALL UNDERGROUND STRUCTURES AND UTILITIES SHALL BE CAPABLE OF WITHSTANDING H2O WHEEL LOADS.
- SILT SOCK SHOWN HEREON SHALL BE INSTALLED BEFORE EARTH DISTURBANCE OCCURS WITHIN BUFFER ZONE, AND SHALL SERVE AS THE LIMIT OF WORK.
- ALL POINTS OF CONSTRUCTION EGRESS OR INGRESS SHALL BE MAINTAINED TO PREVENT TRACKING OR FLOWING OF SEDIMENT ON TO PUBLIC ROADS.

GOLFERS WAY

44 Clear Pond Road
Lakeville, Massachusetts 02347

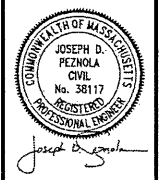
ASSESSORS:
MAP 59 BLOCK 1 LOT 50

PREPARED FOR:
DEREK A. MAKSY
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Lakeville, Massachusetts 02347

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DATE: 11/15/22 DESIGN BY: DTW
SCALE: 1" = 20' DRAWN BY: JML
APPROV. BY: JP CHECK BY: MC

DETAILS SHEET

PLT DATE: Jun 14, 2023 10:15 AM
PATH: \\user-home01\cadd\2023\2023-06\01\2023-06-14\2023-06-14.dwg

DWG: 26623sp6.dwg
LAYOUT: C-3
SHEET: 16 OF 17

C-3

PROJECT NO.: 26623

GOLFERS WAY

44 Clear Pond Road
Lakeville, Massachusetts 02347

ASSESSORS:

MAP	BLOCK	LOT
59	1	50

PREPARED FOR:

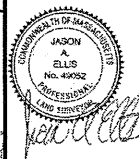
**DEREK
A.
MAKSY**

44 Clear Pond Road
Lakeville, Massachusetts 02347

**HANCOCK
ASSOCIATES**

Civil Engineers
Land Surveyors
Wetland Scientists

315 ELM STREET, MARLBOROUGH, MA 01752
VOICE (978) 777-3050, FAX (978) 774-7816
WWW.HANCOCKASSOCIATES.COM



NO.	BY	APP	DATE	ISSUE/REVISION DESCRIPTION
3	DTW	JF	6/1/2023	PEER REVIEW COMMENTS
2	DTW	JF	5/22/2023	PLANNING BOARD COMMENTS
1	DTW	JF	5/4/2023	PLANNING BOARD COMMENTS

DATE: 11/15/22 DESIGN BY: DTW
SCALE: 1" = 50' DRAWN BY: JMC
APPRVD. BY: JF CHECK BY: MC

**LOT COMPLIANCE
EXHIBIT**

PLT DATE: Jun 14, 2023 2:52 pm
PATH: \\server\projects\26623\26623_00\Projects\26623 - Maksy - Lakeville\DWG\

DWG: 26623sp6.dwg

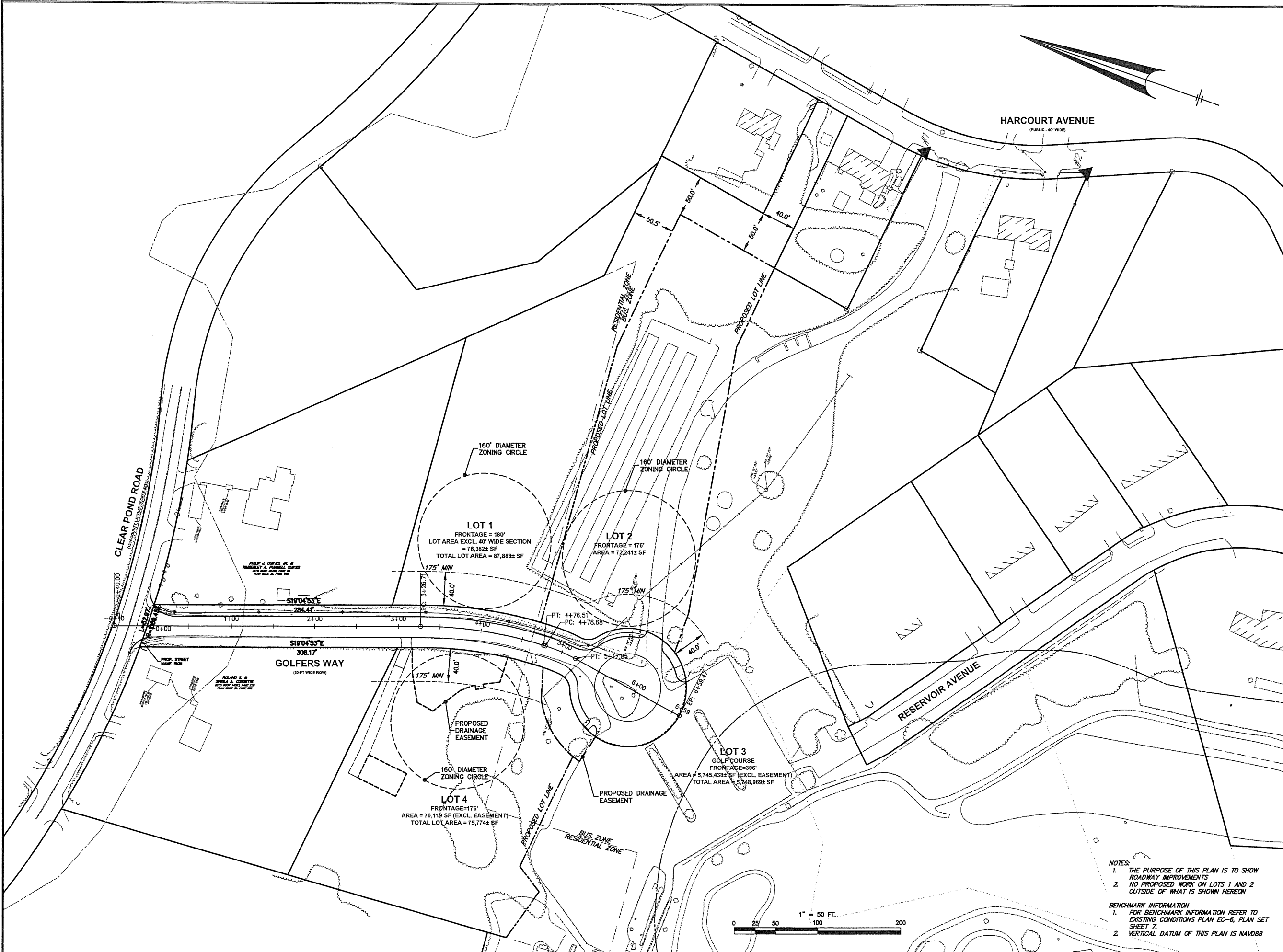
LAYOUT: C-4

SHEET: 17 OF 17

PROJECT NO.:

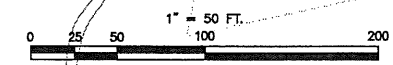
C-4

26623



NOTES:
1. THE PURPOSE OF THIS PLAN IS TO SHOW ROADWAY IMPROVEMENTS
2. NO PROPOSED WORK ON LOTS 1 AND 2 OUTSIDE OF WHAT IS SHOWN HEREON

BENCHMARK INFORMATION
1. FOR BENCHMARK INFORMATION REFER TO EXISTING CONDITIONS PLAN EC-6, PLAN SET SHEET 7.
2. VERTICAL DATUM OF THIS PLAN IS NAVD88





3 Main Street Lakeville, MA 02347
(508) 947-4208 - www.zcellc.com

- Civil Engineering
- Septic Design (Title 5)
- Septic Inspections (Title 5)
- Commercial and Industrial Site Plans
- Chapter 91 Permitting

June 5, 2023

Marc Resnick, Town Planner
Lakeville Planning Board
346 Bedford Street
Lakeville, MA 02347

RE: Stowe Estates, Lakeville, MA

Dear Marc,

This letter is written to respond to the review comments on the subject project which were included in a letter dated April 23, 2023, issued by the Board's review engineer, Environmental Partners (EP). The responses below correspond to the numbered comments from EP.

Town of Lakeville Rules and Regulations of the Planning Board Governing the Subdivision of Land

1. **EP: Section III.C.2.b requires a benchmark be provided. A benchmark is provided on the Grading and Drainage Plan only.**

Response: Two benchmarks are provided on the Existing Conditions Plan and Grading and Drainage Plan.

2. **EP: Section III.C.2.f requires existing wells and septic systems within 100 feet of the property line be provided. The submitted plans do not show any wells or septic systems on adjacent properties.**

Response: The existing well and septic tank for #33 Myricks St have been added to the plan. No other known wells or septic system are located within 100' of the site.

3. **EP: Section III.C.2.k requires building setback lines be included on the plans. The plans do not include any building setback lines.**

Response: Building setback lines have been added to the Grading and Drainage Plan.

4. **EP: Section III.C.2.l requires the locations of all easements on the plans. The project includes a large drainage easement on Lot 3.**

Response: No response necessary.

5. **EP: Section III.C.2.o requires the proposed layout and utilities to be shown on plan and profile sheets. The plans show proposed water and electric service on the Grading and Drainage Plans. They are not shown on the proposed road profile.**

Response: The proposed water and electric services have been added to the Roadway Profile Plan.

6. **EP: Section III.C.2.u requires all proposed street trees to be shown on the plan as well as trees to be retained. The plans do not show any existing or proposed individual trees.**

Response: Street trees are not proposed and a waiver has been requested.

7. **EP: Section III.C.2.v requires cross sections of sidewalks to be provided. The proposed project does not include any sidewalks. The project appears to propose a three inch wide gravel shoulder on each side of the road.**

Response: No sidewalks are proposed and a waiver has been requested. The 3' wide gravel shoulders are proposed to allow for cars to pass each other when travelling in opposite directions as well as allow for the required turning movements of emergency vehicles.

8. **EP: Section III.C.2.w requires a table showing areas of all the proposed lots, areas reserved for streets or rights-of-way, and easements.**

Response: An area table has been added to the Lotting Plan.

9. **EP: Section III.C.2.x requires an upland circle shown on each of the lots consistent with the Lakeville Town Bylaws. The plans show the upland circle for lot three shown in the proposed drainage easement.**

Response: This meets the requirements set in Zoning Bylaw 5.1.2 which states only exclusive use easements may not be included in a lot's frontage or area. Per 5.1.2 "Exclusive use shall be when someone other than the owner of a lot has the sole right to use a portion of the lot, to the exclusion of the owner". The proposed drainage easement does not qualify as an exclusive use easement.

10. **EP: Section IV.B.2.b requires the minimum centerline radii of a minor street to be 150'. Although not labelled on the plan, it appears the proposed street has a centerline radius of twenty feet. The applicant has requested a waiver.**

Response: The proposed minimum centerline radius is 20' at stations 2+10 and 4+45. A waiver has been requested.

11. **EP: Section IV.B.2.d requires property lines at street intersections to have a curb radius of thirty feet. The proposed plans do not show curb rounding's. The plans show an edge of pavement rounding with a radius of 20' on the south side of the intersection with Myrick Street. The north edge of pavement rounding is not labelled and does not appear tangent with the edge of pavement on Myricks Street. The applicant has requested a waiver.**

Response: The radius on the edge of the southern gravel shoulder is 20' and is tangent with the existing pavement of Myricks St. The northern radius is the same, but the gravel ties into the existing gravel driveway. A waiver has been requested.

12. **EP: Section IV.B.2.e requires streets to be laid out at intervals of 600 feet to 1200 feet. Based on the locus map, it appears the proposed entrance is approximately 450 feet from the Matthews Drive curb cut.**

Response: A waiver request has been added for this requirement.

13. **EP: Section IV.B.3.a requires the minimum right-of-way width to be fifty feet. The proposed right-of-way width is forty feet. The applicant has requested a waiver.**

Response: No response necessary.

14. EP: Section IV.B.4.c requires a leveling area that is seventy-five feet in length with a maximum grade of 3% at intersection of street rights-of-way. The proposed design includes a levelling area that is five feet long prior to the start of a vertical curve. The applicant has requested a waiver.

Response: No response necessary.

15. EP: Section IV.B.5.a requires dead end streets to be no longer than 750 feet in length. The proposed right of way is 750 feet long. There is a residential driveway that continues another 350 feet to provide access to a residential house on Lot 3 at the end of the cul-de-sac.

Response: No response necessary.

16. EP: Section IV.B.5.b requires a dead end to have a turnaround (cul-de-sac) with an outside roadway diameter of 120 feet. The proposed end of the right-of-way does not include a turnaround. This section also describes a landscaped island. The proposed design does not include a landscaped island. The submitted plans do include a fire truck turning detail utilizing residential driveways on lot 2 and 3. This detail shows a fire truck veering off the pavement onto gravel strips that are proposed on the edge of the proposed road and driveways. The applicant has requested a waiver.

Response: A "T" turnaround is proposed within the right of way. The gravel is intended to be used for this maneuver and is adequate to provide safe access. Similar roadway cross-sections have been approved in the past. A waiver has been requested.

17. EP: Section IV.B.6.g requires the minimum roadway width for Minor Streets be twenty-four feet. The proposed cross section includes a 14 foot wide pavement width with a 3 foot wide gravel strip on either side of the pavement. The Roadway Cross Section Detail labels the road width as twenty feet. This includes the fourteen foot pavement and three foot gravel strips. The detail describes the 3-foot gravel strips as processed gravel. We recommend more detail be provided for this specification, consistent with MassDOT Standard Specifications. We assume this is proposed to be $\frac{3}{4}$ -1-1/2 inch crushed stone, but the applicant should specify. The applicant has requested a waiver for reducing the width from twenty-four feet to fourteen feet with 3 foot wide gravel shoulders.

Response: The Roadway Cross-Section Detail has been revised to specify gravel shoulder requirements.

18. EP: Section IV.B.6.h requires roadway pavement to be Class I Bituminous Concrete Pavement Type I-1. This type of pavement should be specified on the detail.

Response: The Roadway Cross-Section Detail has been revised to specify Type I-1 pavement.

19. EP: Section IV.B.7.a (Curbs and Berms) requires concrete berms and curbs to be placed along each side of the road. There are no curbs and berms proposed. The applicant has requested a waiver.

Response: No response necessary.

20. EP: Section IV.B.7.a (Curb Cuts) requires driveways to be at least ten feet wide and have a curb return of three feet. The proposed driveway widths are not labelled.

Response: The proposed driveways are 14' wide and have greater than 3' curb return radii. Labels have been added to the Grading and Drainage Plan.

21. EP: Section IV.B.8.a requires sidewalks within subdivisions. The proposed project does not include any sidewalks. The applicant has requested a waiver.

Response: No response necessary.

- 22. EP: Section IV.B.8.b requires five foot wide sidewalks to extend the entire length of the street. As described above, sidewalks are not proposed on this project. The applicant has requested a waiver.**

Response: No response necessary.

- 23. EP: Section IV.B.8.c specifies concrete thicknesses for sidewalks. As described above, there are no sidewalks proposed on this project. The applicant has requested a waiver.**

Response: No response necessary.

- 24. EP: Section IV.C.2. is regarding the installation of utilities. The proposed plans show a water line extended into Myricks Street with a note to verify water main location and to connect consistent with Taunton Water Standards. There is no existing water line shown on the plans. The existing conditions plans show water valves and hydrants in the vicinity of the project indicating there is a water line in Myricks Street. We recommend the applicant coordinate with the Water Department regarding the size and location of the line and the feasibility of connecting the project to this line.**

Response: Several unsuccessful attempts have been made to get information on the existing water main. We respectfully request the Planning Board consider a condition to determine the location of the existing water main prior to construction.

- 25. EP: Section IV.C.2.b describes pressures that are required to be provided in each subdivision. The applicant should coordinate with the Water Department regarding water pressures in the existing line. This section also describes looping water lines when possible. The proposed plan does not include a looped water line.**

Response: We recommend a condition of approval be written to require water pressure be determined prior to construction. Since the project is a dead-end road with only three houses, we believe it is impractical to loop the water main. However, ultimately the Taunton Water Department will determine the need for a looped system.

- 26. EP: Section IV.C.2.c describes installing underground gas service. The proposed project does not include any gas service.**

Response: No gas is proposed. Either propane, oil or electric utilities shall be used.

- 27. EP: Section IV.C.2.d describes the installation of underground electric and telephone lines. The proposed plans show overhead electric and telecommunication lines. The applicant has requested a waiver.**

Response: No response necessary.

- 28. EP: Section IV.C.3 is regarding on-site sewage disposal systems. The applicant has performed a significant amount of test holes on site. The results of the test holes generally show high groundwater with slow percolation rates. The test hole results are still within the allowed rates for on-site sewage disposal.**

Response: No response necessary.

- 29. EP: Section IV.D.1 requires the proposed project will not result in a significant increase in peak rates or volumes of stormwater. The proposed project results in a decrease in peak rates of stormwater. The calculations show an increase in volume of stormwater discharged to wetlands for 51% for the 2-year storm and 37% for the 100 year storm.**

Response: The basin discharges to a wetland, which is very conservatively 30 acres, and slopes southeast to Montgomery Street then to a number of cranberry bogs and Tinkham Hill Pond (another 30+ acres of bog, wetland and pond area). Accordingly, there is flow into and out of the downstream wetlands system. By reducing the post-development rate the wetlands, we are assured that no downstream flooding will occur regardless of volume. The difference in volume from pre- to post-development in the 2-year storm is 0.297 acre-feet and 0.759 acre-feet in the 100-year storm. Even if we assume the wetlands system has no outlet beyond Montgomery Street, the increase in flooding would be about 1/8" in the 2-year storm and less than 3/8" in the 100-year storm. We believe this can be considered an insignificant increase and thus consistent with the regulation. Furthermore, the only way to limit runoff volume from a site is to infiltrate and the site soils do not allow for even moderate infiltration.

30. EP: Section IV.D.2.c describes methods for managing stormwater. The proposed project includes the use of swales to convey stormwater rather than a traditional closed drainage system, which we believe is consistent with the Regulations. Therefore, all requirements pertaining to a closed drainage system are not pertinent to the project.

Response: No response necessary.

31. EP: Section IV.D.2.f requires all stormwater to pass through an oil/separator prior to outfall. The project does not include an oil/water separator. This section also states that stormwater detention-retention basins should be designed to recharge the ten year event. The proposed basin is not designed to recharge stormwater. The applicant has requested a waiver.

Response: No response necessary.

32. EP: Section IV.F.4 states that drainage easements shall not be included in the lot area. Lot 3 includes a significant (68,808 sf) drainage easement. Access to lot three is proposed through this easement.

Response: As stated in response to comment #9, Zoning Bylaw 5.1.2 states only exclusive use easements cannot be included in lot area or frontage. Even if we ignore this contradiction in the regulations, the required lot area is 70,000 sf. The proposed drainage easement is 68,808 sf and Lot 3 totals 225,816 sf. This leaves 157,008 sf of non-easement area on Lot 3, more than double the required area. There is no regulation which would restrict access through the easement to the house on this lot.

33. EP: Section IV.G.1 requires monuments to be set through the subdivision. The project generally meets this requirement. The applicant is requesting a waiver from setting a monument at the northern intersection point with Myricks Street because this location falls within an existing gravel driveway.

Response: No response necessary.

34. EP: Section IV.G.2 provides specifications for monuments. We recommend the applicant provide a monument detail to confirm compliance with these requirements.

Response: A concrete bound detail has been added to the Site Details sheet.

35. EP: Section IV.H requires street signs. The plans do not include street signs.

Response: A street sign is specified on the Grading and Drainage Plan on the southern side of the intersection.

36. EP: Section IV.I includes specifications for streetlights. It is unclear if streetlights are provided for this project. The project includes utility poles, and it is unclear whether street lights are proposed on the utility poles. The applicant has requested a waiver.

Response: Street lights are not proposed. A waiver has been requested.

- 37. EP: Section IV.K is regarding street trees. The proposed plans do not show any proposed street trees. The applicant has requested a waiver.**

Response: No response necessary.

General Stormwater Management Comments

- 1. EP: The proposed project provides a stormwater management system consisting of a drainage swale along the side of the proposed road that discharges to a stormwater detention basin. The proposed detention basin, along with the proposed swale system, provides removal of Total Suspended Solids, consistent with the Massachusetts Stormwater Management Standards.**

Response: No response necessary.

- 2. EP: The proposed detention basin provides attenuation of peak flows consistent with the Massachusetts Stormwater Management Standards.**

Response: No response necessary.

- 3. EP: The project does not provide any dedicated stormwater recharge facilities. Soils conditions on site are moderately conducive to groundwater recharge.**

Response: The site contains Hydrologic Soil Group C soils. As such, the Mass Stormwater Handbook states that recharge is only required to the maximum extent practicable. The perc tests performed on-site show that the infiltrative capacity of the soil is limited. This coupled with the high groundwater table makes recharge impractical. As explained in response to comment #29, there is no downstream flooding caused by the lack of recharge.

- 4. EP: The project disturbs more than one acre of land and is therefore required to obtain coverage under the NPDES Construction General Permit and prepare a Stormwater Pollution Prevention Plan (SWPPP). A draft SWPPP was not submitted. We recommend the Planning Board require the final SWPPP be submitted for review and approval prior to the commencement of construction.**

Response: As stated in the Construction Notes on the Cover Sheet, a NPDES permit must be obtained prior to construction. We have no issue providing a copy to the Board prior to construction.

- 5. EP: The applicant has provided an Operation and Maintenance Plan which is consistent with the requirements of the Stormwater Management Standards.**

Response: No response necessary.

- 6. EP: The applicant has provided a Construction Period Pollution Prevention Plan which is consistent with the Stormwater Management Standards.**

Response: No response necessary.

- 7. EP: The applicant has provided an erosion and sedimentation control plan that includes perimeter erosion controls, a construction entrance, and requirements for ongoing erosion and sedimentation observations and maintenance, consistent with the Stormwater Management Standards.**

Response: No response necessary.

8. **EP: The proposed project conveys stormwater to a water quality swale located on the western side of the proposed road. Stormwater will be routed through the gravel section along the side of the road before flowing into the proposed swale. The swale directs stormwater into the drainage easement located on Lot 3 that contains the proposed detention basins. During snow events, if snow is cleared to this side of the road, it will prevent water from being conveyed to the grassed swales, and ultimately to the detention basin. If snow is not cleared properly, it will likely result in ponding, and possibly icing, along the side of the road. The entity responsible for maintenance will need to be diligent about clearing snow so stormwater can flow to these facilities.**

Response: No response necessary.

9. **EP: We recommend the applicant provide a rip-rap pad detail for the location downstream of the outlet pipe from the detention basin. We recommend Stone for Pipe Ends, consistent with MassDOT specifications, be installed at the discharge point.**

Response: A note has been added to the basin detail to specify the splashpool stones shall meet MassDOT specs for Stone for Pipe Ends.

10. **EP: The roadway cross section detail shows the side slopes of the drainage swale to be 2:1. We recommend this slope be flattened to a minimum of 3:1 to ensure adequate stabilization and maintenance, including mowing.**

Response: Swale sideslopes have been revised to be 3:1 slopes.

11. **EP: The Operation and Maintenance Plan indicates a Homeowners Association will be responsible for maintaining the Stormwater Management System. In the event this project is approved, we recommend the Planning Board include a condition requiring proof of maintenance of the Stormwater Management System on an annual basis.**

Response: No response necessary.

Revised design plans reflecting the items detailed in this letter are attached. Should you have any questions, please do not hesitate to contact our office at 508-947-4208.

Sincerely,
Zenith Consulting Engineers, LLC.



Nyles Zager, P.E.
Manager/Senior Project Engineer

LAKEVILLE PLANNING BOARD
 APPROVED UNDER THE SUBDIVISION CONTROL LAW

APPROVED: _____
 ENDORSED: _____

I HEREBY CERTIFY THAT THE NOTICE OF APPROVAL OF THIS PLAN BY THE LAKEVILLE PLANNING BOARD WAS RECEIVED AND RECORDED ON _____ AT THIS OFFICE, AND NO APPEAL WAS RECEIVED DURING THE TWENTY (20) DAYS NEXT AFTER SUCH RECEIPT OF RECORDING OF SAID NOTICE.

TOWN CLERK, LAKEVILLE, MA DATE _____

SUBJECT TO A PERFORMANCE COVENANT DATED _____ RUNNING WITH THE LAND, TO BE DULY RECORDED WITH THIS PLAN BY OR FOR THE OWNER OF RECORD.

DEFINITIVE RESIDENTIAL SUBDIVISION

"STOWE ESTATES" AT 35 MYRICKS STREET

LAKEVILLE, MASSACHUSETTS

SITE NOTES:

- THE SITE IS LISTED ON THE TOWN OF LAKEVILLE ASSESSORS PROPERTY RECORD CARDS AS A PORTION OF PARCEL ID 17-4-3.
- PROPERTY LINE AND EXISTING CONDITIONS INFORMATION WAS TAKEN FROM A FIELD SURVEY BY ZENITH LAND SURVEYORS, LLC.
- PLYMOUTH COUNTY REGISTRY OF DEEDS:
 DEED REFERENCE: BOOK 57395 PAGE 258
 PLAN REFERENCE: BOOK 66 PAGE 50
- THE SUBJECT PROPERTY IS LOCATED IN ZONE X, AS SHOWN ON THE FLOOD INSURANCE RATE MAP (F.I.R.M.) NUMBER 25023C0426J, MAP REVISED 7-17-12.
- THE SITE IS NOT LOCATED IN A PRIORITY HABITAT AND ESTIMATED HABITAT AS SHOWN ON THE MASSACHUSETTS NATURAL HERITAGE ATLAS 15TH EDITION EFFECTIVE DATE AUGUST, 2021.
- WETLAND LINE TAKEN FROM PLAN RECORDED IN PLYMOUTH COUNTY REGISTRY OF DEEDS BOOK 66 PAGE 50.
- THE PROJECT IS NOT LOCATED WITHIN AN AREA OF CRITICAL ENVIRONMENTAL CONCERN (ACEC).
- THE SITE IS NOT LOCATED IN A ZONE II TO A PUBLIC WATER SUPPLY WELL.
- THE SITE IS NOT IN A ZONE A TO A SURFACE WATER SUPPLY AREA.
- THE SITE IS NOT LOCATED IN AN OUTSTANDING RESOURCE WATER AREA (ORW).

CONSTRUCTION NOTES:

- A NPDES PERMIT MUST BE OBTAINED FOR THIS PROJECT PRIOR TO CONSTRUCTION.
- CONTRACTOR TO VERIFY BENCHMARKS FOR CONSISTENCY PRIOR TO CONSTRUCTION AND SHALL NOTIFY ZENITH CONSULTING ENGINEERS, LLC OF ANY DISCREPANCIES.
- CONTRACTOR SHALL VERIFY WATER TABLE ELEVATIONS AND NOTIFY THE DESIGN ENGINEER OF ANY DISCREPANCIES FROM THE PLAN.
- IT IS THE CONTRACTORS' RESPONSIBILITY TO CONTACT DIG SAFE (1-888-DIG SAFE) PRIOR TO THE COMMENCEMENT OF WORK AND ALL UNDERGROUND UTILITY COMPANIES TO CONFIRM LOCATIONS AND ELEVATIONS.
- SITE IS TO BE SERVICED BY MUNICIPAL WATER AND PRIVATE SEWER.
- ALL PAVEMENT MARKING AND SIGNAGE SHALL CONFORM TO MUTCD STANDARDS.
- PROPOSED UTILITIES AND CONSTRUCTION METHODS UNDER AREAS SUBJECT TO TRAFFIC LOADING SHALL BE INSTALLED TO WITHSTAND H-20 LOADING TRAFFIC STANDARDS. CONTRACTOR SHALL VERIFY THAT ALL STRUCTURES COMPLY TO THIS STANDARD.
- WHERE ALL CONCRETE STRUCTURES INTERCEPT THE SEASONAL HIGH GROUNDWATER TABLE, THE CONTRACTOR SHALL SEAL THE ENTIRE STRUCTURE WITH WATERPROOF SEALER.
- IF APPLICABLE, ANY RETAINING WALLS SHALL BE DESIGNED BY A MASSACHUSETTS REGISTERED PROFESSIONAL STRUCTURAL ENGINEER.
- ALL WORK SHALL CONFORM TO THE TOWN OF LAKEVILLE RULES AND REGULATIONS AND THE MASSACHUSETTS DEPARTMENT OF TRANSPORTATION SPECIFICATIONS FOR HIGHWAY AND BRIDGES, MOST CURRENT VERSION OF PLAN SET.

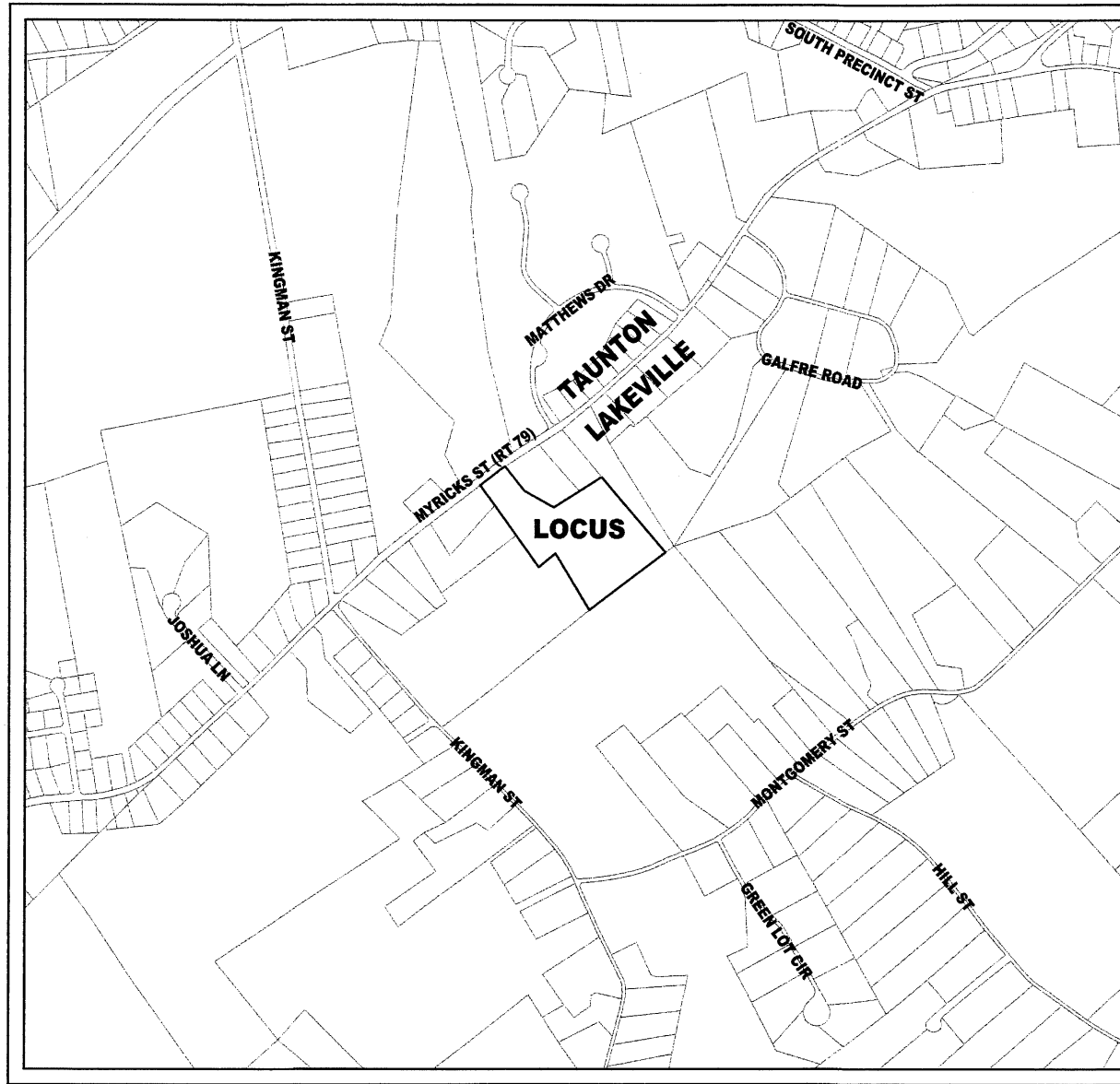
WAIVERS REQUESTED:

THE FOLLOWING WAIVERS ARE REQUESTED FROM THE TOWN OF LAKEVILLE RULES & REGULATIONS OF THE PLANNING BOARD GOVERNING THE SUBDIVISION OF LAND:

- SECTION IV B.2.B - TO ALLOW A CENTERLINE RADIUS LESS THAN 150' (20' PROPOSED)
- SECTION IV B.2.D - TO ALLOW A CURB RADIUS LESS THAN 30' AT AN INTERSECTION (20' PROPOSED)
- SECTION IV B.2.E - TO ALLOW AN INTERSECTION LESS THAN 600' FROM MATTHEWS DRIVE (450' PROPOSED)
- SECTION IV B.3.A - TO ALLOW A RIGHT OF WAY WIDTH LESS THAN 50' (40' PROPOSED)
- SECTION IV B.3.C - TO ALLOW A CHANGE IN GRADE OF MORE THAN 5% WITHIN 150 ON AN INTERSECTION WITHOUT A 75' LEVELING AREA
- SECTION IV B.5.B - TO ALLOW A DEAD-END TURNAROUND OTHER THAN A 120' DIAMETER CUL-DE-SAC (TEE TURNAROUND PROPOSED)
- SECTION IV B.6.G - TO ALLOW A MINOR ROAD WITHOUT 24' PAVED WIDTH (20' WIDTH INCLUDING 14' OF PAVEMENT AND 3' OF GRAVEL ON EACH SIDE IS PROPOSED)
- SECTION IV B.7 - TO WAIVE THE REQUIREMENTS OF CURBS AND BERMS (ROAD IS PROPOSED TO PITCH TO A GRASSED SWALE)
- SECTION IV B.8 - TO WAIVE THE REQUIREMENTS OF SIDEWALKS
- SECTION IV B.9 - TO ALLOW ROADWAY EMBANKMENT SLOPES GREATER THAN 3:1 (2:1 PROPOSED)
- SECTION IV C.2.D - TO ALLOW OVERHEAD ELECTRIC, TELEPHONE AND CABLE UTILITIES
- SECTION IV D.2.F - TO WAIVE THE REQUIREMENT OF AN OIL SEPARATOR PRIOR TO STORMWATER OUTFALL
- SECTION IV D.5 - TO ALLOW A DRAINAGE PIPE MATERIAL OTHER THAN RCP (HDPE PROPOSED)
- SECTION IV G.1 - TO WAIVE THE REQUIREMENT OF A MONUMENT TO BE SET AT THE NORTHERN INTERSECTION POINT WITH MYRICKS STREET (FALLS IN AN EXISTING GRAVEL DRIVEWAY TO REMAIN)
- SECTION IV I - TO WAIVE THE REQUIREMENTS OF STREET LIGHTS
- SECTION IV K - TO WAIVE THE REQUIREMENTS OF TREES

CRITERIA	REQUIRED	EXISTING	PROPOSED
LOT AREA	70,000 S.F.	505,613± S.F.	75,400± S.F. MIN.
FRONTAGE	175'	202.50'	180.00' MIN.
FRONT BUILDING SETBACK	40'	-	> 40'
SIDE BUILDING SETBACK	20'	-	> 20'
REAR BUILDING SETBACK	20'	-	> 20'
CONTIGUOUS UPLAND	52,500 S.F.	440,822± S.F.	75,400± S.F. MIN.
IMPERVIOUS COVER	25%	0.3% (1,320 S.F.)	7.8%* (34,110 S.F.)

*IMPERVIOUS COVER (PER LAKEVILLE ZONING SECTION 5.2.2.1):	
TOTAL LOT AREA	505,613 SF
WETLAND AREA	64,791 SF
PROPOSED DRAINAGE BASIN	5,420 SF
ADJUSTED AREA FOR IMPERVIOUS CALCULATION	435,402 SF
PROPOSED ROOF AND PAVEMENT AREA	34,110 SF
IMPERVIOUS AREA =	34,110 SF
ADJUSTED AREA =	7.8%



LOCUS PLAN
SCALE: 1"=500'

OWNER/APPLICANT
JIJ PROPERTIES, INC.
6 SAND TRAP LANE
LAKEVILLE, MA

LEGEND		
EXISTING	DESCRIPTION	PROPOSED
	BUILDING	
	CONTOUR	
	SPOT GRADE	
	100X0	
	SILT FENCE/SILT SOCK	
	CHAINLINK FENCE	
	STOCKADE FENCE	
	SIGN	
	TEST PIT	
	GAS MAIN	
	GAS SERVICE	
	OVERHEAD WIRES	
	UTILITY POLE	
	GUY POLE	
	CLAY WIRE	
	LIGHT POLE	
	WATER MAIN	
	WATER SERVICE	
	HYDRANT	
	WATER GATE/VALVE	
	WATER SHUTOFF	
	TREELINE	
	STONEWALL	
	WETLAND LINE	
	50' BUFFER	
	100' BUFFER	
	WETLAND FLAG	

SCHEDULE OF DRAWINGS		
SHEET ID	PLAN TITLE	LATEST REVISION DATE
C	COVER SHEET	-
X	EXISTING CONDITIONS PLAN	-
L	LOTING PLAN	-
G	GRADING AND DRAINAGE PLAN	-
P	ROADWAY PROFILE PLAN	-
E	EROSION CONTROL PLAN	-
D	SITE DETAILS	-

SURVEY COMPANY OF RECORD:

ZLS
 ZENITH LAND SURVEYORS, LLC
 1162 ROCKDALE AVENUE
 NEW BEDFORD, MA 02740
 (508) 995-0100

6-6-23

RECEIVED
 JUN 6 2023
 PLANNING BOARD

FEBRUARY 13, 2023

ZCE
 ZENITH CONSULTING ENGINEERS, LLC
 3 MAIN STREET LAKEVILLE, MA 02347
 PHONE: (508) 947-4208

MASS. C. REGISTERED PROFESSIONAL ENGINEER
 CIVIL
 NO. 48177

P.E. STAMP

REV.	DATE	DESCRIPTION	BY	APP.
1	6-5-23	PER REVIEW COMMENTS	TEM	NCZ

DATE:	PROJECT NUMBER:	DRAWING SCALE:	SHEET ID:
2-13-23	0982-01-01	1"=500'	C

DRAWN BY:	DESIGNED BY:	CHECKED BY:	APPROVED BY:
TEM	TEM	NCZ	NCZ

DEFINITIVE SUBDIVISION COVER SHEET

STOWE ESTATES
 LAKEVILLE, MASSACHUSETTS

JIJ PROPERTIES, INC.
 6 SAND TRAP LANE
 LAKEVILLE, MASSACHUSETTS

SHEET NAME:
 PROJECT SITE:
 CLIENT INFO:

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LAKEVILLE PLANNING BOARD

APPROVED UNDER THE SUBDIVISION CONTROL LAW

APPROVED: _____
 ENDORSED: _____

I HEREBY CERTIFY THAT THE NOTICE OF APPROVAL OF THIS PLAN BY THE LAKEVILLE PLANNING BOARD WAS RECEIVED AND RECORDED ON _____ AT THIS OFFICE, AND NO APPEAL WAS RECEIVED DURING THE TWENTY (20) DAYS NEXT AFTER SUCH RECEIPT OF RECORDING OF SAID NOTICE.

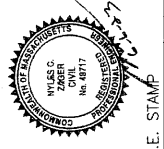
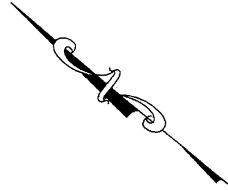
TOWN CLERK, LAKEVILLE, MA DATE _____

SUBJECT TO A PERFORMANCE COVENANT DATED _____ RUNNING WITH THE LAND, TO BE DULY RECORDED WITH THIS PLAN BY OR FOR THE OWNER OF RECORD.

CRITERIA	REQUIRED	EXISTING
LOT AREA	70,000 S.F.	505,613± S.F.
FRONTAGE	175'	202.50'
FRONT BUILDING SETBACK	40'	-
SIDE BUILDING SETBACK	20'	-
REAR BUILDING SETBACK	20'	-
CONTIGUOUS UPLAND	52,500 S.F.	440,822± S.F.
IMPERVIOUS COVER	25%	0.3% (1,320 S.F.)

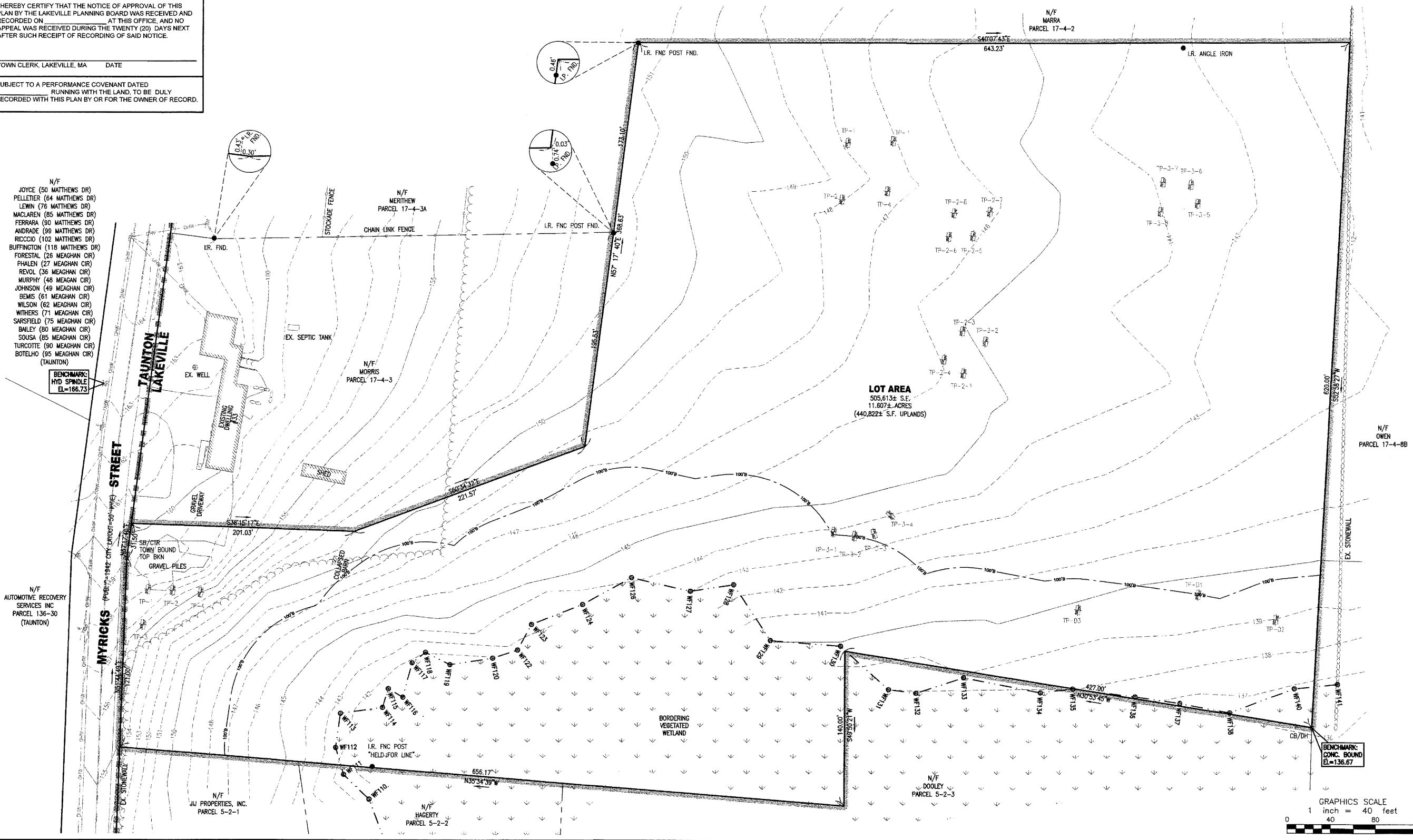
SURVEY COMPANY OF RECORD:

ZLS
 ZENITH LAND SURVEYORS, LLC
 1162 ROCKDALE AVENUE
 NEW BEDFORD, MA 02740
 (508) 995-0100



P.E. STAMP

ZCE
 ZENITH CONSULTING ENGINEERS, LLC
 3 MAIN STREET LAKEVILLE, MA 02347
 PHONE: (508) 947-4208



- N/F
- JOYCE (50 MATTHEWS DR)
 - PELLETIER (64 MATTHEWS DR)
 - LEWIN (76 MATTHEWS DR)
 - MACLAREN (85 MATTHEWS DR)
 - FERRARA (90 MATTHEWS DR)
 - ANDRADE (98 MATTHEWS DR)
 - RICCIO (102 MATTHEWS DR)
 - BUFFINGTON (118 MATTHEWS DR)
 - FORESTAL (26 MEAGHAN CIR)
 - PHALEN (27 MEAGHAN CIR)
 - REVOL (36 MEAGHAN CIR)
 - MURPHY (48 MEAGHAN CIR)
 - JOHNSON (49 MEAGHAN CIR)
 - BEMIS (61 MEAGHAN CIR)
 - WILSON (62 MEAGHAN CIR)
 - WITHERS (71 MEAGHAN CIR)
 - SARSFIELD (75 MEAGHAN CIR)
 - BAILEY (80 MEAGHAN CIR)
 - SOUSA (85 MEAGHAN CIR)
 - TURCOTTE (90 MEAGHAN CIR)
 - BOTELHO (95 MEAGHAN CIR)
 - (TAUNTON)

N/F
 AUTOMOTIVE RECOVERY
 SERVICES INC
 PARCEL 136-30
 (TAUNTON)

N/F
 JJI PROPERTIES, INC.
 PARCEL 5-2-1

N/F
 HAGERTY
 PARCEL 5-2-2

N/F
 DOOLEY
 PARCEL 5-2-3

REV.	DATE	DESCRIPTION	BY	APP.
1	6-5-23	PER REVIEW COMMENTS	TEM	NCZ

DRAWN BY:	TEM	DATE:	2-13-23
DESIGNED BY: <td>TEM <td>PROJECT NUMBER: <td>0992-01-01</td> </td></td>	TEM <td>PROJECT NUMBER: <td>0992-01-01</td> </td>	PROJECT NUMBER: <td>0992-01-01</td>	0992-01-01
CHECKED BY: <td>NCZ <td>DRAWING SCALE: <td>1"=40'</td> </td></td>	NCZ <td>DRAWING SCALE: <td>1"=40'</td> </td>	DRAWING SCALE: <td>1"=40'</td>	1"=40'
APPROVED BY: <td>NCZ <td>SHEET ID: <td>X</td> </td></td>	NCZ <td>SHEET ID: <td>X</td> </td>	SHEET ID: <td>X</td>	X

DEFINITIVE SUBDIVISION EXISTING CONDITIONS PLAN
 STOWE ESTATES
 LAKEVILLE, MASSACHUSETTS
 JJI PROPERTIES, INC.
 6 SAND TRAP LANE
 LAKEVILLE, MASSACHUSETTS

C:\Users\jzales\AppData\Local\Temp\MapInfo\1040\Subdivision Plan - 35 Myricks St - Lakeville.dwg

LAKEVILLE PLANNING BOARD

APPROVED UNDER THE SUBDIVISION CONTROL LAW

APPROVED: _____

ENDORSED: _____

SITE NOTES:

1. THE SITE IS LISTED ON THE TOWN OF LAKEVILLE ASSESSORS PROPERTY RECORD CARDS AS A PORTION OF PARCEL ID 17-4-3.
2. PROPERTY LINE AND EXISTING CONDITIONS INFORMATION WAS TAKEN FROM A FIELD SURVEY BY ZENITH LAND SURVEYORS, LLC.
3. PLYMOUTH COUNTY REGISTRY OF DEEDS:
DEED REFERENCE: BOOK 57395 PAGE 258
PLAN REFERENCE: BOOK 66 PAGE 50
4. THE SUBJECT PROPERTY IS LOCATED IN ZONE X, AS SHOWN ON THE FLOOD INSURANCE RATE MAP (F.I.R.M.) NUMBER 2502300426J, MAP REVISED 7-17-12.
5. THE SITE IS NOT LOCATED IN A PRIORITY HABITAT AND ESTIMATED HABITAT AS SHOWN ON THE MASSACHUSETTS NATURAL HERITAGE ATLAS 15TH EDITION EFFECTIVE DATE AUGUST, 2021.
6. WETLAND LINE TAKEN FROM PLAN RECORDED IN PLYMOUTH COUNTY REGISTRY OF DEEDS BOOK 66 PAGE 50.
7. THE PROJECT IS NOT LOCATED WITHIN AN AREA OF CRITICAL ENVIRONMENTAL CONCERN (ACEC).
8. THE SITE IS NOT LOCATED IN A ZONE II TO A PUBLIC WATER SUPPLY WELL.
9. THE SITE IS NOT IN A ZONE A TO A SURFACE WATER SUPPLY AREA.
10. THE SITE IS NOT LOCATED IN AN OUTSTANDING RESOURCE WATER AREA (ORW).

I HEREBY CERTIFY THAT THIS PLAN HAS BEEN PREPARED IN CONFORMANCE WITH THE RULES AND REGULATIONS OF THE REGISTERS OF DEEDS OF THE COMMONWEALTH OF MASSACHUSETTS.

PROFESSIONAL LAND SURVEYOR _____ DATE _____

ADJACENT PROPERTY TABLE (NEIGHBORING DISTRICTS)	
CRITERIA	REQUIRED
LOT AREA	70,000 S.F.
FRONTAGE	175'
FRONT BUILDING SETBACK	40'
SIDE BUILDING SETBACK	20'
REAR BUILDING SETBACK	20'
CONTIGUOUS UPLAND	52,500 S.F.
IMPERVIOUS COVER	25%

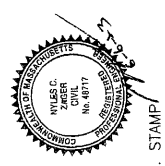
LOT AREA TABLE	
ITEM	AREA
TOTAL	505,613± S.F.
ROADWAY	39,890± S.F.
LOT 1	83,509± S.F.
LOT 2	75,400± S.F.
LOT 3	225,816± S.F.
PARCEL A	80,998± S.F.
DRAIN EASE LOT 3	66,808± S.F.
GRADING EASE LOT 3	1,628± S.F.
GRADING EASE PARCEL A	4,264± S.F.

SURVEY COMPANY OF RECORD:

ZLS
ZENITH LAND SURVEYORS, LLC
1162 ROCKDALE AVENUE
NEW BEDFORD, MA 02740
(508) 995-0100

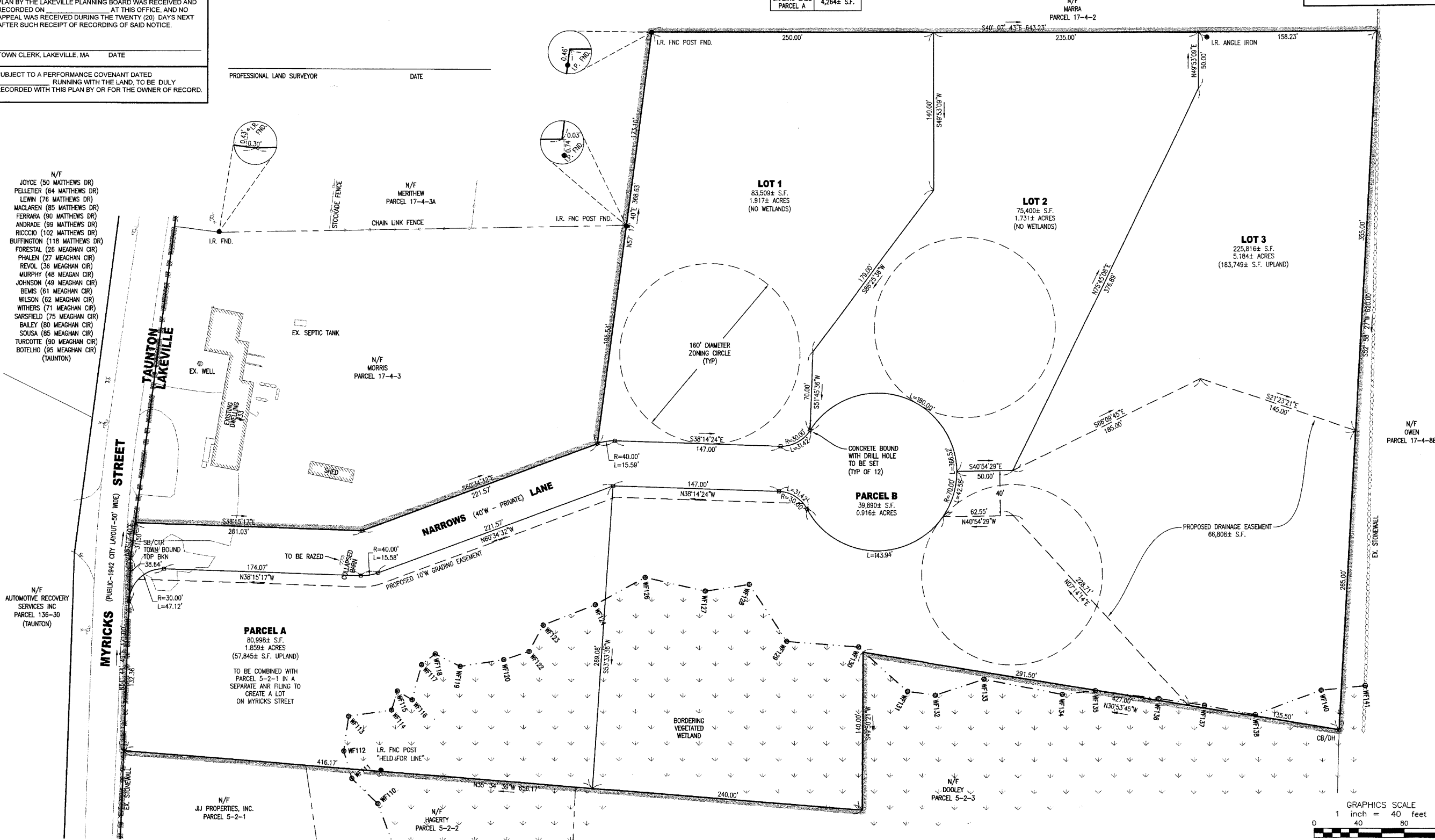


6-6-23



P.E. STAMP

FOR REGISTRY USE ONLY



ZCE
ZENITH CONSULTING ENGINEERS, LLC
3 MAIN STREET LAKEVILLE, MA 02347
PHONE: (508) 947-4208



REV.	DATE	DESCRIPTION	BY	APP.
1	6-5-23	PER REVIEW COMMENTS	TEM	NCZ

DATE:	PROJECT NUMBER:	DRAWING SCALE:	SHEET ID:
2-13-23	092-01-01	1"=40'	L

DEFINITIVE SUBDIVISION	DESIGNED BY:	CHECKED BY:	APPROVED BY:
LOTTING PLAN	TEM	NCZ	NCZ

STOWE ESTATES
LAKEVILLE, MASSACHUSETTS
JJI PROPERTIES, INC.
6 SAND TRAP LANE
LAKEVILLE, MASSACHUSETTS

LAKEVILLE PLANNING BOARD

APPROVED UNDER THE SUBDIVISION CONTROL LAW

APPROVED: _____

ENDORSED: _____

UTILITY NOTES

1. WATER AND ELECTRIC SHOWN ON THIS PLAN ARE PRELIMINARY. FINAL LAYOUT IS SUBJECT TO CHANGE BY RESPECTIVE UTILITY COMPANIES. ALL WORK SHALL COMPLY WITH LOCAL REGULATIONS.
2. SEPTIC LAYOUTS SHOWN ON THIS PLAN ARE SIZED BASED ON CONVENTIONAL FIELD FOR 4-BEDROOM HOUSES. LAYOUTS ARE SUBJECT TO CHANGE. INDIVIDUAL SITE PLANS SHALL BE PERMITTED THROUGH THE BOARD OF HEALTH PRIOR TO CONSTRUCTION.

I HEREBY CERTIFY THAT THE NOTICE OF APPROVAL OF THIS PLAN BY THE LAKEVILLE PLANNING BOARD WAS RECEIVED AND RECORDED ON _____ AT THIS OFFICE, AND NO APPEAL WAS RECEIVED DURING THE TWENTY (20) DAYS NEXT AFTER SUCH RECEIPT OF RECORDING OF SAID NOTICE.

TOWN CLERK, LAKEVILLE, MA DATE _____

SUBJECT TO A PERFORMANCE COVENANT DATED _____ RUNNING WITH THE LAND, TO BE DULY RECORDED WITH THIS PLAN BY OR FOR THE OWNER OF RECORD.

- N/F JOYCE (50 MATTHEWS DR)
- PELLETIER (64 MATTHEWS DR)
- LEWIN (76 MATTHEWS DR)
- MACLAREN (85 MATTHEWS DR)
- FERRARA (90 MATTHEWS DR)
- ANDRADE (95 MATTHEWS DR)
- RICCIO (102 MATTHEWS DR)
- BUFFINGTON (118 MATTHEWS DR)
- FORESTAL (26 MEAGHAN CIR)
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- REVOL (36 MEAGHAN CIR)
- MURPHY (48 MEAGHAN CIR)
- JOHNSON (49 MEAGHAN CIR)
- BEMIS (61 MEAGHAN CIR)
- WILSON (62 MEAGHAN CIR)
- WITHERS (71 MEAGHAN CIR)
- SARSFIELD (75 MEAGHAN CIR)
- BAILEY (80 MEAGHAN CIR)
- SOUSA (85 MEAGHAN CIR)
- TURCOTTE (90 MEAGHAN CIR)
- BOTELHO (95 MEAGHAN CIR)
- (TAUNTON)

BENCHMARK HYD SPINDLE EL=166.73

N/F AUTOMOTIVE RECOVERY SERVICES INC PARCEL 136-30 (TAUNTON)

N/F JIJ PROPERTIES, INC. PARCEL 5-2-1

N/F HAGERTY PARCEL 5-2-2

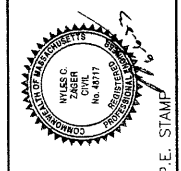
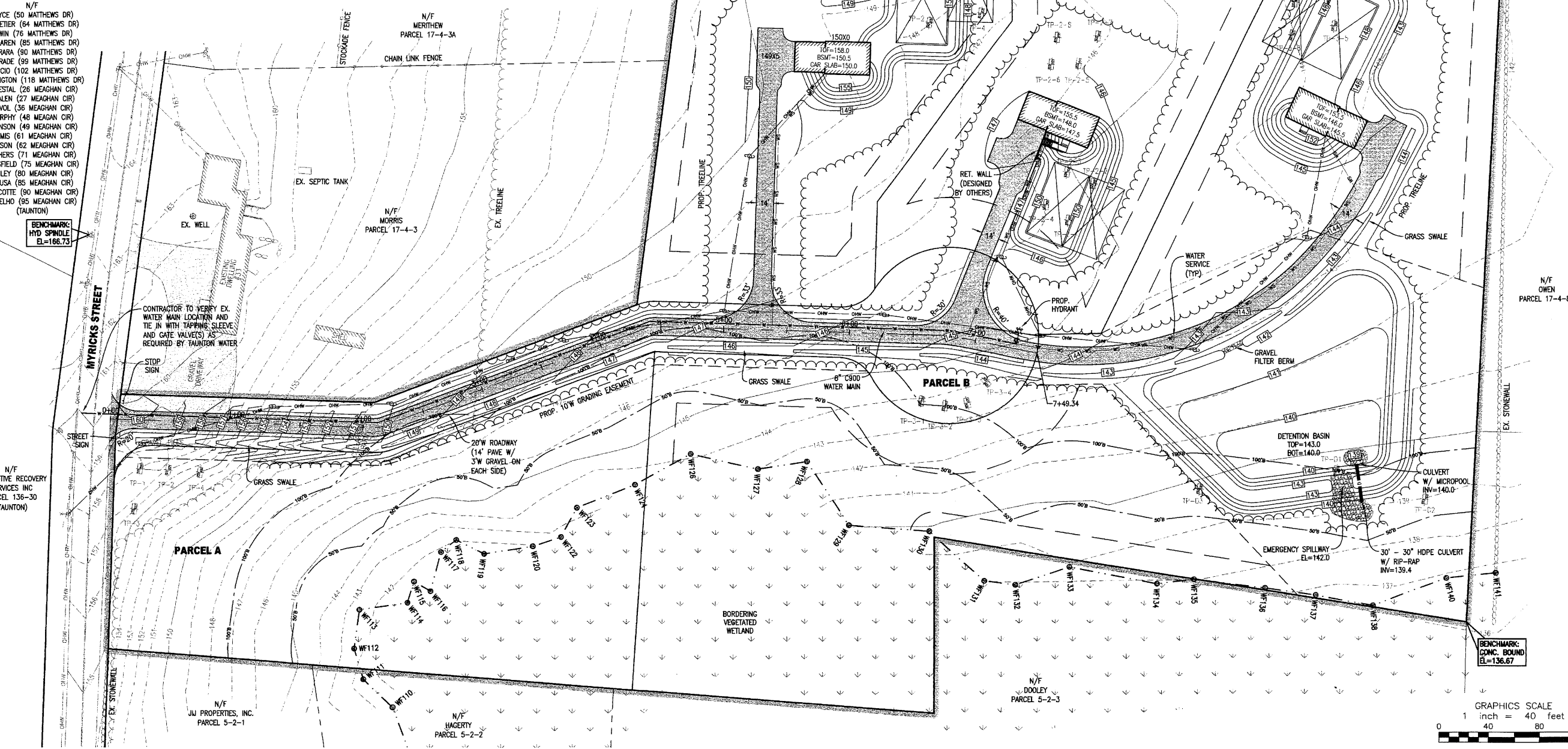
N/F DOOLEY PARCEL 5-2-3

N/F MARRA PARCEL 17-4-2

N/F MERTHEW PARCEL 17-4-3A

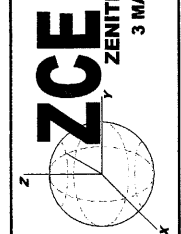
N/F MORRIS PARCEL 17-4-3

N/F OWEN PARCEL 17-4-8B



P. E. STAM

ZCE
ZENITH CONSULTING ENGINEERS, LLC
3 MAIN STREET LAKEVILLE, MA 02347
PHONE: (508) 947-4208



REV.	DATE	DESCRIPTION	BY	APP.
1	8-5-23	PER REVIEW COMMENTS	TEM	NCZ

DATE	DESCRIPTION	BY	APP.
2-13-23	PROJECT NUMBER 0992-01-01	TEM	NCZ
8-5-23	DRAWING SCALE 1"=40'	NCZ	NCZ
	SHEET ID	NCZ	NCZ

DEFINITIVE SUBDIVISION GRADING & DRAINAGE PLAN
STOWE ESTATES
LAKEVILLE, MASSACHUSETTS
JIJ PROPERTIES, INC.
6 SAND TRAP LANE
LAKEVILLE, MASSACHUSETTS

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LAKEVILLE PLANNING BOARD

APPROVED UNDER THE SUBDIVISION CONTROL LAW

APPROVED: _____

ENDORSED: _____

I HEREBY CERTIFY THAT THE NOTICE OF APPROVAL OF THIS PLAN BY THE LAKEVILLE PLANNING BOARD WAS RECEIVED AND RECORDED ON _____ AT THIS OFFICE, AND NO APPEAL WAS RECEIVED DURING THE TWENTY (20) DAYS NEXT AFTER SUCH RECEIPT OF RECORDING OF SAID NOTICE.

TOWN CLERK, LAKEVILLE, MA DATE _____

SUBJECT TO A PERFORMANCE COVENANT DATED _____ RUNNING WITH THE LAND, TO BE DULY RECORDED WITH THIS PLAN BY OR FOR THE OWNER OF RECORD.

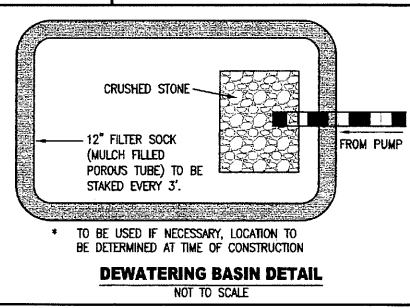
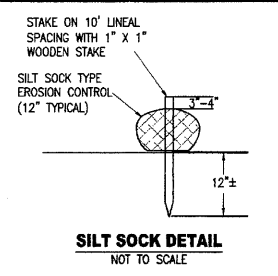
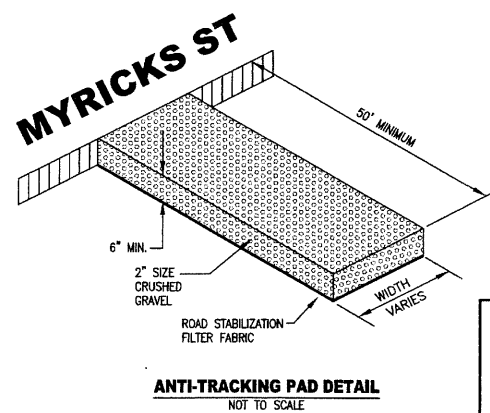
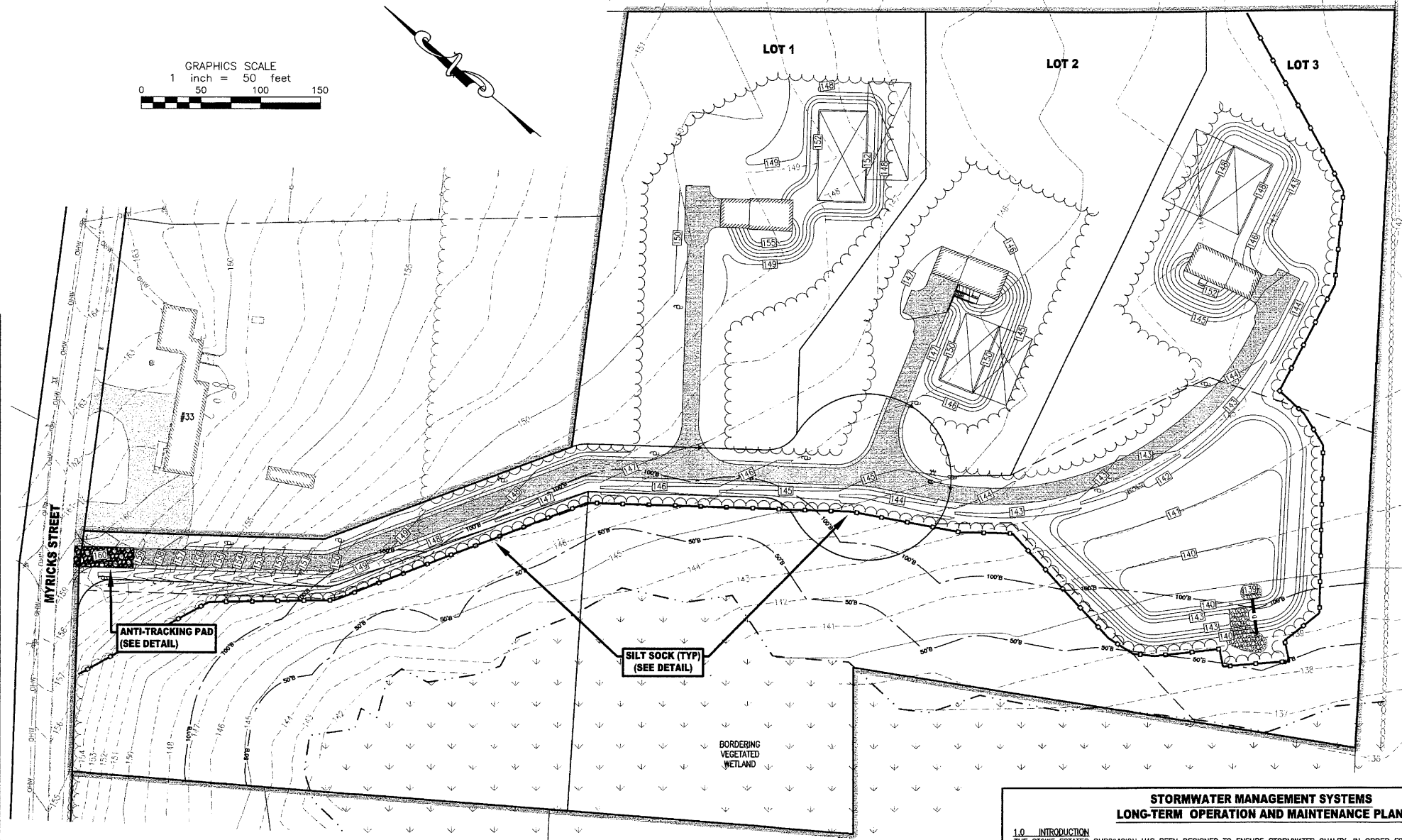
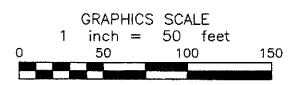
EROSION & SEDIMENT CONTROL NOTES:

IT IS THE CONTRACTOR'S RESPONSIBILITY TO CONTROL EROSION AND PREVENT SEDIMENTATION FROM ENTERING THE WETLAND OR OFFSITE PROPERTIES. IT IS INTENDED THAT THE IMPLEMENTATION OF THE FOLLOWING MEASURES WILL MEET THIS GOAL. WHEN IT IS CLEAR TO THE DESIGNER THAT EROSION AND SEDIMENTATION HAVE BEEN ADEQUATELY CONTROLLED WITHOUT THE IMPLEMENTATION OF EVERY MEASURE, ADDITIONAL MEASURES NEED NOT BE IMPLEMENTED. ALTERNATIVELY, IF ALL OF THE FOLLOWING MEASURES HAVE BEEN IMPLEMENTED AND THE CONTROL OF EROSION AND SEDIMENTATION IS INADEQUATE, THE CONTRACTOR MUST EMPLOY SUFFICIENT SUPPLEMENTAL MEASURES BEYOND THE SCOPE OF THIS PLAN.

1. EROSION AND SEDIMENT CONTROL MEASURES WILL BE INSTALLED PRIOR TO STUMP REMOVAL AND CONSTRUCTION. STABILIZATION OF ALL REGRADED AND SOIL STOCKPILE AREAS WILL BE INITIATED AND MAINTAINED DURING ALL PHASES OF CONSTRUCTION.
2. ALL EROSION AND SEDIMENT CONTROL MEASURES WILL BE CONSTRUCTED IN ACCORDANCE WITH LOCAL MUNICIPAL REGULATIONS. ALL EROSION CONTROL MEASURES ARE TO BE MAINTAINED AND UPGRADED AS REQUIRED TO ACHIEVE PROPER SEDIMENT CONTROL DURING CONSTRUCTION. A STAKED FILTER SOCK DAM SHALL BE INSTALLED DOWN GRADIENT OF ALL DRAINAGE OUTFALLS.
3. ADDITIONAL CONTROL MEASURES WILL BE INSTALLED DURING THE CONSTRUCTION PERIOD, IF DEEMED NECESSARY BY THE OWNER OR AGENTS OF THE OWNER.
4. SEEDING MIXTURE FOR FINISHED GRASSED AREAS WILL BE AS FOLLOWS:
 KENTUCKY BLUE GRASS 45%
 CREEPING RED FESCUE 45%
 PERENNIAL RYEGRASS 10%
 SEED TO BE APPLIED AT A RATE OF 4 LBS./1000 SQ. FT.
 PLANTING SEASONS SHALL BE APRIL 1 TO JUNE 1 AND AUGUST 1 TO OCTOBER 15. AFTER OCTOBER 15, AREAS WILL BE STABILIZED WITH HAYBALE CHECK, FILTER FABRIC, OR WOODCHIP MULCH, AS REQUIRED, TO CONTROL EROSION.

5. AREAS THAT ARE NOT THE LOCATION OF ACTIVE CONSTRUCTION WHICH ARE TO BE LEFT BARE FOR OVER ONE MONTH BEFORE FINISHED GRADING AND SEEDING IS ACHIEVED, SHALL BE MULCHED OR RECEIVE TEMPORARY STABILIZATION SUCH AS JUTE NETTING OR SHALL RECEIVE A TEMPORARY SEEDING OF PERENNIAL RYEGRASS APPLIED TO A RATE OF 2 LBS./1,000 SQ. FT. LIMESTONE (EQUIVALENT TO BE 50 PERCENT CALCIUM PLUS MAGNESIUM OXIDE) SHALL BE APPLIED AS SEEDBED PREPARATION AT A RATE OF 90 LBS./1,000 SQ. FT. PLANTING SEASONS SHALL BE APRIL 1 TO JUNE 1 AND AUGUST 1 TO OCTOBER 1. AREAS TO BE LEFT BARE BEFORE FINISH GRADING AND SEEDING OUTSIDE OF PLANTING SEASONS SHALL RECEIVE AN AIR-DRIED WOOD CHIP MULCH, FREE OF COARSE MATTER.
6. AT ALL PROPOSED FILL AREAS WHICH ARE NOT CURRENTLY SHOWN ON THESE PLANS, THE CONTRACTOR SHALL ESTABLISH AN EROSION CONTROL LINE (HAYBALE CHECK OR FILTER FABRIC) ABOUT TEN (10') FEET FROM TOE TO SLOPE OF PROPOSED FILL AREAS PRIOR TO BEGINNING FILL INSTALLATION. STABILIZATION OF SLOPES IN FILL AREAS (USING MULCH OR GRASS) SHALL BE INITIATED WITHIN THIRTY (30) DAYS OF COMMENCEMENT OF FILL INSTALLATION.
7. STABILIZATION OF SLOPES IN CUT AREAS (USING MULCH OR GRASS) AND THE INSTALLATION OF CONTROL LINE (HAYBALE CHECK OR FILTER FABRIC) AT THE TOE OF SLOPE SHALL BE INITIATED WITHIN THIRTY (30) DAYS OF COMPLETION.
8. SEDIMENT REMOVED FROM CONTROL STRUCTURES WILL BE DISPOSED IN A MANNER WHICH IS CONSISTENT WITH THE INTENT OF THE PLAN. ALL HAYBALES OR SILT FENCE RETAINING SEDIMENT OVER 1/2 THEIR HEIGHT SHALL HAVE THE SEDIMENT REMOVED AND ALL DAMAGED EROSION CONTROLS SHALL BE REPAIRED OR REPLACED.
9. CONTRACTOR WILL BE ASSIGNED THE RESPONSIBILITY FOR IMPLEMENTING THIS EROSION AND SEDIMENT CONTROL PLAN. THIS RESPONSIBILITY INCLUDES THE INSTALLATION AND MAINTENANCE OF EROSION CONTROL MEASURES, INFORMING ALL PARTIES ENGAGED ON THE CONSTRUCTION SITE OF THE REQUIREMENTS AND OBJECTIVES OF THE PLAN, AND NOTIFYING THE PLANNING BOARD OF ANY TRANSFER OF THIS RESPONSIBILITY. THE OWNER SHALL BE RESPONSIBLE FOR CONVEYING A COPY OF THE EROSION AND SEDIMENT CONTROL PLAN IF THE TITLE TO THE LAND IS TRANSFERRED.

10. THE CONTRACTOR SHALL SECURE THE SERVICES OF A PROFESSIONAL ENGINEER, WHO SHALL VERIFY IN THE FIELD THAT THE CONTROLS REQUIRED BY THIS PLAN ARE PROPERLY INSTALLED, SHALL MAKE INSPECTION OF SUCH FACILITIES NOT LESS FREQUENTLY THAN EVERY 14 DAYS OR AFTER A RAINFALL IN EXCESS OF 1/2 INCH, WHICHEVER OCCURS FIRST. THE INSPECTION REPORTS SHALL BE SUBMITTED TO THE PLANNING DEPARTMENT AND CONSERVATION COMMISSION OFFICE ON A MONTHLY BASIS.
11. STOCKPILES OF SOIL SHALL BE SURROUNDED BY A SEDIMENT BARRIER. SOIL STOCKPILES TO BE LEFT BARE FOR MORE THAN THIRTY (30) DAYS SHALL BE STABILIZED WITH TEMPORARY VEGETATION OR MULCH. IF SOIL STOCKPILES ARE TO REMAIN FOR MORE THAN SIXTY (60) DAYS, FILTER FABRIC SHALL BE USED IN PLACE OF HAYBALES. SIDE SLOPES SHALL NOT EXCEED 2:1.
12. THE CONTRACTOR SHALL BE RESPONSIBLE TO CONTROL DUST AND WIND EROSION THROUGHOUT THE LIFE OF THE CONTRACT. DUST CONTROL SHALL INCLUDE, BUT IS NOT LIMITED TO SPRINKLING OF WATER ON EXPOSED SOILS AND HAUL ROADS. CONTRACTOR SHALL CONTROL DUST TO PREVENT A HAZARD TO TRAFFIC AND ADJUTING PROPERTIES.
13. IF FINAL GRADING IS TO BE DELAYED FOR MORE THAN THIRTY (30) DAYS AFTER LAND DISTURBANCES CEASE, TEMPORARY VEGETATION OR MULCH SHALL BE USED TO STABILIZE SOILS.
14. FILTER SOCK SHALL BE USED ONLY AS A TEMPORARY MEASURE. WHERE CONTROL MEASURES WILL BE REQUIRED FOR LONGER THAN SIXTY (60) DAYS, FILTER FABRIC SHALL BE USED.
15. WHERE DEWATERING IS NECESSARY, THERE SHALL NOT BE A DISCHARGE DIRECTLY INTO WETLANDS OR WATERCOURSES. PROPER METHODS AND DEVICES SHALL BE UTILIZED TO THE EXTENT PERMITTED BY LAW, SUCH AS PUMPING WATER INTO A TEMPORARY SEDIMENTATION BOWL, PROVIDING SURGE PROTECTION AT THE INLET AND THE OUTLET OF PUMPS, OR FLOATING THE INTAKE OF THE PUMP, OR OTHER METHODS TO MINIMIZE AND RETAIN THE SUSPENDED SOLIDS. IF A PUMPING OPERATION IS CAUSING TURBIDITY PROBLEMS, SAID OPERATION SHALL CEASE UNTIL SUCH TIME AS FEASIBLE MEANS OF CONTROLLING TURBIDITY ARE DETERMINED AND IMPLEMENTED. SAID DISCHARGE POINTS SHALL BE LOCATED OVER 100 FEET FROM THE DELINEATED WETLANDS AS INDICATED ON THIS PLAN.
16. EROSION CONTROL MEASURES SHOWN ON THIS PLAN SHALL BE FOLLOWED BY THE GENERAL CONTRACTOR AND ALL INDIVIDUAL HOME BUILDERS.
17. ANY SLOPE GREATER THAN 3:1 SHALL BE STABILIZED WITH STUMP GRINDINGS (OR EQUIVALENT) AND INSPECTED ON A WEEKLY BASIS THROUGHOUT THE CONSTRUCTION PERIOD. ANY EROSION OR SLUMPING DISCOVERED SHALL BE REPAIRED AND STABILIZED IMMEDIATELY. INSPECTIONS SHALL CONTINUE UNTIL THE SLOPE IS CONSIDERED FULLY STABILIZED.



CONSTRUCTION OPERATION AND MAINTENANCE SCHEDULE

- THE OPERATION AND MAINTENANCE (O&M) SCHEDULE DURING THE CONSTRUCTION PHASE IS THE RESPONSIBILITY OF THE DEVELOPER AND/OR SITE CONTRACTOR. THE OUTLINE BELOW SHALL BE ADHERED TO AS CLOSELY AS POSSIBLE TO ENSURE THE PROPER CONSTRUCTION AND FUNCTION OF THE DRAINAGE SYSTEM.
1. PRIOR TO CONSTRUCTION, SILT SOCK SHALL BE INSTALLED PER THE APPROVED PLANS. THE EROSION CONTROL SHALL BE INSPECTED PRIOR TO A LARGE STORM EVENT TO ENSURE THAT THE EROSION CONTROL WILL FUNCTION AS REQUIRED AND FOLLOWING A STORM TO INSPECT FOR DAMAGE TO THE EROSION CONTROL ELEMENTS. ANY DAMAGE OR IMPROPER INSTALLATION THAT IS NOTICED PRIOR TO OR FOLLOWING A STORM EVENT SHALL BE PROMPTLY REPLACED OR REPAIRED IN A SATISFACTORY MANNER SO AS TO PREVENT SEDIMENT FROM BYPASSING THE EROSION CONTROL BARRIER.
 2. THE LIMIT OF CLEARING SHOWN ON THE APPROVED PLAN SHALL BE STRICTLY ADHERED TO. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO DETERMINE THE LEVEL OF SAFETY OF STANDING TREES.
 3. IN CONJUNCTION WITH THE ROADWAY CONSTRUCTION, ALL DRAINAGE STRUCTURES, INCLUDING THE DETENTION BASIN, SHALL BE CONSTRUCTED AND STABILIZED AS SOON AS POSSIBLE. METHODS OF STABILIZATION INCLUDE, BUT ARE NOT LIMITED TO, HYDROSEED, LOAM AND SEED, STRAW MULCH, EROSION CONTROL BLANKETS, ETC.
 4. THE DETENTION BASIN SHALL BE INSPECTED WEEKLY OR AFTER ALL RAINFALL EVENTS GREATER THAN 1/2 INCH, WHICHEVER OCCURS SOONER. ANY EROSION WITHIN THE BASIN SHALL BE FILLED AND RE-STABILIZED IN A MANNER TO PREVENT FUTURE EROSION. IN ADDITION, THE OUTER PORTIONS OF THE BASIN SHALL BE INSPECTED IN A SIMILAR MANNER.
 5. THE ANTI-TRACKING PAD SHALL BE INSPECTED DAILY. THE STONE AND SEDIMENT MUST BE REMOVED AND REPLACED AS NECESSARY TO PREVENT EXCESSIVE SEDIMENT FROM ENTERING MYRICKS STREET. SWEEPING SHALL BE PERFORMED AS NEEDED TO REMOVE ANY SEDIMENT IN MYRICKS STREET.
 6. THIS SCHEDULE MUST BE ADHERED TO BY THE OWNER AND/OR CONTRACTOR UNTIL THE ROADWAY IS TRANSFERRED TO THE HOMEOWNERS ASSOCIATION.

**STORMWATER MANAGEMENT SYSTEMS
LONG-TERM OPERATION AND MAINTENANCE PLAN:**

1.0 INTRODUCTION
THE STOWE ESTATES SUBDIVISION HAS BEEN DESIGNED TO ENSURE STORMWATER QUALITY. IN ORDER FOR THIS TO CONTINUE IN THE LONG TERM, IT IS NECESSARY TO IMPLEMENT THE FOLLOWING LONG TERM OPERATION AND MAINTENANCE PROGRAM.

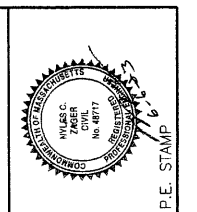
2.0 RESPONSIBLE PARTY
OWNER: JIJ PROPERTIES, INC.
6 SAND TRAP LANE
LAKEVILLE, MA 02347

RESPONSIBLE FOR OPERATION AND MAINTENANCE: SAME AS ABOVE

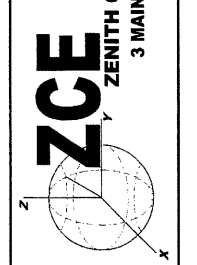
UPON COMPLETION OF THE DEVELOPMENT, THE APPLICANT SHALL ESTABLISH A HOMEOWNERS ASSOCIATION WHICH SHALL TAKE OVER AS THE RESPONSIBLE PARTY FOR OPERATION AND MAINTENANCE OF THE ROADWAY AND DRAINAGE FEATURES AS THE ROADWAY SHALL REMAIN PRIVATE.

3.0 MAINTENANCE OF STORMWATER MANAGEMENT FACILITIES
THE STORMWATER MANAGEMENT FACILITIES WERE DESIGNED TO REQUIRE LITTLE OR NO INTERVENTION IN THE OPERATION AND TO REQUIRE LITTLE OR NO MAINTENANCE ONCE THE PROJECT IS BUILT AND STABLE VEGETATIVE COVER IS ESTABLISHED. HOWEVER, THE DRAINAGE IMPROVEMENTS SHALL BE SUBJECT TO THE FOLLOWING MAINTENANCE SCHEDULE.

- A. ROUTINE MAINTENANCE**
 1. DEBRIS: ALL DEBRIS AND LITTER ARE TO BE REMOVED FROM ALL SWALES AND SURROUNDING AREAS AT LEAST TWICE PER YEAR.
 2. RE-SEEDING: EMBANKMENTS THAT HAVE EXCESSIVE EROSION OR SLUMPING ARE TO BE RE-GRADED AND SEEDING (WITH CANARY GRASS OR TALL FESCUE GRASS) DURING THE SPRING OR FALL GROWING SEASONS AS NEEDED.
 3. INSPECT: DETENTION BASIN SHALL BE INSPECTED FOR SIGNS OF PROPER FUNCTIONING ON A MONTHLY BASIS. ANY SIGNS OF STANDING WATER SHALL BE RECTIFIED IMMEDIATELY.
 4. MOWING: ALL LAWN AREAS SHALL BE MOWED AT LEAST TWICE PER YEAR.
- B. PERIODIC MAINTENANCE**
 1. ALL SWALES SHALL BE INSPECTED, AT A MINIMUM, FOUR TIMES PER YEAR. THEY SHALL BE CLEANED TWO TIMES PER YEAR OR WHENEVER THE DEPTH OF DEPOSITS IS GREATER THAN OR EQUAL TO ONE HALF THE DEPTH. WITH THE ONE-FOOT DEPTH THAT IS SPECIFIED, THIS DEPTH EQUALS SIX INCHES.
- C. NON-ROUTINE MAINTENANCE**
 1. STRUCTURAL: ALL SWALES AND THE DETENTION BASIN SHALL BE INSPECTED ONCE EVERY FOUR (4) YEARS FOR PROPER FUNCTION, CLOGGING, SIGNS OF DETERIORATION AND STRUCTURAL INADEQUACY. ANY ADVERSE SITUATIONS ARE TO BE REPAIRED AS NEEDED.
- D. NON-PERIODIC INSPECTION**
 1. THE STORM WATER MANAGEMENT SYSTEM SHALL BE INSPECTED AFTER TWO YEARS OF FULL OPERATION BY A REGISTERED PROFESSIONAL CIVIL ENGINEER TO CONFIRM ITS ADEQUACY. THE INSPECTION SHALL INCLUDE AN EXAMINATION OF ALL COMPONENTS OF THE SYSTEM INCLUDING SWALES AND THE DETENTION BASIN.
- E. ANNUAL BUDGET**
 1. THE ESTIMATED ANNUAL BUDGET FOR THE O & M IS \$1,000.



ZCE
ZENITH CONSULTING ENGINEERS, LLC
3 MAIN STREET LAKEVILLE, MA 02347
PHONE: (508) 947-4208



REV.	DATE	DESCRIPTION	BY	APP.
1	8-5-23	PER REVIEW COMMENTS	TEM	NCZ

DATE	REV.	DESCRIPTION	BY	APP.
2-13-23	1	PER REVIEW COMMENTS	TEM	NCZ

DESIGNED BY	CHECKED BY	APPROVED BY
TEM	TEM	NCZ

**DEFINITIVE SUBDIVISION
EROSION CONTROL PLAN**

**STOWE ESTATES
LAKEVILLE, MASSACHUSETTS**

**JIJ PROPERTIES, INC.
6 SAND TRAP LANE
LAKEVILLE, MASSACHUSETTS**

C:\Users\Naiman\AppData\Local\Temp\Asbtabat...Subdivision Plan - 35 Myricks St - Lakeville.dwg

LAKEVILLE PLANNING BOARD

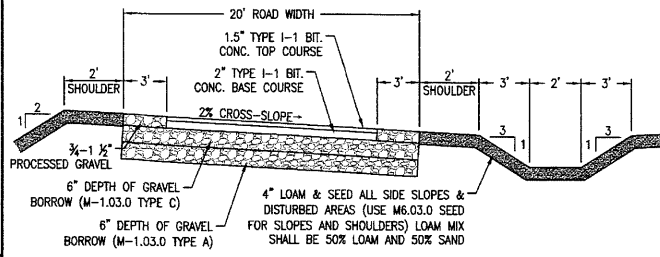
APPROVED UNDER THE SUBDIVISION CONTROL LAW

APPROVED: _____
 ENDORSED: _____

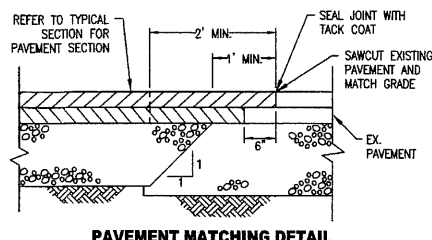
I HEREBY CERTIFY THAT THE NOTICE OF APPROVAL OF THIS PLAN BY THE LAKEVILLE PLANNING BOARD WAS RECEIVED AND RECORDED ON _____ AT THIS OFFICE, AND NO APPEAL WAS RECEIVED DURING THE TWENTY (20) DAYS NEXT AFTER SUCH RECEIPT OF RECORDING OF SAID NOTICE.

TOWN CLERK, LAKEVILLE, MA DATE _____

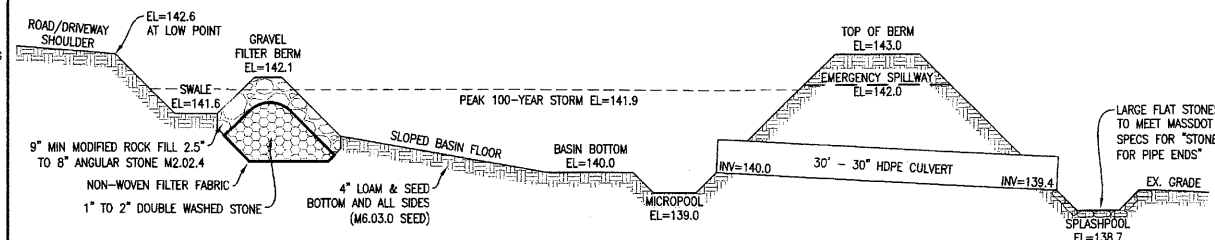
SUBJECT TO A PERFORMANCE COVENANT DATED _____ RUNNING WITH THE LAND, TO BE DULY RECORDED WITH THIS PLAN BY OR FOR THE OWNER OF RECORD.



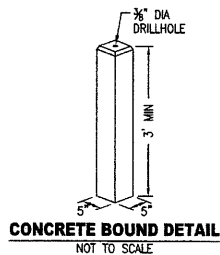
ROADWAY CROSS SECTION DETAIL
NOT TO SCALE



PAVEMENT MATCHING DETAIL
NOT TO SCALE



DETENTION BASIN DETAIL
NOT TO SCALE



CONCRETE BOUND DETAIL
NOT TO SCALE

SOIL LOGS:

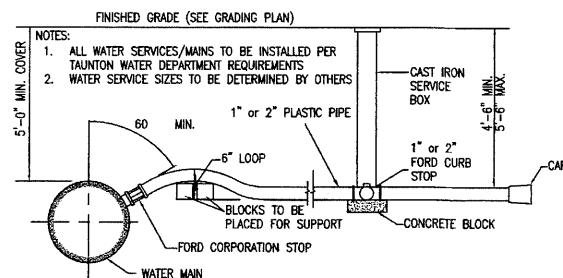
DATE: 9-12-21 (TP-1 THRU 4 ON PARCEL A), 9-13-21 (TP-1 THRU 4 ON LOT 1), 9-29-21 (TP-2-1 THRU 3-4), 9-30-21 (TP-3-5 THRU 3-8)
 PERFORMED BY: WILL CONNELLY, ZENITH CONSULTING ENGINEERS, LLC.
 WITNESSED BY: ED CULLEN, LAKEVILLE BOH

TP-1	TP-2	TP-3	TP-4	TP-1	TP-2	TP-3	TP-4		
DEPTH (INCHES) 0 14 30 108 142	ELEV. (FEET) 158.0 156.8 155.5 149.0 146.2	DEPTH (INCHES) 0 10 22 100 130	ELEV. (FEET) 157.0 156.2 155.2 148.7 146.2	DEPTH (INCHES) 0 10 28 98 132	ELEV. (FEET) 156.0 155.2 153.7 146.8 145.0	DEPTH (INCHES) 0 12 24 66 114	ELEV. (FEET) 147.9 147.0 146.0 142.5 138.5	DEPTH (INCHES) 0 10 26 68 102	ELEV. (FEET) 147.1 146.1 144.9 141.4 138.6
MOTTLING @ 30" WEEPING @ NONE STANDING @ NONE ESHW EL= 155.5 PERC DEPTH: 30"-48" PERC RATE: 51 M.P.I.	MOTTLING @ 26" WEEPING @ NONE STANDING @ NONE ESHW EL= 154.8 PERC DEPTH: 42"-60" PERC RATE: 54 M.P.I.	MOTTLING @ 28" WEEPING @ NONE STANDING @ NONE ESHW EL= 153.7 PERC DEPTH: NONE PERC RATE: NONE	MOTTLING @ 28" WEEPING @ NONE STANDING @ NONE ESHW EL= 152.7 PERC DEPTH: NONE PERC RATE: NONE	MOTTLING @ 24" WEEPING @ 68" STANDING @ 116" ESHW EL= 145.9 PERC DEPTH: 18"-36" PERC RATE: 25 M.P.I.	MOTTLING @ 24" WEEPING @ 53" STANDING @ 106" ESHW EL= 146.0 PERC DEPTH: NONE PERC RATE: NONE	MOTTLING @ 26" WEEPING @ 64" STANDING @ 94" ESHW EL= 144.9 PERC DEPTH: 22"-40" PERC RATE: 52 M.P.I.	MOTTLING @ 26" WEEPING @ 54" STANDING @ 84" ESHW EL= 145.1 PERC DEPTH: NONE PERC RATE: NONE		
DEPTH (INCHES) 0 8 24 148	ELEV. (FEET) 145.6 144.9 143.6 133.3	DEPTH (INCHES) 0 12 26 142	ELEV. (FEET) 144.8 143.6 142.6 133.0	DEPTH (INCHES) 0 8 24 132	ELEV. (FEET) 145.1 144.4 143.3 134.1	DEPTH (INCHES) 0 10 24 30 130	ELEV. (FEET) 145.6 144.8 143.6 143.7 135.6	DEPTH (INCHES) 0 16 32 30 116	ELEV. (FEET) 146.1 145.1 143.7 143.6 136.4
MOTTLING @ 24" WEEPING @ NONE STANDING @ NONE ESHW EL= 143.6 PERC DEPTH: NONE PERC RATE: NONE	MOTTLING @ 26" WEEPING @ NONE STANDING @ NONE ESHW EL= 142.6 PERC DEPTH: 26"-44" PERC RATE: 40 M.P.I.	MOTTLING @ 22" WEEPING @ NONE STANDING @ NONE ESHW EL= 143.3 PERC DEPTH: NONE PERC RATE: NONE	MOTTLING @ 24" WEEPING @ NONE STANDING @ NONE ESHW EL= 143.6 PERC DEPTH: 24"-42" PERC RATE: 18 M.P.I.	MOTTLING @ 30" WEEPING @ NONE STANDING @ NONE ESHW EL= 143.6 PERC DEPTH: 28"-46" PERC RATE: ABANDONED	MOTTLING @ 32" WEEPING @ NONE STANDING @ NONE ESHW EL= 143.7 PERC DEPTH: 28"-46" PERC RATE: ABANDONED	MOTTLING @ 30" WEEPING @ NONE STANDING @ NONE ESHW EL= 143.6 PERC DEPTH: NONE PERC RATE: NONE	MOTTLING @ 26" WEEPING @ NONE STANDING @ NONE ESHW EL= 144.4 PERC DEPTH: NONE PERC RATE: NONE		
DEPTH (INCHES) 0 12 26 130	ELEV. (FEET) 143.9 142.9 141.7 133.1	DEPTH (INCHES) 0 10 28 140	ELEV. (FEET) 143.6 142.8 141.3 132.9	DEPTH (INCHES) 0 8 24 136	ELEV. (FEET) 143.5 142.8 141.5 132.2	DEPTH (INCHES) 0 12 28 34 120	ELEV. (FEET) 144.0 143.0 141.7 140.9 133.7	DEPTH (INCHES) 0 14 20 30 116	ELEV. (FEET) 143.7 142.7 142.2 142.2 134.2
MOTTLING @ 26" WEEPING @ NONE STANDING @ NONE ESHW EL= 141.7 PERC DEPTH: 26"-44" PERC RATE: ABANDONED	MOTTLING @ 28" WEEPING @ NONE STANDING @ NONE ESHW EL= 141.3 PERC DEPTH: NONE PERC RATE: NONE	MOTTLING @ 24" WEEPING @ NONE STANDING @ NONE ESHW EL= 141.5 PERC DEPTH: 28"-46" PERC RATE: ABANDONED	MOTTLING @ 28" WEEPING @ NONE STANDING @ NONE ESHW EL= 141.7 PERC DEPTH: NONE PERC RATE: NONE	MOTTLING @ 28" WEEPING @ NONE STANDING @ NONE ESHW EL= 141.4 PERC DEPTH: NONE PERC RATE: NONE	MOTTLING @ 34" WEEPING @ NONE STANDING @ NONE ESHW EL= 140.9 PERC DEPTH: NONE PERC RATE: NONE	MOTTLING @ 20" WEEPING @ NONE STANDING @ NONE ESHW EL= 142.2 PERC DEPTH: 20"-38" PERC RATE: 45 M.P.I.	MOTTLING @ 26" WEEPING @ NONE STANDING @ NONE ESHW EL= 141.8 PERC DEPTH: 22"-40" PERC RATE: 17 M.P.I.		

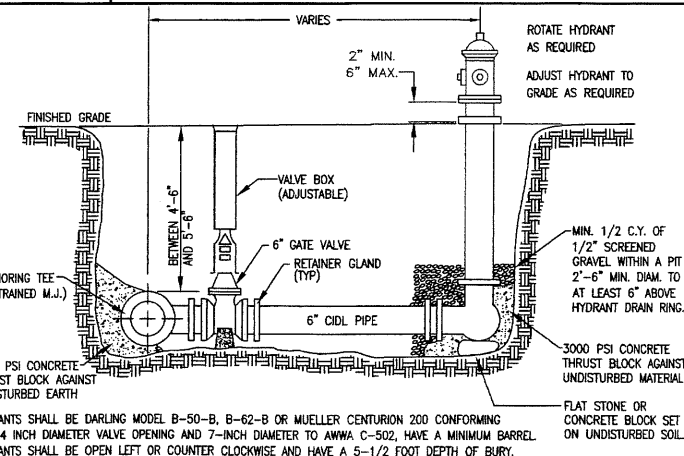
SOIL LOGS:

DATE: 2-6-23
 PERFORMED BY: TOM MORRIS, ZENITH CONSULTING ENGINEERS, LLC.

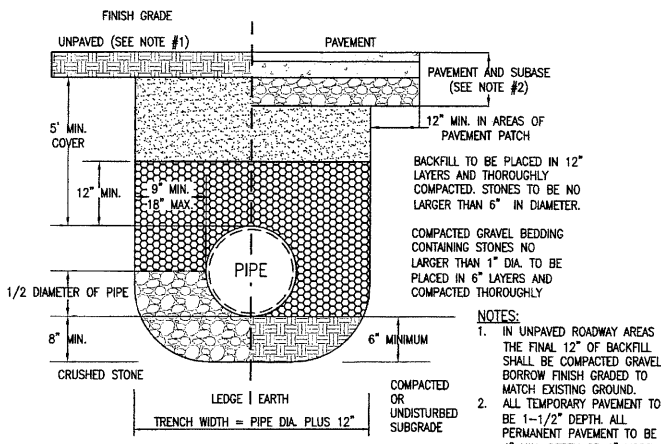
TP-D1	TP-D2	TP-D3	
DEPTH (INCHES) 0 10 20 84	ELEV. (FEET) 139.8 139.0 138.1 132.8	DEPTH (INCHES) 0 10 22 72	ELEV. (FEET) 139.7 138.9 137.9 132.7
MOTTLING @ 20" WEEPING @ 22" STANDING @ NONE ESHW EL= 138.1	MOTTLING @ 18" WEEPING @ NONE STANDING @ NONE ESHW EL= 137.5	MOTTLING @ 22" WEEPING @ 22" STANDING @ NONE ESHW EL= 137.9	



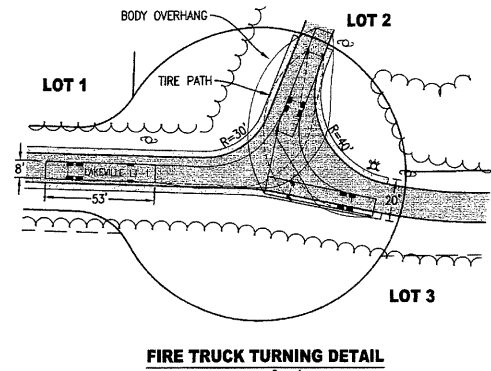
TYPICAL PERMANENT SERVICE CONNECTION
NOT TO SCALE



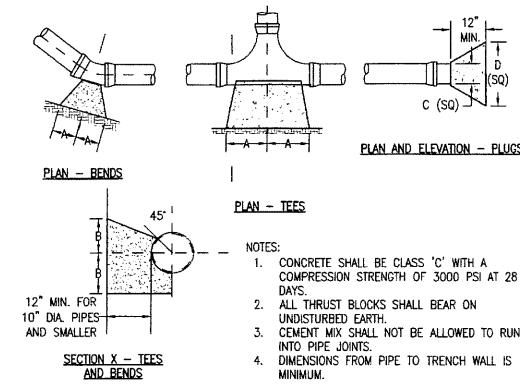
HYDRANT AND VALVE DETAIL
NOT TO SCALE



WATERMAIN TRENCH DETAIL
NOT TO SCALE

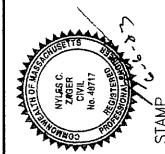


FIRE TRUCK TURNING DETAIL
SCALE: 1"=40'



THRUST BLOCK DETAIL
NOT TO SCALE

TYPE	1/4 BEND		1/8 BEND		1/16 BEND		TEES		PLUGS	
	A	B	A	B	A	B	A	B	C	D
2,000 PSF SOIL	6"	16"	10"	9"	10"	12"	10"	12"	10"	21"
	8"	22"	13"	12"	13"	8"	10"	13"	12"	29"
	10"	26"	17"	14"	17"	10"	13"	16"	20"	36"



P.E. STAMP

ZENITH CONSULTING ENGINEERS, LLC
 3 MAIN STREET LAKEVILLE, MA 02347
 PHONE: (508) 947-4208



REV.	DATE	DESCRIPTION	BY	APP.
1	6-5-23	PER REVIEW COMMENTS	NCZ	

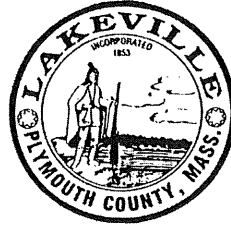
DATE:	2-13-23
DESIGNED BY:	TEM
CHECKED BY:	NCZ
PROJECT NUMBER:	0992-01-01
DRAWING SCALE:	N.T.S.
SHEET ID:	D

DEFINITIVE SUBDIVISION SITE DETAILS
STOWE ESTATES
 LAKEVILLE, MASSACHUSETTS
JJJ PROPERTIES, INC.
 6 SAND TRAP LANE
 LAKEVILLE, MASSACHUSETTS

Town of Lakeville

PLANNING BOARD

346 Bedford Street
Lakeville, MA 02347



NOTICE OF PUBLIC HEARING LEGAL NOTICE

The LAKEVILLE PLANNING BOARD pursuant to the Lakeville Zoning Bylaw, Section 6.7 and 7.5 will hold a Public Hearing on **THURSDAY, June 22, 2023, at 7:00 PM** at the Lakeville Police Station, 323 Bedford Street. The purpose of the Public Hearing will be to receive information and public comment on the following Site Plan Review application:

13 Main Street – The applicant, Main Street Real Estate Holdings, LLC, seeks Site Plan Review and Approval for a proposed development with two (2), three (3)-story apartment buildings with a total of 40 units, which will be age qualified residential units, and associated site improvements.

Mark Knox, Chairman

June 15, 2023



Lakeville Fire Department

346 Bedford Street

Lakeville, Massachusetts 02347

TEL 508-947-4121

FAX 508-946-3436

MICHAEL O'BRIEN
FIRE CHIEF
mobrien@lakevillema.org

PAMELA GARANT
DEPUTY CHIEF
pgarant@lakevillema.org

To: Planning Board

From: Michael P. O'Brien, Fire Chief

RE: 13 Main Street Proposal

Date: June 12, 2023

This document has been provided as comment on the proposed project located at 13 Main Street. The following is a list of concerns about the project as presented.

- Lack of relevant details about the buildings.
 - How many units will be in each building?
 - How will the apartment units be configured (town house style versus contained apartments on each level)?
 - Will there be elevator service that will accommodate patient transport cots?
- The road access lacks a defined turnaround for emergency vehicles.
- The building located closest to Rhode Island Road only provides access to the Fire Department on two sides.
 - Ground ladder use would be required for rescue of occupants from building sides without access.
- No discernable plan for fire department appliances and hydrant coverage.
 - Hydrant locations?
 - Fire Department Sprinkler connection locations and marked access.

The proposal lacks details required to provide an informed opinion about this proposed project.

Law Office of
Michael P. O'Shaughnessy
43 East Grove Street, Suite 5
Middleboro, MA 02346
Phone: (508) 947-9170
E-mail: mike@mposesq.com

June 15, 2023

Town of Lakeville Planning Board
Attn: Mr. Mark Knox
346 Bedford Street
Lakeville, MA 02347

Re: Site Plan Review
13 Main Street, Lakeville, MA

Dear Mr. Knox:

Main Street Real Estate Holdings, LLC (“Applicant”) requests Site Plan Review from the Town of Lakeville Planning Board (“Board”) pursuant to Section 6.7 of the Lakeville Zoning Bylaw¹ for a project located at 13 Main Street. The project was initially proposed as a mixed-use development with a two-story office building located at the front of the property along Main Street and 19 residential units located westerly of the office building. However, an issue was raised regarding the interpretation of the zoning setbacks with respect to the initial proposal causing the Applicant to redesign the project. The project will be Age-Qualified Housing comprised of two (2) apartment buildings with twenty (20) units in each building for a total of forty (40) residential units. There will be five (5) one-bedroom units and fifteen (15) two-bedroom units per building.

The proposed project is subject to site plan review pursuant to Section 6.7.3 as new multifamily building construction of three or more units is proposed.

The site is located in the Mixed-Use Development District (“MUDD”). The purpose of the Mixed Use Development District is to encourage and to authorize the mixed use development by means of an association of a variety of building types and uses. Section 7.5.1 of the Bylaw states:

“The Mixed Use Development District is an overlay district superimposed over the underlying district(s). The provisions of the underlying zoning district(s), and the provisions of this By-Law generally, each as in effect as of June 16, 2003, including bulk and dimensional requirements, will apply within the Mixed Use Development District, except if inconsistent with the Mixed Use Development District regulations set forth below, in which case the provisions of this Section 7.5 will govern over any conflicting zoning requirements of the underlying zoning district(s).”

¹ References to Section _____ shall mean those section found in the Lakeville Zoning Bylaw

Pursuant to Section 7.5.3, Age-Qualified Housing is an allowed use within the MUDD district and parking and access drives are an allowable accessory use under Section 7.5.4.

The project site is located in both the Residential zoning district and the Business zoning district with the bulk of the site and buildings being located in the business district zone. As shown in the chart below, the project complies with the bulk and dimensional requirements of the business zone.

Zoning Compliance Chart

Bylaw Section	Required	Provided
5.1	Business	Business
Min. Lot Dimension	70,000 sf (52,500 contiguous upland)	134,398 +/- sf with 128,773 sf +/- upland
Frontage (feet)	175	175
Front Yard (feet)	40	>40
Side Yard (feet)	40	>40
Rear Yard (feet)	40	>40
Number of Stories	3	3
Height (feet)	35	35<
Max % of Land Covered by Parking/Structures	50%	49.98%
7.5.5.1 – Minimum Lot Area	3 acres	3.08 acres
7.5.5.2 – Buffer Zones		Not applicable to zoning boundaries internal to MUDD
Section 5.2.4.1	40 feet	
Section 5.2.4.2	20 feet	
7.5.5.3 – Lot Coverage for office and R&D uses	Max 60% for all office and R&D uses located outside of the Business Zone	Not applicable
7.5.5.4 – Parking Lot Access	The restrictions set forth in Section 6.5.1 regarding the maximum number of entry/exit points for a parking area shall be understood as applying to individual lots within the Mixed Use Development District, and shall apply only to entry/exit points along a public way	Satisfied

7.5.5.5 – Shared Parking/Reduced Size	9 x 20 or 9 x 18 – PB approval	9 x 20 provided
7.5.5.6 – Multiple Buildings on a Lot	Allowed	Satisfied
7.5.5.7 – Site Plan Approval	Approval Required	Satisfied

Analysis of Site Plan Review Performance Standards

The purpose of the site plan review bylaw is to protect public health, safety and welfare; to promote balanced growth; to protect property values; and to encourage development. Additionally, site plan review is intended to ensure that the proposed project will constitute suitable development and will not result in a detriment to the neighborhood or the environment. The Bylaw establishes performance standards in order to control the size, scale, and impacts of the project. As established below, the proposed project meets the established standards (each standard is set forth in *italics*).

6.7.6.1. Purpose. The following performance standards have been adopted in order to control the size, scale, and impacts of projects listed in Section 6.7.3. “The Planning Board shall consider the protection of adjacent areas against detrimental or offensive uses on the site by provision of adequate surface water drainage, buffers against light, sight, sound, dust and vibration, and preservation of light and air.” The Planning Board shall ensure that such standards are met during the review of any Planning Board site plan review application or those that also require a special permit.

As the Planning Board will see in its review, the proposed project meets each applicable performance standards.

6.7.6.2. Preservation of landscape. The landscape shall be preserved in its natural state insofar as practicable by minimizing any grade changes and vegetation and soil removal.

The landscape is preserved in its natural state as much as practicable by minimizing existing grade changes and matching same to the extent practicable. The project will not require soil removal from the site.

6.7.6.3. Off-street parking and loading. The plan shall comply with Section 6.5 of these bylaws. Unless otherwise allowed by the Planning Board, construction materials and standards not specified within Section 6.5 shall be consistent with those found within the Lakeville Subdivision Regulations. Provisions shall be made to accommodate areas for snow storage.

Section 6.5.3.2 requires that the number of parking spaces be the sum of the requirements for the several individual uses. As shown on the chart below (see also plan set coversheet)

Parking (see Section 6.5.3.3 of the Zoning Bylaw)

Use	Required	Provided
Residential	80 (Two per dwelling unit)	82
ADA Spaces	One per establishment and/or use.	4

6.7.6.4. Circulation. Driveways and internal circulation shall be safe, adequate and convenient for automotive as well as pedestrian and bicycle traffic. Sidewalks and parking lots shall meet Massachusetts Architectural Access Board Regulations and the American with Disabilities Act Design Standards. Site distances, driveway widths, grade, location, drainage, signage, islands, and other control structures, curb radii and intersection angles shall all be provided for review.

The driveway and the internal circulation are safe and convenient for automotive, pedestrian and bicycle traffic. The sidewalk and parking lots meet Massachusetts Architectural Access Board Regulations and the American with Disabilities Act Design Standards. Site distances, driveway widths, grade, location, drainage, signage, islands, and other control structures, curb radii and intersection angles are shown on the Grading and Drainage Plan and Detail Sheet 2.

6.7.6.5. Site access. The Planning Board shall evaluate the safety of motorists, bicyclists, and pedestrians utilizing the site and the roadways leading into the site. To ensure the public's safety, the Planning Board may require sidewalks or pedestrian paths within and between developments. The Planning Board may also require the connection of adjacent properties via the use of connector drives.

There are presently no sidewalks, pedestrian path or connector drives on the abutting properties that can be connected to.

6.7.6.6. Architectural requirements. Consideration shall be given to ensure that buildings are appropriate in scale, massing, height, roofline, and building materials to ensure that the architecture shall be in harmony with the surrounding neighborhood and the Town. Rooftop mechanical installation shall be hidden from view from the street or abutting properties. See Section 6.7.7 for specific standards.

The office building has a gable style roof that is dormered out on the front to match the style of the CVS building, the urgent care building and office building across the street from the project and will be in harmony with the surrounding neighborhood.

6.7.6.7. Screening, buffers and landscaping requirements. Notwithstanding whether or not the project is adjacent to a Residential District the plan shall comply with Sections 5.2.4.1, 5.2.4.2, 5.2.5.1 or 5.2.5.2 of these bylaws. Plants should be indigenous to the area or be able to survive New England winters. Salt-tolerant varieties shall be planted along roadways and parking areas.

A landscape buffer is proposed along the length of the southerly property line. This property line is approximately 375 feet +/- in length with evergreens, red maples and eastern red cedars. These are all plants that can survive New England winters.

6.7.6.8. Lighting. Lighting shall be designed to enhance public safety and provide for adequate and appropriate outdoor lighting. The design shall not produce unwanted glare, light trespass on abutting properties or an over illumination of the site. Lighting shall be full cut off fixtures, dark sky compliant except for sign lighting.

All lighting will be dark sky compliant. As is shown on the lighting plan, there is no light trespassing onto the abutting properties.

6.7.6.9. Service areas. Service areas and delivery locations shall be located so that delivery vehicles are parked outside the street right-of-way or in on-site driveways. The Board shall ensure that these areas do not impede on-site vehicular circulation. The Board may require that specific areas adjacent to buildings or areas of the business' operations be specifically reserved for loading or delivery operations. These areas cannot be counted for parking or utilized for access aisles. All service areas, dumpster and trash receptacle locations, and other similar uses shall be screened from the street and from public view, through a variety of materials such as walls, fences, plantings or a combination of these materials.

There is a dedicated space near each building for delivery vehicle parking.

6.7.6.10. Utility service. All utility service transmission systems, including but not limited to water, sewer, natural gas, electrical, cable and telephone lines, shall, whenever practicable, be placed underground.

All utilities will be underground.

6.7.6.11. Drainage.

1. All efforts shall be made to design the drainage system to utilize low-impact development (LID) methods. Developments not incorporating any LID design elements shall prove to the Board that the use of these drainage systems is not feasible for the project due to unique site characteristics or its location.

The project site is not conducive to using low-impact development (LID) methods due to the narrowness of the lot and steep grades.

2. Detailed drainage design and computations shall be provided in conformance with the Department of Environmental Protection, Massachusetts Stormwater Handbook (latest edition). Closed drainage systems shall be designed for a 25-year storm event. Culverts, detention basins, and infiltration systems shall be designed for 100-year events.

The design of the drainage system complies with Massachusetts Stormwater management standards.

3. Post-development drainage rates shall not exceed predevelopment levels. Within the Water Resource Protection District, special attention shall be made to ensure water quality is not degraded. Easements shall be shown on the plan. If they are to be granted to the Town, a written easement and a specific easement plan of such for recording purposes is necessary.

The design of the drainage system complies with Massachusetts Stormwater management standards.

6.7.6.12. Off-site improvements. The Planning Board may require applicants to make offsite improvements to public roads or other community facilities, or to make payments for the reasonable costs associated with the impacts of the proposed development. Such improvements may include but are not limited to the widening of streets and improvement of intersections providing access to the site; the installation of curb and sidewalks along streets serving the site; and drainage improvements necessitated by the development of the site.

The proposed project is located on a state roadway and the Applicant will obtain a curb cut permit from Massachusetts Department of Transportation. The Applicant does not believe that the proposed project necessitates offsite improvements to public roads or other community facilities. Additionally, the Applicant does not believe that that the proposed age qualified housing will cause a negative impact to the Town of Lakeville.

6.7.6.13. Public safety. Buildings and adjacent grounds shall permit reasonable access and operation by fire, police and other emergency personnel and equipment. The Board may require fire lanes at locations providing access to buildings to ensure that these areas are open for fire vehicle access.

The width and configuration of the entrance way, driveway and parking areas provide reasonable access to and around the apartment buildings.

6.7.6.14. Construction standards. All construction specifications shall comply with the standards in the Lakeville Subdivision Regulations. Where these regulations do not cover construction items, construction shall be in accordance with Commonwealth of Massachusetts, Department of Transportation, Standard Specifications for Highways and Bridges (latest edition) or standard engineering practices as determined by the Board or its designee.

As noted on the plan (see Note 10 on the coversheet), the construction specifications will conform to the Town of Lakeville Subdivision Rules and Regulations. In the event the regulations do not cover construction items, the project will comply with the Commonwealth of Massachusetts, Department of Transportation, Standard Specifications for Highways and Bridges (latest edition) or standard engineering practices.

6.7.7.1 Facades: For long front facades, vary the setback, height, and roof form of the building within the range provided by traditional buildings in the region to continue the established rhythm of facades on the street. In most cases, long facades should be avoided, generally extending no more than 50 feet without a change in the wall plane. Setbacks and projections of several feet in depth are most effective at visually breaking up large facades. Smaller setbacks used in

conjunction with larger setbacks can be effective. The bulk and mass of the building should be broken down to a scale that reflects the context of the surrounding neighborhood.

The front façade of the apartment buildings mimics features found in other buildings on Main Street. The wall plane of the buildings are broken up by the variety in the window widths, the setbacks in the buildings and larger setbacks for the decks. The dormered roofline along the street in connection with the lower roof line that frames the entranceway reduces the appearance of the bulk and mass of the building down to a scale that reflects the context of the surrounding neighborhood.

6.7.7.2 Siding: The following siding treatments most commonly found in New England shall be used: Clapboard, vertical board, brick, stone, and wood shingles. Natural materials are preferred. The use of vinyl or aluminum is strongly discouraged in the Business District. Concrete block, stucco, adobe, or other non-traditional siding types are also discouraged. Sidings having a panelized or prefabricated appearance are unacceptable.

The Applicant proposes to install a clapboard style product.

6.7.7.3 Roofs: Roofs shall be of various pitched varieties commonly found in New England. Gable or Hip Roofs are most preferred. Shed and Gambrel style roofs are also acceptable. False mansard or other flat roofs are the least desirable. All roofs should have appropriate overhangs. Flat roofs should not be completely eliminated from consideration, but should only be built where the size of the building does not permit a pitched roof. When flat roofs are permissible, any roof top mechanicals should be hidden from the main viewpoints on ground level.

The proposed residential buildings have gable styled roofs with appropriate overhangs.

6.7.7.4 Roof Materials: Roofs shall be constructed of materials, which are commonly found in New England. Shingled roofs constructed of asphalt or wood shingles are preferred. Standing seam, copper, or other metal roofs are also acceptable. Multiple roof plain slopes are acceptable, as New England Architecture often includes a variety of roof styles and plains, however it should be limited. Roll roofing, built-up tar and gravel, plastic, or fiberglass roofing materials are not appropriate. On flat roofs that are not visible from public areas, other roof materials may be considered.

The roofs will be asphalt shingled.

6.7.7.5 Architectural Features and Details: Balconies, decks, covered porches, decorative shingles, bracketed eaves, columns, balustrades, towers, turrets, skylights, and arches are among the details to be considered. All features and details should be in proportion with the building. Use of metal, fiberglass, or plastic awnings is not appropriate.

The entrances to the buildings are framed with columns and archways. Each unit will have its own exterior deck for a sitting area.

June 15, 2023

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6.7.7.6 Windows and Doors: All windows and doors shall be of a New England character. Large plate glass windows are discouraged unless they are broken up with mullions or muttuns. Mirrored glass or walls are not acceptable. Also, aluminum windows/wall systems with or without colored metal panels known as curtain wall systems are not acceptable. Windows and doorways should be encased with trim. Decorative trim is preferred.

The windows have New England character. The larger windows are broken up with mullions. Mirrored glass or walls are not proposed. A curtain wall system is not proposed. Windows and doors will have a decorative trim.

6.7.7.7 Lighting: Lighting for new developments whether mounted on the building or on poles shall be designed so as not to spill onto adjacent properties. Shielded lights are preferred or exposed bulb fixtures, which are historic in character. Lighting elements shall be covered by globe or shielded. Low-level lighting is preferred over large high-level light fixtures. Lighting shall comply with the Town of Lakeville Outdoor Lighting By-Law.

Lighting will be mounted on the buildings and will not spill onto adjacent properties. Lighting elements will be shielded and will comply with the Town of Lakeville Outdoor Lighting By-Law.

6.7.7.8 Equipment: All roof, wall or ground mounted mechanical equipment, trash collection or dumpster locations, delivery or loading areas, and outdoor storage areas shall be located outside primary visual corridors and screened from public view.

All roof, wall or ground mounted mechanical equipment, trash collection or dumpster locations, delivery or loading areas, are located outside primary visual corridors and screened from public view.

Conclusion

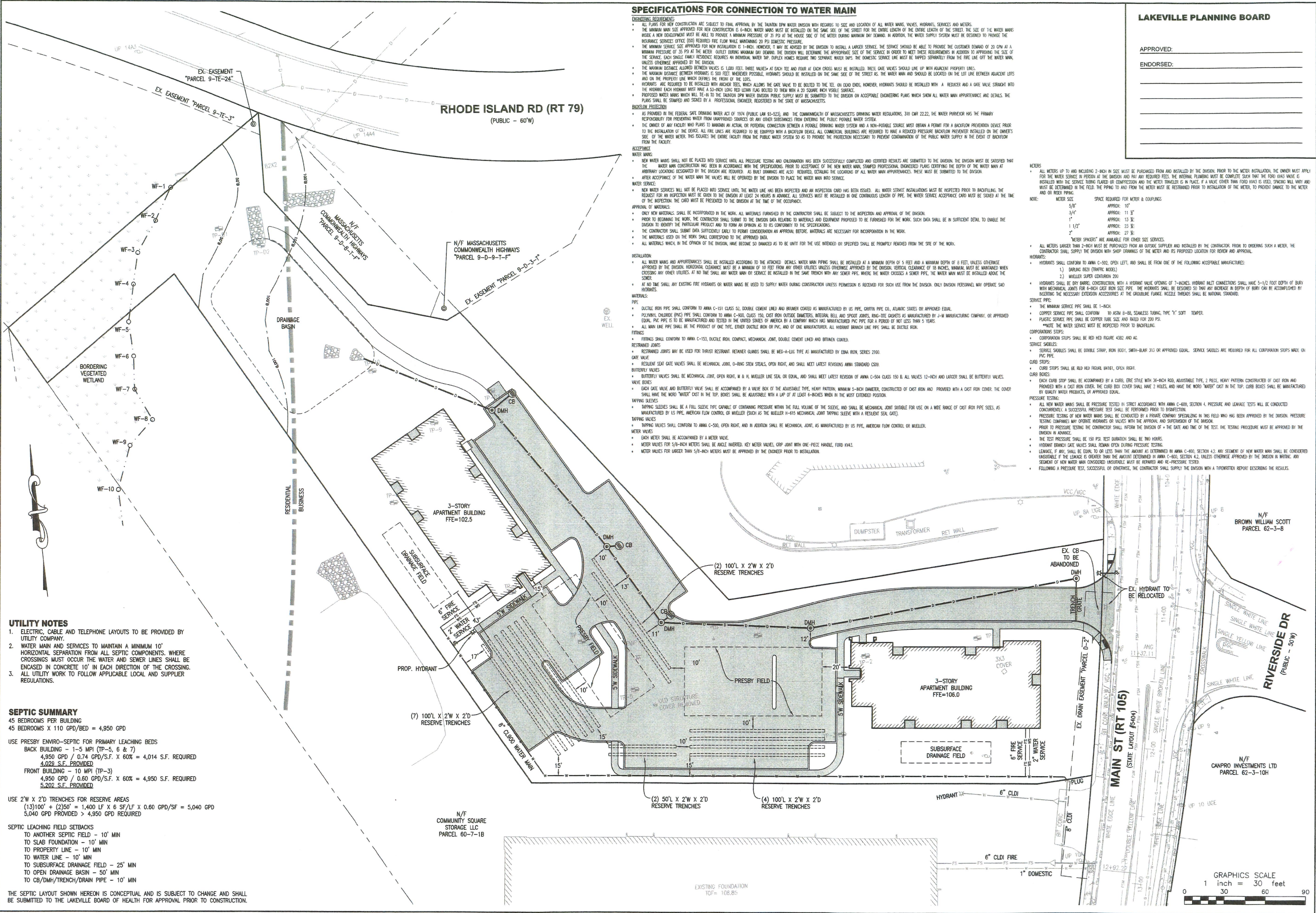
The Applicant believes that the project satisfies the performance standards established under the Town of Lakeville Zoning Bylaw and that the project is suitable development and will not result in a detriment to the neighborhood or the environment. The Applicant respectfully requests that the Planning Board issue a decision indicating that the project complies with the Site Plan Review performance standards.

Should you have any questions or comments, please do not hesitate to contact me.

Very truly yours,



Michael O'Shaughnessy



SPECIFICATIONS FOR CONNECTION TO WATER MAIN

- DISCRETIONARY REQUIREMENTS:**
- ALL PLANS FOR NEW CONSTRUCTION ARE SUBJECT TO FINAL APPROVAL BY THE TOWN OF LAKEVILLE WATER DEPARTMENT WITH REGARD TO SIZE AND LOCATION OF ALL WATER MAINS, VALVES, HYDRANTS, SERVICES AND METERS.
 - THE MINIMUM MAIN SIZE APPROVED FOR NEW CONSTRUCTION IS 6-INCH WATER MAINS MUST BE INSTALLED ON THE SAME SIDE OF THE STREET FOR THE ENTIRE LENGTH OF THE STREET. THE SIZE OF THE WATER MAINS INSIDE A NEW DEVELOPMENT MUST BE ABLE TO PROVIDE A MINIMUM PRESSURE OF 35 PSI AT THE HOUSE SIDE OF THE METER DURING MAXIMUM DAY DEMAND. IN ADDITION, THE WATER SUPPLY SYSTEM MUST BE DESIGNED TO PROVIDE THE INSURANCE SERVICE OFFICE (ISO) REQUIRED FLOW RATE MAINTAINING 20 PSI DOMESTIC PRESSURE.
 - THE MINIMUM SERVICE SIZE APPROVED FOR NEW INSTALLATION IS 1/2-INCH HYDRANT. IT MAY BE INCREASED BY THE DIVISION TO INSTALL A LARGER SERVICE. THE SERVICE SHOULD BE ABLE TO PROVIDE THE CUSTOMER DEMAND OF 20 GPM AT A MINIMUM PRESSURE OF 35 PSI AT THE METER OUTLET DURING MAXIMUM DAY DEMAND. THE DIVISION WILL DETERMINE THE APPROPRIATE SIZE OF THE SERVICE IN ORDER TO MEET THESE REQUIREMENTS IN ACCORDANCE TO APPROVING THE SIZE OF THE SERVICE. EACH SINGLE FAMILY RESIDENCE REQUIRES AN INDIVIDUAL WATER TAP. DUPLEX HOMES REQUIRE TWO SEPARATE WATER TAPS. THE DOMESTIC SERVICE LINE MUST BE TAPPED SEPARATELY FROM THE FIRE LINE OFF THE WATER MAIN, UNLESS OTHERWISE APPROVED BY THE DIVISION.
 - THE MAXIMUM DISTANCE ALLOWED BETWEEN VALVES IS 1,000 FEET. THREE VALVES AT EACH TEE AND FOUR AT EACH CROSS MUST BE INSTALLED. THESE GATE VALVES SHOULD LINE UP WITH ADJACENT PROPERTY LINES.
 - THE MAXIMUM DISTANCE BETWEEN HYDRANTS IS 500 FEET. WHEREVER POSSIBLE, HYDRANTS SHOULD BE INSTALLED ON THE SAME SIDE OF THE STREET AS THE WATER MAIN AND SHOULD BE LOCATED ON THE LOT LINE BETWEEN ADJACENT LOTS AND ON THE PROPERTY LINE WHICH DRAINS THE FRONT OF THE LOTS.
 - HYDRANTS ARE REQUIRED TO BE INSTALLED WITH ANCHOR TEES, WHICH ALLOWS THE GATE VALVE TO BE BOLTED TO THE TEE. ON DEAD ENDS, HOWEVER, HYDRANTS SHOULD BE INSTALLED WITH A REDUCER AND A GATE VALVE STRAIGHT INTO THE HYDRANT. EACH HYDRANT MUST HAVE A 4.5-INCH LONG RED LEAD FLANG BOLT TO TIGHTEN WITH A 20 SQUARE INCH VISIBLE SURFACE.
 - PROPOSED WATER MAINS WHICH WILL TIE-IN TO THE TOWN OF LAKEVILLE WATER DEPARTMENT PUBLIC SUPPLY MUST BE SUBMITTED TO THE DIVISION ON ACCEPTABLE ENGINEERING PLANS WHICH SHOW ALL WATER MAIN APPURTENANCES AND DETAILS. THE PLANS SHALL BE STAMPED AND SIGNED BY A PROFESSIONAL ENGINEER, REGISTERED IN THE STATE OF MASSACHUSETTS.
- BACKFLOW PREVENTION:**
- AS PROVIDED IN THE FEDERAL SAFE DRINKING WATER ACT OF 1974 (PUBLIC LAW 93-52), AND THE COMMONWEALTH OF MASSACHUSETTS DRINKING WATER REGULATIONS, 310 CMR 22.22, THE WATER PURIFIER HAS THE PRIMARY RESPONSIBILITY FOR PREVENTING WATER FROM UNAPPROVED SOURCES OR OTHER SUBSTANCES FROM ENTERING THE PUBLIC POTABLE WATER SYSTEM.
 - THE OWNER OF ANY FACILITY WHO PLANS TO MAINTAIN AN ACTUAL OR POTENTIAL CONNECTION BETWEEN A POTABLE DRINKING WATER SYSTEM AND A NON-POTABLE SOURCE MUST OBTAIN A PERMIT FOR A BACKFLOW PREVENTION DEVICE PRIOR TO THE INSTALLATION OF THE DEVICE. ALL FIRE LINES ARE REQUIRED TO BE EQUIPPED WITH A BACKFLOW PREVENTER. ALL COMMERCIAL BUILDINGS ARE REQUIRED TO HAVE A REDUCED PRESSURE BACKFLOW PREVENTER INSTALLED ON THE OWNER'S SIDE OF THE WATER METER. THIS SQUARES THE OWNER'S FACILITY FROM THE PUBLIC WATER SYSTEM SO AS TO PROVIDE THE PROTECTION NECESSARY TO PREVENT CONTAMINATION OF THE PUBLIC WATER SUPPLY IN THE EVENT OF BACKFLOW FROM THE FACILITY.
- ACCEPTANCE:**
- NEW WATER MAINS SHALL NOT BE PLACED INTO SERVICE UNTIL ALL PRESSURE TESTING AND CALIBRATION HAS BEEN SUCCESSFULLY COMPLETED AND CERTIFIED RESULTS ARE SUBMITTED TO THE DIVISION. THE DIVISION MUST BE SATISFIED THAT THE WATER MAIN CONSTRUCTION HAS BEEN IN ACCORDANCE WITH THE SPECIFICATIONS. PRIOR TO ACCEPTANCE OF THE NEW WATER MAIN, STAMPED PROFESSIONAL ENGINEER PLANS CERTIFYING THE DEPTH OF THE WATER MAIN AT ARBITRARY LOCATIONS DESIGNATED BY THE DIVISION ARE REQUIRED. AS BUILT DRAWINGS ARE ALSO REQUIRED, DETAILING THE LOCATIONS OF ALL WATER MAIN APPURTENANCES. THESE MUST BE SUBMITTED TO THE DIVISION.
 - AFTER ACCEPTANCE OF THE WATER MAIN THE VALVES WILL BE OPERATED BY THE DIVISION TO PLACE THE WATER MAIN INTO SERVICE.
- WATER SERVICE:**
- NEW WATER SERVICES WILL NOT BE PLACED INTO SERVICE UNTIL THE WATER LINE HAS BEEN INSPECTED AND AN INSPECTION CARD HAS BEEN ISSUED. ALL WATER SERVICE INSTALLATIONS MUST BE INSPECTED PRIOR TO BACKFLOWING. THE REQUEST FOR AN INSPECTION MUST BE GIVEN TO THE DIVISION AT LEAST 24 HOURS IN ADVANCE. ALL SERVICES MUST BE INSTALLED IN ONE CONTINUOUS LENGTH OF PIPE. THE WATER SERVICE ACCEPTANCE CARD MUST BE SIGNED AT THE TIME OF THE INSPECTION. THE CARD MUST BE PRESENTED TO THE DIVISION AT THE TIME OF OCCUPANCY.
- APPROVAL OF MATERIALS:**
- ONLY NEW MATERIALS SHALL BE INCORPORATED IN THE WORK. ALL MATERIALS FURNISHED BY THE CONTRACTOR SHALL BE SUBJECT TO THE INSPECTION AND APPROVAL OF THE DIVISION.
 - PRIOR TO BEGINNING THE WORK, THE CONTRACTOR SHALL SUBMIT TO THE DIVISION DATA RELATING TO MATERIALS AND EQUIPMENT PROPOSED TO BE FURNISHED FOR THE WORK. SUCH DATA SHALL BE IN SUFFICIENT DETAIL TO ENABLE THE DIVISION TO IDENTIFY THE PARTICULAR PRODUCT AND TO FORM AN OPINION AS TO ITS CONFORMITY TO THE SPECIFICATIONS.
 - THE CONTRACTOR SHALL SUBMIT DATA SUFFICIENTLY EARLY TO PERMIT CONSIDERATION AND APPROVAL BEFORE MATERIALS ARE NECESSARY FOR INCORPORATION IN THE WORK.
 - THE MATERIALS USED ON THE WORK SHALL CORRESPOND TO THE APPROVED DATA.
 - ALL MATERIALS WHICH, BY THE OPINION OF THE DIVISION, HAVE BECOME SO DAMAGED AS TO BE UNFIT FOR THE USE INTENDED OR SPECIFIED SHALL BE PROMPTLY REMOVED FROM THE SITE OF THE WORK.
- INSTALLATION:**
- ALL WATER MAINS AND APPURTENANCES SHALL BE INSTALLED ACCORDING TO THE ATTACHED DETAILS. WATER MAIN PIPING SHALL BE INSTALLED AT A MINIMUM DEPTH OF 5 FEET AND A MAXIMUM DEPTH OF 8 FEET, UNLESS OTHERWISE APPROVED BY THE DIVISION. HORIZONTAL CLEARANCE MUST BE A MINIMUM OF 10 FEET FROM ANY OTHER UTILITIES UNLESS OTHERWISE APPROVED BY THE DIVISION. VERTICAL CLEARANCE OF 18 INCHES MINIMUM MUST BE MAINTAINED WHEN CROSSING ANY OTHER UTILITIES. AT NO TIME SHALL ANY WATER MAIN OR SERVICE BE INSTALLED IN THE SAME TRENCH WITH ANY OTHER SERVICE PIPE. THE WATER MAIN MUST BE INSTALLED ABOVE THE SERVICE PIPE.
 - AT NO TIME SHALL ANY EXISTING FIRE HYDRANTS OR WATER MAINS BE USED TO SUPPLY WATER DURING CONSTRUCTION UNLESS PERMISSION IS RECEIVED FOR SUCH USE FROM THE DIVISION. ONLY DIVISION PERSONNEL MAY OPERATE SAID HYDRANTS.
- MATERIALS:**
- PPE:**
- DUCTILE IRON PIPE SHALL CONFORM TO ANNA C-151 CLASS 50, DOUBLE CEMENT LINED AND BROWN COATED AS MANUFACTURED BY US PIPE, ORFLEX PIPE CO., ATLANTIC STATES OR APPROVED EQUAL.
 - POLYETHYLENE GLYCOL (PE) PIPE SHALL CONFORM TO ANNA C-405 CLASS 150, CAST IRON OUTSIDE DIAMETERS, METRIC BELL AND SPIGOT JOINTS, BING-TOE JOINTS AS MANUFACTURED BY J-H MANUFACTURING COMPANY, OR APPROVED EQUAL. PVC PIPE IS TO BE MANUFACTURED AND TESTED IN THE UNITED STATES OF AMERICA BY A COMPANY WHICH HAS MANUFACTURED PVC PIPE FOR A PERIOD OF NOT LESS THAN 5 YEARS.
 - ALL MAIN LINE PIPE SHALL BE THE PRODUCT OF ONE TYPE, EITHER DUCTILE IRON OR PVC, AND OF ONE MANUFACTURER. ALL HYDRANT BRANCH LINE PIPE SHALL BE DUCTILE IRON.
- FITTINGS:**
- FITTINGS SHALL CONFORM TO ANNA C-153, DUCTILE IRON COMPACT, MECHANICAL JOINT, DOUBLE CEMENT LINED AND BITUMEN COATED.
- RESTRAINED JOINTS:**
- RESTRAINED JOINTS MAY BE USED FOR THROST RESTRAINT. RESTRAINT GLANDS SHALL BE MED-A-LINE TYPE AS MANUFACTURED BY EBAN IRON, SERIES 2100.
- GATE VALVE:**
- RESIDENT SIDE GATE VALVES SHALL BE MECHANICAL JOINT, O-RING STEM STEELS, OPEN RIGHT, AND SHALL MEET LATEST REVISED ANNA STANDARD C509.
- BUTTERFLY VALVES:**
- BUTTERFLY VALVES SHALL BE MECHANICAL JOINT, OPEN RIGHT, M & H, WHEELER LINE SEAL OR EQUAL, AND SHALL MEET LATEST REVISION OF ANNA C-504 CLASS 150 B. ALL VALVES 12-INCH AND LARGER SHALL BE BUTTERFLY VALVES.
- VALVE BOXES:**
- EACH GATE VALVE AND BUTTERFLY VALVE SHALL BE ACCOMPANIED BY A VALVE BOX OF THE ADJUSTABLE TYPE, HEAVY PATENT, MINIMUM 5-INCH DIAMETER, CONSTRUCTED OF CAST IRON AND PROVIDED WITH A CAST IRON COVER. THE COVER SHALL HAVE THE WORD "WATER" CAST IN THE TOP. BOXES SHALL BE ADJUSTABLE WITH A LIP OF AT LEAST 4-INCHES WHEN IN THE MOST EXTENDED POSITION.
- TAPPING SLEEVES:**
- TAPPING SLEEVES SHALL BE A FULL SLEEVE TYPE CAPABLE OF WITHSTANDING PRESSURE WITHIN THE FULL VOLUME OF THE SLEEVE, AND SHALL BE MECHANICAL JOINT SUITABLE FOR USE ON A WIDE RANGE OF CAST IRON PIPE SIZES, AS MANUFACTURED BY US PIPE, AMERICAN FLOW CONTROL, OR WHEELER (SUCH AS THE WHEELER H-815 MECHANICAL JOINT TAPPING SLEEVE WITH A RESIDENT SEAL GATE).
- TAPPING VALVES:**
- TAPPING VALVES SHALL CONFORM TO ANNA C-500, OPEN RIGHT, AND IN ADDITION SHALL BE MECHANICAL JOINT, AS MANUFACTURED BY US PIPE, AMERICAN FLOW CONTROL, OR WHEELER.
- METER VALVES:**
- EACH METER SHALL BE ACCOMPANIED BY A METER VALVE.
 - METER VALVES FOR 1/2-INCH METERS SHALL BE INSIZE INSTEAD. KEY METER VALVES, GWP JOINT WITH ONE-PIECE HANDLE, FORD M&L.
 - METER VALVES FOR LARGER THAN 1/2-INCH METERS MUST BE APPROVED BY THE ENGINEER PRIOR TO INSTALLATION.

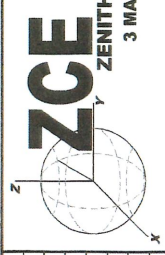
LAKEVILLE PLANNING BOARD

APPROVED: _____

ENDORSED: _____



ZENITH CONSULTING ENGINEERS, LLC
 3 MAIN STREET LAKEVILLE, MA 02347
 PHONE: (508) 947-4208



- UTILITY NOTES**
- ELECTRIC, CABLE AND TELEPHONE LAYOUTS TO BE PROVIDED BY UTILITY COMPANY.
 - WATER MAIN AND SERVICES TO MAINTAIN A MINIMUM 10' HORIZONTAL SEPARATION FROM ALL SEPTIC COMPONENTS. WHERE CROSSINGS MUST OCCUR THE WATER AND SEWER LINES SHALL BE ENCASED IN CONCRETE 10" IN EACH DIRECTION OF THE CROSSING.
 - ALL UTILITY WORK TO FOLLOW APPLICABLE LOCAL AND SUPPLIER REGULATIONS.

- SEPTIC SUMMARY**
- 45 BEDROOMS PER BUILDING
 - 45 BEDROOMS X 110 GPD/BED = 4,950 GPD
 - USE PRESBY ENVIRO-SEPTIC FOR PRIMARY LEACHING BEDS
 - BACK BUILDING - 1-5 MPI (TP-5, 6 & 7)
 - 4,950 GPD / 0.74 GPD/S.F. X 60% = 4,014 S.F. REQUIRED
 - 4,022 S.F. PROVIDED
 - FRONT BUILDING - 10 MPI (TP-3)
 - 4,950 GPD / 0.60 GPD/S.F. X 60% = 4,950 S.F. REQUIRED
 - 5,202 S.F. PROVIDED
 - USE 2'W X 2'D TRENCHES FOR RESERVE AREAS
 - (13)100' + (2)50' = 1,400 LF X 6 SF/LF X 0.60 GPD/SF = 5,040 GPD
 - 5,040 GPD PROVIDED > 4,950 GPD REQUIRED

- SEPTIC LEACHING FIELD SETBACKS**
- TO ANOTHER SEPTIC FIELD - 10' MIN
 - TO SLAB FOUNDATION - 10' MIN
 - TO PROPERTY LINE - 10' MIN
 - TO WATER LINE - 10' MIN
 - TO SUBSURFACE DRAINAGE FIELD - 25' MIN
 - TO OPEN DRAINAGE BASIN - 50' MIN
 - TO CB/DMH/TRENCH/DRAIN PIPE - 10' MIN

THE SEPTIC LAYOUT SHOWN HEREON IS CONCEPTUAL AND IS SUBJECT TO CHANGE AND SHALL BE SUBMITTED TO THE LAKEVILLE BOARD OF HEALTH FOR APPROVAL PRIOR TO CONSTRUCTION.

- METERS:**
- ALL METERS 1/2" TO AND INCLUDING 2-INCH IN SIZE MUST BE PURCHASED FROM AND INSTALLED BY THE DIVISION. PRIOR TO THE METER INSTALLATION, THE OWNER MUST APPLY FOR THE WATER SERVICE IN PERSON AT THE DIVISION AND PAY ANY REQUIRED FEES. THE INTERNAL PLUMBING MUST BE COMPLETE SUCH THAT THE FLOW VALVE IS INSTALLED WITH THE SERVICE TUBING FLARED OR COMPRESSION AND THE METER TONGUE IS IN PLACE. IF A VALVE OTHER THAN FORD VALVES IS USED, SPACING WILL VARY AND MUST BE DETERMINED IN THE FIELD. THE PIPING TO AND FROM THE METER MUST BE RESTRAINED PRIOR TO INSTALLATION OF THE METER, TO PREVENT DAMAGE TO THE METER AND ON PIPING.
- NOTE:**
- | METER SIZE | SPACE REQUIRED FOR METER & COUPLINGS |
|------------|--------------------------------------|
| 5/8" | APPROX: 10" |
| 3/4" | APPROX: 11 1/2" |
| 1" | APPROX: 13 1/2" |
| 1 1/2" | APPROX: 15 1/2" |
| 2" | APPROX: 27 1/2" |
- "METER SPACERS" ARE AVAILABLE FOR OTHER SIZE SERVICES.
- ALL METERS LARGER THAN 2-INCH MUST BE PURCHASED FROM AN OUTSIDE SUPPLIER AND INSTALLED BY THE CONTRACTOR. PRIOR TO ORDERING SUCH A METER, THE CONTRACTOR SHALL SUPPLY THE DIVISION WITH SHOP DRAWINGS OF THE METER AND ITS PROPOSED LOCATION FOR REVIEW AND APPROVAL.
- HYDRANTS:**
- HYDRANTS SHALL CONFORM TO ANNA C-502, OPEN LEFT, AND SHALL BE FROM ONE OF THE FOLLOWING ACCEPTABLE MANUFACTURERS:
 - DARLING (BELL MODEL)
 - WHEELER (SPERT CENTERLINE 200)
 - HYDRANTS SHALL BE 8" DIAMETER. CONSTRUCTION WITH A HYDRANT VALVE OPENING OF 7-INCHES. HYDRANT M&L CONNECTIONS SHALL HAVE 5-1/2" FOOT DEPTH OF BURY WITH MECHANICAL JOINTS FOR 6-INCH CAST IRON PIPE. THE HYDRANTS SHALL BE DESIGNED SO THAT ANY INCREASE IN DEPTH OF BURY CAN BE ACCOMPLISHED BY INSERTING THE NECESSARY EXTENSION ACCESSORIES AT THE GROUNDLINE FLANGE. NOZZLE THREADS SHALL BE NATIONAL STANDARD.
- SERVICE PIPE:**
- THE MINIMUM SERVICE PIPE SHALL BE 1-INCH.
 - COPPER SERVICE PIPE SHALL CONFORM TO ASTM B-88, SEAMLESS TUBING, TYPE "Y" SOFT TEMPER.
 - PLASTIC SERVICE PIPE SHALL BE COPPER TUBE SIZE AND RATED FOR 200 PSI.
 - "NOTE: THE WATER SERVICE MUST BE INSPECTED PRIOR TO BACKFLOWING."
- CORPORATION STEPS:**
- CORPORATION STEPS SHALL BE RED HED FIGURE 4382 AND 4C.
- SERVICE SADDLES:**
- SERVICE SADDLES SHALL BE DOUBLE SHARP, IRON BODY, SMITH-BLAF 313 OR APPROVED EQUAL. SERVICE SADDLES ARE REQUIRED FOR ALL CORPORATION STEPS MADE ON PVC PIPE.
- CURB STOPS:**
- CURB STOPS SHALL BE RED HED FIGURE 4381, OPEN RIGHT.
- CURB BOXES:**
- EACH CURB STOP SHALL BE ACCOMPANIED BY A CURB, 8" DEEP WITH 36-HIGH ROD, ADJUSTABLE TYPE, 1" PRESS. HEAVY PATENT CONSTRUCTED OF CAST IRON AND PROVIDED WITH A CAST IRON COVER. THE CURB BOX COVER SHALL HAVE 2 HOLES, AND HAVE THE WORD "WATER" CAST IN THE TOP. CURB BOXES SHALL BE MANUFACTURED BY QUALITY WATER PRODUCTS OR APPROVED EQUAL.
- PRESSURE TESTING:**
- ALL NEW WATER MAINS SHALL BE PRESSURE TESTED IN STRICT ACCORDANCE WITH ANNA C-400, SECTION 4. PRESSURE AND LEAKAGE TESTS WILL BE CONDUCTED CONCURRENTLY. A SUCCESSFUL PRESSURE TEST SHALL BE PERFORMED PRIOR TO DISINTEGRATION.
 - PRESSURE TESTING OF NEW WATER MAINS SHALL BE CONDUCTED BY A PRIVATE COMPANY SPECIALIZING IN THIS FIELD WHO HAS BEEN APPROVED BY THE DIVISION. PRESSURE TESTING COMPANIES MAY OPERATE HYDRANTS OR VALVES WITH THE APPROVAL AND SUPERVISION OF THE DIVISION.
 - PRIOR TO PRESSURE TESTING THE CONTRACTOR SHALL NOTIFY THE DIVISION OF THE DATE AND TIME OF THE TEST. THE TESTING PROCEDURE MUST BE APPROVED BY THE DIVISION IN ADVANCE.
 - THE TEST PRESSURE SHALL BE 150 PSI. TEST DURATION SHALL BE TWO HOURS.
 - HYDRANT BRANCH GATE VALVES SHALL REMAIN OPEN DURING PRESSURE TESTING.
 - LEAKAGE IF ANY, SHALL BE EQUAL TO OR LESS THAN THE AMOUNT AS DETERMINED IN ANNA C-400, SECTION 4.2. ANY STATEMENT OF NEW WATER MAIN SHALL BE CONSIDERED UNRELIABLE IF THE LEAKAGE IS GREATER THAN THE AMOUNT DETERMINED IN ANNA C-400, SECTION 4.2, UNLESS OTHERWISE APPROVED BY THE DIVISION IN WRITING. ANY STATEMENT OF NEW WATER MAIN CONSIDERED UNRELIABLE MUST BE REPAIRED AND RE-PRESSURE TESTED.
 - FOLLOWING A PRESSURE TEST, SUCCESSFUL OR OTHERWISE, THE CONTRACTOR SHALL SUPPLY THE DIVISION WITH A TYPED REPORT DESCRIBING THE RESULTS.

REV.	DATE	DESCRIPTION	BY	APP.
6-8-23				

DATE:	6-8-23
PROJECT NUMBER:	0454-17-01
DRAWING SCALE:	1" = 30'
SHEET ID:	U

DRAWN BY:	RNF/TEM
DESIGNED BY:	RNF/TEM
CHECKED BY:	NZJ
APPROVED BY:	NZJ

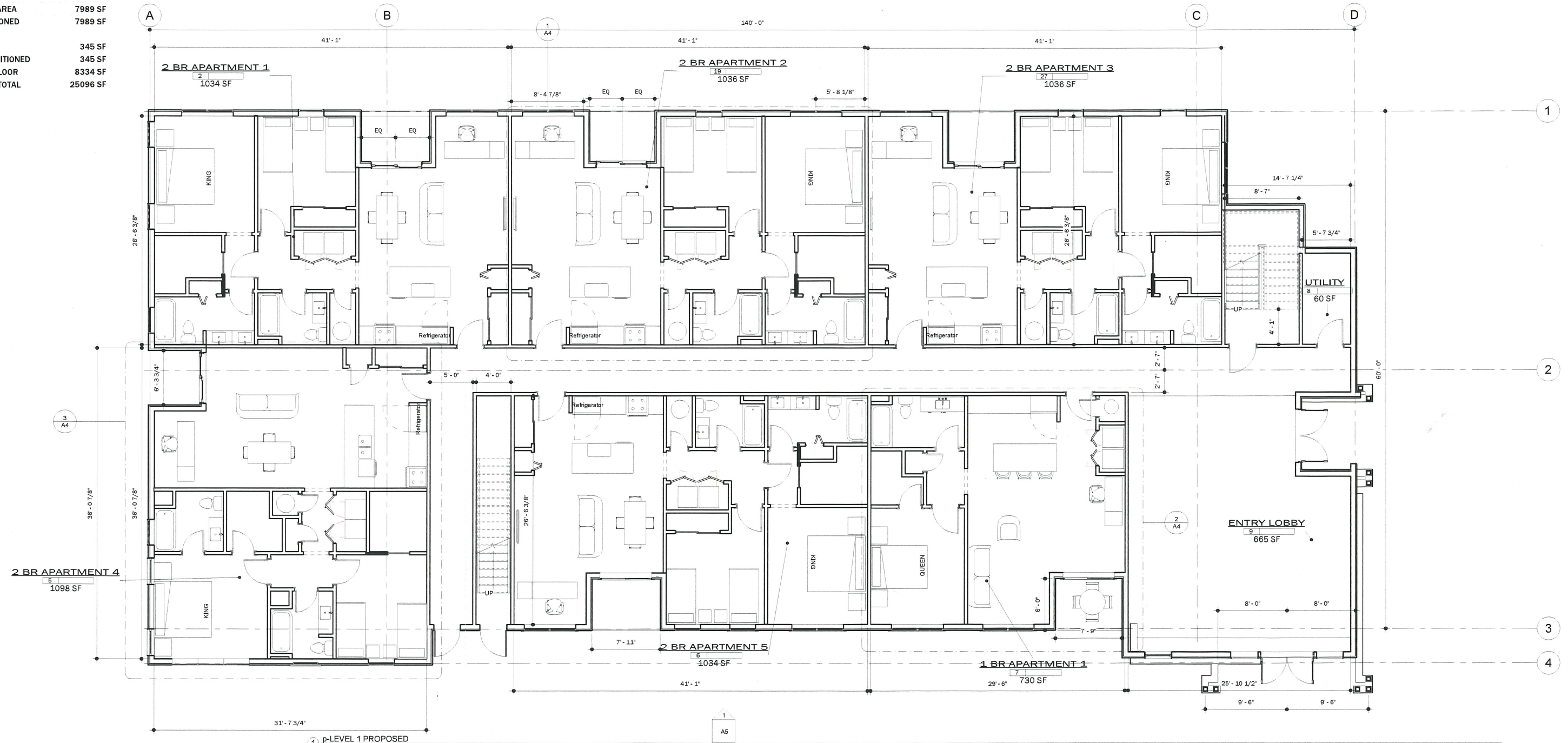
UTILITIES PLAN

13 MAIN STREET
 LAKEVILLE, MASSACHUSETTS

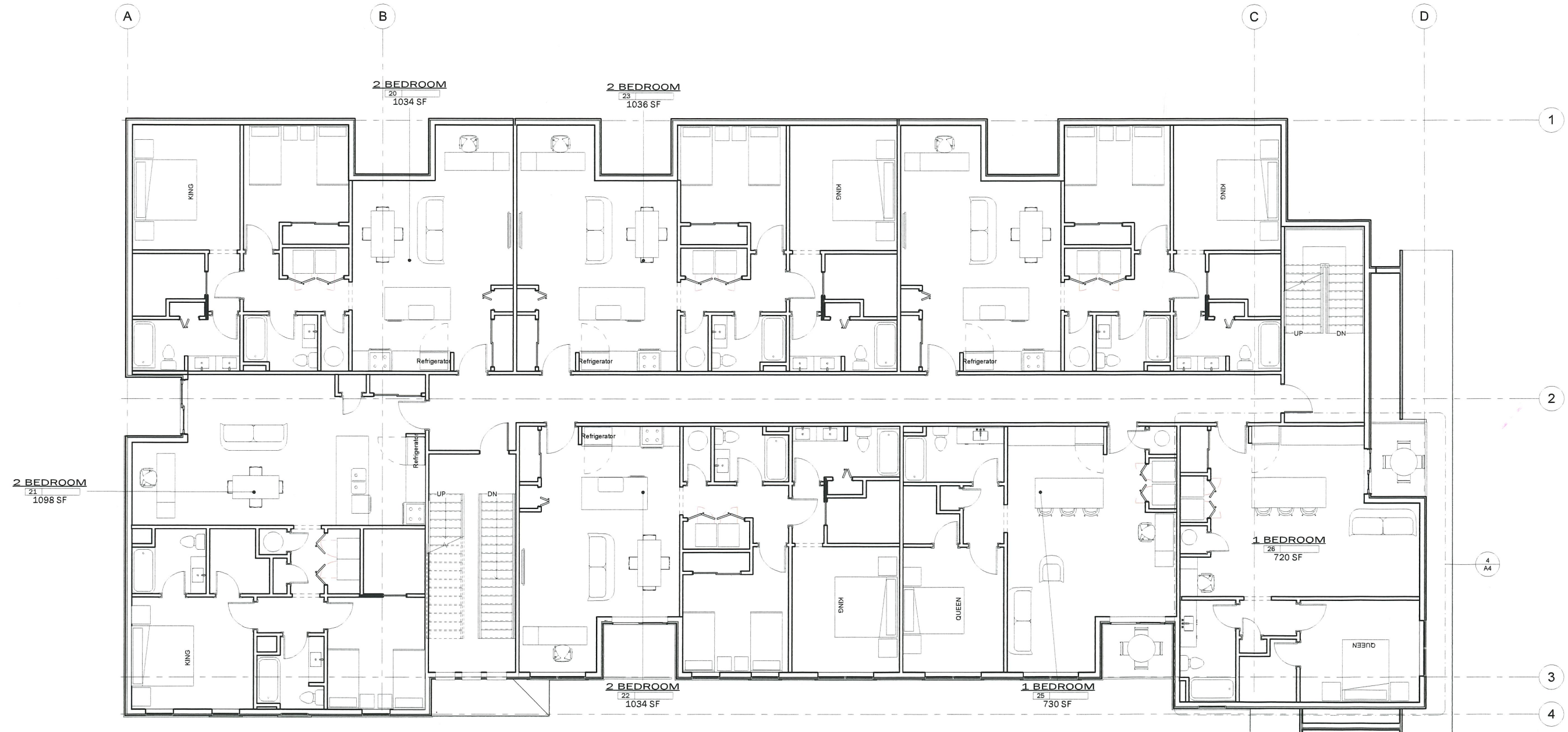
CLIENT INFO:
 MAIN STREET REAL ESTATE HOLDINGS, LLC
 5308 HARKLE ROAD SUITE 100
 SANTE FE, NEW MEXICO

DRAFT-NOT FOR CONSTRUCTION

FIRST FLOOR	
GROSS AREA	8232 SF
CONDITIONED	8232 SF
PATIO	195 SF
UNCONDITIONED	195 SF
FIRST FLOOR	8427 SF
SECOND FLOOR	
GROSS AREA	7989 SF
CONDITIONED	7989 SF
PATIO	345 SF
UNCONDITIONED	345 SF
SECOND FLOOR	8334 SF
THIRD FLOOR	
GROSS AREA	7989 SF
CONDITIONED	7989 SF
PATIO	345 SF
UNCONDITIONED	345 SF
THIRD FLOOR	8334 SF
GRAND TOTAL	25096 SF

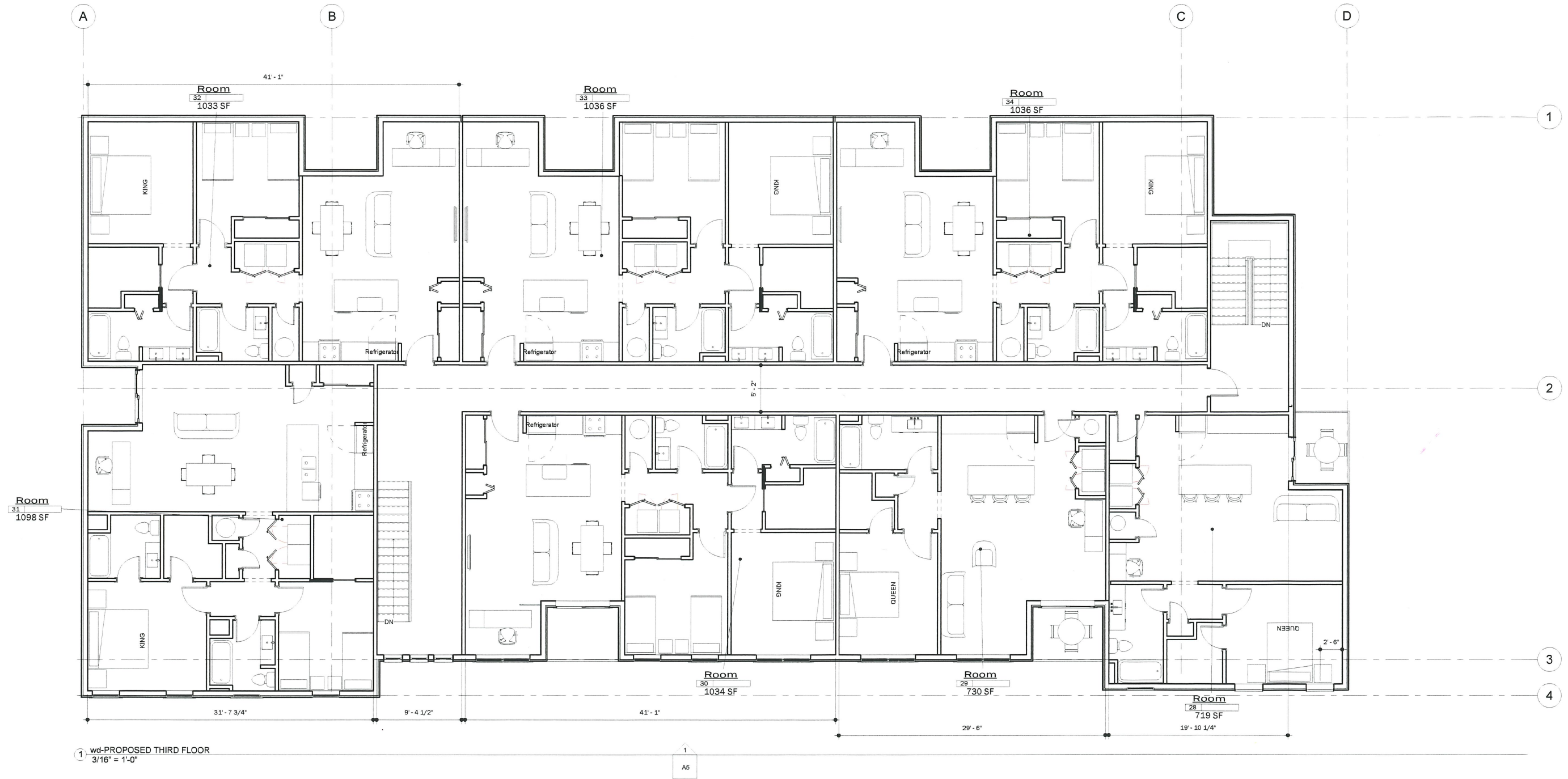


DRAFT-NOT FOR CONSTRUCTION



1 wd-SECOND FLOOR
3/16" = 1'-0"

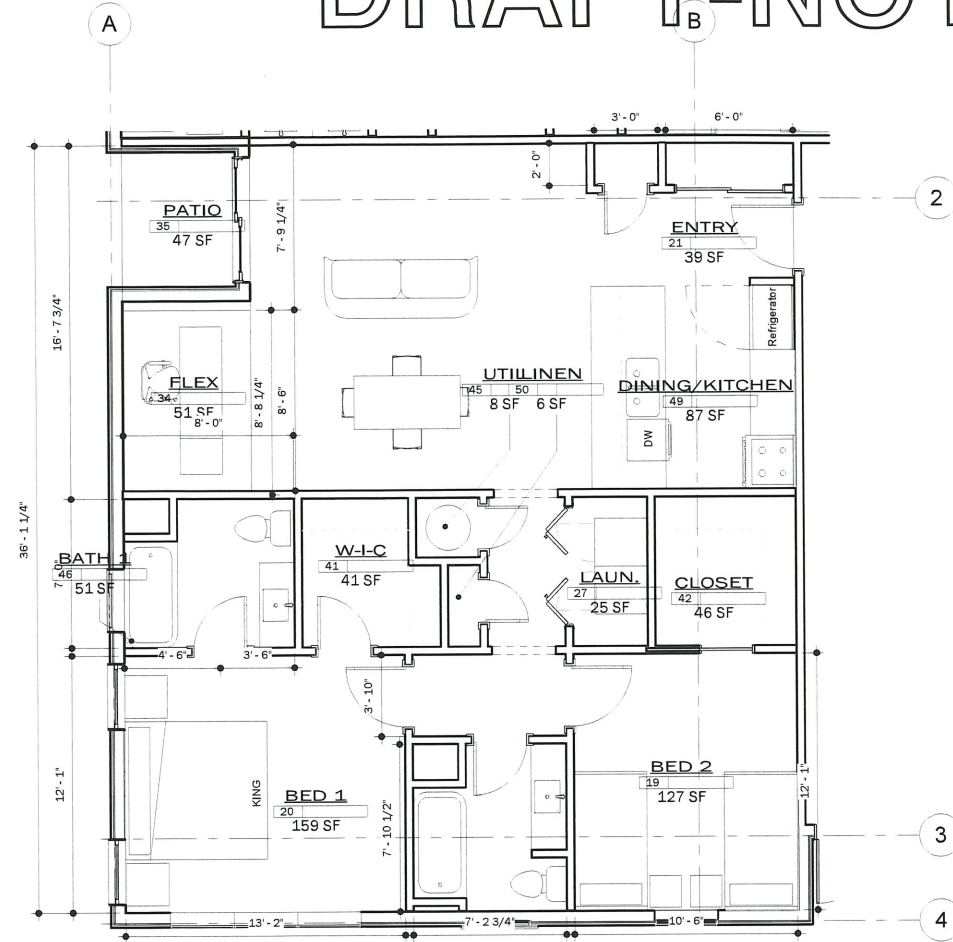
DRAFT-NOT FOR CONSTRUCTION



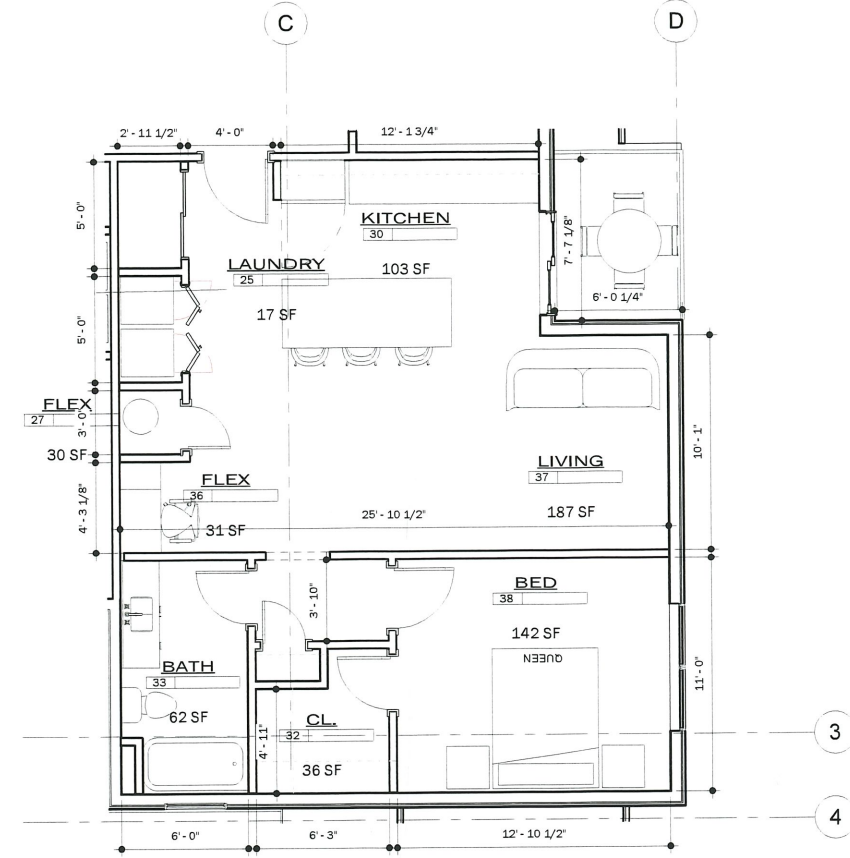
1 wd-PROPOSED THIRD FLOOR
3/16" = 1'-0"

1
A5

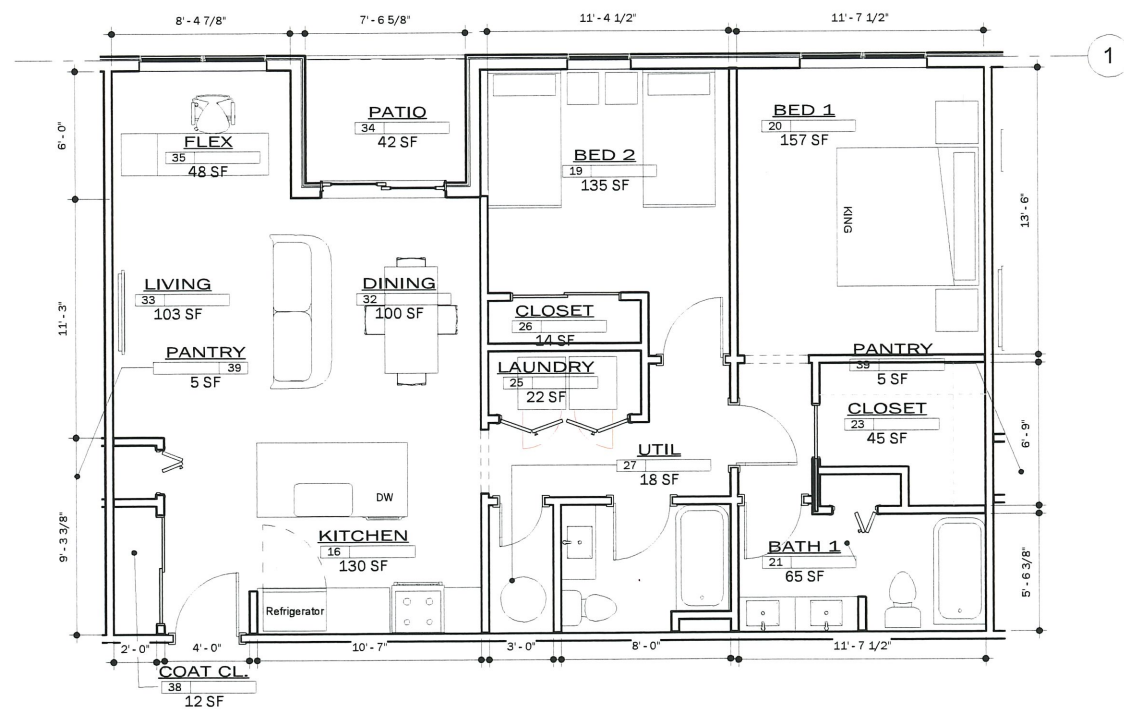
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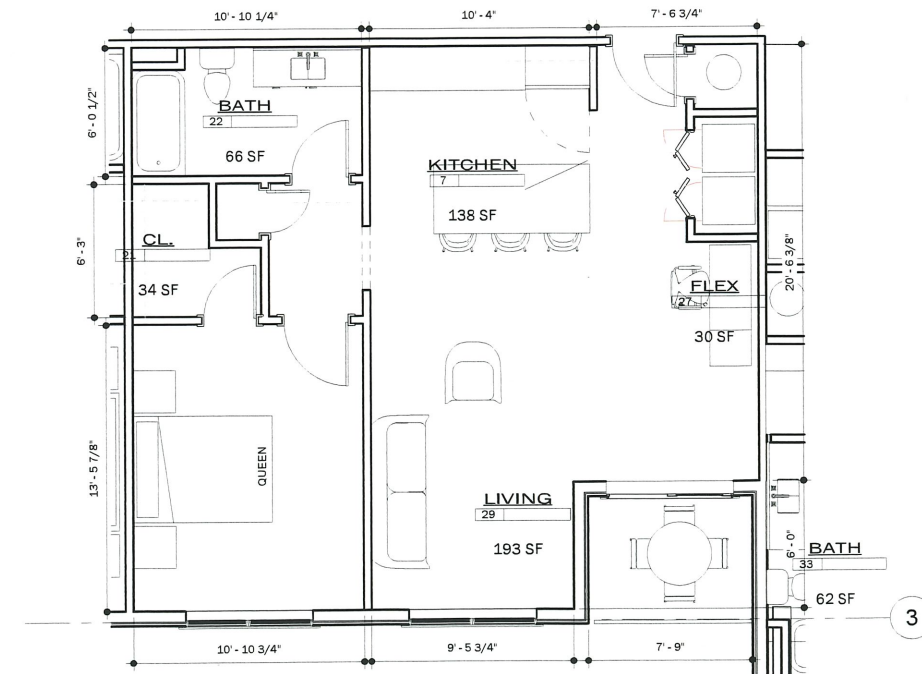
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1/4" = 1'-0"



4 1 BR UNIT PLAN TYPE 2
1/4" = 1'-0"



1 2 BR UNIT PLAN
1/4" = 1'-0"



2 1 BR UNIT PLAN
1/4" = 1'-0"

DRAFT-NOT FOR CONSTRUCTION







TOWN OF LAKEVILLE

SELECT BOARD OFFICE

346 Bedford Street

Lakeville, Massachusetts 02347

Telephone 508-946-8803

TO: Mark Knox, Chairman
Planning Board

FROM: Tracie Craig-McGee, Executive Assistant *tem*

RE: Site Plan Review
156 Rhode Island Road

DATE: May 24, 2023

At their meeting on May 22, 2023, the Select Board reviewed the Site Plan Application for 156 Rhode Island Road.

After a discussion on the proposed site plan, the Select Board had no comments.



Lakeville Fire Department

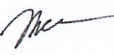
346 Bedford Street

Lakeville, Massachusetts 02347

TEL 508-947-4121 FAX 508-946-3436

MICHAEL O'BRIEN
FIRE CHIEF
mobrien@lakevillema.org

PAMELA GARANT
DEPUTY CHIEF
pgarant@lakevillema.org

To: Lakeville Planning Board
From: Michael P. O'Brien, Fire Chief 
RE: 156 Rhode Island Road Proposal
Date: May 16, 2023

The document has been submitted as comment on the May 9, 2023 plan submission for the proposed building at 156 Rhode Island Road.

- The fire department access for the proposed building meets the minimum dimensional requirements of the Fire Code on the southwest and northeast ends of the building and exceeds requirements in all other areas. Signage and markings should be required to discourage the blocking of fire department access in the areas of minimal access.
- The dimensions of the building will trigger the requirement for an automatic fire sprinkler system. The fire department will require that the fire department sprinkler connection be located on the northwest or southwest sides of the building. The access to that connection must not be block by parking, utilities, landscaping, or any building feature. A 36" clear path to the connection is required and must be maintained.
 - The site plan should address the location of the sprinkler connection.

Thank you for the opportunity to comment on this proposal. Please contact the fire department if additional comment or information is required.



April 19, 2023

Mr. Marc Resnick
Lakeville Planning Board
346 Bedford Street
Lakeville, MA 02347

**RE: Engineering Peer Review
156 Rhode Island Road, Lakeville, Massachusetts**

Dear Marc,

This letter is to advise that we have reviewed the materials submitted for a proposed commercial development project located at 156 Rhode Island Road. The project includes the construction of an 18,800 square foot commercial building with associated parking areas, site driveways, stormwater management system, and on-site sewage disposal system. The materials were prepared by River Hawk Environmental, LLC, on behalf of the applicant, T. Sikorski Realty, LLC. The submission includes the following documents:

- Plans entitled "Site Plan – Commercial Development – 156 Rhode Island Road, Lakeville, MA" prepared by River Hawk Environmental, LLC, revised through October 26, 2022.
- Stormwater Report entitled "Stormwater Management Report" prepared by River Hawk Environmental, LLC, revised through October 26, 2022.

These documents have been reviewed for conformance with the Section 6.7.6.11 of the Lakeville Zoning Bylaw regarding Stormwater Management, the Massachusetts Stormwater Management Standards, and general engineering practice regarding stormwater design.

BACKGROUND

The subject property, located at 156 Rhode Island Road, is developed with an approximate 2,560 square foot commercial building, gravel parking areas, gravel access drives, and associated utilities. Currently, stormwater either infiltrates into underlying soil or runs off into adjoining properties without control or treatment. The proposed project consists of the construction of an additional 18,800 square foot commercial building, additional driveways, parking areas, utilities, and stormwater best management practices (BMPs).

COMMENTS

Our comments note missing items and noncompliance with various standards as outlined below.

Section 6.7.6.11 of the Lakeville Zoning Bylaw

1. *Section 6.7.6.11.1.: All efforts shall be made to design the drainage system to utilize low-impact development (LID) methods. Developments not incorporating any LID design elements shall prove to the Board that the use of these drainage systems is not feasible for the project due to unique site characteristics or its location.*

The proposed design employs various LID methods, including minimized impervious surfaces via gravel parking areas and drive aisles, and infiltration via a stormwater retention basin. As described below, we recommend the proposed retention basin be revised to provide stormwater infiltration. The HydroCAD model does not indicate any stormwater infiltration in this basin.

2. *Section 6.7.6.11.2.: Detailed drainage design and computations shall be provided in conformance with the Department of Environmental Protection, Massachusetts Stormwater Handbook (latest edition). Closed drainage systems shall be designed for a 25-year storm event. Culverts, detention basins, and infiltration systems shall be designed for 100-year events.*

The Applicant has not submitted closed drainage pipe sizing calculations. The Applicant should submit closed drainage pipe sizing calculations showing that all closed drainage systems are designed for the 25-year storm event.

The submitted Stormwater Management Report also does not include a stamped MassDEP "Checklist for Stormwater Report" indicating compliance with the Stormwater Management Standards. The Applicant should submit a completed stamped checklist.

See the following section for an analysis of the project's compliance with the Massachusetts Stormwater Management Standards.

3. *Section 6.7.6.11.3.: Post-development drainage rates shall not exceed pre-development levels. Within the Water Resource Protection District, special attention shall be made to ensure water quality is not degraded. Easements shall be shown on the plan. If they are to be granted to the Town, a written easement and a specific easement plan of such for recording purposes is necessary.*

Before we can confirm that post-development drainage rates do not exceed pre-development levels, the Applicant should address our comments in the section below. No easements are shown on the plans.

Massachusetts Stormwater Management Standards

1. *Standard 1: No new untreated discharges*

The proposed design complies with Standard 1. There are no wetlands in the vicinity of the project. Stormwater runoff generated by proposed impervious and graveled areas experiencing vehicular traffic is routed through deep sump, hooded catch basins and a sediment forebay for pretreatment prior to infiltration in the proposed retention basin. All stormwater outlets into the proposed retention basin should include a flared end structure and rip rap pad to prevent erosion. We recommend stone for pipe ends be used at the end of flared end structures.

2. *Standard 2: Peak rate attenuation*

Section 2.0 of the submitted Stormwater Management Report indicates that post-development peak rates of runoff do not exceed pre-development peak rates of runoff at all design points for the 2-, 10-, and 100-year design storms. However, prior to confirming compliance with Standard 2, we have the following comments:

- a. The Applicant should submit a construction detail of the stormwater retention basin and sediment forebay.
- b. The design of the outlet control structure is not consistent between the construction detail, Grading & Drainage Plan, and HydroCAD report. The construction detail specifies a frame and cover, whereas the HydroCAD report indicates the presence of a grate. Additionally, the elevation of the grate is not consistent between the HydroCAD report and the Site Plans (93.20' vs. 93.40', respectively). Additionally, there appears to be an errant "inv. Out=80.60" label on the Grading & Drainage Plan.
- c. An emergency rip rap spillway (and associated construction detail) should be added to the stormwater retention basin at or above the 100-year flood elevation. We recommend maintaining 1-foot of freeboard during the 100-year storm in the retention basin.
- d. We understand additional test holes will be performed by the Applicant's engineer. The results of these test holes may change the stormwater calculations as they pertain to Standard 2.

3. *Standard 3: Recharge*

The Applicant claims that the proposed retention basin and infiltration gallery combine to provide 4,879 cubic feet of recharge volume. However, provided recharge volume is calculated at or below the lowest outlet discharging from the best management practice (BMP). Since the proposed outlet control structure's lowest outlet is at elevation 91.00', and the bottom of the proposed basin is at elevation 91.00', there is effectively no storage in the proposed basin to provide infiltration. Therefore, the Applicant cannot take any credit for recharge at the proposed retention basin and the design is not compliant with Standard 3.

The Applicant has not performed test holes in the vicinity of the proposed stormwater basin to confirm soils conditions. Additional test holes are scheduled to be performed on April 25, 2023 in the vicinity of the stormwater basin.

4. *Standard 4: Water quality*

- a. The project is required to remove 44% of the total suspended solids (TSS) prior to infiltration due to the presence of soils with rapid infiltration rates. The project satisfies the required pretreatment TSS removal in Treatment Train 1 via deep sump hooded catch basins and a sediment forebay, and in Treatment Train 2 via a proprietary hydrodynamic separator. However, the project does not satisfy the overall 80% TSS removal requirement. Per Standard 4, the stormwater volume that requires TSS removal is the water quality volume. The provided water quality

volume, as explained below in (b), is zero since the outlet control structure's lowest outlet matches the elevation of the bottom of the basin.

- b. The Applicant does not include an analysis of required vs. proposed water quality volume under Standard 4 in the submitted Stormwater Management Report. As explained in comment 3 above, the lowest outlet of the proposed outlet control structure matches the bottom elevation of the basin. Therefore, the proposed retention basin does not provide any water quality volume and is not compliant with Standard 4.

5. *Standard 5: Land use with higher potential pollutant loads (LUHPPL)*

The project is not a LUHPPL, and therefore Standard 5 does not apply.

6. *Standard 6: Critical areas*

The project does not lie within a critical area as defined within the Massachusetts Stormwater Handbook.

7. *Standard 7: Redevelopment*

This project does not classify as a redevelopment. Therefore, the project requires full compliance with all Stormwater Management Standards.

8. *Standard 8: Construction period pollution prevention and erosion and sedimentation control*

- a. All existing and proposed catch basins in the vicinity of the project should be shown with inlet protection on the Erosion Control/Demolition Plan.
- b. Because the project disturbs more than one acre of land, it is required to obtain coverage under the NPDES Construction General Permit and prepare a Stormwater Pollution Prevention Plan (SWPPP). A draft SWPPP was not submitted. We recommend the Planning Board require the final SWPPP be submitted for review and approval prior to the commencement of construction.

9. *Standard 9: Operation and maintenance plan (O&M plan)*

Appendix D of the Stormwater Management Report includes an Operation and Maintenance Plan consistent with the requirements outlined by Standard 9.

10. *Standard 10: Prohibition of illicit discharges*

A signed illicit discharge statement was not provided. An illicit discharge statement signed by the owner should be provided prior to any approval.

General Comments

1. The proposed parking areas and access drives are specified as gravel. However, the layout plan shows pavement markings. Is the intent of the project to stripe the gravel parking areas? Are the proposed islands intended to be landscaped? Based on the grading plan they appear to include curbs.

2. We recommend the applicant consult the Architectural Access Board Regulations regarding providing handicapped spaces on gravel surfaces.
3. The Applicant should submit a construction detail and sizing calculations for the proposed hydrodynamic separator.
4. The proposed conditions hydrology map does not include any proposed drainage areas.
5. The plans show the infiltration galley overflow being routed to the proposed drainage basin. The HydroCADD model shows this pipe being discharged off-site. The HydroCADD model should be revised.
6. The proposed infiltration galley overtops during the 2, 10, and 100 years storms. The top of the facility appears to be at elevation 91.17' but the peak elevation is above 93' for all storms analyzed. There are errors associated with this structure in the model for the 2-year storm which shows a higher outflow than inflow. This structure does not seem to infiltrate or detain much water. The primary outlets of the infiltration galley in the HydroCADD model have an invert elevation of 93.0' and 93.8', but the elevation of the top of the infiltration galley per the construction detail in the plans is 91.17'. The Applicant should revise the design of the infiltration galley to ensure that the HydroCADD model and the plans are consistent.
7. The HydroCADD model shows the top of the proposed model at elevation 95'. The grading of this basin shows the top at elevation 94'. The peak elevation in the 100-year storm is at elevation 94.21'. Therefore, the basin will overtop during the 100 year storm. It will have less than 1 foot of freeboard during the 2- and the 10-year storms as shown on the grading plans.

Our review is based on the information that has been provided. As noted above, additional review will be required to verify comments have been incorporated into the revised submission.

We appreciate the opportunity to be able to assist you with this important project. Please feel free to contact me at (617) 595-5180 or sdt@envpartners.com with any questions or comments.

Very Truly Yours,



Scott D. Turner, PE, AICP, LEED AP ND
Director of Planning
P: 617.595.5180
E: sdt@envpartners.com



Dylan J. O'Donnell, PE
Senior Project Engineer
P: 413.335.7666
E: djo@envpartners.com



May 9, 2023

Lakeville Planning Board
346 Bedford Street
Lakeville, MA 02346

**RE: 156 Rhode Island Road
Response to Comments - Application for Site Plan Review**

Dear Planning Board Members:

On behalf of T. Sikorski Realty, LLC (the Applicant), River Hawk Environmental, LLC (RHE) has prepared this correspondence to provide the Town of Lakeville Planning Board with supplemental information to address comments contained in a Memorandum from the Planning Board consultant, Environmental Partners. The following is a restatement of each comment (*italic text & text*) and a brief response to each (**bold text**):

Section 6.7.6.11 of the Lakeville Zoning Bylaw

1. *Section 6.7.6.11.1.: All efforts shall be made to design the drainage system to utilize low-impact development (LID) methods. Developments not incorporating any LID design elements shall prove to the Board that the use of these drainage systems is not feasible for the project due to unique site characteristics or its location.*

The proposed design employs various LID methods, including minimized impervious surfaces via gravel parking areas and drive aisles, and infiltration via a stormwater retention basin. As described below, we recommend the proposed retention basin be revised to provide stormwater infiltration. The HydroCAD model does not indicate any stormwater infiltration in this basin.

The proposed retention basin has been revised to provide infiltration.

2. *Section 6.7.6.11.2.: Detailed drainage design and computations shall be provided in conformance with the Department of Environmental Protection, Massachusetts Stormwater Handbook (latest edition). Closed drainage systems shall be designed for a 25-year storm event. Culverts, detention basins, and infiltration systems shall be designed for 100-year events.*

The Applicant has not submitted closed drainage pipe sizing calculations. The Applicant should submit closed drainage pipe sizing calculations showing that all closed drainage systems are designed for the 25-year storm event.

Pipe sizing calculations demonstrating that the closed drainage system can handle the flow from a 25-year design storm event have been included in the stormwater report.

The submitted Stormwater Management Report also does not include a stamped MassDEP "Checklist for Stormwater Report" indicating compliance with the Stormwater Management Standards. The Applicant should submit a completed stamped checklist.

A stamped MassDEP Checklist for Stormwater Report has been included in the Stormwater Report.

3. *Section 6.7.6.11.3.: Post-development drainage rates shall not exceed pre-development levels. Within the Water Resource Protection District, special attention shall be made to ensure water quality is not degraded. Easements shall be shown on the plan. If they are to be granted to the Town, a written easement and a specific easement plan of such for recording purposes is necessary.*

Post-development drainage rates do not exceed pre-development levels. No easements are proposed. The stormwater BMPs will be owned and maintained by the land owner.

Massachusetts Stormwater Management Standards:

1. *Standard 1: No new untreated discharges*

The proposed design complies with Standard 1. There are no wetlands in the vicinity of the project. Stormwater runoff generated by proposed impervious and graveled areas experiencing vehicular traffic is routed through deep sump, hooded catch basins and a sediment forebay for pretreatment prior to infiltration in the proposed retention basin. All stormwater outlets into the proposed retention basin should include a flared end structure and rip rap pad to prevent erosion. We recommend stone for pipe ends be used at the end of flared end structures.

All stormwater outlets into the proposed retention basin include a flared end structure and rip rap pad to prevent erosion. Stone pads will be placed at all flared pipe ends.

2. *Standard 2: Peak rate attenuation*

Section 2.0 of the submitted Stormwater Management Report indicates that post-development peak rates of runoff do not exceed pre-development peak rates of runoff at all design points for the 2-, 10-, and 100-year design storms. However, prior to confirming compliance with Standard 2, we have the following comments:

- A. The Applicant should submit a construction detail of the stormwater retention basin and sediment forebay.

A construction detail of the infiltration basin has been submitted.

- B. The design of the outlet control structure is not consistent between the construction detail, Grading & Drainage Plan, and HydroCAD report. The construction detail specifies a frame and cover, whereas the HydroCAD report indicates the presence of a grate. Additionally, the elevation of the grate is not consistent between the HydroCAD report and the Site Plans (93.20' vs. 93.40', respectively). Additionally, there appears to be an errant "inv. Out=80.60" label on the Grading & Drainage Plan.

The plans have been revised accordingly.

- C. An emergency rip rap spillway (and associated construction detail) should be added to the stormwater retention basin at or above the 100-year flood elevation. We recommend maintaining 1-foot of freeboard during the 100-year storm in the retention basin.

An emergency spillway has been added to the infiltration basin. One foot of freeboard has been provided.

- D. We understand additional test holes will be performed by the Applicant's engineer. The results of these test holes may change the stormwater calculations as they pertain to Standard 2.

Test holes and soil evaluations have been conducted in the areas of the proposed stormwater Best Management Practices (BMPs).

3. *Standard 3: Recharge*

The Applicant claims that the proposed retention basin and infiltration gallery combine to provide 4,879 cubic feet of recharge volume. However, provided recharge volume is calculated at or below the lowest outlet discharging from the best management practice (BMP). Since the proposed outlet control structure's lowest outlet is at elevation 91.00',

and the bottom of the proposed basin is at elevation 91.00', there is effectively no storage in the proposed basin to provide infiltration. Therefore, the Applicant cannot take any credit for recharge at the proposed retention basin and the design is not compliant with Standard 3. The Applicant has not performed test holes in the vicinity of the proposed stormwater basin to confirm soils conditions. Additional test holes are scheduled to be performed on April 25, 2023 in the vicinity of the stormwater basin.

The design has been modified to allow for infiltration below the proposed outlets of the infiltration basin and rain gardens. The calculations have been revised accordingly.

4. *Standard 4: Water quality*

- A. The project is required to remove 44% of the total suspended solids (TSS) prior to infiltration due to the presence of soils with rapid infiltration rates. The project satisfies the required pretreatment TSS removal in Treatment Train 1 via deep sump hooded catch basins and a sediment forebay, and in Treatment Train 2 via a proprietary hydrodynamic separator. However, the project does not satisfy the overall 80% TSS removal requirement. Per Standard 4, the stormwater volume that requires TSS removal is the water quality volume. The provided water quality volume, as explained below in (b), is zero since the outlet control structure's lowest outlet matches the elevation of the bottom of the basin.

The required TSS removal prior to infiltration has been provided.

- B. The Applicant does not include an analysis of required vs. proposed water quality volume under Standard 4 in the submitted Stormwater Management Report. As explained in comment 3 above, the lowest outlet of the proposed outlet control structure matches the bottom elevation of the basin. Therefore, the proposed retention basin does not provide any water quality volume and is not compliant with Standard 4.

An analysis of required vs. proposed water quality volume has been provided in the Stormwater Report. All impervious surfaces drain to an infiltration BMP.

5. *Standard 5: Land use with higher potential pollutant loads (LUHPPL)*

The project is not a LUHPPL, and therefore Standard 5 does not apply.

No response required.

6. *Standard 6: Critical areas*

The project does not lie within a critical area as defined within the Massachusetts Stormwater Handbook.

No response required.

7. *Standard 7: Redevelopment*

This project does not classify as a redevelopment. Therefore, the project requires full compliance with all Stormwater Management Standards.

No response required.

8. *Standard 8: Construction period pollution prevention and erosion and sedimentation control*

- A. All existing and proposed catch basins in the vicinity of the project should be shown with inlet protection on the Erosion Control/Demolition Plan.

All existing and proposed catch basins in the vicinity of the project have been shown with inlet protection on the Erosion Control/Demolition Plan.

- B. Because the project disturbs more than one acre of land, it is required to obtain coverage under the NPDES Construction General Permit and prepare a Stormwater Pollution Prevention Plan (SWPPP). A draft SWPPP was not submitted. We recommend the Planning Board require the final SWPPP be submitted for review and approval prior to the commencement of construction.

A SWPPP will be submitted for review and approval prior to the commencement of construction.

9. *Standard 9: Operation and maintenance plan (O&M plan)*

Appendix D of the Stormwater Management Report includes an Operation and Maintenance Plan consistent with the requirements outlined by Standard 9.

No response required.

10. *Standard 10: Prohibition of illicit discharges*

A signed illicit discharge statement was not provided. An illicit discharge statement signed by the owner should be provided prior to any approval.

No response required.

General Comments

1. The proposed parking areas and access drives are specified as gravel. However, the layout plan shows pavement markings. Is the intent of the project to stripe the gravel parking areas? Are the proposed islands intended to be landscaped? Based on the grading plan they appear to include curbs.

The parking area will be paved with bituminous concrete pavement.

2. We recommend the applicant consult the Architectural Access Board Regulations regarding providing handicapped spaces on gravel surfaces.

The parking area will be paved with bituminous concrete pavement.

3. The Applicant should submit a construction detail and sizing calculations for the proposed hydrodynamic separator.

Details of the hydrodynamic separators have been included in the plan set. Sizing information for the hydrodynamic separators have been included in the Stormwater Report.

4. The proposed conditions hydrology map does not include any proposed drainage areas.

The proposed subcatchment map has been included in the Stormwater Report.

5. The plans show the infiltration galley overflow being routed to the proposed drainage basin. The HydroCADD model shows this pipe being discharged off-site. The HydroCADD model should be revised.

The stormwater system has been revised. The HydroCAD model has been revised to represent the proposed changes.

6. The proposed infiltration galley overtops during the 2, 10, and 100 years storms. The top of the facility appears to be at elevation 91.17' but the peak elevation is above 93' for all storms analyzed. There are errors associated with this structure in the model for the 2-year storm which shows a higher outflow than inflow. This structure does not seem to infiltrate or detain much water. The primary outlets of the infiltration galley in the HydroCADD model have an invert elevation of 93.0' and 93.8', but the elevation of the top of the infiltration galley per the construction detail in the plans is 91.17'. The Applicant should revise the design of the infiltration galley to ensure that the HydroCADD model and the plans are consistent.

The stormwater system has been revised. The HydroCAD model has been revised to represent the proposed changes.

7. The HydroCADD model shows the top of the proposed model at elevation 95'. The grading of this basin shows the top at elevation 94'. The peak elevation in the 100-year storm is at elevation 94.21'. Therefore, the basin will overtop during the 100 year storm. It will have less than 1 foot of freeboard during the 2- and the 10-year storms as shown on the grading plans.

The stormwater system has been revised. The HydroCAD model has been revised to represent the proposed changes.

If you have any questions regarding this correspondence and/or the Revised Plan Set, please contact the undersigned.

Sincerely,

River Hawk Environmental, LLC



Robert S. Rego, P.E., LSP
Manager, Senior Engineer

Attachments

May 24, 2023

Mr. Marc Resnick
Lakeville Planning Board
346 Bedford Street
Lakeville, MA 02347

**RE: Engineering Peer Review #2
156 Rhode Island Road, Lakeville, Massachusetts**

Dear Marc,

This letter is to advise that we have reviewed the revised materials submitted for the proposed commercial development project located at 156 Rhode Island Road. The project includes the construction of an 18,500 square foot commercial building with associated parking areas, site driveways, stormwater management system, and on-site sewage disposal system. The materials were prepared by River Hawk Environmental, LLC, on behalf of the applicant, T. Sikorski Realty, LLC. The revised submission includes the following documents:

- Plans entitled "Site Plan – Commercial Development – 156 Rhode Island Road, Lakeville, MA" prepared by River Hawk Environmental, LLC, revised through May 9, 2023.
- Stormwater Report entitled "Stormwater Management Report" prepared by River Hawk Environmental, LLC, revised through May 9, 2023.
- Response to comments letter prepared by River Hawk Environmental, LLC, dated May 9, 2023.

These documents have been reviewed for conformance with Section 6.7.6.11 of the Lakeville Zoning Bylaw regarding Stormwater Management, the Massachusetts Stormwater Management Standards, and general engineering practice regarding stormwater design.

BACKGROUND

The subject property, located at 156 Rhode Island Road, is developed with an approximate 2,560 square foot commercial building, gravel parking areas, gravel access drives, and associated utilities. Currently, stormwater either infiltrates into underlying soil or runs off into adjoining properties without control or treatment. The proposed project consists of the construction of an additional 18,500 square foot commercial building, additional driveways, parking areas, utilities, and stormwater best management practices (BMPs).

COMMENTS

Our comments note missing items and noncompliance with various standards as outlined below.

Section 6.7.6.11 of the Lakeville Zoning Bylaw

1. *Section 6.7.6.11.1.: All efforts shall be made to design the drainage system to utilize low-impact development (LID) methods. Developments not incorporating any LID design elements shall prove to the Board that the use of these drainage systems is not feasible for the project due to unique site characteristics or its location.*

The proposed design employs various LID methods, including minimized impervious surfaces via gravel parking areas and drive aisles, and infiltration via a stormwater retention basin. As described below, we recommend the proposed retention basin be revised to provide stormwater infiltration. The HydroCAD model does not indicate any stormwater infiltration in this basin.

RHE Response 5/9/23: The proposed retention basin has been revised to provide infiltration.

EP Response 5/24/23: The revised design has replaced the proposed gravel parking areas with impervious surface; however, two rain gardens have been added to the modified stormwater design. Both rain gardens and the proposed infiltration basin provide infiltration. **Item closed.**

2. *Section 6.7.6.11.2.: Detailed drainage design and computations shall be provided in conformance with the Department of Environmental Protection, Massachusetts Stormwater Handbook (latest edition). Closed drainage systems shall be designed for a 25-year storm event. Culverts, detention basins, and infiltration systems shall be designed for 100-year events.*

The Applicant has not submitted closed drainage pipe sizing calculations. The Applicant should submit closed drainage pipe sizing calculations showing that all closed drainage systems are designed for the 25-year storm event.

The submitted Stormwater Management Report also does not include a stamped MassDEP "Checklist for Stormwater Report" indicating compliance with the Stormwater Management Standards. The Applicant should submit a completed stamped checklist.

See the following section for an analysis of the project's compliance with the Massachusetts Stormwater Management Standards.

RHE Response 5/9/23: Pipe sizing calculations demonstrating that the closed drainage system can handle the flow from a 25-year design storm event have been included in the stormwater report. A stamped MassDEP Checklist for Stormwater Report has been included in the Stormwater Report.

EP Response 5/24/23: Pipe sizing calculations have been provided. The peak flood elevation for the 100-year design storm is below the emergency spillways for both Infiltration Basin 1 and the Northern Rain Garden. However, for the Southern Rain Garden, the peak flood elevation for the 100-year design storm exceeds the rim elevation of the upstream hydrodynamic separator (WQS-1). Therefore, the Southern Rain Garden is not designed for the 100-year event.

3. *Section 6.7.6.11.3.: Post-development drainage rates shall not exceed pre-development levels. Within the Water Resource Protection District, special attention shall be made to ensure water quality is not degraded. Easements shall be shown on the plan. If they are to be granted to the Town, a written easement and a specific easement plan of such for recording purposes is necessary.*

Before we can confirm that post-development drainage rates do not exceed pre-development levels, the Applicant should address our comments in the section below. No easements are shown on the plans.

RHE Response 5/9/23: Post-development drainage rates do not exceed pre-development levels. No easements are proposed. The stormwater BMPs will be owned and maintained by the land owner.

EP Response 5/24/23: Item closed. See below for additional review of the revised stormwater design's compliance with the Massachusetts Stormwater Management Standards.

Massachusetts Stormwater Management Standards

1. *Standard 1: No new untreated discharges*

The proposed design complies with Standard 1. There are no wetlands in the vicinity of the project. Stormwater runoff generated by proposed impervious and graveled areas experiencing vehicular traffic is routed through deep sump, hooded catch basins and a sediment forebay for pretreatment prior to infiltration in the proposed retention basin. All stormwater outlets into the proposed retention basin should include a flared end structure and rip rap pad to prevent erosion. We recommend stone for pipe ends be used at the end of flared end structures.

RHE Response 5/9/23: All stormwater outlets into the proposed retention basin include a flared end structure and rip rap pad to prevent erosion. Stone pads will be placed at all flared pipe ends.

EP Response 5/24/23: The revised design uses hydrodynamic separators for pretreatment, in lieu of the previously design sediment forebay. **Item closed.**

2. *Standard 2: Peak rate attenuation*

Section 2.0 of the submitted Stormwater Management Report indicates that post-development peak rates of runoff do not exceed pre-development peak rates of runoff at all design points for the 2-, 10-, and 100-year design storms. However, prior to confirming compliance with Standard 2, we have the following comments:

- a. The Applicant should submit a construction detail of the stormwater retention basin and sediment forebay.

RHE Response 5/9/23: A construction detail of the infiltration basin has been submitted.

EP Response 5/24/23: Under the revised design submitted, post-development peak rates of runoff do not exceed pre-development peak rates of runoff at all design points for the 2-, 10-, and 100-year design storms. A construction detail of the infiltration basin has also been provided. **Item closed.**

- b. The design of the outlet control structure is not consistent between the construction detail, Grading & Drainage Plan, and HydroCAD report. The construction detail specifies a frame and cover, whereas the HydroCAD report indicates the presence of a grate. Additionally, the elevation of the grate is not consistent between the HydroCAD report and the Site Plans (93.20' vs. 93.40', respectively). Additionally, there appears to be an errant "inv. Out=80.60" label on the Grading & Drainage Plan.

RHE Response 5/9/23: The plans have been revised accordingly.

EP Response 5/24/23: The outlet control structure (OCS-1) has been revised. Its design is consistent between the plans, construction details, and HydroCAD design. **Item closed.**

- c. An emergency rip rap spillway (and associated construction detail) should be added to the stormwater retention basin at or above the 100-year flood elevation. We recommend maintaining 1-foot of freeboard during the 100-year storm in the retention basin.

RHE Response 5/9/23: An emergency spillway has been added to the infiltration basin. One foot of freeboard has been provided.

EP Response 5/24/23: **Item closed.**

- d. We understand additional test holes will be performed by the Applicant's engineer. The results of these test holes may change the stormwater calculations as they pertain to Standard 2.

RHE Response 5/9/23: Test holes and soil evaluations have been conducted in the areas of the proposed stormwater Best Management Practices (BMPs).

EP Response 5/24/23: Additional test holes were performed and logs are provided on Sheet D1.3. The design calculations are consistent with the test hole results. **Item closed.**

3. *Standard 3: Recharge*

The Applicant claims that the proposed retention basin and infiltration gallery combine to provide 4,879 cubic feet of recharge volume. However, provided recharge volume is calculated at or below the lowest outlet discharging from the best management practice (BMP). Since the proposed outlet control structure's lowest outlet is at elevation 91.00', and the bottom of the proposed basin is at elevation 91.00', there is effectively no storage in the proposed basin to provide infiltration. Therefore, the Applicant cannot take any credit for recharge at the proposed retention basin and the design is not compliant with Standard 3.

The Applicant has not performed test holes in the vicinity of the proposed stormwater basin to confirm soils conditions. Additional test holes are scheduled to be performed on April 25, 2023 in the vicinity of the stormwater basin.

RHE Response 5/9/23: The stormwater design has been modified to allow for infiltration below the proposed outlets of the infiltration basin and rain gardens. The calculations have been revised accordingly.

EP Response 5/24/23: The stormwater design has been revised. As described in the revised Stormwater Management Report, Infiltration Basin 1 and the Northern Rain Garden combine to provide 6,123 cubic feet of recharge volume below their lowest outlets, in compliance with Standard 3. As stated above, additional test holes were performed, and logs are provided on Sheet D1.3. The design calculations are consistent with the test hole results. **Item closed.**

4. *Standard 4: Water quality*

- a. The project is required to remove 44% of the total suspended solids (TSS) prior to infiltration due to the presence of soils with rapid infiltration rates. The project satisfies the required pretreatment TSS removal in Treatment Train 1 via deep sump hooded catch basins and a sediment forebay, and in Treatment Train 2 via a proprietary hydrodynamic separator. However, the project does not satisfy the overall 80% TSS removal requirement. Per Standard 4, the stormwater volume that requires TSS removal is the water quality volume. The provided water quality volume, as explained below in (b), is zero since the outlet control structure's lowest outlet matches the elevation of the bottom of the basin.

RHE Response 5/9/23: The required TSS removal prior to infiltration has been provided.

EP Response 5/24/23: The revised stormwater design uses deep sump hooded catch basins and hydrodynamic separators to achieve the TSS requirements of Standard 4. As stated above, Infiltration Basin 1, the Northern Rain Garden, and the Southern Rain Garden all provide static storage volume below their lowest outlets. **Item closed.**

- b. The Applicant does not include an analysis of required vs. proposed water quality volume under Standard 4 in the submitted Stormwater Management Report. As explained in comment 3 above, the lowest outlet of the proposed outlet control structure matches the bottom elevation of the basin. Therefore, the proposed retention basin does not provide any water quality volume and is not compliant with Standard 4.

RHE Response 5/9/23: An analysis of required vs. proposed water quality volume has been provided in the Stormwater Report. All impervious surfaces drain to an infiltration BMP.

EP Response 5/24/23: As stated above, Infiltration Basin 1, the Northern Rain Garden, and the Southern Rain Garden all provide static storage volume below their lowest outlets. **Item closed.**

5. *Standard 5: Land use with higher potential pollutant loads (LUHPPL)*

The project is not a LUHPPL, and therefore Standard 5 does not apply.

RHE Response 5/9/23: No response required.

EP Response 5/24/23: Item closed.

6. Standard 6: Critical areas

The project does not lie within a critical area as defined within the Massachusetts Stormwater Handbook.

RHE Response 5/9/23: No response required.

EP Response 5/24/23: Item closed.

7. Standard 7: Redevelopment

This project does not classify as a redevelopment. Therefore, the project requires full compliance with all Stormwater Management Standards.

RHE Response 5/9/23: No response required.

EP Response 5/24/23: Item closed.

8. Standard 8: Construction period pollution prevention and erosion and sedimentation control

- a. All existing and proposed catch basins in the vicinity of the project should be shown with inlet protection on the Erosion Control/Demolition Plan.

RHE Response 5/9/23: All existing and proposed catch basins in the vicinity of the project have been shown with inlet protection on the Erosion Control/Demolition Plan.

EP Response 5/24/23: Item closed.

- b. Because the project disturbs more than one acre of land, it is required to obtain coverage under the NPDES Construction General Permit and prepare a Stormwater Pollution Prevention Plan (SWPPP). A draft SWPPP was not submitted. We recommend the Planning Board require the final SWPPP be submitted for review and approval prior to the commencement of construction.

RHE Response 5/9/23: A SWPPP will be submitted for review and approval prior to the commencement of construction.

EP Response 5/24/23: Item closed.

9. Standard 9: Operation and maintenance plan (O&M plan)

Appendix D of the Stormwater Management Report includes an Operation and Maintenance Plan consistent with the requirements outlined by Standard 9.

RHE Response 5/9/23: No response required.

EP Response 5/24/23: Item closed.

10. Standard 10: Prohibition of illicit discharges

A signed illicit discharge statement was not provided. An illicit discharge statement signed by the owner should be provided prior to any approval.

RHE Response 5/9/23: No response required.

EP Response 5/24/23: We recommend the Planning Board require an illicit discharge statement signed by the owner be submitted prior to any approval.

General Comments

1. The proposed parking areas and access drives are specified as gravel. However, the layout plan shows pavement markings. Is the intent of the project to stripe the gravel parking areas? Are the proposed islands intended to be landscaped? Based on the grading plan they appear to include curbs.

RHE Response 5/9/23: The parking area will be paved with bituminous concrete pavement.

EP Response 5/24/23: Item closed.

2. We recommend the applicant consult the Architectural Access Board Regulations regarding providing handicapped spaces on gravel surfaces.

RHE Response 5/9/23: The parking area will be paved with bituminous concrete pavement.

EP Response 5/24/23: Accessible parking areas cannot exceed 2% slope in any direction to comply with Architectural Access Board Regulations. It appears that the accessible parking spaces in front of the proposed building may exceed 2% slope. The Applicant should provide spot elevations on the plans to ensure compliance with accessibility requirements.

3. The Applicant should submit a construction detail and sizing calculations for the proposed hydrodynamic separator.

RHE Response 5/9/23: Details of the hydrodynamic separators have been included in the plan set. Sizing information for the hydrodynamic separators have been included in the Stormwater Report.

EP Response 5/24/23: Details have been provided as described above. The Applicant should coordinate with the hydrodynamic separator manufacturer to ensure the specified model for WQS-2 can accommodate the three inlet pipes and one outlet pipe as shown on Sheet SP1.2.

4. The proposed conditions hydrology map does not include any proposed drainage areas.

RHE Response 5/9/23: The proposed subcatchment map has been included in the Stormwater Report.

EP Response 5/24/23: Item closed.

5. The plans show the infiltration galley overflow being routed to the proposed drainage basin. The HydroCADD model shows this pipe being discharged off-site. The HydroCADD model should be revised.

RHE Response 5/9/23: The stormwater system has been revised. The HydroCAD model has been revised to represent the proposed changes.

EP Response 5/24/23: The infiltration galley has been removed from the design. Proposed WQS-1 adjacent to Crooked Lane is now routed to the Southern Rain Garden. As noted above in Comment #2 under *Section 6.7.6.11 of the Lakeville Zoning Bylaw*, the peak flood elevation for the 100-year design storm exceeds the rim elevation of the hydrodynamic separator (WQS-1).

6. The proposed infiltration galley overtops during the 2, 10, and 100 years storms. The top of the facility appears to be at elevation 91.17' but the peak elevation is above 93' for all storms analyzed. There are errors associated with this structure in the model for the 2-year storm which shows a higher outflow than inflow. This structure does not seem to infiltrate or detain much water. The primary outlets of the infiltration galley in the HydroCADD model have an invert elevation of 93.0' and 93.8', but the elevation of the top of the infiltration galley per the construction detail in the plans is 91.17'. The Applicant should revise the design of the infiltration galley to ensure that the HydroCADD model and the plans are consistent.

RHE Response 5/9/23: The stormwater system has been revised. The HydroCAD model has been revised to represent the proposed changes.

EP Response 5/24/23: See Comment #5 above.

7. The HydroCADD model shows the top of the proposed model at elevation 95'. The grading of this basin shows the top at elevation 94'. The peak elevation in the 100-year storm is at elevation 94.21'. Therefore, the basin will overtop during the 100 year storm. It will have less than 1 foot of freeboard during the 2- and the 10-year storms as shown on the grading plans.

RHE Response 5/9/23: The stormwater system has been revised. The HydroCAD model has been revised to represent the proposed changes.

EP Response 5/24/23: The stormwater design has been revised as indicated. An emergency overflow spillway has been added to the Infiltration Basin 1 at elevation 94.50'. The peak elevation of the 100-year design storm in Infiltration Basin 1 is 93.32'. **Item closed.**

Our review is based on the information that has been provided. As noted above, additional review will be required to verify comments have been incorporated into the revised submission.

We appreciate the opportunity to be able to assist you with this important project. Please feel free to contact me at (617) 595-5180 or sdt@envpartners.com with any questions or comments.

Very Truly Yours,



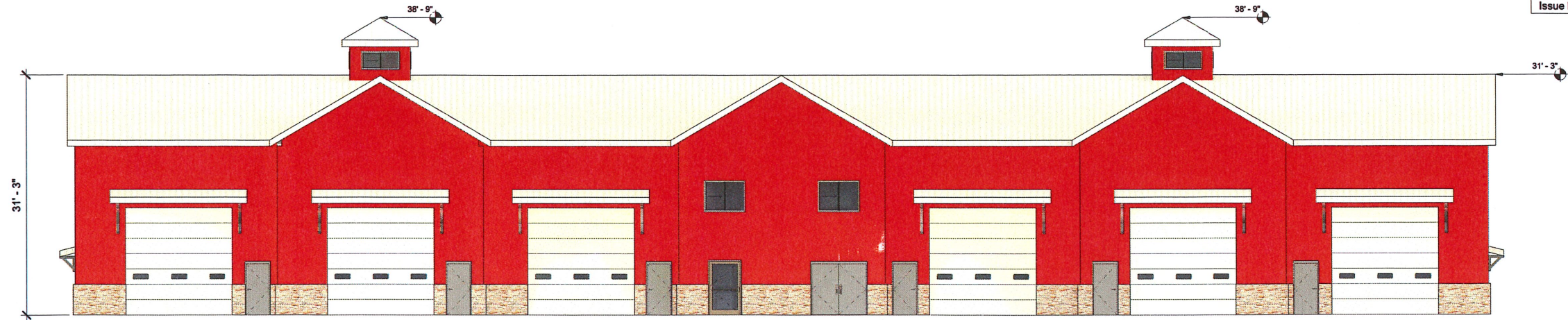
Scott D. Turner, PE, AICP, LEED AP ND
Director of Planning
P: 617.595.5180
E: sdt@envpartners.com



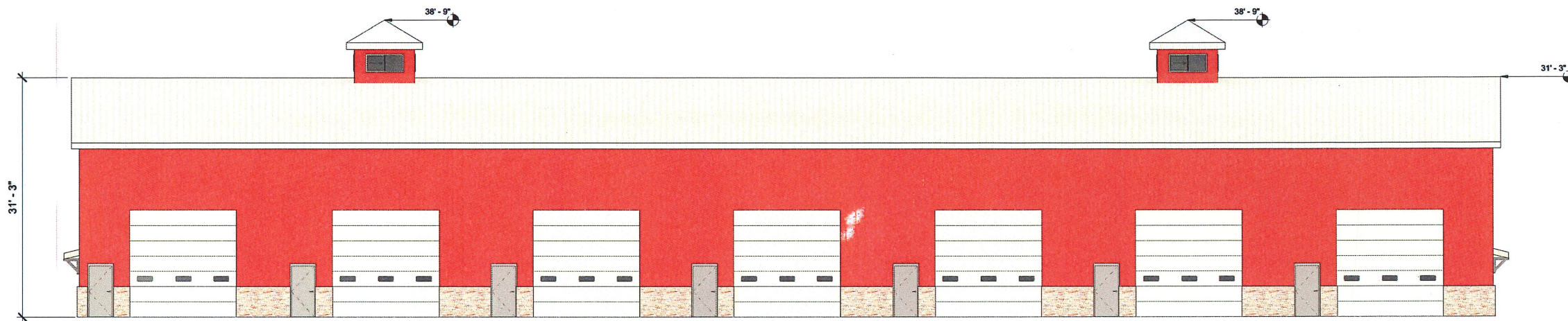
Dylan J. O'Donnell, PE
Senior Project Engineer
P: 413.335.7666
E: djo@envpartners.com

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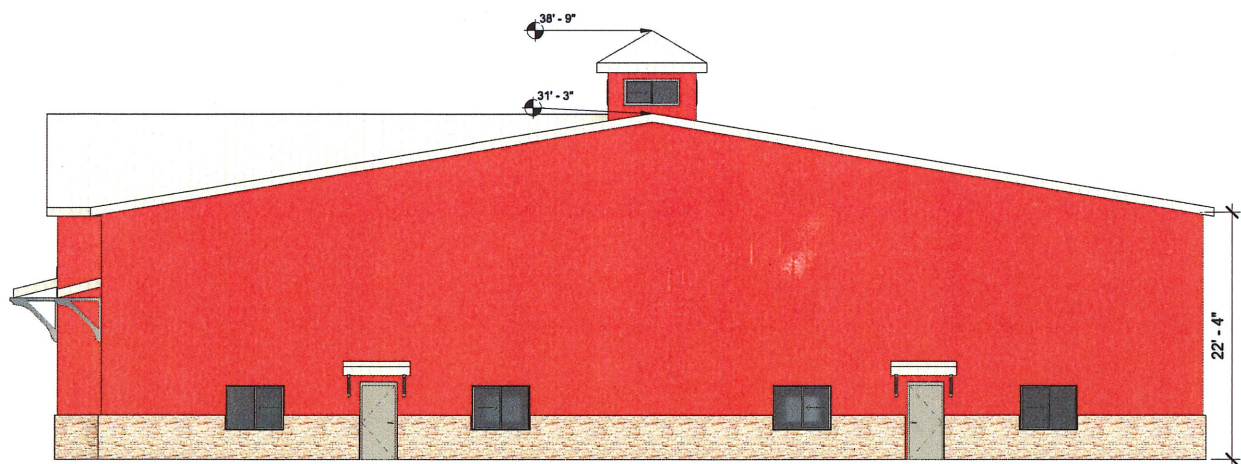
ISSUE SCHEDULE	
Issue No.	Issue



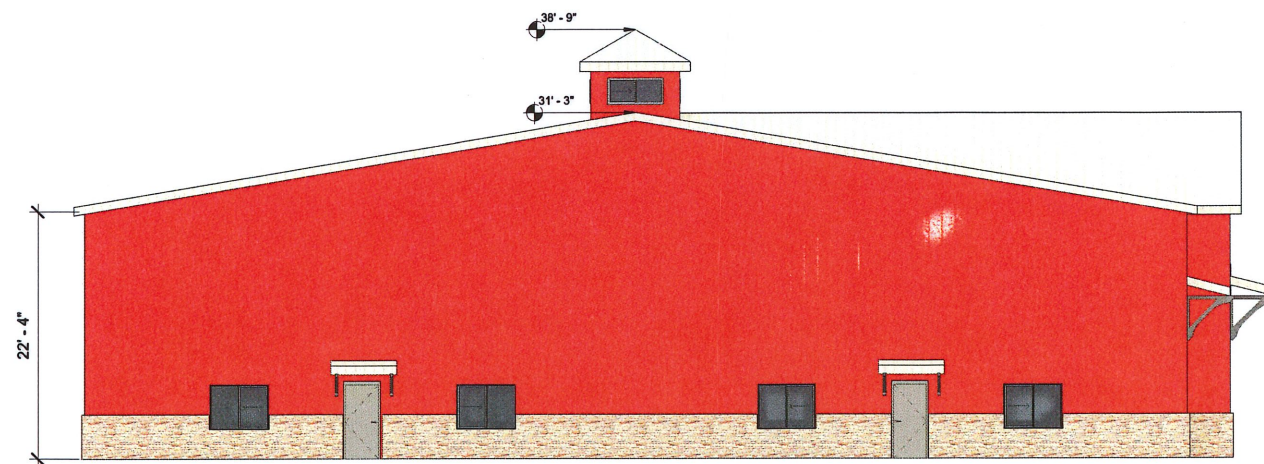
① Front Elevation
1/8" = 1'-0"



② Rear Elevation
1/8" = 1'-0"



③ East
1/8" = 1'-0"



④ West
1/8" = 1'-0"

Rev No.	Description	Date
REVISIONS		

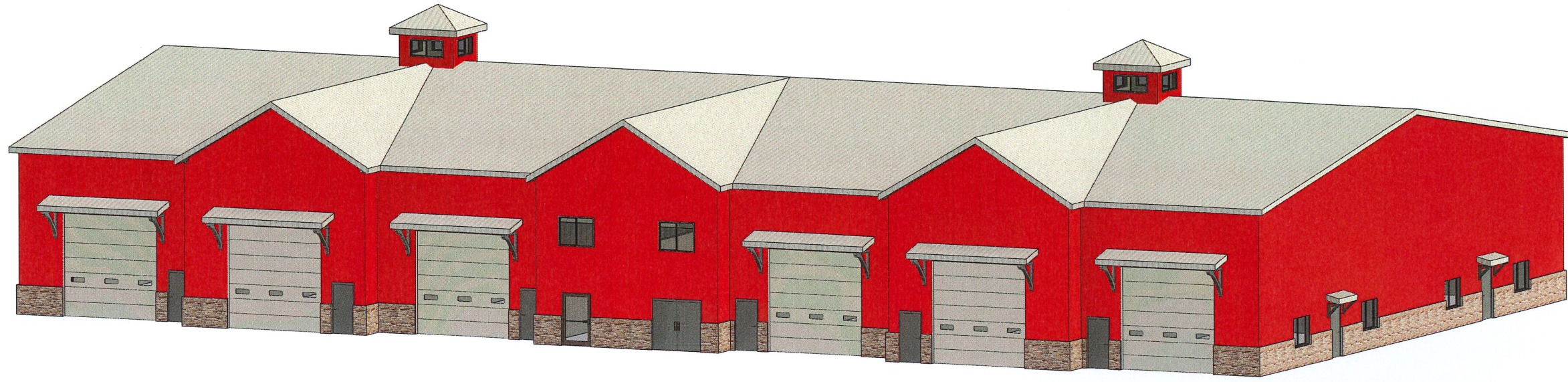
NORTHCOUNTY GROUP, INC.
 4 Court Street, Suite 102
 Taunton, Massachusetts 02780
 Tel. (800) 946-1575, Fax (800) 946-1575
 Land & Building Planning Services, and Construction Management Services

PROJECT: **COMMERCIAL DEVELOPMENT
 ELEVATION PLAN
 156 RHODE ISLAND ROAD
 LAKEVILLE, MA**
 CLIENT: **T SIKORSKI REALTY, LLC**

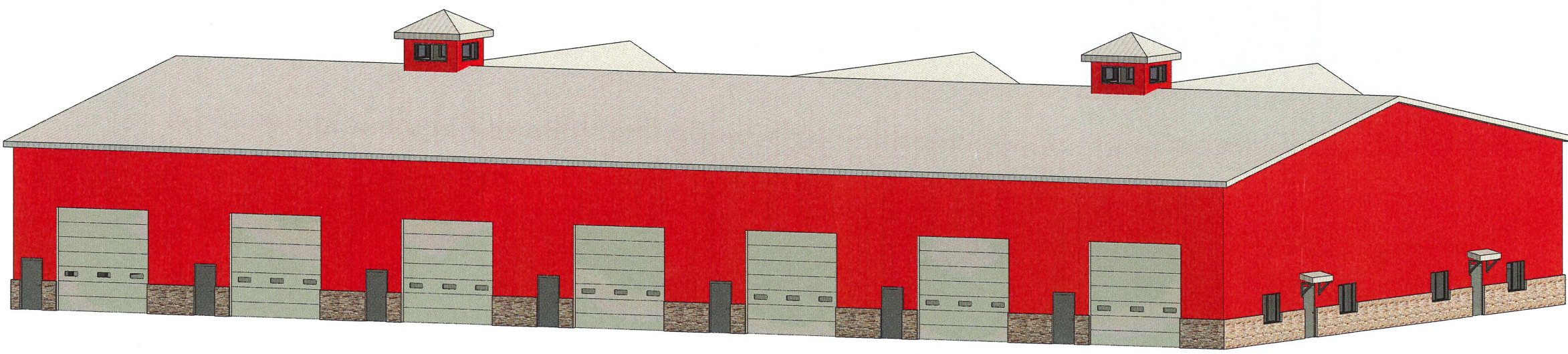
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 DATE: 03-07-2023
 DRAWN BY: JDD-DC-JD
 JOB NO.: 1379-01
 SHEET NO.:

A 102

ISSUE SCHEDULE	
Issue No.	Issue



2 3D Front View



1 3D Rear View

NORTHCOUNTY GROUP, INC.

4 Court Street, Suite 102

Taunton, Massachusetts 02780

Tel. (800) 946-1375, Fax (800) 946-1575

Land & Building Planning Services, and Construction Management Services

PROJECT:
**COMMERCIAL DEVELOPMENT
3D VIEW**

156 RHODE ISLAND ROAD
LAKEVILLE, MA

CLIENT: T SIKORSKI REALTY, LLC

SCALE:

DATE: 03-07-2023

DRAWN BY: Author

JOB NO: 1379-01

SHEET NO:

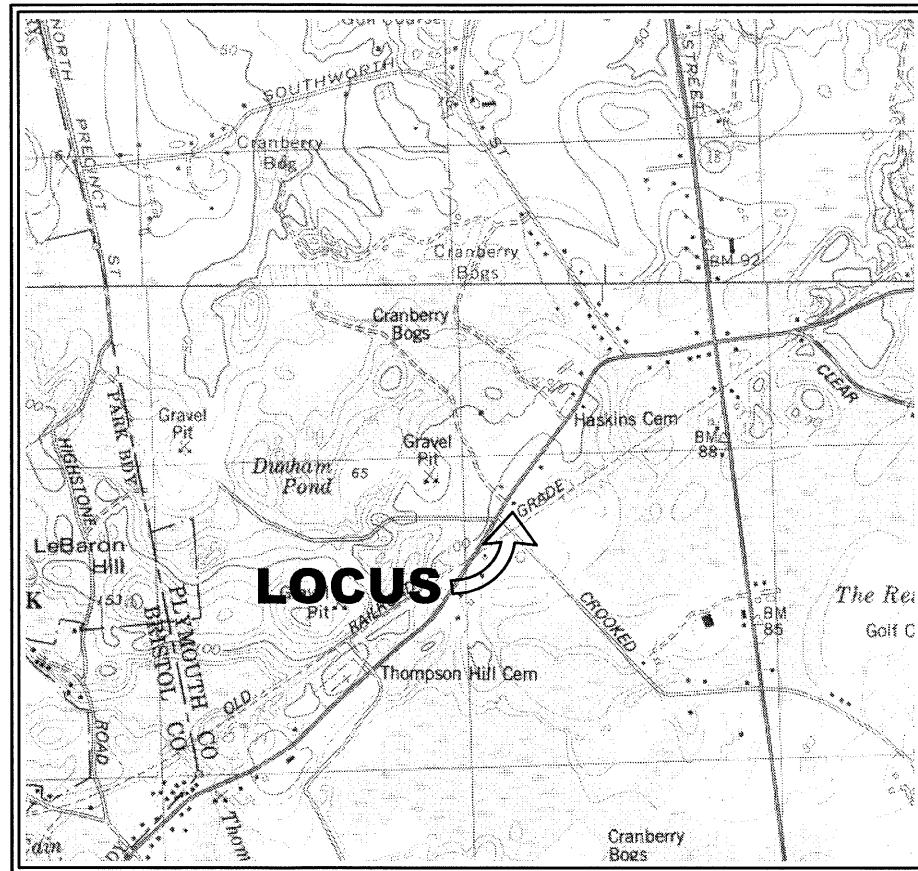
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Rev No.	Description	Date
REVISIONS		

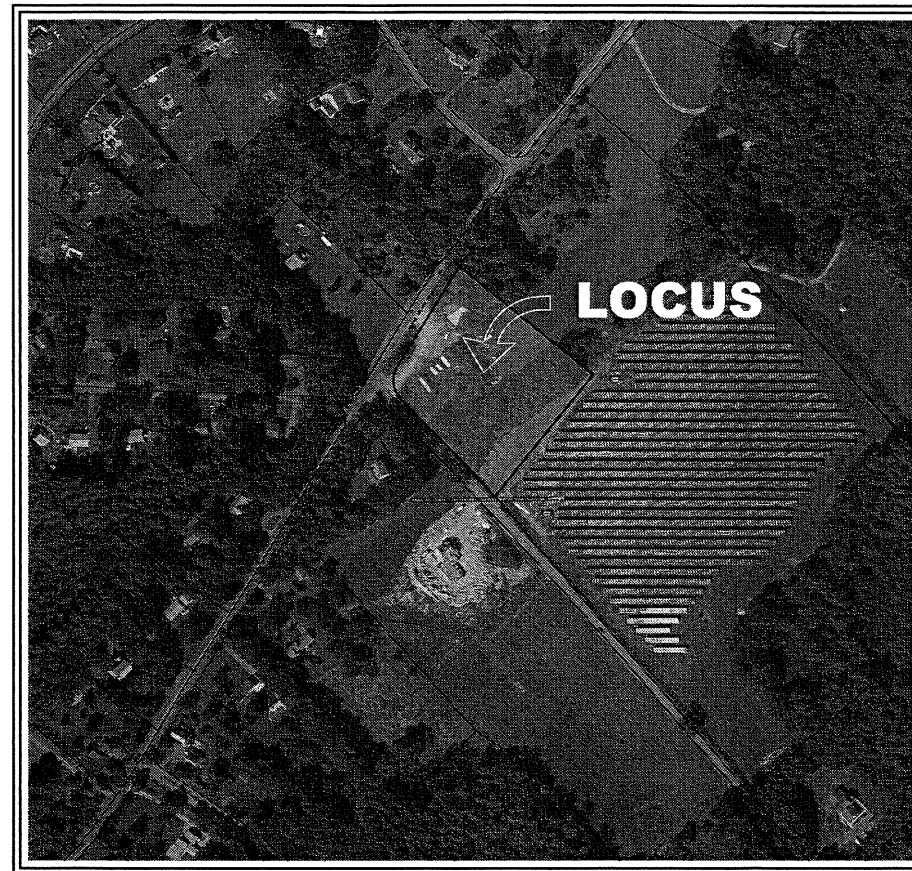
SITE PLAN

COMMERCIAL DEVELOPMENT

156 RHODE ISLAND ROAD, LAKEVILLE, MA



LOCUS MAP
NOT TO SCALE



AERIAL MAP
1" = 200'

TABLE OF CONTENTS

SHEET	PLAN ID
CS1.1	COVER SHEET
EX1.1	EXISTING CONDITIONS PRIOR TO 9/22
EX1.2	EXISTING CONDIOTNS AFTER 9/22
SP1.1	SITE LAYOUT PLAN
SP1.2	GRADING & DRAINAGE
SP1.3	LANDSCAPE AND TRAFFIC
EC1.1	EROSION CONTROL PLAN
D1.1	DETAILS 1
D1.2	DETAILS 2
D1.3	DETAILS 3
SSD1.1	SEPTIC SYSTEM DETAILS-1
SSD1.2	SEPTIC SYSTEM DETAILS-2

TOWN OF LAKEVILLE PLANNING BOARD:

SITE PLAN APPROVAL

DATE APPROVED:

DATE ENDORSED:

OWNER(S):

T. SIKORSKI REALTY, LLC

APPLICANT:

T. SIKORSKI REALTY, LLC
50 TURNER ST.,
E. TAUNTON, MA 02718

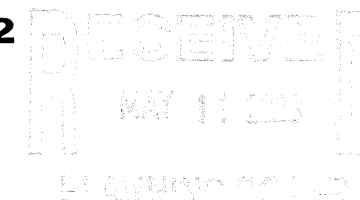
PREPARED BY:

River Hawk

ENVIRONMENTAL

CIVIL ENGINEERING & ENVIRONMENTAL CONSULTING
2183 OCEAN STREET, MARSHFIELD, MA 02050
781-536-4639 www.RiverHawkLLC.com

PREPARED MARCH 10, 2022
REVISED MAY 9, 2023



LEGEND					
DESCRIPTION	EXISTING	PROPOSED	DESCRIPTION	EXISTING	PROPOSED
CATCH BASINS	⊞	⊞	INTERMEDIATE CONTOUR	---22---	---55---
SEWER MANHOLE	⊙	⊙	INDEX CONTOUR	---95---	---55---
DRAIN MANHOLE	⊙	⊙	SPOT ELEVATIONS	X 55.0	X 53.7
ELECTRIC MANHOLE	⊙	⊙	DRAIN LINE	---	---
SW TREATMENT UNIT	⊙	⊙	SEWER LINE	---	---
GAS GATE	⊙	⊙	WATER LINE	---	---
WATER GATE	⊙	⊙	GAS LINE	---	---
FIRE HYDRANT	⊙	⊙	ELECTRICAL LINE	---	---
POWER POLE	⊙	⊙	200' RIVERFRONT AREA	---200' RA---	---
CHAIN LINK FENCE	⊙	⊙	100' RIVERFRONT AREA	---100' RA---	---
STOCKADE FENCE	⊙	⊙	100' BUFFER ZONE	---100' BZ---	---
OVERHEAD WIRES	⊙	⊙	50' BUFFER ZONE	---50' BZ---	---
LIGHT POLE	⊙	⊙	30' BUFFER ZONE	---30' BZ---	---
			LIMIT OF FLOOD ZONE AE	---OH---	---
			WETLAND FLAG	⊙	⊙

SHEET CS1.1

PROJECT: 00488-01-01 DRAWING: SITE PLAN

SITE SUMMARY:

CURRENT OWNERS / APPLICANT

T SIKORSKI REALTY, LLC
50 TURNER ST.
E. TAUNTON, MA, 02718

ASSESSOR'S REFERENCE:

MAP 26, BLOCK 4, LOT 2

DEED REFERENCE:

BOOK 52,511, PAGE 227
(PLYMOUTH COUNTY REGISTRY OF DEEDS)

ZONING:

ZONING DISTRICT(S)
INDUSTRIAL/RESIDENCE

FEMA / WETLANDS:

FLOOD PLAIN - ZONE X

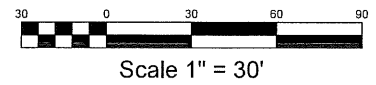
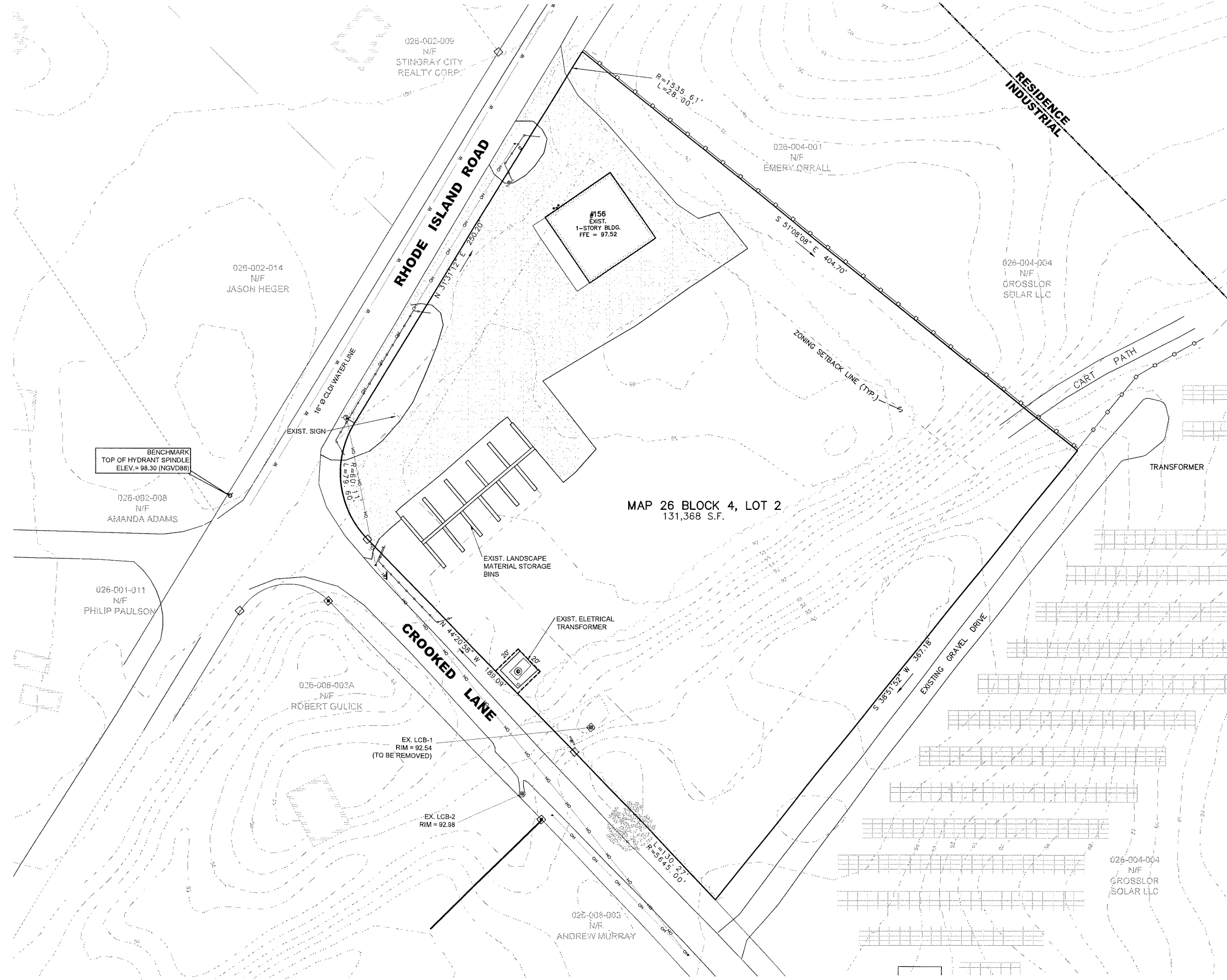
DATUMS:

HORIZONTAL DATUM:
NAD83, MA MAINLAND


VERTICAL DATUM:
NAVD88

SITE NOTES:

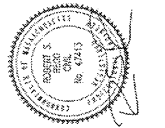
- EXISTING CONDITIONS PLAN & PROPERTY LINES SHOWN WERE DERIVED FROM PLAN PREPARED BY ZENITH LAND SURVEYORS, LLC. EXISTING TOPOGRAPHY FROM 2011 LIDAR DATA.
- BENCHMARK IS TOP OF HYDRANT SPINDLE AS SHOWN ON PLAN, AT ELEVATION = 98.30 (NGVD88).
- THERE ARE NO KNOWN WETLANDS WITHIN 100 FEET OF THE SUBJECT PROPERTY.
- THE SUBJECT PROPERTY IS LOCATED IN ZONE X, AS SHOWN ON THE FLOOD INSURANCE RATE MAP (F.I.R.M.) OF PLYMOUTH COUNTY, MASSACHUSETTS, MAP NUMBER 25023C0427K DATED JULY 16, 2015.
- THE LOCATION OF UNDERGROUND UTILITIES ARE APPROXIMATE ONLY, AND ARE NOT WARRANTED TO BE CORRECT. UNDERGROUND UTILITIES ARE SHOWN BASED ON EITHER RECORD DATA PROVIDED BY THE OPERATING AUTHORITIES, VISUAL INSPECTION OF AVAILABLE ABOVEGROUND STRUCTURES, PHYSICAL SURFACE MARKINGS FOUND, OR DATA PROVIDED BY OTHERS. ADDITIONAL UTILITIES MAY EXIST WHICH ARE NOT INDICATED ON THESE PLANS. ALL EXISTING UTILITIES SHALL BE VERIFIED FOR SERVICE SIZE, INVERT ELEVATION, LOCATIONS, ETC. PRIOR TO NEW CONNECTIONS TO OR RELOCATION OF SAME. CONTRACTOR MUST NOTIFY DIG-SAFE AT 1-888-344-7233 AT LEAST 72 HOURS PRIOR TO ANY CONSTRUCTION. NOTIFY THIS FIRM IN WRITING OF ANY AND ALL DISCREPANCIES PRIOR TO COMMENCING ANY WORK.



REV.	DATE	DESCRIPTION	BY	APP.
1	4/27/22	TOWN PLANNER COMMENTS	RSR	
2	10/26/22	PRE COMMENTS/REV LAYOUT	RSR	
3	10/26/22	TOWN PLANNER COMMENTS	RSR	
4	2/22/23	GENERAL COMMENTS	RSR	
5	5/8/23	TECHNICAL COMMENTS	RSR	


 T SIKORSKI REALTY, LLC
 50 TURNER ST.
 E. TAUNTON, MA, 02718

05/09/2023



RiverHawk
ENVIRONMENTAL
 CIVIL ENGINEERING & ENVIRONMENTAL CONSULTING
 2183 OCEAN STREET, MARSHFIELD, MA 02060
 781-536-6639 www.RiverHawkLLC.com

COMMERCIAL DEVELOPMENT
 156 RHODE ISLAND ROAD
 LAKEVILLE, MA
 EX. CONDITIONS PLAN PRIOR TO 9/22

DATE: MAR. 10, 2022
 PROJECT NO. 00488-01-01
 SCALE: AS SHOWN
 DRAWN BY: HRR
 DESIGNED BY: RSR
 CHECKED BY: RSR
 APPROVED BY: RSR

EX1.1

SITE SUMMARY:

PARCEL ID: 026/004/002
 TOTAL AREA: 131,368± S.F. (3.02± ACRES)
 ZONING DISTRICT: INDUSTRIAL

ZONING REQUIREMENTS:

ITEM:	REQUIRED	EXISTING	PROPOSED
LOT AREA (SF)	70,000	131,368±	131,368±
FRONTAGE (FT)	175	657.16	657.16
FRONT SETBACK (FT)	40	35.0	35.0 & 41.1
SIDE SETBACK (FT)	40, 50 ¹	48.8	48.8 & 113.3
REAR SETBACK (FT)	40	48.8	48.8 & 118.0
COVERAGE (%)	60 ²	33135/130968 ³	73268/123424 ³
		25.3%	59.4%

- NOTES:
- 1 - NO BUILDINGS ARE ALLOWED WITH 50' OF A RESIDENTIAL ZONE (WITH AN ACOUSTICAL WALL)
 - 2 - COVERAGE CAN BE INCREASED TO 60% IF SECTION 7.6.3 SITE DESIGN STANDARDS ARE MET
 - 3 - IN ACCORDANCE WITH SECTION OF THE LAKEVILLE ZONING BY-LAW, AREA USED IN COVERAGE CALC. DOES NOT INCLUDE PERMANENT EASEMENTS, SWALES AND DRAINAGE PONDS

CAR PARKING REQUIREMENTS:

ITEM:	REQ'D PER UNIT	PROPOSED	MIN. REQ'D
WAREHOUSE/OFFICE	1 PER EMPLOYEE	24	24

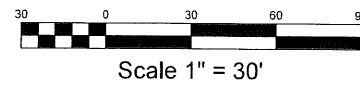
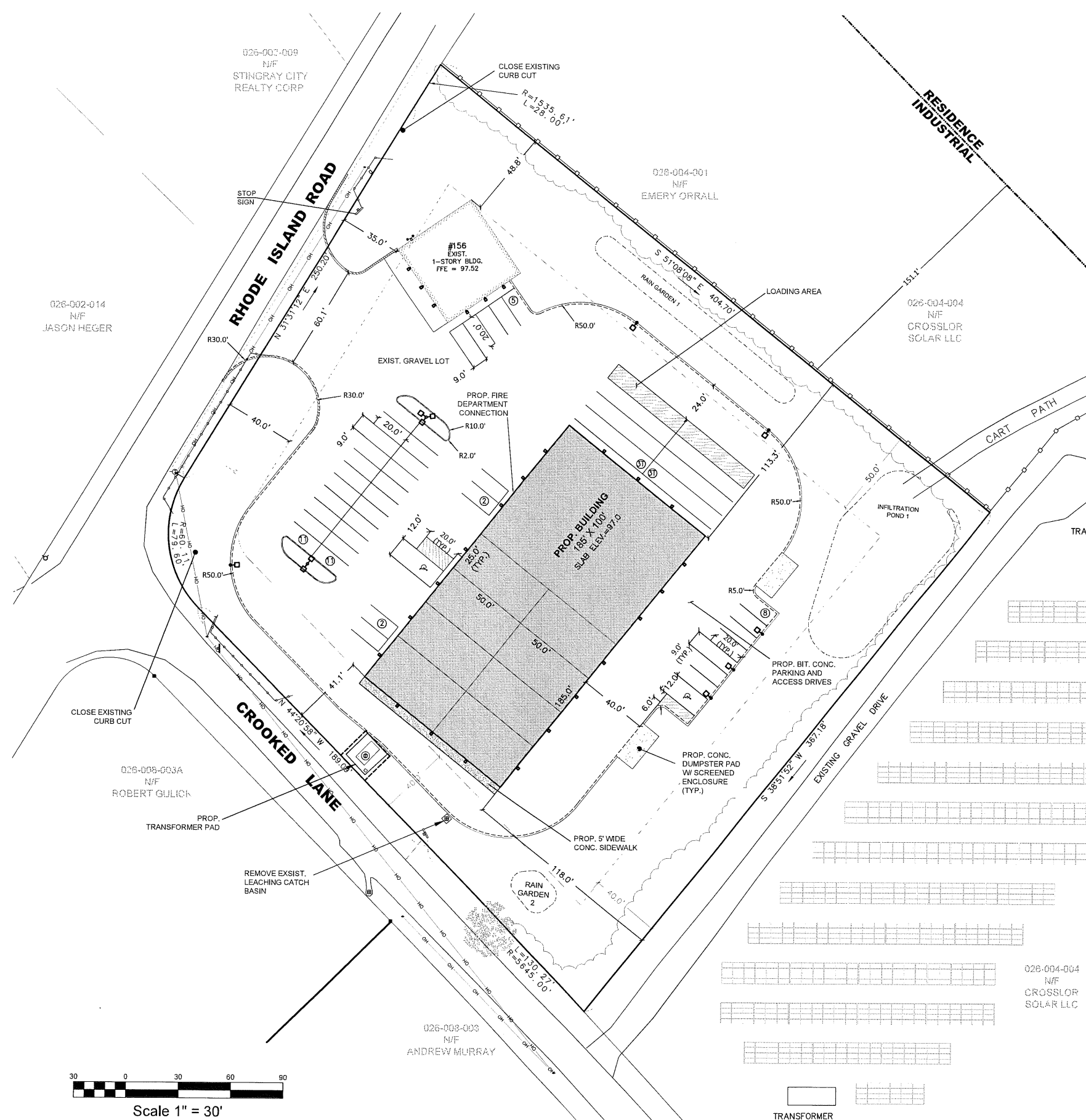
SPACES REQUIRED: 24
 SPACES PROVIDED: 40 PASSENGER VEHICLES
 6 TRACTOR/TRAILER SPACES
 ADA SPACES REQUIRED ON-SITE: 2 (1 VAN ACCESSIBLE)
 ADA SPACES PROVIDED ON-SITE: 2 (1 VAN ACCESSIBLE)

TYPICAL CAR PARKING SPACE DIMENSION:

MIN. 9' WIDE X 20' DEEP (STANDARD SPACE)
 MIN. 12' WIDE X 20' DEEP (HANDICAP ACCESSIBLE SPACE)

LOADING REQUIREMENTS:

IN ACCORDANCE WITH THE LAKEVILLE ZONING BY-LAW ADEQUATE LOADING AREAS SHALL BE PROVIDED.
 LOADING SPACES SHALL BE LOCATED IN FRONT OF EACH GARAGE DOOR, AND NORTH OF THE SITE BUILDING



REVISIONS	NO.	DATE	DESCRIPTION
1	4/27/23		TOWN PLANNER COMMENTS
2	10/26/23		TOWN PLANNER COMMENTS
3	10/26/23		TOWN PLANNER COMMENTS
4	2/22/23		GENERAL COMMENTS
5	5/23/23		TECHNICAL COMMENTS

05/09/2023

RiverHawk ENVIRONMENTAL
 CIVIL ENGINEERING & ENVIRONMENTAL CONSULTING
 511 WEST GROVE STREET, MIDDLEBORO, MA 02344
 781-536-4659 www.RiverHawkLLC.com

COMMERCIAL DEVELOPMENT
 156 RHODE ISLAND ROAD
 LAKEVILLE, MA

SITE LAYOUT PLAN

DATE: MAR. 10. 2022
 PROJECT NO. 00688-01-01
 SCALE: AS SHOWN

DRAWN BY: HRR
 DESIGNED BY: RSR
 CHECKED BY: RSR
 APPROVED BY: RSR

T SIKORSKI REALTY, LLC
 50 TURNER ST.
 E. TAUNTON, MA 02718

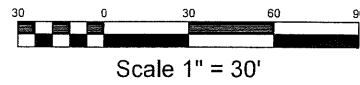
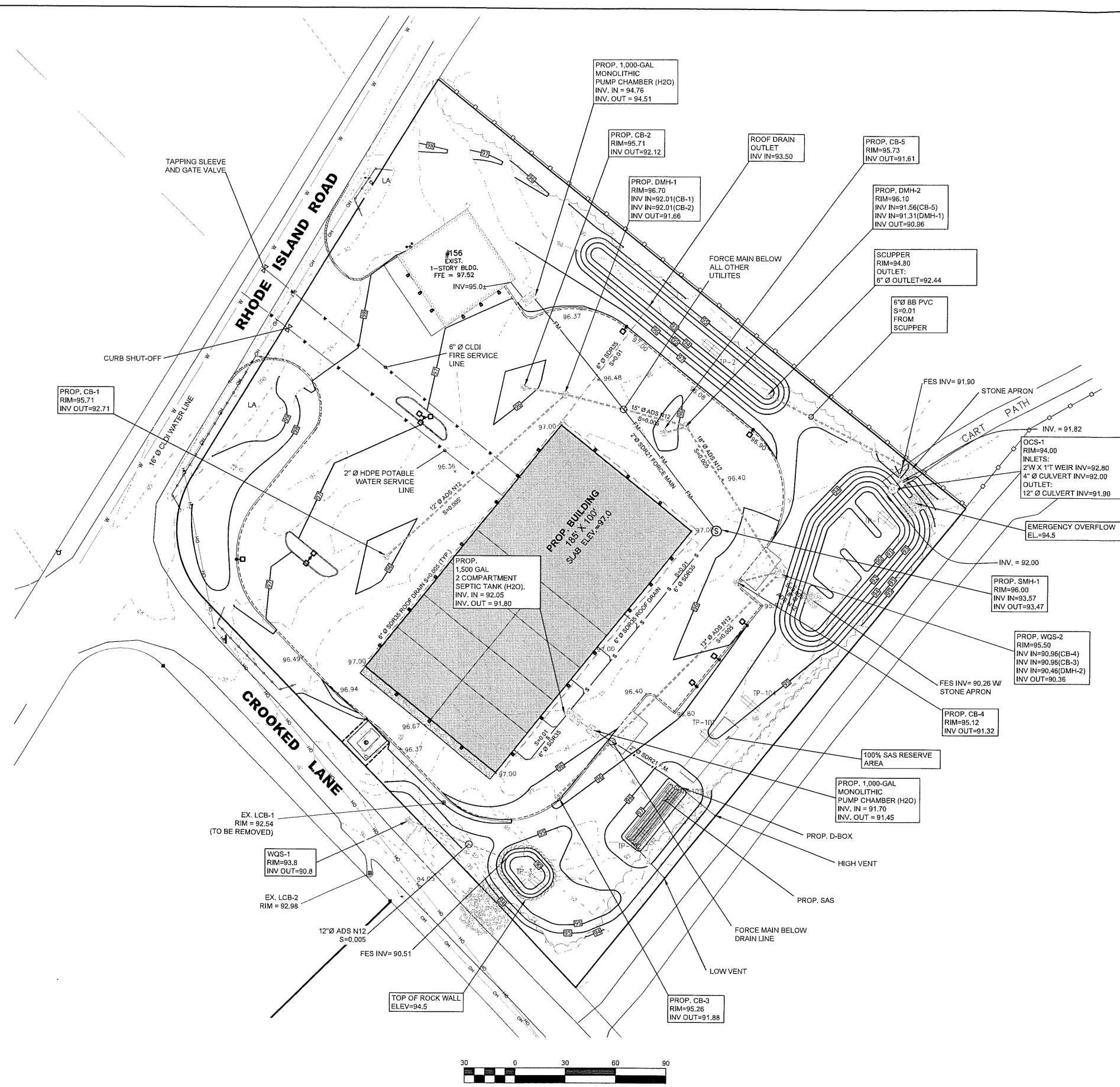
SP1.1

NOTES:

- ALL SITE WORK SHALL MEET OR EXCEED THE SITE SPECIFICATIONS PREPARED THIS PROJECT. THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING THAT THE PROPOSED IMPROVEMENTS SHOWN ON THE PLANS DO NOT CONFLICT WITH ANY KNOWN EXISTING OR OTHER PROPOSED IMPROVEMENTS. IF ANY CONFLICTS ARE DISCOVERED, THE CONTRACTOR SHALL NOTIFY THE ENGINEER AND THE OWNER PRIOR TO ANY SITE WORK WHICH WOULD BE AFFECTED.
- NO CERTIFICATION IS MADE AS TO THE EXISTENCE OR NON EXISTENCE OF ANY SUBSURFACE STRUCTURE/UTILITY NOT VISIBLE AND EVIDENCED FROM THE GROUND SURFACE.
- CONTRACTOR SHALL VERIFY LOCATIONS OF ALL UTILITIES PRIOR TO THE START ANY WORK.
- ALL DRAINAGE PIPE TO BE 12" Ø ADS N-12 SLOPED AT 0.005FT/FT, UNLESS SPECIFIED OTHERWISE.
- UNLESS SPECIFIED, ALL MATERIALS SHALL BE COMPLIANT WITH THE LATEST TOWN OF LAKEVILLE PUBLIC WORKS STANDARDS AND SPECIFICATIONS.
- WATER LINES AND ALL APPURTANCES SHALL BE COMPLIANT WITH THE LATEST CITY OF TAUNTON STANDARDS AND SPECIFICATIONS.
- THE CONTRACTOR SHALL VERIFY EXISTING GRADES IN THE FIELD AND REPORT ANY DISCREPANCIES IMMEDIATELY TO THE OWNER'S ENGINEER. THE CONTRACTOR SHALL MAKE ALL ARRANGEMENTS FOR THE ALTERATION AND ADJUSTMENT OF GAS, ELECTRIC, TELEPHONE AND ANY OTHER PRIVATE UTILITIES BY THE UTILITY COMPANIES, AS REQUIRED. WHERE AN EXISTING UTILITY IS FOUND TO CONFLICT WITH THE PROPOSED WORK, THE LOCATION, ELEVATION AND SIZE OF THE UTILITY SHALL BE ACCURATELY DETERMINED WITHOUT DELAY BY THE CONTRACTOR, AND THE INFORMATION FURNISHED TO THE OWNER AND OWNER'S ENGINEER FOR RESOLUTION.
- CONTRACTOR SHALL PROTECT ALL UNDERGROUND DRAINAGE, SEWER AND UTILITY FACILITIES FROM EXCESSIVE VEHICULAR LOADS DURING CONSTRUCTION. ANY DAMAGE TO THESE FACILITIES RESULTING FROM CONSTRUCTION LOADS WILL BE RESTORED TO ORIGINAL CONDITION.
- EXCAVATION REQUIRED WITHIN THE PROXIMITY OF EXISTING UTILITY LINES SHALL BE DONE BY HAND. CONTRACTOR SHALL REPAIR ANY DAMAGE TO EXISTING UTILITY LINES OR STRUCTURES INCURRED DURING CONSTRUCTION AT NO COST TO THE OWNER.
- ALL UTILITY COVERS, GRATES, ETC. TO REMAIN SHALL BE ADJUSTED TO BE FLUSH WITH THE FINISH GRADE UNLESS OTHERWISE NOTED. RIM ELEVATIONS FOR STRUCTURES AND MANHOLES ARE APPROXIMATE.
- AT ALL LOCATIONS WHERE EXISTING CURBING OR PAVEMENT ABUTS NEW CONSTRUCTION, THE EDGE OF THE EXISTING CURB OR PAVEMENT SHALL BE SAW CUT TO A CLEAN, SMOOTH EDGE, BLEND NEW PAVEMENT, CURBS AND EARTHWORK SMOOTHLY INTO EXISTING BY MATCHING LINES, GRADES AND JOINTS.
- ALL SEDIMENT IS TO BE KEPT OUT OF THE PROPOSED INFILTRATION AREAS, WHICH SHALL NOT BE USED UNTIL ALL CATCH BASINS AND OTHER DRAINAGE SYSTEM APPURTENANCES ARE INSTALLED AND FUNCTIONAL.
- PITCH EVENLY BETWEEN SPOT GRADES. GRADE ALL AREAS TO DRAIN.
- CONTRACTOR SHALL SCHEDULE HIS WORK TO ALLOW THE FINISHED SUBGRADE ELEVATIONS TO DRAIN PROPERLY WITHOUT PUDDLING. SPECIFICALLY, ALLOW WATER TO ESCAPE WHERE PROPOSED CURB MAY RETAIN RUNOFF PRIOR TO APPLICATION OF FINISH SUBGRADE. PROVIDE TEMPORARY POSITIVE DRAINAGE AS REQUIRED.
- ALL UTILITY TRENCHES IN THE RIGHT-OF-WAY SHALL BE BACKFILLED WITH CONTROL DENSITY FILL AND THE PAVEMENT SHALL BE PATCH USING INFRA-RED.

ABBREVIATIONS

CB	CATCH BASIN
FES	FLARED END SECTION
FFE	FINISHED FLOOR ELEVATION
OCS	OUTLET CONTROL STRUCTURE
WQS	WATER QUALITY STRUCTURE



5	5/9/23	TECHNICAL COMMENTS	RRR	RRR
4	2/22/23	GENERAL COMMENTS	RRR	RRR
3	1/10/23	TOWN PLANNER COMMENTS	RRR	RRR
2	10/26/22	PB COMMENTS/REV. LAYOUT	RRR	RRR
1	4/27/22	TOWN PLANNER COMMENTS	RRR	RRR
REV.	DATE	DESCRIPTION	BY	APP.

05/09/2023

T SIKORSKI REALTY, LLC
50 TURNER ST.
E. TAUNTON, MA 02718

05/09/2023

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2183 OCEAN STREET, MARSHFIELD, MA 02050
781-536-4639 www.RiverHawkLLC.com

DESIGNED BY: RSR
CHECKED BY: RSR
APPROVED BY: RSR

DRAWN BY: HRR

PROJECT NO.: 00488-01-01
SCALE: AS SHOWN

COMMERCIAL DEVELOPMENT
156 RHODE ISLAND ROAD
LAKEVILLE, MA

GRADING & DRAINAGE PLAN

DATE: MAR. 10, 2023

SP1.2

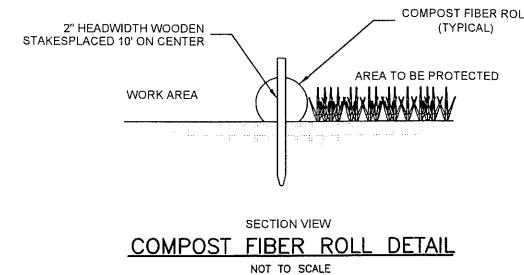
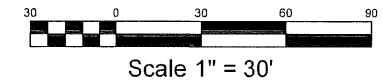
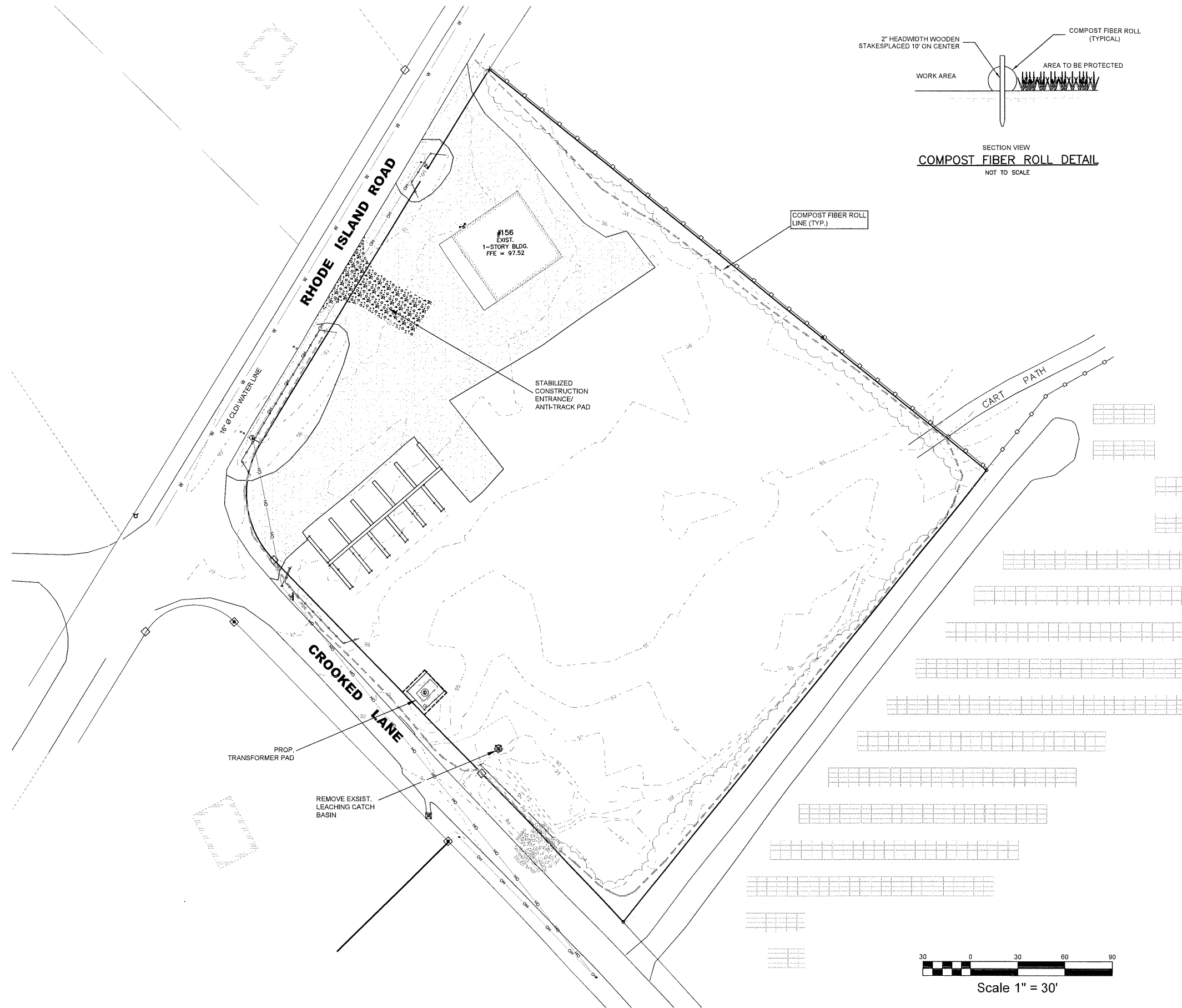
EROSION & SEDIMENT CONTROL NOTES:

THE CONTRACTOR IS RESPONSIBLE TO CONTROL EROSION AND SEDIMENTATION DURING CONSTRUCTION. IT IS INTENDED THAT THE IMPLEMENTATION OF THE FOLLOWING MEASURES WILL MEET THIS GOAL. WHEN IT IS CLEAR TO THE DESIGNER THAT EROSION AND SEDIMENTATION HAVE BEEN ADEQUATELY CONTROLLED WITHOUT THE IMPLEMENTATION OF EVERY MEASURE, ADDITIONAL MEASURES NEED NOT BE IMPLEMENTED. ALTERNATIVELY, IF ALL OF THE FOLLOWING MEASURES HAVE BEEN IMPLEMENTED AND THE CONTROL OF EROSION AND SEDIMENTATION IS INADEQUATE, THE CONTRACTOR MUST EMPLOY SUFFICIENT SUPPLEMENTAL MEASURES BEYOND THE SCOPE OF THIS PLAN.

1. EROSION AND SEDIMENTATION CONTROL MEASURES WILL BE INSTALLED PRIOR TO START OF DEMOLITION OR CONSTRUCTION. STABILIZATION OF ALL RE-GRADED AND SOIL STOCKPILE AREAS WILL BE INITIATED AND MAINTAINED DURING ALL PHASES OF CONSTRUCTION.
2. ALL EROSION AND SEDIMENT CONTROL MEASURES WILL BE CONSTRUCTED IN ACCORDANCE WITH LOCAL MUNICIPAL REGULATIONS, THE USEPA 2017 CONSTRUCTION GENERAL PERMIT, AND MASSACHUSETTS 2003 EROSION & SEDIMENT CONTROL GUIDELINES FOR URBAN AND SUBURBAN AREAS. ALL EROSION CONTROL MEASURES ARE TO BE MAINTAINED AND UPGRADED AS REQUIRED TO ACHIEVE PROPER SEDIMENT CONTROL DURING CONSTRUCTION. A STAKED HAYBALE DAM SHALL BE INSTALLED DOWN GRADIENT OF ALL DRAINAGE OUTFALLS.
3. ADDITIONAL CONTROL MEASURES WILL BE INSTALLED DURING THE CONSTRUCTION PERIOD, IF DEEMED NECESSARY BY THE OWNER OR AGENTS OF THE OWNER. THE CONTRACTOR SHALL KEEP ON SITE AT ALL TIMES ADDITIONAL EROSION CONTROL MATERIALS FOR INSTALLATION AT THE DIRECTION OF THE ENGINEER TO MITIGATE ANY EMERGENCY CONDITION.
4. PRIOR TO COMMENCEMENT OF CONSTRUCTION, APPLICABLE CONTRACTOR PERSONNEL MUST HAVE AN UNDERSTANDING OF THE USEPA CONSTRUCTION GENERAL PERMIT REQUIREMENTS, AND THEIR SPECIFIC RESPONSIBILITIES UNDER THE PERMIT. AT A MINIMUM PERSONNEL MUST BE TRAINED AND UNDERSTAND THE FOLLOWING: LOCATION OF ALL STORMWATER CONTROLS AND HOW TO MAINTAIN THEM; PROCEDURES FOR COMPLYING WITH THE POLLUTION PREVENTION REQUIREMENTS; PROCEDURES FOR CONDUCTING INSPECTIONS, RECORDING FINDINGS, AND TAKING CORRECTIVE ACTION.
5. CATCH BASINS (ON-SITE AND OFF-SITE WITHIN 100') WILL BE PROTECTED WITH HAYBALE FILTERS AND SILT BAG INLET PROTECTION THROUGHOUT THE CONSTRUCTION PERIOD UNTIL ALL DISTURBED AREAS ARE THOROUGHLY STABILIZED. SILT BAGS SHOULD BE INSTALLED UNDER GRATE OPENING UNTIL PAVEMENT IS IN PLACE AND GROUND SURFACE IS STABILIZED.
6. AREAS THAT ARE NOT THE LOCATION OF ACTIVE CONSTRUCTION WHICH ARE TO BE LEFT BARE FOR OVER ONE MONTH BEFORE FINISHED GRADING AND SEEDING IS ACHIEVED, SHALL BE MULCHED OR RECEIVE TEMPORARY STABILIZATION SUCH AS JUTE NETTING OR SHALL RECEIVE A TEMPORARY SEEDING OF PERENNIAL RYEGRASS APPLIED AT A RATE OF 2 LBS./1,000 SQ. FT. LIMESTONE (EQUIVALENT TO 50 PERCENT CALCIUM PLUS MAGNESIUM OXIDE) SHALL BE APPLIED AS SEEDING PREPARATION AT A RATE OF 90 LBS./1,000 SQ. FT. PLANTING SEASONS SHALL BE APRIL TO JUNE 1 AND AUGUST 1 TO OCTOBER 1. AREAS TO BE LEFT BARE BEFORE FINISH GRADING AND SEEDING OUTSIDE OF PLANTING SEASONS SHALL RECEIVE AN AIR-DRIED WOOD CHIP MULCH, FREE OF COARSE MATTER.
7. STABILIZATION OF SLOPES IN CUT AREAS (USING MULCH OR GRASS) AND THE INSTALLATION OF CONTROL LINE (HAYBALE CHECK OR FILTER FABRIC) AT THE TOE OF SLOPE SHALL BE INITIATED WITHIN FOURTEEN (14) DAYS OF COMPLETION.
8. SEDIMENT REMOVED FROM CONTROL STRUCTURES WILL BE DISPOSED IN A MANNER WHICH IS CONSISTENT WITH THE INTENT OF THE PLAN. ALL LINEAR EROSION CONTROLS RETAINING SEDIMENT OVER 1/2 THEIR HEIGHT SHALL HAVE THE SEDIMENT REMOVED AND ALL DAMAGED EROSION CONTROLS SHALL BE REPAIRED OR REPLACED.
10. THE CONTRACTOR WILL BE ASSIGNED THE RESPONSIBILITY FOR IMPLEMENTING THIS EROSION AND SEDIMENT CONTROL PLAN. THIS RESPONSIBILITY INCLUDES THE INSTALLATION AND MAINTENANCE OF CONTROL MEASURES, INFORMING ALL PARTIES ENGAGED ON THE CONSTRUCTION SITE OF THE REQUIREMENTS AND OBJECTIVES OF THE PLAN, AND NOTIFYING THE CONSERVATION COMMISSION OF ANY TRANSFER OF THIS RESPONSIBILITY. THE OWNER SHALL BE RESPONSIBLE FOR CONVEYING A COPY OF THE EROSION AND SEDIMENT CONTROL PLAN IF THE TITLE TO THE LAND IS TRANSFERRED.
11. STOCKPILES OF SOIL SHALL BE SURROUNDED BY A SEDIMENT BARRIER. SOIL STOCKPILES TO BE LEFT BARE FOR MORE THAN FOURTEEN (14) DAYS SHALL BE STABILIZED WITH TEMPORARY VEGETATION OR MULCH. IF SOIL STOCKPILES ARE TO REMAIN FOR MORE THAN SIXTY (60) DAYS, FILTER FABRIC SHALL BE USED IN PLACE OF HAYBALES. SIDE SLOPES SHALL NOT EXCEED 2:1.
12. THE CONTRACTOR SHALL BE RESPONSIBLE TO CONTROL DUST AND WIND EROSION THROUGHOUT THE LIFE OF THEIR CONTRACT. DUST CONTROL SHALL INCLUDE, BUT IS NOT LIMITED TO SPRINKLING OF WATER ON EXPOSED SOILS AND HAUL ROADS. CONTRACTOR SHALL CONTROL DUST TO PREVENT A HAZARD TO TRAFFIC.
13. ADJACENT ROADS SHALL BE PERIODICALLY SWEEPED OR WASHED TO AVOID TRACKING MUD, DUST OR DEBRIS FROM THE CONSTRUCTION AREA. ALL SEDIMENT TRACKED ONTO ROADWAYS MUST BE REMOVED AT END OF EACH WORK DAY.
13. IF FINAL GRADING IS TO BE DELAYED FOR MORE THAN FOURTEEN (14) DAYS AFTER LAND DISTURBANCES CEASE, TEMPORARY VEGETATION OR MULCH SHALL BE USED TO STABILIZE SOILS.
14. WHERE DE-WATERING IS NECESSARY, THERE SHALL NOT BE A DISCHARGE DIRECTLY INTO WETLANDS OR WATERCOURSES. PROPER METHODS AND DEVICES SHALL BE UTILIZED TO THE EXTENT PERMITTED BY LAW, SUCH AS PUMPING WATER INTO A TEMPORARY SEDIMENTATION BOWL, PROVIDING SURGE PROTECTION AT THE INLET AND THE OUTLET OF PUMPS, OR FLOATING THE INTAKE OF THE PUMP, OR OTHER METHODS TO MINIMIZE AND RETAIN THE SUSPENDED SOLIDS. IF A PUMPING OPERATION IS CAUSING TURBIDITY PROBLEMS, SAID OPERATION SHALL CEASE UNTIL SUCH TIME AS FEASIBLE MEANS OF CONTROLLING TURBIDITY ARE DETERMINED AND IMPLEMENTED. SAID DISCHARGE POINTS SHALL BE LOCATED OVER 100 FEET FROM THE DELINEATED WETLANDS AS INDICATED ON THIS PLAN.
15. ALL EROSION CONTROL MEASURES SHALL BE ROUTINELY INSPECTED BY THE CONTRACTOR, CLEANED AND REPAIRED OR REPLACED AS NECESSARY THROUGHOUT ALL PHASES OF CONSTRUCTION. IN ADDITION, INSPECTIONS SHALL TAKE PLACE WEEKLY AND BEFORE AND AFTER EACH 1/4" RAINFALL EVENT. CONTRACTOR TO MAINTAIN ALL WEEKLY REPORTS IN CONJUNCTION WITH THE EROSION CONTROL / NPDES CONSTRUCTION GENERAL PERMIT REQUIREMENTS. COPIES OF ALL SWPPP INSPECTION REPORTS SHALL BE PROVIDED TO THE TOWN, EPA, DEP, OR ANY OTHER AUTHORITY REQUESTING WITHIN 3 DAYS OF EACH INSPECTION.

LEGEND

- PROPOSED LINEAR EROSION CONTROL LINE
- ☒ PROPOSED CATCH BASIN INLET PROTECTION



REV.	DATE	DESCRIPTION	BY	APP.
1	4/27/22	TOWN PLANNER COMMENTS	RSR	
2	10/26/22	PE COMMENTS/REV LAYOUT	RSR	
3	1/30/23	TOWN PLANNER COMMENTS	RSR	
4	2/22/23	GENERAL COMMENTS	AWL	
5	5/8/23	TECHNICAL COMMENTS	RSR	

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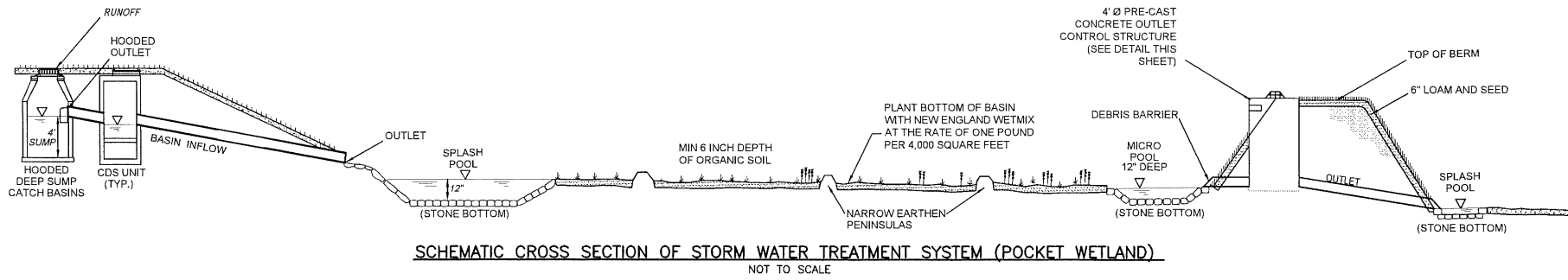
05/09/2023

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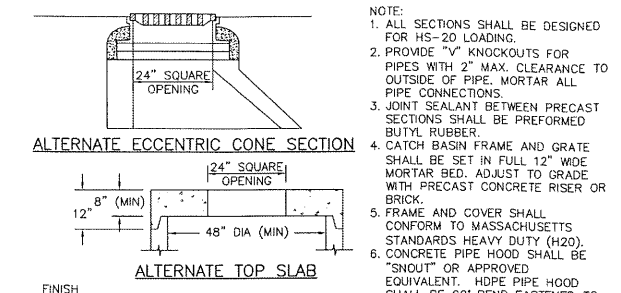
COMMERCIAL DEVELOPMENT
 156 RHODE ISLAND ROAD
 LAKEVILLE, MA
 EROSION CONTROL / DEMOLITION PLAN

PROJECT NO. 00888-01-01
 SCALE: AS SHOWN
 DATE: MAR. 10, 2022
 DRAWN BY: HRR
 DESIGNED BY: RSR
 CHECKED BY: RSR
 APPROVED BY: RSR

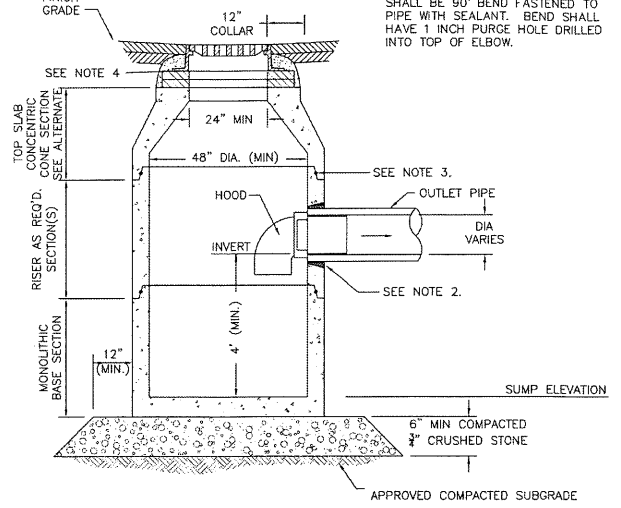
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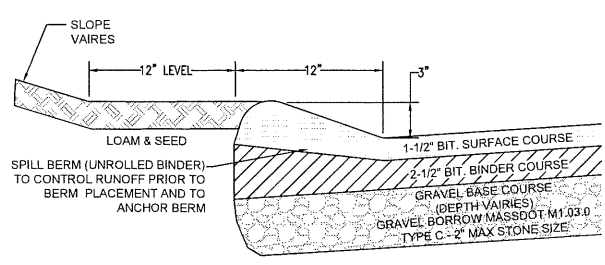
SCHEMATIC CROSS SECTION OF STORM WATER TREATMENT SYSTEM (POCKET WETLAND)
NOT TO SCALE



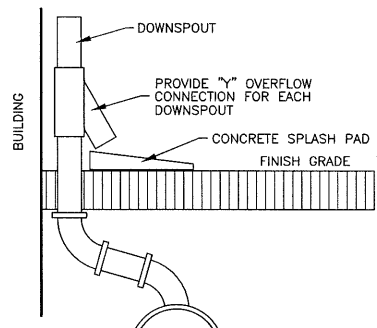
- NOTE:
1. ALL SECTIONS SHALL BE DESIGNED FOR H5-20 LOADING.
 2. PROVIDE "Y" KNOCKOUTS FOR PIPES WITH 2" MAX. CLEARANCE TO OUTSIDE OF PIPE. MORTAR ALL PIPE CONNECTIONS.
 3. JOINT SEALANT BETWEEN PRECAST SECTIONS SHALL BE PREFORMED BUTYL RUBBER.
 4. CATCH BASIN FRAME AND GRATE SHALL BE SET IN FULL 12" WIDE MORTAR BED. ADJUST TO GRADE WITH PRECAST CONCRETE RISER OR BRICK.
 5. FRAME AND COVER SHALL CONFORM TO MASSACHUSETTS STANDARDS HEAVY DUTY (H20).
 6. CONCRETE PIPE HOOD SHALL BE "SNOOT" OR APPROVED EQUIVALENT. HDPE PIPE HOOD SHALL BE 90° BEND FASTENED TO PIPE WITH SEALANT. BEND SHALL HAVE 1 INCH PURGE HOLE DRILLED INTO TOP OF ELBOW.



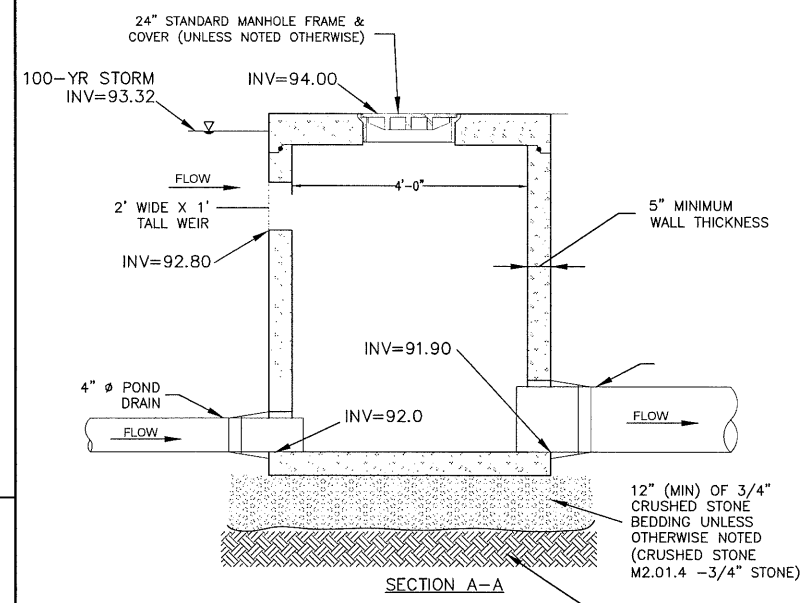
SINGLE GRATE CATCH BASIN
NOT TO SCALE



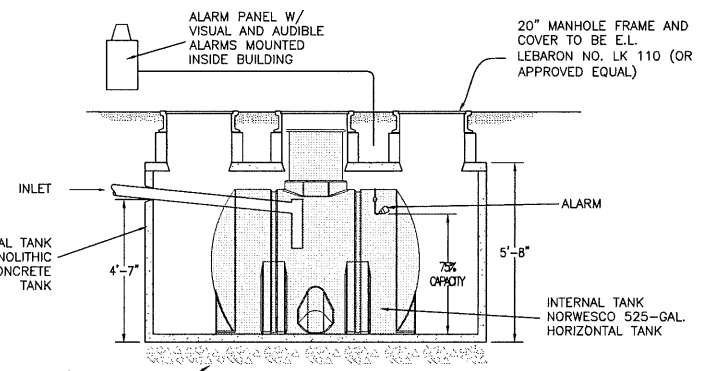
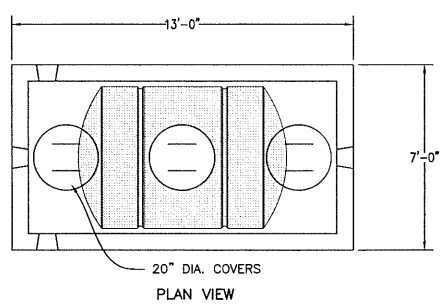
MONOLITHIC CAPE COD BERM
NOT TO SCALE



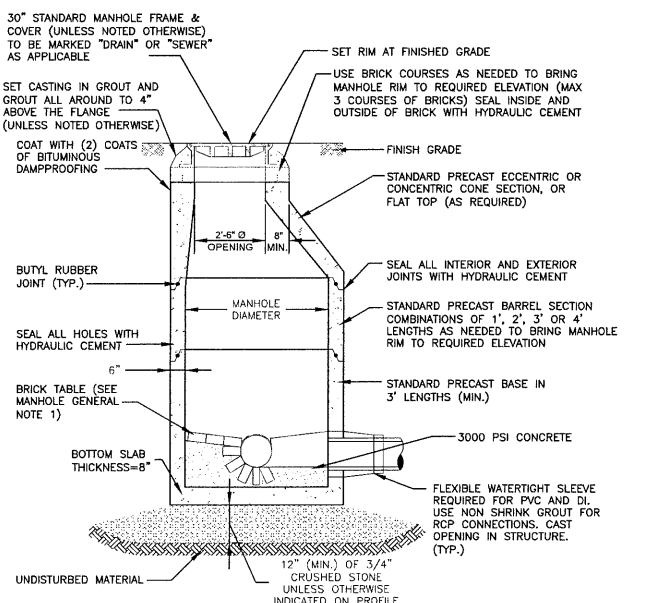
TYPICAL ROOF DOWNSPOUT
NOT TO SCALE



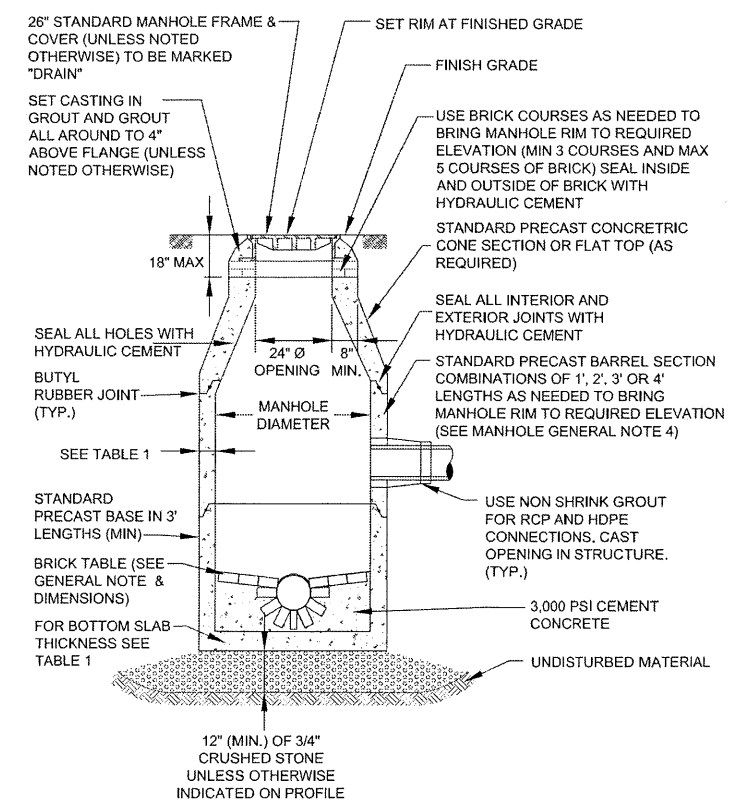
OUTLET CONTROL STRUCTURE
NOT TO SCALE



INDUSTRIAL WASTE WATER HOLDING TANK (H-20)
NOT TO SCALE

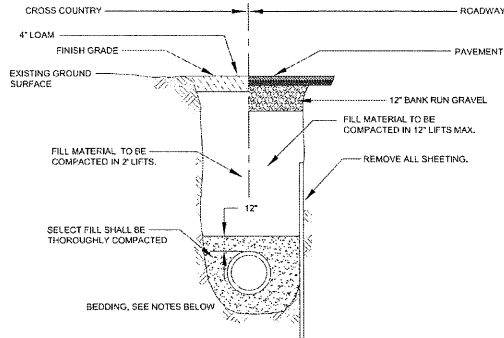


TYP. SEWER MANHOLE
NOT TO SCALE



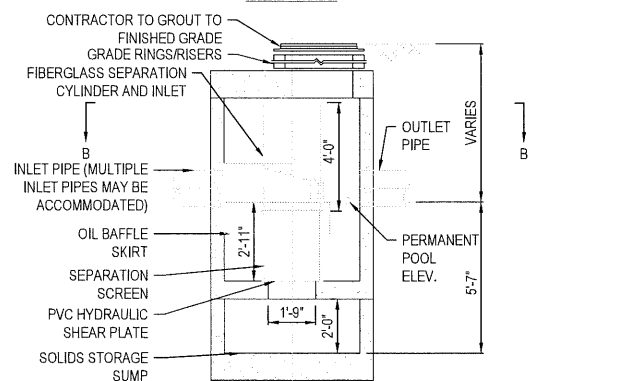
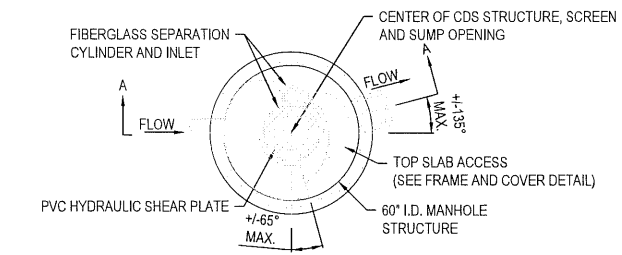
TYP. DRAINAGE MANHOLE
NOT TO SCALE

DATE: OCT. 24, 2022	PROJECT NO.: 00488-01-01	SCALE: AS SHOWN	DRAWN BY: HRR	CHECKED BY: WPK	APPROVED BY: RSR
COMMERCIAL DEVELOPMENT 156 RHODE ISLAND ROAD LAKEVILLE, MA					
DETAILS - 1					
D1.1					

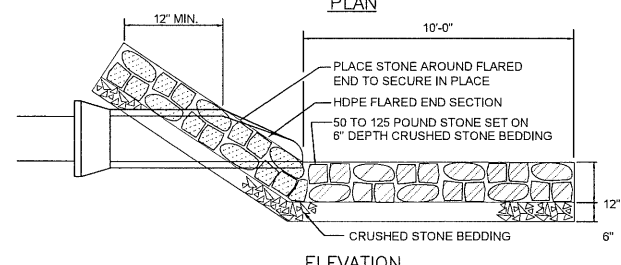
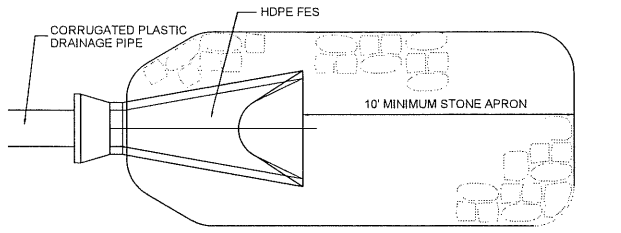


- NOTES:
- FOR LOCATIONS WHERE LEDGE IS NOT ENCOUNTERED IN TRENCH, PIPE CAN LAY ON UNDISTURBED EARTH, OR ON SAND BEDDING CONSISTENT WITH AWWA GUIDELINES.
 - FOR LOCATIONS WHERE LEDGE IS ENCOUNTERED, SAND BEDDING SHALL BE MIN. OF 12" THICK UNDER PIPE.
 - FILL MATERIAL SHALL BE COMPACTED TO 95% PROCTOR DENSITY.

WATER MAIN TRENCH DETAIL
NOT TO SCALE

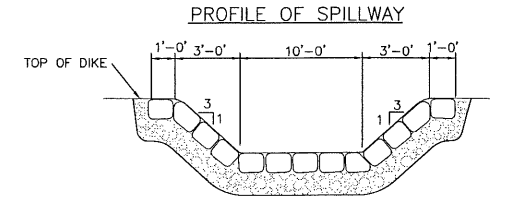
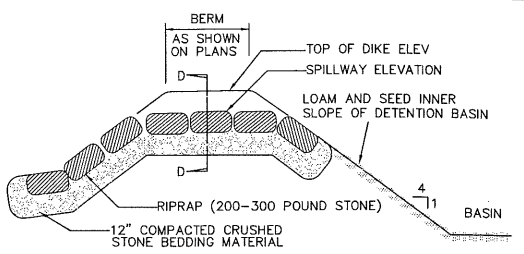


TYP. SEWER MANHOLE
NOT TO SCALE

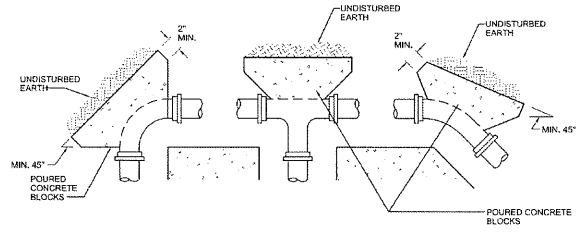


NOTES:
1. PROVIDE STONE APRON AT ALL OUTLETS

STONE APRON AT PIPE END
NOT TO SCALE

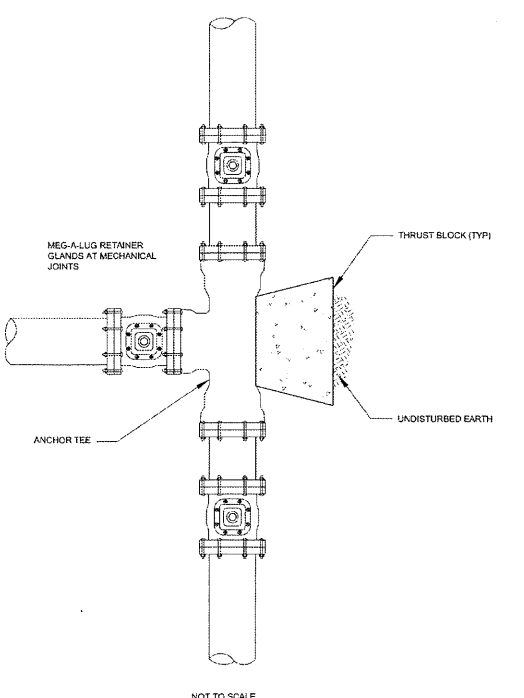


DETENTION BASIN SPILLWAY
NOT TO SCALE

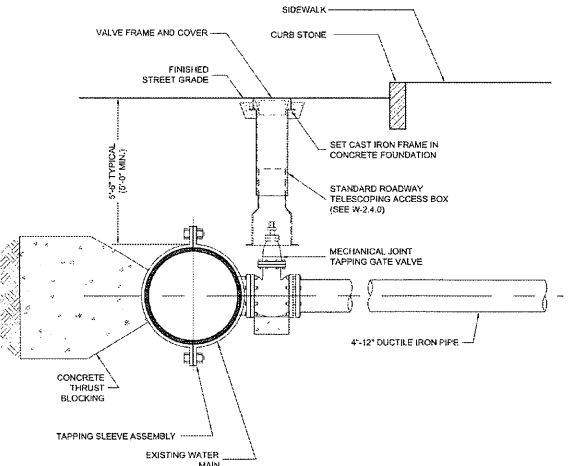


- NOTES:
- SPECIFIC THRUST BLOCK DESIGN SHALL CONFORM TO AWWA GUIDELINES.
 - PLACE 4 mil. POLYETHYLENE BETWEEN CONCRETE AND FITTING (CONCRETE SHALL NOT INTERFERE WITH JOINT).
 - MINIMUM CONCRETE THICKNESS SHALL BE 12 INCHES.
 - THRUST BLOCK ORIENTATION SHALL BE SUCH THAT THE CENTER OF THE FITTING CORRESPONDS WITH THE CENTER OF THE THRUST BLOCK.
 - THE MINIMUM ALLOWABLE ANGLE (EITHER VERTICAL OR HORIZONTAL) SHALL BE 45 DEGREES.

TYP. THRUST BLOCK DETAIL
NOT TO SCALE

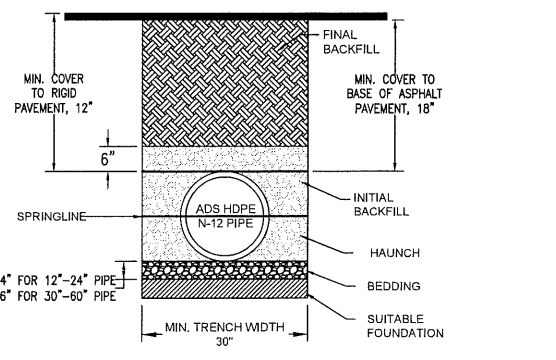


TYP. ANCHOR TEE
NOT TO SCALE

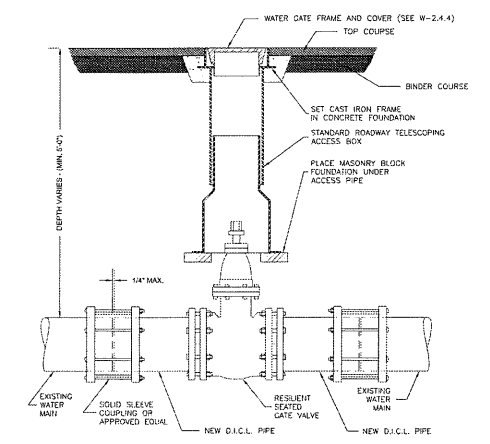


- NOTES:
- MAXIMUM TAPPING SLEEVE SHALL NOT BE GREATER THAN 1/2 DIAMETER OF CONNECTING MAIN.
 - MEGA LUG RESTRAINTS ON ALL MECHANICAL JOINTS.

TYP. CONNECTION (TAPPING SLEEVE)
NOT TO SCALE

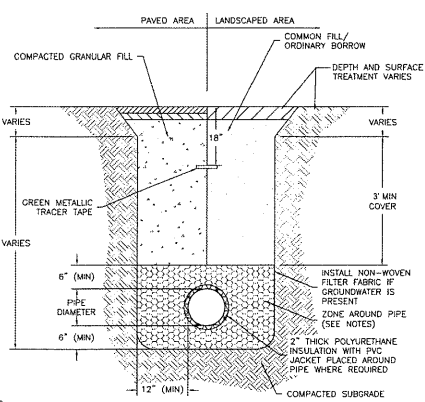


DRAIN PIPE TRENCH DETAIL
NOT TO SCALE



NOTE: ALL EXCAVATION, BACKFILLING AND FINISHING SHALL BE IN ACCORDANCE WITH THE TOWN OF FRAMINGHAM REQUIREMENTS.

GATE VALVE
NOT TO SCALE



- NOTE:
- GRAVITY SEWER AND FORCE MAIN SHALL BE INSULATED WHEN VERTICAL OR HORIZONTAL. SOIL COVER IS LESS THAN 4 FEET AND WHERE SHOWN ON PLANS. IN CERTAIN INSTANCES, DI PIPE MAY BE REQUIRED.
 - BACKFILL PLACED IN UTILITY TRENCHES INCLUDING DISTURBED AREAS SURROUNDING UTILITY TRENCHES SHALL BE PLACED AND COMPACTED IN 12" (MAX.) VERTICAL LIFTS.
 - TRACER TAPE FOR NON-FERROUS PIPE SHALL BE CONSTRUCTED OF A METALLIC CORE BONDED TO PLASTIC LAYERS. THE METALLIC TRACER TAPE SHALL BE A MINIMUM 3mm THICK AND MUST BE LOCABLE AT A DEPTH OF 18 INCHES WITH GROUNDWATER PIPE LOCATORS.
 - PIPE GRAVEL SHALL CONSIST OF CLEAN, HARD, ROUND PARTICLES OF GRAVEL MEETING THE FOLLOWING:
- | PIE SIZE | PERCENT PASSING |
|----------|-----------------|
| 3/8" | 85-95 |
| NO. 4 | 5-15 |
| NO. 8 | 0-2 |
- CONTRACTOR SHALL ACHIEVE 95% COMPACTION FOR THE BEDDING. TRENCH BACKFILL UNDER ROADWAYS SHALL BE COMPACTED TO 95%.
 - ZONE AROUND PIPE: BACKFILL WITH PROCESSED SAND, FINE GRAVEL, OR OTHER MATERIAL APPROVED BY THE WASTEWATER DEPARTMENT.
 - FOR PVC PIPE: 2" CRUSHED STONE 8" AROUND ENTIRE PIPE.
 - FOR CONCRETE PIPE: 2" STONE 6" UNDER PIPE AND HALF WAY UP PIPE.

TYP. SEWER TRENCH
NOT TO SCALE

REV.	DATE	DESCRIPTION	BY	APP.
1	4/27/22	TOWN PLANNER COMMENTS	HR	RSR
2	10/26/22	GENERAL COMMENTS	HR	RSR
3	2/22/23	GENERAL COMMENTS	HR	RSR
4	5/9/23	TECHNICAL COMMENTS	HR	RSR



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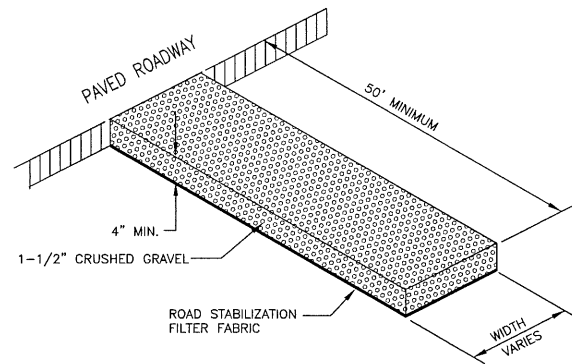
RiverHawk ENVIRONMENTAL
CIVIL ENGINEERING & ENVIRONMENTAL ASSESSMENT
2183 OCEAN STREET, MARSHFIELD, MA 02050
781-556-4639 www.RiverHawkLLC.com

COMMERCIAL DEVELOPMENT
156 RHODE ISLAND ROAD
LAKEVILLE, MA

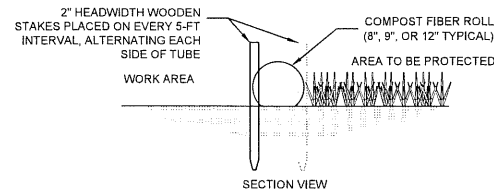
DETAILS - 2

PROJECT NO. 0488-01-01
SCALE AS SHOWN
DATE OCT. 24, 2022

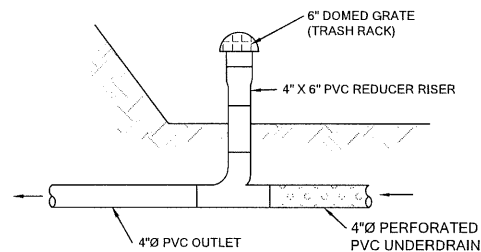
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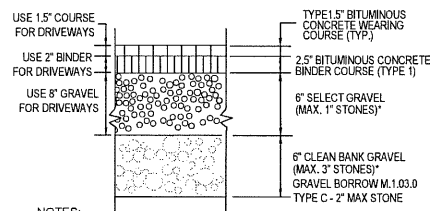
ANTI-TRACKING PAD
NOT TO SCALE



COMPOST FIBER ROLL DETAIL
NOT TO SCALE

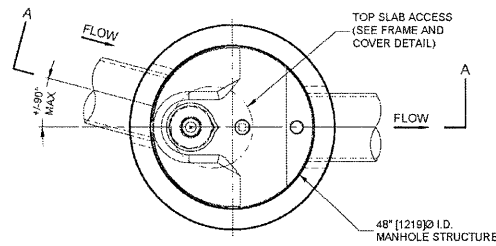


SCUPPER DETAIL
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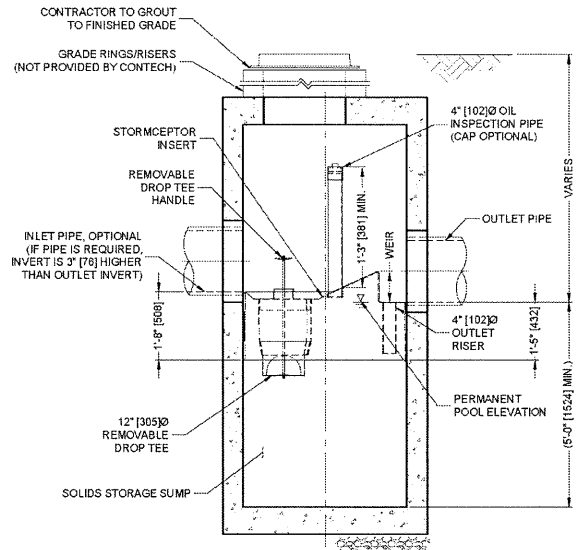


- NOTES:**
- USE MASSDOT SPECIFIED MATERIAL FOR ALL ROADWAY BASE / SUB BASE FILL MATERIAL.
 - PLACE IN 6" LIFTS AND COMPACT TO AT LEAST 95% OF LABORATORY MAXIMUM DRY DENSITY (ASTM D 1557, METHOD D)

BITUMINOUS CONCRETE PAVEMENT
NOT TO SCALE

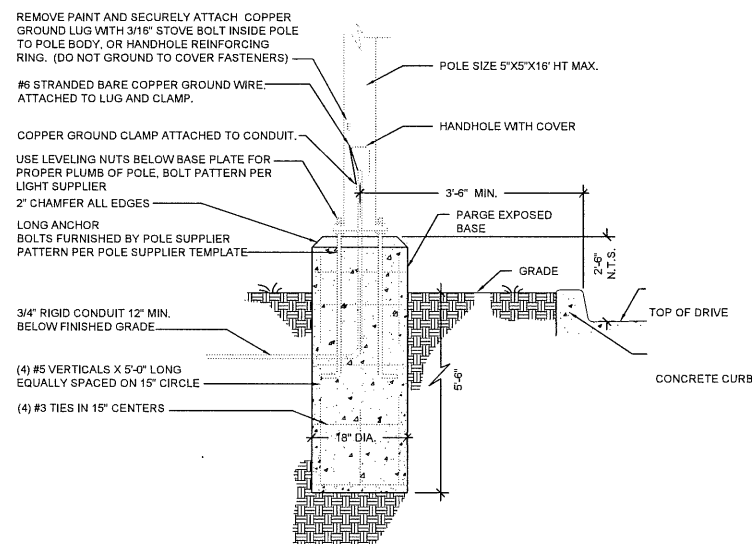


PLAN VIEW
TOP SLAB NOT SHOWN

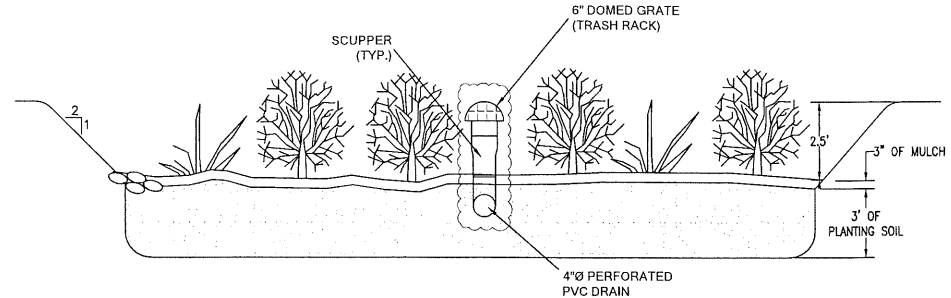


SECTION A-A

STC 450i STORMCEPTOR TREATMENT UNIT
NOT TO SCALE



LIGHT POLE BASE
NOT TO SCALE



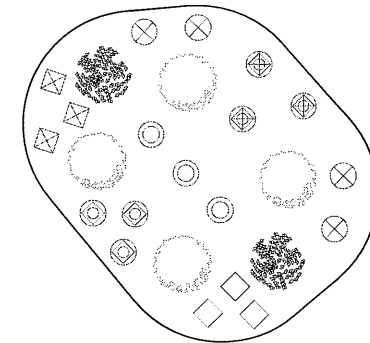
RAIN GARDEN (TYP.)
NOT TO SCALE

PLANTING REQUIREMENTS FOR EACH RAIN GARDEN

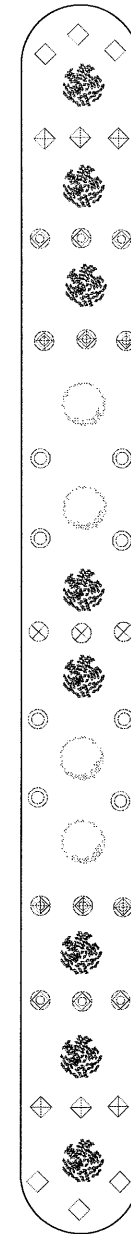
SYM	BOTANICAL NAME	COMMON NAME	SIZE	QUANTITY	
				RG-1	RG-2
◇	SYMPHYOTRICHUM NOVAE-ANGLIAE	NEW ENGLAND ASTER	3" POT	3	6
◇	AQUILEGIA CANADENSIS	RED COLUMBINE	3" POT	3	6
⊗	EUTROCHUM PURPUREUM	JOE-PYE WEED	3" POT	3	6
⊗	PENSTEMON DIGITALIS	FOXGLOVE BEARD TONGUE	3" POT	3	6
⊗	PANICUM VIRGATUM	SWITCHGRASS	3" POT	3	6
⊗	LOBELIA CARDINALIS	CARDINAL FLOWER	3" POT	4	6
⊗	ILEX GLABRA	INKBERRY	3-GAL	2	8
⊗	ILEX VERTICILLATA	WINTERBERRY	3-GAL	4	4

NOTES:

- COVER THE BOTTOM OF THE EXCAVATION WITH COARSE GRAVEL, OVER PEA GRAVEL, OVER SAND.
- THE SOIL MIX FOR BIORETENTION SHOULD BE A MIXTURE OF SAND, COMPOST AND SOIL.
 - 40% SAND,
 - 20-30% TOPSOIL, AND
 - 30-40% COMPOST.
- THE SOIL MIX MUST BE UNIFORM, FREE OF STONES, STUMPS, ROOTS OR SIMILAR OBJECTS LARGER THAN 2 INCHES. CLAY CONTENT SHOULD NOT EXCEED 5%.
- SOIL PH SHOULD GENERALLY BE BETWEEN 5.5-6.5. A RANGE THAT IS OPTIMAL FOR MICROBIAL ACTIVITY AND ADSORPTION OF NITROGEN, PHOSPHORUS, AND OTHER POLLUTANTS.
- USE SOILS WITH 1.5% TO 3% ORGANIC CONTENT AND MAXIMUM 500-PPM SOLUBLE SALTS.
- THE SAND COMPONENT SHOULD BE GRAVELLY SAND THAT MEETS ASTM D 422.
 - SIEVE SIZE PERCENT PASSING
 - 2-INCH 100
 - 3/4-INCH 70-100
 - 1/4-INCH 50-80
 - U.S. NO. 40 15-40
 - U.S. NO. 200 0-3
- THE TOPSOIL COMPONENT SHALL BE A SANDY LOAM, LOAMY SAND OR LOAM TEXTURE.
- THE COMPOST COMPONENT MUST BE PROCESSED FROM YARD WASTE IN ACCORDANCE WITH MASSDEP GUIDELINES (SEE [HTTP://WWW.MASS.GOV/DEP/RECYCLE/REDUCE/LEAFGUID.DOC](http://www.mass.gov/dep/recycle/reduce/leafguid.doc)). THE COMPOST SHALL NOT CONTAIN BIOSOLIDS.



SAMPLE RAIN GARDEN LAYOUT 1
NOT TO SCALE



SAMPLE RAIN GARDEN LAYOUT 2
NOT TO SCALE

SOIL DATA:

DATE PERFORMED: APRIL 25, 2023
SOIL TESTING AND PERCOLATION TEST PERFORMED BY BOB REGO P.E., RIVER HAWK ENVIRONMENTAL, LLC
WITNESSED BY SCOTT TURNER E.P., LAKEVILLE BOARD OF HEALTH

SOIL HORIZ.	TP-1	DEPTH	ELEV.	SOIL HORIZ.	TP-2	DEPTH	ELEV.	SOIL HORIZ.	TP-3	DEPTH	ELEV.
FILL		0	94	FILL		0	96	Bw		0	93
C1	GRAVELLY SAND	18"	92.5	B	GRAVELLY SAND	8"	95.3	C1	GRAVELLY SAND	18"	91.5
C2	GRAVELLY SAND	48"	90	C1	GRAVELLY SAND	30"	93.5	C1	GRAVELLY SAND	60"	88
C3	F/M SAND	72"	88	C1	F SAND	62"	90.8	C2	SANDY LOAM	80"	89.3
		120"	84	C2	SANDY LOAM	80"	89.3			108"	84

WEEPING - NONE OBSERVED
MOTTLING - NONE OBSERVED
STANDING WATER - NONE OBSERVED
SEASONAL HIGH GROUNDWATER ELEV. = 84.8

WEEPING - NONE OBSERVED
MOTTLING - NONE OBSERVED
STANDING WATER - NONE OBSERVED
SEASONAL HIGH GROUNDWATER ELEV. = 83.5

WEEPING - NONE OBSERVED
MOTTLING - NONE OBSERVED
STANDING WATER - NONE OBSERVED
SEASONAL HIGH GROUNDWATER ELEV. = 84.2

05/09/2023

T SIKORSKI REALTY, LLC
50 TURNERS ST.
E. TAUNTON, MA, 02718

05/09/2023

RiverHawk ENVIRONMENTAL
CIVIL ENGINEERING & ENVIRONMENTAL ASSESSMENT
2183 OCEAN STREET, MARSHFIELD, MA 02060
781-536-4639 www.RiverHawkLLC.com

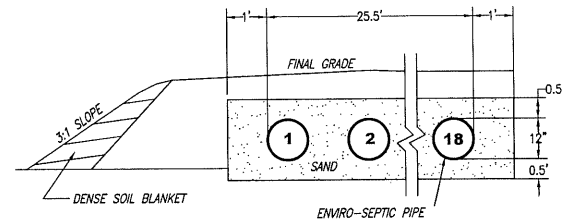
DESIGNED BY: RSR
CHECKED BY: WPK
APPROVED BY: RSR

COMMERCIAL DEVELOPMENT
156 RHODE ISLAND ROAD
LAKEVILLE, MA

DETAILS - 3

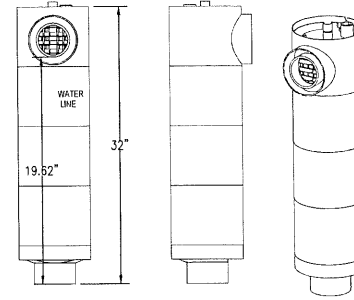
PROJECT NO. 0688-01-01
SCALE: AS SHOWN
DATE: OCT. 24, 2022

D1.3



NOTES:
NUMBER OF ENVIRO-SEPTIC LINES: 18
CENTER TO CENTER SPACING: 1.5'

CROSS-SECTION OF SAS
NOT TO SCALE



ZABEL A100 OUTLET FILTER
NOT TO SCALE

TOWN OF LAKEVILLE PLANNING BOARD:

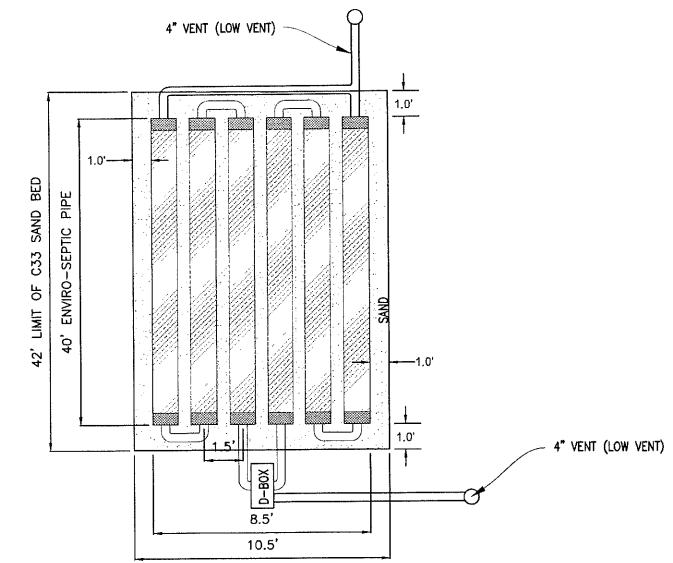
SITE PLAN APPROVAL

DATE APPROVED:

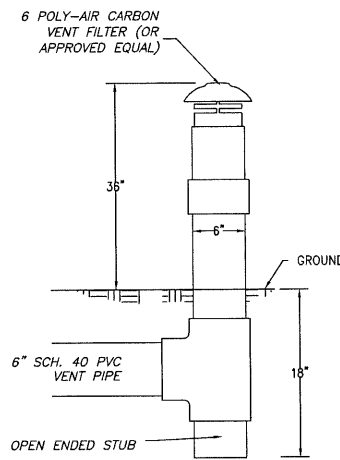
DATE ENDORSED:



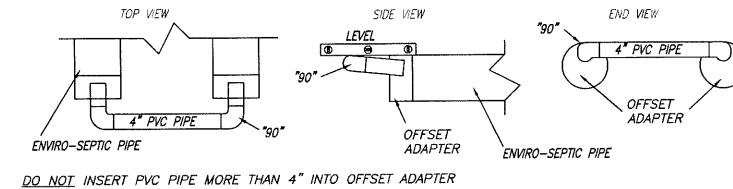
T SIKORSKI REALTY, LLC
50 TURNERS ST.
E. TAUNTON, MA, 02718



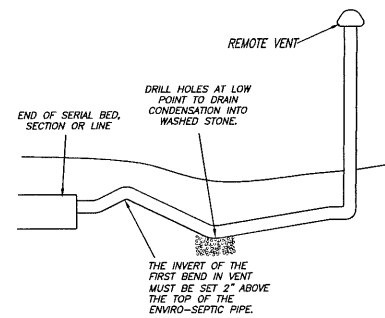
PRESBY LEACHING BED
NOT TO SCALE



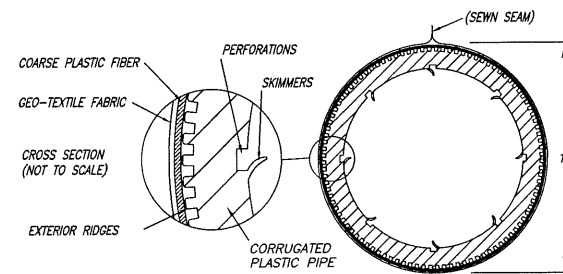
LOW VENT DETAIL
NOT TO SCALE



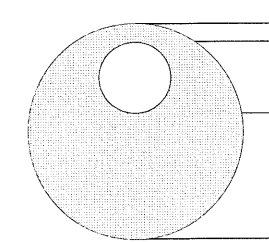
RAISED CONNECTION
NOT TO SCALE



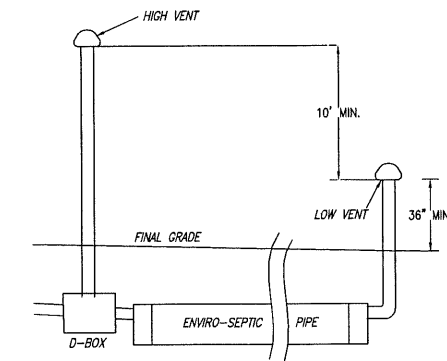
REMOTE LOW VENT DETAIL
NOT TO SCALE



ENVIRO-SEPTIC LEACHING SYSTEM
NOT TO SCALE



OFFSET ADAPTER
NOT TO SCALE



DIFFERENTIAL VENTING DETAIL
NOT TO SCALE

RiverHawk ENVIRONMENTAL
CIVIL ENGINEERING & ENVIRONMENTAL ASSESSMENT
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781-556-4639 www.RiverHawkLLC.com

COMMERCIAL DEVELOPMENT
156 RHODE ISLAND ROAD
LAKEVILLE, MA

SEPTIC SYSTEM DETAILS - 2

SSD1.2

DATE:	OCT. 24, 2022	PROJECT NO.:	00486-01-01	SCALE:	AS SHOWN
DRAWN BY:	HRR	DESIGNED BY:	RSR	CHECKED BY:	VPK
APPROVED BY:	RSR				
REV.	DATE	DESCRIPTION	BY	APP.	
1	4/27/22	TOWN PLANNER COMMENTS	HRR	RSR	
2	1/26/22	GENERAL COMMENTS	HRR	RSR	
3	2/22/23	GENERAL COMMENTS	HRR	RSR	
4	5/8/23	TECHNICAL COMMENTS	HRR	RSR	