



# TOWN OF LAKEVILLE MEETING POSTING & AGENDA

Town Clerk's Time Stamp  
received & posted:  
*K. Murray*  
LAKEVILLE TOWN CLERK  
ROUD 2023 JUL 24 PM 4:23  
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, July 27, 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

- 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. Approve Decision and Covenant.
- 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. Approve Decision and Covenant.
- Public Hearing (7:00) 13 Main St., continued** - 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.
- ANR Plan – 154 Rhode Island Road** – River Hawk Land Survey
- Public Hearing (7:00) Site Plan Review – 156 Rhode Island Road, continued** - T. Sikorski Realty, LLC -applicant
- Discuss OSRD draft bylaw
- Discussion regarding Sign By-Law and Commercial Zoning Districts.
- Discussion regarding Subdivision waivers
- Approve the May 11, 2023, and July 13, 2023, Meeting Minutes
- Review correspondence
- Next meeting. . . August 10, 2023 at the Lakeville Police Station
- Any other business that may properly come before the Planning Board.
- 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



*Town of Lakeville*  
*Board of Health*  
*346 Bedford Street*  
*(Office location 241 Main Street)*  
*Lakeville, MA 02347*

Board of Health  
(508) 946-3473  
(508) 946-8805  
(508) 946-3971 fax

June 21, 2023

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

Re: 156 Rhode Island Rd and **13 Main Street**

Dear Chairman Knox:

We received a copy of the **site plan for 156 Rhode Island Road** revised on 6/19/23. The revisions do not impact the **sewage disposal system**. Therefore, the Board of Health has no objections to the proposed **commercial building**.

**We received a copy of the Petition for Hearing for 13 Main Street. The Board of Health has reviewed the "Site Plan for 13 Main St dated 6/8/23, which shows 2 proposed residential buildings. The applicant has performed percolation tests and the area is sufficient to support sewage disposal systems for both buildings, and it is possible to connect to municipal water, so there is no need for a well. Thus, the Board of Health has no objections to the proposed residential buildings.**

If you should have any further questions feel free to contact this office.

Sincerely yours,  
For the Board of Health

Edward Cullen  
Health Agent

## Cathy Murray, Appeals Board Clerk

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**From:** Bob <rjbouchard@verizon.net>  
**Sent:** Wednesday, June 21, 2023 12:14 PM  
**To:** Cathy Murray, Appeals Board Clerk  
**Subject:** Re: 13 Main Street - Site Plan - Revised

Hi Cathy,

Thanks for the reminder. There is only a small portion of the plot that is occupied by wetland. Never the less, the work is in the buffer zone and must be reviewed with an NOI.

Bob

On Wednesday, June 21, 2023 at 11:56:09 AM EDT, Cathy Murray, Appeals Board Clerk <cmurray@lakevillema.org> wrote:

Hi everyone,

Just a reminder that the hearing for 13 Main Street is scheduled for Thursday, June 22, 2023. If you have not already done so, please forward any comments or concerns you may have regarding this Site Plan

Thanks

Cathy

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**From:** Cathy Murray, Appeals Board Clerk  
**Sent:** Thursday, June 8, 2023 2:59 PM  
**To:** Matthew Perkins, Lakeville Chief of Police <mperkins@lakevillema.org>; Michael P. O'Brien, Fire Chief <mobrien@lakevillema.org>; Edward Cullen <ecullen@lakevillema.org>; rjbouchard@verizon.net; Franklin Moniz, DPW Director <fmoniz@lakevillema.org>; Nathan Darling, Building Commissioner & Zoning Enforcement Officer <ndarling@lakevillema.org>; Ari Sky <asky@lakevillema.org>; Tracie Craig-McGee <tcraig-mcgee@lakevillema.org>  
**Cc:** Kristen Campbell, Administrative Assistant, Lakeville Police Department <kcampbell@lakevillema.org>; Pamela Garant, Fire Deputy Chief <pgarant@lakevillema.org>; Fran Lawrence, Part time Board of Health Clerk <flawrence@lakevillema.org>; Lori Canedy <lcandedy@lakevillema.org>; Jennifer Jewell, DPW - Administrative Assistant <jjewell@lakevillema.org>; Clorinda Dunphy <cdunphy@lakevillema.org>  
**Subject:** 13 Main Street - Site Plan - Revised

Hi everyone,



July 19, 2023

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

**RE:    Engineering Peer Review  
       13 Main Street, Lakeville, Massachusetts**

Dear Marc,

This letter is to advise that we have reviewed the materials submitted for a proposed Residential Development project located at 13 Main Street. The project includes the construction of two 3-story apartment buildings with a total of 80 residential units. Construction will also consist of the necessary supporting infrastructure including pavement for access and parking, drainage structures, and utilities. The submission includes the following documents:

- Plans entitled "Site Plan, 13 Main Street, Lakeville, Massachusetts," prepared by Zenith Consulting Engineers (ZCE), dated June 8, 2023, revised through June 21, 2023;
- Stormwater Management Report prepared by Zenith Consulting Engineers (ZCE), dated June 8, 2023.

These documents have been reviewed for conformance to 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 13 Main Street, is a portion of the old Lakeville Hospital site. The old pavement and foundations have been removed from the site. The proposed project includes the removal of any existing structures and then construction of two 3-story apartment buildings with a total of 80 residential units. Construction will also consist of the necessary supporting infrastructure including pavement for access and parking, drainage structures, and utilities. The site is located in the Mixed Use Development District ("MUDD"). It is also located in both the Residential Zoning District and the Business Zoning District.

## 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.*

In Section 2.1 of the Stormwater Management Report, the Applicant indicates that “no credits are sought for the project and therefore no LID techniques are required. Nevertheless, the project design incorporates LID techniques by proposing no impacts to wetlands and the minimum amount of pavement required to provide safe vehicular access to and around the site for all vehicle types.”

The proposed design employs stormwater infiltration via a stormwater infiltration basin, in addition to two underground recharge chamber systems ( one for each of the two apartment buildings’ roofs).

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 submitted Stormwater Management Report includes a stamped MassDEP “Checklist for Stormwater Report” indicating compliance with the Stormwater Management Standards. See “Massachusetts Stormwater Standards” section below for a review of conformance to each of the MA Stormwater Management Standards.

The Applicant has submitted closed drainage pipe sizing calculations in the Stormwater Management Report. Closed drainage pipe systems have been sized for the 25-year storm event. The proposed infiltration basin is also designed to fully infiltrate the 100-year storm 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.*

The Drainage Summary in the submitted Stormwater Management Report indicates that post-development drainage rates are less than pre-development drainage rates. See “Massachusetts Stormwater Standards” section below for an in-depth review of conformance to each of the MA Stormwater Management Standards. However, the drainage area map that was included with the stormwater report does not include all areas of the project. There are areas along the southern boundary of the project that were not included in the analysis. None of these areas are proposed to be pavement. In our opinion, the stormwater analysis should extend to the property line.

### Massachusetts Stormwater Management Standards

1. *Standard 1: No new untreated discharges*

The proposed project complies with Standard 1. There is a bordering vegetated wetlands system in the northwest corner of the site. Stormwater generated by the proposed impervious areas experiencing vehicular traffic is routed through deep sump, hooded catch basins and a sediment forebay for pretreatment prior to infiltration in the proposed infiltration basin. The infiltration basin is designed to fully infiltrate the 100-year storm event, and includes an emergency spillway.

*2. Standard 2: Peak rate attenuation*

The Stormwater Report states the proposed project complies with Standard 2. All impervious surfaces are routed to the infiltration basin or Cultec infiltration chamber systems, all of which are designed to fully infiltrate the 100-year design storm. Post-development peak rates of runoff are less than pre-development rates at all discharge points. As described above, the drainage area map that was included with the stormwater report does not include all areas of the project. There are areas along the southern boundary of the project that were not included in the analysis. None of these areas are proposed to be pavement. In our opinion, the stormwater analysis should extend to the property line.

*3. Standard 3: Recharge*

- a. The recharge calculations provided in the Stormwater Management Report indicate that the recharge volume requirements are easily satisfied. However, the Applicant should provide calculations showing that all infiltration facilities are able to drain fully within 72 hours.
- b. The test pit data logs for test pits excavated proximate to the infiltration basin and chamber field #2 indicate four feet or greater separation between the bottom of the infiltration system and estimated seasonal high groundwater. However, the test pit excavated near chamber field #1 (TP-3) has an estimated seasonal high groundwater elevation of 99.1', and the bottom of the system is at elevation 98.62'. We recommend that the Applicant performs another test pit directly within the limits of chamber field #1, and revises the design as necessary to ensure adequate separation between the bottom of the system and estimated seasonal high groundwater.

*4. Standard 4: Water quality*

The proposed project complies with Standard 4. Stormwater runoff generated by all impervious surfaces subject to vehicular traffic is conveyed through deep sump hooded catch basins and a sediment forebay, prior to discharge to the infiltration basin. The stormwater management system is designed to remove at least 80% of the average annual post-construction load of total suspended solids (TSS).

*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. The plans indicate that the majority of the site will need to be cleared for proposed construction. Based on recent aerial imagery, it appears that the entire site has already been cleared. Unstabilized land from clearing, combined with steep slopes across the site, is likely to cause erosion and sedimentation. On the Erosion Control Plan, the Applicant proposes temporary stabilization on all slopes steeper than 2:1. All areas with a slope of 2:1 or steeper should be permanently stabilized. Additionally, diversion swales and temporary sediment basins should be used if necessary to prevent sedimentation of the infiltration basin during construction.
- 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 is provided in the Storm Water Management Report. 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)*

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*

The proposed project complies with Standard 10, and a signed illicit discharge statement is provided in the Stormwater Management Report.

General Comments

1. The infiltration basin is proposed within the 100-foot buffer to bordering vegetated wetlands. Therefore, this project is subject to review by the Conservation Commission. All construction activities should be consistent with any future Order of Conditions.
2. We recommend the Applicant consider alternatives to the proposed trench drain located at the throat of the driveway. Trench drains clog easily and can underperform. The grates can become broken or dislodged, making them difficult to maintain.
3. There are several areas of steep slopes across the proposed project, including 1:1 slopes. We recommend all 1:1 slopes be reinforced and not left as grass. For instance, 1:1 slopes could be reinforced with rip-rap or another type of reinforcement. Slopes 2:1 will remain stable once vegetation is established. However, 2:1 slopes are too steep to be mowed. All slopes 2:1 or steeper should be permanently stabilized.

4. The project proposes significant cut across portions of the site (e.g. approximately 18 feet of cut is proposed to the west of the western most 3-story apartment building). The cut areas appear to be in areas where stockpiles of material exist or existed when the topographic survey was performed. We recommend the Applicant quantify the earthwork required for the project as well as the number of trips needed to remove this material if the project requires a net cut.
5. The rim elevation labelled on some of the structures (DMH-2 and DMH-3) is incorrect.
6. We recommend inspection ports be included with the Cultec chamber system.
7. There are no electric or gas utilities proposed in the plans.
8. The proposed water main connects to an existing water main on the adjacent property. The Applicant should provide more information on this connection and verify this connection has been coordinated with the adjacent property owner/Taunton Water Department.
9. The slope work around the western apartment building directs water onto adjacent property. We recommend moving the slope away from the property line and grading a swale to direct water from this area into the proposed infiltration basin,

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](mailto: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](mailto:sdt@envpartners.com)



Dylan J. O'Donnell, PE  
Senior Project Engineer  
P: 413.335.7666  
E: [djo@envpartners.com](mailto:djo@envpartners.com)



**SITE NOTES:**

- THE SITE IS LISTED ON THE TOWN OF LAKEVILLE ASSESSORS PROPERTY RECORD CARDS AS PARCEL ID 60-7-1A.
- PROPERTY LINE AND EXISTING CONDITIONS INFORMATION WAS TAKEN FROM A FIELD SURVEY BY MADDIGAN LAND SURVEYING, LLC.
- PLYMOUTH COUNTY REGISTRY OF DEEDS:  
DEED REFERENCE: BOOK 56090 PAGE 178  
PLAN REFERENCE: BOOK 66 PAGE 983
- 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 25023C0318K, MAP REVISED 7-16-15.
- 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.
- THE WETLAND LINE SHOWN ON THESE PLANS WAS TAKEN FROM AN APPROVED WETLAND LINE SHOWN ON A PLAN PREPARED BY HERITAGE DESIGN GROUP, DATED 2-20-07 FOR LAKEVILLE HOSPITAL REALTY, LLC, RECORDED IN PLAN BOOK 55, PAGE 135 AT THE PLYMOUTH COUNTY REGISTRY OF DEEDS.
- 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 FILING MUST BE SUBMITTED 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 ON-SITE SEPTIC SYSTEMS.
- 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 SUBDIVISION RULES AND REGULATIONS AND THE MASSACHUSETTS DEPARTMENT OF TRANSPORTATION SPECIFICATIONS FOR HIGHWAY AND BRIDGES, MOST CURRENT VERSION OF PLAN SET.

**PARKING SUMMARY**

ZONING REGULATION 6.5.3.3  
RESIDENTIAL - 2 SPACES / UNIT  
MINIMUM REQUIRED: 40 UNITS X 2 SPACES/UNIT = 80 SPACES  
PROVIDED: 82 SPACES  
HANDICAPPED PARKING  
ADA STANDARDS FOR ACCESSIBLE DESIGN 28 CFR PART 36  
MINIMUM REQUIRED: 4 FOR PARKING LOT BETWEEN 76 AND 100 SPACES  
PROVIDED: 4 HC SPACES (VAN ACCESSIBLE)

ZONING SUMMARY AND COMPLIANCE TABLE (BUSINESS & RESIDENTIAL WITH MIXED USE OVERLAY)			
CRITERIA	BUSINESS	EXISTING	PROPOSED
LOT AREA	70,000 S.F.	134,398± S.F.	134,398± S.F.
CONTIGUOUS UPLAND AREA	52,500 S.F.	128,773± S.F.	128,773± S.F.
FRONTAGE	175'	175.03'	175.03'
FRONT BUILDING SETBACK	40'	-	> 40'
SIDE BUILDING SETBACK	40'	-	> 40'
REAR BUILDING SETBACK	40'	-	> 40'
BUILDING HEIGHT	35'	-	< 35'
IMPERVIOUS COVER	50%*	0.1% (140± S.F.)	49.98% (61,440± S.F.)

MIXED USE REQUIRES 3 ACRE (130,680 S.F.) MINIMUM LOT SIZE  
\*80% ALLOWED BY DIMENSIONAL REQUIREMENTS OF THE ZONING BYLAW IN EFFECT ON JUNE 16, 2003.

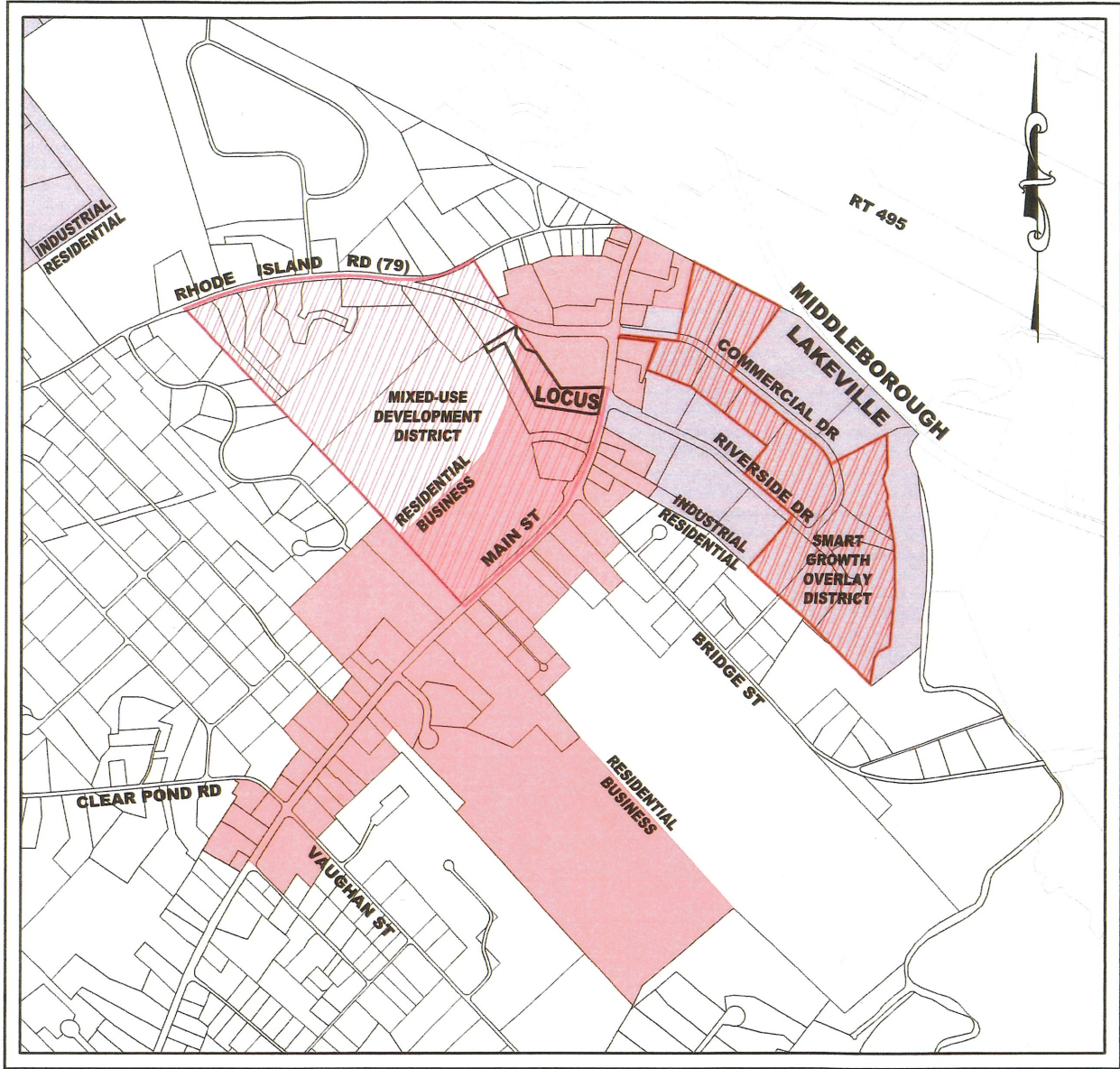
IMPERVIOUS COVER (PER LAKEVILLE ZONING SECTION 5.2.2.1:)	
TOTAL LOT AREA	134,398 SF
WETLAND AREA	5,625 SF
PROPOSED DRAINAGE BASIN	5,280 SF
ADJUSTED AREA FOR IMPERVIOUS CALCULATION	123,493 SF
PROPOSED ROOF AND PAVEMENT AREA	61,726 SF
IMPERVIOUS AREA = 61,726 SF	
ADJUSTED AREA = 123,493 SF	= 49.98%

SCHEDULE OF DRAWINGS		
SHEET ID	PLAN TITLE	LATEST REVISION DATE
C	COVER SHEET	6/21/23
X	EXISTING CONDITIONS PLAN	6/21/23
L	SITE LAYOUT, LANDSCAPING & LIGHTING PLAN	6/21/23
U	UTILITIES PLAN	6/21/23
G	GRADING & DRAINAGE PLAN	6/21/23
E	EROSION CONTROL PLAN	6/21/23
D1-2	DETAIL SHEET	6/21/23

# SITE PLAN

## 13 MAIN STREET

### LAKEVILLE, MASSACHUSETTS



**LOCUS PLAN**  
**SCALE: 1"=500'**

**OWNER/APPLICANT**  
**MAIN STREET REAL ESTATE HOLDINGS, LLC**  
**530B HARKLE ROAD SUITE 100**  
**SANTE FE, NM 87505**

**LAKEVILLE PLANNING BOARD**

APPROVED: \_\_\_\_\_  
ENDORSED: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_



P.E. STAMP

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

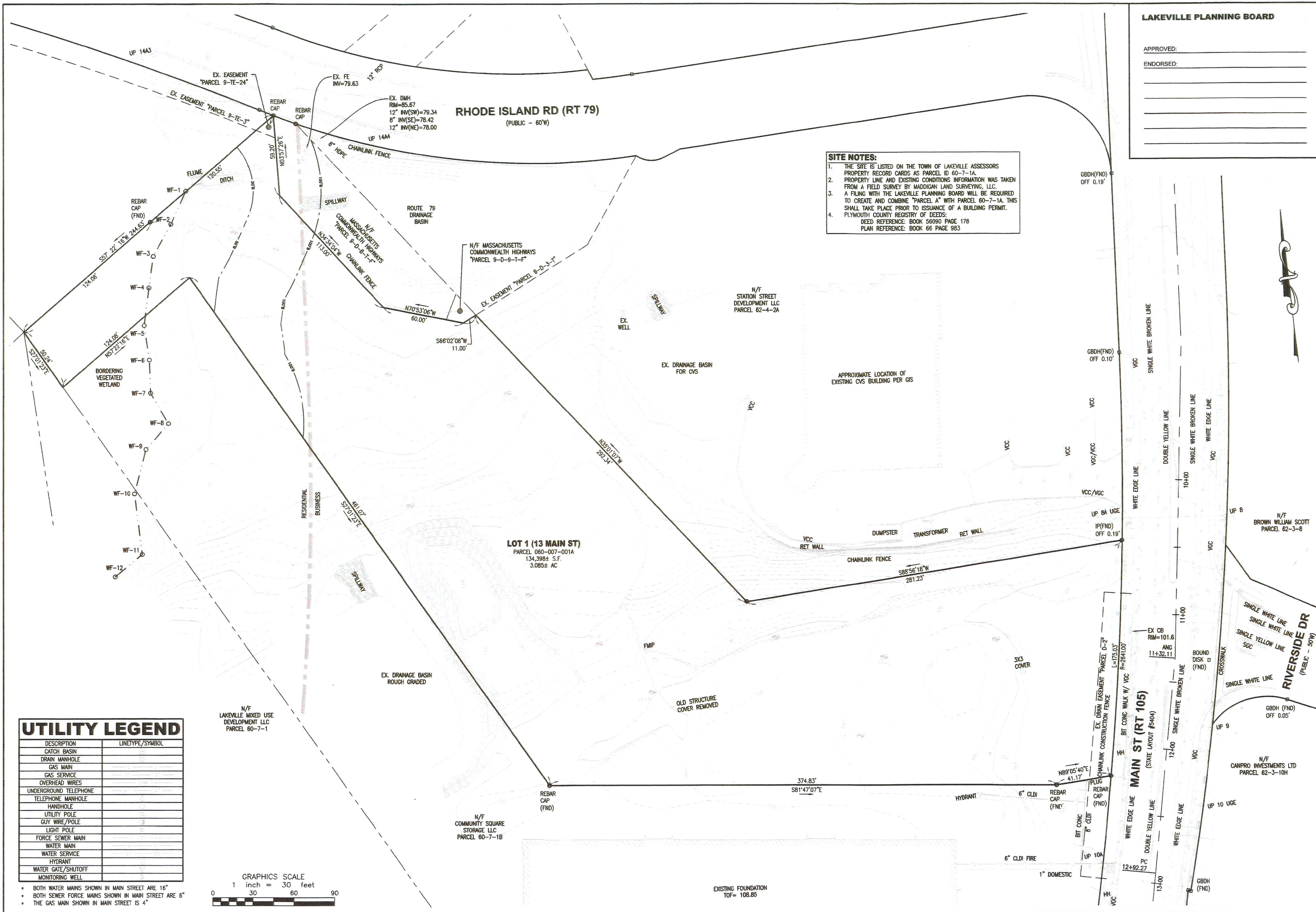
EXISTING	DESCRIPTION	PROPOSED
---	BUILDING	---
---	CONTOUR	---
---	SPOT GRADE	100X0
---	SILT SOCK	---
---	CHAINLINK FENCE	---
---	STOCKADE FENCE	---
---	GUARDRAIL	---
---	SIGN	---
---	TEST PIT	---
---	DRAINAGE PIPE	D D
---	ROOF DRAIN PIPE	RD RD
---	CATCH BASIN	CB
---	DRAIN MANHOLE	DM
---	FLARED END	FE
---	GAS MAIN	GS GS
---	GAS SERVICE	---
---	GAS GATE VALVE	---
---	ELEC/TELE/CABLE	ETC
---	OVERHEAD WIRES	OWH
---	UNDERGROUND ELECTRIC	UE UE
---	HANDHOLE	HH
---	TRANSFORMER	TR
---	UTILITY POLE	UP
---	GUY WIRE/POLE	GW
---	LIGHT POLE	LP
---	FLOOD LIGHT	FL
---	GRAVITY SEWER MAIN	S S
---	FORCE SEWER MAIN	FSM
---	SEWER SERVICE	---
---	SEWER MANHOLE	SM
---	SEWER VALVE	SV
---	FIRE SUPPRESSION SERVICE	FS FS
---	WATER MAIN	---
---	WATER SERVICE	WS WS
---	HYDRANT	HY
---	WATER GATE/SHUTOFF	WG
---	MONITORING WELL	MW
---	TREELINE	---
---	WETLAND LINE	---
---	50' BUFFER	---
---	100' BUFFER	---
---	WETLAND FLAG	---
○ WF10	BOUND	---
□	BOUND	---
○	REBAR	---



**COVER SHEET**  
**13 MAIN STREET**  
**LAKEVILLE, MASSACHUSETTS**  
**MAIN STREET REAL ESTATE HOLDINGS, LLC**  
**530B HARKLE ROAD SUITE 100**  
**SANTE FE, NEW MEXICO**

**JUNE 8, 2023**

S:\04 Engineering Projects\Lakeville\Main Street\13 Main Street\Eng\Site Plan - 13 Main St - Lakeville.dwg



**SITE NOTES:**

1. THE SITE IS LISTED ON THE TOWN OF LAKEVILLE ASSESSORS PROPERTY RECORD CARDS AS PARCEL ID 60-7-1A.
2. PROPERTY LINE AND EXISTING CONDITIONS INFORMATION WAS TAKEN FROM A FIELD SURVEY BY MADDIGAN LAND SURVEYING, LLC.
3. A FILING WITH THE LAKEVILLE PLANNING BOARD WILL BE REQUIRED TO CREATE AND COMBINE "PARCEL A" WITH PARCEL 60-7-1A. THIS SHALL TAKE PLACE PRIOR TO ISSUANCE OF A BUILDING PERMIT.
4. PLYMOUTH COUNTY REGISTRY OF DEEDS:  
DEED REFERENCE: BOOK 56090 PAGE 178  
PLAN REFERENCE: BOOK 66 PAGE 983

**LAKEVILLE PLANNING BOARD**

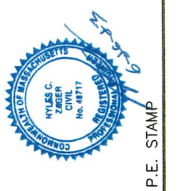
APPROVED: \_\_\_\_\_

ENDORSED: \_\_\_\_\_

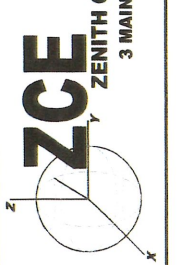
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**ZENITH CONSULTING ENGINEERS, LLC**  
3 MAIN STREET LAKEVILLE, MA 02347  
PHONE: (508) 947-4208



REV.	DATE	DESCRIPTION	BY	APP.
1	6/21/23	REVISIONS PER FIRE DEPT	RMF	NCZ

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

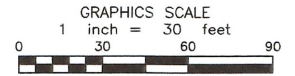
  

DATE:	6-8-23
DESIGNED BY:	RMF/TEM
CHECKED BY:	NCZ
APPROVED BY:	NCZ

**UTILITY LEGEND**

DESCRIPTION	LINETYPE/SYMBOL
CATCH BASIN	
DRAIN MANHOLE	
GAS MAIN	
GAS SERVICE	
OVERHEAD WIRES	
UNDERGROUND TELEPHONE	
TELEPHONE MANHOLE	
HANDHOLE	
UTILITY POLE	
GUY WIRE/POLE	
LIGHT POLE	
FORCE SEWER MAIN	
WATER MAIN	
WATER SERVICE	
HYDRANT	
WATER GATE/SHUTOFF	
MONITORING WELL	

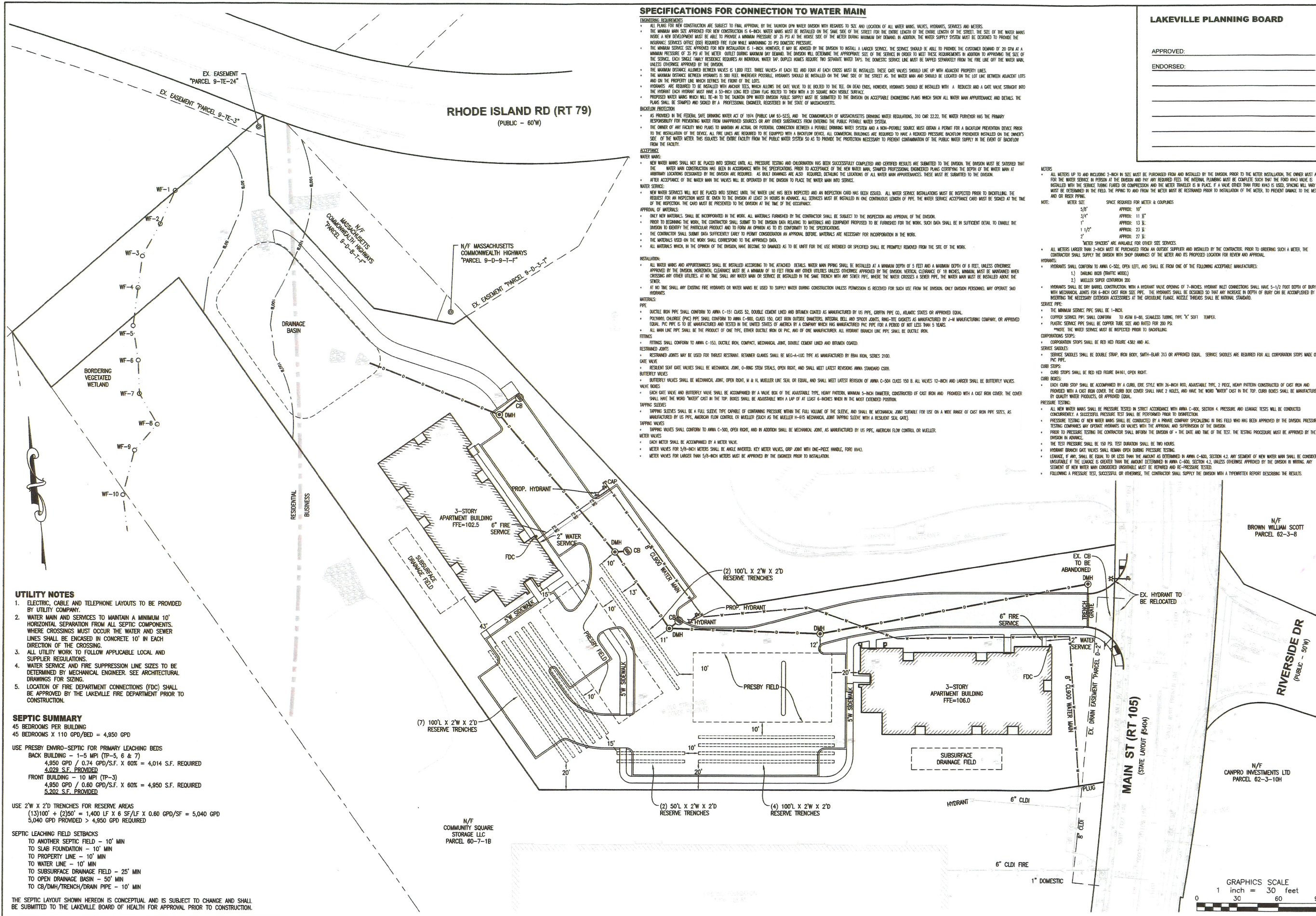
N/F LAKEVILLE MIXED USE DEVELOPMENT LLC PARCEL 60-7-1



- BOTH WATER MAINS SHOWN IN MAIN STREET ARE 16"
- BOTH SEWER FORCE MAINS SHOWN IN MAIN STREET ARE 6"
- THE GAS MAIN SHOWN IN MAIN STREET IS 4"

EXISTING FOUNDATION TOF= 108.85





- 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.
  - WATER SERVICE AND FIRE SUPPRESSION LINE SIZES TO BE DETERMINED BY MECHANICAL ENGINEER. SEE ARCHITECTURAL DRAWINGS FOR SIZING.
  - LOCATION OF FIRE DEPARTMENT CONNECTIONS (FDC) SHALL BE APPROVED BY THE LAKEVILLE FIRE DEPARTMENT PRIOR TO CONSTRUCTION.

**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  
 4,029 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.

**SPECIFICATIONS FOR CONNECTION TO WATER MAIN**

- ENGINEERING REQUIREMENTS**
- ALL PLANS FOR NEW CONSTRUCTION ARE SUBJECT TO FINAL APPROVAL BY THE TOWN OF LAKEVILLE 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 ENTIRE LENGTH OF THE DRIVE 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 DAILY DEMAND. IN ADDITION, THE WATER SUPPLY SYSTEM MUST BE DESIGNED TO PROVIDE THE REQUIREMENT SERVICES OFFICE (SO) REQUIRED FLOW WHILE MAINTAINING 20 PSI DOMESTIC PRESSURE.
  - THE MINIMUM SERVICE SIZE APPROVED FOR NEW INSTALLATION IS 1-INCH. HOWEVER, IT MAY BE ADJUSTED BY THE DIVISION TO INSTALL A LARGER SERVICE. THE SERVICE SHOULD BE ABLE TO PROVIDE THE CUSTOMER DEMAND AT 20 GPM AT A MINIMUM PRESSURE OF 35 PSI AT THE METER. OUTLET DURING MAXIMUM DAILY DEMAND. THE DIVISION WILL DETERMINE THE APPROPRIATE SIZE OF THE SERVICE IN ORDER TO MEET THESE REQUIREMENTS IN ADDITION 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 MINIMUM 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 MINIMUM 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 BOUNDS THE LOT.
  - HYDRANTS ARE REQUIRED TO BE INSTALLED WITH ANCHOR TEES WHICH ALLOW 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 3/4-INCH LONG RED LEAD FLAG BOLTED TO THEM WITH A 20 SQUARE INCH VISIBLE SURFACE.
  - PROPOSED WATER MAINS WHICH WILL BE 4-IN TO THE TOWN OF LAKEVILLE PUBLIC SUPPLY MUST BE SUBMITTED TO THE DIVISION ON ACCEPTABLE ENGINEERING PLANS WHICH SHOW ALL WATER MAIN APPROVED AND DETAILS. THE PLANS SHALL BE SIGNED AND SEALED BY A PROFESSIONAL ENGINEER, REGISTERED IN THE STATE OF MASSACHUSETTS.

- BACKFLOW PROTECTION**
- AS PROVIDED IN THE FEDERAL SAFE DRINKING WATER ACT OF 1974 (PUBLIC LAW 93-523), AND THE COMMONWEALTH OF MASSACHUSETTS DRINKING WATER REGULATIONS, 310 CMR 22.02, THE WATER PURVEYOR HAS THE PRIMARY RESPONSIBILITY FOR PREVENTING WATER FROM UNAPPROVED SOURCES OR ANY 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 DEVICE. ALL COMMERCIAL BUILDINGS ARE REQUIRED TO HAVE A REDUCED PRESSURE BACKFLOW PREVENTER INSTALLED ON THE OWNER'S SIDE OF THE WATER METER. THIS ISOLATES THE ENTIRE 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**
- WATER MAINS:**
- NEW WATER MAINS SHALL NOT BE PLACED INTO SERVICE UNTIL ALL PRESSURE TESTING AND COLORIMETRY 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, SHARED PROFESSIONAL ENGINEERED PLANS DESCRIBING 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 APPROXIMATIONS. 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 SERVICE ACCEPTANCE CARD MUST BE SIGNED AT THE TIME OF THE INSPECTION. THE CARD MUST BE PRESENTED TO THE DIVISION AT THE TIME OF THE 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 CONFORM TO THE APPROVED DATA.
  - ALL MATERIALS WHICH, IN 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 PIPE, WHERE THE WATER CROSSES A SEWER PIPE, THE WATER MAIN MUST BE INSTALLED ABOVE THE SEWER.
  - 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:**
- PIPE:**
- DUCTILE IRON PIPE SHALL CONFORM TO ANNA C-151 CLASS 52, DOUBLE COATED AND BROWN COATED AS MANUFACTURED BY US PIPE, GRIFIN PIPE CO., ATLANTA, GEORGIA OR APPROVED EQUAL.
  - POLYETHYLENE GLYCOL (PE) PIPE SHALL CONFORM TO ANNA C-500, CLASS 150, CAST IRON OUTSIDE DIMENSIONS, INTEGRAL BELL AND SPIGOT JOINTS, RING-TITE CASSETS AS MANUFACTURED BY J-M 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-151, DUCTILE IRON, COMPACT, MECHANICAL JOINT, DOUBLE COATED AND BROWN COATED.
- RESTRAINED JOINTS:**
- RESTRAINED JOINTS MAY BE USED FOR THURST RESTRAINT. RETAINER GLANDS SHALL BE MEG-A-LUG TYPE AS MANUFACTURED BY FEMA IRON, SERIES 2100.

- GATE VALVE:**
- RESIDENT SEAT GATE VALVES SHALL BE MECHANICAL JOINT, O-RING STEEL SEALS, OPEN RIGHT, AND SHALL MEET LATEST REVISIONS ANNA STANDARD C500.
- BUTTERFLY VALVES:**
- BUTTERFLY VALVES SHALL BE MECHANICAL JOINT, OPEN RIGHT, 8" & 10" MULLER LINE SEAL OR EQUAL, AND SHALL MEET LATEST REVISIONS ANNA C-504 CLASS 150 & 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 PATTERN, MINIMUM 3-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 LAP OF AT LEAST 6-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 MUELLER (SUCH AS THE MUELLER H-615 MECHANICAL JOINT TAPPING SLEEVE WITH A RESILIENT 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 MUELLER.

- METER VALVES:**
- EACH METER SHALL BE ACCOMPANIED BY A METER VALVE.
  - METER VALVES FOR 5/8-INCH METERS SHALL BE ANGLE INVERTED KEY METER VALVES, GRP JOINT WITH ONE-PIECE HANDLE, FORG IRON.
  - METER VALVES FOR LARGER THAN 5/8-INCH METERS MUST BE APPROVED BY THE ENGINEER PRIOR TO INSTALLATION.

**LAKEVILLE PLANNING BOARD**

APPROVED: \_\_\_\_\_

ENDORSED: \_\_\_\_\_

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



REV.	DATE	DESCRIPTION	BY	APP.
1	6/21/23	REVISIONS PER FIRE DEPT	RMF	NCZ

DRAWN BY:	DATE:	PROJECT NUMBER:	DRAWING SCALE:	SHEET ID:
RMF/TEM	6-8-23	0454-17-01	1" = 30'	U
DESIGNED BY:	CHECKED BY:	APPROVED BY:		
RMF/TEM	NCZ	NCZ		

**UTILITIES PLAN**  
**13 MAIN STREET**  
**LAKEVILLE, MASSACHUSETTS**  
**CLIENT INFO: MAIN STREET REAL ESTATE HOLDINGS, LLC**  
**530B HARKLE ROAD SUITE 100**  
**SANTE FE, NEW MEXICO**

GRAPHICS SCALE  
 1 inch = 30 feet  
 0 30 60 90

**GRADING & DRAINAGE PLAN**

PROJECT SITE: **13 MAIN STREET**  
**LAKEVILLE, MASSACHUSETTS**  
**5308 HARKLE ROAD SUITE 100**  
**SAINTE FE, NEW MEXICO**

CLIENT INFO: **LAKEVILLE REAL ESTATE HOLDINGS, LLC**

SHEET NAME: **GRADING & DRAINAGE PLAN**

GRAPHICS SCALE: 1" = 30' (1" = 30 feet)

13 MAIN STREET (STATE LOT #105) (PUBLIC - 50W)

RIVERSIDE DR (PUBLIC - 50W)

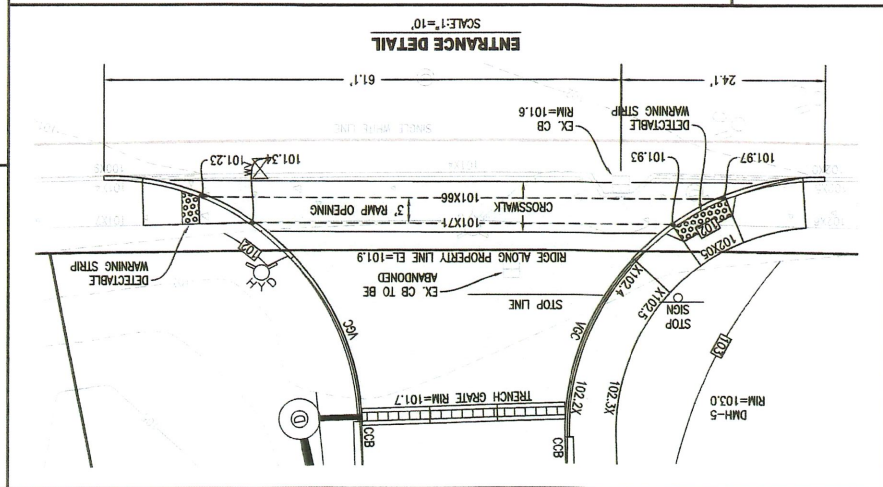
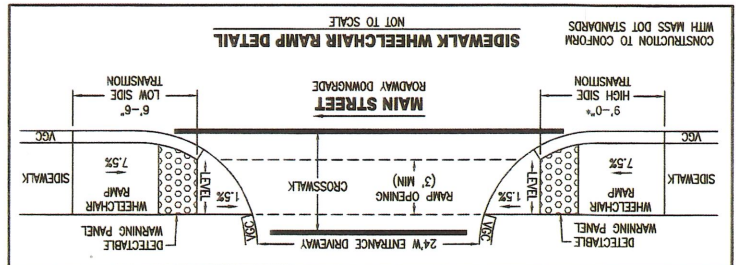
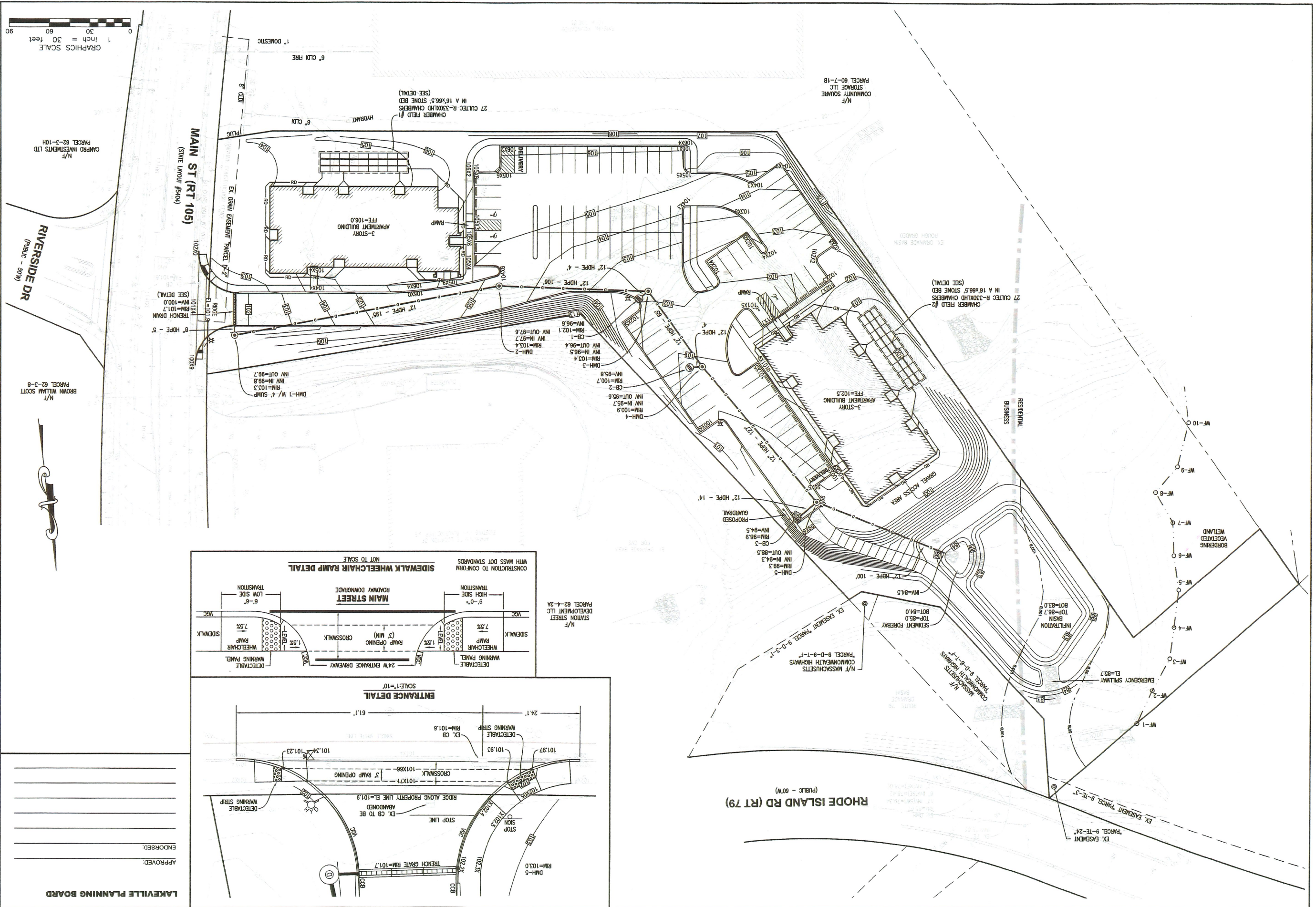
3 MAIN STREET LAKEVILLE, MA 02347  
 ZCE ZENITH CONSULTING ENGINEERS, LLC  
 PHONE: (508) 947-4208

APPROVED: \_\_\_\_\_  
 ENDORSED: \_\_\_\_\_

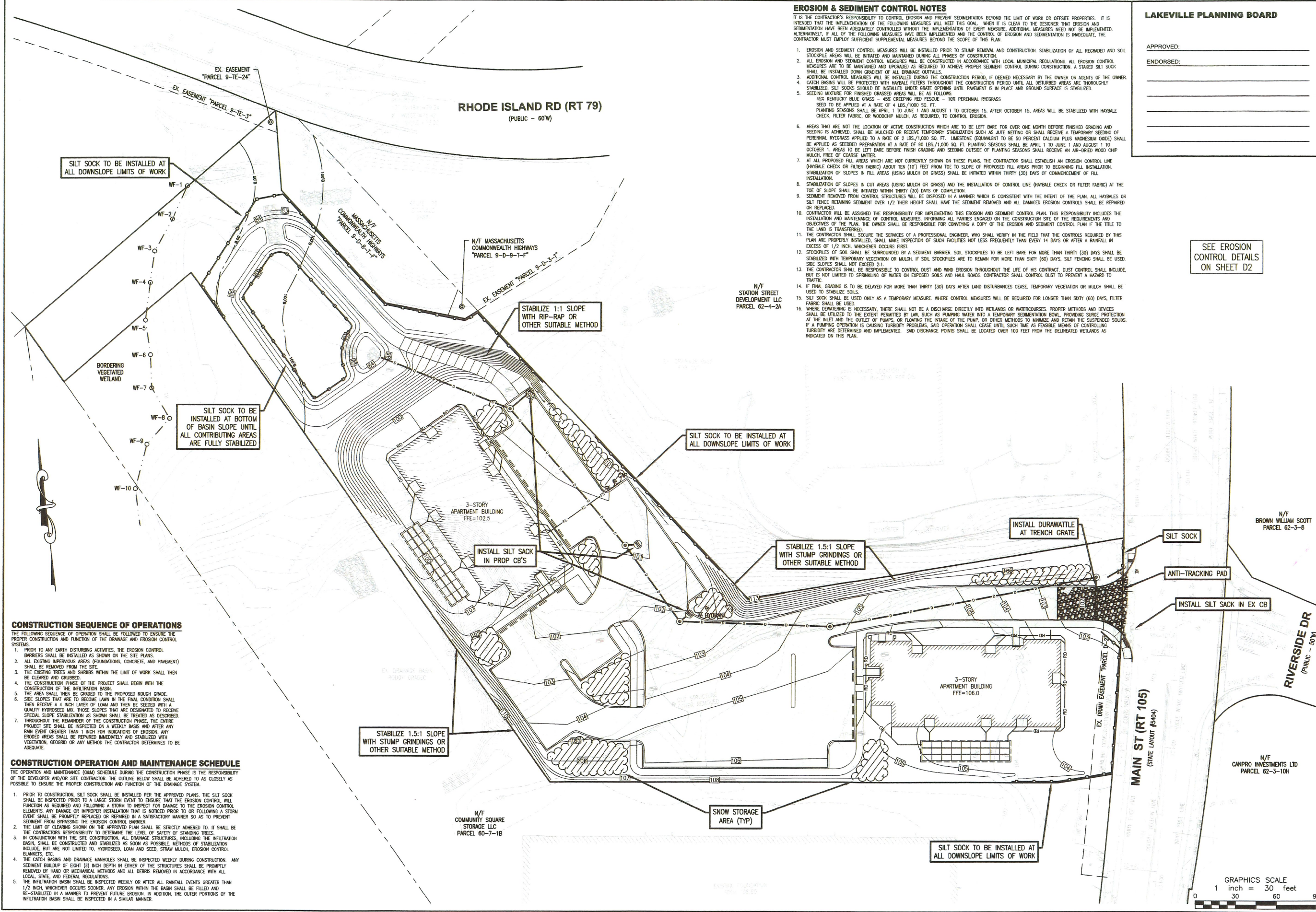
DATE: 6-8-23  
 PROJECT NUMBER: 0431-17-01  
 DRAWING SCALE: 1" = 30'

DESIGNED BY: RWF/TEW  
 CHECKED BY: NCZ  
 APPROVED BY: NCZ

REV. DATE DESCRIPTION BY APP.  
 1 6/21/23 REVISIONS PER FIRE DEPT. RWF NCZ



LAKEVILLE PLANNING BOARD



**EROSION & SEDIMENT CONTROL NOTES**

IT IS THE CONTRACTOR'S RESPONSIBILITY TO CONTROL EROSION AND PREVENT SEDIMENTATION BEYOND THE LIMIT OF WORK 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 IMPROVED AS REQUIRED TO ACHIEVE PROPER SEDIMENT CONTROL. DURING CONSTRUCTION, A STAKED SILT SOCK 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. CATCH BASINS WILL BE PROTECTED WITH HAYBALE FLEETS THROUGHOUT THE CONSTRUCTION PERIOD UNTIL ALL DISTURBED AREAS ARE THOROUGHLY STABILIZED. SILT SOCKS SHOULD BE INSTALLED UNDER GRATE OPENING UNTIL PAVEMENT IS IN PLACE AND GROUND SURFACE IS STABILIZED.
5. SEEDING MIXTURE FOR FINISHED GRASSED AREAS WILL BE AS FOLLOWS:  
 45% PERENNIAL RYEGRASS - 45% CREEPING RED FESCUE - 10% PERENNIAL RYEGRASS  
 SEED TO BE APPLIED AT A RATE OF 4 LBS./1,000 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.
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 BE 50 PERCENT CALCIUM PLUS MANGANESE 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.
7. 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.
8. 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.
9. SEDIMENT REMOVED FROM CONTROL STRUCTURES WILL BE DEPOSITED 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.
10. 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, 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. 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.
12. 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, SILT FENCING SHALL BE USED. SIDE SLOPES SHALL NOT EXCEED 2:1.
13. THE CONTRACTOR SHALL BE RESPONSIBLE TO CONTROL DUST AND WIND EROSION THROUGHOUT THE LIFE OF HIS CONTRACT. DUST CONTROL SHALL INCLUDE, BUT IS NOT LIMITED TO SPRINKLING OF WATER ON EXPOSED SOILS AND SHALL INCLUDE: CONTRACTOR SHALL CONTROL DUST TO PREVENT A HAZARD TO TRAFFIC.
14. 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 SLOPES.
15. SILT 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.
16. WHERE CONTAMINATION 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.

**LAKEVILLE PLANNING BOARD**

APPROVED: \_\_\_\_\_

ENDORSED: \_\_\_\_\_

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



SEE EROSION CONTROL DETAILS ON SHEET D2

**CONSTRUCTION SEQUENCE OF OPERATIONS**

THE FOLLOWING SEQUENCE OF OPERATION SHALL BE FOLLOWED TO ENSURE THE PROPER CONSTRUCTION AND FUNCTION OF THE DRAINAGE AND EROSION CONTROL SYSTEMS.

1. PRIOR TO ANY EARTH DISTURBING ACTIVITIES, THE EROSION CONTROL BARRIERS SHALL BE INSTALLED AS SHOWN ON THE SITE PLANS.
2. ALL EXISTING IMPERVIOUS AREAS (FOUNDATIONS, CONCRETE, AND PAVEMENT) SHALL BE REMOVED FROM THE SITE.
3. THE EXISTING TREES AND SHRUBS WITHIN THE LIMIT OF WORK SHALL THEN BE CLEARED AND GRUBBED.
4. THE CONSTRUCTION PHASE OF THE PROJECT SHALL BEGIN WITH THE CONSTRUCTION OF THE INFILTRATION BASIN.
5. THE AREA SHALL THEN BE GRADED TO THE PROPOSED ROUGH GRADE.
6. SIDE SLOPES THAT ARE TO BECOME LAWN IN THE FINAL CONDITION SHALL THEN RECEIVE A 4 INCH LAYER OF LOAM AND THEN BE SEEDDED WITH A QUALITY HYDROSEED MIX. THOSE SLOPES THAT ARE DESIGNATED TO RECEIVE SPECIAL SLOPE STABILIZATION AS SHOWN SHALL BE TREATED AS DESCRIBED.
7. THROUGHOUT THE REMAINDER OF THE CONSTRUCTION PHASE, THE ENTIRE PROJECT SITE SHALL BE INSPECTED ON A WEEKLY BASIS AND AFTER ANY RAIN EVENT GREATER THAN 1 INCH FOR INDICATIONS OF EROSION. ANY ERODED AREAS SHALL BE REPAIRED IMMEDIATELY AND STABILIZED WITH VEGETATION, GEOTEXTILE OR ANY METHOD THE CONTRACTOR DETERMINES TO BE ADEQUATE.

**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 SILT SOCK 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 SITE CONSTRUCTION, ALL DRAINAGE STRUCTURES, INCLUDING THE INFILTRATION 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 CATCH BASINS AND DRAINAGE MANHOLES SHALL BE INSPECTED WEEKLY DURING CONSTRUCTION. ANY SEDIMENT BUILDUP OF EIGHT (8) INCH DEPTH IN EITHER OF THE STRUCTURES SHALL BE PROMPTLY REMOVED BY HAND OR MECHANICAL METHODS AND ALL DEBRIS REMOVED IN ACCORDANCE WITH ALL LOCAL, STATE, AND FEDERAL REGULATIONS.
5. THE INFILTRATION 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 INFILTRATION BASIN SHALL BE INSPECTED IN A SIMILAR MANNER.

DATE	DESCRIPTION	BY	APP.
6-8-23 <td>REVISIONS PER FIRE DEPT <td>RMF <td>NCZ</td> </td></td>	REVISIONS PER FIRE DEPT <td>RMF <td>NCZ</td> </td>	RMF <td>NCZ</td>	NCZ
6/21/23 <td> <td> <td></td> </td></td>	<td> <td></td> </td>	<td></td>	

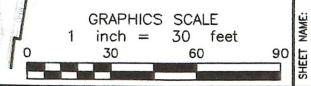
DATE	PROJECT NUMBER	PROJECT	SCALE	SHEET ID
6-8-23	0454-17-01		1" = 30'	E

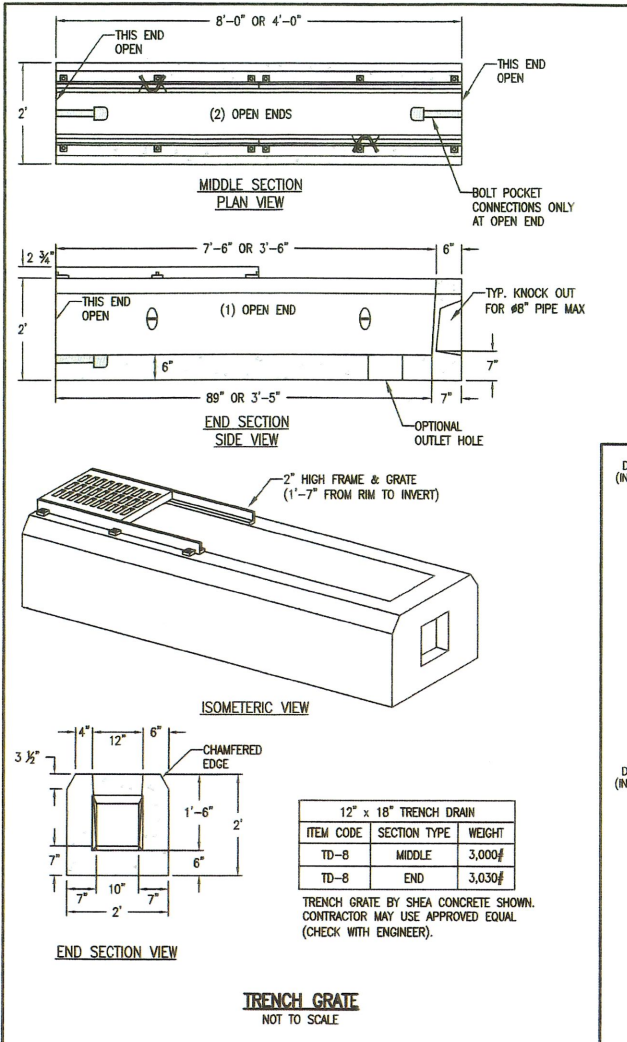
  

DATE	DESIGNED BY	CHECKED BY	APPROVED BY
	RMF/TEM	NCZ	NCZ

PROJECT SITE	CLIENT INFO
13 MAIN STREET LAKEVILLE, MASSACHUSETTS	MAIN STREET REAL ESTATE HOLDINGS, LLC
	5308 HARKLE ROAD SUITE 100
	SANTEE FE, NEW MEXICO





### SOIL LOGS

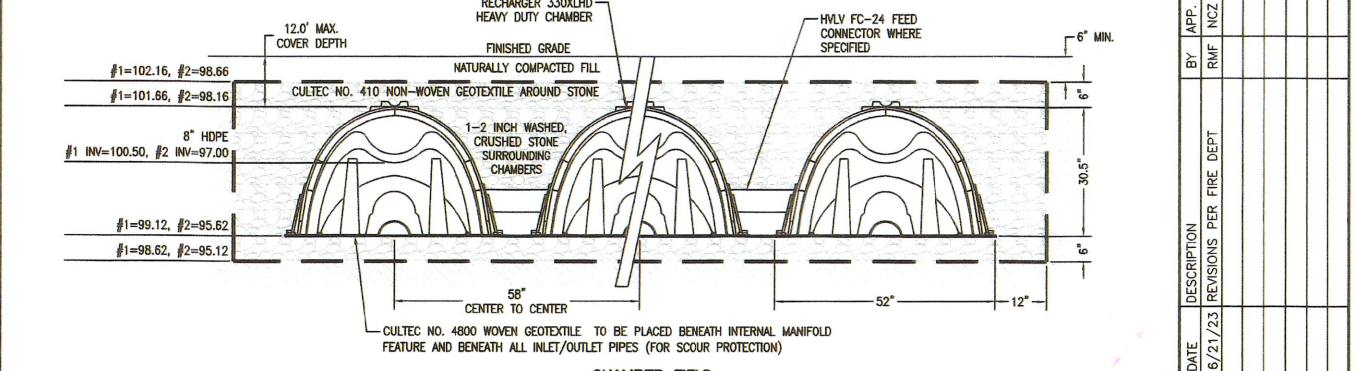
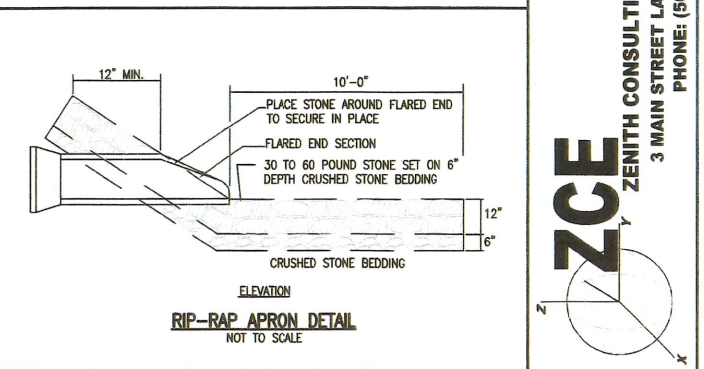
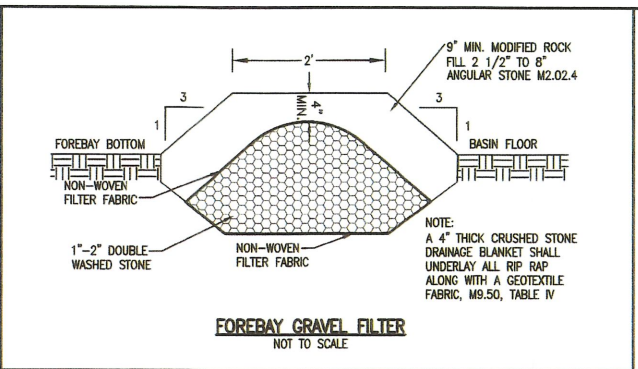
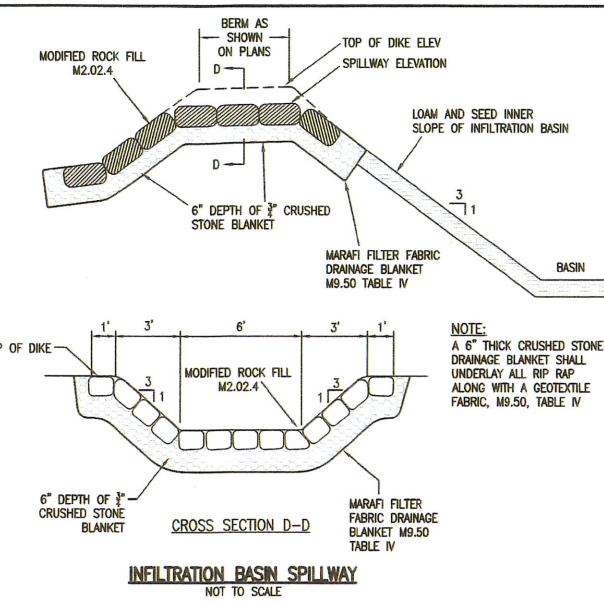
DATE: 8-9-22  
 PERFORMED BY: WILLIAM CONNELLY, ZENITH CONSULTING ENGINEERS  
 WITNESSED BY: ED CULLEN, LAKEVILLE BOARD OF HEALTH ("D" HOLES WERE NOT WITNESSED)

DEPTH (INCHES)	TP-1	ELEV. (FEET)	DEPTH (INCHES)	TP-2	ELEV. (FEET)	DEPTH (INCHES)	TP-3	ELEV. (FEET)	DEPTH (INCHES)	TP-4	ELEV. (FEET)	DEPTH (INCHES)	TP-5	ELEV. (FEET)	DEPTH (INCHES)	TP-6	ELEV. (FEET)	DEPTH (INCHES)	TP-7	ELEV. (FEET)	DEPTH (INCHES)	TP-8	ELEV. (FEET)	DEPTH (INCHES)	TP-9	ELEV. (FEET)	DEPTH (INCHES)	TP-10	ELEV. (FEET)
0	FILL	103.7	0	FILL	106.8	0	FILL	105.3	0	FILL	107.7	0	FILL	109.9	0	FILL	106.1	0	FILL	103.2	0	FILL	94.5	0	FILL	89.9	0	FILL	86.5
28	B SANDY LOAM	103.1	8	B SANDY LOAM	104.1	18	C1 LOAMY FINE SAND	99.1	16	B SANDY LOAM	107.0	24	B SANDY LOAM	108.2	32	B SANDY LOAM	103.4	28	B SANDY LOAM	100.9	40	B SANDY LOAM	99.9	20	B SANDY LOAM	87.9	4	B SANDY LOAM	86.2
34	C1 LOAMY SAND	97.9	32	C1 FINE SAND	98.3	92	C2 FINE SANDY LOAM	95.5	48	C1 LOAMY SAND	105.0	48	C1 FINE SAND	101.9	52	C1 FINE SAND	101.8	40	C1 LOAMY SAND	95.9	60	C1 LOAMY SAND	92.0	30	C1 FINE-MED SAND	87.9	20	C1 FINE-MED SAND	84.8
96	C2 LOAMY SAND	95.9	102	C2 FINE-MED SAND	93.8	136	C3 FINE SANDY LOAM	95.5	78	C2 LOAMY SAND	102.5	96	C2 LOAMY FINE SAND	101.9	118	C2 LOAMY FINE SAND	96.3	56	C2 LOAMY FINE SAND	94.9	88	C2 LOAMY FINE SAND	90.8	74	C2 LOAMY FINE SAND	83.7	102	C2 LOAMY FINE SAND	78.0
120	C3 FINE SAND	95.1	156	C3 FINE SAND	93.8	136	C3 FINE SANDY LOAM	95.5	132	C4 MED SAND	96.5	150	C2 LOAMY FINE SAND	97.7	140	C2 LOAMY FINE SAND	94.4	122	C3 LOAMY FINE SAND	90.8	149	M-C SAND	90.8	122	C2 LOAMY FINE SAND	78.9	158	C2 LOAMY FINE SAND	73.3
130	FINE SAND	95.1	156	C2 FINE-MED SAND	93.8	136	C3 FINE SANDY LOAM	95.5	150	C4 MED SAND	96.5	150	C2 LOAMY FINE SAND	97.7	140	C2 LOAMY FINE SAND	94.4	122	C3 LOAMY FINE SAND	90.8	149	M-C SAND	90.8	122	C2 LOAMY FINE SAND	78.9	158	C2 LOAMY FINE SAND	73.3

DEPTH (INCHES)	D-1	ELEV. (FEET)	DEPTH (INCHES)	D-2	ELEV. (FEET)
0	O/A SANDY LOAM	84.2	0	O/A SANDY LOAM	84.4
12	B SANDY LOAM	83.2	12	B SANDY LOAM	83.4
28	C1 LOAMY SAND	81.9	26	C1 LOAMY SAND	82.2
56	C2 MED SAND	79.5	60	C2 MED SAND	79.4
148	C2 MED SAND	71.9	142	C2 MED SAND	72.6

DEPTH (INCHES)	D-3	ELEV. (FEET)
0	O/A SANDY LOAM	91.9
12	B SANDY LOAM	90.9
22	C1 LOAMY SAND	90.1
82	C1 M-C SAND	85.1
158	C2 MED SAND	78.7

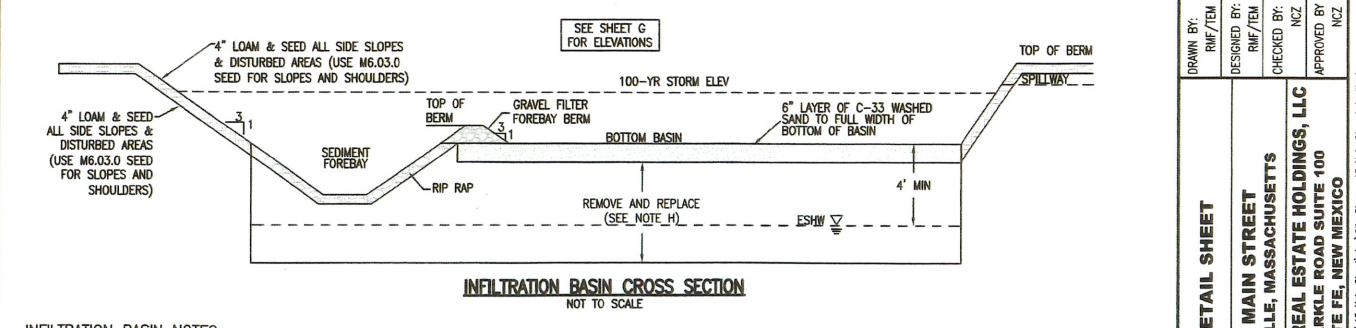


### CHAMBER FIELD NOTES:

THE CONTRACTOR IS CAUTIONED THAT THE CHAMBER FIELD IS DESIGNED TO INFILTRATE/RECHARGE STORMWATER AND CONSTRUCTION TECHNIQUES THAT WOULD POTENTIALLY DIMINISH THE INFILTRATION CAPACITY OF THE UNDERLYING SOILS ARE TO BE AVOIDED. COMPACTION AND SILTATION OF THE FIELD AREA DURING CONSTRUCTION IS PROHIBITED.

A. DO NOT COMPACT SOILS BELOW THE CHAMBER FIELD.

B. AS PART OF THE CHAMBER FIELD CONSTRUCTION, THE CONTRACTOR SHALL REMOVE TOPSOIL, SUBSOIL, AND OTHER UNSUITABLE SOIL THAT MAY BE ENCOUNTERED DOWN TO THE "SAND" LAYER REFERENCED IN THE TEST PITS. THE REMOVED MATERIAL SHALL BE REPLACED BY CLEAN SAND WHICH MEETS TITLE V (310 CMR 15.255) REQUIREMENTS. AFTER THE REMOVAL OF UNSUITABLE MATERIAL AND PRIOR TO THE PLACEMENT OF THE CLEAN SAND, AN INSPECTION BY THE DESIGN ENGINEER SHALL BE COMPLETED TO CONFIRM CONDITIONS. SIEVE ANALYSIS OF THE CLEAN SAND SHALL BE SUBMITTED TO THE DESIGN ENGINEER FOR APPROVAL PRIOR TO PLACEMENT AND SAMPLED ONSITE BY THE DESIGN ENGINEER.



### INFILTRATION BASIN NOTES:

THE CONTRACTOR IS CAUTIONED THAT THE DETENTION BASIN IS DESIGNED TO INFILTRATE/RECHARGE STORMWATER PRIMARILY THROUGH THE BOTTOM AND SIDES OF THE BASIN. CONSTRUCTION TECHNIQUES THAT WOULD POTENTIALLY DIMINISH THE INFILTRATION CAPACITY OF THE UNDERLYING SOILS ARE TO BE AVOIDED. COMPACTION AND SILTATION OF THE BASIN DURING CONSTRUCTION IS PROHIBITED.

A. DO NOT UTILIZE ANY PORTION OF THE BASIN FLOOR AS A HAUL ROAD FOR MATERIAL AND HEAVY EQUIPMENT.

B. DO NOT COMPACT SOILS IN THE BASIN FLOOR.

C. DO NOT PLACE GRAVEL OR OTHER MATERIALS TO STABILIZE THE BASIN FLOOR FOR CONSTRUCTION VEHICULAR TRAVEL ACCESS.

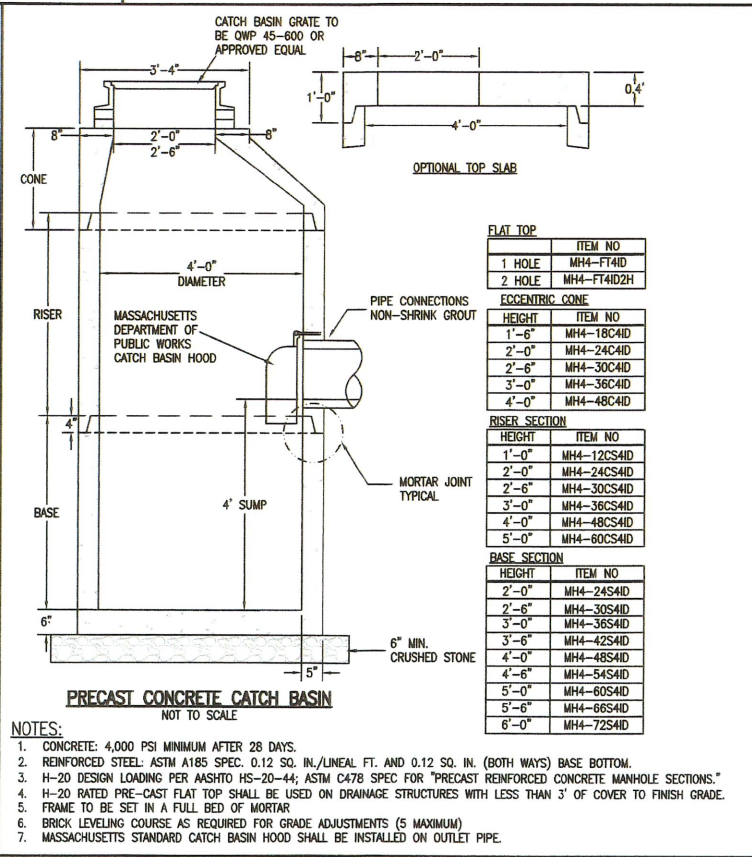
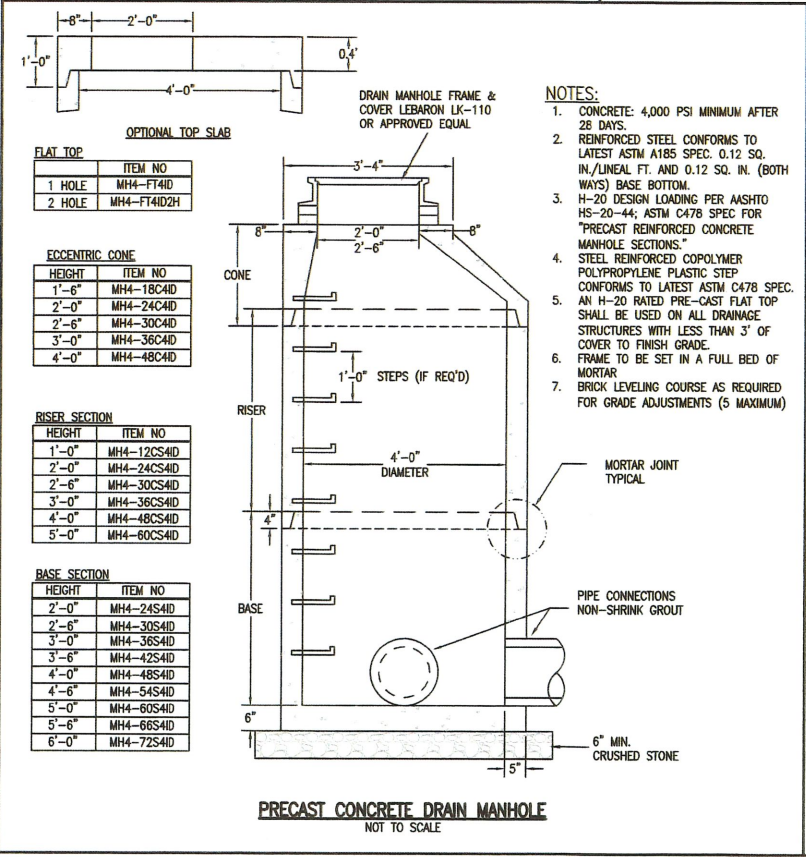
D. STRICT COMPLIANCE WITH THE EROSION CONTROL PLAN AND THE STORMWATER OPERATIONS AND MAINTENANCE PLAN IS NECESSARY.

E. BASIN CONSTRUCTION SHALL OCCUR AT THE EARLY STAGES OF THE PROJECT CONSTRUCTION SO THAT THEY ARE FULLY VEGETATED AND STABILIZED PRIOR TO RECEIVING STORMWATER.

F. RIP-RAP IN THE FOREBAYS TO BE PLACED, NOT DUMPED. DO NOT COMPACT.

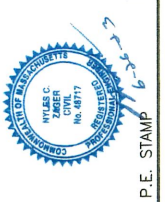
G. DO NOT USE THE INFILTRATION BASIN AS A TEMPORARY SEDIMENT BASIN OR DE-WATERING BASIN.

H. AS PART OF THE INFILTRATION BASIN CONSTRUCTION, THE CONTRACTOR SHALL REMOVE TOPSOIL, SUBSOIL, AND OTHER UNSUITABLE SOIL THAT MAY BE ENCOUNTERED DOWN TO THE "MEDIUM SAND / C2" LAYER REFERENCED IN TEST PIT D1 & D2 OR "FINE-MED SAND / C1" LAYER REFERENCED IN TEST PIT 10. THE REMOVED MATERIAL SHALL BE REPLACED BY CLEAN SAND WHICH MEETS TITLE V (310 CMR 15.255) REQUIREMENTS. AFTER THE REMOVAL OF UNSUITABLE MATERIAL AND PRIOR TO THE PLACEMENT OF THE CLEAN SAND, AN INSPECTION BY THE DESIGN ENGINEER SHALL BE COMPLETED TO CONFIRM CONDITIONS. SIEVE ANALYSIS OF THE CLEAN SAND SHALL BE SUBMITTED TO THE DESIGN ENGINEER FOR APPROVAL PRIOR TO PLACEMENT AND SAMPLED ONSITE BY THE DESIGN ENGINEER.

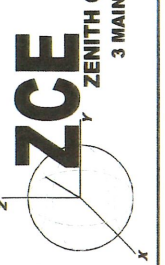


### LAKEVILLE PLANNING BOARD

APPROVED: \_\_\_\_\_  
 ENDORSED: \_\_\_\_\_



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



REV.	DATE	DESCRIPTION	BY	APP.
1	6/21/23	REVISIONS PER FIRE DEPT	RMF	NCZ

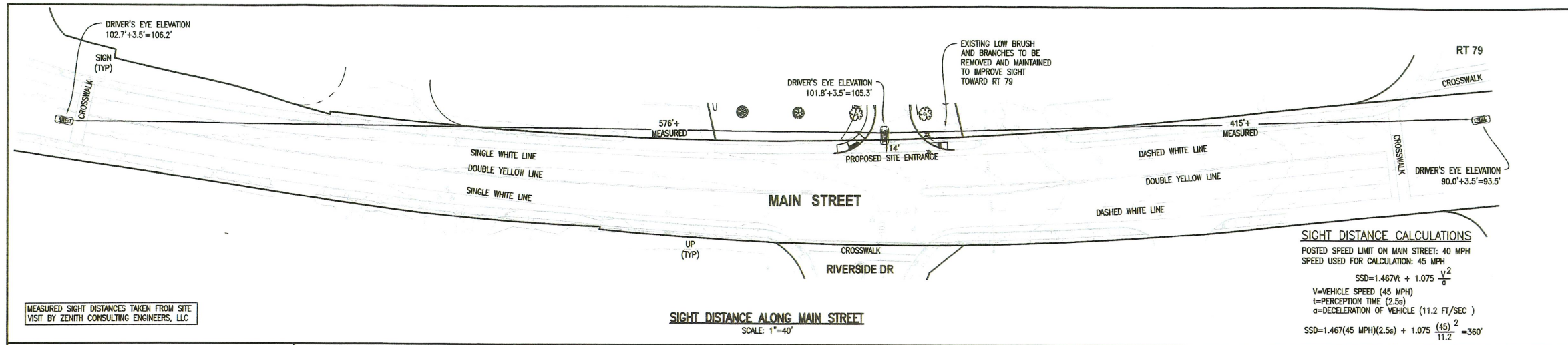
DATE	PROJECT NUMBER	DRAWING SCALE	N.T.S.	SHEET ID
6-8-23	0454-17-01			D1

DRAWN BY	DESIGNED BY	CHECKED BY	APPROVED BY
RMF/TEM	RMF/TEM	NCZ	NCZ

DETAIL SHEET
13 MAIN STREET LAKEVILLE, MASSACHUSETTS
MAIN STREET REAL ESTATE HOLDINGS, LLC
5308 MARKLE ROAD SUITE 100
SANTEE FE, NEW MEXICO



**SIGHT DISTANCE CALCULATIONS**  
 POSTED SPEED LIMIT ON MAIN STREET: 40 MPH  
 SPEED USED FOR CALCULATION: 45 MPH  
 $SSD = 1.467V + 1.075 \frac{V^2}{a}$   
 $V = \text{VEHICLE SPEED (45 MPH)}$   
 $t = \text{PERCEPTION TIME (2.5s)}$   
 $a = \text{DECELERATION OF VEHICLE (11.2 FT/SEC)}$   
 $SSD = 1.467(45 \text{ MPH})(2.5s) + 1.075 \frac{(45)^2}{11.2} = 360'$

MEASURED SIGHT DISTANCES TAKEN FROM SITE VISIT BY ZENITH CONSULTING ENGINEERS, LLC

**LAKEVILLE PLANNING BOARD**

APPROVED: \_\_\_\_\_

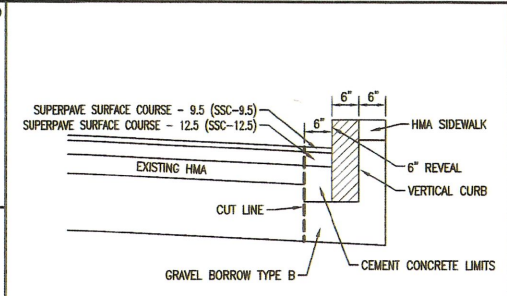
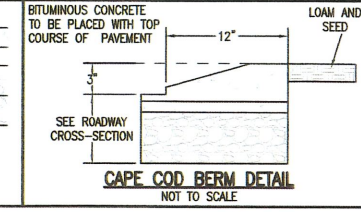
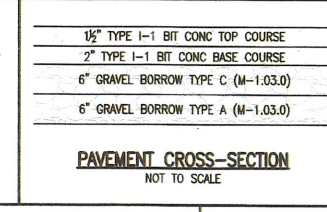
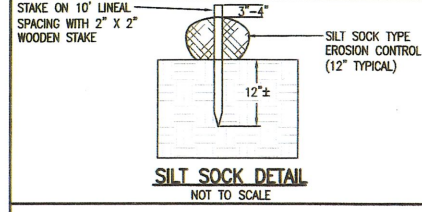
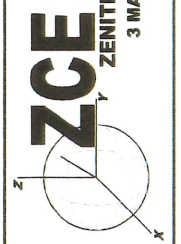
ENDORSED: \_\_\_\_\_

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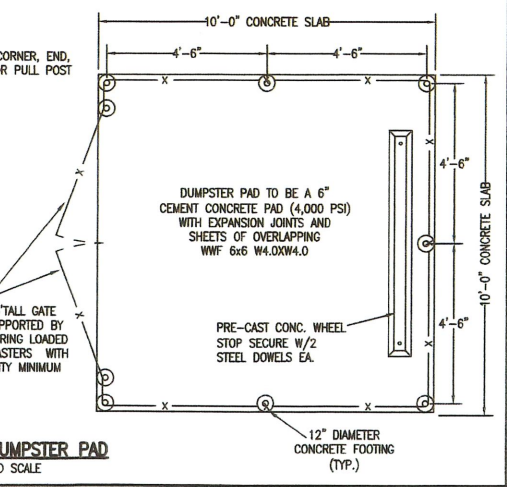
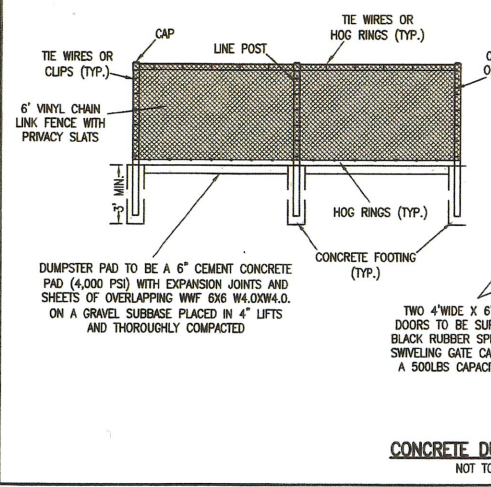
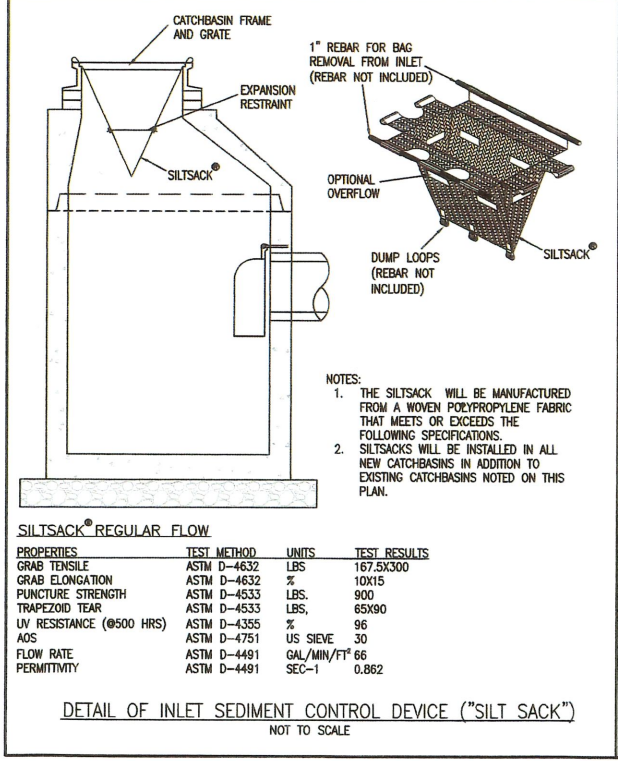
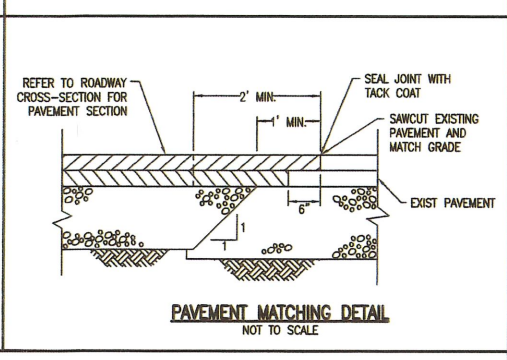
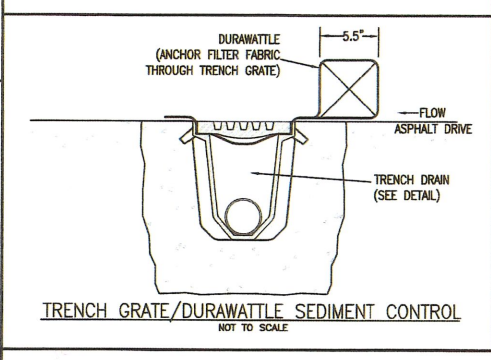
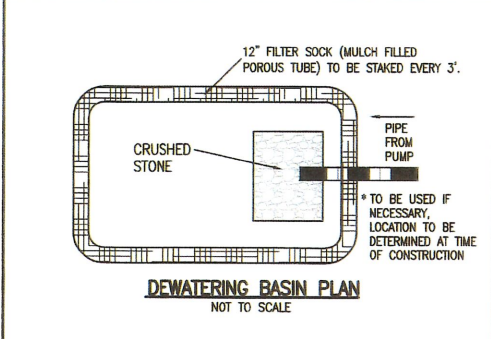
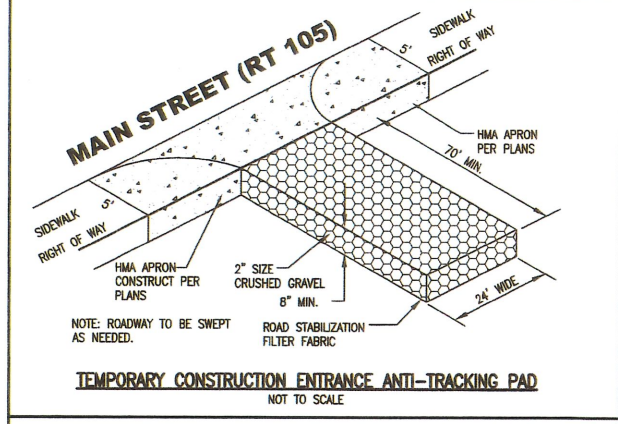
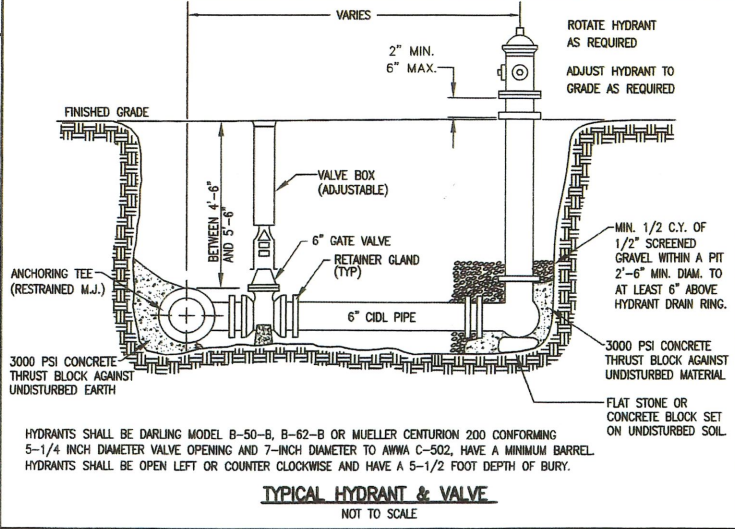
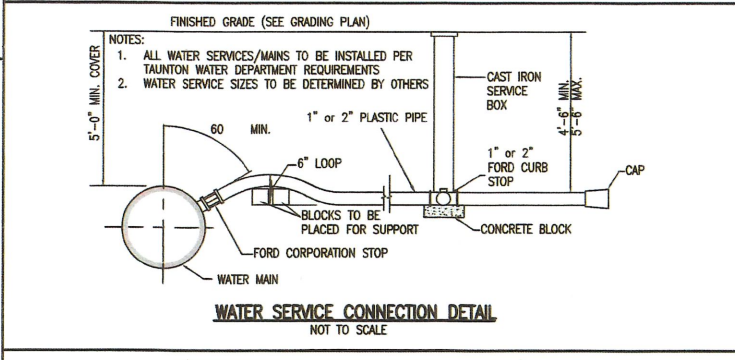
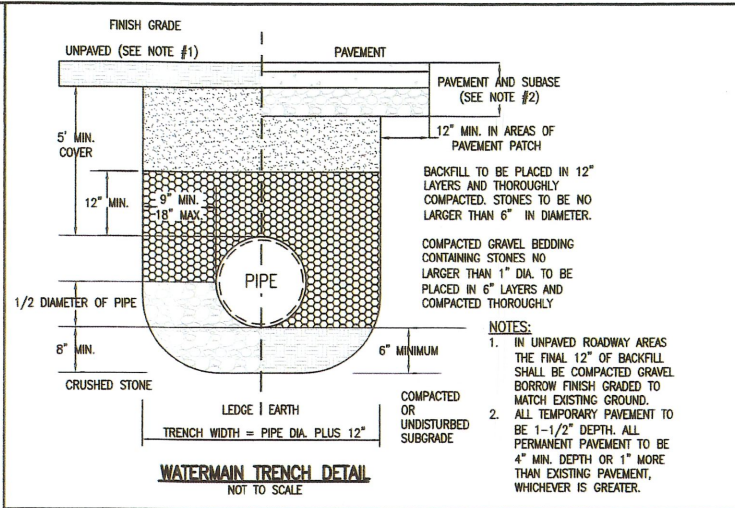
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**ZENITH CONSULTING ENGINEERS, LLC**  
 3 MAIN STREET LAKEVILLE, MA 02347  
 PHONE: (508) 947-4208



**NOTES:**  
 1. THIS PROCEDURE IS APPLICABLE ONLY IF CURB IS TO BE SET AFTER BASE COURSE IS IN PLACE PRIOR TO BRINDER AND TOP PLACEMENT.  
 2. CUT NEAT LINE 6" FROM CURB LINE AND REMOVE BASE AND GRAVEL. REPLACE WITH CEMENT CONCRETE.  
 3. ANY DESIGNATED CEMENT CONCRETE THAT IS ACCEPTABLE UNDER SECTION M4 OF THE STANDARD SPECIFICATIONS MAY BE USED; ALL TEST REQUIREMENTS ARE WAIVED. HOT MIX ASPHALT SHALL NOT BE USED AS A SUBSTITUTE.



REV.	DATE	DESCRIPTION	BY	APP.
1	6/21/23	REVISIONS PER FIRE DEPT	RMF	NCZ

DATE	PROJECT NUMBER	DRAWING SCALE	N.T.S.	SHEET ID
6-8-23	0454-17-01			D2

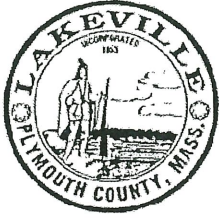
  

DRAWN BY	DESIGNED BY	CHECKED BY	APPROVED BY
RMF/TEM	RMF/TEM	NCZ	NCZ

DETAIL SHEET	
PROJECT SITE:	13 MAIN STREET LAKEVILLE, MASSACHUSETTS
CLIENT INFO:	MAIN STREET REAL ESTATE HOLDINGS, LLC 530B HARKLE ROAD SUITE 100 SANTO FE, NEW MEXICO





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: "Approval Not Required Plan of Land At 154 Rhode Island Road, Lakeville, Ma." Date: 07/11/2023

1. Owner's Signature: *Emery F. Orrall* Date: 7/11/23

2. Owner's Name (Please Print): Emery F. Orrall, Living Trust, Trustee  
Owner's Address: 154 Rhode Island Road, Lakeville, Ma 02347

3. Name of Land Surveyor: Bernard P. Perrotty, PLS River Hawk Land Survey, LLC  
Surveyor's Address: 511 West Grove Street, Suite 301, Middleborough, Ma.  
Surveyor's Telephone: (774)213-5429

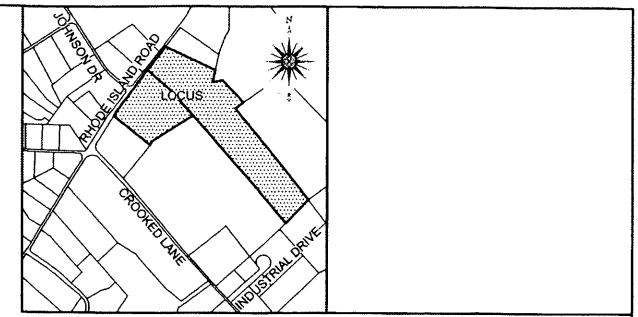
4. Deed of property recorded in Plymouth County Registry,  
Book 55651 Page 3

5. Assessors' Map, Block and Lot (MBL) Map 26 Lot 4-1

6. Location and Description of Property: Parcel A as shown on plan accompanying this application.

7. Plan Contact Name and Telephone Number:

Contact Name: Bernard P. Perrotty, PLS Telephone: (774)213-5429



LOCUS  
SCALE: 1" = 750'  
FOR REGISTRY USE ONLY

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

7/10/23 *Bernard Perrotty*  
DATE PREPARER

ASSESSORS' REFERENCE & SITE ADDRESS

MAP 26 - LOT 4-1	154 RHODE ISLAND RD
MAP 26 - LOT 4-4C	150 RHODE ISLAND RD
MAP 26 - LOT 4-4E	152 RHODE ISLAND RD
PORTION OF MAP 26 - LOT 4-4	129 CROOKED LANE

CURRENT OWNER  
EMERY F. ORRALL LIVING TRUST  
EMERY F. ORRALL, TRUSTEE  
150 RHODE ISLAND RD  
LAKEVILLE, MA 02347

DEED REFERENCES  
BK. 55651 - PG. 3

PLAN REFERENCES  
PB. 36 - PG. 56 PB. 39 - PG. 481  
PB. 59 - PG. 787 PB. 60 - PG. 2  
RHODE ISLAND RD. COUNTY LAYOUT BK. N - PG. 37  
CROOKED LN. COUNTY LAYOUT BK. U - PG. 11

TOWN OF LAKEVILLE ZONING DESIGNATION  
RESIDENTIAL / INDUSTRIAL

FEMA FLOODZONE DESIGNATION  
ZONE X, AREA OF MINIMAL FLOOD HAZARD, AS SCALED FROM FIRM PANEL 25023-C-0427K, EFF. DATE: 7/16/2015

NOTES

- THE PURPOSE OF THIS PLAN IS TO DIVIDE THE EXISTING LOT INTO LOT 1 AND PARCEL A, AS SHOWN HEREON. PARCEL A IS NOT TO BE CONSIDERED A BUILDABLE PARCEL UNTO ITSELF AND IS INTENDED TO BE CONVEYED TO THE ADJUTING PROPERTY OF T SIKORSKI REALTY LLC.
- NO PLAN OF RECORD WAS FOUND ON FILE AT THE PLYMOUTH COUNTY REGISTRY OF DEEDS FOR THE CONVEYANCE MADE IN DEED BK. 53158 - PG. 192-193, DATED JULY 29, 2020, REFERRED TO AS PARCEL FOUR IN DEED BK. 55651 - PG. 3-6.
- THE WETLAND LOCATIONS SHOWN HEREON ARE BASED ON MASSGIS DATA.

**APPROVAL UNDER THE SUBDIVISION CONTROL LAW NOT REQUIRED**

TOWN OF LAKEVILLE PLANNING BOARD APPROVAL UNDER THE SUBDIVISION CONTROL LAW IS NOT REQUIRED:

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

DATE: PLANNING BOARD ENDORSEMENT DOES NOT DETERMINE BUILDABILITY NOR REFLECT COMPLIANCE WITH THE TOWN OF FREETOWN ZONING BY LAWS.

**APPROVAL NOT REQUIRED PLAN OF LAND**

AT  
**154 RHODE ISLAND ROAD  
LAKEVILLE, MASSACHUSETTS**

PREPARED FOR  
**EMERY F. ORRALL LIVING TRUST**

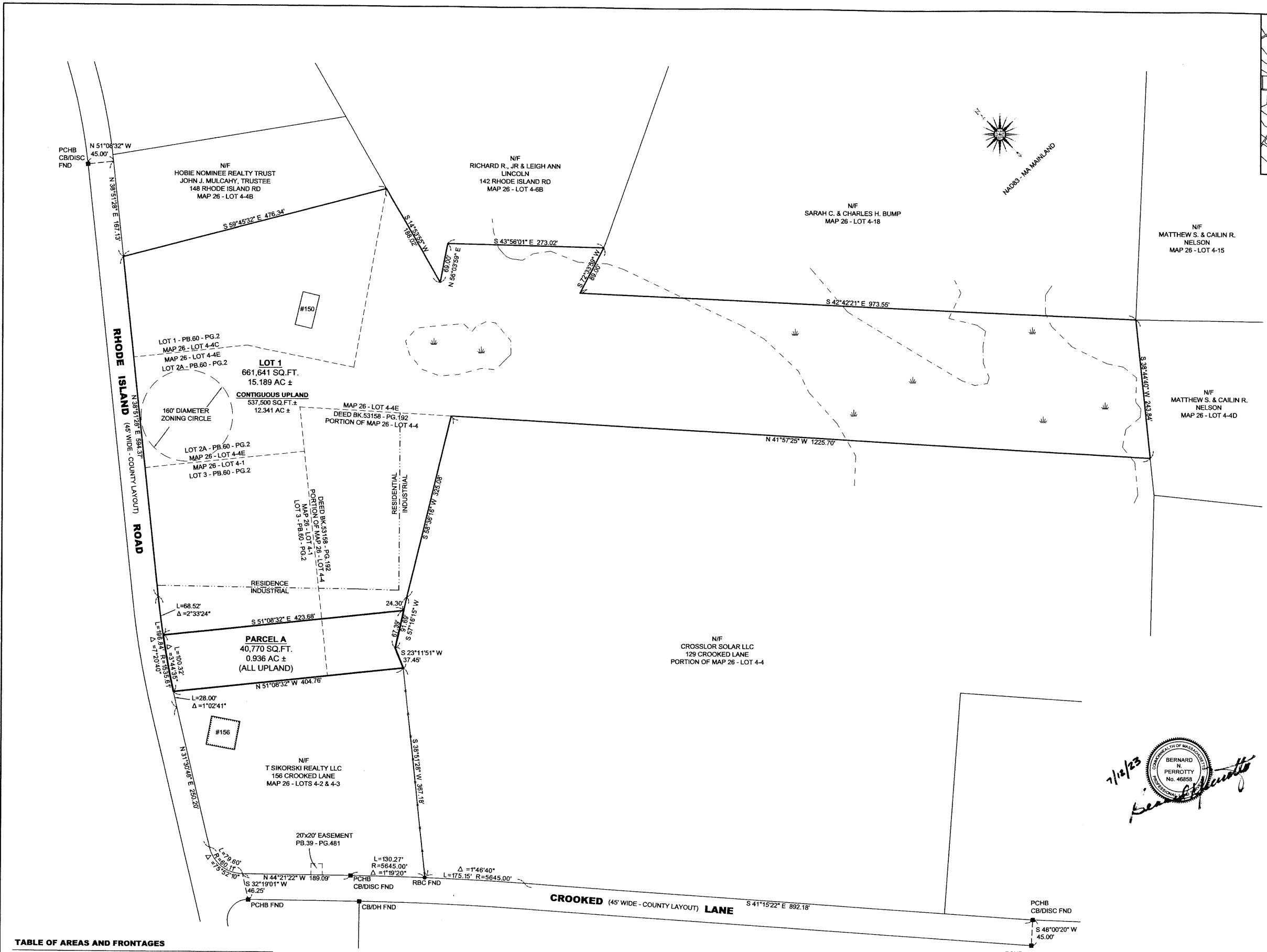
DATE: JULY 3, 2023 SCALE: 1"=100'



PREPARED BY:

**River Hawk**  
LAND SURVEY

RIVER HAWK LAND SURVEY, LLC.  
511 EAST GROVE ST., SUITE 301, MIDDLEBOROUGH, MA 02346  
TEL: 774.213.5429



**TABLE OF AREAS AND FRONTAGES**

	AREA (SQ.FT.)	CONT. UPLAND (SQ.FT.)	FRONTAGE (FT.)
REQUIRED	70,000	52,500	175
LOT 1	661,641	537,500±	662.89
PARCEL A (SEE NOTE 1)	40,770	40,770	100.32



*Town of Lakeville*  
*Board of Health*  
*346 Bedford Street*  
*(Office location 241 Main Street)*  
*Lakeville, MA 02347*

Board of Health  
(508) 946-3473  
(508) 946-8805  
(508) 946-3971 fax

June 21, 2023

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

Re: **156 Rhode Island Rd** and 13 Main Street

Dear Chairman Knox:

**We received a copy of the site plan for 156 Rhode Island Road revised on 6/19/23. The revisions do not impact the sewage disposal system. Therefore, the Board of Health has no objections to the proposed commercial building.**

We received a copy of the Petition for Hearing for 13 Main Street. The Board of Health has reviewed the "Site Plan for 13 Main St dated 6/8/23, which shows 2 proposed residential buildings. The applicant has performed percolation tests and the area is sufficient to support sewage disposal systems for both buildings, and it is possible to connect to municipal water, so there is no need for a well. Thus, the Board of Health has no objections to the proposed residential buildings.

If you should have any further questions feel free to contact this office.

Sincerely yours,  
For the Board of Health

Edward Cullen  
Health Agent

## Cathy Murray, Appeals Board Clerk

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**From:** Bob <rjbouchard@verizon.net>  
**Sent:** Wednesday, June 21, 2023 12:17 PM  
**To:** Cathy Murray, Appeals Board Clerk  
**Subject:** Re: 156 Rhode Island Road-Revised Site Plan

Cathy,

No change to my earlier comment, an NOI will be required.

Bob

On Wednesday, June 21, 2023 at 12:02:40 PM EDT, Cathy Murray, Appeals Board Clerk <cmurray@lakevillema.org> wrote:

Hi everyone,

The owner of 156 Rhode Island Road has an agreement with the adjacent land owner to purchase an additional 41,783 sf of land. They modified the plans to reflect this change in land area. With the exception of increasing the size of one of the Rain Gardens in response to a comment from the review consultant, no other changes were made to the site design.

The revised plan is attached. This is also on the Planning Board's June 22<sup>nd</sup> agenda. If you have not already done so, please forward any comments or concerns you may have regarding this Site Plan

Thanks

Cathy

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**From:** Cathy Murray, Appeals Board Clerk  
**Sent:** Monday, May 15, 2023 1:56 PM  
**To:** Matthew Perkins, Lakeville Chief of Police <mperkins@lakevillema.org>; Michael P. O'Brien, Fire Chief <mobrien@lakevillema.org>; Edward Cullen <ecullen@lakevillema.org>; rjbouchard@verizon.net; Franklin Moniz, DPW Director <fmoniz@lakevillema.org>; Nathan Darling, Building Commissioner & Zoning Enforcement Officer <ndarling@lakevillema.org>; Tracie Craig-McGee <tcraig-mcgee@lakevillema.org>; Ari Sky <asky@lakevillema.org>  
**Cc:** Kristen Campbell, Administrative Assistant, Lakeville Police Department <kcampbell@lakevillema.org>; Pamela Garant, Fire Deputy Chief <pgarant@lakevillema.org>; Fran Lawrence, Part time Board of Health Clerk <flawrence@lakevillema.org>; Lori Canedy <lcandedy@lakevillema.org>; Jennifer Jewell, DPW - Administrative Assistant <jjewell@lakevillema.org>; Clorinda Dunphy <cdunphy@lakevillema.org>  
**Subject:** RE: 156 Rhode Island Road-Revised Site Plan

## Cathy Murray, Appeals Board Clerk

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**From:** Franklin Moniz, DPW Director  
**Sent:** Monday, July 17, 2023 11:25 AM  
**To:** Marc Resnick  
**Cc:** mjkn05@gmail.com; shell42880@gmail.com; Cathy Murray, Appeals Board Clerk  
**Subject:** Re: 156 Rhode Island Road - Ongoing Site Plan Review

Good morning,

As discussed, I see no issue, considering this is a vast improvement to the current layout of this existing property. Please be sure to take into consideration the Rte 79 TIP Project. Limits of work for TIP project are Galfre Rd to Clear Pond Rd on Rte 79.

Thank you,

Franklin Moniz  
D.P.W. Director  
Town of Lakeville, MA

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**From:** Marc Resnick <mresnick@lakevillema.org>  
**Sent:** Wednesday, July 12, 2023 12:04:47 PM  
**To:** Franklin Moniz, DPW Director <fmoniz@lakevillema.org>  
**Cc:** mjkn05@gmail.com <mjkn05@gmail.com>; shell42880@gmail.com <shell42880@gmail.com>; Cathy Murray, Appeals Board Clerk <cmurray@lakevillema.org>  
**Subject:** FW: 156 Rhode Island Road - Ongoing Site Plan Review

Franklin,  
Attached is the plan showing the turning movements into and out of the site.

**Marc Resnick**  
Town Planner  
Town of Lakeville  
346 Bedford Street  
Lakeville, Massachusetts 02347  
[mresnick@lakevillema.org](mailto:mresnick@lakevillema.org)  
(774) 776-4350



**From:** Bob Rego <brego@riverhawkllc.com>  
**Sent:** Friday, June 30, 2023 12:11 PM  
**To:** Cathy Murray, Appeals Board Clerk <cmurray@lakevillema.org>; Marc Resnick <mresnick@lakevillema.org>; mjkn05@gmail.com

June 23, 2023

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

**RE: Engineering Peer Review #3  
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 June 19, 2023.
- Stormwater Report entitled "Stormwater Management Report" prepared by River Hawk Environmental, LLC, revised through June 19, 2023.
- Response to comments letter prepared by River Hawk Environmental, LLC, dated June 19, 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.

**RHE Response 6/19/23:** The Southern Rain Garden has been resized to handle the 100-year storm event.

**EP Response 6/23/23: Item closed.**

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.

**EP Response 6/23/23:** The Applicant added spot elevations to the plan. **Item closed.**

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. **Item closed.**

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).

**RHE Response 6/19/23:** The Southern Rain Garden has been resized to handle the 100-year storm event.

**EP Response 6/23/23: Item closed.**

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.

**EP Response 6/23/23: Item closed.**

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](mailto:sdt@envpartners.com) with any questions or comments.

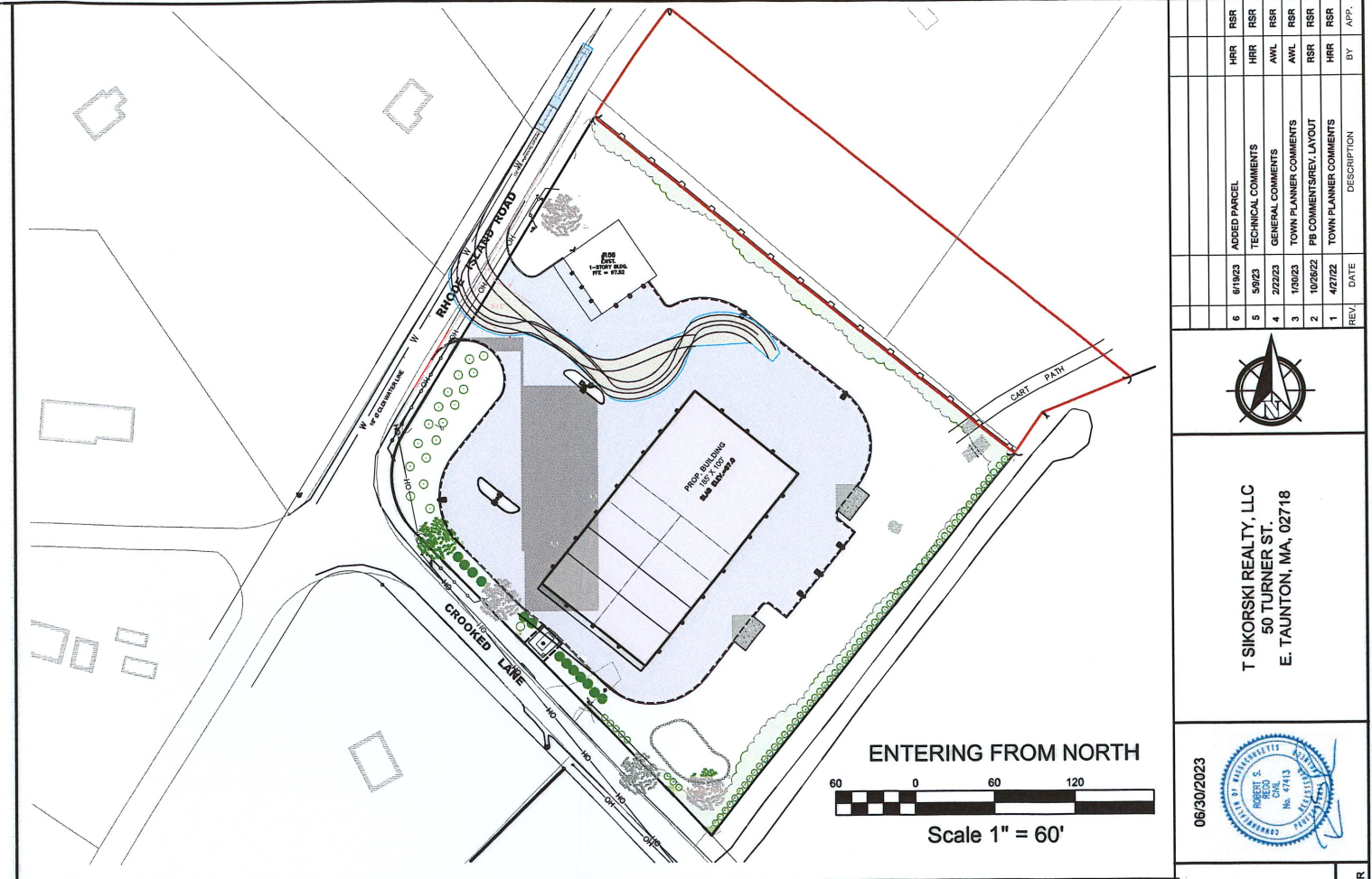
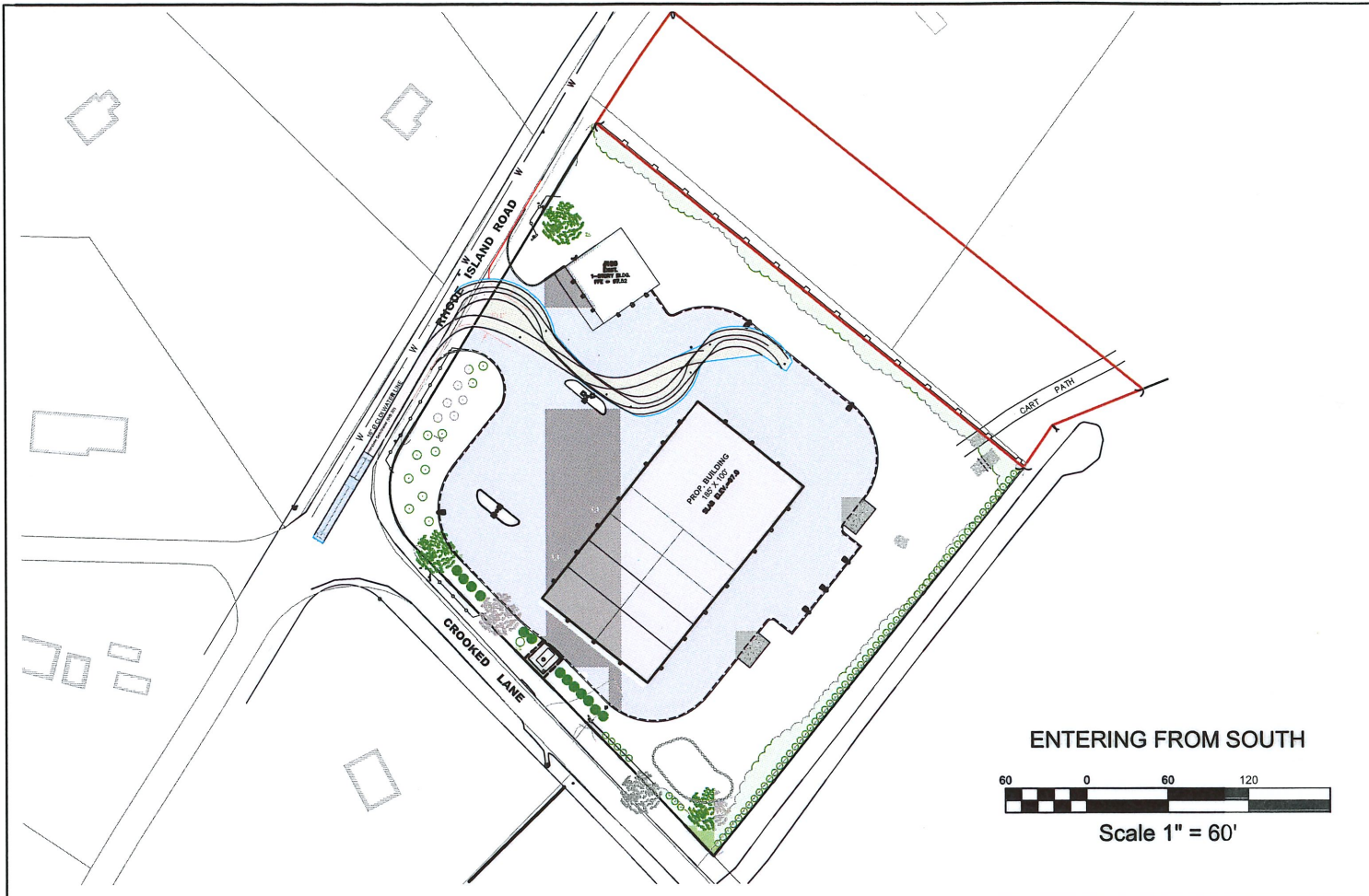
Very Truly Yours,



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



Dylan J. O'Donnell, PE  
Senior Project Engineer  
P: 413.335.7666  
E: [djo@envpartners.com](mailto:djo@envpartners.com)



1. TURNING MOVEMENTS SHOWN ARE FOR AASHTO INTERMEDIATE SEMITRAILER (WB-20).  
 2. ANALYSIS WAS PERFORMED USING AUTOPATH VEHICLE SWEEPED PATH ANALYSIS SOFTWARE.

REV.	DATE	DESCRIPTION	BY	APP.
6	01/19/23	ADDED PARCEL	HRR	RSR
5	5/9/23	TECHNICAL COMMENTS	HRR	RSR
4	2/22/23	GENERAL COMMENTS	AWL	RSR
3	1/19/23	TOWN PLANNER COMMENTS	AWL	RSR
2	10/26/22	PB COMMENTS/REV. LAYOUT	RSR	RSR
1	4/27/22	TOWN PLANNER COMMENTS	HRR	RSR



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



06/30/2023

**RiverHawk**  
 ENVIRONMENTAL  
 CIVIL ENGINEERING & ENVIRONMENTAL CONSULTING  
 2183 OCEAN STREET, MARSHFIELD, MA 02050  
 781-538-4639 www.RiverHawkLLC.com

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

COMMERCIAL DEVELOPMENT  
 156 RHODE ISLAND ROAD  
 LAKEVILLE, MA

TRAFFIC CIRCULATION PLAN

DATE: MAR. 10, 2023  
 PROJECT NO. 00488-01-01  
 SCALE: AS SHOWN

**SP1.3**

**Planning Board  
Lakeville, Massachusetts  
Minutes of Meeting  
Thursday, May 11, 2023**

On May 11, 2023, the Planning Board held a meeting at the Lakeville Police Station. The meeting was called to order by Chairman Knox at 7:00 p.m.

**Members present:**

Mark Knox, Chair; Michele MacEachern, Vice-Chair; John Cabral, Nora Cline, Jack Lynch

**Public hearing (7:00) – Site Plan Review – 156 Rhode Island Road, continued**

Mr. Knox stated the applicant has requested they continue this hearing until their June 8<sup>th</sup> meeting.

Ms. Cline made a motion, seconded by Mr. Cabral, to continue the Site Plan Review hearing for 156 Rhode Island Road until June 8, 2023, at 7:00 p.m. The **vote** was **unanimous for**.

**Public hearing (7:00) – 44 Clear Pond Road, continued**

Mr. Knox advised he had spoken with the applicant today, and he requested they continue this hearing. Mr. Knox said no specific date was suggested, so he would recommend until their next meeting.

Mr. Knox made a motion, seconded by Mr. Lynch, to continue the Public hearing for 44 Clear Pond Road until May 25, 2023, at 7:00 p.m. The **vote** was **unanimous for**.

**Public hearing (7:00) – Stowe Estates – 35 Myricks Street, continued**

Mr. Knox advised this applicant has also requested to continue until their next meeting.

Mr. Knox made a motion, seconded by Mr. Lynch, to continue the Public hearing for Stowe Estates at 35 Myricks Street until May 25, 2023, at 7:00 p.m. The **vote** was **unanimous for**.

**Housing Production Plan (HPP) – Discuss and possible vote**

Mr. Knox asked Ms. MacEachern to speak to this as she had made a few other edits. Ms. MacEachern advised on the following changes:



- Page 3 The first two paragraphs had been added in which closely resembles their previous HPP. At the end of the first paragraph it states that the ponds, rivers, and streams in Town also serve as a source of drinking water for its residents. For its residents should be removed as they serve other communities.
- Page 7 Ms. MacEachern advised when the Town reaches a certain quantity of units and can deny a Comprehensive Permit, it has always been referred to as Safe Harbor. The wording seems to have changed to Certification. She would like to add back into the second paragraph after “deny a Comprehensive Permit”, referred to as reaching Safe Harbor, to keep the language consistent for people who have already heard that term. Mr. Knox added if they are changing the term, maybe they should have both in there and suggested, “previously referred to as Safe Harbor and going to become known as Certification.”
- Page 17 Underneath the chart, she had added wording that when 19% of households in Lakeville make under \$50,000, that illustrates the diverse nature of Lakeville’s housing stock. That was up to the Board if they wanted that wording to remain. Ms. Cline said that this had been brought up in some SRPEDD meetings and there had been an overwhelming response to leave it as it was shown without it.
- Page 33 Ms. MacEachern had noticed that BIOPIC had been added back in. She would also take out the word misguided and crime and replace it with increased burden on Emergency Services. Ms. Cline said that increased crime is a perception. Every one of these that she had read does have that statement in it. In regards to BIOPIC, Ms. Cline said that was required by the State.
- Page 38 Ms. MacEachern said this is a map that shows the existing 40R district and then points to a potential 40B site. She did not think it should be designated as such. It is a priority protection parcel, and has been like that in their Master Plan.
- Page 39 Ms. MacEachern said it talks about reducing lot size requirements. She did not know what other members thought, but it was not keeping in character with the Town. Mr. Knox said they had talked about the Town not having the means to do that because of the lack of public services, and public sewer in particular. Well radiuses would also have to be maintained. He said that you could say you don’t like the way this is worded in the HPP; however, Lakeville can’t do anything about it until they decided to spend some money or public services and eliminate those well radiuses, but he thought it could be left in.

Ms. Cline then made a motion, seconded by Mr. Lynch, to approve the final Lakeville HPP with the following changes conditional upon the approval of SRPEDD:

1. Page 3 – Remove the last three words of the first paragraph.

2. Page 7 – Should include previously known as Safe Harbor and to be known as Certification.
3. Page 38 – Remove the potential 40B site.

The **vote** was **unanimous for**.

Ms. MacEachern made a motion, seconded by Ms. Cline, to forward the HPP to the Select Board, if all the proposed changes were acceptable. The **vote** was **unanimous for**.

### **Discuss Notice of Intent to change land use to residential – 6 Barstow Street**

Mr. Knox said that he had passed out some information to members regarding this item from the Town Administrator, which had been discussed at the Select Board meeting. A process had been laid out to follow, which Mr. Knox then read into the record. He said he had spoken to Mr. Sky and suggested they form a committee through the Select Board. They are currently working towards a 61 process, but he recommended that a member from Planning Board, Conservation, Open Space, CPC, Select Board, and Board of Health be on this Committee. That would open the line of communication among them. He said there should be more to come, and he would advise them of anything he heard.

### **Review the following Zoning Board of Appeals petitions:**

- a. Thompson – 4 Hollis Avenue

Mr. Knox made a motion, seconded by Mr. Lynch, to make no recommendation regarding 4 Hollis Avenue. The **vote** was **unanimous for**.

- b. Darling – 13 Dunbar

Ms. Cline made a motion, seconded by Mr. Lynch, to make no recommendation regarding 13 Dunbar. The **vote** was **unanimous for**.

- c. Bell – 113 Staples Shore Road

Mr. Knox made a motion, seconded by Mr. Lynch, to make no recommendation regarding 113 Staples Shore Road. The **vote** was **unanimous for**.

- d. Lakeville Nursery – 5 Harding Street

Mr. Knox explained this property had gone through the Site Plan Review process. They were now seeking a Special Permit for automotive repairs. Mr. Knox said he had no problem with the use,

but he wanted to make sure the driveway is adequate for vehicles to access. Ms. MacEachern said it appears that the old plans were attached to the application. After examining the plan, it was determined that the driveway was wide enough. Members then discussed some items they would like the ZBA to address for safety, such as signage and public access to the garage bays.

Mr. Knox made a motion, seconded by Ms. MacEachern, to forward the following recommendations to the Zoning Board regarding 5 Harding Street:

- There should be no public access to the back of the building.
- Parking for automotive repair customers should be clearly designated for safety purposes.
- The site should have adequate signage which indicates the above.

The **vote** was **unanimous for**.

### **Planning Board Goals – Review and possible action**

Ms. Cline then went through the following goals.

- Review Housing Production Plan
- Review Planning Board Goals yearly
- Establish goals for Planner and support staff
- Establish tracking and map of buildable land area and use SRPEDD hours
- Review current Zoning Map and identify properties for zoning reclassification. Look at Open Space Residential, Adult Entertainment District, and Industrial Growth land.
- Complete review of 40R, 40B, and 3A for identification of applicable property.
- Review Planning Board Rules and Guidelines.
- Electronic agendas to be delivered weekly by noon on Friday preceding the meeting.
- Hold one combined meeting with CPC and ConComm.
- Implementation of applicable Master Plan goals updating priority protection areas.
- Adopt Stormwater Management By-Law
- Investigate a Transfer of Development Rights By-Law

Ms. MacEachern made a motion, seconded by Mr. Lynch, to accept the goals and have them included going forward on one meeting every other month. The **vote** was **unanimous for**.

### **Approve Meeting Minutes**

Mr. Knox made a motion, seconded by Mr. Lynch, to approve the Minutes from the March 9, 2023, meeting. The **vote** was **unanimous for**.

### Next meeting

The next meeting is scheduled for May 25, 2023, at 7:00 p.m. at the Lakeville Police Station.

### Correspondence

There was no correspondence of significant impact to review. However, Ms. Cline asked if there had been any further feedback from Freetown in regards to the MBTA communities. Ms. MacEachern said that she thought the Select Board was supposed to be arranging this. Ms. MacEachern said that there is something that she would like to be considered with the Mixed-Use Zone and the setbacks in relation to the single level units and the apartment buildings. Mr. Knox said that he felt the best plan of action at this point is to talk to either Zenith or Mr. McMahon to see if they would be amenable to an extended time frame as the Board worked on amending the setbacks. Ms. MacEachern said she would also like to discuss amending the sign bylaw for illuminated signs and adding standards. She suggested looking at some type of an Overlay to allow some distribution in certain sections of the Business Zone, but with more safeguarding and a maximum allowed. Mr. Knox said he would not be inclined to do anything until they saw examples of this in other Towns. He would also be cautious with the effort that they put forth.

### Adjourn

Mr. Knox made a motion, seconded by Mr. Lynch, to adjourn the meeting. The **vote** was **unanimous for**.

Meeting adjourned at 8:04.

**Planning Board  
Lakeville, Massachusetts  
Minutes of Meeting  
Thursday, July 13, 2023**

On July 13, 2023, the Planning Board held a meeting at the Lakeville Police Station. The meeting was called to order by Chairman Knox at 7:05 p.m.

**Members present:**

Mark Knox, Chair; Nora Cline, Jack Lynch

**Others present:**

Marc Resnick, Town Planner

**Public hearing (7:00) – 44 Clear Pond Road, continued**

Mr. Fred Keylor from Hancock Associates, representing Mr. Derek Maksy, the applicant, was present. Mr. Maksy had been unable to attend. Mr. Keylor advised since their last meeting, they have revised the configuration from four lots to three lots, in order for all the lots to be compliant. They have also addressed the latest comments from Environmental Partners. Regarding Item #12 that requires the driveway to slope toward the road at a grade not more than 8%, but it was at 10%. Mr. Keylor said that item had been missed, but that correction will be made. He will also update the language in the Operation & Maintenance Plan (O&M Plan.)

Mr. Knox noted that they were then moving forward with the three lots instead of four. Mr. Keylor said that was correct. Mr. Resnick suggested the Board close the hearing. He would prepare a draft approval and covenant for the Board to review at their next meeting.

Mr. Knox made a motion, seconded by Mr. Lynch, to close the hearing. The **vote was unanimous for.**

**Review the following Zoning Board of Appeals petition:**

Mr. Knox took this item out of order as there was someone present in regards to it.

**a. Benatti – Re: 434 Bedford Street**

Mr. Knox made a motion, seconded by Ms. Cline, to make no recommendation on 434 Bedford Street-Benatti. The **vote was unanimous for.**

**Public hearing (7:00) – Stowe Estates - 35 Myricks Street, continued**

Mr. Jamie Bissonnette from Zenith Consulting Engineers was present. Mr. Gagnier, the applicant, was also present. Mr. Bissonnette advised one of the changes they made to the plan had been asked for by the Fire Department. They have removed the 3' wide gravel shoulders in the right of way and increased the pavement width to 20 feet for the turn around. This will be able to better serve this development.

Mr. Bissonnette advised regarding the water, the Taunton Water Department does not know where the main is located in the street. He then submitted their Will Serve Letter for the record. He noted that Taunton will be on site as they excavate and try to locate the water. He stated that the only items now open from peer review would be where they have requested waivers.

Mr. Knox advised that after checking waivers given for underground electric service, he noted that they have only given one in ten years. This was also for a Form A development, where the poles were already existing. He was not in favor of this waiver. The sidewalk waiver would be acceptable. Regarding the lighting, Ms. Cline said that she would be amenable to the marker at the end of the driveway that had previously been discussed. There should also be a street light at the intersection. It was noted that there should be one directly across the street, or if not, within a reasonable distance. Mr. Resnick said if that was not the case, it would be added as a condition.

Mr. Knox said that Mr. Zagar had been in front of the Conservation Commission on Tuesday. He did not expect any changes to the plan, so he would be comfortable closing this hearing. Mr. Bissonnette said that he would also forward the Board a copy of the SWPP.

Mr. Knox made a motion, seconded by Mr. Lynch, to close the hearing. The **vote was unanimous for**. The covenant and approval letter will be available at their next meeting.

**156 Rhode Island Road – discussion regarding curb cut**

Mr. Knox advised that they should have a copy of the swing radiuses that had been provided by Mr. Rego from Riverhawk. He noted that a 60-foot curb cut is proposed, which is a reduction from the existing 90 feet. The requirement is 30 feet. Mr. Moniz, DPW Director, had been consulted, and he was not opposed to it being wider. Mr. Knox said that he was recommending that they meet in the middle at 45 feet. What did other members think? Ms. Cline and Mr. Lynch were both okay with the curb cut at 45 feet.

Mr. Knox then made a motion, seconded by Ms. Cline, to allow a 45-foot curb cut for 156 Rhode Island Road. The **vote was unanimous for**.

**Review the following Zoning Board of Appeals petitions, continued:**

- b. Terra – 8 Birch Street

- c. Chapin – 24 Beechwood Avenue
- d. Garbitt/Pike – 29 Staples Shore Road
- e. Barbosa – 20 Second Avenue

All of the petitions were for residential properties. Ms. Cline made a motion, seconded by Mr. Lynch, to make no recommendation regarding the above ZBA petitions. The **vote** was **unanimous for**.

### **Discussion regarding Sign By-Law and Commercial Zoning Districts**

As all members were not present, this will be placed on the Planning Board's next agenda.

### **Discussion regarding Subdivision waivers**

Members briefly discussed this agenda item. One suggestion was a tiered set of waivers dependent on the amount or size of the proposed lots. It was decided that as all members were not present, this item will be placed on the Planning Board's next agenda.

### **Approve Meeting Minutes**

Ms. Cline made a motion, seconded by Mr. Lynch, to approve the Minutes from the April 27, 2023, meeting. The **vote** was **unanimous for**.

### **Next meeting**

The next meeting is scheduled for July 27, 2023, at 7:00 p.m. at the Lakeville Police Station.

### **Correspondence**

There was no correspondence to review. Mr. Resnick gave members an update regarding the OSRD bylaw. He noted that he has been working to address both the Board of Health and Conservation Commission's concerns so this could be placed on the fall Town Meeting Warrant. The following were some of the ideas for handling those concerns. For an OSRD development, you must have at least one of the following:

- Municipal water must be on site
- There must be a public water supply.
- For large developments, there must be a sewer treatment plant
- For developments under 10,000 gallons per day, there must be a common septic.

The last issue would be having the open space land subject to Article 91. He was also considering including an age restricted type of development. He should have a draft available for them by next week.

He also noted that the Housing Production Plan (HPP) has been submitted to the State. The MBTA analysis has been completed and will be sent to the State next week.

### **Adjourn**

Mr. Knox made a motion, seconded by Mr. Lynch, to adjourn the meeting. The **vote** was **unanimous for**.

Meeting adjourned at 7:49.