Tuesday, July 26, 2022 Medway Planning and Economic Development Board 155 Village Street Medway, MA 02053

Members	Bob	Tom	Matt	Sarah	Rich	Jessica
	Tucker	Gay	Hayes	Raposa	Di Iulio	Chabot
Attendance	Zoom	X	X	X	X	X

PRESENT:

Susy Affleck-Childs, Planning and Economic Development Coordinator Barbara Saint Andre, Director of Community and Economic Development (via Zoom)

The meeting was called to order by Chairman Hayes at 7:02 p.m.

There were no Citizen Comments.

APPOINTMENTS TO THE DESIGN REVIEW COMMITTEE:

The Board is in receipt of the following: (See Attached)

- Memo dated 7-20-22 from Susy Affleck-Childs
- Resume of Jamie Ahlstedt
- Resume of Susan Alessandri

The DRC is in receipt of the resumes from Jamie Ahlstedt and Susan Alessandri to seek appointment to the DRC. Ms. Ahlstedt was present via Zoom and Ms. Alessandri attended the meeting in person. They provided the Board with their background information and interest in serving on the DRC.

On a motion made by Sarah Raposa, seconded by Rich Di Iulio, the Board voted by roll call to appoint Susan Alessandri to the Design Review Committee through June 20, 2024, and Jamie Ahlstedt to the Committee through June 30, 2023.

Roll Call Vote:	
Bob Tucker	aye
Matt Hayes	aye
Rich Di Iulio	aye
Sarah Raposa	aye
Jess Chabot	aye

APPROVAL OF PEDB MEETING MINUTES:

June 13th and July 12th meetings:

On a motion made by Rich Di Iulio, seconded by Jessica Chabot, the Board voted by roll call to accept the minutes from the June 13th and July 12th meetings as revised.

Minutes of July 26, 2022 Meeting Medway Planning & Economic Development Board APPROVED – August 9, 2022

Roll Call Vote:	
Bob Tucker	aye
Matt Hayes	aye
Rich Di Iulio	aye
Sarah Raposa	aye
Jess Chabot	aye

CONSTRUCTION ESTIMATES

<u>288 VILLAGE STREET MULTI FAMILY PROJECT</u> – The Board is in receipt of an estimate from Tetra Tech in the amount of \$13,194.00. See Attached.

On a motion made by Rich Di Iulio, seconded by Sarah Raposa, the Board voted by roll call to approve the Tetra Tech construction estimate for 288 Village Street for \$13,194.00.

Roll Call Vote:	
Bob Tucker	aye
Matt Hayes	aye
Rich Di Iulio	aye
Sarah Raposa	aye
Jess Chabot	aye

<u>BRIGHTPATH CHILDSCARE/Medway Commons</u> – The Board is in receipt of an estimate from Tetra Tech in the among of \$6,088. See Attached.

On a motion made by Sarah Raposa, seconded by Rich Di Iulio, the Board voted by roll call to approve the construction estimate for Bright Path Day Care for \$6,088.00.

Roll Call Vote:

Bob Tucker	aye
Matt Hayes	aye
Rich Di Iulio	aye
Sarah Raposa	aye
Jess Chabot	aye

Zoning Board of Appeals Application:

201 Village Street – Accessory Family Dwelling Family Unit:

The Board is in receipt of an application submitted to the ZBA for 201 Village Street. See Attached. This is a petition for an AFDU special permit to be part of the existing building.

The Board has no issue with this application and is taking no action.

CONSTRUCTION REPORTS:

The Board is in receipt of the following: (See Attached)

William Wallace Village – 274 Village Street

- Field Report No. 32 Tetra Tech, 5-12-22
- Field Report No. 33 Tetra Tech, 6-21-22

Salmon Health:

- Field Report No. 70 Tetra Tech, 6-21-2022
- Field Report No. 80 Tetra Tech, 7-06-2022
- Field Report No. 81 Tetra Tech, 7-12-2022

21 Trotter Drive:

• Field Report No. 20 – Tetra Tech, 7-13-2022

Master Plan Update:

Member Chabot updated the board. There was a meeting of the Master Plan Committee on 7-25-22. There is a draft Master Plan the document. There is still some work which needs to be done on this. There needs to be graphics included and clarification of language. The second part of this Committee's task will be to establish the action plan for implementation responsibilities. The current document will be sent to the Boards and Committees to review and provide comments by August 9, 2022. Another step will be for the implementation of this plan which will include the strategies. There was a suggestion that the management of the document needs to be done by a staff member.

<u>PUBLIC HEARING CONTINUATION – BOUNDARY LANE DEFINITIVE</u> <u>SUBDIVISION PLAN:</u>

The Board is in receipt of the following: (See Attached)

- Notice dated 7-1-22 of Public Hearing Continuation to 7-26-22
- Mullins Rule Certification for Bob Tucker for 6-14-22 hearing
- Mullins Rule Certification for Jess Chabot for 6-14-22 hearing
- Email dated 6-9-22 from Health Agent Beth Hallal
- Letter dated 6-14-22 from Deputy Fire Chief Mike Fasolino
- Email dated 7-20-22 from DPW/Sewer Superintendent Barry Smith
- Letter dated 6-22-22 from Safety Officer Jeff Watson
- Revised Boundary Lane Subdivision Plan dated 7-12-22 by Connorstone Engineering
- Plan Revision summary letter dated 7-15-22 from Vito Colonna
- Tetra Tech revised plan review letter dated 7-20-22
- Conservation Commission Order of Conditions for 69 Summer Street
- DRAFT Certificate of Action dated 7-22-22
- Email dated 7-26-22 from Assessor Donna Greenwood re: drainage parcel
- Additional waiver request dated 7-26-22 re Section 7.7.2 p. to not require the drainage system to be located on a separate parcel

The continued hearing for Boundary Lane was opened.

The Board is in receipt of the signed Mullin Rule Certification from member Tucker for the 6-14-22 hearing.

The draft decision was displayed on the screen share to be reviewed by all parties.

Applicant Zach Lindsey was present in person along with Gerry Lindsey and attorney Steven Kenney. The applicant does not have any issues with how the decision was written. Per the request from Assessor Donna Greenwood, the drainage parcel should be located on the house lot and shown as an easement and not be shown as a separate parcel. It was noted that the homeowners association can still be the entity to maintain it. The Board reviewed the various waiver requests and finetuned the language. There will also be language added relative to the subdivision covenant and that the relevant infrastructure including the stormwater management system be constructed within three years of the date of endorsement date of the plan.

Waivers from Subdivision Rules and Regulations

On a motion made by Rich DiIulio, seconded by Jessica Chabot, the Board voted by roll call to approve the Waiver Requests as discussed and presented in the draft decision.

Roll Call Vote:

Bob Tucker	aye
Matt Hayes	aye
Rich Di Iulio	aye
Sarah Raposa	aye
Jess Chabot	aye

Project Criteria:

On a motion made by Sarah Raposa, seconded by Rich Di Iulio, the Board voted by roll call to approve the Project Evaluation Criteria as presented in the draft decision.

Roll Call Vote:

Bob Tucker	aye
Matt Hayes	aye
Rich Di Iulio	aye
Sarah Raposa	aye
Jess Chabot	aye

Conditions:

The conditions of this decision were next discussed.

- There is language included about the tree preservation and that the permittee shall make the fullest possible effort to prevent removal of noted trees and to preserve/retain them.
- Any damaged sidewalk on the west side of Summer Street shall be repaired or replaced before an occupancy permit is issued for Lot 3.
- The sentence relating to the condition #9 for ownership of Boundary Lane and that it remain privately owned in perpetuity to the center line by the owners of the adjacent lots can be removed as suggested by Barbara Saint Andre.
- The addresses of the houses will need to be discussed further with the Board of Assessors.

On a motion made by Jessica Chabot, seconded by Sarah Raposa, the Board voted by roll call to approve the conditions as presented.

Minutes of July 26, 2022 Meeting Medway Planning & Economic Development Board APPROVED – August 9, 2022

Roll Call Vote:

Bob Tucker	aye
Matt Hayes	aye
Rich Di Iulio	aye
Sarah Raposa	aye
Jess Chabot	aye

Decision:

On a motion made by Jessica Chabot, seconded by Sarah Raposa, the Board voted by roll call to approve the Decision with waivers and conditions as approved.

Roll Call Vote:

Bob Tucker	aye
Matt Hayes	aye
Rich Di Iulio	aye
Sarah Raposa	aye
Jess Chabot	aye

Close Public Hearing:

On a motion made by Rich Di Iulio, seconded by Jessica Chabot, the Board voted by roll call to close the Boundary Lane public hearing.

<u>Roll Call Vote:</u> Bob Tucker Matt Haves

Matt Hayts	ayu
Rich Di Iulio	aye
Sarah Raposa	aye
Jess Chabot	aye

PUBLIC HEARING CONTINUATION - MILFORD HOSPITAL MEDICAL FACILITY:

The Board is in receipt of the following: (See Attached)

aye

9 V A

- Notice dated July 1, 2022, to continue the Milford Hospital public hearing to July 26, 2022
- Revised site plan dated June 29, 2022, received July 15, 2022
- Collection of submittals from Guerriere & Halnon associated with the revised site plan, received July 15, 2022
- Tetra Tech review letter dated July 19, 2022, on the revised site plan dated June 29, 2022
- Letter dated July 21, 2022, from Jack Mee (Building Commissioner)
- Letter dated May 31, 2022, from Jeffrey Dirk of Vanasse Associates (Transportation Impact Assessment report
- Letter dated July 15, 2022, from Jeffrey Dirk of Vanesse Associates (traffic intersection improvements

The continuation public hearing for Milford Regional Hospital Medical Center Site plan and Groundwater Protection Special Permit was opened.

The applicant Kevin Lobisser was also present along with Michael Hassett and Amanda Cavaliere from Guerriere and Halnon.

The Board was informed that the plans have been revised based on the recommendations provided from the Conservation Commission, Fire Department, and Police Department Consultant. Tetra Tech has also provided responses. The Board reviewed the letter from Guerriere and Halnon. This included updated project narrative; revised development impact statement, updated waiver request forms, revised application for approval of a special permit, response letter dated May 31, 2022, by Vanasse & Associates dated May 31, 2022. There was also information provided about the underground piping inspection prepared by DWD Engineering dated June 22, 2022. There was a revised lighting plan prepared by Holbrook Associates dated July 6, 2022.

The following items were clarified:

- There are no easements on record for the existing drainage infrastructure onsite. There will be no easement provided by the town.
- There was an additional waiver requested from Section 10.2.D.2.a.
- The size of the trees has been adjusted to comply with Section 10.2.D.2.b. There is also the inclusion of 23 additional shrubs.
- There is an outdoor amenity space for the front of the property including picnic tables, benches, landscaping and trash receptacles.
- The project narrative has also been revised.
- A development impact statement has now been provided.
- There is an anticipation that the construction activities will be completed within 10 months of receiving the Town approvals.
- The color renderings will be provided for the next meeting.
- The Town Assessor has requested address 68A Main Street for this site. That address needs to be reviewed by the Boston Post Office.
- The proposed sidewalk at the front of the building narrows to a 5' width between the building entrances and the parking area where 7' is required as parking overhangs the sidewalk.
- The total number of proposed parking spaces has been reduced from 102 to 88, with the reduction in the front left corner. There will be an increase in screening.
- The south entrance has shifted 15' north from its originally proposed location.
- The southern driveway has been revised to be exit only and stop bars and signs have been added to both the north and south exits.
- The applicant will follow the recommendations of the safety audit.

The Applicant will be providing color renderings next week. The plan needs to show the designated area for open space. It was explained that an ANR will be done to create this parcel once all approvals are provided. This could be a condition of the decision.

Waivers:

- Section 204-5 (D)(14) Master Signage Plan. There will be a master signage plan submitted under a separate permit application with the input of the DRC and PB.
- Section 204-5 (B) Site Context Sheet.
- Section 204-5 (D)(8)(a) Landscape Plan

- Section 207-9 (B)(1) Pedestrian and Bicycle Access and Sidewalks. The applicant will stripe and include compact cars spaces.
- Section 207-12 (B) Parking G. (3) locations
- Section 207-19 Landscaping B. (2) Landscape buffers
- Zoning Bylaw Section Central Business District (2.D.2.A) Off Street Parking

Tetra Tech representative Courtney Sudak was present via Zoom to explain the peer review. It was indicated that trash area has been relocated to the northwest portion of site. It was recommended that there be a condition that the vehicle turning analysis be provided for a service delivery vehicle and Medway Fire Department design vehicle. There should also be a condition that the Applicant work with the Town to finalize the elements of the Transportation Demand Management program for the project. The applicant is planning to attend the DRC meeting on Monday.

There was a question about the shifting of the building on site and if there would be a buffer. There will be Norway spruce plantings with a minimum of 6-7 ft. The stockade fence will be on the slope.

On a motion made by Jessica Chabot, seconded by Sarah Raposa, the Board voted by roll call to continue the hearing to August 23, 2022, at 7:30 pm.

Roll Call Vote:	
Bob Tucker	aye
Matt Hayes	aye
Rich Di Iulio	aye
Sarah Raposa	aye
Jess Chabot	aye

<u>PUBLIC HEARING CONTINUATION – PHYTOPIA – 6 INDUSTRIAL</u> <u>PARK ROAD:</u>

The Board is in receipt of the following: (See Attached)

• Notice dated July 18, 2022, to continue the hearing to August 9, 2022.

The Board was informed that the draft decision was not able to be prepared. It was suggested to continue the hearing to August 9, 2022. Ms. Affleck-Childs indicated she had spoken with attorney Ted Cannon for the applicant who was amenable to the continuation.

On a motion made by Rich Di Iulio, seconded by Jessica Chabot, the Board voted by roll call to continue the hearing to August 9, 2022, at 7:00 pm.

Roll Call Vote:	
Bob Tucker	aye
Matt Hayes	aye
Rich Di Iulio	aye
Sarah Raposa	abstained
Jess Chabot	aye

DISCUSS MEDWAY GRID BESS PROJECT:

The Board was provided with the following: (See Attached)

- Draft Host Community Agreement
- Medway GRID's petition to the Energy Facilities Siting Board
- Proposed site plan as provided to the Energy Facilities Siting Board
- Tetra Tech review letter dated 6-21-22

The Board was informed that the Town Manager has asked for comments on the draft Host Community Agreement. A copy of this agreement was in the packet along with the petition and a link to the Energy Facilities Siting Board hearing on July 13, 2022. Chairman Hayes attended the hearing via Zoom. It would be his suggestion to wait on acting on the host agreement. It was noted that the Select Board is planning to act on the Host Community Agreement at its August 22, 2022 meeting. The draft agreement includes Medway GRID providing some financial support for the Town's master planning efforts. There was a suggestion that funds be put in place for the ability to use consultants for various planning activities, not limited to master plan. There was a concern expressed about the Town tasking the PEDB to write a BESS bylaw when the Medway GRID application will surpass the boards. The Town wants the agreement to protect its interest if the Medway GRID project is approved by the EFSB. The Board would like a letter drafted to review at the August 9, 2022, meeting. Ms. Affleck-Childs will work with Chairman Hayes on a letter.

POSSIBLE ZONING BYLAW AMENDMENTS:

- Solar Electric Installations
- Battery Energy Storage Systems
- Table of Uses
- Multi-Family Housing
- Housekeeping

Solar Electric Installations: The Article has been amended to include language that the Town seeks incentivize solar installations within already developed property and on lands with lower resource values (parking lots, roofs). There will also be amendments to some of the definitions to include ground mounted solar electric installations with rated name plate capacity of 250 kW (DC). The electric power generation definition will be amended. In regard to the proof of liability insurance, there will be language added that insurance be in effect until such facility has been decommissioned, removed, and the site restored with subsection K of the bylaw. There was a recommendation to increase the setback to 100 ft when abutting the residential zone.

BESS Bylaw

Resident, Charlie Myers attended the meeting in person to participate in the discussion.

The Article for BESS is to see if the Town will vote to amend the Zoning Bylaw for Section 2 Definitions of Battery Energy Storage Facility and to add other definitions. Table 1 Schedule of Uses will be amended to indicate where Battery Energy Storage Systems would be allowed. There will also be an amendment to Table 3 Schedule of Off-Street parking requirements by adding a new category for Battery Energy Storage System (2 parking spaces for a Tier 1 BESS and 3 spaces for a Tier 2 BESS). The purpose section was also revised to include "consistent Minutes of July 26, 2022 Meeting Medway Planning & Economic Development Board APPROVED – August 9, 2022

with best practices and safety protocols". There would also be an amendment to Section 3.5.3.A.1 Major Site Plan Review for a Tier 2 BESS and a Section 3.5.3.A.2 Minor Site Plan for a Tier 1 BESS. The Board does not want to expand the ER district at this time. There was also a recommendation to increase the buffer between a BESS and any residentially used or zoned property. There was also a section added about the mitigation for loss of Carbon Sequestration and Forest Habitat, Mitigation for Disruption of Trail Networks, and Disruption of Historic Resources and Properties. There also needs to be an application for a decommissioning plan for Tier 2 BESS. The bylaw would also have any applicant have to provide proof of liability insurance prior to issuance of a building permit.

Multi-Family Housing:

The article for the multifamily housing would be to revise C. Dimensional Regulations along with increasing the minimum lot size for a Multi-Family Building to be one/half acre. There will also be a revising of the parking special regulations.

Housekeeping:

This Article would see if the Town will vote to amend the bylaw for:

- Open Space Residential Development, minor correction in numbering
- Adding a new definition for Forestland
- Change all the references that read "Board of Selectmen" to "Select Board"

NOTE - Member Tucker left the meeting at 10:12 pm.

ADJOURN:

On a motion made by Jessica Chabot, seconded by Sarah Raposa, the Board voted to adjourn the meeting.

The meeting was adjourned at 10:31 pm.

Prepared by, Amy Sutherland Recording Secretary

Reviewed and edited by, Susan E. Affleck-Childs Planning and Economic Development Coordinator



July 26, 2022 Medway Planning & Economic Development Board Meeting

<u>Appointments to the</u> <u>Design Review Committee</u>

- Memo dated 7-20-22 from Susy Affleck-Childs
- Resume of Jamie Ahlstedt
- Resume of Susan Alessandri

Susan E. Affleck-Childs

Planning and Economic Development Coordinator



Medway Town Hall 155 Village Street Medway, MA 02053 Phone (508) 533-3291 Fax (508) 321-4987 Email: sachilds@ townofmedway.org www.townofmedway.org

TOWN OF MEDWAY Commonwealth of Massachusetts

PLANNING AND ECONOMIC DEVELOPMENT OFFICE

July 20, 2022

TO:	Planning and Economic Development Board
FROM:	Susy Affleck-Childs, Planning and Economic Development Coordinator
RE:	Appointments to Medway Design Review Committee (DRC)

There are 3 vacancies on the Design Review Committee which need to be filled to reach its full contingent of 7 people. Current members include Matt Buckley, Janine Clifford and Jess Chabot with Tom Gay serving as the PEDB's representative.

There are 2 outstanding candidates interested in serving on the DRC. See attached resumes of Jamie Ahlstedt and Susan Alessandri. Each has attended 2 or more meetings and has met the other DRC members. Both plan to Zoom in for the July 26th PEDB meeting to meet you.

I recommend the PEDB make the following appointments to the DRC: Susan Alessandri for a 2-year term through June 30, 2024 Jamie Ahlstedt for a 1-year term through June 30, 2023

Contact

jamie.ahlstedt@gmail.com

www.linkedin.com/in/jamie-ahlstedt (LinkedIn)

Top Skills

Photoshop Graphic Design Illustrator

Certifications

Email Marketing Certificate Agile Project Management Certificate

Honors-Awards

Hermès Creative Gold Award Winner - Email Communications Category

Hermès Creative Platinum Award Winner - Ebook Design

Hermès Creative Gold Award Winner - Integrated Marketing Campaign

Hermes Creative Platinum Award Winner - Digital Marketing Campaign

Jamie Ahlstedt

Award Winning Creative Director + Graphic Designer Medway

Experience

HMI Performance Incentives 3 years 8 months

Creative Services Manager September 2019 - Present (2 years) Norwood, MA

Develop and manage the creative team which consists of in-house designers and copywriters as well as contract designers, copywriters and video production.

Introduced an agile design process streamlining the number of edits needed from the creative team. Implemented a sprint process that would keep internal stakeholders in the know and onboard with what the creative team was developing for clients.

Developed the timeline and planning process of the Creative Team to align all stakeholders internal and external. This kept the plan on track, and everyone involved knew where we were in the creative process at all times. Mentored internal team, cultivating their talents and keeping them engaged and excited about their own growth as well as the companies Stayed up to date on latest trends as well as new technologies/methodologies to utilize throughout the team.

Graphic Designer January 2018 - August 2019 (1 year 8 months)

Ahlstedt Design Owner/Creative Director 2008 - Present (13 years) Medway, Massachusetts, United States

Create and maintain all Print and web collateral for Clients. Work within tight deadlines on direct mailers, websites, branding and identity as well as other design projects. Making sure to stay within branding guidelines and budget.

Maintaining numerous social media sites for clients. Creating, designing and updating all material on social media sites. Researching ways to use social

media to build awareness of clients demographic and helping the client build a following.

Ahlstedt Drywall Graphic Designer May 2008 - Present (13 years 4 months) Greater New Orleans Area

Develop and maintain the Brand and Identity. Develop website and keep track of SEO / data analytics to promote traffic.

Columbia Threadneedle Investments, US Freelance Graphic Designer January 2017 - July 2017 (7 months) Boston, Ma

In collaboration with marketing managers and the creative team, design and execute marketing content for a variety of mediums including print and digital. Work with copywriters to design marketing materials while working within brand guidelines and standards. Partner with internal Production team to ensure that marketing content can be produced effectively and that design elements are properly executed. Update marketing content and collateral/ Refine templates and designs as needs evolve.

Calyptus Consulting Group, Inc. Graphics and Documentation Specialist July 2014 - May 2016 (1 year 11 months) Cambridge, Massachusetts

Jamie was the Graphics & Documentation Specialist at Calyptus. She created the design structures for reports, presentations, and other media. Jamie designed and manages the website, along with managing social media accounts and graphic content. She provides design and content support for eLearning and training courses. Jamie also designs marketing initiatives.

SkinIt Inc. Graphic Designer September 2009 - June 2011 (1 year 10 months) San Diego, Ca

Worked independently while maintaining high-volume production turnaround of daily orders; Tailor the composition of existing layouts to fit multiple devices while upholding the integrity of the original design. As well as following all of the licensing guidelines. Producing Web banner ads and email blasts to go along with promotional products.

Also developing photoshop actions to make a quicker turnaround as well as photorealistic images for skinned devices to go up on the web.

University of Rhode Island Freelance Graphic Designer January 2007 - April 2011 (4 years 4 months)

Freelance Graphic Designer for the Confucius Institute at the University of Rhode Island.

Education

University of Massachusetts Dartmouth BFA, Graphic Design

Massasoit Community College Associate's Degree, Graphic Design

Weymouth High School / VTHS High School Diploma / Graphic Arts Certificate, Graphic Arts Vocational

SUSAN WESTCOTT ALESSANDRI, PH.D.

<u>salessandri@suffolk.edu</u> 508-321-1430 – home 315-263-2607 – mobile

FACULTY APPOINTMENTS

Suffolk University Department of Advertising, Public Relations & Social Media Associate Professor (with tenure), 2016 – present Department spun off from Department of Communication & Journalism

Department of Communication & Journalism Associate Professor (with tenure), 2012 – 2016 Assistant Professor, 2008 – 2012

Northeastern University D'Amore-McKim School of Business Part-Time Lecturer, Summers 2013 – present

Syracuse University S.I. Newhouse School of Public Communications Assistant Professor, 2005 – 2008 Visiting Assistant Professor, 2002 – 2005

Syracuse University Martin J. Whitman School of Management Adjunct Assistant Professor, Spring 2004 & Spring 2005

University of North Carolina at Chapel Hill School of Journalism & Mass Communication Instructor of Record, 2000 – 2002

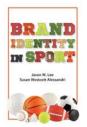
EDUCATION

University of North Carolina at Chapel Hill School of Journalism and Mass Communication Ph.D. Mass Communication Dissertation: Predicting the Performers: An Analysis of the Promotion & Protection of Corporate Identity Adviser: Dr. Mary Alice Shaver

Northeastern University M.A. Journalism

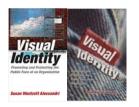
Framingham State University B.S. Media Communications

BOOKS



Lee, J. & Alessandri, S.W. (2018). <u>Brand Identity in Sport</u>. Durham, NC: Carolina Academic Press.

Positive review in Journal of Advertising Education, v. 23, no. 1.



Alessandri, S.W. (2009). <u>Visual Identity: Promoting and Protecting the Public Face</u> <u>of an Organization</u>. Armonk, NY: M.E. Sharpe. Acquired by Routledge in 2015.

Positive review in *Public Relations Review*, v. 36, no. 1.

PEER-REVIEWED PUBLICATIONS

Lee, J. W., Cavanaugh, T., & Alessandri, S. W. (2019). Design science behind university logos: Hidden factors behind your icon. Journal of Contemporary Athletics, v. 13, no. 2.

Alessandri, S.W. (2013). Corporate reputation and the discipline of visual communication. <u>The Handbook of</u> <u>Communication and Corporate Reputation</u>, Craig Carroll, ed. Wiley-Blackwell Publishing.

Alessandri, S.W. (2009). Promoting the network brand: An exploration of network and local affiliate on-air promotion during the Super Bowl, 2001-2006. Journal of Promotion Management, v. 15, no. 1 & 2.

Yang, S.U., Alessandri, S.W. & Kinsey, D.F. (2008). An integrative analysis of reputation and relational quality: A study of university-student relationships. Journal of Marketing for Higher Education, v. 18, no. 2.

Alessandri, S.W. (2007). Retaining a legacy while avoiding trademark infringement: A case study of one university's attempt to develop a consistent athletic brand identity. Journal of Marketing for Higher Education, v. 17, no. 1.

Alessandri, S.W., Yang, S. & Kinsey, D.F. (2006). An integrative approach to university visual identity & reputation. Corporate Reputation Review, v. 9, no. 4.

Alessandri, S.W. (2005). *Corporate identity crisis: One company's merger odyssey*. <u>Education Review of Business</u> <u>Communication</u>, v. 2, no. 1. Case study accompanied by published teaching note.

Alessandri, S.W. (2005). "Undressing the Ad": Using critical theory to teach advertising strategy. Journal of Advertising Education, v. 8, no. 2.

Alessandri, S.W. & Alessandri, T.M. (2004). Promoting and protecting corporate identity: The importance of organizational and industry context. <u>Corporate Reputation Review</u>, v. 7, no. 3.

Alessandri, S.W. (2001). *Modeling corporate identity: A concept explication and theoretical explanation*. <u>Corporate</u> <u>Communications: An International Journal</u>, v. 6, no. 4. Received "Highly Commended Award" as one of the journal's four best articles published in 2001.

BOOK CHAPTERS & INVITED PUBLICATIONS

Alessandri, S.W. (2022). *Chapter 2 Exercises – Strategy & Branding*. In <u>Advertising Creative: Strategy, Copy &</u> <u>Design</u> (6th ed.). Altstiel, T., Grow, J., Augustine, D. & Jenkins, J. Thousand Oaks, CA: Sage Publications.

Alessandri, S.W. (2022). *Chapter 5 Exercises – Design Basics*. In <u>Advertising Creative: Strategy, Copy & Design</u> (6th ed.). Altstiel, T., Grow, J., Augustine, D. & Jenkins, J. Thousand Oaks, CA: Sage Publications.

Alessandri, S.W. (2021). Framingham State: Branding a small public school amid change and uncertainty. In <u>Branding in</u> <u>Higher Ed: Every University Tells a Story</u>. Lee, J.W., Cianfrone, B.A. & Gregg, E. eds. Durham, NC: Carolina Academic Press.

Alessandri, S.W. (2021). *Collegiate sport & intellectual property*. In <u>Branding in Higher Ed: Every University Tells a</u> <u>Story</u>. Lee, J.W., Cianfrone, B.A. & Gregg, E. eds. Durham, NC: Carolina Academic Press.

Alessandri, S.W. (2019). *A Distinctive Brand with a Generic Name*. In <u>Advertising Creative: Strategy, Copy & Design</u> (5th ed.), by Jean Grow & Tom Altstiel. Thousand Oaks, CA: Sage Publications.

Lee, J.W. & Alessandri, S.W. (2018). *Life is good: A good life for this lifestyle brand.* In <u>Branded: Branding in Sport</u> <u>Business</u> (2nd ed.), Lee, J.W., ed. Durham: Carolina Academic Press.

Alessandri, S.W. (2016). *Visual Identity*. In <u>The SAGE Encyclopedia of Corporate Reputation</u>, Craig Carroll, ed. Thousand Oaks, CA: Sage Publications.

Alessandri, S.W. (2013). Underheard in New York. In Encyclopedia of Major Marketing Strategies, v. 3. Independence: Gale/Cengage Learning.

Alessandri, S.W. (2012). *Lasn, Kalle*. In <u>Encyclopedia of Gender in Media</u>, Mary Kosut & J. Geoffrey Golson, eds. Thousand Oaks, CA: Sage Publications.

Alessandri, S.W. (2012). *Miller, Mark Crispin.* In <u>Encyclopedia of Gender in Media</u>, Mary Kosut & J. Geoffrey Golson, eds. Thousand Oaks, CA: Sage Publications.

Alessandri, S.W. (2010). A Superwoman of the Seventies Brings Home the Bacon. Pink Television: Sixty Years of Women on Prime Time by Pierracini, C. Dubuque, IA: Kendall Hunt.

Alessandri, S.W. (2009). Revlon: The most celebrated multicultural women in the world appear in advertising. In <u>Color</u> <u>Television: 60 Years of African American and Latino Images on Prime Time Television</u> by Pieraccini, C. & Alligood, D. 2nd edition. Dubuque, IA: Kendall Hunt.

Barnes, B. & Alessandri, S.W. (2009). The Modern Marketplace & 'The New Advertising. In Advertising & The Business of Brands, Bendinger, B., ed. Chicago, IL: Copy Workshop.

Alessandri, S.W. (2008). Select university advertising programs: Syracuse University, S.I. Newhouse School of Public Communications. In <u>A Century of Advertising Education</u> by Ross, B.I. & Richards, J.I. American Academy of Advertising.

Alessandri, S.W. (2008). *Non-traditional expressions of corporate identity*, In <u>Facets of Corporate Identity</u>, <u>Communication & Reputation</u>, Melewar, T.C., ed. Oxford, UK: Routledge.

Alessandri, S.W. (2007). Reading Notices, Early 20th Century (early product placements). In Encyclopedia of American Journalism. Vaughn, S., ed. Oxford, UK: Routledge.

Alessandri, S.W. (2007). *Branding: Identity and Image Strategy*, In <u>Creative Strategy in Advertising</u>, 9th edition, by Jeweler, A.J. & Drewniany, B.L. Belmont, CA: Wadsworth Publishing.

Alessandri, S.W. (2005). The ad strategy scavenger hunt: How to help students find classroom concepts in the real world. The <u>Community College Journalist</u>, Spring/Summer.

Alessandri, S.W. (2005). Advice from today's exec communicators. Journal of Employee Communication Management, July/August.

Alessandri, S.W. (2004). *ITT Industries' corporate advertising campaign: Putting a face on a large corporation*. In <u>Creative</u> <u>Strategy in Advertising</u>, 8th edition, by Jeweler, A.J. & Drewniany, B.L.

Alessandri, S.W. (2004). Brands in black and white: Racial stereotypes in advertising. In <u>Color Television: 50 Years of</u> <u>African American and Latino Images on Prime Time Television</u> by Pieraccini, C. & Alligood, D. Also reprinted in second edition.

Schultz, H., Tuleja, E.A. & Alessandri, S.W. (2004) Toward a model of reputation and relationship management for the corporate communication curriculum: A pilot study. Proceedings of the Conference on Corporate Communication 2004.

Alessandri, S.W. (2003). *How to do your part: Protecting corporate identity from the inside out*. Journal of Employee <u>Communication Management</u>, (May/June).

Alessandri, S.W. (2001). Being both student and teacher: Lessons from the classroom. Journal of Advertising Education, v. 5 no. 2.

Alessandri, S.W. (2001). *Turn employees into fierce defenders of the corporate identity*. <u>Journal of Employee</u> <u>Communication Management</u>, (September/October).

BOOK REVIEWS

(2018). *Creative Aerobics: Fueling Imagination in the 21st Century* by Linda Conway Correll George and Arpan Yagnik. Journal of Advertising Education, v. 22, no. 2.

(2018). *Advertising Campaigns Workbook* by Harsha Gangadharbatla, Kim Bartel Sheehan and David Koranda. Journal of Advertising Education, v. 22, no. 1.

(2015). Raised by Mad Men: The Son of a Real Life Advertising Mad Man (and Mad Woman) Reveals Who These People Really Were – and How They Raised Us All by David Murray. Journal of Advertising Education, v. 19, no. 1.

(2012). Brand Identity Essentials: 100 Principles for Designing Logos and Building Brands by Kevin Budelman, Yang Kim and Curt Wozniak. Journalism & Mass Communication Quarterly, v. 89, no. 1.

(2011). Dog Days: A Year in the Oscar Mayer Wienermobile by Dave Ihlenfeld. Journal of Advertising Education, v. 15, no. 2.

(2007). Brand Royalty: How the World's Top 100 Brands Thrive & Survive by Matt Haig; Zag: The #1 Strategy of High-Performance Brands by Marty Neumeier. Corporate Reputation Review, v. 10, no. 4. (2006). Not Buying It: My Year Without Shopping by Judith Levine. Journal of Advertising Education, v. 10, no. 1.

(2006). The Consumer Trap: Big Business Marketing in American Life by Michael Dawson; Ads, Fads, & Consumer Culture: Advertising's Impact on American Character & Society, (second edition) by Arthur Asa Berger. Journalism & Mass Communication Quarterly, v. 83, no. 2.

(2006). Public Relations Worktext: A Writing and Planning Resource (second edition) by Joseph M. Zappala and Ann R. Carden. American Communication Journal, v. 8, no. 1.

(2005). The Viagra Ad Venture: Masculinity, Media, and the Performance of Sexual Health by Jay Baglia. Journalism & Mass Communication Quarterly, v. 82, no. 4.

(2004). Brand Babble: Sense and Nonsense about Branding by Don E. Schultz and Heidi F. Schultz. Journal of Advertising Education, v. 8, no. 1.

(2004). Big Brands, Big Trouble: Lessons Learned the Hard Way by Jack Trout; The Fall of Advertising and the Rise of PR by Al Ries & Laura Ries. Journalism & Mass Communication Educator, Winter.

(2004). Educating the Consumer-Citizen: A History of the Marriage of Schools, Advertising, and Media by Joel Spring. Journal of Advertising Education, v. 7, no. 2.

REFEREED CONFERENCE PRESENTATIONS

Alessandri, S.W. & Lee, J. *Academic brand identity on a budget*. Presented at the Mid-South Educational Research Association Conference, online via Zoom, October 2020.

Lee, J.W., Alessandri, S. W., & Gregg, E.A. You are the what? Offensive mascots and school accountability. Presented at the Mid-South Educational Research Association Conference in Pensacola, FL, November 2018.

Alessandri, S.W. & Lee, J. Offensive high school mascots and community accountability. Presented at the Corporate Affairs, Reputation and Accountability Workshop at New York University's Stern School of Business. Co-sponsored by Oxford University Said Business School, December 2016.

Lee, J. & Alessandri, S.W. *'Boston Strong' but not trademark strong*. Presented at the 27th Annual Sport and Recreation Law Association Conference in Orlando, FL, February 2013.

Alessandri, S.W. Framingham State: Branding a small public university in a highly competitive educational market. Presented at the 15th International Conference on Corporate Reputation, Brand, Identity, and Competitiveness in New Orleans, LA, May 2011.

Alessandri, S.W. *Framingham State: Branding a small public university in a highly competitive educational market.* Accepted for presentation at the 1st International Colloquium on Corporate Branding, Identity, Image and Reputation in Zurich, Switzerland, February 2011.

Rosengard, D. & Alessandri, S.W. *Marketing college & university reputation: Searching for differentiation on the Web.* Presented at the 13th International Conference on Corporate Reputation, Brand, Identity, and Competitiveness in Amsterdam, The Netherlands, May 2009.

Alessandri, S.W. Wegmans Food Markets, Inc.: A case study in visual identity, image and reputation. Presented at the 11th International Public Relations Research Conference in Miami, FL, March 2008.

Gorham, B.W., Alessandri, S.W. & Kinsey, D.F. *The problem of athletic visual identity and Native American imagery: A pilot study.* Presented at the Broadcast Education Association Conference in Las Vegas, NV, April 2007. Awarded first prize in the Multicultural Studies Division.

Alessandri, S.W. Promoting the network brand: An exploration of network and local affiliate on-air promotion during the Super Bowl, 2001-2006. Accepted for presentation at the Ad Bowl Symposium at the University of South Carolina, January 2007.

Alessandri, S.W. Developing a consistent collegiate brand identity: Retaining a legacy while avoiding trademark infringement. Presented at the 10th Anniversary Conference on Reputation, Image, Identity & Competitiveness in New York, NY, May 2006.

Zyglidopoulos, S., Alessandri, S.W. & Alessandri, T.M. *Exploring the moderators on the branding strategy - financial performance relationship*. Presented at the 10th Anniversary Conference on Reputation, Image, Identity & Competitiveness in New York, NY, May 2006.

Alessandri, S.W., Yang, S. & Kinsey, D.F. An integrative model of university identity & reputation. Presented at the 9th International Public Relations Research Conference in Miami, FL, March 2006.

Alessandri, S.W. The ad strategy scavenger hunt: How to help students find classroom concepts in the real world. Presented at the AEJMC Annual Conference in San Antonio, TX, August 2005.

Alessandri, S.W. *The Super Bowl: 'Tis the Season for Self-Promotion*. Presented at the AEJMC Annual Conference in San Antonio, TX, August 2005.

Alessandri, S.W. *The Super Bowl and the art of network self-promotion*. Presented at the Broadcast Education Association Conference in Las Vegas, NV, April 2005. Awarded first prize in the Debut Category for the Sales & Management Division.

Schultz, H., Tuleja, L. & Alessandri, S.W. Toward a model of reputation and relationship management for the corporate communications curriculum: A pilot study. Presented at the Conference on Corporate Communication in Wroxton, England, June 2004.

Alessandri, S.W. & Alessandri, T.M. *Exploring the boundaries of the linkage between corporate identity and performance.* Presented at the 8th Conference on Reputation, Image, Identity & Competitiveness in Fort Lauderdale, FL, May 2004.

Schultz, H., Tuleja, L. & Alessandri, S.W. Business needs are academic needs: Linking the reality of corporate communication to the MBA curriculum. Presented at the Management Communication Association Conference in New Orleans, LA, May 2004.

Alessandri, S.W. & Alessandri, T.M. *The intersection of marketing strategy & organizational strategy: The importance of corporate identity to performance.* Presented at the Strategic Management Society 23rd Annual International Conference in Baltimore, MD, November 2003.

Alessandri, S.W. *WWG: The case for a consistent corporate identity.* Presented at the 7th International Conference on Corporate Reputation, Identity & Competitiveness in Manchester, England, May 2003.

Alessandri, S.W. *Promoting and protecting corporate identity as a firm resource: Empirical evidence from the field.* Presented at the 7th International Conference on Corporate Reputation, Identity & Competitiveness in Manchester, England, May 2003.

Alessandri, S.W. *Promoting and protecting corporate identity on the Web: Does firm size matter?* Presented at the 6th International Conference on Corporate Reputation, Identity & Competitiveness in Boston, MA, May 2002.

Alessandri, S.W. Projecting and protecting corporate identity on the Web: An exploration of companies of varying size. Presented at the American Communication Association Annual Meeting in Boone, NC, October 2001.

Alessandri, S.W. *Time to market: An exploratory study of the print media promotion of new corporate names.* Presented at the AEJMC Mid-Winter Conference in New York City, February 2001.

Alessandri, S.W. & Shaver, M.A. Advertising and the consumer movement of the 1960s and 70s. Presented at the AEJMC Annual Conference in Washington, D.C., August 2001.

Alessandri, S.W. Determining fame under the Federal Trademark Dilution Act of 1995. Presented at the AEJMC Annual Meeting in Phoenix, AZ, August 2000. Presented at the AEJMC Southeast Regional Colloquium in Chapel Hill, NC, March 2000.

INVITED PRESENTATIONS & PANELS

One Brand, One Message: Brand Identity & IMC. Presented to 2nd year Global Business Management masters' students at Universita Cattolica del Sacro Cuore in Piacenza, Italy, October 7, 2019.

Business Communication. Presented to new full-time MBA students at D'Amore-McKim School of Business at Northeastern University, August 29, 2018.

Meet the Editors. Represented *Journal of Advertising Education* as Book Review Editor. Panel held at the Direct/Interactive Marketing Summit sponsored by the Direct Marketing Educational Foundation in Boston, October 1, 2011.

What You Don't Say Can Say a Lot. Presented to Suffolk University McNair Scholars, March 24, 2011.

Organizational Visual Identity. Presented to the Society of Professional Communicators, Jan. 12, 2010.

The process of publishing an academic book. Presented to CJN 177: Professional Communication, Sawyer Business School at Suffolk University, on Sept. 28, 2009.

The Communication Academic's Response to 'The Authentic Enterprise''. Moderated a panel at the Arthur W. Page Society/Tuck School of Business Academic Symposium, May 2008.

Intellectual property and marketing. Presented to the Mohawk Valley (NY) Advertising Club, Oct. 30, 2007.

Branding from the beginning. Presented to COM 701: Proseminar for Graduate Study, S.I. Newhouse School of Public Communications at Syracuse University, on Oct. 19, 2007.

Managing the corporate identity change process. Presented at the Arthur W. Page Society/Tuck School of Business Academic Symposium at Dartmouth College, on May 18, 2006.

Advertising and its future. Presented to TRF 235: Principles and Practices of Television, Radio & Film, S.I. Newhouse School of Public Communications at Syracuse University, on Nov. 21, 2005.

Corporate identity & reputation. Presented to PRL 206: Introduction to Public Relations, S.I. Newhouse School of Public Communications at Syracuse University, on Nov. 10, 2005.

Corporate brand identity. Presented to COM 701: Proseminar for Graduate Study, S.I. Newhouse School of Public Communications at Syracuse University, on Sept. 16, 2005.

Marketing ethics. Presented to COM 350: Communication Ethics, LeMoyne College, on Sept. 24, 2004.

Course management tools & the advertising curriculum. Presented at the "Teaching Advertising" Pre-Conference Workshop, AEJMC Annual Meeting, Toronto, Canada, August 2004.

Corporate image & reputation. Presented to PRL 605: Managerial Public Relations, S.I. Newhouse School of Public Communications at Syracuse University, on Nov. 3, 2003.

Corporate identity protection: Bother or business strategy? Presented to a cross-functional audience of Lowe & Partners Worldwide employees in New York, August 2003.

Preventing actual and potential infringement of corporate identity: Current practice in the field. Presented at the Sixth Conference on Corporate Communication at the University of Notre Dame, October 2002.

Projecting and protecting corporate identity on the Web: An exploration of companies of varying size. Presented at the "Food for Thought" research seminar in Chapel Hill, NC, on September 5, 2001.

Determining fame under the Federal Trademark Dilution Act of 1995. Presented at the "Food for Thought" research seminar in Chapel Hill, NC, on October 4, 2000.

PROFESSIONAL DEVELOPMENT



TikTok Marketing for Beginners – TikTok Ads Marketing Guide March 2020 Completed online training by Udemy



WhatsApp Marketing: The New Way to Reach Your Customers March 2020 Completed online training by Udemy



How to Use Snapchat for Business March 2020 Completed online training by Udemy



The Complete Pinterest Marketing Course for Beginners March 2020 Completed online training by Udemy



YouTube Marketing Course March 2020 Completed online training by HubSpot



How to Build an Advanced Twitter Strategy February 2020 Completed online training by HubSpot



Developing an End-to-End Instagram Marketing Strategy for Your Business November 2019 Completed online training by HubSpot

HubSpot Academy

Social Media Certification, November 2018 Completed online training for two-year social media certification

OCR Conference on Corporate Communication, Reputation & Accountability; New York, NY *Sponsored by New York University and Said School of Business of Oxford University,* December 2016 Attended an exclusive gathering of senior executives and academics focused on corporate communication.

Conference on Corporate Communication; South Bend, IN

University of Notre Dame, Mendoza College of Business, 2002 – 2010, 2013, 2017 (not held during 2007) Member of an annual conference that brings together academics and practitioners to discuss timely issues associated in the corporate communications industry.

Arthur W. Page Society/Tuck School of Business Academic Symposium; Hanover, NH

Dartmouth College, May 2006 – 2008 Participated in by-invitation-only seminar on the teaching and practice of corporate communications.

New Media Summit; New York, NY

Sponsored by Edelman Public Relations & PR Week, June 2007 Participated in by-invitation-only seminar on social media.

The Art & Craft of Discussion Leadership; Boston, MA

Harvard Business School, March 2007 Attended a two-day immersion seminar focused on helping professors improve their mastery of discussionfocused teaching and using the case teaching method.

Lowe & Partners Worldwide; New York, NY

Visiting Professor Program, Advertising Educational Foundation, 2003

During two-week program, observed the account planning team during the pitch process, critiqued application for APG/AAAA awards, and assisted in development of a research program for new corporate brand client.

CORPORATE/INDUSTRY EXPERIENCE

Wavetek Wandel Goltermann; Research Triangle Park, NC Marketing Communications Project Leader, 1998 – 1999

Liberty Communications Services, Liberty Mutual Group; Boston, MA Corporate & International Communications Project Manager, 1997 – 1998

Lifeline Systems; Framingham, MA *Editor, Corporate Communications, 1995 – 1997*

Community Newspaper Company; Needham, MA *Staff Writer*, 1994 – 1995

AWARDS & HONORS

- 2007 Awarded first prize in the Multicultural Studies Division of the Broadcast Education Association (BEA)
- 2007 Sponsored student for American Advertising Federation's "Most Promising Minority Student" program
- 2006 Nominated for Who's Who Among America's Teachers
- 2005 Awarded first prize in the Debut Category for the Sales & Management Division of the Broadcast Education Association (BEA)
- 2004 Awarded a Syracuse University grant (\$250) to purchase advertising and public relations data related to the Super Bowl
- 2004 Sponsored student for American Advertising Federation's "Most Promising Minority Student" program
- 2003 Awarded Syracuse University grant (\$850) for field research at the Smithsonian Institution's Advertising, Marketing, and Commercial Imagery Collections
- 2003 Selected for the Advertising Educational Foundation (AEF) Visiting Professor Program
- 2003 Received a scholarship from the Direct Marketing Educational Foundation to attend the DMEF Direct/Interactive Marketing Institute for Professors
- 2002 Received "Highly Commended Award" from <u>Corporate Communications: An International Journal</u> for writing one of the four best articles published in 2001
- 2002 Awarded \$440 Minnie S. and Eli A. Rubinstein Research Award for completion of doctoral dissertation
- 2001 Awarded UNC Intellectual Life Grant (\$220) for screening and discussion of "Behind the Scenes: Hollywood Goes Hypercommercial"
- 1999 Awarded 3-year Park Fellowship for doctoral study at the University of North Carolina at Chapel Hill
- 1998 Received Insurance Marketing Communications Association (IMCA) award for Liberty Mutual Legends of Golf tournament marketing collateral program

1995 Received Honorable Mention New England Press Association (NEPA) award for a co-authored story, "Shopping for God," published by the TAB Newspapers

PROFESSIONAL SERVICE

Member, Framingham State University Alumni Association Board of Directors, 2008 – 2013
Paper Chair, AEJMC Midwinter Conference, Media Management & Economics Division: 2002 – 2011
Board of Directors, Syracuse Ad Club: 2006 – 2008
Panelist, Syracuse Ad Club Monday Morning Quarterback Luncheon: 2006
Member, AEJMC Membership Committee: 2005-2007
Moderator, AEJMC Annual Conference, Advertising Division: 2005
Member, AEF Visiting Professor Program selection committee: 2004, 2006
Moderator, AEJMC Annual Conference, Media Management & Economics Division: 2002, 2005
Member, American Academy of Advertising Industry Relations Committee: 2000-2001

EDITORIAL BOARD MEMBERSHIPS

Corporate Communications: An International Journal Corporate Reputation Review Journal of Advertising Education Newspaper Research Journal

AD HOC REVIEWER

British Journal of Management European Journal of Marketing International Journal of Management Education International Marketing Review Journal of Brand Management Journal of Marketing Communications Journal of World Business Invited Expert Reviewer, King Fahd University of Petroleum & Minerals (Saudi Arabia)

CONFERENCE REVIEWER

American Academy of Advertising AEJMC Annual Conference, Advertising Division AEJMC Southeast Colloquium, Open Division AEJMC Annual Conference, Media Management & Economics Division

TEXTBOOK REVIEWER

McGraw-Hill: <u>Management: Leading & Collaborating in the Competitive World</u> by Bateman & Snell Thomson Business and Professional Publishing: <u>Communication in the Business Organization</u> Prentice-Hall: <u>Advertising: Principles and Practice</u>, 6th Ed. Sage Publications: <u>Focus Groups: A Practical Guide for Applied Research</u>, 4th Ed. Cengage Learning: <u>Strategic Business Communication: An Integrated, Ethical Approach</u> by Robyn Walker

COMMUNITY SERVICE

2016 - 2022Trustee, Medway Public Library (elected position)2021Judge, Lions Club Youth Speech Competition2022Judge, Miss Boston Scholarship Organization

SUFFOLK UNIVERSITY SERVICE

2020 -	ADPR Representative, College of Arts & Sciences Undergraduate Curriculum Committee
2017 -	ADPR Representative, College of Arts & Sciences Honors Faculty Advisory Council
2017 -	ADPR Department Honors Program Coordinator
2016	ADPR Department Tenure Standards Committee
2013 -	Coordinator, AEF "Inside Advertising" speakers program
2011 - 2012	CJN Living Learning Community Faculty Representative
2011	Faculty Reader, CJN 506 Honors Course Student Sabrina Vetter
2011	Founder & Judging Coordinator, RAMMY Strategic Communications category
2011	Research Mentor, McNair Scholar Antonia Darosa
2010-	Member, CAS Core Assessment Committee
2010	Member, McNair Scholars Program Advisory Board
2010 - 2011	Discussion Leader, CTE faculty book group
2010	Coordinator, Advertising Sequence assessment team
2009 - 2011	Coordinator, AEF "Inside Advertising" speakers program
2009	Member, Communication & Journalism Department Assessment Committee
2009	Judging Coordinator, RAMMY Public Service Announcement (PSA) category

UNIVERSITY OF NORTH CAROLINA & SYRACUSE UNIVERSITY SERVICE

2008	Future Professoriate Program Mentor
2007	PhD Program Adviser to first-year student Olga Zatepilina
2007	Member, Promotion Committee
2007	Assessment Subcommittee for Accreditation
2007	Internal Judge, Newhouse Mirror Awards
2007	PhD Program Curriculum Review Committee
2007	Newhouse School Library Committee
2007	Member, Advertising Department Chair Search Committee
2007	Member, Research Applications Working Group
2005 - 2006	Public Relations Department Strategic Plan Subcommittee
2005 - 2006	Development & Leaves Committee
2005	Judge, Whitman School of Management Capstone Business Plan Competition
2005	Syracuse University Communications Task Force
2005	Member, DIPA Communications Manager Search Committee
2004	Speaker, Remembrance Scholar Convocation
2004	Diversity Committee Media Literacy Day
2004	"Group Work" DVD segment: And Nobody Said Anything
2004	New Faculty Orientation
2003 - 2007	Coordinator, AEF "Inside Advertising" speakers program
2003 - 2006	Member, Faculty Social Committee
2003 - 2005	Member, Pan Am Flight 103 Remembrance Scholar Selection Committee
2002	Presenter, 65th Empire State School Press Association Conference
2002	Faculty Adviser, Syracuse University Ad Club
2001 - 2002	UNC School of Journalism & Mass Communication Research Roundtable
2001	Member, UNC Summer Reading Program Book Selection Committee
2000 - 2001	Discussion Leader, UNC Summer Reading

SYRACUSE UNIVERSITY THESES & DISSERTATIONS

- 2008 Member, Master's Thesis Committee, Claire McAuliffe
- 2008 Member, Master's Thesis Committee, Cathleen Ziegler
- 2008 Defense Chair, Master's Thesis, Lisa Wortman
- 2007 Member, Master's Thesis Committee, Chih-ping Wu
- 2007 Reader, Dissertation Committee, Kristin Lieb
- 2007 Defense Chair, Master's Thesis Committee, Janis Timian
- 2007 Member, Dissertation Committee, Doreen Kutufam
- 2006 Adviser, Senior Honors Thesis, Jacqueline Braun
- 2006 Adviser, Senior Honors Professional Project, Kristina Quinlavin
- 2006 Reader, Senior Honors Professional Project, Magdalene Misztal
- 2005 Adviser, Senior Honors Thesis, Kathleen Ruddy
- 2005 Adviser, Master's Thesis, Yu (Michelle) Yuan
- 2004 Member, Dissertation Committee, Pamela Morris
- 2004 Reader, Dissertation Committee, Suman Lee
- 2004 Reader, Dissertation Committee, Young Yoon

MEDIA MENTIONS, APPEARANCES & REVIEWS

2019	Positive review of <u>Brand Identity in Sport</u> by Morgan Murphy in <u>Journal of Advertising</u> <u>Education</u> , v. 23, no. 1, pp. 69-70.
11/2017	MBTA allows alcohol advertisements despite criticism. The Daily Free Press (Boston University).
8/2017	Executive Profile: Jessica DeVlieger's C-Space takes a customer-centric approach. <u>Boston Business Journal</u> .
9/2015	Using College's Names? They're Looking For You. <u>Marketplace</u> on National Public Radio.
2/2012	Super Bowl action moves beyond TV screen. <u>The Boston Globe</u> . Reprinted in <u>Columbus (Ohio)</u> <u>Dispatch</u> .
12/2011	Stories that sold: Hub ad agencies churned out compelling campaigns in 2011. The Boston Globe.
10/2011	Wrote "The College Column" for Local Town Pages.
9/2011	Wrote "The College Column" for Local Town Pages.
6/2011	Wrote "The College Column" for Local Town Pages.
5/2011	Wrote "The College Column" for Local Town Pages.
2/2011	<u>Visual Identity: Promoting and Protecting the Public Face of an Organization</u> chosen as <i>My favourite brand book</i> by External Affairs Advisor, Shell Oman. <u>Business Today</u> .
3/2010	Positive review of <u>Visual Identity: Promoting and Protecting the Public Face of an Organization</u> by Doug Newsom in <u>Public Relations Review</u> , v. 36, no. 1, pp. 95-96.
11/2009	SGA calls for universal professor evaluations. The Suffolk Journal
2/2008	Heart attack: SU grad, renowned researcher causes controversy over cholesterol drug commercial endorsements. <u>The</u> <u>Daily Orange</u>

- 10/2007 Gore glams up global warming fight again. <u>CNNMoney.com</u>
- 2/2007 NYC to launch condom line. The Daily Orange
- 2/2007 WSYR-TV (Syracuse ABC affiliate) (quoted on the "fine print" in national advertising)
- 10/2006 Don't blink or you might miss these radio ads. (Syracuse) Post-Standard
- 8/2006 Company news. (Syracuse) Post-Standard
- 7/2006 Newhouse students elevate awareness for AIDS Memorial. Syracuse Magazine
- 4/2006 Personality-based advertising distinguishes local icons. The Daily Orange
- 9/2005 News 10 Now (Central New York) (quoted on the purpose of Destiny USA advertising)
- 6/2005 WTVH radio news (Syracuse CBS affiliate) (quoted regarding marketing of flavored cigarettes)
- 6/2005 Smoking an apple won't keep doc away. (Syracuse) Post-Standard
- 6/2005 Ads after Paris: In the age of TiVO, expect more advertising to create its own buzz. <u>CNNMoney.com</u>
- 4/2005 Fumble! <u>A Line</u>
- 2/2005 Selling images. <u>The Philadelphia Inquirer</u>
 2/2005 MTV ad man reveals inner workings of marketing. <u>The Daily Orange</u>
- 2/2005 *Hour CNY*, PBS affiliate WCNY (Super Bowl advertising review)
- 4/2004
 New York Times v. Sullivan: The Supreme Court hints at First Amendment protection for advertising.

 Defining US: Civil Rights & the Press conference Web site.
- 2/2004 Super bowl ads fall short of high prices. The Daily Orange
- 1/2004 *Women's Voices*, PBS affiliate WCNY (Super Bowl advertising review)
- 8/2003 College comments: Take a professor's advice. (Memphis, TN) Lamplighter
- 6/2003 Hardee's fast-food chain fesses up to shortcomings. <u>Wall Street Journal</u>
- 1/2002 *Employees can be your best brand builders.* <u>Harvard Management Communication Letter</u> research excerpted in practitioner newsletter.
- 2001 *Graduate student finds MME division is great experience.* <u>MME Record: Newsletter of the Media</u> <u>Management & Economics Division of AEJMC</u>, no. 33.
- 10/2000 Park fellows seek to teach and learn. University (UNC) Gazette

COMPLETE LIST OF COURSES TAUGHT

Suffolk University - Department of Advertising, Public Relations & Social Media

ADPR 257 – Advertising ADPR 317 – Branding and Visual Identity ADPR 359 – Advertising Copy ADPR 437 – Advertising Campaigns ADPR 506 – Honors Seminar ADPR 717 – Branding and Visual Identity (graduate) ADPR 769 – Introduction to Marketing Communications (graduate) ADPR 779 – Integrated Marketing Communications (graduate) CI 153 – Branding and Visual Identity (Creativity & Innovation requirement)

Suffolk University – Department of Communication & Journalism

CJN 101 – Introduction to Communication CJN 177 – Professional Communication CJN 457 – Integrated Marketing Communications CJN 477 – Public Relations II CJN 691 – Special Topics: Promotion & Protection of Organizational Visual Identity (graduate) CJN 691 – Special Topics: Advertising Strategy (graduate) CJN 691 – Special Topics: Legal and Cultural Implications of Branding (graduate) CJN 702 – Marketing Communications Research (graduate) CJN 770 – Seminar in Advertising (graduate) SF 1111 – Logo Police: The Crime & Culture of Trademark Counterfeiting (Seminar for Freshmen)

Northeastern University - D'Amore-McKim School of Business

ACCT 6254 – Accounting Research and Communication MGMT 6212 – Managerial Communication

Syracuse University - S.I. Newhouse School of Public Communications

- COM 100 First Year Seminar
- ADV 206 Introduction to Advertising
- ADV 207 Advertising Strategies & Executions
- ADV 509 Advertising Research
- ADV 601 Introduction to Copy and Layout
- ADV 607 Writing for the Advertising Profession
- PRL 315 Public Relations Research
- PRL 497 Public Relations Management
- PRL 500 Corporate Branding

Syracuse University - Whitman School of Management

MAR 455 - Marketing Communications

University of North Carolina at Chapel Hill - Hussman School of Journalism

JOMC 170 - Principles of Advertising



July 26, 2022 Medway Planning & Economic Development Board Meeting

<u>Construction Services Estimate for 288</u> <u>Village Street</u>

 Construction services estimate dated 7-18-22 from Tetra Tech for \$13,194



288 Village Street PEDB Construction Administration Budget

Item No. ¹	Inspection	Visits	Hrs/Inspection ²	Rate	Total
1	Pre-Construction Meeting	1	4	\$172	\$688
2	Erosion Control/SWPPP Inspections/Review Reports	12	2	\$107	\$2,568
3	Subgrade/Staking/Rough Grading	1	4	\$107	\$428
4	Stormwater: Rain Garden	3	4	\$107	\$1,284
5	Stormwater: Subsurface System	3	4	\$107	\$1,284
6	Site Subbase Gravel/Fine Grading	1	4	\$107	\$428
7	Binder Course Paving	1	4	\$107	\$428
8	Top Course Paving	1	4	\$107	\$428
9	Landscape/Plantings	1	4	\$107	\$428
10	Punch List/Bond Estimate ³	2	6	\$107	\$1,284
11	As-Built Review ⁴	1	4	\$172	\$688
12	Field Changes/Change Orders	1	8	\$172	\$1,376
13	Meetings	6	1	\$172	\$1,032
14	Admin	1	3	\$74	\$222
	Subtotal				\$12,566
	Expenses			5.0%	\$628
	TOTAL				\$13,194

Notes:

¹ Each item includes site visit, inspection and written report and is based on current TT/Medway negotiated rates through June 2023.

² If installation schedule is longer than that assumed by engineer for any item above, or if additional inspections are required due to issues with the contract work, additional compensation will be required.

³ This item includes a substantial completion inspection, punch list memo and bond estimate provided to the town. It also includes one final inspection to verify that comments from the list have been addressed and one revision to the list/estimate if required.

⁴ This item includes review of as-built plans and review letter.

Date Approved by Medway PEDB_

Certified by:

Susan E. Affleck-Childs Medway PEDB Coordinator Date



July 26, 2022 Medway Planning & Economic Development Board Meeting

<u>Construction Services Estimate for</u> <u>BrightPath Child Care @ Medway</u> <u>Commons</u>

 Construction services estimate dated 7-18-22 from Tetra Tech for \$6,088



Bright Path Child Care Center PEDB Construction Administration Budget July 18, 2022

Item No. ¹	Inspection	Visits	Hrs/Inspection ²	Rate	Total
1	Pre-Construction Meeting	1	4	\$172	\$688
2	Stormwater: Subsurface Underdrain System	1	4	\$107	\$428
3	Site Subbase Gravel/Fine Grading	1	4	\$107	\$428
4	Binder Course Paving	1	4	\$107	\$428
5	Top Course Paving	1	4	\$107	\$428
6	Landscape/Plantings	1	4	\$107	\$428
7	Punch List/Bond Estimate ³	2	4	\$107	\$856
8	As-Built Review ⁴	1	4	\$172	\$688
9	Field Changes/Change Orders	1	4	\$172	\$688
10	Meetings	3	1	\$172	\$516
11	Admin	1	3	\$74	\$222
	Subtotal				\$5,798
	Expenses			5.0%	\$290
	TOTAL				\$6,088

Notes:

¹ Each item includes site visit, inspection and written report and is based on current TT/Medway negotiated rates through June 2023.

² If installation schedule is longer than that assumed by engineer for any item above, or if additional inspections are required due to issues with the contract work, additional compensation will be required.

³ This item includes a substantial completion inspection, punch list memo and bond estimate provided to the town. It also includes one final inspection to verify that comments from the list have been addressed and one revision to the list/estimate if required.

⁴ This item includes review of as-built plans and review letter.

Date Approved by Medway PEDB_____

Certified by:

Susan E. Affleck-Childs Medway PEDB Coordinator Date



July 26, 2022 Medway Planning & Economic Development Board Meeting

Petition to the ZBA for an Accessory Family Dwelling Unit Special Permit for 201 Village Street

• Petition for an AFDU special permit to be included in the existing building. ZBA hearing is August 3, 2022



TOWN OF MEDWAY

ZONING BOARD OF APPEALS

155 Village Street Medway MA 02053 Phone: 508-321-4915 |zoning@townofmedway.org www.townofmedway.org/zoning-board-appeal

NOTE: THE APPLICATION WILL NOT BE CONSIDERED "COMPLETE" UNLESS ALL NECESSARY DOCUMENTS, FEES, & WAIVER REQUESTS ARE SUBMITTED. A GENERAL APPLICATION FORM MUST BE COMPLETED FOR ALL APPLICATIONS.

TO BE COMPLETED BY THE APPLICANT

Applicant/Petitioner(s):	Application Request(s):		
Reardon Family Irrevocable Trust			
Edward C. Reardon, Jr., Trustee			
Property Owner(s): Reardon Family Irrevocable Trust	Appeal		
Edward C. Reardon, Jr., Trustee	Special Permit	\checkmark	
Site Address(es): 201 Village Street, Medway, MA 02053	Variance		
	Determination/Finding		
	Extension (provide previous case #)		
	Modification (provide previous case #)		
Parcel ID(s): 60-106	Withdrawal		
	Comprehensive Permit		
Zoning District(s): ARII			
Registry of Deeds Book & Page No. and Date or Land Co Book 35342, Page 291	urt Certificate No. and Date of Current Title:		

TOWN CLERK STAMP

TO BE COMPLETED BY STAFF:

Check No.: Date of Complete Submittal: Comments:

GENERAL APPLICATION FORM

Case Number: _

APPLICANT/PETITIONER INFORMATION

The owner(s) of the land must be included as an applicant, even if not the proponent. Persons or entities other than the owner may also serve as coapplicants in addition to the owner(s), however, in each instance, such person shall provide sufficient written evidence of authority to act on behalf of the owner(s). For legal entities such as corporations, LLCs, etc., list the type and legal status of ownership, the name of the trustees/officer members, their affiliation, and contact information. Please provide attachment for information if necessary.

Applicant/Petitioner(s):	Phone:			
Reardon Family Irrevocable Trust	508-533-8914			
Edward C. Reardon Jr., Trustee	Email:			
Address: 201 Village Street, Medway, MA 02053				
	:			
Attorney/Engineer/Representative(s):	Phone:			
Stephen J. Kenney, Esq.	508-533-6711			
Stephen J. Kenney, Esq.	Email: sjk@kenney-law.com			
Address: 181 Village Street, Medway, MA 02053				
Owner(s):	Phone:			
Reardon Family Irrevocable Trust	508-533-8914			
Edward C. Reardon, Jr., Trustee	Email:			
Mailing Address: 201 Village Street, Medway, MA 02053				

Please list name and address of other parties with financial interest in this property (use attachment if necessary):

None

Please disclose any relationship, past or present, interested parties may have with members of the ZBA:

None

I hereby certify that the information on this application and plans submitted herewith are correct, and that the application complies with all applicable provisions of Statutes, Regulations, and Bylaws to the best of my knowledge, and that all testimony to be given by me during the Zoning Board of Appeals public hearing associated with this application are true to the best of my knowledge and belief

9/h Signature of Applicant/P Date presentative

Signature Property Owner (if different than Applicant/Petitioner)

Received by: ____

GENERAL APPLICATION FORM

Case Number: _____

APPLICATION INFORMATION

YES NO

		YES NO
Applicable Section(s) of the Zoning Bylaw: 3.4, Table 1, 8.2	Requesting Waivers?	$\bigcirc \bigcirc$
	Does the proposed use conform to the current Zoning Bylaw?	$\bigcirc \bigcirc$
Present Use of Property: Commercial building as office space and	Has the applicant applied for and/or been refused a building permit?	$\bigcirc \odot$
1 bedroom apartment	Is the property or are the buildings/ structures pre-existing nonconforming?	$\bigcirc\bigcirc$
Proposed Use of Property: Single Family with Accessory Family Dwelling Unit	Is the proposal subject to approval by the BOH or BOS?	$\bigcirc \odot$
	Is the proposal subject to approval by the Conservation Commission?	$\bigcirc \odot$
Date Lot was created: 1960	Is the property located in the Floodplain District?	$\bigcirc \odot$
Date Building was erected: 1960	Is the property located in the Groundwater Protection District?	$\bigcirc \odot$
Does the property meet the intent of the Design Review Guidelines? Yes	Is the property located in a designated Historic District or is it designated as a Historic Landmark?	\bigcirc \bigcirc

Describe Application Request:

Remodel building into a 1 family residence wiht an Accessory Family Dwelling Unit. Pursuant to Special Permit and, if necessary, request variances on a preexisting non-conforming lot for Area and Frontage.

Ň.

FILL IN THE APPLICABLE DATA BELOW

1

Required Data	Bylaw Requirement	Existing	Proposed
A. Use		Office Building	2 Family Residence
B. Dwelling Units	2 by Special Permit	1	2
C. Lot Size	30,000 S.F.	9,148	9,148
D. Lot Frontage	150'	100	100
E. Front Setback	35'	38.3	38.3
F. Side Setback	15'	27.3	27.3
G. Side Setback	15'	36.3	36.3
H. Rear Setback	15'	29.3	29.3
I. Lot Coverage	30%	N/A	N/A
J. Height	35'	2 story cape 30'	2 story cape 30'
K. Parking Spaces	N/A	11	4
L. Other			

FOR TOWN HALL USE ONLY

To be filled out by the Building Commissioner:

Date Reviewed

Medway Building Commissioner

Comments:

After completing this form, please submit an electronic copy to <u>zoning@townofmedway.org</u> and 10 paper copies to the Community & Economic Development Department.

GENERAL SPECIAL PERMIT FORM Case Number: _____



100

TOWN OF MEDWAY ZONING BOARD OF APPEALS

155 Village Street Medway MA 02053 Phone: 508-321-4915 |zoning@townofmedway.org www.townofmedway.org/zoning-board-appeal

NOTE: THE APPLICATION WILL NOT BE CONSIDERED "COMPLETE" UNLESS ALL NECESSARY DOCUMENTS, FEES, & WAIVER REQUESTS ARE SUBMITTED. A GENERAL APPLICATION FORM MUST BE COMPLETED FOR ALL APPLICATIONS.

TO BE COMPLETED BY THE APPLICANT

Please provide evidence regarding how the Special Permit Decision Criteria, outlined below, is met. Please write "N/A" if you believe any of the Criteria is Not Applicable. Provide attachments if necessary.

1. The proposed site is an appropriate location for the proposed use:

See Attached

2. Adequate and appropriate facilities will be provided for the operation of the proposed use:

See Attached

3. The proposed use as developed will not create a hazard to abutters, vehicles, pedestrians, or the environment:

See Attached

4. The proposed use will not cause undue traffic congestion or conflicts in the immediate area:

See Attached

5. The proposed use will not be detrimental to the adjoining properties due to lighting, flooding, odors, dust, noise, vibration, refuse materials, or other undesirable visual, site, or operational attributes of the proposed use:

See Attached

6. The proposed use as developed will not adversely affect the surrounding neighborhood or significantly alter the character of the zoning district:

See Attached

GENERAL SPECIAL PERMIT FORM

Case Number:

7. The proposed use is in harmony with the general purposed and intent of this Zoning Bylaw:

See Attached

8. The proposed use is consistent with the goals of the Medway Master Plan:

lop

See Attached

9. The proposed use will not be detrimental to the public good:

See Attached

Signature of Applicant/Petitionerlor Representative

1-27-22

Date

- 1. The proposed site is in an appropriate location for the proposed used as the proposed site is within a residential zoning district surrounded by single-family and two-family residences. The proposed site and lot are pre-existing non-conforming lot, and the site has been used as an insurance business office and an apartment for in excess of 30 years. The Petitioner wishes to convert the insurance office and the apartment to a single-family residence with Accessory Family Dwelling Unit.
- 2. Adequate and appropriate facilities will be provided for the operation of proposed use. The proposed use will have all that is required to operate it and use it as a one-family residence with Accessory Family Dwelling Unit. Most of the required facilities are already present but there have been some interior renovations done in order to establish the one-family residence with Accessory Family Dwelling Unit.
- 3. The proposed use as developed will not create a hazard to abutters, vehicles, pedestrians, or the environment as the proposed use will be more in conformity with the surrounding zoning district, will create less traffic than the insurance business and will create less of a hazard to abutters, vehicles, and pedestrians.
- 4. The proposed use will not cause undue traffic congestion or conflicts in the immediate area as the proposed use as a one-family residence with Accessory Family Dwelling Unit will cause less traffic congestion then the use as an insurance office.
- 5. The proposed use will not be detrimental to the adjoining properties due to lighting, flooding, odors, dust, noise, vibration, refuse materials or other undesirable visual site or operational attributes as the proposed use will be going from a use of an office building and apartment to a one-family residence with Accessory Family Dwelling Unit, and will be less intrusive as to all the previously listed issues.
- 6. The proposed use as developed will not adversely affect the surrounding neighborhood or significantly alter the character of the zoning district as the proposed use will be more in conformity with the zoning district and a residential district and in conformity with the surrounding neighborhood which consist of single-family and two-family residences.
- 7. The proposed use is in harmony with the general purpose and intention to the zoning bylaw, with the intent of the Zoning By-Law in this particular zoning district is to allow residential single-family and two-family structures, and the intent is converting this office building and apartment to a one-family residence with Accessory Family Dwelling Unit.
- 8. The proposed use is consistent with the goals of the Medway Master Plan as the proposed use is a one-family residence with Accessory Family Dwelling Unit which will foster the Medway Master Plan as it will provide more and different kinds of residences.
- 9. The proposed use will not be detrimental to the public good as it will provide residences in a residential district and will remove an insurance office from the residential district and the pre-existing non-conforming use.



TOWN OF MEDWAY ZONING BOARD OF APPEALS

155 Village Street Medway, MA 02053 Phone: 508-321-4915 |zoning@townofmedway.org www.townofmedway.org/zoning-board-appeal

NOTE: THE APPLICATION WILL NOT BE CONSIDERED "COMPLETE" UNLESS ALL NECESSARY DOCUMENTS, FEES, & WAIVER REQUESTS ARE SUBMITTED. A GENERAL APPLICATION FORM MUST BE COMPLETED FOR ALL APPLICATIONS. A GENERAL SPECIAL PERMIT APPLICATION IS REQUIRED IN ADDITION TO THIS FORM FOR AFDU'S.

TO BE COMPLETED BY THE APPLICANT

Please provide evidence regarding how the Special Permit Decision Criteria, outlined below, is met. Please write "N/A" if you believe any of the Criteria is Not Applicable. Provide attachments if necessary.

 An accessory family dwelling unit shall be located within: a. a detached single-family dwelling (principal dwelling unit); or b. an addition to a detached single-family dwelling principal dwelling unit); or c. a separate structure on the same premises as a detached single-family dwelling (principal
dwelling unit).
See Attached
2. There shall be no more than one accessory family dwelling unit associated with a detached single-
family dwelling (principal dwelling unit).
See Attached
3. No accessory family dwelling unit shall have more than one bedroom, unless a second bedroom is
authorized by the Board of Appeals pursuant to 8.2.C. 8.
See Attached
4. An accessory family dwelling unit shall not exceed 800 sq. ft. of gross floor area unless:
a. there is an existing detached accessory structure larger than 800 sq. ft. located on the same lot
as a detached single-family dwelling (principal dwelling unit) and the Board of Appeals determines
its use as an accessory family dwelling unit is in character with the neighborhood; or
b. authorized by the Board of Appeals pursuant to 8.2.C.8.
See Attached
5. There shall be at least one designated off-street parking space for the accessory family dwelling
unit in addition to parking for the occupants of the detached single-family (principal dwelling unit).
The off-street parking space shall be located in a garage or in the driveway, and shall have
vehicular access to the driveway. The location, quantity and adequacy of parking for the accessory

family dwelling unit shall be reviewed by the Board of Appeals to ensure its location and appearance are in keeping with the residential character of the neighborhood. See Attached

6. Occupancy of the single-family dwelling (principal dwelling unit) and accessory family dwelling unit shall be restricted as follows:

a. The owners of the property shall reside in one of the units as their primary residence, except for bona fide temporary absences due to employment, hospitalization, medical care, vacation, military service, or other comparable absences which would not negate the primary residency standard. For purposes of this Section, "owners" shall mean one or more individuals who hold legal or beneficial title to the premises.

b. The accessory dwelling unit and the detached single-family dwelling (principal dwelling unit) shall be occupied by any one or more of the following:

i. the owner(s) of the property;

ii. the owner's family by blood, marriage, adoption, foster care or guardianship;

iii. an unrelated caregiver for an occupant of the detached single-family dwelling or the accessory family dwelling unit, who is an elder, a person with a disability, handicap or chronic disease/medical condition, or a child.

See Attached

7. An accessory family dwelling unit shall be designed so as to preserve the appearance of the singlefamily dwelling (principal dwelling unit) and be compatible with the residential character of the neighborhood. Any new separate outside entrance serving an accessory family dwelling unit shall be located on the side or in the rear of the building.

See Attached

In order to encourage the development of housing units for disabled and handicapped individuals and persons with limited mobility or a chronic medical condition, the Board of Appeals may allow reasonable deviations from the Basic Requirements where necessary to install features in the accessory family dwelling unit to facilitate the care of, and access and mobility for, disabled and handicapped individuals and persons with limited mobility or a chronic medical condition. This may include, but is not limited to, authorizing a second bedroom in the accessory family dwelling unit.

If you are seeking relief under this provision, please specify the relief sought and the reasons supporting your request.

See Attached

Signature of Applicant/Petitioner or Representative

Received by:

Date

Date:

6-27-22

- 1. The accessory family dwelling unit is to be located within a detached single-family dwelling which has been used for many years as an apartment to an insurance business which has been on the primary floor.
- 2. There will not be more than one accessory family dwelling unit associated with the detached single-family dwelling. The accessory family dwelling unit is located in the basement area of the single-family dwelling.
- 3. There will not be more than one bedroom in the accessory family dwelling unit unless a second bedroom is authorized by the Zoning Board of Appeals. At the present time there is one bedroom in the accessory family dwelling unit.
- 4. The accessory family dwelling unit consist of less than 800 sq. ft. of gross floor area and there shall not be more than 800 sq. ft. of gross area in the accessory family dwelling unit unless it is authorized by the Zoning Board of Appeals.
- 5. There is at lease one designated off-street parking space for the accessory family dwelling unit in the driveway of the subject property. This is in addition to parking for the occupants of the detached single-family dwelling unit.
- 6. Occupancy of the single-family dwelling unit and the accessory family dwelling unit shall be consistent with the requirement of Section 8.2 as the owners of the property shall reside in one of the units as their primary residence and the accessory family dwelling unit shall be occupied by anyone or more of the following: owner of the property, the owner's family by blood, marriage, adoption, foster care or guardianship, or an unrelated care giving for an occupant of the detached single-family dwelling or the accessory family dwelling unit who is an elder, a person with a disability, handicap or chronic disease/medical condition, or a child.
- 7. Single-family dwelling unit with the accessory family dwelling unit is designed so is to preserve the appearance of a single-family dwelling and is compatible with the residential character of the neighborhood. The outside entrance servicing the accessory family dwelling unit is located in the rear of the building.

Unofficial Property Record Card - Medway, MA

General Property Data

Parcel ID 60-106 Prior Parcel ID 1B -87-Property Owner REARDON TRUSTEE ANN REARDON FAMILY IRREVOCABLE TRS Mailing Address 6 ELYSE RD

City MANSFIELD

Mailing State MA Zip 02048 ParcelZoning ARII Account Number 1B-87

Property Location 201 VILLAGE ST Property Use COMM/RES Most Recent Sale Date 8/7/2017 Legal Reference 35342-291 Grantor E & A NOMINEE TRUST, Sale Price 1

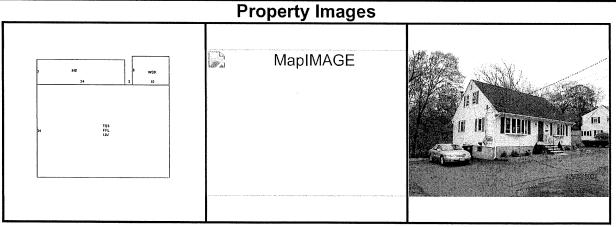
Land Area 0.210 acres

Current Property Assessment

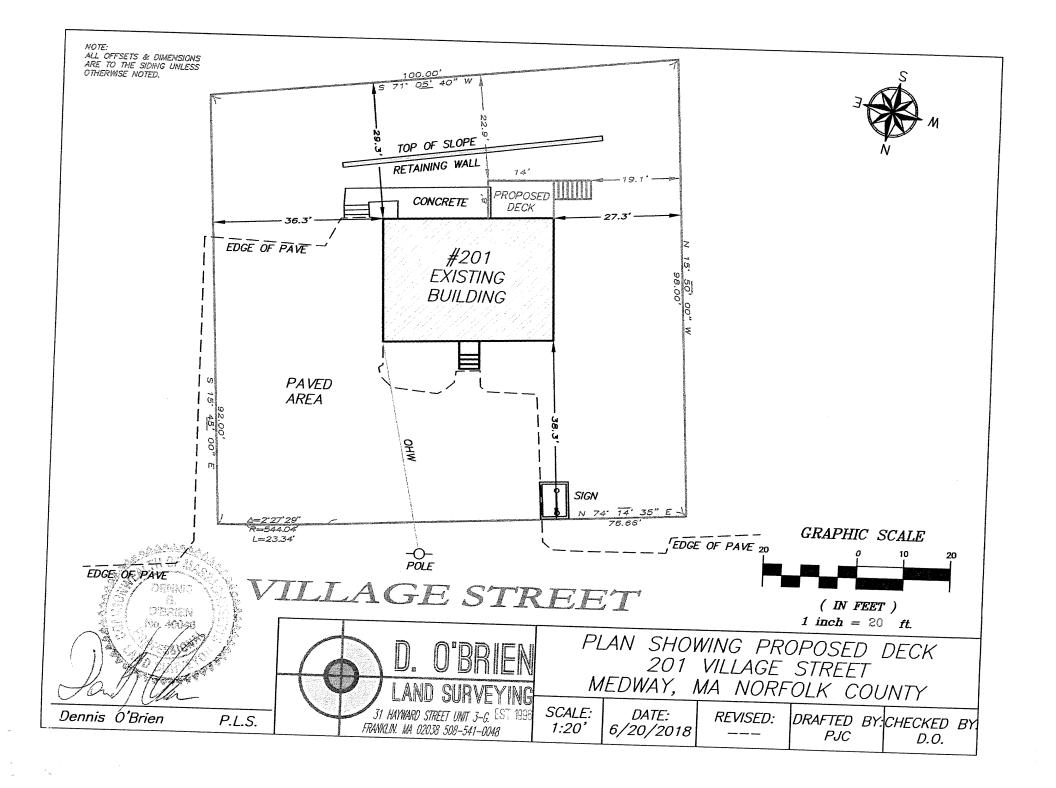
Xtra Features 3,700 Value Card 1 Value Building Value 130,900 Land Value 105,400 Total Value 240,000 **Building Description Building Style OFFICE** Foundation Type WALKOUT BMT **Flooring Type Carpet** # of Living Units 4 Frame Type Wood **Basement Floor Carpet** Year Built 1960 Roof Structure GABLE Heating Type FORCED H/AIR **Building Grade Average Roof Cover ASPHALT SHNG Heating Fuel GAS** Building Condition Average Siding Vinyl Air Conditioning 100% Finished Area (SF) 2527.20001 Interior Walls PANELED # of Bsmt Garages 0 Number Rooms 3 # of Bedrooms 1 # of Full Baths 1 # of 3/4 Baths 0 # of 1/2 Baths 2 # of Other Fixtures 2 Legal Description

Narrative Description of Property

This property contains 0.210 acres of land mainly classified as COMM/RES with a(n) OFFICE style building, built about 1960, having Vinyl exterior and ASPHALT SHNG roof cover, with 4 unit(s), 3 room(s), 1 bedroom(s), 1 bath(s), 2 half bath(s).



Disclaimer: This information is believed to be correct but is subject to change and is not warranteed.





July 26, 2022 Medway Planning & Economic Development Board Meeting

Construction Reports

William Wallace Village – 274 Village Street

- Field Report No. 32 Tetra Tech, 5-12-2022
- Field Report No. 33 Tetra Tech, 6-21-2022 Salmon Health
 - Field Report No. 79 Tetra Tech, 6-21-2022
 - Field Report No. 80 Tetra Tech, 7-06-2022
 - Field Report No. 81 Tetra Tech, 7-12-2022

21 Trotter Drive

• Field Report No. 20 – Tetra Tech, 7-13-2022

Tetra Tech 100 Nickerson Road, Suite 200 Marlborough, MA 01752	FIELD REPORT		
Project		Date	Report No.
William Wallace Village		05/12/2022	32
Location		Project No.	Sheet 1 of
Village Street, Medway, MA		143-21583-19012	2
Contractor		Weather	Temperature
M. Phillips Industries (Site Contractor)		A.M. CLEAR	A.M. 65°F
Larry Rucci (Developer)		P.M. CLEAR	Р.М. 65°F
FIELD OBSERVATIONS		•	

On Thursday, May 12, 2022, Tucker D Paradee, EIT from Tetra Tech (TT) visited the project location to inspect the current condition of the site and monitor construction progress. The following report outlines observations made during the site visit.

1. OBSERVATIONS

- A. Site Conditions/Erosion Controls: Dry and firm surface conditions throughout the site. Entrance to Village St. is clean with no signs of sediment. Silt fence barrier (SFB) and compost filter sock have been installed around the entire perimeter of the site. Sections of SFB have fallen off grade stakes along the southeast property boundary and require repair. Additional compost filter sock has been placed along the eastern property line adjacent to Bedelia Lane, as well as around the two at-grade infiltration basins, and appears to be in good condition. Temporary sediment basin has been removed in the northeast region of the site for the foundation of Units 7 and 8.
- B. Contractor not on-site during inspection. Contractor has installed roof drain manifold along the front and back of Units 10 through 12. A crushed stone bed is placed prior to HDPE pipe and crushed stone is used as backfill. Contractor using 4-inch HDPE from downspouts that enlarge to 8-inch HDPE per plan. Contractor to continue installing pipe for perimeter drains to discharge to Infiltration Basin 1.
- C. Contractor continues vertical construction for proposed Units 3 and 4 and Units 5 and 6, along with Units 10, 11, and 12.

CONTRACTOR'S FORCE AND EQUIPMENT				WORK DO	NE BY OTHERS			
Sup't		Bulldozer		Asphalt Paver		Dept. or Company	Description of Work	
Foreman	2	Backhoe		Asphalt Reclaimer				
Laborers	1	Loader		Vib. Roller				
Drivers		Rubber Tire Backhoe/Loader		Static Roller				
Oper. Engr.		Skid Steer		Vib. Walk Comp.				
Carpenters		Hoeram		Compressor				
Masons		Excavator		Jack Hammer				
Iron Workers		Mini-Excavator	1	Power Saw				
Electricians		Grader		Conc. Vib.				
Flagpersons		Crane		Tack Truck				
Surveyors		Scraper		Man Lift				
Roofers		Conc. Mixer		Skidder		OFFICIAL VISITORS TO JOB		
Mechanical/HVAC		Conc. Truck		Compact Track Loader				
		Conc. Pump Truck		Porta-John	2			
		Pickup Truck	1	Dumpster (15 Yard)				
		Tri-Axle Dump Truck						
		Trailer Dump Truck						
						RESIDENT REPR	RESENTATIVE FORCE	
Contractor's Hours of Work: 7:00 A.M. to 6:00 P.M.				Name	Time on-site			
						Brad M. Picard, EIT	11:30 A.M. – 12:00 P.M	



Project	Date	Report No.
William Wallace Village	05/12/2022	32
Location	Project No.	Sheet 2 of
Village Street, Medway, MA	143-21583-19012	2

FIELD OBSERVATIONS CONTINUED

2. <u>SCHEDULE</u>

- A. Gas company to finish connecting installed line to each unit.
- B. TT will maintain communication with contractor and will inspect the site on an as-need basis.

3. NEW ACTION ITEMS

A. Repair fallen sections of SFB along the southeast portion of the site.

4. PREVIOUS OPEN ACTION ITEMS

A. N/A

5. MATERIALS DELIVERED TO SITE SINCE LAST INSPECTION

A. N/A

Tetra Tech 100 Nickerson Road, Suite 200 Marlborough, MA 01752	FIELD REPORT		
Project		Date	Report No.
William Wallace Village		06/21/2022	33
Location		Project No.	Sheet 1 of
Village Street, Medway, MA		143-21583-19012	2
Contractor		Weather	Temperature
M. Phillips Industries (Site Contractor)		A.M.	A.M.
Larry Rucci (Developer)		P.M. CLEAR	р.м. 72°F
FIFLD OBSERVATIONS			÷

On Tuesday, June 21, 2022, Tucker D Paradee, EIT from Tetra Tech (TT) visited the project location to inspect the current condition of the site and monitor construction progress. The following report outlines observations made during the site visit.

1. OBSERVATIONS

- A. Site Conditions/Erosion Controls: Dry and firm surface conditions throughout the site. Entrance to Village St. is clean with no signs of sediment. Silt fence barrier (SFB) and compost filter sock have been installed around the entire perimeter of the site. Sections of SFB have fallen off grade stakes along the southeast and southwest property boundary and require repair. Additional compost filter sock has been placed along the eastern property line adjacent to Bedelia Lane, as well as around the two at-grade infiltration basins, and appears to be in good condition. Temporary sediment basin has been removed in the northeast region of the site for the foundation of Units 7 and 8.
- B. Developer not on-site during inspection. Vertical construction continues for proposed Units 3 and 4 and Units 5 and 6, along with Units 10, 11, and 12.

	ONTRA	CTOR'S FORCE AN	ID EQ	UIPMENT		WORK DON	E BY OTHERS	
Sup't		Bulldozer		Asphalt Paver		Dept. or Company	Description of Work	
Foreman	2	Backhoe		Asphalt Reclaimer				
Laborers	1	Loader		Vib. Roller				
Drivers		Rubber Tire Backhoe/Loader		Static Roller				
Oper. Engr.		Skid Steer		Vib. Walk Comp.				
Carpenters		Hoeram		Compressor				
Masons		Excavator		Jack Hammer				
Iron Workers		Mini-Excavator	1	Power Saw				
Electricians		Grader		Conc. Vib.				
Flagpersons		Crane		Tack Truck				
Surveyors		Scraper		Man Lift				
Roofers		Conc. Mixer		Skidder		OFFICIAL VISITORS TO JOB		
Mechanical/HVAC		Conc. Truck		Compact Track Loader				
		Conc. Pump Truck		Porta-John	2			
		Pickup Truck	1	Dumpster (15 Yard)				
		Tri-Axle Dump Truck						
		Trailer Dump Truck						
						RESIDENT REPRE	SENTATIVE FORCE	
Contractor's Hours of Work: 7:00 A.M. to 6:00 P.M.						Name	Time on-site	
Contractor S Flours OF W						Tucker D. Paradee, EIT	4:20 P.M. – 4:45 P.M.	



Project	Date	Report No.
William Wallace Village	06/21/2022	33
Location	Project No.	Sheet 2 of
Village Street, Medway, MA	143-21583-19012	2

FIELD OBSERVATIONS CONTINUED

2. <u>SCHEDULE</u>

- A. Gas company to finish connecting installed line to each unit.
- B. TT will maintain communication with contractor and will inspect the site on an as-need basis.

3. NEW ACTION ITEMS

A. N/A

4. PREVIOUS OPEN ACTION ITEMS

A. Repair fallen sections of SFB along the southeast portion of the site.

5. MATERIALS DELIVERED TO SITE SINCE LAST INSPECTION

A. N/A

Tetra Tech 100 Nickerson Road, Suite 200 Marlborough, MA 01752	FIELD REPORT	-	
Project		Date	Report No.
Salmon Health and Retirement Community	(The Willows)	06/21/2022	79
Location		Project No.	Sheet 1 of
Village Street, Medway, MA		143-21583-15011	2
Contractor		Weather	Temperature
Black Brook Realty (Developer)		A.M.	A.M.
C.D Riley (Site Contractor)		P.M. CLEAR	р.м. 72°F
FIELD OBSERVATIONS			

On Tuesday, June 21, 2022, Tucker D. Paradee, EIT from Tetra Tech (TT) visited the project location to inspect the current condition of the site and monitor construction progress. The report outlines observations made during the site visit.

1. OBSERVATIONS

- A. General site conditions: Current construction efforts are being done on the proposed cottages along Waterside Run. The eastern portion of the site along Waterside Run appears to have firm and dry ground conditions. Silt fence barrier (SFB) and filter socks have been installed along the western limit of Waterside Run and appear to be in good condition. At-grade Basin 3 is dry and appears to be functioning as designed. Stockpiled construction material is present throughout the active work zone of the site.
- B. TT visited the site to monitor current construction conditions and progress. Upon arrival, vertical construction continues for Units 2 through 16 along Waterside Run. The foundation for Unit 18 has been poured and backfilled completely. Various sections of the previously installed cape code berm (CCB) have been damaged during construction and require replacement upon completion of the cottages.

CONTRACTOR'S FORCE AND EQUIPMENT			WORK DON	WORK DONE BY OTHERS	
Sup't	1	Bulldozer	Asphalt Paver	Dept. or Company	Description of Work
Foreman	1	Backhoe	Asphalt Reclaimer		
Laborers	5+	Loader	Vib. Roller		
Drivers	5+	Rubber Tire Backhoe/Loader	Static Roller		
Oper. Engr.	2	Skid Steer	Vib. Walk Comp.		
Carpenters		Hoeram	Compressor		
Masons		Excavator	Jack Hammer		
Iron Workers		Grader	Power Saw		
Electricians		Crane	Conc. Vib.		
Flagpersons		Scraper	Tack Truck		
Surveyors		Conc. Mixer	Man Lift		
		Conc. Truck	Skidder	OFFICIAL VISITORS TO JOB	
		Conc. Pump Truck	Compact Track Loader		
		Pickup Truck	Water Truck		
		Tri-Axle Dump Truck	Crane Truck		
		Trailer Dump Truck	Sweeper		
		Art. Dump Truck	BOMAG Remote Comp.		
Police Details: N/A				RESIDENT REPRE	ESENTATIVE FORCI
Contractor's Hours of W	/ork: 7:00) A.M. to 3:30 P.M.		Name	Time on-site
				Tucker D. Paradee, EIT	4:00 P.M. – 4:20 P.M.

Project	Date	Report No.
Salmon Health and Retirement Community	06/21/2022	79
Location	Project No.	Sheet 2 of
Village Street, Medway, MA	143-21583-15011	2

FIELD OBSERVATIONS CONTINUED

2. <u>SCHEDULE</u>

- A. Vertical construction to continue for Cottages along Waterside Run.
- B. TT will maintain communication with contractor and will inspect the site as construction progresses.

3. NEW ACTION ITEMS

A. Repair damaged CCB along Waterside Run upon completion of the cottages.

4. PREVIOUS OPEN ACTION ITEMS

- A. Provide outstanding SWPPP inspection reports to Conservation.
- B. Developer to confirm Basin 3's maintenance drawdown outlet is closed to ensure the basin is operating as designed.

5. MATERIALS DELIVERED TO SITE SINCE LAST INSPECTION

A. N/A

Tetra Tech 100 Nickerson Road, Suite 200 Marlborough, MA 01752	FIELD	REPORT		
Project			Date	Report No.
Salmon Health and Retirement Community	(The Willows)		07/06/2022	80
Location			Project No.	Sheet 1 of
Village Street, Medway, MA			143-21583-15011	2
Contractor			Weather	Temperature
Black Brook Realty (Developer)			A.M.	A.M.
C.D Riley (Site Contractor)			P.M. CLEAR	Р.М. 77°F
FIELD OBSERVATIONS				

On Wednesday, July 6, 2022, Tucker D. Paradee, EIT from Tetra Tech (TT) visited the project location with Ariel Powers of Medway Conservation Commission (ConCom) to inspect the current condition of the site and monitor construction progress. The report outlines observations made during the site visit.

1. OBSERVATIONS

- A. General site conditions: Current construction efforts are being done on the proposed cottages along Waterside Run. The eastern portion of the site along Waterside Run appears to have firm and dry ground conditions. Silt fence barrier (SFB) and filter socks have been installed along the western limit of Waterside Run and appear to be in good condition. Various sections of SFB located directly behind the cottages are observed to be damaged and require maintenance. At-grade Basin 3 is dry and appears to be functioning as designed. Stockpiled construction material is present throughout the active work zone of the site.
- B. TT visited the site to monitor current construction conditions and progress. Upon arrival, vertical construction continues for Units 2 through 16 along Waterside Run. The foundation for Unit 18 has been poured and backfilled completely. Various sections of the previously installed cape cod berm (CCB) have been damaged during construction and require repair upon completion of the cottages.

CC	ONTRA	CTOR'S FORCE AND	EQUIPMENT	WORK DON	E BY OTHERS
Sup't	1	Bulldozer	Asphalt Paver	Dept. or Company	Description of Work
Foreman	1	Backhoe	Asphalt Reclaimer		
Laborers	5+	Loader	Vib. Roller		
Drivers	5+	Rubber Tire Backhoe/Loader	Static Roller		
Oper. Engr.	2	Skid Steer	Vib. Walk Comp.		
Carpenters		Hoeram	Compressor		
Masons		Excavator	Jack Hammer		
Iron Workers		Grader	Power Saw		
Electricians		Crane	Conc. Vib.		
Flagpersons		Scraper	Tack Truck		
Surveyors		Conc. Mixer	Man Lift		
		Conc. Truck	Skidder	OFFICIAL VIS	SITORS TO JOB
		Conc. Pump Truck	Compact Track Loader		
		Pickup Truck	Water Truck		
		Tri-Axle Dump Truck	Crane Truck		
		Trailer Dump Truck	Sweeper		
		Art. Dump Truck	BOMAG Remote Comp.		
Police Details: N/A				RESIDENT REPRE	ESENTATIVE FORCI
Contractor's Hours of Work: 7:00 A.M. to 3:30 P.M.		Name	Time on-site		
				Tucker D. Paradee, EIT	11:30 A.M 12:30 P.M

Project	Date	Report No.
Salmon Health and Retirement Community	07/06/2022	80
Location	Project No.	Sheet 2 of
Village Street, Medway, MA	143-21583-15011	2

FIELD OBSERVATIONS CONTINUED

2. <u>SCHEDULE</u>

- A. Vertical construction to continue for Cottages along Waterside Run.
- B. TT will maintain communication with contractor and will inspect the site as construction progresses.

3. NEW ACTION ITEMS

A. N/A

4. PREVIOUS OPEN ACTION ITEMS

- A. Provide outstanding SWPPP inspection reports to Conservation.
- B. Developer to confirm Basin 3's maintenance drawdown outlet is closed to ensure the basin is operating as designed.
- C. Repair damaged CCB along Waterside Run upon completion of the cottages.

5. MATERIALS DELIVERED TO SITE SINCE LAST INSPECTION

A. N/A

Tetra Tech				
100 Nickerson Road, Suite 200	FIFI D	REPORT		
Marlborough, MA 01752				
Project			Date	Report No.
Salmon Health and Retirement Community	(The Willows)		07/12/2022	81
Location			Project No.	Sheet 1 of
Village Street, Medway, MA			143-21583-15011	2
Contractor			Weather	Temperature
Black Brook Realty (Developer)			A.M.	A.M.
C.D Riley (Site Contractor)			P.M. CLEAR	р.м. 77°F
FIELD OBSERVATIONS				

On Tuesday, July 12, 2022, Tucker D. Paradee, EIT from Tetra Tech (TT) visited the project location with Bridget Graziano of Medway Conservation Commission (ConCom) to inspect the current condition of the site and monitor construction progress. The report outlines observations made during the site visit.

1. OBSERVATIONS

- A. General site conditions: Current construction efforts are being done on the proposed cottages along Waterside Run. The eastern portion of the site along Waterside Run appears to have firm and dry ground conditions. Silt fence barrier (SFB) have been installed along the western limits of Waterside Run with compost filter socks just inside the SFB. Various sections of SFB and filter socks located directly behind the cottages are observed to be damaged and require maintenance. At-grade Basins 1 and 3 are dry and appears to be functioning as designed. Stockpiled construction material is present throughout the active work zone of the site.
- B. TT visited the site with ConCom to monitor current construction conditions and discuss erosion control issues observed during previous site visit. During the site walk, ConCom notes multiple locations where insulation, building material, and concrete are improperly discarded. The site superintendent was informed of these issues that are to be resolved and should be prevented in the future. An unwarranted concrete washout was observed behind Cottage 18 with other smaller washouts throughout the site. Per the Commission Agent, slurry concrete is to be disposed of in a designated pit that is lined to prevent stormwater pollution. ConCom requests to be present when concrete is removed to confirm the washouts are not buried.
- C. Vertical construction continues for Units 2 through 16 along Waterside Run. The foundation for Unit 18 has been poured and backfilled completely. Various sections of the previously installed cape cod berm (CCB) have been damaged during construction and require repair upon completion of the cottages.

C	CONTRACTOR'S FORCE AND EQUIPMENT		WORK DON	E BY OTHERS	
Sup't	1	Bulldozer	Asphalt Paver	Dept. or Company	Description of Work
Foreman	1	Backhoe	Asphalt Reclaimer		
Laborers	5+	Loader	Vib. Roller		
Drivers	5+	Rubber Tire Backhoe/Loader	Static Roller		
Oper. Engr.	2	Skid Steer	Vib. Walk Comp.		
Carpenters		Hoeram	Compressor		
Masons		Excavator	Jack Hammer		
Iron Workers		Grader	Power Saw		
Electricians		Crane	Conc. Vib.		
Flagpersons		Scraper	Tack Truck		
Surveyors		Conc. Mixer	Man Lift		
		Conc. Truck	Skidder	OFFICIAL VI	SITORS TO JOB
		Conc. Pump Truck	Compact Track Loader	Bridget Graziano	ConCom
		Pickup Truck	Water Truck	Peter Bemis	EDC
		Tri-Axle Dump Truck	Crane Truck	Patrick Burns	
		Trailer Dump Truck	Sweeper		
		Art. Dump Truck	BOMAG Remote Comp.		
Police Details: N/A			RESIDENT REPRE	ESENTATIVE FORC	
Contractor's Hours of	Work: 7:00) A.M. to 3:30 P.M.		Name	Time on-site
				Tucker D. Paradee, EIT	8:00 A.M. – 9:00 A.M.

Project	Date	Report No.
Salmon Health and Retirement Community	07/12/2022	81
Location	Project No.	Sheet 2 of
Village Street, Medway, MA	143-21583-15011	2

FIELD OBSERVATIONS CONTINUED

2. SCHEDULE

- A. Vertical construction to continue for Cottages along Waterside Run.
- B. TT will maintain communication with contractor and will inspect the site as construction progresses.

3. NEW ACTION ITEMS

- A. Properly dispose of concrete washouts located throughout the site. ConCom or TT are required to be on site during removal to ensure the washouts are not buried.
- B. Repair damaged SFBs located behind Cottages 6 and 8 along Waterside Run.

4. PREVIOUS OPEN ACTION ITEMS

- A. Provide outstanding SWPPP inspection reports to Conservation.
- B. Developer to confirm Basin 3's maintenance drawdown outlet is closed to ensure the basin is operating as designed. TT Update: Peter Bemis assured TT during inspection that the maintenance crew will check on drawdown outlet status. This item will remain until this is confirmed.
- C. Repair damaged CCB along Waterside Run upon completion of the cottages.

5. MATERIALS DELIVERED TO SITE SINCE LAST INSPECTION

A. N/A

Tetra Tech 100 Nickerson Road, Suite 200 Marlborough, MA 01752	FIELD REPORT		
Project	1	Date	Report No.
21 Trotter Drive	(07/13/2021	20
Location	F	Project No.	Sheet 1 of
21 Trotter Drive, Medway, MA		143-21583-19018	2
Contractor	١	Weather	Temperature
RP Marzilli (Site Contractor)	/	A.M. CLEAR	а.м. 74°F
· · · ·	F	P.M.	P.M.
Contractor RP Marzilli (Site Contractor)	/	A.M. CLEAR	а.м. 74°F

FIELD OBSERVATIONS

On Wednesday, July 13, 2022, Tucker D. Paradee, EIT from Tetra Tech (TT) visited the project location to inspect the current condition of the site and monitor construction progress. The following report outlines observations made during the site visit.

1. OBSERVATIONS

- A. Site Conditions/Erosion Controls: Dry ground surface that is firm throughout. Silt fence barrier (SFB) has been removed on the eastern and southern portions of the site where vegetation has grown, and slopes have stabilized. A portion of SFB behind the additional storage remains with compost filter tubes placed just inside the SFB. Both the SFB and compost tubes appear to be in good condition. Paved parking area and work area south of the building appear to have sediment and debris accumulation from daily traffic. A sweeping truck is located on site and used at the end of the day.
- B. Developer has completed the proposed building addition which is now active. A metal roof has been installed on the building addition and is currently being reviewed by Medway Conservation. Developer should coordinate with The Medway Planning Board to determine a resolution for this conflict.
- C. Top course was reinspected in regions where ambient temperatures were below the recommended 40°F during installation. Asphalt appears to be in good condition with no signs of cracks or depressions.

CONTRACTOR'S FORCE AND EQUIPMENT			WORK DON	E BY OTHERS				
Sup't		Bulldozer		Asphalt Paver	1	Dept. or Company	Description of Work	
Foreman	1	Backhoe		Asphalt Reclaimer				
Laborers	5+	Loader		Vib. Roller	2			
Drivers		Rubber Tire Backhoe/Loader		Static Roller				
Oper. Engr.		Skid Steer	1	Vib. Walk Comp.	1			
Carpenters		Hoeram		Compressor				
Masons		Excavator		Jack Hammer				
Iron Workers		Grader		Power Saw				
Electricians		Crane		Conc. Vib.				
Flagpersons		Scraper		Tack Truck				
Surveyors		Conc. Mixer		Man Lift				
Roofers		Conc. Truck		Skidder		OFFICIAL VISITORS TO JOB		
Mechanical/HVAC		Conc. Pump Truck		Compact Track Loader				
		Pickup Truck	5+	Lull				
		Tri-Axle Dump Truck	5+					
		Trailer Dump Truck						
Police Details: N/A						RESIDENT REPRE	SENTATIVE FORCE	
Contractor's Hours of Work: 7:00 A.M. to 6:00 P.M.				Name	Time on-site			
						Tucker D. Paradee, EIT	9:30 A.M. – 10:00 A.M.	

Project	Date	Report No.
21 Trotter Drive	07/13/2022	20
Location	Project No.	Sheet 2 of
21 Trotter Drive, Medway, MA	143-21583-19018	2

FIELD OBSERVATIONS CONTINUED

2. SCHEDULE

A. TT will maintain communication with contractor and will inspect the site on an as-need basis.

3. NEW ACTION ITEMS

A. N/A

4. PREVIOUS OPEN ACTION ITEMS

- A. Contractor to submit photos of drainage system installed on the east side of the site, TT not present during installation.
- B. Developer shall conduct inspection of all stormwater infrastructure to determine extent of hydrocarbons in structures and clean as necessary if thresholds have been met.

5. MATERIALS DELIVERED TO SITE SINCE LAST INSPECTION

A. N/A



July 26, 2022 Medway Planning & Economic Development Board Meeting

<u>Public Hearing Continuation – Boundary</u> <u>Lane Definitive Subdivision Plan</u>

- Notice dated 7-1-22 of Public Hearing Continuation to 7-26-22
- Mullins Rule certification for Bob Tucker for 6-14-22 hearing
- Mullins Rule certification from Jess Chabot for 6-14-22 hearing
- Email dated 6-9-22 from Health Agent Beth Hallal re: well
- Letter dated 6-14-22 from Deputy Fire Chief Mike Fasolino
- Email dated 7-20-22 from DPW Water/Sewer Superintendent Barry Smith re: sewer connection
- Letter dated 6-22-22 from Safety Officer Jeff Watson
- REVISED *Boundary Lane Subdivision Plan* dated 7-12-22 by Connorstone Engineering
- Plan revision summary letter dated 7-15-22 from Vito Colonna at Connorstone Engineering
- Tetra Tech review letter dated 7-20-22 re: revised *Boundary Lane Definitive Subdivision Plan*
- Conservation Commission Order of Conditions for 69 Summer Street (March 2022)
- DRAFT Certificate of Action (Subdivision Decision) dated 7-22-22. NOTE – This has been provided to applicant Zachary Lindsey and his consultant team.

Board Members

Matthew Hayes, P.E., Chair Robert Tucker, Vice Chair Richard Di Iulio, Clerk Jessica Chabot, Member Sarah Raposa, A.I.C.P, Member Thomas Gay, Associate Member



TOWN OF MEDWAY

COMMONWEALTH OF MASSACHUSETTS

PLANNING AND ECONOMIC DEVELOPMENT BOARD

Medway Town Hall 155 Village Street Medway, MA 02053 Phone (508) 533-3291 Fax (508) 321-4987 Email: planningboard @townofmedway.org www.townofmedway.org

> RECEIVED TOWN CLERX JUL 1'22 AM10:23

MEMORANDUM

July 1, 2022

TO: Stefany Ohannesian, Town Clerk Town of Medway Departments, Boards and Committees

FROM: Susy Affleck-Childs, Planning and Economic Development Coordinator

RE: **Public Hearing Continuation for Boundary Lane Definitive Subdivision Plan** 67R and 69 Summer Street Continuation Date – Tuesday, July 26, 2022 at 7:15 p.m.

At its June 14, 2022 meeting, the Planning and Economic Development Board voted to continue the public hearing on the application of Zachary Lindsey of Medway, MA for approval of a definitive subdivision plan to create a 3-lot subdivision out of the two already developed properties located at 67R and 69 Summer Street to the Board's meeting on Tuesday, July 26, 2022 at 7:15 p.m. at Medway Town Hall, 155 Village Street.

The combined 11.38 acre site is located on the west side of Summer Street near the Summer and Highland Streets intersection. The *Definitive Subdivision Plan of Boundary Lane* is dated August 20, 2021, last revised February 17, 2022, and was prepared by Connorstone Engineering, Inc. of Northborough, MA. The plan shows the reorganization of the subject properties into three residential lots, one lot with the existing house at 67R Summer Street, one lot with the existing house at 69 Summer Street, and a new lot for construction of a single-family house. All properties will have frontage on an approximately 260' long, permanent private road to be known as Boundary Lane. A private homeowners association will be established to maintain the road and stormwater facilities.

The plan and associated application documents are on file with the Medway Town Clerk and the Community and Economic Development office at Medway Town Hall. The information is also posted at Board's web page at: https://www.townofmedway.org/planning-economic-development-board/pages/boundary-lane-subdivision

The Board expects to review and vote a decision on this application at the July 26th hearing. If you have any further comments on the proposed subdivision, kindly provide those comments to me by July 13th.

Please don't hesitate to contact me if you have any questions. Thanks.



RECEIVED TOWN CLERK THN 30'22 PM12:26

Town of Medway, Massachusetts

CERTIFICATION PURSUANT TO G.L. c. 39, Section 23D OF PARTICIAPTION IN A SESSION OF AN ADJUDICATORY HEARING WHERE THE UNDERSIGNED MEMBER MISSED A SINGLE HEARING SESSION

Note: This form can only be used for missing a single public hearing session. This cannot be used for missing more than one hearing session.

I, _____Robert Tucker _____ (name), hereby certify under the pains and penalties of perjury as follows:

1. I am a member of <u>Planning and Economic Development</u> Board

2. I missed a public hearing session on the matter(s) of: <u>288 Village St.</u> (Leland), Neo Organics,

Boundary Lane Subdivision, Milford Hosp.site Plan.

which was held on ___6/14 and 6/28, 2022

- 3. I have reviewed all the evidence introduced at the hearing session that I have missed which included a review of (initial which one(s) is/are applicable):
 - audio recording of the missed hearing session; or a.
 - ____X___ video recording of the missed hearing session: or b.
 - _____a written transcript of the missed hearing session. c.

This certification shall become part of the record of the proceedings in the above matter.

Signed under the pains and penalties of perjury	this Z day of _	JUNE	.20 72

nature of Board Member)

Received as part of the record of the above matter:

Date: JUNE 30, 2022 By: Doc



RECEIVED TOWN CLERK TUI 12'22 AM8:46

Town of Medway, Massachusetts

CERTIFICATION PURSUANT TO G.L. c. 39, Section 23D OF PARTICIAPTION IN A SESSION OF AN ADJUDICATORY HEARING WHERE THE UNDERSIGNED MEMBER MISSED A SINGLE HEARING SESSION

Note: This form can only be used for missing a single public hearing session. This cannot be used for missing more than one hearing session.

lessica Chabot (name), hereby certify under the pains and I, penalties of perjury as follows:

Planning and Economic Development Board 1. I am a member of

2. I missed a public hearing session on the matter(s) of: _____

Boundary Lane Subdivision

which was held on _____ June 14th, 2022

- 3. I have reviewed all the evidence introduced at the hearing session that I have missed which included a review of (initial which one(s) is/are applicable):
 - audio recording of the missed hearing session; or a.

b. × video recording of the missed hearing session: or

a written transcript of the missed hearing session. c.

This certification shall become part of the record of the proceedings in the above matter.

Signed under the pains and penalties of perjury	this 10	_day of	July	, 20_	22	
	A					

(Signature of Board Member)

Received as part of the record of the above matter:

Date:	2-11-22	
By:	Sappor Flells	
Position:	: Planny + Co Das. Cordwart	

Susan Affleck-Childs

From: Sent: To: Subject: Beth Hallal Thursday, June 9, 2022 11:56 AM Susan Affleck-Childs 69 Summer St. WELL

Hi Susy,

The well was permitted and approved by the BOH. The well is in and the results of the well water were reviewed and approved by the Health agent.

Respectfully submitted,

Beth

Beth Hallal, RS Board of Health Town of Medway 155 Village Street Medway, MA 02053 508.533.3206



TOWN OF MEDWAY FIRE DEPARTMENT

> MICHAEL FASOLINO DEPUTY FIRE CHIEF



MEDWAY, MA 02053

6/14/2022

Gerry Lindsey 69 & 67R Summer Street Medway, Ma 02053

Re: Boundary Lane

Gerry,

This letter is to confirm the Medway Fire Department is still in agreement with the following proposal as it relates to your application to the PEDB for one additional home in the rear of 69 and 67 R Summer St. We are ok with the following:

The proposed distance from the street requires a hydrant. As stated, the home will be service by a private well. In lieu of a hydrant with public water supply, the home will have residential sprinkler system. The system will conform to NFPA 13D.

A "T" type turnaround with and engineered analysis for our largest piece of apparatus (Ladder one).

To provide a paved width of 20 feet on the new private way.

Feel free to call or email with any questions.

Regards,

Michael Fasolino Deputy Chief

Susan Affleck-Childs

From: Sent: To: Cc: Subject: Barry Smith Wednesday, July 20, 2022 8:24 AM Susan Affleck-Childs Zachary Lindsey; Gerry Lindsey Re: Boundary Lane Subdivision Plan

Susy,

That is correct, it is only a connection not an extension. There is no problem on what they are trying to do. If you have any questions please call me on my cell, I am on vacation this week.

Thanks,

Barry Smith Water/Sewer Superintendent <u>45b Holliston Street</u> <u>Medway, MA 02053</u> O <u>508-321-4930</u> M <u>774-285-0482</u>

Sent from my IPhone

Register & Access your Water usage: https://medwma.aquahawk.us



www.townofmedway.org Facebook Twitter

Please remember when writing or responding, the Massachusetts Secretary of State has determined that e-mail is a public record.

The information in this e-mail, including attachments, may contain privileged and confidential information intended only for the person(s) identified above. If you are not the intended recipient, you are hereby notified that any dissemination, copying or disclosure of this communication is strictly prohibited. Please discard this e-mail and any attachments and notify the sender immediately.

From: Susan Affleck-Childs <sachilds@townofmedway.org>
Sent: Tuesday, July 19, 2022 4:24:00 PM
To: Barry Smith <bsmith@townofmedway.org>
Cc: Zachary Lindsey <zlindsey@townofmedway.org>; Gerry Lindsey <rabbitbrookfarm@gmail.com>
Subject: Boundary Lane Subdivision Plan

HI Barry,

I need an email from you about the sewer connection for Boundary Lane for Zach Lindsey.

We had previously discussed that it did not constitute a sewer extension, only a connection.

I need something in writing from you to confirm that before Tuesday night's PEDB meeting (7-26-22). We are working on the decision that night.

Thanks.

Susan E. Affleck-Childs Planning and Economic Development Coordinator Town of Medway 155 Village Street Medway, MA 02053 508-533-3291





Medway Police Department

315 Village Street Medway, MA 02053

Phone: 508-533-3212 FAX: 508-533-3216 Emergenry: 911

Allen M. Tingley Chief of Police

June 22, 2022

- To: Susan Affleck-Childs Planning & Economic Development Coordinator
- From: Jeffrey W. Watson Sergeant/Safety Officer Medway Police Department
- Ref: Boundary Lane.

I have been asked by the builder, to follow up on safety concerns with Boundary Lane. A private road located off Summer St. at number 69.

As stated in my original letter dated May 28, 2021, I feel it would be important to keep the look of a private drive as it is located across the street from Highland St. I believe making it look like a true road would lead motorist to believe it is a through street. I would recommend keeping the current curbing however adding the appropriate ADA ramping on the sidewalks as this is a direct route to the High School.

I was also asked to look at the safety concerns with lighting either at the entrance or on the driveway in. Currently there is a streetlight located at the intersection of Summer and Highland St. The location of this light is sufficient for the area. I do not see any safety reasons why lighting should be placed on the driveway. If lighting was to be placed, I would be concerned again that it would invite people to believe it is a through street.

I would also suggest signage such as "No Thru Traffic or Dead End to help alleviate cars from entering.

All signage should adhere to the regulations of the Town of Medway's Department of Public Works.

If you have any questions, please let me know.

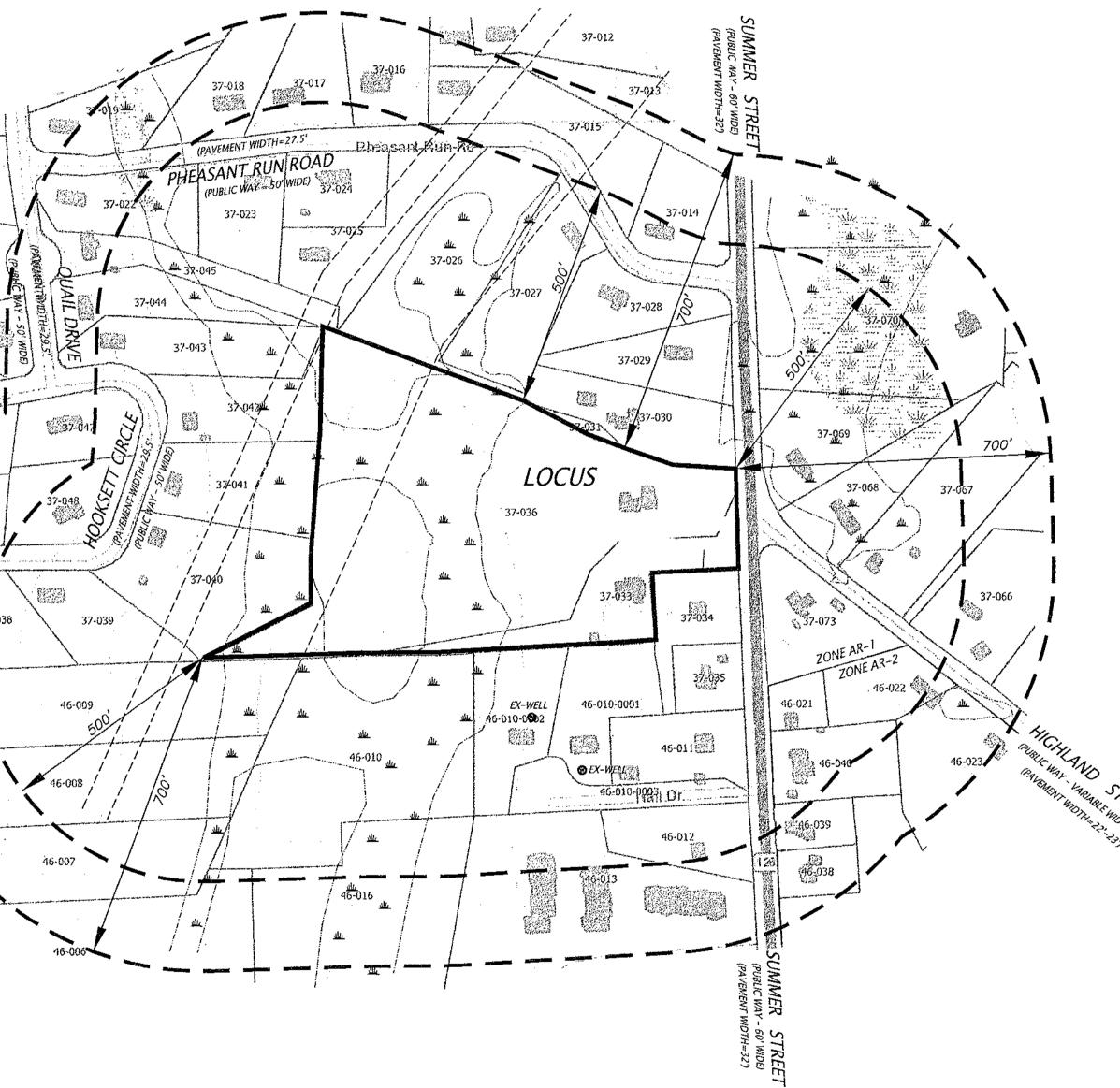
SUBDIVISION IS RE MEDWAY PLANNI	L UNDER THE CONTROL LAW, EQUIRED. ING AND ECONOMIC MENT BOARD	DE
		\mathcal{N}
THIS PLAN IS SUE TO BE RECORDED	BJECT TO A COVENANT HEREWITH.	
OF ACTION WHICH	BJECT TO A CERTIFICATE SHALL BE RECORDED TTHE NORFOLK COUNTY DS.	
		-
<u>LIST_OF_R</u>	EQUESTED WAIVERS	
water within the new hou <u>Section 7.7.2.p</u> Waiver to al basins to tl	ot require installation of an extension of Municipal In the proposed roadway. Proposed Lot 2 containing use would be serviced by an on-site private well. Ilow less than a 30 foot setback from drainage the proposed private road and Lot 1. The 30 foot	
northerly o <u>Section 7.7.4.d</u> Waiver from system to o house would	d be maintained to both Summer Street and the abutter. collect foundation perimeter drains. The only new d be on Lot 2. This lot would discharge any drainage the rear of the property away from the	The second secon
roadway. <u>Section 7.9.5.a</u> Waiver to al	llow a minimum center line grade of one percent luce the required earthwork and more closely match	37,046
	llow a vertical curve within the leveling area (not). All slopes would be below the maximum 2%	37:00.19
has b	r from the requirement curbs and berms. The project been proposed with low impact development (LID) ed swales in place of traditional curbs and gutters.	NELSS SSSEE
utility pole	installation of additional street lighting. The existing on Summer Street located 50 feet north of the padway includes a street light.	37-037 \$
i		
<u>PLAN_INDEX</u>		
SHEET NUMBER 1-2 2-2	DRAWING TITLE COVER SHEET LAND PLAN	
1—6 2—6 3—6 4—6 5—6	EXISTING CONDITIONS PLAN CONSTRUCTION PLAN ROADWAY PLAN & PROFILE EROSION & SEDIMENT CONTROL PLAN CONSTRUCTION DETAILS	

6–6 STORM WATER POLLUTION PREVENTION PLAN

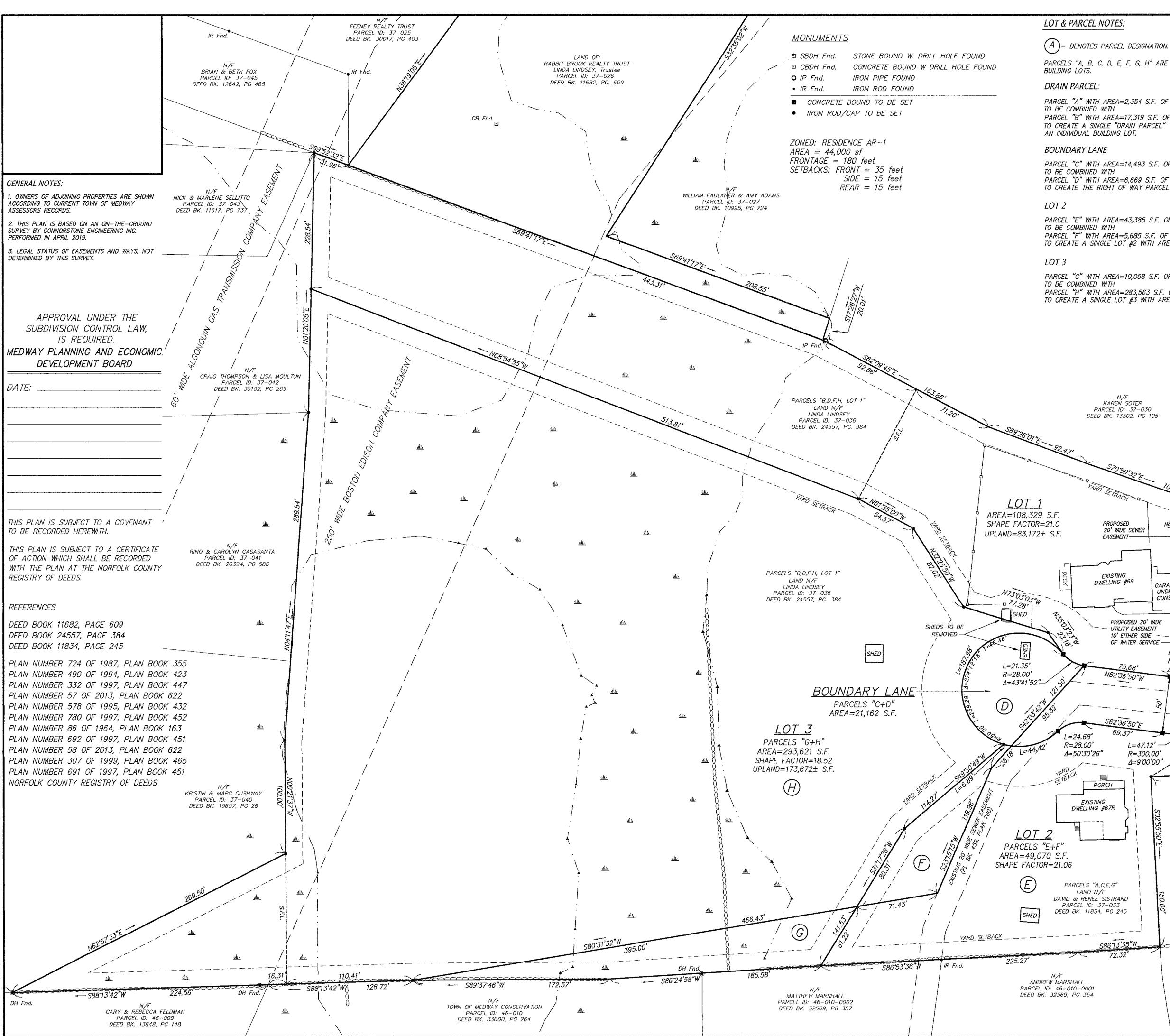
SITE AREA TABULATION:

TOTAL AREA OF LAND THAT IS BEING SUBDIVIDED = 491,855 S.F. (11.29 Acres)
TOTAL NUMBER OF LOTS AND PARCELS = 3 LOTS, 1 PARCEL
TOTAL AREA OF LOTS AND PARCELS = 470,693 S.F. (346,777 S.F. UPLAND, 123,916 S.F. WETLAND)
TOTAL AREA DEDICATED FOR STREET PURPOSES =21,162 S.F.
TOTAL AREA NOT INCLUDED FOR STREETS, LOTS OR PARCELS
DEDICATED FOR DRAINAGE, SEWER, OR UTILITY EASEMENTS = 0 S.F.
TOTAL AREA RESERVED FOR OPEN SPACE, PARKS, SCHOOLS AND OTHER PUBLIC USE = 0 S.F.
SUMMARY: 470,693 S.F + 21,162 S.F. + 0 + 0 = 491,855 S.F.

FINITIVE SUBDIVISION PLAN "BOUNDARY LANE" IEDWAY, MASSACHUSETTS



	GENERAL NOTES:
	1. OWNERS OF ADJOINING PROPERTIES ARE SHOWN ACCORDING TO CURRENT TOWN OF MEDWAY ASSESSORS RECORDS.
	2. THIS PLAN IS BASED ON AN ON-THE-GROUND SURVEY BY CONNORSTONE ENGINEERING INC. PERFORMED IN APRIL 2019.
	3. LEGAL STATUS OF EASEMENTS AND WAYS, NOT DETERMINED BY THIS SURVEY.
	ADA / AAB REQUIREMENTS:
	ALL IMPROVEMENTS, RAMPS, CURB CUTS, SIDEWALKS, AND DRIVEWAY CROSSINGS SHALL
	COMPLY WITH THE AMERICANS WITH DISABILITIES ACT REGULATIONS AND WITH ARCHITECTURAL ACCESS BOARD REGULATIONS (521 CMR S 1–47) IN FORCE AND EFFECTIVE AT THE TIME OF CONSTRUCTION.
	ZONED: AR-1 AREA = 44,000 sf FRONTAGE = 180 feet SETBACKS: FRONT = 35 feet SIDE = 15 feet REAR = 15 feet
	ASSESSOR MAP 37, LOTS 33 & 36
	APPLICANT: ZACHARY T. LINDSEY et ux. 69 SUMMER STREET
	MEDWAY, MA OWNERS: LINDA LINDSEY 69 SUMMER STREET
	MEDWAY, MA DAVID & RENEE SISTRAND
	67R SUMMER STREET MEDWAY, MA
	CONNORSTONE
	ENGINEERING INC. CIVIL ENGINEERS AND LAND SURVEYORS 10 SOUTHWEST CUTOFF, SUITE 7 NORTHBOROUGH, MASSACHUSETTS 01532 PHONE: 508–393–9727 FAX: 508–393–5242
I HEREBY CERTIFY THAT THIS PLAN WAS PREPARED IN CONFORMANCE WITH THE RULES AND REGULATIONS OF THE REGISTERS OF DEEDS.	DEFINITIVE SUBDIVISION PLAN
Correspondent	COVER SHEET BOUNDARY LANE
VAROUJAN H. HAGOPIAN, P.L.S. 49665	IN MEDWAY, MASS.
I, CLERK OF THE TOWN OF MEDWAY	
RECEIVED AND RECORDED APPROVAL FROM THE PLANNING BOARD	7-12-2022EDITS PER PEER REVIEW2-17-2022MISC. CON. COMM. EDITS
OF THIS PLAN ON AND NO APPEAL WAS TAKEN FOR TWENTY (20) DAYS THEREAFTER.	2-17-2022 MISC. CON. COMM. EDITS 2-8-2022 MISC. CON. COMM. EDITS
CDADLIC SCALE 1" 2001	REVISED: DESCRIPTION:
GRAPHIC SCALE: 1"=200' 0 100 200 300 400 600 800 1000 FEET	DRAWN BY: REM CHECK BY: VC
0 20 40 60 40 100 150 200 250 300 METERS	DATE: AUGUST 20, 2021 SCALE: AS SHOWN SHEET 1 OF 2





N/F

106.79°

N80'52'26

GARAGE

L=39.27' R=250.00' -

 ∞

UNDER

CONST.

L=47.12'

R=300.00'

∆≕9°00'00*

DH Fnd.

N80'52'26"E

---- S87'03'37"₩

S86'26'54"E----

B

EXISTING 15' WIDE SEWER EASEMENT

DRAIN PARCEL

PARCELS "A+B'

AREA=19,673 S.F.

UPLAND=19,701± S.F.

والمحاجبين والمحاوية للمحاورة للما والمحاوية والمحاومين والمحاومين

105.36

EXISTING 20' WIDE SEWER EASEMENT

N88'23'10"E

105.36

N/F CHERYL ANN TENNANT

PARCEL ID: 37–034 DEED BK. 19053, PG 91

(PL. BK. 452, PLAN 780)

APPROX. LOC. WATER SERVICE

-DRAIN

EASEMENT

DH Fnd

-1-

2.00'

191.63'

139.61

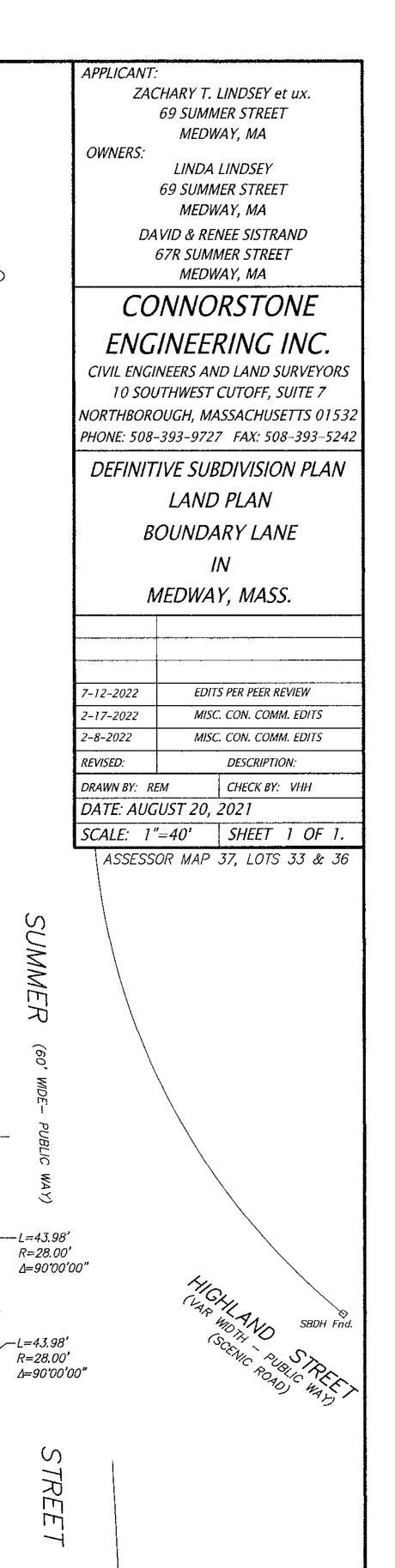
PARCELS "A, B, C, D, E, F, G, H" ARE NOT TO BE CONSIDERED INDIVIDUAL

PARCEL "A" WITH AREA=2,354 S.F. OF DAVID & RENEE SISTRAND (BK.11834, PG.245) PARCEL "B" WITH AREA=17,319 S.F. OF LINDA LINDSEY (BK.24557, PG.384) TO CREATE A SINGLE "DRAIN PARCEL" WITH AREA=19,673 S.F. NOT TO BE CONSIDERED

PARCEL "C" WITH AREA=14,493 S.F. OF DAVID & RENEE SISTRAND (BK.11834, PG.245) PARCEL "D" WITH AREA=6,669 S.F. OF LINDA LINDSEY (BK.24557, PG.384) TO CREATE THE RIGHT OF WAY PARCEL WITH AREA=21,162 S.F.

PARCEL "E" WITH AREA=43,385 S.F. OF DAVID & RENEE SISTRAND (BK.11834, PG.245) PARCEL "F" WITH AREA=5,685 S.F. OF LINDA LINDSEY (BK.24557, PG.384) TO CREATE A SINGLE LOT #2 WITH AREA=49,070 S.F.

PARCEL "G" WITH AREA=10,058 S.F. OF DAVID & RENEE SISTRAND (BK.11834, PG.245) PARCEL "H" WITH AREA=283,563 S.F. OF LINDA LINDSEY (BK.24557, PG.384) TO CREATE A SINGLE LOT #3 WITH AREA=293,621 S.F.

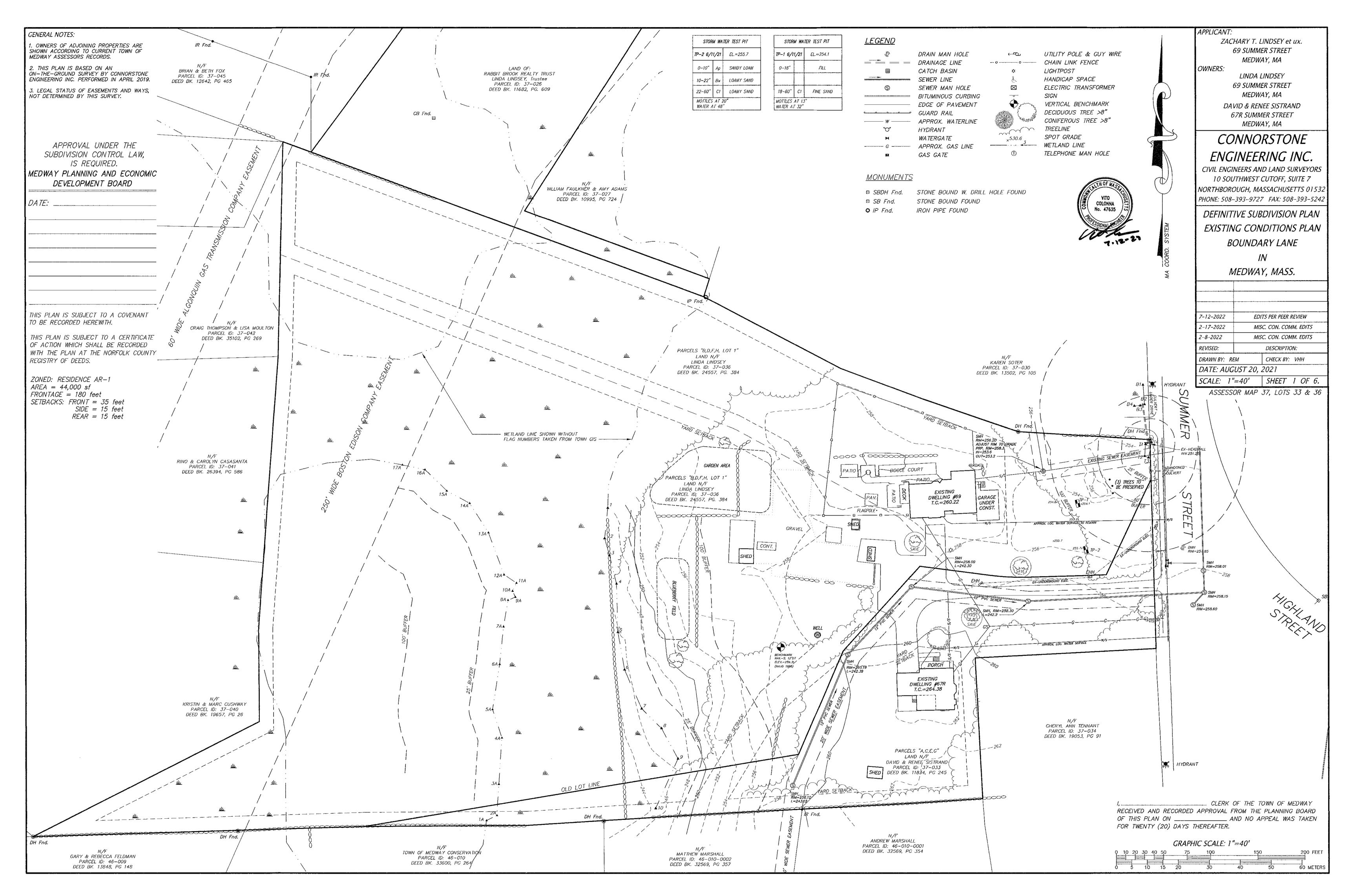


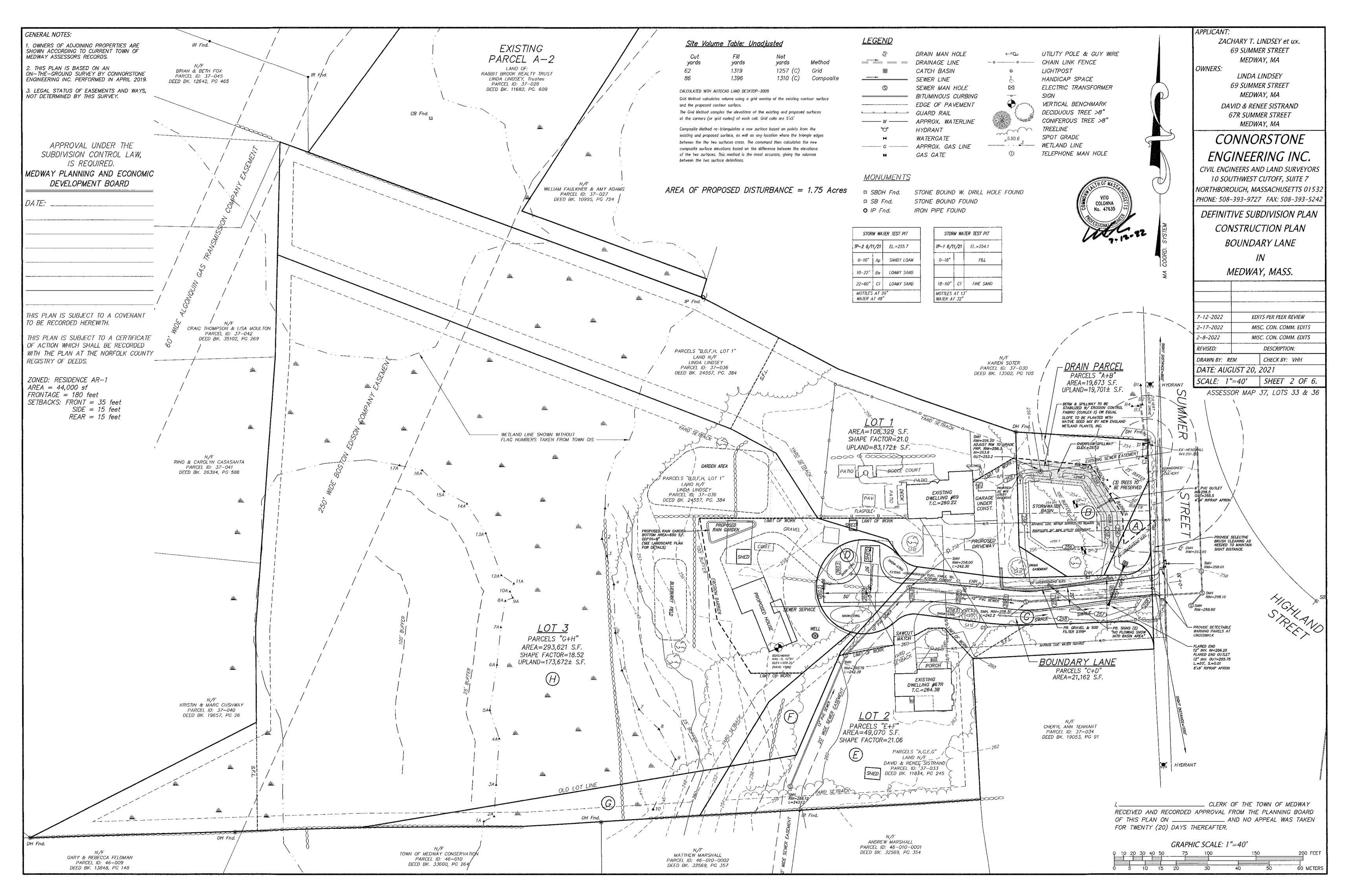
I HEREBY CERTIFY THAT THIS PLAN WAS PREPARED IN CONFORMANCE WITH THE RULES AND REGULATIONS OF THE REGISTERS OF DEED 2/72 VAROUJAN H. HAGOPIAN, P.L.S. 49665

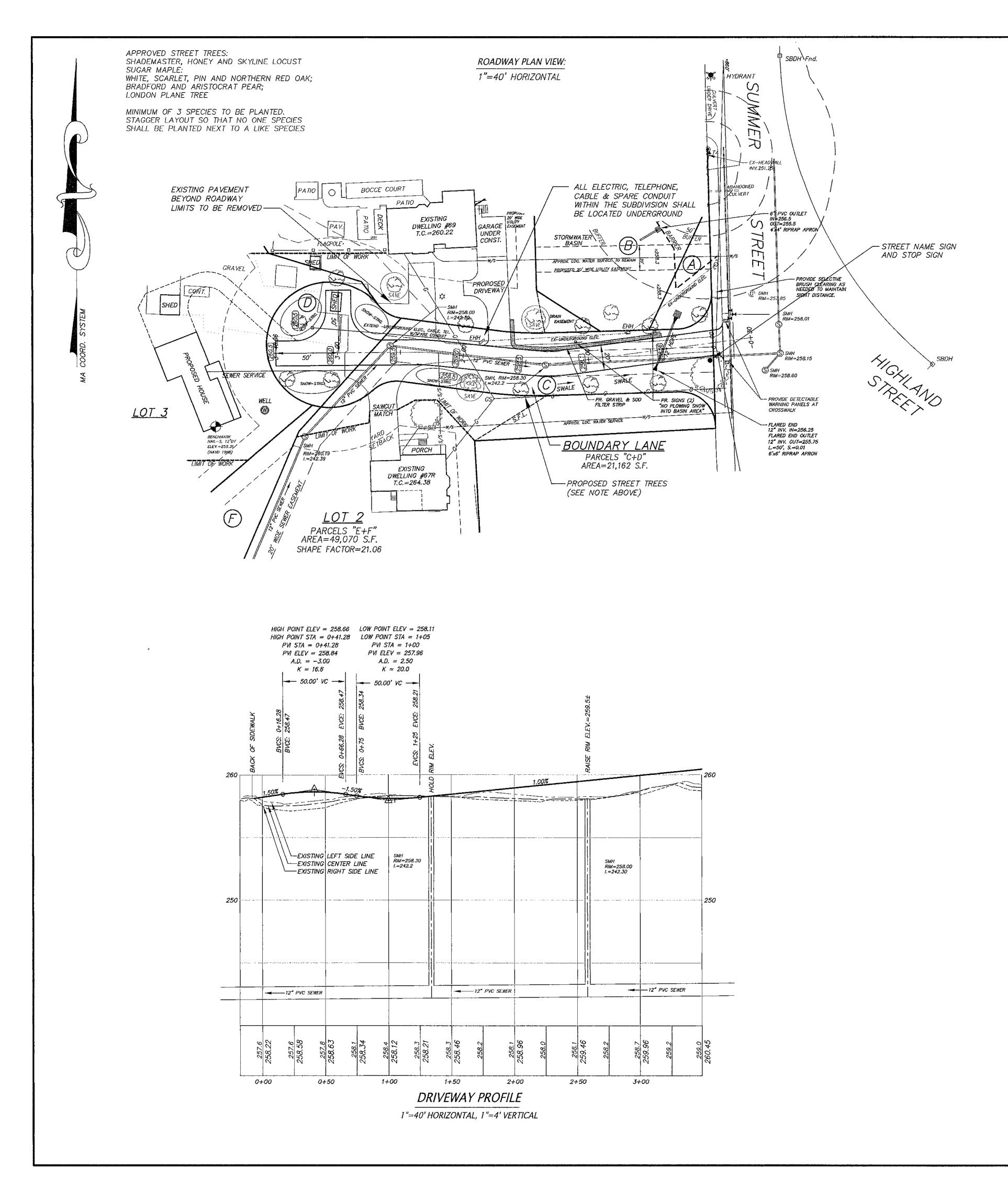


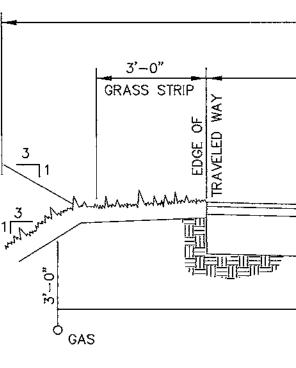
_____ CLERK OF THE TOWN OF MEDWAY RECEIVED AND RECORDED APPROVAL FROM THE PLANNING BOARD OF THIS PLAN ON _____ _ AND NO APPEAL WAS TAKEN FOR TWENTY (20) DAYS THEREAFTER.

GRAPHIC SCALE: 1"=40'						
0 10 20 30 40 50	75 100	150	200 FEET			
0 5 10 15	20 30	40 50	60 METERS			









PERMANENT PRIVATE

CONSTRUCTION NOTES:

1. EXISTING UTILITY LINES SHOWN ON T INFORMATION AND ARE APPROXIMATE L GUARANTEE THEIR ACCURACY OR THAT STRUCTURES ARE SHOWN. THE CONTRA INVERT ELEVATIONS OF THE UTILITIES A THE START OF CONSTRUCTION. ANY DIS BE REPORTED TO THE ENGINEER IMMED DIG SAFE: 1-800-344-7233 (72 HOU UTILITY LOCATIONS PRIOR TO EXCAVATI UTILITY CONNECTIONS.

2. ALL MATERIALS AND CONSTRUCTION WITH THE STANDARDS AND SPECIFICATI WORKS, OR THE LATEST EDITION OF TH (MHD) CONSTRUCTION STANDARDS AND HIGHWAYS AND BRIDGES", WHICHEVER IN

3. THE LAYOUT AND INSTALLATION OF UTILITY CONNECTIONS AND SERVICES S REQUIREMENTS OF THE RESPECTIVE UT

4. IT SHALL BE THE RESPONSIBILITY C WORK WITH THE APPROPRIATE HIGHWAY SHALL MAINTAIN ALL EXISTING AND NET ORDER AND SHALL PROTECT THEM FRO IS COMPLETED AND ACCEPTED.

5. WORK WITHIN THE HIGHWAY LAYOU CONDITIONS OF THE PERMIT ISSUED BY DEPARTMENT AND/OR LOCAL AUTHORIT

6. THE CONTRACTOR SHALL UTILIZE A TO ENSURE THE SAFETY OF ALL PERSO CONSTRUCTION. ALL EXCAVATIONS SHA STANDARDS.

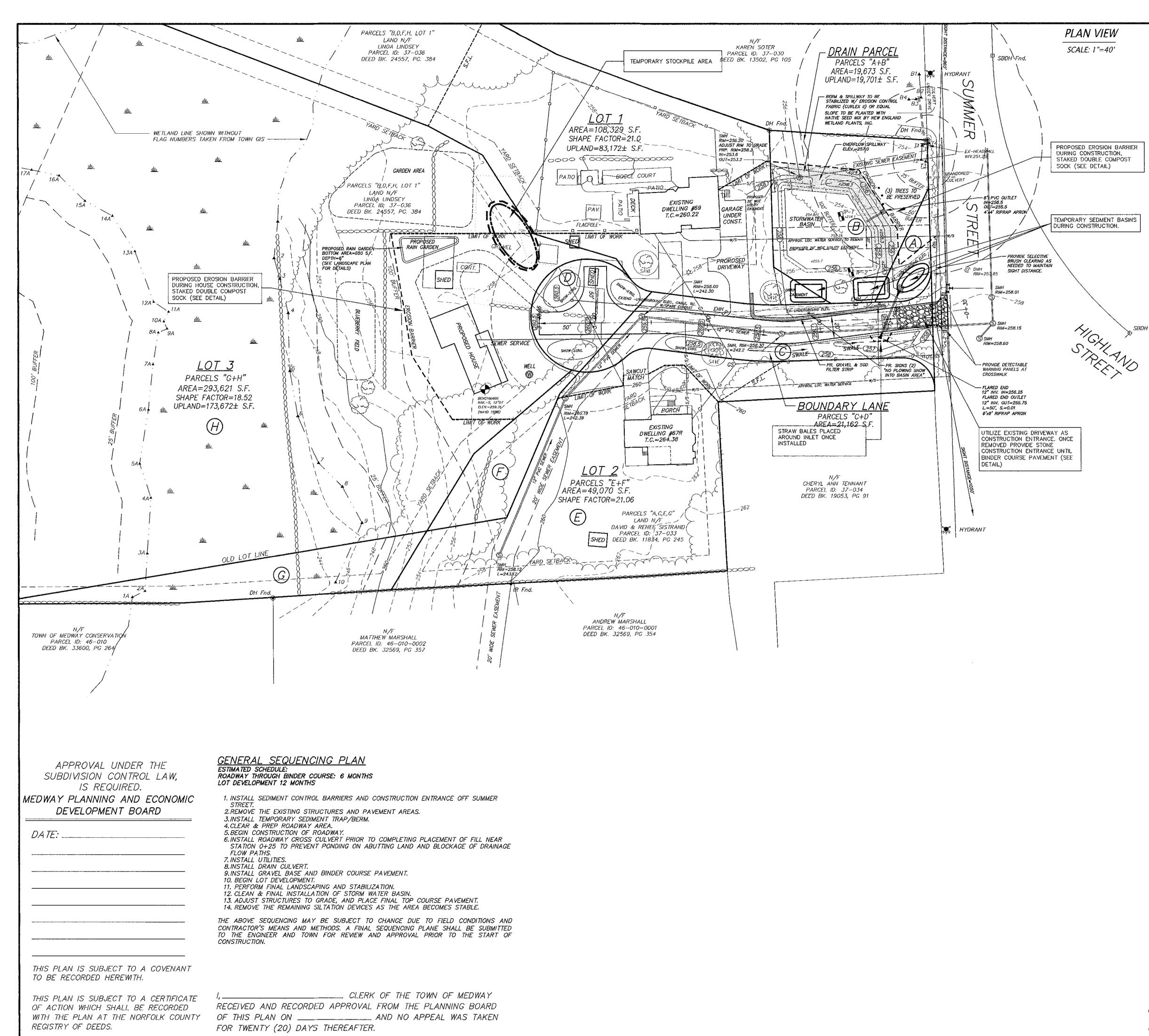
7. ALL SIGN SIZES AND MATERIAL SHA UNIFORM TRAFFIC DEVICES" (MUTCD) FEDERAL HIGHWAY ADMINISTRATION, U.S

8. ALL RAMPS, CURB CUTS, SIDEWALKS COMPLY WITH THE AMERICANS WITH DIS ARCHITECTURAL ACCESS BOARD REGUL

9. ALL EXCAVATION AND EARTHWORK S WITH THE LATEST EDITION OF THE MAS (MHD) STANDARD SPECIFICATIONS FOR 140, 150, AND 170.

ADA / AAB REQUIREME ALL IMPROVEMENTS, RAMPS, CURB CUT CROSSINGS SHALL COMPLY WITH THE A REGULATIONS AND WITH ARCHITECTURA (521 CMR S 1–47) IN FORCE AND EFFL CONSTRUCTION.

50' RIGHT-OF-WAY	
10' TRAVEL LANE	3'-0" GRASS STRIP
1/2" BIT. CONC. TOP COURSE 2 1/2" BIT. CONC. BINDER COURSE	EDGE OF
	1 I
12" GRAVEL BASE COURSE	COOC 50 50 50 50 50 50 50 50 50 50 50 50 50
	6" LOAM & SEED (TYP.)
E ROADWAY SECTION o scale Sewer	CABLE UTILITIES EXTEND SERVICES TO LOT 3 INSTALL SPARE CONDUIT FOR FUTURE UTILITIES
	<i>ZONED: AR-1 AREA = 44,000 sf FRONTAGE = 180 feet SETBACKS: FRONT = 35 feet</i>
THIS DRAWING ARE FROM AVAILABLE LOCATIONS. THE ENGINEER DOES NOT T ALL UTILITIES AND SUBSURFACE	SETBACKS: FRONT = 35 feet SIDE = 15 feet REAR = 15 feet
ACTOR SHALL VERIFY SIZE, LOCATION AND AND STRUCTURES, AS REQUIRED PRIOR TO ISCREPANCIES WITH RECORD DATA SHALL DIATELY. THE CONTRACTOR SHALL CONTACT IRS BEFORE DIGGING), AND TOWN DPW FOR	APPROVAL UNDER THE SUBDIVISION CONTROL LAW, IS REQUIRED.
TION TEAT DITO OUNT DE LITUIZED EOD	MEDWAY PLANNING AND ECONOMIC DEVELOPMENT BOARD
TIONS MEDWAY DEPARTMENT OF PUBLIC HE MASSACHUSETTS HIGHWAY DEPARTMENT D THE MHD "STANDARD SPECIFICATIONS FOR IS MORE STRINGENT.	DA TE:
OF ELECTRIC, GAS, TELEPHONE AND CATV SHALL IN ACCORDANCE WITH THE TILITY.	
OF THE CONTRACTOR TO COORDINATE HIS Y & UTILITY DEPARTMENTS. CONTRACTOR EWLY INSTALLED UTILITIES IN GOOD WORKING OM DAMAGE AT ALL TIMES UNTIL THE WORK	
JT, IF APPLICABLE, SHALL CONFORM TO THE Y THE MASSACHUSETTS HIGHWAY ITY AS APPROPRIATE.	
ALL MEASURES AND MATERIALS NECESSARY SONS AND PROPERTIES AT THE SITE DURING TALL CONFORM TO CURRENT OSHA	THIS PLAN IS SUBJECT TO A COVENANT
ALL CONFORM TO THE "MANUAL ON) AND THE OFFICE OF TRAFFIC OPERATIONS, .S. DEPARTMENT OF TRANSPORTATION.	TO BE RECORDED HEREWITH. THIS PLAN IS SUBJECT TO A CERTIFICATE
S, AND ACCESSIBLE SPACES SHALL ISABILITIES ACT REGULATIONS AND WITH LATIONS (521 CMR 1–47).	OF ACTION WHICH SHALL BE RECORDED WITH THE PLAN AT THE NORFOLK COUNTY REGISTRY OF DEEDS.
SHALL BE PERFORMED IN ACCORDANCE ASSACHUSETTS HIGHWAY DEPARTMENT HIGHWAYS AND BRIDGES, SECTIONS 120,	APPLICANT: ZACHARY T. LINDSEY et ux. 69 SUMMER STREET MEDWAY, MA
ENTS: TS, SIDEWALKS, AND DRIVEWAY AMERICANS WITH DISABILITIES ACT AL ACCESS BOARD REGULATIONS FECTIVE AT THE TIME OF	OWNERS: LINDA LINDSEY 69 SUMMER STREET MEDWAY, MA
	DAVID & RENEE SISTRAND 67R SUMMER STREET MEDWAY, MA
	CONNORSTONE
	ENGINEERING INC. CIVIL ENGINEERS AND LAND SURVEYORS 10 SOUTHWEST CUTOFF, SUITE 7 NORTHBOROUGH, MASSACHUSETTS 01532
	PHONE: 508-393-9727 FAX: 508-393-5242
WITH OF MASSING	DEFINITIVE SUBDIVISION PLAN ROADWAY PLAN & PROFILE
VITO COLONNA No. 47635	BOUNDARY LANE
ice in the	IN MEDWAY, MASS.
	7-12-2022 EDITS PER PEER REVIEW
	2-17-2022 MISC. CON. COMM. EDITS 2-8-2022 MISC. CON. COMM. EDITS
I, CLERK OF THE TOWN OF MEDWAY RECEIVED AND RECORDED APPROVAL FROM THE PLANNING BOARD	REVISED: DESCRIPTION:
OF THIS PLAN ON AND NO APPEAL WAS TAKEN FOR TWENTY (20) DAYS THEREAFTER.	DRAWN BY: REM CHECK BY: VC DATE: AUGUST 20, 2021
	SCALE: 1"=40' SHEET 3 OF 6.



EROSION AND SEDIMENTATION CONTROL NOTES:

1. ALL WORK SHALL BE IN ACCORDANCE WITH THE ORDER OF CONDITIONS ISSUED BY THE TOWN OF MEDWAY CONSERVATION COMMISSION, AND THE PROJECT STORMWATER POLLUTION PREVENTION PLAN.

2. PRIOR TO INITIATING CONSTRUCTION, ALL SEDIMENTATION AND EROSION CONTROL MEASURES SHALL BE INSTALLED AS SHOWN ON THE PLANS AND DETAIL DRAWINGS.

3. THIS PLAN DEPICTS THE MINIMUM REQUIRED SEDIMENTATION AND EROSION CONTROLS. THE CONTRACTOR SHALL EMPLOY ADDITIONAL SEDIMENTATION AND EROSION CONTROL MEASURES AS NECESSITATED BY SITE CONDITIONS, OR AS DIRECTED BY THE OWNER, THE OWNER'S REPRESENTATIVE, OR THE CONSERVATION COMMISSION TO ENSURE PROTECTION OF ALL WETLAND RESOURCES AND CONTROL SEDIMENT TRANSPORT. IF SEDIMENTATION PLUMES OCCUR, THE CONTRACTOR SHALL STOP WORK AND INSTALL ADDITIONAL SEDIMENTATION CONTROL DEVICES IMMEDIATELY TO PREVENT FURTHER SEDIMENTATION.

4. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING ALL TEMPORARY AND PERMANENT SEDIMENTATION AND EROSION CONTROLS UNTIL WORK IS COMPLETE AND ALL AREAS HAVE BEEN PERMANENTLY STABILIZED. AT SUCH TIME THE CONTRACTOR IS RESPONSIBLE FOR REMOVING ALL SEDIMENTATION AND EROSION CONTROL MEASURES.

5. THE CONTRACTOR SHALL INSPECT SEDIMENTATION AND EROSION CONTROLS ON A DAILY BASIS AND IMMEDIATELY AFTER EACH RAINFALL; REPAIRS SHALL BE MADE BY THE END OF THE WORKING DAY. ACCUMULATED SEDIMENT SHALL BE REMOVED AND DISPOSED OF BY THE CONTRACTOR WHEN THE VOLUME REACHES 1/4 TO 1/2 THE HEIGHT OF COMPOST SOCK OR SEDIMENT TRAP, OR AS DIRECTED BY THE LOCAL AUTHORITY.

6. SOIL STOCKPILES SHALL BE STABILIZED TO PREVENT EROSION, AND A PERIMETER SEDIMENT CONTROL BARRIER SHALL BE INSTALLED. NO MATERIALS SUBJECT TO EROSION SHALL BE STOCKPILED OVERNIGHT WITHIN 100 FEET OF A WETLAND UNLESS COVERED.

7. TOPSOIL STOCKPILES AND DISTURBED PORTIONS OF THE SITE WHERE CONSTRUCTION ACTIVITY TEMPORARILY CEASES FOR AT LEAST 7 DAYS WILL BE STABILIZED WITH A TEMPORARY SEED AND MULCH NO LATER THAN 7 DAYS FROM THE LAST CONSTRUCTION ACTIVITY IN THAT AREA. THE TEMPORARY SEED SHALL BE EROSION CONTROL MIX. DISTURBED PORTIONS OF THE SITE WHERE FINAL GRADE HAS BEEN MET AND CONSTRUCTION ACTIVITY CEASES SHALL BE STABILIZED WITH PERMANENT SEED NO LATER THAN 7 DAYS AFTER THE LAST CONSTRUCTION ACTIVITY. THE PERMANENT SEED MIX CONSISTS OF BLUEGRASS, TALL FESCUE, AND ANNUAL RYE. PRIOR TO SEEDING, GROUND AGRICULTURAL LIMESTONE SHALL BE APPLIED AS REQUIRED. SEEDING SHALL BE NUTRIENT ENRICHED HYDROSEED AND CELLULOSE OR OTHER DEGRADABLE FIBERS CAPABLE OF RETAINING MOISTURE. IF NOT DURING THE GROWING SEASON, THESE AREAS SHALL BE MULCHED WITH STRAW AND SECURED.

8. DEWATERING OPERATIONS, IF REQUIRED, SHALL DISCHARGE ONTO STABILIZED AREAS, AND ALL DISCHARGE WATER IS TO PASS THROUGH SEDIMENTATION CONTROL DEVICES TO PREVENT IMPACTS UPON WATER BODIES, BORDERING VEGETATED WETLANDS, DRAINAGE SYSTEMS AND ABUTTING PROPERTIES. AT A MINIMUM ALL DISCHARGES SHALL BE INTERCEPTED BY STRAWBALE CORRAL AND STRAWBALE CHECK DAMS SPACED 10' APART.

9. COMPOST SOCK AND SILT FENCE SHALL BE INSTALLED ALONG THE EDGE OF PROPOSED DEVELOPMENT OR AS INDICATED ON THE PLANS. ADDITIONAL BARRIERS SHALL BE LOCATED AS CONDITIONS WARRANT, AND IN SOME AREAS WEED FREE BALE/SILT FENCING STRUCTURES MAY HAVE TO BE DUPLICATED AT REGULAR INTERVALS UP GRADIENT OF WETLANDS.

10. STREET SWEEPING IN THE VICINITY OF THE PROJECT AREA SHALL BE PERFORMED AS NEEDED UNTIL THE PROJECT LIMITS HAVE BEEN STABILIZED. ALL SEDIMENT TRACKED ONTO PUBLIC RIGHT-OF-WAYS SHALL BE SWEPT AT THE END OF EACH WORKING DAY.

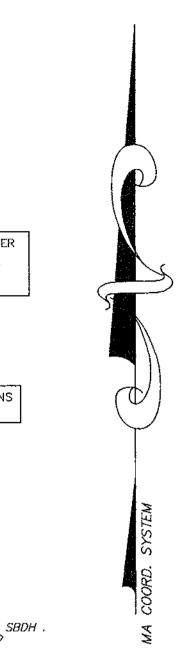
11. ALL EXISTING AND PROPOSED DRAINAGE SYSTEM INLETS, WHICH MAY RECEIVE STORMWATER FLOW FROM DISTURBED AREAS, SHALL BE PROVIDED WITH INLET PROTECTION (CATCH BASIN SILT SACKS). THE CONTRACTOR SHALL MAINTAIN THESE DEVICES PER THE MANUFACTURERS RECOMMENDATIONS UNTIL ALL WORK IS COMPLETED AND ALL AREAS HAVE BEEN ADEQUATELY STABILIZED.

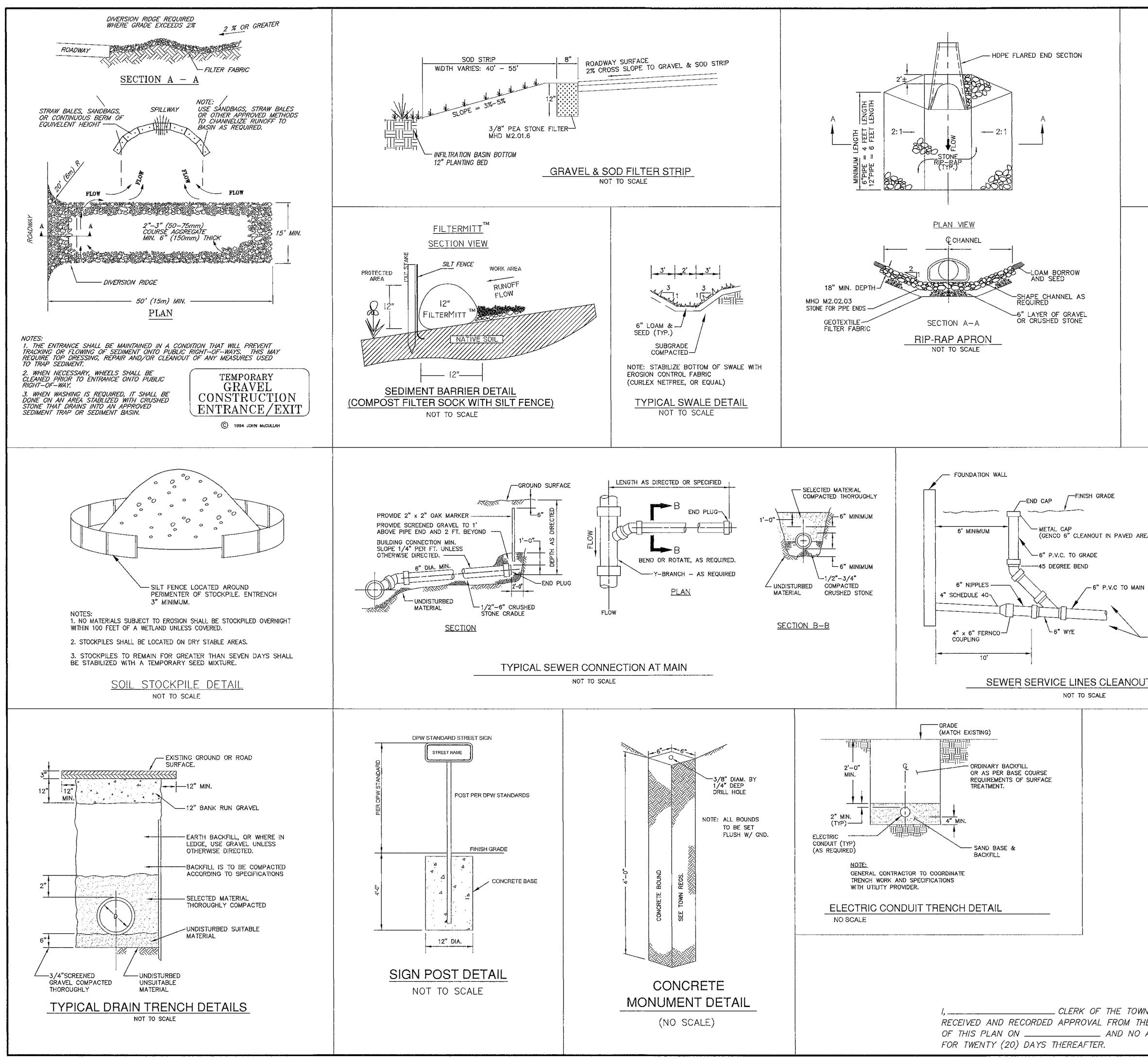
12. DUST CONTROL MEASURES SHALL BE IMPLEMENTED AND MAINTAINED PROPERLY THROUGHOUT DRY WEATHER PERIODS UNTIL ALL DISTURBED AREAS HAVE BEEN PERMANENTLY STABILIZED. METHODS FOR DUST CONTROL SHALL INCLUDE WATER SPRINKLING AND/OR OTHER METHODS APPROVED BY THE ENGINEER.

13. ALL VEHICLES SHALL ENTER AND EXIT THE SIT VIA THE STABILIZED CONSTRUCTION ENTRANCE CONSISTING OF 2" TO 3" INCH CRUSHED STONE TO A DEPTH OF 6" FOR A MINIMUM OF THE FIRST 50 FEET FROM EXISTING PAVED STREETS. EXTEND THE PAD BEYOND 50 FEET AS NECESSARY BASED UPON FIELD CONDITIONS. IF THE SITE CONDITIONS ARE SUCH THAT THE GRAVEL PAD DOES NOT REMOVE THE MAJORITY OF THE MUD AND DEBRIS, THEN THE TIRES SHALL BE WASHED BEFORE ANY VEHICLES ENTER ADJACENT ROADWAYS. ALL WATER USED FOR TIRE WASHING SHALL BE COLLECTED AND TREATED PRIOR TO ENTERING THE DRAINAGE SYSTEM. THE CONTRACTOR SHALL INSPECT THE CONSTRUCTION ENTRANCE DAILY AND AFTER HEAVY USE.

14. EQUIPMENT NOT IN USE SHALL NOT BE PARKED WITHIN WETLANDS OR BUFFER AREAS.

		HARY T. LINDSEY et ux. 69 SUMMER STREET MEDWAY, MA
	OWNERS:	LINDA LINDSEY 69 SUMMER STREET MEDWAY, MA
		VID & RENEE SISTRAND 57R SUMMER STREET MEDWAY, MA
	CC	NNORSTONE
	CIVIL ENGI 10 SOL NORTHBOR	EINEERING INC. INEERS AND LAND SURVEYORS JTHWEST CUTOFF, SUITE 7 OUGH, MASSACHUSETTS 01532 -393-9727 FAX: 508-393-5242
and the second sec	DEFINIT	IVE SUBDIVISION PLAN
WHITH OF MASSA	ERO:	SION & SEDIMENT
VITO COLONNA No. 47635	0	CONTROL PLAN
		OUNDARY LANE
All. 12. 12. 12		IEDWAY, MASS.
	7-12-2022	EDITS PER PEER REVIEW
	2-17-2022	MISC. CON. COMM. EDITS
	2-8-2022	MISC. CON. COMM. EDITS
GRAPHIC SCALE: 1"=40'	REVISED:	DESCRIPTION:
10 20 30 40 50 75 100 150 200 FEET	DRAWN BY: R	
5 10 15 20 30 40 50 60 METERS	<u> </u>	GUST 20, 2021
	SCALE: 1	"=60' SHEET 4 OF 6.





and an approximate of the second

EXIST. GROUND	SLOPE S	KNESS TOPSOIL W/ STABILIZATION (TYP.) NULAR FILL (TYP.)
	= 1 + 1 + 1 + 1 + 1 + 1 + 1 + 1 + 1 + 1	
- LIMIT OF EXCAVA	<u> </u> !	IMIT OF EXCAVATION
	TYPICAL EARTH BERM SECTION NOT TO SCALE	
(SOIL MIX PER MASSDEP S V2, CH2, PG 26 ENGINEERI APPROVED BY THE ENGINE	TORMWATER HANDBOOK ED SOIL MIX), OR EQUAL AS	OVERFLOW SPILLWAY
GRASS BASIN BOTTOM TO BE SEDDED WITH NATIVE GRASSES "New England Erosion Control/Restoration Mix For Detention Basins " OR EQUAL		RIPRAP OUTFALL
12" SAND/TOPSOIL/COMPOST BORROW BASE 40%/20-30%/		
AND REMOVE ANY UNSUIT THE SYSTEM. ANY REPLAC CLEAN FREE DRAINING FILL	NCHES IN TO NATURAL "C" LAYER, ABLE MATERIALS BELOW OR AROUND EMENT FILL REQUIRED SHALL BE WITH LESS THAN 5% PASSING THE MEETS THIS REQUIREMENT)	
	CAL INFILTRATION BASIN S NOT TO SCALE	<u>Section</u>
NOTE: GREEN TRACER TAPE MARKED "CAUTION_SEWER LINE BELOW" MUST BE PLACED IN THE SEWER SERVICE TRENCH FROM THE MUNICIPAL MAIN TO EACH RESIDENCE 16" BELOW FINISH GRADE. CAST IRON COVER IN PAVED AREAS - 6" OF 1/2" TO 3/4" STONE T & FITTINGS		VITO COLONNA No. 47633 VITO COLONNA No. 47633 VITO COLONNA No. 47633 VITO COLONNA No. 47633 VITO COLONNA NO VITO COLONNA NO VITO COLONNA NO VITO COLONNA NO VITO COLONNA NO VITO COLONNA NO VITO COLONNA NO VITO COLONNA NO VITO COLONNA NO VITO COLONNA NO VITO COLONNA NO VITO COLONNA NO VITO COLONNA NO VITO COLONNA NO VITO COLONNA NO VITO COLONNA NO VITO COLONNA NO VITO COLONNA NO VITO COLONNA NO VITO VITO COLONNA NO VITO VITO VITO COLONNA NO VITO VITO VITO VITO VITO VITO VITO VIT
	APPROVAL UNDER THE SUBDIVISION CONTROL LAW, IS REQUIRED. MEDWAY PLANNING AND ECONOMIC DEVELOPMENT BOARD	ENGINEERS AND LAND SURVEYORS 10 SOUTHWEST CUTOFF, SUITE 7 NORTHBOROUGH, MASSACHUSETTS 01532 PHONE: 508-393-9727 FAX: 508-393-5242 DEFINITIVE PLAN CONSTRUCTION DETAILS OF BOUNDARY LANE IN MEDWAY, MA
	- <u> </u>	7/12/2022 EDITS PER PEER REVIEW
N OF MEDWAY	THIS PLAN IS SUBJECT TO A COVENANT TO BE RECORDED HEREWITH. THIS PLAN IS SUBJECT TO A CERTIFICATE	2/17/2022MISC. CON. COMM. EDITS2/8/2022MISC. CON. COMM. EDITSREVISED:DESCRIPTION:DRAWN BY:RMCHECK BY:VC
E PLANNING BOARD APPEAL WAS TAKEN	OF ACTION WHICH SHALL BE RECORDED WITH THE PLAN AT THE NORFOLK COUNTY REGISTRY OF DEEDS.	DRAWN BY: RM CHECK BY: VC DATE: AUGUST 20, 2021 SCALE: NONE SHEET 5 OF 6.

STORMWATER POLLUTION PREVENTION PLAN

FOR	WITH INLET PROTECTION (CATCH BASIN INSERTS). THE CONTRACTOR SHALL MAINTAIN THESE DE ADEQUATELY STABILIZED.
BOUNDARY LANE SUMMER ST. MEDWAY, MA	TEMPORARY SEDIMENT TRAPS- SEDIMENT TRAPS AND/OR BASINS SHALL BE CONSTRUCTED AS N 1800 CUBIC FEET OF STORAGE FOR EACH ACRE OF DRAINAGE AREA. SEDIMENT TRAPS/BASINS REMOVAL, AND SHOULD REMAIN IN OPERATION AND BE PROPERLY MAINTAINED UNTIL THE SITE
THIS STORMWATER POLLUTION PREVENTION PAN HAS BEEN PREPARED IN ACCORDANCE WITH THE MA DEPARTMENT OF ENVIRONMENTAL PROTECTION STORMWATER STANDARDS AND NPDES GENERAL CONSTRUCTION PERMIT FOR STORMWATER DISCHARGES FROM CONSTRUCTION ACTIVITIES. ALL WORK SHALL BE IN ACCORDANCE WITH THE ORDER OF CONDITIONS ISSUED BY THE LOCAL CONSERVATION COMMISSION.	PERMANENT STRUCTURES ARE IN PLACE. REMOVE BASIN AFTER DRAINAGE AREA HAS BEEN PERM DAM, DRAIN WATER AND REMOVE SEDIMENT; PLACE WASTE MATERIAL IN DESIGNATED DISPOSA STABILIZE. DUST CONTROL - DUST CONTROL MEASURES SHALL BE IMPLEMENTED AND MAINTAINED PROPERL
1.1 PROJECT INFORMATION PROJECT NAME AND LOCATION: BOUNDARY LANE SUBDIVISION 69 SUMMER STREET, MEDWAY, MA	HAVE BEEN PERMANENTLY STABILIZED. METHODS FOR DUST CONTROL SHALL INCLUDE WATER SPRIN
ACCOMPANYING DOCUMENTS: PLANS TITLED "DEFINITIVE SUBDIVISION PLAN, BOUNDARY LANE SUBDIVISION, MEDWAY, MA" PREPARED BY CONNORSTONE ENGINEERING,	SOIL STOCKPILES – SOIL STOCKPILES SHALL BE STABILIZED TO PREVENT EROSION ALONG WITH EROSION SHALL BE STOCKPILED OVERNIGHT WITHIN 100 FEET OF A WETLAND UNLESS COVERED.
ARE TO BE CONSIDERED A PART OF THIS DOCUMENT.	DEWATERING OPERATIONS – DEWATERING OPERATIONS, IF REQUIRED, SHALL DISCHARGE ONTO SEDIMENTATION CONTROL DEVICES TO PREVENT IMPACTS UPON WATER BODIES, BORDERING VEGET DISCHARGES FROM DEWATERING OPERATIONS SHALL BE DISCHARGED DIRECTLY TO THE DRAINAGE S
LATITUDE/LONGITUDE: LAT: 42.15050 / LONG: 71.44400	SNOW REMOVAL – SNOW SHALL BE PLOWED TO THE SHOULDER OF THE ROADWAY. ANY EXCESS OF SHALL NOT BE PLOWED INTO THE CONSTRUCTED WETLAND OR INTO THE 20-FOOT BUFFER ZONE
PROJECT DESCRIPTION: THREE (3) LOT RESIDENTIAL SUBDIVISION ESTIMATED DATES: START: FALL 2021 / COMPLETION: SPRING 2023	AND FUNCTIONAL IMMEDIATELY AFTER SNOW PLOWING. ANY SNOW PILES SHALL BE PLACED SO TH
NAME OF RECEIVING WATERS: CHICKEN BROOK & HOPPING BROOK	TOPSOIL – TOPSOIL SHALL BE STRIPPED AND STOCKPILED ON-SITE FOR REUSE, UNLESS OT MATERIALS SHALL BE RE-USED ON-SITE TO THE MAXIMUM EXTENT PRACTICAL. ANY EXCESS SHALL
ESTIMATED AREA OF DISTURBANCE: 1.5 ACRES	MINIMIZE SOIL COMPACTION - WITHIN THE LIMITS OF THE INFILTRATION GALLEY, THE USE OF HEAVY
1.2 EXISTING CONDITIONS THE EXISTING SITE CONSISTS OF A 11.3 ACRE PARCEL AT 69–67R SUMMER STREET AND IS SHOWN ON ASSESSOR'S MAP 37 AS PARCELS 36 AND 33.	VEHICLE WASHING VEHICLE AND EQUIPMENT WASHING, OTHER THAN HOSE DOWN WITH CLEAN DIRECTED TO A SEDIMENT CONTROL DEVICE (NOT DIRECTLY TO ANY STORMWATER DRAINAGE SYSTEM
THE LOT IS CURRENTLY DEVELOPED WITH TWO SINGLE FAMILY HOUSES LOCATED OFF A COMMON DRIVEWAY FROM SUMMER STREET. THE CURRENT ZONING MAP SHOWS THE SITE IS WITHIN THE AR-1 DISTRICT, WHICH REQUIRES A MINIMUM LOT AREA OF 44,000 SQUARE FEET AND 180 FEET OF FRONTAGE. GENERALLY THE EASTERN HALF OF THE SITE IS FULLY DEVELOPED WITH THE TWO RESIDENTIAL HOUSES AND AGRICULTURAL USES. THE CURRENT CONDITIONS INCLUDE 27,840 SQUARE FEET OF IMPERVIOUS AREAS (PAVEMENT, ROOF AREAS, AND/OR COMPACTED GRAVEL SURFACES). THE WESTERN HALF OF THE SITE CONSISTS OF WOODED AREAS, WETLANDS, AND A POWER COMPANY EASEMENT (OVERHEAD WIRES).	FERTILIZER DISCHARGE RESTRICTIONS. • APPLY AT A RATE AND IN AMOUNTS CONSISTENT WITH MANUFACTURER'S SPECIFICATIONS, • APPLY DURING THE GROWING SEASON, AND PREFERABLY TIMED TO COINCIDE AS CLOSELY A GROWTH; • AVOID APPLYING BEFORE HEAVY RAINS THAT COULD CAUSE EXCESS NUTRIENTS TO BE DISCHA
THE NATURAL RESOURCE CONSERVATION SERVICE HAS MAPPED THE SOILS WITHIN THE DEVELOPMENT AREA AS "WOODBRIDGE FINE SANDY LOAM," WHICH ARE TYPICALLY MODERATELY WELL DRAINED SOILS WITH GROUNDWATER AT 18 TO 30 INCHES BELOW GRADE. TEST PITS WERE PERFORMED BY CONNORSTONE ENGINEERING, INC. TO DETERMINE CONFIRM THE SOIL CLASSIFICATION AND DEPTH TO GROUNDWATER FOR DESIGN OF THE STORMWATER MANAGEMENT BASIN. THE TEST PITS WITHIN THE BASIN SHOWED LOAMY SAND TO FINE SAND MATERIAL WITH A SHALLOW GROUNDWATER ELEVATION.	 NEVER APPLY TO FROZEN GROUND; NEVER APPLY TO STORMWATER CONVEYANCE CHANNELS WITH FLOWING WATER; AND FOLLOW ALL OTHER FEDERAL, STATE, TRIBAL, AND LOCAL REQUIREMENTS REGARDING FERTILIZE WASHING OF APPLICATORS AND CONTAINERS USED FOR PAINT, CONCRETE, OR OTHER MATERIALS
THERE ARE ALSO MINOR AREAS ON-SITE MAPPED AS "RIDGEBURY FINE SANDY LOAM." THESE SOILS ARE ASSOCIATED WITH WETLAND AREAS, AND CORRELATE TO THE DELINEATED WETLANDS ON-SITE. RUNOFF FROM THE PROJECT AREA FLOWS IN TWO FLOW PATTERNS. EITHER TO THE REAR WETLAND OR TO THE FRONT CORNER WETLAND. THE SUBCATCHMENT AREAS ARE APPROXIMATELY SPLIT DOWN THE CENTRAL PORTION OF THE DEVELOPED AREA. THERE ARE CURRENTLY NO STORMWATER	LEAK-PROOF PIT. THE CONTAINER OR PIT MUST BE DESIGNED SO THAT NO OVERFLOWS CAN OCO OR CLEANOUT WASTES AS FOLLOWS: DO NOT DUMP LIQUID WASTES IN STORM SEWERS; DISPOSE AND. REMOVE AND DISPOSE OF HARDENED CONCRETE WASTE CONSISTENT WITH YOUR HANDL CLEANOUT ACTIVITIES AS FAR AWAY AS POSSIBLE FROM SURFACE WATERS AND STORMWATER INLE AREAS TO BE USED FOR THESE ACTIVITIES AND CONDUCT SUCH ACTIVITIES ONLY IN THESE AREAS.
 CONTROLS ON-SITE AND ALL FLOW IS VIA OVERLAND RUNOFF 1.3 PROPOSED DEVELOPMENT / NATURE OF CONSTRUCTION ACTIVITIES THE PROPOSED REJECT PROVIDES FOR A THREE (3) LOT RESIDENTIAL SUBDIVISION. THE TWO EXISTING HOUSES ARE TO REMAIN AND ONE NEW HOUSE THE PROPOSED REJECT PROVIDES FOR A THREE (3) LOT RESIDENTIAL SUBDIVISION. THE TWO EXISTING HOUSES ARE TO REMAIN AND ONE NEW HOUSE THE PROPOSED REJECT PROVIDES FOR A THREE (3) LOT RESIDENTIAL SUBDIVISION. THE TWO EXISTING HOUSES ARE TO REMAIN AND ONE NEW HOUSE THE PROPOSED REJECT PROVIDES FOR A THREE (3) LOT RESIDENTIAL SUBDIVISION. THE TWO EXISTING HOUSES ARE TO REMAIN AND ONE NEW HOUSE THE PROPOSED REJECT PROVIDES FOR A THREE (3) LOT RESIDENTIAL SUBDIVISION. THE TWO EXISTING HOUSES ARE TO REMAIN AND ONE NEW HOUSE THE PROPOSED REJECT PROVIDES FOR A THREE (3) LOT RESIDENTIAL SUBDIVISION. THE TWO EXISTING HOUSES ARE TO REMAIN AND ONE NEW HOUSE THE PROPOSED REJECT PROVIDES FOR A THREE (3) LOT RESIDENTIAL SUBDIVISION. THE TWO EXISTING HOUSES ARE TO REMAIN AND ONE NEW HOUSE	2.3 INSPECTION AND MAINTENANCE SCHEDULE THE RESPONSIBLE PARTY SHALL BE RESPONSIBLE FOR MAINTAINING ALL TEMPORARY AND PE COMPLETE AND ALL AREAS HAVE BEEN PERMANENTLY STABILIZED. AT SUCH TIME ALL SEDIMENTA ARE THE INSPECTION AND MAINTENANCE PRACTICES THAT WILL BE USED TO MAINTAIN EROSION AN
LOT HAS BEEN PROPOSED. ALL LOTS ARE GREATER THAN THE MINIMUM 44,000 SQ. FT. LOT AREA AND MINIMUM 180 FEET OF FRONTAGE. THE PROJECT WILL INCLUDE CONSTRUCTION OF A 350 FOOT LONG CUL-DE-SAC ROADWAY TO PROVIDE THE REQUIRED ACCESS AND LOT FRONTAGE. THE PROPOSED ROADWAY WOULD BE CONSTRUCTED IN THE SAME LOCATION AS THE EXISTING PAVED COMMON DRIVEWAY. THE PAVEMENT WOULD BE WIDENED FROM 12 FEET TO THE REQUIRED 20 FEET WIDE FOR FIRE ACCESS. THE ROAD PROFILE HAS PROVIDED RELATIVELY FLAT GRADES WITH AN UP/DOWN SLOPE OF 1% TO 1.5% THROUGH THE ROAD. A "TEE" TYPE TURNAROUND HAS ALSO BEEN PROVIDED AT THE END OF THE ROADWAY FOR EMERGENCY AND DELIVERY VEHICLE MANEUVERING. THE PROPOSED PROJECT WOULD RESULT IN 27,485 SQUARE FEET OF IMPERVIOUS AREA, WHICH WOULD RESULT IN A SLIGHT REDUCTION IN IMPERVIOUS AREAS WHEN COMPARED TO THE EXISTING CONDITIONS.	SCHEDULE: • ALL CONTROL MEASURES WILL BE INSPECTED AT LEAST ONCE EACH WEEK. • ALL EROSION COMPONENTS SHALL BE INSPECTED WITHIN 24 HOURS FOLLOWING ANY PRECIPITA • DEPTH OF PRECIPITATION EVENTS SHALL BE BASED UPON NCDC REPORTING. <u>MAINTENANCE PRACTICES:</u> • ALL MEASURES WILL BE MAINTAINED IN GOOD WORKING ORDER; IF A REPAIR IS NECESS. DEFICIENCIES.
THE PROPOSED STORMWATER MANAGEMENT SYSTEM HAS BEEN DESIGNED TO CONTROL BOTH THE PEAK RATE AND VOLUME OF RUNOFF TO MATCH THE PRE-EXISTING CONDITIONS THROUGH THE 100 YEAR STORM EVENT. RAINFALL INTENSITIES WERE BASED UPON THE MOST CURRENT NOAA ATLAS 14 DATA. THE STORMWATER MANAGEMENT SYSTEM INCLUDES A SURFACE COLLECTION SYSTEM VIA LID TECHNIQUES OF OVERLAND FLOW OVER GRASSED SURFACES. RUNOFF WOULD THEN BE DIRECTED TO A SHALLOW STORMWATER BASIN WITH A BERM HEIGHT OF TWO (2) FEET. THIS BASIN WILL PROVIDE FOR RECHARGE TO GROUNDWATER, TREATMENT TO 80% TSS, AND CONTROL OF OFF-SITE FLOWS.	 BUILT UP SEDIMENT SHALL BE REMOVED FROM THE SILT FENCE WHEN IT REACHES A DEPTH E THE SEDIMENT TRAPS SHALL BE INSPECTED FOR DEPTH OF SEDIMENT, AND BUILT UP SEDIMEI CAPACITY OR AT THE END OF THE JOB. CHECK EMBANKMENT FOR: SETTLEMENT, SEEPAGE, O PIPING. REPAIR IMMEDIATELY. REMOVE TRASH AND OTHER DEBRIS FROM PRINCIPAL SPILLWAY, WHEN SEDIMENT POOL DOES NOT DRAIN PROPERLY. ANY DIVERSION DIKES WILL BE INSPECTED FOR BREACHES AND PROMPTLY REPAIRED.
 1.4 CONSTRUCTION SITE ESTIMATES TOTAL PARCEL AREA 11.3 ACRES TOTAL LAND DISTURBANCE: 1.5 ACRES IMPERVIOUS AREA BEFORE CONSTRUCTION: 0.6 ACRES IMPERVIOUS AREA AFTER CONSTRUCTION: 0.6 ACRES	 TEMPORARY AND PERMANENT SEEDING AND PLANTING WILL BE INSPECTED FOR BARE SPOTS, W. CONTRACTOR TO MAINTAIN A SUPPLY OF EROSION CONTROL DEVISES ON SITE AT ALL TIMES T STREET SWEEPING SHALL BE PERFORMED THROUGHOUT CONSTRUCTION AS REQUIRED. ANY SE OF THE WORKING DAY. CATCH BASINS AND STORMCEPTORS SHALL BE MAINTAINED THROUGHOUT CONSTRUCTION AND AND 8-INCHES IN STORMCEPTORS.
1.5 SENSITIVE AREAS / WETLAND RESOURCES A WETLAND SYSTEM INCLUDING BORDERING VEGETATED WETLANDS AND INTERMITTENT STREAM IS LOCATED TO THE REAR OF THE SITE. THIS SYSTEM FLOWS GENERALLY FROM NORTH TO SOUTH TOWARD THE UNDEVELOPED WOODED LAND ABUTTING TO THE SOUTH OF THE PROJECT. THERE IS ALSO A SMALLER WETLAND AREA THAT HAS BEEN DELINEATED IN THE NORTHEAST CORNER OF THE SITE. THIS AREA CONNECTS VIA A CULVERT UNDER THE ABUTTING DRIVEWAY TO A WETLAND ALONG SUMMER STREET.	THE SITE SUPERINTENDENT, WILL SELECT THREE INDIVIDUALS WHO WILL BE RESPONSIBLE FOR INSP INSPECTION AND MAINTENANCE REPORTS. PERSONNEL SELECTED FOR INSPECTION AND MAINTENANCE IN SECTION 4. D OF THE GCP. STAFF SHALL BE TRAINED IN ALL INSPECTION AND MAINTENANCE F ONSITE IN GOOD WORKING ORDER.
1.6 DISCHARGE INFORMATION STORMWATER GENERALLY FLOWS IN TWO DIRECTIONS. THE AREA THAT FLOWS TO THE NORTHEAST ULTIMATELY CONNECTS TO CHICKEN BROOK (APPROXIMATELY 4,000 FEET FROM THE SITE). THE AREA THAT FLOWS TO THE WEST ULTIMATELY CONNECTS TO HOPPING BROOK. BOTH OF THESE WATER BODIES ARE NOT CLASSIFIED UNDER THE MA SURFACE WATER QUALITY STANDARDS 314 CMR 4. BASED UPON THE MASSACHUSETTS YEAR 2016 INTEGRATED LIST OF WATERS THIS SURFACE WATER IS AN IMPAIRED WATER DUE TO E. COLI, AND IS LISTED AS A CATEGORY 5 WATER, 'WATERS REQUIRING A TMDL.'	AN INSPECTION REPORT WILL BE MADE AFTER EACH INSPECTION. COPIES OF THE REPORTS SHA MUST INCLUDE: • THE INSPECTION DATE; • NAMES, TITLES, AND QUALIFICATIONS OF PERSONNEL MAKING THE INSPECTION; • WEATHER INFORMATION FOR THE PERIOD SINCE THE LAST INSPECTION INCLUDING ESTIM APPROXIMATE AMOUNT OF RAINFALL FOR EACH STORM EVENT (IN INCHES), AND WHETHER AND • LOCATION(S) OF DISCHARGES OF SEDIMENT OR OTHER POLLUTANTS FROM THE SITE; • LOCATION(S) OF BMPS THAT NEED TO BE MAINTAINED; • LOCATION(S) OF BMPS THAT FAILED TO OPERATE AS DESIGNED OR PROVED INADEQUATE FOR
 1.7 ENDANGERED SPECIES CERTIFICATION THE PROPOSED PROJECT IS NOT LOCATED IN AN ESTIMATED OR PRIORITY HABITAT OF RARE WILDLIFE AS INDICATED ON THE 2017 ESTIMATED HABITAT MAP OF STATE-LISTED RARE WETLAND WILDLIFE PUBLISHED BY THE NATURAL HERITAGE AND ENDANGERED SPECIES PROGRAM (NHESP) 1.8 DOTINITIAL SCURDES OF DOLUTION	 LOCATION(S) WHERE ADDITIONAL BMPS ARE NEEDED THAT DID NOT EXIST AT THE TIME OF INS CORRECTIVE ACTION REQUIRED INCLUDING IMPLEMENTATION DATES. THE INSPECTION REPORT MUST BE SIGNED IN ACCORDANCE WITH APPENDIX G, SECTION 11 OF THE
1.8 POTENTIAL SOURCES OF POLLUTION POTENTIAL SOURCES OF SEDIMENT TO STORMWATER RUNOFF: • CLEARING AND GRUBBING OPERATIONS • GRADING AND SITE EXCAVATION OPERATIONS • VEHICLE TRACKING	2.5 STAFF AND TRAINING REQUIREMENTS. PRIOR TO THE COMMENCEMENT OF EARTH-DISTURBING ACTIVITIES OR POLLUTANT-GENERATING / FOLLOWING PERSONNEL UNDERSTAND THE REQUIREMENTS OF THIS PERMIT AND THEIR SPECIFIC RES • PERSONNEL WHO ARE RESPONSIBLE FOR THE DESIGN, INSTALLATION, MAINTENANCE, AND/OR F
 TOPSOIL STRIPPING AND STOCKPILING LANDSCAPING OPERATIONS POTENTIAL POLLUTANTS AND SOURCES, OTHER THAN SEDIMENT, TO STORMWATER RUNOFF: COMBINED STAGING AREA-SMALL FUELING ACTIVITIES, MINOR EQUIPMENT MAINTENANCE, SANITARY FACILITIES, AND HAZARDOUS WASTE STORAGE. 	MEASURES); • PERSONNEL RESPONSIBLE FOR THE APPLICATION AND STORAGE OF TREATMENT CHEMICALS (IF • PERSONNEL WHO ARE RESPONSIBLE FOR CONDUCTING INSPECTIONS AS REQUIRED IN PART 4.1. • PERSONNEL WHO ARE RESPONSIBLE FOR TAKING CORRECTIVE ACTIONS.
 MATERIALS STORAGE AREAGENERAL BUILDING MATERIALS, SOLVENTS, ADHESIVES, PAVING MATERIALS, PAINTS, AGGREGATES, TRASH, ETC. CONSTRUCTION ACTIVITYPAVING, CURB/GUTTER INSTALLATION, CONCRETE POURING/MORTAR/STUCCO, BUILDING CONSTRUCTION, AND CONCRETE WASHOUT AREA. 1.9 REQUIREMENT TO POST A NOTICE OF YOUR PERMIT COVERAGE. THE OPERATOR MUST POST A SIGN OR OTHER NOTICE CONSPICUOUSLY AT A SAFE, PUBLICLY ACCESSIBLE LOCATION IN CLOSE PROXIMITY TO THE PROJECT SITE. AT A 	NOTES: (1) IF THE PERSON REQUIRING TRAINING IS A NEW EMPLOYEE, WHO STARTS AFTER YOU YOU MUST ENSURE THAT THIS PERSON HAS THE PROPER UNDERSTANDING AS REQUIRED ABO COMPLIANCE WITH THIS PERMIT. (2) FOR EMERGENCY-RELATED CONSTRUCTION ACTIVITIES, THE EARTH-DISTURBING ACTIVITIES DOES NOT APPLY, HOWEVER, SUCH PERSONNEL MUST HAVE THE RE
MINIMUM, THE NOTICE MUST INCLUDE THE NPDES PERMIT TRACKING NUMBER AND A CONTACT NAME AND PHONE NUMBER FOR OBTAINING ADDITIONAL PROJECT INFORMATION. THE NOTICE MUST BE LOCATED SO THAT IT IS VISIBLE FROM THE PUBLIC ROAD THAT IS NEAREST TO THE ACTIVE PART OF THE CONSTRUCTION SITE, AND IT MUST USE A FONT LARGE ENOUGH TO BE READILY VIEWED FROM A PUBLIC RIGHT—OF—WAY.	THE OPERATOR IS RESPONSIBLE FOR ENSURING THAT ALL ACTIVITIES ON THE SITE COMPLY WITH TO TO PROVIDE OR DOCUMENT FORMAL TRAINING FOR SUBCONTRACTORS OR OTHER OUTSIDE SET UNDERSTAND ANY REQUIREMENTS OF THE PERMIT THAT MAY BE AFFECTED BY THE WORK THEY AN BE TRAINED TO UNDERSTAND THE FOLLOWING IF RELATED TO THE SCOPE OF THEIR JOB DUTIES NEED TO UNDERSTAND HOW TO CONDUCT INSPECTIONS):
1.10 SUBCONTRACTORS: EACH SUBCONTRACTOR ENGAGED IN ACTIVITIES AT THE CONSTRUCTION SITE THAT COULD IMPACT STORMWATER MUST BE IDENTIFIED AND SIGN THE SUBCONTRACTOR CERTIFICATIONS/AGREEMENT (ATTACHED). 2.1 GENERAL CONSTRUCTION SEQUENCING OF MAJOR ACTIVITIES	• THE LOCATION OF ALL STORMWATER CONTROLS ON THE SITE REQUIRED BY THIS PERMIT, AND • THE PROPER PROCEDURES TO FOLLOW WITH RESPECT TO THE PERMIT'S POLLUTION PREVENTION • WHEN AND HOW TO CONDUCT INSPECTIONS, RECORD APPLICABLE FINDINGS, AND TAKE CORREC
 ESTIMATED SCHEDULE: 18-24 MONTHS GENERAL SEQUENCING PLAN	3.1 STORAGE, HANDLING, AND WASTE DISPOSAL BUILDING PRODUCTS SHALL BE COVERED OR STORED INSIDE TO PREVENT ANY DISCHARGE
 1. INSTALL SEDIMENT CONTROL BARRIERS AND CONSTRUCTION ENTRANCE OFF SUMMER STREET. 2.REMOVE THE EXISTING STRUCTURES AND PAVEMENT AREAS.	REGISTRATION REQUIREMENTS.
3.INSTALL TEMPORARY SEDIMENT BASINS (IF REQUIRED) 4.CLEAR, STUMP & GRUB ROADWAY AREAS. 5.BEGIN CONSTRUCTION OF ROADWAY.	APPLICATION, DISPOSAL, AND REGISTRATION REQUIREMENTS.
6.INSTALL ROADWAY CROSS CULVERT PRIOR TO COMPLETING PLACEMENT OF FILL NEAR STATION 0+50 TO PREVENT PONDING ON ABUTTING LAND AND BLOCKAGE OF DRAINAGE FLOW PATHS. 7.INSTALL UTILITIES. 8.INSTALL GRAVEL BASE AND BINDER COURSE PAVEMENT. 9.BEGIN LOT DEVELOPMENT. 10. PERFORM FINAL LANDSCAPING AND STABILIZATION	DIESEL FUEL, OIL, HYDRAULIC FLUIDS, OTHER PETROLEUM PRODUCTS, AND OTHER CHEMICALS- STO WATER-TICHT CONTAINERS, AND PROVIDE EITHER (1) COVER (E.G., PLASTIC SHEETING OR TEMP CONTACT WITH RAINWATER, OR (2) A SIMILARLY EFFECTIVE MEANS DESIGNED TO PREVENT THE D PROVIDE SECONDARY CONTAINMENT (E.G., SPILL BERMS, DECKS, SPILL CONTAINMENT PALLETS). CL POSSIBLE, AND DISPOSE OF USED MATERIALS PROPERLY. DO NOT CLEAN SURFACES OR SPILLS B PREVENT A DISCHARGE OR A CONTINUATION OF AN ONGOING DISCHARGE
11. CLEAN AND SEDIMENT AND FINAL INSTALLATION OF THE STORMWATER BASIN. 12. PLACE FINAL TOP COURSE PAVEMENT.	HAZARDOUS WASTE – SEPARATE HAZARDOUS OR TOXIC WASTE FROM CONSTRUCTION AND DO
13. REMOVE THE REMAINING SILTATION DEVISES AS THE AREA BECOMES STABLE. 2.2 EROSION AND SEDIMENT CONTROLS GENERAL CONDITIONS – PRIOR TO INITIATING CONSTRUCTION, ALL SEDIMENTATION AND EROSION CONTROL MEASURES SHALL BE INSTALLED AS SHOWN ON THE PLANS AND DETAIL DRAWINGS. THIS PLAN DEPICTS THE MINIMUM REQUIRED SEDIMENTATION AND EROSION CONTROLS. THE CONTRACTOR SHALL EMPLOY ADDITIONAL CEDUCATION AND SEDIMENT OF DEPICTS THE MINIMUM REQUIRED SEDIMENTATION AND EROSION CONTROLS. THE CONTRACTOR SHALL EMPLOY ADDITIONAL	CONSTRUCTED OF SUITABLE MATERIALS TO PREVENT LEAKAGE AND CORROSION, AND WHICH ARE AND RECOVERY ACT (RCRA) REQUIREMENTS AND ALL OTHER APPLICABLE FEDERAL, STATE, TRIBAL STORED OUTSIDE WITHIN APPROPRIATELYSIZED SECONDARY CONTAINMENT (E.G., SPILL BERMS, DE DISCHARGED, OR PROVIDE A SIMILARLY EFFECTIVE MEANS DESIGNED TO PREVENT THE DISCHARG COVERED AREA OR HAVING A SPILL KIT AVAILABLE ON SITE);
SEDIMENTATION AND EROSION CONTROL MEASURES AS NECESSITATED BY SITE CONDITIONS, OR AS DIRECTED BY THE OWNER, THE OWNER'S REPRESENTATIVE, OR THE CONSERVATION COMMISSION TO ENSURE PROTECTION OF ALL WETLAND RESOURCES AND CONTROL SEDIMENT TRANSPORT. IF SEDIMENTATION PLUMES OCCUR, THE CONTRACTOR SHALL STOP WORK AND INSTALL ADDITIONAL SEDIMENTATION CONTROL DEVICES IMMEDIATELY TO PREVENT FURTHER SEDIMENTATION.	DISPOSE OF HAZARDOUS OR TOXIC WASTE IN ACCORDANCE WITH THE MANUFACTURER'S RECO STATE, TRIBAL, AND LOCAL REQUIREMENTS. SITE PERSONNEL WILL BE INSTRUCTED IN THESE PI
TEMPORARY STABILIZATION – TOPSOIL STOCKPILES AND DISTURBED PORTIONS OF THE SITE WHERE CONSTRUCTION ACTIVITY TEMPORARILY CEASES FOR AT LEAST 14 DAYS WILL BE STABILIZED WITH A TEMPORARY SEED AND MULCH NO LATER THAN 14 DAYS FROM THE LAST CONSTRUCTION ACTIVITY IN THAT AREA. THE TEMPORARY SEED SHALL BE EROSION CONTROL MIX. SEEDING SHALL BE NUTRIENT ENRICHED HYDROSEED WITH TACKIFER AND CELLULOSE OR OTHER DEGRADABLE FIBERS CAPABLE OF RETAINING MOISTURE.	OPERATIONS, WILL BE RESPONSIBLE FOR SEEING THAT THESE PROCEDURES ARE FOLLOWED. CLEAN UP SPILLS IMMEDIATELY, USING DRY CLEAN-UP METHODS WHERE POSSIBLE, AND DISPOSE BY HOSING THE AREA DOWN. ELIMINATE THE SOURCE OF THE SPILL TO PREVENT A DISCHARGE O

PERMANENT STABILIZATION -- DISTURBED PORTION OF THE SITE WHERE CONSTRUCTION ACTIVITY CEASES SHALL BE STABILIZED WITH PERMANENT SEED NO LATER THAN 14 DAYS AFTER THE LAST CONSTRUCTION ACTIVITY. THE PERMANENT SEED MIX CONSISTS OF TALL FESCUE, AND ANNUAL RYE. PRIOR TO SEEDING, GROUND AGRICULTURAL LIMESTONE SHALL BE APPLIED. SEEDING SHALL BE NUTRIENT ENRICHED HYDROSEED WITH TACKIFERS AND CELLULOSE OR OTHER DEGRADABLE FIBERS CAPABLE OF RETAINING MOISTURE.

EROSION BARRIER (PERIMETER CONTROLS) - FROSION BARRIERS SHALL CONSIST OF COMPOST FILTER SOCKS, PRIOR TO THE COMMENCEMENT OF WORK, FILTER SOCKS SHALL BE INSTALLED ALONG THE EDGE OF PROPOSED DEVELOPMENT, AND AS INDICATED ON THE PLANS. ADDITIONAL EROSION BARRIERS SHALL BE LOCATED AS CONDITIONS WARRANT OR AS DIRECTED BY THE OWNER, HIS REPRESENTATIVES, OR THE LOCAL AUTHORITY.

TRACK OUT CONTROLS / CONSTRUCTION ENTRANCE - A STABILIZED STONE APRON CONSTRUCTION ENTRANCE SHALL BE AT ALL CONSTRUCTION ENTRANCES TO HELP PREVENT VEHICLE TRACKING OF SEDIMENTS. ALL VEHICLES SHALL ENTER AND EXIT THE SIT VIA THE STABILIZED CONSTRUCTION ENTRANCE. THE CONTRACTOR SHALL INSPECT THE CONSTRUCTION ENTRANCE DAILY AND AFTER HEAVY USE. IF MUD AND SOIL CLOGS THE VOIDS IN THE CRUSHED STONE REDUCING THE EFFECTIVENESS. THE PAD SHALL BE TOP DRESSED WITH NEW. CLEAN STONE. IF THE PAD BECOMES COMPLETELY CLOGGED. REPLACEMENT OF THE ENTIRE PAD MAY BE NECESSARY. DUMP TRUCKS HAULING MATERIAL FROM THE CONSTRUCTION SITE MILL BE COVERED WITH A TARPAULIN.

BE TIPPED OVER.

TRACK OUT CONTROLS / STREET SWEEPING - STREET SWEEPING IN THE VICINITY OF THE PROJECT AREA SHALL BE PERFORMED AS NEEDED UNTIL THE PROJECT LIMITS HAVE BEEN STABILIZED. ALL SEDIMENT TRACKED OUTSIDE THE LIMIT OF WORK SHALL BE SWEPT AT THE END OF EACH WORKING DAY.

INLET PROTECTION - ALL EXISTING AND PROPOSED DRAINAGE SYSTEM INLETS, WHICH MAY RECEIVE STORMWATER FLOW FROM DISTURBED AREAS, SHALL BE PROVIDED WITH INLET PROTECTION (CATCH BASIN INSERTS). THE CONTRACTOR SHALL MAINTAIN THESE DEVICES UNTIL ALL WORK IS COMPLETED AND ALL AREAS HAVE BEEN

> NT TRAPS- SEDIMENT TRAPS AND/OR BASINS SHALL BE CONSTRUCTED AS NECESSITATED BY FIELD CONDITIONS. THE MINIMUM VOLUME SHALL BE F STORAGE FOR EACH ACRE OF DRAINAGE AREA. SEDIMENT TRAPS/BASINS SHOULD BE READILY ACCESSIBLE FOR MAINTENANCE AND SEDIMENT DULD REMAIN IN OPERATION AND BE PROPERLY MAINTAINED UNTIL THE SITE AREA IS PERMANENTLY STABILIZED BY VEGETATION AND/OR WHEN URES ARE IN PLACE. REMOVE BASIN AFTER DRAINAGE AREA HAS BEEN PERMANENTLY STABILIZED, INSPECTED, AND APPROVED. BEFORE REMOVING AND REMOVE SEDIMENT; PLACE WASTE MATERIAL IN DESIGNATED DISPOSAL AREAS. SMOOTH SITE TO BLEND WITH SURROUNDING AREA AND

> DUST CONTROL MEASURES SHALL BE IMPLEMENTED AND MAINTAINED PROPERLY THROUGHOUT DRY WEATHER PERIODS UNTIL ALL DISTURBED AREAS IENTLY STABILIZED. METHODS FOR DUST CONTROL SHALL INCLUDE WATER SPRINKLING AND/OR OTHER METHODS APPROVED BY THE ENGINEER. SOIL STOCKPILES SHALL BE STABILIZED TO PREVENT EROSION ALONG WITH PERIMETER SEDIMENTATION CONTROLS. NO MATERIALS SUBJECT TO

> TIONS – DEWATERING OPERATIONS, IF REQUIRED, SHALL DISCHARGE ONTO STABILIZED AREAS. ALL DISCHARGE WATER IS TO PASS THROUGH ITROL DEVICES TO PREVENT IMPACTS UPON WATER BODIES, BORDERING VEGETATED WETLANDS, DRAINAGE SYSTEMS AND ABUTTING PROPERTIES. NO DEWATERING OPERATIONS SHALL BE DISCHARGED DIRECTLY TO THE DRAINAGE SYSTEM.

> SNOW SHALL BE PLOWED TO THE SHOULDER OF THE ROADWAY. ANY EXCESS OF THAT WHICH CAN BE STORED ON-SITE SHALL BE REMOVED. SNOW WED INTO THE CONSTRUCTED WETLAND OR INTO THE 20-FOOT BUFFER ZONE TO ANY WETLAND AREA. ALL CATCH BASINS SHALL BE UNCOVERED MEDIATELY AFTER SNOW PLOWING. ANY SNOW PILES SHALL BE PLACED SO THAT IT WILL NOT INTERFERE WITH RUNOFF FLOW.

> SHALL BE STRIPPED AND STOCKPILED ON-SITE FOR REUSE, UNLESS OTHERWISE NOTED ON THE PLANS (PER STOCKPILE REQUIREMENTS). RE-USED ON-SITE TO THE MAXIMUM EXTENT PRACTICAL. ANY EXCESS SHALL BE PROPERLY EXPORTED OFF-SITE.

> ACTION — WITHIN THE LIMITS OF THE INFILTRATION GALLEY, THE USE OF HEAVY EQUIPMENT SHALL BE LIMITED TO THE MAXIMUM EXTENT PRACTICAL. VEHICLE AND EQUIPMENT WASHING, OTHER THAN HOSE DOWN WITH CLEAN WATER, SHALL NOT BE ALLOWED. ALL WASH DOWN WATER SHALL BE IMENT CONTROL DEVICE (NOT DIRECTLY TO ANY STORMWATER DRAINAGE SYSTEM OR WETLAND).

TE AND IN AMOUNTS CONSISTENT WITH MANUFACTURER'S SPECIFICATIONS, THE GROWING SEASON, AND PREFERABLY TIMED TO COINCIDE AS CLOSELY AS POSSIBLE TO THE PERIOD OF MAXIMUM VEGETATION UPTAKE AND BEFORE HEAVY RAINS THAT COULD CAUSE EXCESS NUTRIENTS TO BE DISCHARGED;

O FROZEN GROUND: O STORMWATER CONVEYANCE CHANNELS WITH FLOWING WATER; AND HER FEDERAL, STATE, TRIBAL, AND LOCAL REQUIREMENTS REGARDING FERTILIZER APPLICATION.

ATORS AND CONTAINERS USED FOR PAINT. CONCRETE, OR OTHER MATERIALS. – DIRECT ALL WASH WATER INTO A LEAK-PROOF CONTAINER OR THE CONTAINER OR PIT MUST BE DESIGNED SO THAT NO OVERFLOWS CAN OCCUR DUE TO INADEQUATE SIZING OR PRECIPITATION HANDLE WASHOUT ES AS FOLLOWS: DO NOT DUMP LIQUID WASTES IN STORM SEWERS; DISPOSE OF LIQUID WASTES IN ACCORDANCE WITH APPLICABLE REGULATIONS; DISPOSE OF HARDENED CONCRETE WASTE CONSISTENT WITH YOUR HANDLING OF OTHER CONSTRUCTION WASTES. LOCATE ANY WASHOUT OF S AS FAR AWAY AS POSSIBLE FROM SURFACE WATERS AND STORMWATER INLETS OR CONVEYANCES, AND, TO THE EXTENT PRACTICABLE, DESIGNATE FOR THESE ACTIVITIES AND CONDUCT SUCH ACTIVITIES ONLY IN THESE AREAS.

MAINTENANCE SCHEDULE PARTY SHALL BE RESPONSIBLE FOR MAINTAINING ALL TEMPORARY AND PERMANENT SEDIMENTATION AND EROSION CONTROLS UNTIL WORK IS AREAS HAVE BEEN PERMANENTLY STABILIZED. AT SUCH TIME ALL SEDIMENTATION AND EROSION CONTROL MEASURES SHALL BE REMOVED. THESE AND MAINTENANCE PRACTICES THAT WILL BE USED TO MAINTAIN EROSION AND SEDIMENT CONTROLS DURING CONSTRUCTION.

EASURES WILL BE INSPECTED AT LEAST ONCE EACH WEEK. OMPONENTS SHALL BE INSPECTED WITHIN 24 HOURS FOLLOWING ANY PRECIPITATION EVENT OF 0.25 INCHES.

XPITATION EVENTS SHALL BE BASED UPON NCDC REPORTING. WILL BE MAINTAINED IN GOOD WORKING ORDER; IF A REPAIR IS NECESSARY, IT WILL BE INITIATED WITHIN 24 HOURS OF REPORT OF ANY

IENT SHALL BE REMOVED FROM THE SILT FENCE WHEN IT REACHES A DEPTH EQUAL TO ONE—THIRD THE HEIGHT OF THE FENCE. RAPS SHALL BE INSPECTED FOR DEPTH OF SEDIMENT, AND BUILT UP SEDIMENT WILL BE REMOVED WHEN IT REACHED 25 PERCENT OF THE DESIGN THE END OF THE JOB. CHECK EMBANKMENT FOR: SETTLEMENT, SEEPAGE, OR SLUMPING ALONG THE TOE OR AROUND PIPE. LOOK FOR SIGNS OF IMMEDIATELY. REMOVE TRASH AND OTHER DEBRIS FROM PRINCIPAL SPILLWAY, EMERGENCY SPILLWAY, AND POOL AREA. CLEAN OR REPLACE GRAVEL POOL DOES NOT DRAIN PROPERLY.

DIKES WILL BE INSPECTED FOR BREACHES AND PROMPTLY REPAIRED. PERMANENT SEEDING AND PLANTING WILL BE INSPECTED FOR BARE SPOTS, WASHOUTS AND HEALTHY GROWTH.

) MAINTAIN A SUPPLY OF EROSION CONTROL DEVISES ON SITE AT ALL TIMES TO REPAIR ANY BROKEN OR DAMAGED MATERIALS. NG SHALL BE PERFORMED THROUGHOUT CONSTRUCTION AS REQUIRED. ANY SEDIMENT TRACKED ONTO PUBLIC WAYS SHALL BE SWEPT BY THE END AND STORMCEPTORS SHALL BE MAINTAINED THROUGHOUT CONSTRUCTION AND CLEANED WHENEVER SEDIMENT REACHES 12-INCHES IN CATCH BASINS IN STORMCEPTORS.

INDENT, WILL SELECT THREE INDIVIDUALS WHO WILL BE RESPONSIBLE FOR INSPECTIONS, MAINTENANCE AND REPAIR ACTIVITIES, AND FILLING OUT THE MINTENANCE REPORTS. PERSONNEL SELECTED FOR INSPECTION AND MAINTENANCE RESPONSIBILITIES SHALL BE A "QUALIFIED PERSONNEL" AS DEFINED THE GCP. STAFF SHALL BE TRAINED IN ALL INSPECTION AND MAINTENANCE PRACTICES FOR KEEPING THE EROSION AND SEDIMENT CONTROLS USED RKING ORDER.

PORT WILL BE MADE AFTER EACH INSPECTION. COPIES OF THE REPORTS SHALL BE MAINTAINED ON SITE. AT A MINIMUM, THE INSPECTION REPORT

AND QUALIFICATIONS OF PERSONNEL MAKING THE INSPECTION, RMATION FOR THE PERIOD SINCE THE LAST INSPECTION INCLUDING ESTIMATE OF THE BEGINNING AND DURATION OF EACH STORM EVENT, MOUNT OF RAINFALL FOR EACH STORM EVENT (IN INCHES), AND WHETHER ANY DISCHARGES OCCURRED;

DISCHARGES OF SEDIMENT OR OTHER POLLUTANTS FROM THE SITE; BMPS THAT NEED TO BE MAINTAINED;

" BMPS THAT FAILED TO OPERATE AS DESIGNED OR PROVED INADEQUATE FOR A PARTICULAR LOCATION; HERE ADDITIONAL BMPS ARE NEEDED THAT DID NOT EXIST AT THE TIME OF INSPECTION; AND

PORT MUST BE SIGNED IN ACCORDANCE WITH APPENDIX G, SECTION 11 OF THE GCP.

MENCEMENT OF EARTH-DISTURBING ACTIVITIES OR POLLUTANT-GENERATING ACTIVITIES, WHICHEVER OCCURS FIRST, YOU MUST ENSURE THAT THE NEL UNDERSTAND THE REQUIREMENTS OF THIS PERMIT AND THEIR SPECIFIC RESPONSIBILITIES WITH RESPECT TO THOSE REQUIREMENTS: O ARE RESPONSIBLE FOR THE DESIGN, INSTALLATION, MAINTENANCE, AND/OR REPAIR OF STORMWATER CONTROLS (INCLUDING POLLUTION PREVENTION SPONSIBLE FOR THE APPLICATION AND STORAGE OF TREATMENT CHEMICALS (IF APPLICABLE):

O ARE RESPONSIBLE FOR CONDUCTING INSPECTIONS AS REQUIRED IN PART 4,1.1; AND) ARE RESPONSIBLE FOR TAKING CORRECTIVE ACTIONS.

PERSON REQUIRING TRAINING IS A NEW EMPLOYEE, WHO STARTS AFTER YOU COMMENCE EARTH-DISTURBING OR POLLUTANT-GENERATING ACTIVITIES, THAT THIS PERSON HAS THE PROPER UNDERSTANDING AS REQUIRED ABOVE PRIOR TO ASSUMING PARTICULAR RESPONSIBILITIES RELATED TO THIS PERMIT. (2) FOR EMERGENCY-RELATED CONSTRUCTION ACTIVITIES, THE REQUIREMENT TO TRAIN PERSONNEL PRIOR TO COMMENCEMENT OF ACTIVITIES DOES NOT APPLY, HOWEVER, SUCH PERSONNEL MUST HAVE THE REQUIRED TRAINING PRIOR TO NOI SUBMISSION.

RESPONSIBLE FOR ENSURING THAT ALL ACTIVITIES ON THE SITE COMPLY WITH THE REQUIREMENTS OF THE PERMIT. THE OPERATOR IS NOT REQUIRED OCUMENT FORMAL TRAINING FOR SUBCONTRACTORS OR OTHER OUTSIDE SERVICE PROVIDERS, BUT YOU MUST ENSURE THAT SUCH PERSONNEL EQUIREMENTS OF THE PERMIT THAT MAY BE AFFECTED BY THE WORK THEY ARE SUBCONTRACTED TO PERFORM. AT A MINIMUM, PERSONNEL MUST DERSTAND THE FOLLOWING IF RELATED TO THE SCOPE OF THEIR JOB DUTIES (E.G., ONLY PERSONNEL RESPONSIBLE FOR CONDUCTING INSPECTIONS ND HOW TO CONDUCT INSPECTIONS): OF ALL STORMWATER CONTROLS ON THE SITE REQUIRED BY THIS PERMIT, AND HOW THEY ARE TO BE MAINTAINED:

ROCEDURES TO FOLLOW WITH RESPECT TO THE PERMIT'S POLLUTION PREVENTION REQUIREMENTS; AND TO CONDUCT INSPECTIONS, RECORD APPLICABLE FINDINGS, AND TAKE CORRECTIVE ACTIONS.

- SHALL BE COVERED OR STORED INSIDE TO PREVENT ANY DISCHARGE OF POLLUTANTS. COMPLY WITH ALL APPLICATION, DISPOSAL, AND JIREMENTS.

IDES, INSECTICIDES AND FERTILIZERS – SHALL BE COVERED OR STORED INSIDE TO PREVENT ANY DISCHARGE OF POLLUTANTS, COMPLY WITH ALL SAL. AND REGISTRATION REQUIREMENTS.

YDRAULIC FLUIDS, OTHER PETROLEUM PRODUCTS, AND OTHER CHEMICALS – STORE CHEMICALS IN

AINERS, AND PROVIDE EITHER (1) COVER (E.G., PLASTIC SHEETING OR TEMPORARY ROOFS) TO PREVENT THESE CONTAINERS FROM COMING INTO WATER, OR (2) A SIMILARLY EFFECTIVE MEANS DESIGNED TO PREVENT THE DISCHARGE OF POLLUTANTS FROM THESE AREAS (E.G., SPILL KITS), OR Y CONTAINMENT (E.G., SPILL BERMS, DECKS, SPILL CONTAINMENT PALLETS). CLEAN UP SPILLS IMMEDIATELY, USING DRY CLEAN-UP METHODS WHERE POSE OF USED MATERIALS PROPERLY. DO NOT CLEAN SURFACES OR SPILLS BY HOSING THE AREA DOWN. ELIMINATE THE SOURCE OF THE SPILL TO RGE OR A CONTINUATION OF AN ONGOING DISCHARGE

- SEPARATE HAZARDOUS OR TOXIC WASTE FROM CONSTRUCTION AND DOMESTIC WASTE. STORE WASTE IN SEALED CONTAINERS, WHICH ARE UITABLE MATERIALS TO PREVENT LEAKAGE AND CORROSION, AND WHICH ARE LABELED IN ACCORDANCE WITH APPLICABLE RESOURCE CONSERVATION (RCRA) REQUIREMENTS AND ALL OTHER APPLICABLE FEDERAL, STATE, TRIBAL, OR LOCAL REQUIREMENTS; III. STORE ALL CONTAINERS THAT WILL BE ITHIN APPROPRIATELYSIZED SECONDARY CONTAINMENT (E.G., SPILL BERMS, DECKS, SPILL CONTAINMENT PALLETS) TO PREVENT SPILLS FROM BEING ROVIDE A SIMILARLY EFFECTIVE MEANS DESIGNED TO PREVENT THE DISCHARGE OF POLLUTANTS FROM THESE AREAS (E.G., STORING CHEMICALS IN HAVING A SPILL KIT AVAILABLE ON SITE);

RDOUS OR TOXIC WASTE IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDED METHOD OF DISPOSAL AND IN COMPLIANCE WITH FEDERAL,) LOCAL REQUIREMENTS. SITE PERSONNEL WILL BE INSTRUCTED IN THESE PRACTICE AND THE INDIVIDUAL WHO MANACES THE DAY TO DAY SITE BE RESPONSIBLE FOR SEEING THAT THESE PROCEDURES ARE FOLLOWED.

MMEDIATELY, USING DRY CLEAN-UP METHODS WHERE POSSIBLE, AND DISPOSE OF USED MATERIALS PROPERLY. DO NOT CLEAN SURFACES OR SPILLS BY HOSING THE AREA DOWN. ELIMINATE THE SOURCE OF THE SPILL TO PREVENT A DISCHARGE OR A FURTHERANCE OF AN ONGOING DISCHARGE

SANITARY WASTE - ALL SANITARY WASTE WILL BE COLLECTED FROM THE PORTABLE UNITS A MINIMUM OF ONCE PER WEEK BY THE SANITARY PUMPING COMPANY LICENSED BY THE COMMONWEALTH OF MASSACHUSETTS AND AS REQUIRED BY THE LOCAL REGULATION. POSITION UNITS IN A SECURE LOCATION WHERE THEY CANNOT

WASTE MATERIALS - ALL WASTE MATERIALS WILL BE COLLECTED AND STORED IN A SECURELY LIDDED METAL DUMPSTER RENTED FROM A LICENSED WASTER MANAGEMENT COMPANY. THE DUMPSTER WILL MEET ALL LOCAL AND STATE SOLID WASTER MANAGEMENT REGULATIONS. ALL TRASH AND CONSTRUCTION DEBRIS FROM THE SITE WILL BE DEPOSITED IN THE DUMPSTER. THE DUMPSTER WILL BE EMPTIED AT LEAST TWICE PER MONTH OR MORE OFTEN IF NECESSARY, AND THE WASTE WILL BE HAULED TO THE WASTE MANAGEMENT COMPANY. ON WORK DAYS, CLEAN UP AND DISPOSE OF WASTE IN DESIGNATED WASTE CONTAINERS. CLEAN UP IMMEDIATELY IF CONTAINERS OVERFLOW, NO CONSTRUCTION WASTE MATERIALS WILL BE BURIED ONSITE. ALL PERSONNEL WILL BE INSTRUCTED REGARDING THE CORRECT PROCEDURE FOR WASTE DISPOSAL. NOTICES STATING THESE PRACTICES WILL BE POSTED IN THE OFFICE TRAILER. THE INDIVIDUAL MANAGING THE DAY-TO-DAY SITE OPERATIONS WILL BE RESPONSIBLE FOR SEEING THAT THESE PROCEDURES ARE FOLLOWED.

3.2 BUILDING MATERIAL INVENTORY FOR POLLUTION PREVENTION PLAN

THE MATERIALS OR SUBSTANCES LISTED BELOW ARE EXPECTED TO BE PRESENT ONSITE DURING CONSTRUCTION: CONCRETE

- PETROLEUM BASED PRODUCTS INCLUDING ASPHALT CONCRETE/EMULSIONS, FUEL(S), OIL, ETC.
- FERTILIZERS AND TACHIFIERS • PAINTS (ENAMEL, LATEX AND OIL BASED STAINS)
- METAL STUDS AND PRODUCTS MASONRY BLOCK
- ROOFING SHINGLES GYPSUM AND PLASTER

STONE PRODUCTS

3.3 SPILL PREVENTION MATERIAL MANAGEMENT PRACTICES AND SUBSTANCES TO STORMWATER RUNOFF.

THE FOLLOWING ARE THE MATERIAL MANAGEMENT PRACTICES THAT WILL BE USED TO REDUCE THE RISK OF SPILLS OR OTHER ACCIDENTAL EXPOSURE OF MATERIALS GOOD HOUSEKEEPING - THE FOLLOWING GOOD HOUSEKEEPING PRACTICES WILL BE FOLLOWED ONSITE DURING THE CONSTRUCTION PROJECT

- AN EFFORT WILL BE MADE TO STORE ONLY ENOUGH PRODUCTS TO DO THE JOB.
- FNCLOSURE.
- SUBSTANCES WILL NOT BE MIXED WITH ONE ANOTHER UNLESS RECOMMENDED BY THE MANUFACTURES. WHENEVER POSSIBLE, ALL OF A PRODUCT WILL BE USED UP BEFORE DISPOSING OF THE CONTAINER.
- MANUFACTURERS' RECOMMENDATION FOR PROPER USE AND DISPOSAL WILL BE FOLLOWED.

PRODUCT SPECIFIC PRACTICES - THE FOLLOWING PRODUCT SPECIFIC PRACTICES WILL BE FOLLOWED ONSITE: PETROLEUM PRODUCTS - TRANSPORT AND DELIVERY OF FUEL IN APPROVED CONTAINERS ONLY. FERTILIZERS - IN ACCORDANCE WITH LABELING PAINTS - IN ACCORDANCE WITH LABELING

SPILL CONTROL PRACTICES - ANY SPILLS OF HAZARDOUS MATERIALS SHALL BE CONTAINED AND CLEANED UP IMMEDIATELY. IF APPROPRIATE, THE MASSACHUSETTS DEPARTMENT OF ENVIRONMENTAL PROTECTION (DEP) SHALL BE NOTIFIED. THERE SHALL, AT ALL TIMES WHEN WORK IS UNDERWAY ON-SITE, BE AN INDIVIDUAL PRESENT WHO IS TRAINED IN PROPER SPILL CONTROL PRACTICES. IN THE EVENT THAT HAZARDOUS MATERIAL, GASOLINE OR OTHER PETROLEUM IS RELEASED, THE FOLLOWING PROCEDURE SHOULD BE FOLLOWED:

1. IMMEDIATELY CONTACT THE FOLLOWING AGENCIES:

MEDWAY FIRE DEPARTMENT (508) 533-3211 MASSDEP EMERGENCY RESPONSE (888) 304-1133

SITE PROFESSIONAL (LSP) TO LEAD THE CLEAN-UP. ACCORDANCE WITH THE REQUIREMENTS OF 40 CFR PART 110, 40 CFR PART 117 AND 40 CFR PART 302 AS SOON AS SITE STAFF HAVE KNOWLEDGE OF THE DISCHARGE: AND DATE OF THE RELEASE. YOU MUST ALSO IMPLEMENT MEASURES TO PREVENT THE REOCCURRENCE OF SUCH RELEASES AND TO RESPOND TO SUCH RELEASES.

2. PROVIDE SUPPORT TO AGENCIES LISTED ABOVE, WHICH MAY INCLUDE CONTACTING AN OUTSIDE CONTRACTOR TO PROVIDE CLEAN-UP OR CONTACTING A LICENSED O PROVIDE NOTICE TO THE NATIONAL RESPONSE CENTER (NRC) (800-424-8802; IN THE WASHINGTON, DC, METROPOLITAN AREA CALL 202-267-2675) IN O WITHIN 7 CALENDAR DAYS OF KNOWLEDGE OF THE RELEASE, PROVIDE A DESCRIPTION OF THE RELEASE, THE CIRCUMSTANCES LEADING TO THE RELEASE, AND THE

WHERE A RELEASE CONTAINING A HAZARDOUS SUBSTANCE OR OIL IN AN AMOUNT EQUAL TO OR IN EXCESS OF A REPORTABLE QUANTITY ESTABLISHED UNDER EITHER 40 CFR PART 110, 40 CFR PART 117 OR 40 CFR PART 302, OCCURS DURING A 24-HOUR PERIOD: VEHICLE FUELING AND MAINTENANCE - ALL MAJOR EQUIPMENT/VEHICLE FUELING AND MAINTENANCE WILL BE PERFORMED OFF-SITE. WHEN VEHICLE FUELING MUST OCCUR ON-SITE, THE FUELING ACTIVITY WILL OCCUR IN THE STAGING AREA OUTSIDE THE BUFFER ZONE OR RESOURCE AREA. ONLY MINOR EQUIPMENT MAINTENANCE WILL OCCUR ON-SITE, ALL EQUIPMENT FLUIDS GENERATED FROM MAINTENANCE ACTIVITIES WILL BE DISPOSED OF INTO DESIGNATED DRUMS STORED ON SPILL PALLETS IN ACCORDANCE WITH PART 3.1 OF THE GCP. ABSORBENT, SPILL-CLEANUP MATERIALS AND SPILL KITS WILL BE AVAILABLE AT THE COMBINED STAGING AND MATERIALS STORAGE AREA. DRIP PANS WILL BE PLACED UNDER ALL EQUIPMENT RECEIVING MAINTENANCE AND VEHICLES AND EQUIPMENT PARKED OVERNICHT.

3.4 NON-STORM WATER DISCHARGES IT IS EXPECTED THAT THE FOLLOWING NON-STORM WATER DISCHARGE WILL OCCUR FROM THE SITE DURING THE CONSTRUCTION PERIOD:

- · PAVEMENT WASH WATERS (WHERE NO SPILLS OR LEAKS OF TOXIC OR HAZARDOUS MATERIAL HAVE OCCURRED). DISCHARGES FROM FIRE FIGHTING ACTIVITIES
- HYDRANT AND WATER LINE FLUSHING LANDSCAPE IRRIGATION
- VEHICLE WASH WATER FOR DUST CONTROL
- FOUNDATION / FOOTING DRAINS
- CONSTRUCTION DEWATERING WATER

4.0 RECORD KEEPING / UPDATING OF DOCUMENTATION

THIS DOCUMENT IS INTENDED AS A LIVING DOCUMENT TO BE CONTINUOUSLY REVISED AND UPDATED BASED ON CHANGING SITE CONDITIONS AND THE PROGRESSION OF CONSTRUCTION. THE SWPPP SHALL BE CONTINUOUSLY REVISED TO INDICATE THE CONDITION AND LOCATION OF THE VARIOUS BEST MANAGEMENT PRACTICES. COPIES OF THE GCP. SIGNED AND CERTIFIED NOI. AND EPA NOTIFICATION OF RECEIPT MUST BE INCLUDED IN THE SWPPP. THIS SWPPP PLAN, THE APPROVED DRAWINGS MADE PART OF THIS DOCUMENT, INSPECTION REPORTS (MADE AT LEAST WEEKLY), AND REQUIRED LOGS SHALL BE MAINTAINED ON SITE AT ALL TIMES. INSPECTION REPORTS SHALL BE RETAINED WITH THE SWPPP FOR AT LEAST THREE YEARS.

THE FOLLOWING INSPECTION REPORTS AND LOGS SHALL BE MAINTAINED: INSPECTION REPORTS

- CORRECTIVE ACTION LOG SWPPP AMENDMENT LOG
- GRADING AND STABILIZATION ACTIVITIES LOG

CONSTRUCTION EQUIPMENT AND MAINTENANCE MATERIALS WILL BE STORED AT THE COMBINED STAGING AREA AND MATERIALS STORAGE AREAS. A WATERTIGHT CONTAINER WILL BE USED TO STORE HAND TOOLS, SMALL PARTS, AND OTHER CONSTRUCTION MATERIALS.

• ALL MATERIALS STORED ONSITE WILL BE STORED IN A NEAT, ORDERLY MANNER IN THIS APPROPRIATE CONTAINERS AND, IF POSSIBLE, UNDER A ROOF OR OTHER PRODUCTS WILL BE KEPT IN THEIR ORIGINAL CONTAINERS AND WITH THE ORIGINAL MANUFACTURERS' LABEL.

• THE SITE SUPERINTENDENT WILL INSPECT DAILY TO ENSURE PROPER USE AND DISPOSAL OF MATERIALS. • HAZARDOUS PROCEDURES - IN ACCORDANCE WITH INDUSTRY STANDARDS AND APPLICABLE REGULATIONS

APPROVAL UNDER THE SUBDIVISION CONTROL LAW, IS REQUIRED. MEDWAY PLANNING AND ECONOMIC DEVELOPMENT BOARD DA TE: THIS PLAN IS SUBJECT TO A COVENANT TO BE RECORDED HEREWITH. THIS PLAN IS SUBJECT TO A CERTIFICATE OF ACTION WHICH SHALL BE RECORDED WITH THE PLAN AT THE NORFOLK COUNTY REGISTRY OF DEEDS. OWNERS: LINDA LINDSEY 69 SUMMER STREET MEDWAY, MA RABBIT BROOK REALTY TRUST 69 SUMMER STREET MEDWAY. MA DAVID & RENEE SISTRAND 67R SUMMER STREET MEDWAY, MA CONNORSTONE ENGINEERING INC. CIVIL ENGINEERS AND LAND SURVEYORS 10 SOUTHWEST CUTOFF, SUITE 7 NORTHBOROUGH, MASSACHUSETTS 01532 PHONE: 508–393–9727 FAX: 508–393–5242 DEFINITIVE PLAN STORMWATER POLLUTION PREVENTION PLAN BOUNDARY LANE MEDWAY, MA 7/12/2022 EDITS PER PEER REVIEW

CLERK OF THE TOWN OF MEDWAY RECEIVED AND RECORDED APPROVAL FROM THE PLANNING BOARD OF THIS PLAN ON _____ _____ AND NO APPEAL WAS TAKEN FOR TWENTY (20) DAYS THEREAFTER.

2/17/2022

2/8/2022

REVISED:

DRAWN BY: RM

SCALE: NONE

DATE: AUGUST 20, 2021

MISC. CON. COMM. EDITS

MISC. CON. COMM. EDITS

DESCRIPTION:

CHECK BY: VC

SHEET 6 OF 6.

VITO COLONNA

No. 47635

CONNORSTONE ENGINEERING, INC.

10 SOUTHWEST CUTOFF, #7 NORTHBOROUGH, MASSACHUSETTS 01532 TEL: 508-393-9727 FAX: 508-393-5242

Medway Planning Board 155 Village Street Medway, MA 02053

July 15, 2022

Subject: Revised Plans per Tetra Tech Review Definitive Subdivision Boundary Lane (off Summer Street),

Dear Members of the Board;

On behalf of the applicant, please find the enclosed plans for the proposed definitive subdivision off Summer Street (Boundary Lane). The materials have been revised based upon comments provided by Tetra Tech in a review letter dated June 8, 2022. A response to each review item has been provided below:

1. The Applicant has not supplied the required ANRAD determination from the Medway Conservation Commission (Conservation). (Ch. 100 §5.5.14)

<u>Response:</u> The applicant previously filed a Notice of Intent with the Conservation Commission and has received an Order of Conditions. We understand a copy of the Order of Conditions was forward to the Board.

2. A Certified List of Abutters within seven hundred feet (700') of the boundaries of the land shown in the subdivision has not been provided. In the application package, it appears that the Certified List of Abutters was forwarded to PEDB by the Assessor's Office on 4/15/2022. (Ch. 100 §5.7.5)

<u>Response:</u> The required Certified List of Abutters was included with the application. Section 5.7.5 required showing abutters as listed on Form E, which is defined as abutters within 300 feet, and then all other land within 700 feet. This information is shown on the project locus map.

3. The Applicant shall confirm whether the sewer from existing dwelling #67R ties into the 12" PVC sewer onsite or if the dwelling has its own septic system. Means of sewer disposal/treatment for the existing dwelling shall be displayed on the Existing Conditions Plan. (Ch. 100 §5.7.9)

<u>Response:</u> The existing dwelling at 67R is connected to the existing sewer main on-site, and the service location has been added to the plans.

4. Location of the minimum lines of building setback (front, side and rear yard depths) as required by the Zoning By-Law is not shown on the Plans. The calculation of the lot shape factor shall also be provided for each lot. (Ch. 100 §5.7.14)

<u>Response:</u> The setbacks and shape factors have been included on the updated plans.

5. Existing topographic data shall extend at least 20 feet beyond the Project's property boundaries. (Ch. 100 §5.7.21)

<u>Response:</u> The existing topography has been expanded to at least 20 feet beyond the project boundary.

6. Provisions for street lighting have not been proposed. (Ch. 100 §5.7.28)

<u>Response:</u> Street lighting is not proposed on the private lane. The existing utility pole on Summer Street located 50 feet north of the proposed roadway includes a street light. We understand this item was reviewed by the Safety Officer.

7. The Project meets the threshold of the Town of Medway Article XXVI - Stormwater Management and Land Disturbance Bylaw and will be required to address items listed in the Subdivision Regulations under the Bylaw. It should be noted that the Project was reviewed for compliance with this Bylaw during the Applicant's permitting process with the Medway Conservation Commission. (Ch. 100 §7.3.1)

<u>Response:</u> As noted above, the Stormwater Management was previously reviewed during the Conservation Commission permitting process.

8. Water mains, with hydrants, valves, and other fittings, shall be proposed on-site to provide adequate water supply for domestic and fire protection uses. A waiver has been requested from this Regulation. (Ch. 100 §7.6.2.b)

<u>Response:</u> As noted, a waiver has been requested from this item.

9. The Applicant is proposing one well to supply water for the dwellings on Lot 2 and Lot 3. The Applicant shall confirm, through testing that the well can support both dwellings. We anticipate this will be closely monitored during the Applicant's expected permitting process with the Medway Board of Health. (Ch. 100 §7.6.2.c)

<u>Response:</u> The well will service Lot 2 only. The existing dwelling at 67R is currently connected to municipal water, and the service connection has been added to the plans.

10. Sewer services shall be constructed and installed within the subdivision as necessary to provide all lots therein adequate municipal sewer service. Existing dwelling #67R does not appear to have a proposed sewer connection to the municipal sewer service. Refer to Comment #3 for confirmation of existing sewer treatment for dwelling #67R. (Ch. 100 §7.6.2.d)

<u>Response:</u> As noted in comment 3, the existing sewer service to 67R has been added to teh plans.

11. The proposed dwelling at Lot 2 does not appear to have a gas service connection. Gas mains shall be installed if gas connection is available. (Ch. 100 §7.6.2.f)

<u>Response:</u> Gas is present on-site with a 4" main and connections to 67R and 69. The proposed house is intended to be serviced with a heat pump and solar panels, and a service connection would not be required.

12. The Applicant has not proposed a spare conduit for the proposed electric/tel/data installation. (Ch. 100 §7.6.2.h)

<u>Response</u>: The Plans have been updated to include a space conduit on that portion of the underground elec/tel/data to be extended for the new lot.

13. Proposed Stormwater Basin is located within 30 feet from its parcel line. A waiver has been requested from this Regulation (Ch. 100 §7.7.2.p)

Response: As noted, a waiver has been requested from this item.

14. An independent drainage system to collect and discharge subsurface runoff from the foundation perimeter drains has not been provided for all dwellings along Boundary Lane. A waiver has been requested from this regulation. (Ch. 100 §7.7.4.d)

<u>Response:</u> As noted, a waiver has been requested from this item.

15. The Applicant has not supplied curb radii at roadway intersection with Highland Street. (Ch. 100 §7.9.2.d)

<u>Response:</u> A waiver would be requested for this item. We understand the proposed configuration was the preferred layout to minimize changes along Summer Street and utilize the existing curb cut.

16. The centerline grade of the roadway is less than two percent along its length. A waiver has been requested from this regulation. (Ch. 100 §7.9.5.a)

Response: As noted, a waiver has been requested from this item.

17. A level slope area is required for the first 100-feet of roadway. The proposed roadway changes grade within the first 100-feet. A waiver has been requested from this Regulation. (Ch. 100 §7.9.5.c)

Response: As noted, a waiver has been requested from this item.

18. The Applicant shall confirm with the Fire Chief that the proposed turnaround at the end of Boundary Lane is adequate for emergency vehicles. Turnarounds shall be designed as a cul-de-sac turnaround or a hammerhead (T-shaped) turnaround. (Ch. 100 §7.9.6.e)

<u>Response:</u> The applicant has confirmed the proposed design through the Fire Chief, and a letter has been forwarded to the Board.

19. Vertical granite curbing shall be installed at the intersection of the development roadway and Summer Street. A waiver has been requested from this Regulation. (Ch. 100 §7.10.1)

<u>Response:</u> As noted, a waiver has been requested from this item.

20. Curbing shall be provided for the full length of all streets along each side of the roadway. The proposed roadway for the Project is superelevated and utilizes country drainage to convey stormwater to the proposed Stormwater Basin. A waiver has been requested from this regulation (Ch. 100 §7.10.2)

Response: As noted, a waiver has been requested from this item.

21. The Applicant has not proposed street lighting and should coordinate with Medway Public Safety Officer to determine if they are required. A waiver has been requested from this Regulation. (Ch. 100 §7.21)

Response: As noted, a waiver has been requested from this item.

22. TT recommends test pitting be performed to locate the existing water service to Lot 1 as it enters the limits of the proposed Stormwater Basin to ensure the service will not be damaged during clearing, grubbing, and excavation activities.

<u>Response:</u> The existing water service includes a 2-inch pvc, and record indicate it was installed with the typical 5 feet of cover. The basin has been design to not lower the grades and reduce the cover in the area of the water line. The line would be flagged prior to any excavation (digsafe), and protected throughout construction.

23. The Applicant shall coordinate with the PEDB and Medway Public Safety Officer to determine if a painted "STOP" and stop line are required at the intersection of the development roadway and Summer Street.

<u>Response:</u> If requested by PEDB and/or Public Safety, those items referenced above would be provided.

24. Provide a sewer service connection detail, electric/tel/data trench detail, reinforced concrete bound detail and sign installation detail on the Plans.

Response: The requested details have been added to the plan set.

We look forward to discussing the proposed project with the Board at the upcoming public hearing, and if you have any questions please contact our office any time at 508-393-9727.

Sincerely, Connorstone Engineering, Inc.

Vito Colonna, PE



June 8, 2022 (revised July 20, 2022)

Ms. Susan E. Affleck-Childs Medway Planning and Economic Development Coordinator Medway Town Hall 155 Village Street Medway, MA 02053

Re: 67R-69 Summer Street (Boundary Lane) Definitive Subdivision Review (Permanent Private Way) Medway, Massachusetts

Dear Ms. Affleck-Childs:

Tetra Tech (TT) has performed a review of the proposed Site Plan for the above-mentioned Project at the request of the Town of Medway Planning and Economic Development Board (PEDB). The proposed Project is located at 67R-69 Summer Street in Medway, MA. Proposed Project includes the development of a 3-lot residential subdivision, appurtenant roadway, utilities, and stormwater drain infrastructure.

TT is in receipt of the following materials:

- A plan set (Plans) titled "Definitive Subdivision Plan, 'Boundary Lane' in Medway, Massachusetts", dated August 20, 2021, revised February 17, 2022, prepared by Connorstone Engineering, Inc (CEI).
- An Application for Approval of a Definitive Subdivision Plan, dated April 28, 2022.

The Plans and accompanying materials were reviewed for conformance with the following regulatory documents:

 Town of Medway Planning & Economic Development Board Rules and Regulations, Chapter 100 – Land Subdivision, Rules and Regulations for the Review and Approval of Land Subdivisions. (Adopted April 26, 2005)

The Project was also reviewed for good engineering practice and overall plan efficiency. Review of the Project for zoning related matters is being conducted by Town personnel and is excluded from this review.

TT 7/20/22 Update

The Applicant has supplied TT with a revised submission addressing comments provided in our previous letter including the following documents:

- A response to comments letter, dated July 15, 2022, prepared by CEI.
- A plan set (Plans) titled "Definitive Subdivision Plan, 'Boundary Lane' in Medway, Massachusetts", dated August 20, 2021, revised February 17, 2022, prepared by CEI.

The revised Plans and supporting information were reviewed against our previous comment letter (June 8, 2022) and comments have been tracked accordingly. Text shown in <u>gray</u> represents information contained in previous correspondence while new information is shown in <u>black</u> text.

DEFINITIVE SUBDIVISION REVIEW

Land Subdivision Rules and Regulations (Chapter 100)

- 1. The Applicant has not supplied the required ANRAD determination from the Medway Conservation Commission (Conservation). (Ch. 100 §5.5.14)
 - CEI 7/15/22 Response: The applicant previously files a Notice of Intent with the Conservation Commission and has received an order of Conditions. We understand a copy of the Order of Conditions was forwarded to the Board.

• TT 7/20/22 Update: In our opinion, this comment is resolved.

- 2. A Certified List of Abutters within seven hundred feet (700') of the boundaries of the land shown in the subdivision has not been provided. In the application package, it appears that the Certified List of Abutters was forwarded to PEDB by the Assessor's Office on 4/15/2022. (Ch. 100 §5.7.5)
 - CEI 7/15/22 Response: The required Certified List of Abutters was included with the application. Section 5.7.5 required showing abutters as listed on Form E, which is defined as abutters within 300 feet, and then all other land within 700 feet. This information is shown on the project locus map.
 - TT 7/20/22 Update: In our opinion, this comment is resolved.
- 3. The Applicant shall confirm whether the sewer from existing dwelling #67R ties into the 12" PVC sewer onsite or if the dwelling has its own septic system. Means of sewer disposal/treatment for the existing dwelling shall be displayed on the Existing Conditions Plan. (Ch. 100 §5.7.9)
 - CEI 7/15/22 Response: The existing dwelling at 67R is connected to the existing sewer main on-site, and the service location has been added to the plans.
 - TT 7/20/22 Update: In our opinion, this comment is resolved.
- 4. Location of the minimum lines of building setback (front, side and rear yard depths) as required by the Zoning By-Law is not shown on the Plans. The calculation of the lot shape factor shall also be provided for each lot. (Ch. 100 §5.7.14)
 - CEI 7/15/22 Response: The setbacks and shape factors have been included on the updated plans.
 TT 7/20/22 Update: In our opinion, this comment is resolved.
- 5. Existing topographic data shall extend at least 20 feet beyond the Project's property boundaries. (Ch. 100 §5.7.21)
 - CEI 7/15/22 Response: The existing topography has been expanded to at least 20 feet beyond the project boundary.
 - TT 7/20/22 Update: In our opinion, this comment is resolved.
- 6. Provisions for street lighting have not been proposed. (Ch. 100 §5.7.28)
 - CEI 7/15/22 Response: Street lighting is not proposed on the private lane. The existing utility pole on Summer Street located 50 feet north of the proposed roadway includes a street light. We understand this item was reviewed by the Safety Officer.
 - TT 7/20/22 Update: We recommend a Condition requiring the Applicant provide written confirmation from the Medway Safety Officer regarding this comment.
- 7. The Project meets the threshold of the Town of Medway Article XXVI Stormwater Management and Land Disturbance Bylaw and will be required to address items listed in the Subdivision Regulations under the Bylaw. It should be noted that the Project was reviewed for compliance with this Bylaw during the Applicant's permitting process with the Medway Conservation Commission. (Ch. 100 §7.3.1)
 - CEI 7/15/22 Response: As noted above, the Stormwater Management was previously reviewed during the Conservation Commission permitting process.
 - TT 7/20/22 Update: In our opinion, this comment is resolved.

- 8. Water mains, with hydrants, valves, and other fittings, shall be proposed on-site to provide adequate water supply for domestic and fire protection uses. A waiver has been requested from this Regulation. (Ch. 100 §7.6.2.b)
 - CEI 7/15/22 Response: As noted, a waiver has been requested from this item.
 - TT 7/20/22 Update: No further action necessary until PEDB decision on Waiver requests.
- 9. The Applicant is proposing one well to supply water for the dwellings on Lot 2 and Lot 3. The Applicant shall confirm, through testing that the well can support both dwellings. We anticipate this will be closely monitored during the Applicant's expected permitting process with the Medway Board of Health. (Ch. 100 §7.6.2.c)
 - CEI 7/15/22 Response: The well will service Lot 2 only. The existing dwelling at 67R is currently connected to municipal water, and the service connection has been added to the plans.

$\circ~$ TT 7/20/22 Update: In our opinion, this comment is resolved.

- 10. Sewer services shall be constructed and installed within the subdivision as necessary to provide all lots therein adequate municipal sewer service. Existing dwelling #67R does not appear to have a proposed sewer connection to the municipal sewer service. Refer to Comment #3 for confirmation of existing sewer treatment for dwelling #67R. (Ch. 100 §7.6.2.d)
 - CEI 7/15/22 Response: As noted in comment 3, the existing sewer service at 67R has been added to the plans.

• TT 7/20/22 Update: In our opinion, this comment is resolved.

- 11. The proposed dwelling at Lot 2 does not appear to have a gas service connection. Gas mains shall be installed if gas connection is available. (Ch. 100 §7.6.2.f)
 - CEI 7/15/22 Response: Gas is present on-site with a 4" main and connections to 67R and 69. The proposed house is intended to be services with a heat pump and solar panels, and a service connection would not be required.
 - TT 7/20/22 Update: In our opinion, this comment is resolved.
- 12. The Applicant has not proposed a spare conduit for the proposed electric/tel/data installation. (Ch. 100 §7.6.2.h)
 - CEI 7/15/22 Response: The plans have been updated to include a space conduit on that portion of the underground elec/tel/data to be extended for the new lot.
 - $\circ~$ TT 7/20/22 Update: In our opinion, this comment is resolved.
- 13. Proposed Stormwater Basin is located within 30 feet from its parcel line. A waiver has been requested from this Regulation (Ch. 100 §7.7.2.p)
 - CEI 7/15/22 Response: As noted, a waiver has been requested from this item.
 - TT 7/20/22 Update: No further action necessary until PEDB decision on Waiver requests.
- 14. An independent drainage system to collect and discharge subsurface runoff from the foundation perimeter drains has not been provided for all dwellings along Boundary Lane. A waiver has been requested from this regulation. (Ch. 100 §7.7.4.d)
 - CEI 7/15/22 Response: As noted, a waiver has been requested from this item.
 - TT 7/20/22 Update: No further action necessary until PEDB decision on Waiver requests.
- 15. The Applicant has not supplied curb radii at roadway intersection with Highland Street. (Ch. 100 §7.9.2.d)
 - CEI 7/15/22 Response: A waiver would be requested for this item. We understand the proposed configuration was the preferred layout to minimize changes along Summer Street and utilize the existing curb cut.
 - TT 7/20/22 Update: No further action necessary until PEDB decision on Waiver requests.

- 16. The centerline grade of the roadway is less than two percent along its length. A waiver has been requested from this regulation. (Ch. 100 §7.9.5.a)
 - CEI 7/15/22 Response: As noted, a waiver has been requested from this item.
 - TT 7/20/22 Update: No further action necessary until PEDB decision on Waiver requests.
- 17. A level slope area is required for the first 100-feet of roadway. The proposed roadway changes grade within the first 100-feet. A waiver has been requested from this Regulation. (Ch. 100 §7.9.5.c)
 - CEI 7/15/22 Response: As noted, a waiver has been requested from this item.

• TT 7/20/22 Update: No further action necessary until PEDB decision on Waiver requests.

- The Applicant shall confirm with the Fire Chief that the proposed turnaround at the end of Boundary Lane is adequate for emergency vehicles. Turnarounds shall be designed as a cul-de-sac turnaround or a hammerhead (T-shaped) turnaround. (Ch. 100 §7.9.6.e)
 - CEI 7/15/22 Response: The applicant has confirmed the proposed design though the Fire Chief and a letter has been forwarded to the Board.
 - TT 7/20/22 Update: In our opinion, this comment is resolved.
- 19. Vertical granite curbing shall be installed at the intersection of the development roadway and Summer Street. A waiver has been requested from this Regulation. (Ch. 100 §7.10.1)
 - CEI 7/15/22 Response: As noted, a waiver has been requested from this item.
 - TT 7/20/22 Update: No further action necessary until PEDB decision on Waiver requests.
- 20. Curbing shall be provided for the full length of all streets along each side of the roadway. The proposed roadway for the Project is superelevated and utilizes country drainage to convey stormwater to the proposed Stormwater Basin. A waiver has been requested from this regulation (Ch. 100 §7.10.2)
 - CEI 7/15/22 Response: As noted, a waiver has been requested from this item.
 - TT 7/20/22 Update: No further action necessary until PEDB decision on Waiver requests.
- 21. The Applicant has not proposed street lighting and should coordinate with Medway Public Safety Officer to determine if they are required. A waiver has been requested from this Regulation. (Ch. 100 §7.21)
 - CEI 7/15/22 Response: As noted, a waiver has been requested from this item.
 - TT 7/20/22 Update: We recommend a Condition requiring the Applicant provide written confirmation from the Medway Safety Officer regarding this comment.

General Comments

- 22. TT recommends test pitting be performed to locate the existing water service to Lot 1 as it enters the limits of the proposed Stormwater Basin to ensure the service will not be damaged during clearing, grubbing, and excavation activities.
 - CEI 7/15/22 Response: The existing water service includes a 2-inch pvc, and records indicate it was installed with the typical 5 feet of cover. The basin has been designed to not lower the grades and reduce the cover in the area of the water line. The line would be flagged prior to any excavation (digsafe), and protected throughout construction.
 - $\circ~$ TT 7/20/22 Update: In our opinion, this comment is resolved.
- 23. The Applicant shall coordinate with the PEDB and Medway Public Safety Officer to determine if a painted "STOP" and stop line are required at the intersection of the development roadway and Summer Street.
 - CEI 7/15/22 Response: If requested by PEDB and/or public safety, those items referenced above would be provided.
 - TT 7/20/22 Update: We recommend a Condition requiring the Applicant provide written confirmation from the Medway Safety Officer regarding this comment.

- 24. Provide a sewer service connection detail, electric/tel/data trench detail, reinforced concrete bound detail and sign installation detail on the Plans.
 - CEI 7/15/22 Response: The requested details have been added to the plan set.
 TT 7/20/22 Update: In our opinion, this comment is resolved.

These comments are offered as guides for use during the Town's review and additional comments may be generated during the course of review. The applicant shall be advised that any absence of comment shall not relieve him/her of the responsibility to comply with all applicable local, state and federal regulations for the Project. If you have any questions or comments, please feel free to contact us at (508) 786-2200.

Very truly yours,

two boules

Steven M. Bouley, P.E. Project Manager

Bradly Preard

Bradley M. Picard, E.I.T. Civil Engineer

P:\21583\143-21583-22020 (PEDB BOUNDARY LANE)\DOCS\BOUNDARY LANE-PEDBREV(2022-07-20).DOCX



Massachusetts Department of Environmental Protection Bureau of Resource Protection - Wetlands WPA Form 5 – Order of Conditions Provided by MassDEP: 216-0996 MassDEP File #

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

eDEP Transaction # Medway City/Town

A. General Information

Please note:		·	Medway					
this form has been modified	1. F	rom:	Conservation Commis	sion				
with added space to accommodate		his issu check o	ance is for ne):	a 🛛 Order	of Conditio	ns b. 🗌 Ame	ended Orde	r of Conditions
the Registry of Deeds Requirements	3. T	• •	plicant:					
		Linda				indsey		
Important: When filling		a. First N	ame		b.	. Last Name		
out forms on		c. Organi	ization					
the computer,		69 Sun	nmer Street					
use only the		d. Mailing	g Address					
tab key to		Medwa	A			MA		02053
move your cursor - do		e. City/To	own		1	f. State		g. Zip Code
not use the return key.	4. F	Property	Owner (if different	from applica	ant):			
		Linda			1.000	indsey		
		a. First N	lame		b	. Last Name		
		c. Organi						Pa
			nmer Street					
			g Address					
		Medwa	*			MA		02053
		e. City/To	own			f. State		g. Zip Code
	5. F	Project L	ocation:					
		69 Sun	nmer Street		N	ledway		
		a. Street	Address		b	. City/Town		
		37			0	36		
		c. Asses	sors Map/Plat Number		d	. Parcel/Lot Number		
		Latitud	e and Longitude, if	known:	42d9m1.2	2s	71d26m3	5.44s
					d. Latitude		e. Longitud	Ð



WPA Form 5 – Order of Conditions

Provided by MassDEP: 216-0996 MassDEP File #

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

eDEP Transaction # Medway

City/Town

A. General Information (cont.)

6. Property recorded at the Registry of Deeds for (attach additional information if more than one parcel):

Norfolk a. County		b. Certificate Number (if	registered land)
24557		384	
c. Book		d. Page	
Dates:	December 23, 2021 a. Date Notice of Intent Filed	March 24, 2022 b. Date Public Hearing Closed	March 29, 2022 c. Date of Issuance

8. Final Approved Plans and Other Documents (attach additional plan or document references as needed):

Definitive Subdivision Plan Boundry L	ane Medway, MA
a. Plan Title	
Connorstone Engineering	Varoujan Hagoplan No 49665
b. Prepared By	c. Signed and Stamped by
February 17, 2022	1"=20'
d. Final Revision Date	e. Scale
Notice of Intent	December 23, 2021
f. Additional Plan or Document Title	g. Date

B. Findings

1. Findings pursuant to the Massachusetts Wetlands Protection Act:

Following the review of the above-referenced Notice of Intent and based on the information provided in this application and presented at the public hearing, this Commission finds that the areas in which work is proposed is significant to the following interests of the Wetlands Protection Act (the Act). Check all that apply:

- a. Dublic Water Supply b. Land Containing Shellfish
 d. Private Water Supply e. Fisheries
 c. Prevention of Pollution
 f. Protection of Wildlife Habitat
 g. Groundwater Supply h. Storm Damage Prevention i. Flood Control
- 2. This Commission hereby finds the project, as proposed, is: (check one of the following boxes)

Approved subject to:

a. 🖾 the following conditions which are necessary in accordance with the performance standards set forth in the wetlands regulations. This Commission orders that all work shall be performed in accordance with the Notice of Intent referenced above, the following General Conditions, and any other special conditions attached to this Order. To the extent that the following conditions modify or differ from the plans, specifications, or other proposals submitted with the Notice of Intent, these conditions shall control.



WPA Form 5 – Order of Conditions

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

Provided by MassDEP: 216-0996 MassDEP File #

eDEP Transaction # Medway City/Town

B. Findings (cont.)

Denied because:

- b. I the proposed work cannot be conditioned to meet the performance standards set forth in the wetland regulations. Therefore, work on this project may not go forward unless and until a new Notice of Intent is submitted which provides measures which are adequate to protect the interests of the Act, and a final Order of Conditions is issued. A description of the performance standards which the proposed work cannot meet is attached to this Order.
- c. If the information submitted by the applicant is not sufficient to describe the site, the work, or the effect of the work on the interests identified in the Wetlands Protection Act. Therefore, work on this project may not go forward unless and until a revised Notice of Intent is submitted which provides sufficient information and includes measures which are adequate to protect the Act's interests, and a final Order of Conditions is issued. A description of the specific information which is lacking and why it is necessary is attached to this Order as per 310 CMR 10.05(6)(c).
- 3. Buffer Zone Impacts: Shortest distance between limit of project <u>50</u> disturbance and the wetland resource area specified in 310 CMR 10.02(1)(a)

Inland Resource Area Impacts: Check all that apply below. (For Approvals Only)

Resource Area	Proposed Alteration	Permitted Alteration	Proposed Replacement	Permitted Replacement
4. 🗌 Bank	a. linear feet	b. linear feet	c. linear feet	d. linear feet
5. 🔲 Bordering				
Vegetated Wetland 6. 🔲 Land Under	a. square feet	b. square feet	c. square feet	d. square feet
Waterbodies and Waterways	a. square feet	b. square feet	c. square feet	d. square feet
·	e. c/y dredged	f. c/y dredged		
7. Dordering Land				
Subject to Flooding	a. square feet	b. square feet	c. square feet	d. square feet
Cubic Feet Flood Storage	e. cubic feet	f. cubic feet	g. cubic feet	h. cubic feet
8. Isolated Land				
Subject to Flooding	a. square feet	b. square feet		
Cubic Feet Flood Storage	c. cubic feet	d. cubic feet	e. cubic feet	f. cubic feet
9. 🔲 Riverfront Area	a. total sq. feet	b. total sq. feet		
Sq ft within 100 ft	c. square feet	d. square feet	e. square feet	f. square feet
Sq ft between 100- 200 ft	g. square feet	h. square feet	i. square feet	j. square feet



WPA Form 5 – Order of Conditions

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

Provided by MassDEP: 216-0996 MassDEP File #

eDEP Transaction # Medway City/Town

B. Findings (cont.)

Coastal Resource Area impacts: Check all that apply below. (For Approvals Only)

		Proposed Alteration	Permitted Alteration	Proposed Replacement	Permitted Replacement
10.	Designated Port Areas	Indicate size un	ider Land Under	r the Ocean, belo	w
11.	Land Under the Ocean	a, square feet	b, square feet		
		c. c/y dredged	d. c/y dredged		
12.	Barrier Beaches	Indicate size un below	ider Coastal Be	aches and/or Coa	astal Dunes
13.	Coastal Beaches			cu yd	cu yd
10.		a. square feet	b. square feet	c. nourishment	d. nourishment
14.	Coastal Dunes	a. square feet	b. square feet	cu yd c. nourishment	cu yd d. nourishment
15.	Coastal Banks	a. linear feet	b. linear feet		
16.	Rocky Intertidal				
	Shores	a. square feet	b. square feet		
17.	Salt Marshes	a. square feet	b. square feet	c. square feet	d. square feet
18.	Land Under Salt		-		
	Ponds	a. square feet	b. square feet		
		c. c/y dredged	d. c/y dredged		
19.					
	Shellfish	a. square feet	b. square feet	c. square feet	d. square feet
20.	Fish Runs		l/or inland Land	nks, Inland Bank, Under Waterbod	
		a. c/y dredged	b. c/y dredged		
21.	Land Subject to Coastal Storm Flowage	a. square feet	b. square feet		
22.	Riverfront Area	a total so feet	b. total sq. feet		
	Sq ft within 100 ft		d. square feet		f. square feet
	Sq ft between 100-	n square feet	a. oquulo loot	e souare feet	1. 094410 1001
	200 ft	n square feet	h. square feet	i souare feet	j. square feet



Massachusetts Department of Environmental Protection

Bureau of Resource Protection - Wetlands

WPA Form 5 – Order of Conditions

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

Provided by MassDEP: 216-0996 MassDEP File #

eDEP Transaction # Medway City/Town

B. Findings (cont.)

* #23. If the project is for the purpose of restoring or enhancing a wetland resource area in addition to the square footage that has been entered in Section B.5.c (BVW) or B.17.c (Salt Marsh) above, 1 please enter the additional amount here.

а.	square feet of BVW	b. square feet of salt marsh
ŧ. 🗆	Stream Crossing(s):	
a.	number of new stream crossings	b. number of replacement stream crossings

The following conditions are only applicable to Approved projects.

- 1. Failure to comply with all conditions stated herein, and with all related statutes and other regulatory measures, shall be deemed cause to revoke or modify this Order.
- 2. The Order does not grant any property rights or any exclusive privileges; it does not authorize any injury to private property or invasion of private rights.
- 3. This Order does not relieve the permittee or any other person of the necessity of complying with all other applicable federal, state, or local statutes, ordinances, bylaws, or regulations.
- 4. The work authorized hereunder shall be completed within three years from the date of this Order unless either of the following apply:
 - a. The work is a maintenance dredging project as provided for in the Act; or
 - b. The time for completion has been extended to a specified date more than three years, but less than five years, from the date of issuance. If this Order is intended to be valid for more than three years, the extension date and the special circumstances warranting the extended time period are set forth as a special condition in this Order.
 - c. If the work is for a Test Project, this Order of Conditions shall be valid for no more than one year.
- 5. This Order may be extended by the issuing authority for one or more periods of up to three years each upon application to the issuing authority at least 30 days prior to the expiration date of the Order. An Order of Conditions for a Test Project may be extended for one additional year only upon written application by the applicant, subject to the provisions of 310 CMR 10.05(11)(f).
- If this Order constitutes an Amended Order of Conditions, this Amended Order of Conditions does not extend the issuance date of the original Final Order of Conditions and the Order will expire on <u>3/29/2025</u> unless extended in writing by the Department.
- Any fill used in connection with this project shall be clean fill. Any fill shall contain no trash, refuse, rubbish, or debris, including but not limited to lumber, bricks, plaster, wire, lath, paper, cardboard, pipe, tires, ashes, refrigerators, motor vehicles, or parts of any of the foregoing.



WPA Form 5 – Order of Conditions

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

Provided by MassDEP: 216-0996 MassDEP File #

eDEP Transaction # Medway City/Town

C. General Conditions Under Massachusetts Wetlands Protection Act

- 8. This Order is not final until all administrative appeal periods from this Order have elapsed, or if such an appeal has been taken, until all proceedings before the Department have been completed.
- 9. No work shall be undertaken until the Order has become final and then has been recorded in the Registry of Deeds or the Land Court for the district in which the land is located, within the chain of title of the affected property. In the case of recorded land, the Final Order shall also be noted in the Registry's Grantor Index under the name of the owner of the land upon which the proposed work is to be done. In the case of the registered land, the Final Order shall also be noted on the Land Court Certificate of Title of the owner of the land upon which the proposed work is done. The recording information shall be submitted to the Conservation Commission on the form at the end of this Order, which form must be stamped by the Registry of Deeds, prior to the commencement of work.
- 10. A sign shall be displayed at the site not less then two square feet or more than three square feet in size bearing the words,

"Massachusetts Department of Environmental Protection" [or, "MassDEP"]

216-0996 "File Number

- 11. Where the Department of Environmental Protection is requested to issue a Superseding Order, the Conservation Commission shall be a party to all agency proceedings and hearings before MassDEP.
- 12. Upon completion of the work described herein, the applicant shall submit a Request for Certificate of Compliance (WPA Form 8A) to the Conservation Commission.
- 13. The work shall conform to the plans and special conditions referenced in this order.
- 14. Any change to the plans identified in Condition #13 above shall require the applicant to inquire of the Conservation Commission in writing whether the change is significant enough to require the filing of a new Notice of Intent.
- The Agent or members of the Conservation Commission and the Department of Environmental Protection shall have the right to enter and inspect the area subject to this Order at reasonable hours to evaluate compliance with the conditions stated in this Order, and may require the submittal of any data deemed necessary by the Conservation Commission or Department for that evaluation.
- 16. This Order of Conditions shall apply to any successor in interest or successor in control of the property subject to this Order and to any contractor or other person performing work conditioned by this Order.



WPA Form 5 – Order of Conditions

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

Provided by MassDEP: 216-0996 MassDEP File #

eDEP Transaction # Medway City/Town

C. General Conditions Under Massachusetts Wetlands Protection Act (cont.)

- 17. Prior to the start of work, and if the project involves work adjacent to a Bordering Vegetated Wetland, the boundary of the wetland in the vicinity of the proposed work area shall be marked by wooden stakes or flagging. Once in place, the wetland boundary markers shall be maintained until a Certificate of Compliance has been issued by the Conservation Commission.
- 18. All sedimentation barriers shall be maintained in good repair until all disturbed areas have been fully stabilized with vegetation or other means. At no time shall sediments be deposited in a wetland or water body. During construction, the applicant or his/her designee shall inspect the erosion controls on a daily basis and shall remove accumulated sediments as needed. The applicant shall immediately control any erosion problems that occur at the site and shall also immediately notify the Conservation Commission, which reserves the right to require additional erosion and/or damage prevention controls it may deem necessary. Sedimentation barriers shall serve as the limit of work unless another limit of work line has been approved by this Order.
- 19. The work associated with this Order (the "Project")
 - (1) is subject to the Massachusetts Stormwater Standards
 - (2) is NOT subject to the Massachusetts Stormwater Standards

If the work is subject to the Stormwater Standards, then the project is subject to the following conditions:

a) All work, including site preparation, land disturbance, construction and redevelopment, shall be implemented in accordance with the construction period pollution prevention and erosion and sedimentation control plan and, if applicable, the Stormwater Pollution Prevention Plan required by the National Pollution Discharge Elimination System Construction General Permit as required by Stormwater Condition 8. Construction period erosion, sedimentation and pollution control measures and best management practices (BMPs) shall remain in place until the site is fully stabilized.

b) No stormwater runoff may be discharged to the post-construction stormwater BMPs unless and until a Registered Professional Engineer provides a Certification that:

i. all construction period BMPs have been removed or will be removed by a date certain specified in the Certification. For any construction period BMPs intended to be converted to post construction operation for stormwater attenuation, recharge, and/or treatment, the conversion is allowed by the MassDEP Stormwater Handbook BMP specifications and that the BMP has been properly cleaned or prepared for post construction operation, including removal of all construction period sediment trapped in inlet and outlet control structures; *ii.* as-built final construction BMP plans are included, signed and stamped by a Registered Professional Engineer, certifying the site is fully stabilized;

iii. any illicit discharges to the stormwater management system have been removed, as per the requirements of Stormwater Standard 10;



WPA Form 5 – Order of Conditions

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

Provided by MassDEP: 216-0996 MassDEP File #

eDEP Transaction # Medway City/Town

C. General Conditions Under Massachusetts Wetlands Protection Act (cont.)

iv. all post-construction stormwater BMPs are installed in accordance with the plans (including all planting plans) approved by the issuing authority, and have been inspected to ensure that they are not damaged and that they are in proper working condition;

v. any vegetation associated with post-construction BMPs is suitably established to withstand erosion.

c) The landowner is responsible for BMP maintenance until the issuing authority is notified that another party has legally assumed responsibility for BMP maintenance. Prior to requesting a Certificate of Compliance, or Partial Certificate of Compliance, the responsible party (defined in General Condition 18(e)) shall execute and submit to the issuing authority an Operation and Maintenance Compliance Statement ("O&M Statement) for the Stormwater BMPs identifying the party responsible for implementing the stormwater BMP Operation and Maintenance Plan ("O&M Plan") and certifying the following:

i.) the O&M Plan is complete and will be implemented upon receipt of the Certificate of Compliance, and

ii.) the future responsible parties shall be notified in writing of their ongoing legal responsibility to operate and maintain the stormwater management BMPs and implement the Stormwater Pollution Prevention Plan.

d) Post-construction pollution prevention and source control shall be implemented in accordance with the long-term pollution prevention plan section of the approved Stormwater Report and, if applicable, the Stormwater Pollution Prevention Plan required by the National Pollution Discharge Elimination System Multi-Sector General Permit.

e) Unless and until another party accepts responsibility, the landowner, or owner of any drainage easement, assumes responsibility for maintaining each BMP. To overcome this presumption, the landowner of the property must submit to the issuing authority a legally binding agreement of record, acceptable to the issuing authority, evidencing that another entity has accepted responsibility for maintaining the BMP, and that the proposed responsible party shall be treated as a permittee for purposes of implementing the requirements of Conditions 18(f) through 18(k) with respect to that BMP. Any failure of the proposed responsible party to implement the requirements of Conditions 18(f) through 18(k) with respect to that BMP. Any failure of the proposed responsible party to implement the requirements of Conditions or Certificate of Compliance. In the case of stormwater BMPs that are serving more than one lot, the legally binding agreement shall also identify the lots that will be serviced by the stormwater BMPs. A plan and easement deed that grants the responsible party access to perform the required operation and maintenance must be submitted along with the legally binding agreement.

f) The responsible party shall operate and maintain all stormwater BMPs in accordance with the design plans, the O&M Plan, and the requirements of the Massachusetts Stormwater Handbook.



WPA Form 5 – Order of Conditions

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

Provided by MassDEP: 216-0996 MassDEP File #

eDEP Transaction # Medway City/Town

C. General Conditions Under Massachusetts Wetlands Protection Act (cont.)

- g) The responsible party shall:
 - Maintain an operation and maintenance log for the last three (3) consecutive calendar years of inspections, repairs, maintenance and/or replacement of the stormwater management system or any part thereof, and disposal (for disposal the log shall indicate the type of material and the disposal location);
 - 2. Make the maintenance log available to MassDEP and the Conservation Commission ("Commission") upon request; and
 - Allow members and agents of the MassDEP and the Commission to enter and inspect the site to evaluate and ensure that the responsible party is in compliance with the requirements for each BMP established in the O&M Plan approved by the issuing authority.

h) All sediment or other contaminants removed from stormwater BMPs shall be disposed of in accordance with all applicable federal, state, and local laws and regulations.

i) Illicit discharges to the stormwater management system as defined in 310 CMR 10.04 are prohibited.

j) The stormwater management system approved in the Order of Conditions shall not be changed without the prior written approval of the issuing authority.

 k) Areas designated as qualifying pervious areas for the purpose of the Low Impact Site Design Credit (as defined in the MassDEP Stormwater Handbook, Volume 3, Chapter 1, Low Impact Development Site Design Credits) shall not be altered without the prior written approval of the issuing authority.

I) Access for maintenance, repair, and/or replacement of BMPs shall not be withheld. Any fencing constructed around stormwater BMPs shall include access gates and shall be at least six inches above grade to allow for wildlife passage.

Special Conditions (if you need more space for additional conditions, please attach a text document):

See attached for Findings and Conditions adopted under the MA Wetlands Protection Act (MGL. Ch. 131 S. 40) & the Medway General Wetlands Protection Bylaw (Article XXI).

20. For Test Projects subject to 310 CMR 10.05(11), the applicant shall also implement the monitoring plan and the restoration plan submitted with the Notice of Intent. If the conservation commission or Department determines that the Test Project threatens the public health, safety or the environment, the applicant shall implement the removal plan submitted with the Notice of Intent or modify the project as directed by the conservation commission or the Department.



WPA Form 5 – Order of Conditions

Provided by MassDEP: 216-0996 MassDEP File #

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

eDEP Transaction # Medway City/Town

D. Findings Under Municipal Wetlands Bylaw or Ordinance

- 1. Is a municipal wetlands bylaw or ordinance applicable? 🖾 Yes 🗌 No
- 2. The Medway hereby finds (check one that applies): Conservation Commission
 - a. I that the proposed work cannot be conditioned to meet the standards set forth in a municipal ordinance or bylaw, specifically:

1. Municipal Ordinance or Bylaw

2. Citation

Therefore, work on this project may not go forward unless and until a revised Notice of Intent is submitted which provides measures which are adequate to meet these standards, and a final Order of Conditions is issued.

 b. X that the following additional conditions are necessary to comply with a municipal ordinance or bylaw: Medway General Bylaw
 Article XXI

Medway General Bylaw	
1. Municipal Ordinance or Bylaw	2. Citation

3. The Commission orders that all work shall be performed in accordance with the following conditions and with the Notice of Intent referenced above. To the extent that the following conditions modify or differ from the plans, specifications, or other proposals submitted with the Notice of Intent, the conditions shall control.

The special conditions relating to municipal ordinance or bylaw are as follows (if you need more space for additional conditions, attach a text document):

See attached for Findings and Conditions adopted under the MA Wetlands Protection Act (MGL. Ch. 131 S. 40) & the Medway General Wetlands Protection Bylaw (Article XXI).



Massachusetts Department of Environmental Protection Bureau of Resource Protection - Wetlands WPA Form 5 – Order of Conditions

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

Provided by MassDEP: 216-0996 MassDEP File #

eDEP Transaction # Medway City/Town

E. Signatures

This Order is valid for three years, unless otherwise specified as a special	3/29/2022
condition pursuant to General Conditions #4, from the date of issuance.	1. Date of Issuance
Please indicate the number of members who will sign this form.	4

The Order must be mailed by certified mail (return receipt requested) or hand delivered to the applicant. A copy also must be mailed or hand delivered at the same time to the appropriate Department of Environmental Protection Regional Office, if not filing electronically, and the property owner, if different from applicant.

Signature Authorization - Chair or/and Agent during COVID-19 Bk. 37835 Pg 135

Pianoturo	Printed Name	
Signature		
	Ken McKay	
Signature	Printed Name	
Dayna Gill Discharge and to be set the set of the set o	Dayna Gil	
Signature Poly synd by Less Monower	Printed Name	
	Tara Kripowicz	
Signature	Printed Name	
	David Blackwell	
Signature	Printed Name	
Michael Narducci	Michael Narducci	
Signature	Printed Name	
Signature	Printed Name	
Signature	Printed Name	
by hand delivery on	by certified mail, return receipt	
	requested, on	
	March 29, 2022	
Date	Date	



WPA Form 5 – Order of Conditions

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

Provided by MassDEP: 216-0996 MassDEP File #

eDEP Transaction # Medway City/Town

E. Signatures

This Order is valid for three years, unless otherwise specified as a special condition pursuant to General Conditions #4, from the date of issuance.

Please indicate the number of members who will sign this form. This Order must be signed by a majority of the Conservation Commission.

of Issuance 2. Number of Signers

The Order must be mailed by certified mail (return receipt requested) or hand delivered to the applicant. A copy also must be mailed or hand delivered at the same time to the appropriate Department of Environmental Protection Regional Office, if not filing electronically, and the property owner, if different from applicant.

Nart Gonarala	David Travalini
Signature	Printed Name
SARA BID	Ken McKay
Signature	Printed Name
	Dayna Gil
Signature	Printed Name
	Tara Kripowicz
Signature	Printed Name
	David Blackwell
Signature	Printed Name
	Michael Narducci
Signature	Printed Name
Signature	Printed Name
Signature	Printed Name
by hand delivery on	by certified mail, return receipt requested, on
Date	Date

Signature Authorization - Chair or/and Agent during COVID-19 Bk. 37835 Pg 135



WPA Form 5 – Order of Conditions

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

Provided by MassDEP: 216-0996 MassDEP File #

eDEP Transaction # Medway City/Town

F. Appeals

The applicant, the owner, any person aggrieved by this Order, any owner of land abutting the land subject to this Order, or any ten residents of the city or town in which such land is located, are hereby notified of their right to request the appropriate MassDEP Regional Office to issue a Superseding Order of Conditions. The request must be made by certified mail or hand delivery to the Department, with the appropriate filing fee and a completed Request for Departmental Action Fee Transmittal Form, as provided in 310 CMR 10.03(7) within ten business days from the date of issuance of this Order. A copy of the request shall at the same time be sent by certified mail or hand delivery to the Conservation Commission and to the applicant, if he/she is not the appellant.

Any appellants seeking to appeal the Department's Superseding Order associated with this appeal will be required to demonstrate prior participation in the review of this project. Previous participation in the permit proceeding means the submission of written information to the Conservation Commission prior to the close of the public hearing, requesting a Superseding Order, or providing written information to the Department prior to issuance of a Superseding Order.

The request shall state clearly and concisely the objections to the Order which is being appealed and how the Order does not contribute to the protection of the interests identified in the Massachusetts Wetlands Protection Act (M.G.L. c. 131, § 40), and is inconsistent with the wetlands regulations (310 CMR 10.00). To the extent that the Order is based on a municipal ordinance or bylaw, and not on the Massachusetts Wetlands Protection Act or regulations, the Department has no appellate jurisdiction.



WPA Form 5 – Order of Conditions

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

Provided by MassDEP: 216-0996 MassDEP File #

eDEP Transaction #				
Medway				
City/Town				

G. Recording Information

Prior to commencement of work, this Order of Conditions must be recorded in the Registry of Deeds or the Land Court for the district in which the land is located, within the chain of title of the affected property. In the case of recorded land, the Final Order shall also be noted in the Registry's Grantor Index under the name of the owner of the land subject to the Order. In the case of registered land, this Order shall also be noted on the Land Court Certificate of Title of the owner of the land subject to the Order of the Order of Conditions. The recording information on this page shall be submitted to the Conservation Commission listed below.

Conservation Commission		
etach on dotted line, have stamped by the ommission.	• •	ubmit to the Conservation
D:		
Conservation Commission		
lease be advised that the Order of Condit	ions for the Project at:	
Project Location	MassDEP File Nur	nber
as been recorded at the Registry of Deed	ls of:	
County	Book	Page
F: Property Owner		
Property Owner		
nd has been noted in the chain of title of t	he affected property in:	
Book	Page	
accordance with the Order of Conditions	issued on:	
Date		
	antifying this transaction	is:
recorded land, the instrument number ide	and a subsection	
Instrument Number		
		is:
Instrument Number		is:



Important: When filling out forms on the computer, use only the tab key to move your cursor - do not use the return key. Massachusetts Department of Environmental Protection Bureau of Resource Protection - Wetlands Request for Departmental Action Fee Transmittal Form Massachusetts Wetlands Protection Act M.G.L. c. 131, §40

A. Request Information

1. Location of Project

	a. Street Address	b. City/Town, Zip				
	c. Check number	d. Fee amount				
2.	Person or party making request (if appropriate, name the citizen group's representative):					
	Name					
	Mailing Address					
	City/Town	State	Zip Code			
	Phone Number	Fax Number (if a	Fax Number (if applicable)			
3.	Applicant (as shown on Determination of Applicability (Form 2), Order of Resource Area Delineation (Form 4B), Order of Conditions (Form 5), Restoration Order of Conditions (Form 5A), or Notice of Non-Significance (Form 6)):					
	Name					
	Mailing Address					
	City/Town	State	Zip Code			
	Phone Number	Fax Number (if a	applicable)			

DEP File Number:

B. Instructions

- 1. When the Departmental action request is for (check one):
 - Superseding Order of Conditions Fee: \$120.00 (single family house projects) or \$245 (all other projects)
 - Superseding Determination of Applicability Fee: \$120
 - Superseding Order of Resource Area Delineation Fee: \$120

DEP File Number:

Provided by DEP



Massachusetts Department of Environmental Protection Bureau of Resource Protection - Wetlands Request for Departmental Action Fee Transmittal Form Massachusetts Wetlands Protection Act M.G.L. c. 131, §40

B. Instructions (cont.)

Send this form and check or money order, payable to the Commonwealth of Massachusetts, to:

Department of Environmental Protection Box 4062 Boston, MA 02211

- 2. On a separate sheet attached to this form, state clearly and concisely the objections to the Determination or Order which is being appealed. To the extent that the Determination or Order is based on a municipal bylaw, and not on the Massachusetts Wetlands Protection Act or regulations, the Department has no appellate jurisdiction.
- Send a copy of this form and a copy of the check or money order with the Request for a Superseding Determination or Order by certified mail or hand delivery to the appropriate DEP Regional Office (see <u>https://www.mass.gov/service-details/massdep-regional-offices-by-community</u>).
- 4. A copy of the request shall at the same time be sent by certified mail or hand delivery to the Conservation Commission and to the applicant, if he/she is not the appellant.

DEP File Number:

Provided by DEP

MEDWAY CONSERVATION COMMISSION ORDER OF CONDITIONS – PART II FINDINGS AND CONDITIONS UNDER THE MASSACHUSETTS WETLANDS PROTECTION ACT AND THE MEDWAY GENERAL WETLANDS PROTECTION BYLAW (ARTICLE XXI) PROJECT SITE: 69 Summer Street Map 37 Lot 036 DEP # 216-0996 MEDWAY, MASSACHUSETTS DATE OF ISSUANCE: March 29, 2022

Project Description: The applicant proposes to construct a subdivision (private) roadway, with associated stormwater management systems, landscaping, and utilities. The site is currently forested with portions along the north to easterly side being Bordering Vegetated Wetlands along Summer Street and then in the western portion of the site running from north to south, there is Bordering Vegetated Wetlands. The applicant has submitted the following documents which have been accepted as part of the final record and decision for the proposed project referenced above.

Approved Documents:

- 1. Stormwater Report titled, "Stormwater Report for Boundary Lane, Medway, MA" by Connorstone Engineering, dated February 15, 2022
- 2. Plan titled, "Definitive Subdivision Plan Boundary Lane in Medway, MA", by Connorstone Engineering, dated February 17, 2022
- 3. Document titled, "Stormwater Operations and Maintenance Plan and Long Term Pollution Prevention Plan" by Connorstone Engineering, dated March 7, 2022

Tetra Tech Comment Letters:

1. Document titled, "Boundary Lane Stormwater and Land Disturbance Review" by Tetra Tech, dated February 22, 2022

Findings:

The Medway Conservation Commission makes the following findings relative to the Amended Order of Conditions File # 216-0996:

- a) The boundaries of Wetland Resource Areas considered in this Notice of Intent review were defined by a combination of methods:
 - Bordering Vegetated Wetlands were defined during the Notice of Intent Process;
- b) The Commission hereby finds that the work proposed for the construction of a subdivision roadway with associated stormwater management system, utilities, landscaping was presented at a public hearing where the applicant presented evidence sufficient to demonstrate that the proposed activity meets the provisions under 310 CMR 10.02 (2)(b) & (3), 310 CMR 10.02(5), 310 CMR 10.05(6)(k-q), 310 CMR 10.53(1), the Medway General Bylaw Article XXI with its Regulations, and the performance standards under Section 25, 26, and 33. Additionally, the applicant has met the performance standards of the Medway General Bylaw Article XXVI as it's related to the filing of the Land Disturbance Permit for stormwater management.
- c) The proposed Notice of Intent is for infrastructure only and does not approve, not contemplate lots, the constructions of lots or any structures, related to the proposed infrastructure. The applicant or successor shall be responsible for subsequent filings pursuant to the Massachusetts Wetland Protection Act and/or

the Town of Medway Wetlands Bylaw. The plan showed, depicts all structures, lawns and associated uses of the single family dwelling outside the Commission's jurisdiction.

- d) It was noted that all conditions of this Order must be met in order to meet the above mentioned provisions. The Commission additionally finds that the work must be conditioned to protect all interests of the MA Wetlands Protection Act and the Medway General Wetlands Protection Bylaw.
- e) Additionally, the Medway Conservation Commission finds that the following conditions are necessary in order to protect the wetland resource for the duration of this proposed project. The Commission orders that all work shall be performed in accordance with said conditions and with the Notice of Intent referenced in the Special Conditions, section of this Order.
- f) <u>To the extent that the following conditions modify or differ from the plans, specifications or other proposals submitted with the Notice of Intent, the conditions shall control.</u>
- g) Following review of the above-referenced Notice of Intent and based on the information provided in this application and presented at the public hearing, this Commission finds that the area in which work is proposed is significant to the following interests of the Medway Wetlands By-Law:
 - 1. Groundwater Supply
 - 2. Flood Control
 - 3. Storm Damage Prevention
 - 4. Prevention of Pollution
 - 5. Protection of Flora and Fauna and their Habitats
 - 6. Erosion Prevention
- f) Furthermore, the Medway Conservation Commission hereby finds that the proposed project is:

Approved, subject to the findings and conditions contained herein.

- A. The Medway Conservation Commission based its decision to approve the proposed project upon the information provided in the Notice of Intent referenced in the WPA Form 5 Order of Conditions ("Part I") issued concomitantly with this Part II OOC for the project, together with all of its contents and attachments, including the plans and documents identified in Part I, Sec. A, para. 8, the findings and conditions contained in this Part II, and the information presented and discussed at the public hearing.
- B. The Medway Conservation Commission further finds the following:
 - Wetland Resource Areas and Boundaries: The site contains the following wetland resource areas protected by the Massachusetts Wetlands Protection Act and the Medway Wetlands By-Law:

 50'- 100' buffer zone of Bordering Vegetated Wetlands
 - 2. Additional General Findings:
 - i. This Order protects the interests specified in the Wetlands Protection Act and the Medway Wetlands By-Law. The Wetland resource areas on the lot are identified on the Plan.
 - ii. The Commission accepts the resource areas as depicted on the above-referenced Plan and as described in the Notice of Intent Project Narrative.
 - 3. Wildlife Habitat: The Commission finds that the project area is currently not within an estimated habitat for state-listed rare wetland wildlife as depicted on the most recent Estimated Habitat Map provided by the Natural Heritage and Endangered Species Program. The Commission further finds that the project is not within an Area of Critical Environmental Concern.

4. Stormwater Management: The Commission finds that the project is subject to the Department of Environmental Protection's Stormwater regulation and policy and the Town of Medway General Bylaw Article XXVI for Land Disturbance where stormwater management is addressed.

In addition to the General Conditions and Findings stated in Parts I, II, and III of the Order of Conditions for this project, the General and Special Conditions below are necessary to comply with the Medway Wetlands By-Law, Article XXI and the Medway Conservation Commission Regulations, the Medway Stormwater Bylaw Article XXVI as well as the Wetlands Protection Act and regulations.

I. General Conditions

- 1. A Conservation Commissioner, agent of the Commission or the Department of Environmental Protection reserves the right to enter and inspect the property at all reasonable times to evaluate compliance with this Order of Conditions, the Act, 310 CMR 10.00 and may acquire any information, measurements, photographs, observations, and/or materials, or may require the submittal of any data or information deemed necessary by the Commission for that evaluation. Further, work shall be halted on the site if a Commissioner, agent or DEP determines that any of the work is not in compliance with this Order of Conditions. Work shall not resume until the Commission is satisfied that the work will comply, and has so notified the applicant in writing.
- 2. This Order shall apply to any successor in control or successor in interest of the property described in the Notice of Intent and accompanying plans. These obligations shall be expressed in covenants in all deeds to succeeding owners of all or any part of or share (in fact) of the property.
- 3. The term "Applicant" as used in this Order of Conditions shall refer to the owner, any successor in interest, title or successor in control of the property referenced in the Notice of Intent, supporting documents and this Order of Conditions. The Commission shall be notified in writing within 30 days of all transfers of title of any portion of property that take place prior to issuance of the Certificate of Compliance.
- 4. No filling of Bordering Vegetated Wetland as defined in 310 CMR 10.55 is authorized by this Order.
- 5. It is the responsibility of the applicant to procure all other applicable federal, state and local permits and approvals associated with this project.
- 6. All waste products, refuse, debris, grubbed stumps, slash, excavate, construction materials, etc. associated with the proposed construction shall be contained and ultimately deposited at an appropriate off-site facility and shall not be incorporated in any manner into the project site. No mulch shall be placed in wetland resource areas.
- 7. The form provided at the end of this Order shall be completed and stamped at the appropriate Registry of Deeds, after the expiration of the 10-day appeal period and if no request for appeal has been filed with the Department of Environmental Protection. Any Order not recorded by the applicant before work commences may be recorded by the Commission at the applicant's expense.
- 8. With respect to all conditions, the Conservation Commission designates the Conservation Agent as its agent with full powers to act on its behalf in administering and enforcing this Order.
- 9. All work shall be conducted in accordance with the approved site plan titled, "Definitive Subdivision Plan Boundary Lane in Medway, MA", by Connorstone Engineering, dated February 17, 2022 (hereafter referred to as the Approved Site Plan), Stormwater Report titled, "Stormwater Report for Boundary Lane, Medway, MA" by Connorstone Engineering, dated February 15, 2022 (hereafter referred to as Stormwater Report), document titled, "Stormwater Operations and Maintenance Plan and Long Term Pollution Prevention Plan" by Connorstone Engineering, dated March 7, 2022 (hereafter referred to as the O&M Plan) and the conditions of this Order. Copies of applicable documents listed above shall be kept on site at all times while the site is under construction.
- 10. This document shall be included in all construction contracts, subcontracts, and specifications dealing with the work proposed and shall supersede any conflicting contract requirements. The applicant shall ensure that all contractors, subcontractors and other personnel performing the permitted work are fully aware of this Order's terms and conditions. Thereafter, the Applicant, the contractors, and subcontractors will be held jointly liable for any violation of this Order resulting from failure to comply with its conditions. The Applicant shall ensure that all contractors, subcontractors and other personnel performing the permitted

work are fully aware of this OOC's terms and conditions. Nothing in this paragraph shall limit or restrict the liability of the Applicant for violations of this OOC.

- 11. If any changes are made in the approved plan(s) which may or will alter an area subject to protection under the Wetlands Protection Act or any change(s) in activity subject to regulations under G.L. Ch. 131 §40 or the Medway General Bylaw Article XXI, the applicant shall inquire from this Commission in writing, prior to their implementation in the field, whether the change(s) is significant enough to require the filing of a new Notice of Intent, or a Request to Amend this Order of Conditions. Any errors in the plans or information submitted by the applicant shall be considered changes and the above procedures shall be followed.
- 12. The Commission reserves the right to amend this Order of Conditions after a legally advertised public hearing if plans or circumstances are changed or if new conditions or information so warrant.
- 13. It is the responsibility of the applicant to procure all other applicable federal, state and local permits and approvals associated with this project.
- 14. Should issuance of additional permits result in a change in the project, the provisions of condition #12 apply, regarding the process for plan amendments.
- 15. All waste products, refuse, debris, construction materials, etc. shall be contained and then postconstruction, deposited at an appropriate off-site facility.
- 16. There shall be no underground storage of fuel, oil, or hazardous substance on the property within the buffer zones or Wetland Resource Areas.
- 17. Removal and storage of hazardous substances, hazardous waste, or hazardous material if in an area subject to protection under Massachusetts Wetlands Protection Act:
 - a. Shall be conducted only when approved and directed by the Department of Environmental Protection, Environmental Protection Agency or other applicable state or federal agency under which removal or remedial activities are directed and shall be conducted in the manner specified in the Notice of Intent and appropriate agency directives.
 - b. All hazardous materials, hazardous substances, and hazardous waste produced, stored or removed must be handled, treated and disposed of in accordance with local, state and federal law regulating such materials and must be located outside of the buffer zone to wetland resource areas, unless specifically authorized by the Order of Conditions and appropriate state and federal licensing and permitting agencies.
 - c. No hazardous materials, substances, or wastes shall be introduced or discharged into or toward wetland resource areas.
 - d. No hazardous materials, substances, or wastes shall be introduced or discharged into the sanitary or sewage systems in such a manner which will result in an impact to wetland resource areas unless approved by the Conservation Commission, Board of Health, Massachusetts Department of Environmental Protection and/or the United States Environmental Protection Agency.
 - e. Identification of all types of hazardous materials, hazardous substances, or hazardous wastes used, produced, or stored on the site shall be submitted to the Conservation Commission in writing.
- 18. In the case of a conflict between a specific condition in this Order and a referenced document, the condition shall prevail.
- 19. Prior to any fill being brought onto the premises from any off property sources, the Medway Conservation Commission requires that Any soil, including loam, brought into the resource areas, buffer zones, or other jurisdictional area should be free of trash and deleterious material and free of any chemical contaminants in excess of Massachusetts Contingency Plan (MCP 310 CMR 40.0000) RCS-1 Reportable Concentrations. Soil should also be free of invasive species. While the MCP as a regulation at the State level may or may not apply to the project, soil characterization shall be completed in a manner consistent with this regulation. Prior to delivering to the project soil, material should be characterized by sampling the soil as outlined below and a certification shall be provided to the Conservation Commission or its agent. The certification shall include a letter signed by a Licensed Site Professional (see MCP) describing the Site history of the originating soil location and certifying sampling collection procedures, quality control, results, compliance

with RCS-1 Standards, and compliance with the requirements of this condition. Soil containing concentrations of contaminants in Exemptions from reporting outlined in the MCP including but not limited to lead paint, emmissions, arsenic, and ash, shall not be allowed in jurisdictional areas. Sampling and classification of soils shall also be consistent with MassDEP Policy # COMM-97-001.

Required soil testing is outlined below:

One soil sample shall be collected from material at each originating location or soil type. One soil sample shall be collected for every 500 cubic yards of soil.

- Volatile Organic Compounds (VOCs) by EPA Method 8260
- SemiVolatile Organic Compounds (SVOCs) by EPA 8270
- Polychlorinated Biphenyls (PCBs) by EPA Method 8082
- Total Petroleum Hydrocarbons (TPH) by EPA Method 8015 or 8100M.
- Substitute MassDEP VPH/EPH) for TPH allowed
- pH
- Priority Pollutant 13 Metals (total) Sb, As, BA, Be, Cd, Cr, Pb, Ni, Se, Ag, Ti, V, Zn.
- Any other analyses determined by the Conservation Commission, MassDEP, or the LSP necessary to properly characterize the soil for relocation.

Exceptions:

Washed Stone Materials (The Commission may elect to require sampling of these materials if materials are suspect when inspected by the Commission or its Agent)

Alternative Sampling Plans;

The Commission may consider alternative sampling plans or soil materials at its sole discretion. Approval of the commission or its agent is required for alternate plans. These may include management of soils consistent with MassDEP WSC#-13-500, Similar Soils Provision Guidance. These may also include originating facilities that are known to the Commission based on previous certifications, historical operations, and sampling to produce soils below RCS-1.

- 20. The applicant shall supply all costs associated with services provided by a Consulting Engineer for the review and oversight related to, but not limited to, the following construction Services Inspection of all site work related to the construction of the storwmater management system by the Town's Consulting Engineer is required. The Consulting Engineer will document compliance with the OOC and report findings to the Commission. The Applicant shall pay a construction services/consultant peer review fee to the Town of Medway for such inspections. The amount shall be determined by the Medway Conservation Commission based on an estimate provided by the Town's Consulting Engineer based on the scope of the project. The Applicant shall provide supplemental payments to the Town of Medway for reasonable additional construction services upon invoice from the Medway Conservation Commission, until the road construction and stormwater drainage system and other utilities are completed and the as-built and a Certificate of Compliance has been granted determining the infrastructure to be satisfactory in compliance with this Order. Funds for such account shall be replenished upon notice from the Conservation Commission and/or Agent. If funds are not replenished within fourteen (14) days of request all work within jurisdictional areas shall be suspended until such time when it is replenished.
- 21. This Order shall apply to any successor in control or successor in interest of the property described in the Notice of Intent and accompanying plans. These obligations shall be expressed in covenants in all deeds to succeeding owners of all or any part of or share (in fact) of the property.
- 22. This Order does not approve the construction of any structures/homes/lots related to or on proposed "lots" shown on the approved plans. This Order shall only approve aspects of the plans related to the infrastructures, stormwater, roadways, mitigation, and utility. Construction of the structures/homes/lots within the Commission's jurisdiction shall be filed under a separate notice or notices.

23. No lots, homes, fencing or structures requiring a Certificate of Occupancy by the Building are approved under this Order.

II. Prior to Construction

- 24. Prior to the Pre-Construction Meeting and any work commencing on the site, a sign of minimum size twofeet by two-feet shall be displayed so as to be clearly visible from the street showing DEP file No. 216-996.
- 25. Emergency Contacts The applicant shall provide to the Commission the identity and 24-hour contact information for one or more persons who will act as emergency contacts in the event of an environmental problem that occurs outside of normal working hours. The applicant shall be responsible for insuring that adequate, round-the-clock coverage including holidays, vacations, weekends, etc. is provided by an adequate number of persons so that a qualified person is always available, and that appropriate contact information has been provided to the Commission. The emergency contact person(s) shall have the authority to expend resources, including necessary manpower, materials, and required subcontracted services, to alleviate any environmental problems at the site in short order. The applicant shall be responsible for immediately notifying the Commission of any change in the identity or contact information for the Emergency Contact persons.
- 26. Prior to the Pre-Construction Meeting and commencement of any activity on this site, the approved erosion control and limit of work lines shall be staked, by survey. The location of erosion controls shall be adjusted, if necessary, during the pre-construction meeting.
- 27. No clearing of vegetation, including trees, or disturbance of soil shall occur prior to the Pre-Construction Meeting. Minimal disturbance of shrubs and herbaceous plants shall be allowed prior to the Pre-Construction Meeting if absolutely necessary in order to stake the approved erosion control and limit of work lines where required.
- 28. Prior to the commencement of any activity on this site other than the marking of locations for erosion controls and limits of work, there shall be a PRE-CONSTRUCTION MEETING between the project supervisor, the contractor responsible for the work, and a member of the Conservation Commission or its Agent to ensure that the requirements of the Order of Conditions are understood. The staked erosion control line shall be adjusted, if necessary, during the pre-construction meeting to comply with the approved plans. The applicant shall contact the Conservation Commission office at <u>508-533-3292</u> at least three (3) business days prior to any activity to arrange for the pre-construction meeting.
- 29. Prior to the commencement of work, the applicant shall designate an approved location for concrete washout. This location shall be approved by the Agent and/or the Commission.
- 30. Prior to any work on site, the applicant shall submit to the Commission and/or its Agent for its review and approval a Stormwater Pollution Prevention Plan or (SWPPP).
- 31. Prior to any work on the site the applicant shall submit to the Commission and/or its Agent a filed approved NPDES Permit.
- 32. Immediately after the Pre-Construction Meeting, all erosion controls and limits of work lines shall be installed along the approved and staked line. Erosion controls and limits of work lines shall be installed with minimal disturbance to vegetation. Where possible, erosion controls should go *around* trees, shrubs, and other vegetation, on the uphill side.
- 33. Immediately after installation of erosion controls, the Conservation Commission shall be contacted in order to conduct a follow-up inspection to ensure that erosion controls and limits of work lines have been properly installed. No work shall be conducted in any jurisdictional area of the site until the Commission or its Agent has inspected and approved of the installation of the erosion controls.
- 34. Prior to commencement of construction on site, the Bordering Vegetated Wetlands lines shall be flagged with surveyor's tape numbered to correspond to the wetland delineation on the approved plans and shall remain in place during construction.
- 35. The applicant shall notify the Conservation Commission in writing at least five (5) business days prior to commencement of construction activity on the site and shall advise the Commission of the name(s) and telephone number(s) of the person(s) responsible on site for compliance with this Order. The applicant shall be responsible for immediately notifying the Commission of any change in the identity or contact

information for the on-site person responsible for compliance with the Order.

- 36. The applicant shall secure a qualified professional to act as a clerk of the works (the Commission shall review the Clerk of the Works resume for the qualifications) whose information shall be provided to the Commission. The Clerk of the Works will supervise the contractor and will inspect the site regularly whenever construction in or within 100 feet of a bordering vegetated wetland is in progress. The Clerk of the Works will provide inspection reports to the Commission every two weeks and after storm events over 0.5", and will respond to required inspected the next day or 24 hours whichever is sooner after storm events of over 0.5", so as to take responsibility for the proper functioning of drainage systems for the project. The applicant shall provide that person's phone number for the Commission. Failure to provide above reports may result in cessation of all work on site until the applicant can meet with the Conservation Commission at a regularly scheduled meeting to explain and rectify their absence.
- 37. Prior to commencing any work on the site, the applicant shall submit the following to the Conservation Commission:
 - A set of photographs depicting the project site in pre-construction condition.
 - A project/construction-sequencing plan
 - A statement signed by the applicant, owner of the property and all persons responsible for the construction of the project that such individuals understand the terms and conditions as specified in the Order and that such persons agree to comply with the provisions of the Wetlands Protection Act and this Order.

III. Erosion Control Inspection and Monitoring

- 38. It shall be the responsibility of the applicant and his successors to conduct monitoring, maintenance, and repair of erosion control measures, as well as to take any other additional measures necessary to control erosion from the site such that wetland impacts do not occur. The erosion control measures designated on the site plans and described in this Order of Conditions shall be considered a minimum standard for compliance. In addition, it shall be the responsibility of the applicant to take whatever measures are necessary to prevent any form of wetland impacts not approved within this Order. Additional requirements related to site monitoring and control are:
 - A. <u>Erosion Control Inspector</u>. The applicant shall designate and identify to the Commission a qualified Erosion Control Inspector. This person shall have appropriate credentials in the field of engineering or environmental science, and erosion and sedimentation control.
 - B. Erosion control inspections. At least once every two weeks and within 24 hours of a rain event of > 0.5" inch within any 24 hour period, the designated Erosion Control Inspector shall conduct a thorough inspection of the site. At a minimum, each inspection shall include a visual inspection of all erosion control barriers, visual inspection of all temporary sediment traps and other erosion control measures, inspection of all stockpile areas, inspection of intermittent streams, the vernal pool wetland adjacent to the development, and the Main Building. Inspections shall include turbidity monitoring as described below.
 - C. <u>Precipitation Monitoring</u>: The applicant shall obtain and maintain in good working order at the site a precipitation gauge. The applicant shall maintain a daily log of precipitation at the site, and make the log available for inspection.
 - D. <u>Inspection reports</u>. Within one week of the completion of an inspection, the Erosion Control Inspector shall submit a report of findings to the Medway Conservation Commission. The contents of this report shall include, but are not limited to, the following:
 - a. Summary of site status with respect to construction phases and erosion control measures.
 - b. Summary of erosion control measure maintenance and additions conducted during the period since the last inspection.
 - c. A list of any and all recommended measures for maintenance, repair, or improvement of erosion control measures.
 - d. The results in tabular form of turbidity monitoring.

e. Each inspection report shall contain the following certification signed by the Erosion Control Inspector:

"With only the following exception(s) noted herein, it is my professional opinion that:

- 1. Work on the site is being conducted in compliance with the Order of Conditions and other regulatory requirements and approvals related to environmental protection.
- 2. The erosion control barriers and other erosion control measures are functioning as intended, are being maintained adequately, and are in a condition to continue to function as intended.
- 3. I observed no impacts of sedimentation, physical disturbance, or other alteration of wetland resource areas, including open water areas and vegetated wetlands, on the site.

IV. Staging Areas

- 38. Prior to construction the general contractor shall designate a construction staging area, located outside all resource areas and outside the 25' buffer zone. All construction trailers, portable sanitary facilities, material storage and overnight parking of equipment shall be in the staging area. The perimeter of the staging area shall be protected as necessary with silt fence and the ground surface shall be protected with washed stone or another suitable non-erosive material.
- 39. An area for cleanup and or maintenance of construction equipment shall be designated prior to construction.
 - a. Applicant shall designate wash out areas which will be located over 25' from any wetland resource and surrounded by siltation controls or some other form of protection approved by the Commission
 - b. Any runoff resulting from the washing of trucks or construction equipment shall neither be directed to, nor dumped in, any on-site drainage system or in any area subject to protection under the Mass. Wetlands Protection Act. Any such washing shall occur in a designated area, protected by washed stone, outside of all resource areas. All construction vehicles exiting the property shall be cleaned of soil prior to traveling on public streets within the Town of Medway.
 - c. Any leakage or spillage of oil, hydraulic fluid, gasoline, or other pollutants must be cleaned up immediately and disposed of off the site. All fueling of equipment shall be performed outside of wetland resource areas and buffer zones. The Commission shall be notified immediately in the event of any spillage.
- 40. Prior to commencing any work on the site the applicant shall install a stone construction entrance (tracking pad) not less than 20' wide and not less than 30' in length of a stone size, on the average of 1" to 4".
- 41. All construction equipment employed in the resource areas or buffer zones thereto shall be properly maintained and precautions shall be taken to prevent any leakage or spillage of oil, gasoline, hydraulic fluids, etc. If this is not recommended based on the site conditions, it shall be agreed to remove this requirement by the Agent and/or the Commission and the Project Supervisor.
- 42. No fuel, oil, or other pollutants shall be stored in any resource area or the buffer zone thereto, unless specified in this Order of Conditions.

V. Stormwater Management

- 43. During construction all stormwater management systems shall be inspected after a 0.5" rain fall and bimonthly during construction. Structures shall be maintained and cleaned as prescribed within the O &M Plan.
- 44. The applicant shall contact the Town Consulting Engineer and the Agent to schedule a site visit to inspect the bottom excavation of the infiltration basin to ensure that the proposed system in not being installed within groundwater or within 2' of Estimated Seasonal High Groundwater.
- 45. All construction and post-construction stormwater management shall be conducted in accordance with the

plans and specifications approved by the Commission in this Order of Conditions, including final plans, Operation and Maintenance Plan, NPDES, SWPPP, and the Department of Environmental Protection Stormwater Management Standards.

- 46. All Stormwater best management practices shall be maintained and inspected as specified in the Operation and Maintenance Plan submitted with the Notice of Intent and incorporated in the Order of Conditions.
- 47. During construction, all drainage structures shall be inspected on the same schedule as the erosion controls and cleaned as necessary.
- 48. The Conservation Commission shall be notified in writing, when any maintenance functions that may impact the wetlands, such as, but not limited to, replacing backfill and repairing drains and terraces, are to be performed.
- 49. Prior to construction the applicant shall construct temporary stomrwater management basin as prescribed by the Stormwater Pollution Prevention Plan and the approved site plan. If the location or sizing of the temporary basin are amended, prior to implementation, the applicant shall submit through its Engineer the proposed design. The design shall be reviewed and approved by the Agent and/or the Town's Consulting Engineer prior to implementation.
- 50. All Stormwater best management practices shall be maintained as specified in the Operation and Maintenance Plan submitted with the Notice of Intent and incorporated in the Order of Conditions. Evidence of maintenance of the Stormwater Management system shall be provided to the Commission on a semi-annual basis during construction.
- 51. The Conservation Commission shall be notified in writing, when any maintenance functions that may impact the wetlands, such as, but not limited to, replacing backfill and repairing drains and terraces, are to be performed.
- 52. The applicants, owners, and their successors and assignees shall maintain all culverts, collection basins, traps, retention and detention ponds, outlet structures, and other elements of drainage systems, in order to avoid blockages and siltation which might cause failure of the system and/or detrimental impacts to on-site or off-site resource areas, and shall maintain the integrity of vegetative cover on the site.
- 53. Beginning with the construction of the drainage system, and continuing in perpetuity thereafter, the owner(s) of the roadway shall maintain the roadway and drainage system in accordance with the following schedule:
 - a. **Roadway and snow plowing** Roadway shall be swept, preferably with a vacuum sweeper, in the early spring immediately after snow melt. Plowed snow shall not be stored within the infiltration basin or at the edge of the basin. Snow shall be stored in locations as depicted on the approved site plans.
 - b. **Deep Sump Catch basins -** Accumulated sediments shall be removed from sumps and floatable wastes shall be removed from the surface of every catch basin at least two times per year. Sediments and wastes shall be disposed of in accordance with all applicable federal, state, and local laws. Any component of a catch basin that becomes damaged shall be repaired or replaced immediately upon discovery.
 - c. **Drain Lines-** after construction, the drain lines shall be inspected after every major storm for the first 12 months. Presence of silt or sedimentation would indicate more frequent maintenance of pretreatment is required. Thereafter drainlines inspection once per year.
 - d. Sediment Forebay- after construction the sediment forbay shall be inspected monthly and cleaned 4 times per year or when sediment exceed 50% of the depth of the forebay capacity, sediment shall be immediately removed.
 - e. Infiltration Basin-during and after construction shall be regularly inspected for sedimentation build up, structural damage, and standing water. Water level shall be measured and corrective action taken if water does not drain in 72 hours following a storm. Based shall be inspected twice annually and cleaned if there is 6 inches of sediment accrual in the bottom of the basin. Additionally, basin shall be mowed at least twice annually.

All maintenance of stormwater management units shall be conducted as prescribed under O&M Plan. The Conservation Commission members and the Commission Agent shall have the right to enter the roadway parcel and drainage easement area to inspect for compliance with all sub conditions of this condition.

- 54. All stormwater BMP's maintenance logs as prescribed under the approved Operations and Maintenance Plan and the SWPPP shall be kept on site and shall be provided to the Conservation Commission upon request and annually or Planning Board upon request, this includes but is not limited to street sweeping logs and receipts.
- 55. All Stormwater best management practices shall be maintained as specified in the O & M Plan and the SWPPP submitted with the Notice of Intent and incorporated in the Order of Conditions. Evidence of maintenance of the Stormwater Management system shall be provided to the Commission on an annual basis post construction, but Stormwater BMP's shall be checked and cleaned according to the schedule prescribed within the O & M Plan. This condition shall be noted on the Certificate of Compliance and shall continue in perpetuity.
- 56. Deep Sump Catch Basins shall be inspected after a 0.5" storm event and on a weekly basis during construction. Post- Construction: the catch basins shall be inspected and cleaned on a quarterly basis. Post-construction all inspection and cleaning dates shall be provide to the Commission written confirmation that the inspections and cleanings were conducted, this shall be provided annually. This condition shall be noted on the Certificate of Compliance and shall continue in perpetuity.
- 57. During construction, all drainage structures shall be inspected regularly and cleaned as necessary as prescribed under the O & M and the SWPPP.
- 58. There shall be no sedimentation into wetlands or water bodies from discharge pipes or surface runoff leaving the site.
- 59. The Conservation Commission shall be notified in writing, when any maintenance functions that may impact the wetlands, such as, but not limited to, replacing backfill and repairing drains and terraces, are to be performed.
- 60. The applicant and its successors, upon the completion of the entire project, prior to submitting a Request for Certificate of Compliance shall provide to the Commission and/or its Agent receipts of all inspections to the stormwater management system as prescribed under the Operations and Maintenance Plan and the Stormwater Pollution Prevention Plan. These receipts shall refer to but are not limited to, catch basin cleaning, vegetation management (removal or mowing of swales, infiltration basins or other structures requiring mowing), and inspection and cleaning of proprietary separator.

VI. During Construction

- 61. The applicant shall not place stockpiles closer than 25' to any wetland resource and all stockpiles shall be within the limit of work approve by the Commission.
- 62. If unforeseen problems occur during construction which may affect the statutory interests of the Wetlands Protection Act, upon discovery by either the Conservation Commission, its agent, or the applicant, the Commission shall immediately be notified, and an immediate meeting shall be held between the Commission or its agent, the applicant, and other concerned parties to determine the correct measures to be employed. The applicant shall then act to correct the problems using the corrective measures agreed upon. Subsequent to resolution, the activity and resulting actions shall be documented in writing.
- 61. All equipment shall be operated, parked, and maintained so as to limit impacts to resource area and buffer zone to those areas clearly identified on the plans and demarcated in the field by the flagging and construction barriers installed. No equipment is to enter or cross wetland resource areas at any time unless the location of disturbance is marked on the plans referenced in this Order and flagged in the field.
- 62. During construction, Town personnel shall exercise extreme care when onsite fueling is underway during construction or storms. Spill kits as required herein shall be maintained at the fueling system during all stages of construction. Any spill of fuel shall be immediately reported to the Medway Fire Department, Police Department and Conservation Commission.
- 63. All existing and proposed catch basins and water quality inlets on the site or within the parcel that receive runoff from or contributes runoff to the project site shall be cleaned of sediment prior to commencement of

work and be protected by Silt Sacks or equivalent to prevent sediment from entering the drainage system. Silt Sacks and sumps shall be maintained and regularly cleaned of sediments until all areas associated with the work permitted by this Order have been permanently stabilized and the Commission and/or its Agent has formally approved their removal.

- 64. All equipment shall be inspected regularly for leaks. Any leaking hydraulic or other fluid lines, cylinders, containers of any kind, or any other components shall be repaired immediately.
- 65. A copy of this Order of Conditions, construction plans, and copies of the documents and reports cited in this Order shall be on the site upon commencement and during any site work for contractors to view and adhere to.

Erosion Control:

- 66. Appropriate erosion control devices shall be in place prior to the beginning of any phases of construction, and shall be maintained during construction in the wetland areas and buffer zone. The erosion control specifications provided in the Notice of Intent and the erosion control provision in the Order will be the minimum standards for this project; additional measures may be required by the Commission. These will be maintained until the Erosion Control Inspector and a member or agent of the Conservation Commission agree that they are no longer needed, at which time they will be removed, using removal procedures that the Commission finds satisfactory. All sedimentation barriers shall be maintained in good repair until all disturbed areas have been fully stabilized with vegetation or other means. At no time shall sediments be deposited in a wetland or water body. During construction, the applicant or his designee shall inspect the erosion controls on a daily basis and shall remove all sediment when accumulated to a depth of two inches or greater. The applicant shall immediately control all erosion on the site, and shall immediately notify the Commission of any breeches of the erosion control all erosion on the site, and shall immediately notify the
- 67. The applicant shall place siltation sacks in all catch basins within the vicinity of the project, this may include Summer Street (only if requested by Agent). In addition, once the stormwater management system is installed all catch basin shall be equipped with siltation sacks. The Agent shall be contacted for review of catch basins within one week of installation.
- 68. Placement of erosion controls shall be directed at the site by the Erosion Control Inspector in order to ensure that no sedimentation will reach wetland resource areas and the erosion and sedimentation controls achieve the specifications specified as part of the Notice of Intent and these Orders of Conditions. Choice of suitable silt fence materials should be based on the design specifications listed by various manufacturers, and in accordance with the approved Site Plans and Details.
- 69. Dewatering activities shall be conducted in accordance with best management practices and with a plan to be submitted for Commission approval prior to any activity on the site. Dewatering activities shall be monitored daily to ensure that sediment laden water is not discharged toward the wetland resource areas. With the exception of dewatering effluent discharged into a detention basin, no discharge of water is allowed directly or indirectly into an area subject to jurisdiction of the Wetlands Protection Act. If emergency dewatering requirements arise, the applicant shall submit a contingency plan to the Commission for approval, which provides for the pumped water to be contained in a settling basin, to adequately reduce turbidity prior to discharge into a resource area. Additional monitoring requirements may be imposed on any such discharge approved, to ensure adequacy of the sediment removal measures.
- 70. An adequate stockpile of erosion control materials shall be on site at all times for emergency or routine replacement and shall include materials to repair or replace silt fences, hay bales, erosion control blankets, stone riprap, filter berms or any other devices planned for use during construction.
- 71. The Commission reserves the right to impose additional conditions on portions of this project to mitigate any impacts which could result from site erosion, or any noticeable degradation of surface water quality discharging from the site. For example, installation of erosion control measures may be required in areas not shown on the plan(s) referenced in this Order of Conditions. Should such installation be required by the Commission, they shall be installed within 48 hours of the Commission's request.
- 72. Within thirty days of completion of construction on any given portion of the project, all disturbed areas in the completed portion of the site shall be permanently stabilized with rapidly growing vegetative cover, using sufficient top soil, or the proposed surface treatments as indicated on the approved plans to assure long-term stabilization of disturbed areas. Where necessary, the loam and seeding shall be held in place with jute netting. Outside of the growing season, exposed soil finish grade surfaces shall be stabilized with a

layer of mulch hay until climate conditions allow for seeding. During construction, any area of exposed soils that will be left idle for more than 30 days shall be stabilized with a layer of mulch hay or other means approved by the Conservation Commission. Temporary stabilization methods may include, but not be limited to, hydro-seeding, straw mats, jute netting, sod, or other Commission approved method. A minimum of four to six inches of organic top soil, and a USDA Natural Resource Conservation Service-approved seed mixture should be used in accordance with the measures outlined in "Vegetative Practices in Site Development: Massachusetts Conservation Guide, Volume II", or other stabilization method the Commission deems acceptable. Continued maintenance of this area in a manner which assures permanent stabilization and precludes any soil erosion shall be the responsibility of the applicant.

- 73. Subsequent to seeding, disturbed areas will be covered with a hay mulch, erosion control blanket or netting or other suitable material in order to provide an adequate surface protection until seed germination. Preference should be given to erosion control netting with biodegradable stitching.
- 74. All existing and proposed catch basins and oil traps on the site that receive runoff from the project site and/or within Medway shall be protected by Silt Sacks or equivalent to prevent sediment from entering the drainage system. Silt Sacks shall be maintained and regularly cleaned of sediments until all areas associated with the work permitted by this Order have been permanently stabilized and the Commission and/or its Agent has formally approved their removal.
- 75. Cement trucks shall not be washed out in any wetland resource or buffer zone area, or into any drainage system. Any such deposit of cement or concrete products into a buffer zone or wetland resource area shall be immediately removed.
- 76. All stockpiles of soils existing for more than seven day shall be surrounded by a row of staked straw bales or 8"-12" compost socks, or entrenched silt fence, and shall be covered when requested by Agent and/or the Commission or if current conditions for precipitation warrant which may be determined by the Project Supervisor or Clerk of the Works.
- 77. Erosion control devices shall remain in place and properly functioning until all exposed soils have been stabilized with final vegetative cover and the Conservation Commission and/or its Agent has authorized their removal.

Grading/Landscaping/Slope:

- 78. Landscaping shall not include exotic invasive species identified on the most current listing of the Massachusetts Division of Fisheries and Wildlife.
- 79. All proposed landscaping within the Commission jurisdiction shall only consist of planting and vegetation native to New England and specifically native to Massachusetts. There shall be no plantings or vegetation within the Commission jurisdiction that is a cultivar or cross breed tree or shrub. The applicant shall submit a Landscaping plan to the Commission for approval prior to the issuance of a Certificate of Occupancy and prior to any planting of vegetation within the Commission's jurisdiction. The Landscaping Plan shall be approved by the Agent and/or the Commission.

Placement of Riprap and Stone:

80. Riprap material shall be clean and free of trash, tree stumps, roots, and other deleterious material.

VIII. After Construction / In Perpetuity

- 81. The applicant and its successors shall submit annual reports of inspections of all stormwater management structures as prescribed in the approved Operations and Maintenance Plan (O&M) to the Conservation Commission. Annual report shall be submitted to the Commission no later than December 1st of every year. *This condition shall remain in perpetuity.*
- 82. Snow storage areas shall be clearly marked on site and all snow removal operators shall be made aware of approved locations on site for storage. Excess snow shall be removed from the site and disposed of in accordance with applicable regulations. Snow shall only be plowed or stored within designated locations as depicted on the approved site plan. *This condition shall apply in perpetuity.*
- 83. Upon completion of construction and final soil stabilization, the applicant shall submit the following to the Conservation Commission to request a Certificate of Compliance (COC):

- (1) A Completed Request for a Certificate of Compliance form (WPA Form 8A)
- (2) A letter from a Registered Professional Engineer certifying compliance of the property with this Order of Conditions, and detailing any deviations that exist, and their potential effect on the project. A statement that the work is in "substantial compliance" with no detailing of the deviations shall not be accepted.
- (3) An "As-Built" plan or plans signed and stamped by a Registered Professional Engineer or Land Surveyor showing post-construction conditions within all areas under the jurisdiction of the Massachusetts Wetlands Protection Act. This plan shall include at a minimum:
 - (a) All wetland resource area boundaries with associated buffer zones and regulatory setback areas taken from the plans approved in this Order of Conditions;
 - (b) Locations and elevations of all stormwater management conveyances, structures and best management designs, including foundation drains, constructed under this Order within any wetland resource area or buffer zone;
 - (c) Distances from any structures constructed under this Order to wetland resource areas "structures" include, but are not limited to, all buildings, septic system components, wells, utility lines, fences, retaining walls, and roads/driveways;
 - (d) A line delineating the actual limit of work "work" includes any filling, excavating and/or disturbance of soils or vegetation, whether or not approved under this Order;
 - (e) The limit of work approved under this Order.
- (4) Post-construction photographs demonstrating compliance with this Order, including established vegetation where required.
- 84. If the completed work differs from that in the original plans and/or conditions listed in this Order, a report must be submitted to the Commission thirty (30) days prior to completion specifying how the work differs, at which time the applicant shall first request a modification to the Order. Upon review, and if approved by the Commission, the applicant may request in writing a Certificate of Compliance as described above.
- 85. No herbicides, pesticides or fertilizers shall be used on this site. Only organic slow release granular, low phosphate fertilizers shall be used on lawns within the buffer zone and all lawns within the entire site. *This condition shall remain in perpetuity.*
- 86. There shall be no snow storage or dumping of excess snow within 100' of Bordering Vegetated Wetlands unless within parking or storage areas. Snow shall not be pushed into forested buffer zones. *This condition shall remain in perpetuity*.

Perpetual Conditions:

- Dumping Prohibited: There shall be no burning or dumping of leaves, grass clippings, brush, or other debris in or into the 100' Buffer Zone, Bordering Vegetated Wetland, or any component of the Stormwater Management System.
- 88. Additional Alteration Prohibited: There shall be no additional alterations of areas under Conservation Commission jurisdiction without the required review and permit(s) under state and local wetlands protection laws and regulations.
- 89. The maintenance or repair of infiltration basins, supporting drainage systems, stormwater management best management practices, other than those in the public way shall be the responsibility of the applicant/property owner and its successors. The design capacity, storm water management treatment capacity and structural integrity of these facilities must be maintained.
- 90. Stabilized slopes shall be maintained as designed and constructed by the property owner of record, whether "bio-engineered" or mechanically-stabilized slopes.
- 91. The Applicant shall have the O & M Plan, and Conditions in Perpetuity after this Order has received a Certificate of Compliance, made part of the all contracts for maintenance work that effects jurisdictional areas.

Linda Lindsey 69 Summer Street DEP #216-0996 LD-22-02 (Bylaw)

- 92. Snow storage shall be done according to the O&M (in perpetuity) and the SWPPP (during construction). Snow storage areas shall be clearly marked on site and all snow removal operator shall be made aware of approved locations on site for storage.
- 93. All deicing chemical must be stored in a cover location, outside the 100' buffer zone, the wetland resource area and all areas where stormwater BMP's are located.

STORMWATER BYLAW PERMIT - PART III FINDINGS AND CONDITIONS UNDER THE MEDWAY STORMWATER PROTECTION BYLAW (ARTICLE XXVI) PROJECT SITE: 69 Summer Street Map 37 Lot 036 DEP # 216-0996 ORIGINAL DATE OF ISSUANCE: March 29, 2022

The Medway Conservation Commission makes the following findings relative to the Land Disturbance Permit Application LD-22-02:

- a) The Commission hereby finds that the work proposed for construction of a subdivision roadway with associated, stormwater management system, utilities and landscaping was presented at a public hearing where the applicant has presented evidence sufficient to demonstrate that the proposed activity meets the provisions under Medway General Bylaw Article XXVI.
- b) It was noted that all conditions of this Order must be met in order to meet the above mentioned provisions. The Commission additionally finds that the work must be conditioned to ensure that all the performances standards of the Medway General Storwmater Bylaw Article XXVI are met.
- 1. A Conservation Commissioner, agent of the Commission reserves the right to enter and inspect the property at all reasonable times to evaluate compliance with this Order of Conditions, the Medway Stormwater Bylaw Article XXVI and may acquire any information, measurements, photographs, observations, and/or materials, or may require the submittal of any data or information deemed necessary by the Commission for that evaluation. Further, work shall be halted on the site if a Commissioner, agent determines that any of the work is not in compliance with this Order of Conditions. Work shall not resume until the Commission is satisfied that the work will comply, and has so notified the applicant in writing.
- 2. The term "Applicant" as used in this Order of Conditions shall refer to the owner, any successor in interest, title or successor in control of the property referenced in the Notice of Intent, supporting documents and this Order of Conditions. The Commission shall be notified in writing within 30 days of all transfers of title of any portion of property that take place prior to issuance of the Certificate of Compliance.
- 3. It is the responsibility of the applicant to procure all other applicable federal, state and local permits and approvals associated with this project.
- 4. With respect to all conditions, the Conservation Commission designates the Conservation Agent as its agent with full powers to act on its behalf in administering and enforcing this Order.
- 5. All work shall be conducted in accordance with the approved site plan titled, "Definitive Subdivision Plan Boundary Lane in Medway, MA", by Connorstone Engineering, dated February 17, 2022 (hereafter referred to as the Approved Site Plan), Stormwater Report titled, "Stormwater Report for Boundary Lane, Medway, MA" by Connorstone Engineering, dated February 15, 2022 (hereafter referred to as Stormwater Report), document titled, "Stormwater Operations and Maintenance Plan and Long Term Pollution Prevention Plan" by Connorstone Engineering, dated March 7, 2022 (hereafter referred to as the O&M Plan) and the conditions of this Order. Copies of applicable documents listed above shall be kept on site at all times while the site is under construction.
- 6. Copies of applicable documents listed above in Condition #5 shall be kept on site at all times while the site is under construction. This document shall be included in all construction contracts, subcontracts, and specifications dealing with the work proposed and shall supersede any conflicting contract requirements. The applicant shall ensure that all contractors, subcontractors and other personnel performing the permitted work are fully aware of this Permits terms and conditions. Thereafter, the Applicant, the contractors, and subcontractors will be held jointly liable for any violation of this Permit's resulting from failure to comply with its conditions. The Applicant shall ensure that all contractors, subcontractors, subcontractors and other personnel performing the permitted work are fully aware of this permit's terms and conditions. Nothing in this paragraph shall limit or restrict the liability of the Applicant for violations of this permit.

Linda Lindsey 69 Summer Street DEP #216-0996 LD-22-02 (Bylaw)

- 7. The Applicant shall submit a final As-Built Plan with a letter from the Engineering stating that all work was completed in conformance with the approved plans, this permit and the Medway Stormwater Bylaw Article XXVI.
- 8. A Conservation Commissioner, agent of the Commission or the Department of Environmental Protection reserves the right to enter and inspect the property at all reasonable times to evaluate compliance with this Permit, the Act, 310 CMR 10.00 and may acquire any information, measurements, photographs, observations, and/or materials, or may require the submittal of any data or information deemed necessary by the Commission for that evaluation. Further, work shall be halted on the site if a Commissioner, agent or DEP determines that any of the work is not in compliance with this Permit. Work shall not resume until the Commission is satisfied that the work will comply, and has so notified the applicant in writing.
- 9. This Permit shall apply to any successor in control or successor in interest of the property described in the Notice of Intent and accompanying plans. These obligations shall be expressed in covenants in all deeds to succeeding owners of all or any part of or share (in fact) of the property.
- 10. It is the responsibility of the applicant to procure all other applicable federal, state and local permits and approvals associated with this project.
- 11. All waste products, refuse, debris, grubbed stumps, slash, excavate, construction materials, etc. associated with the proposed construction shall be contained and ultimately deposited at an appropriate off-site facility and shall not be incorporated in any manner into the project site. No mulch shall be placed in wetland resource areas.
- 12. The form provided at the end of this Permit shall be completed and stamped at the appropriate Registry of Deeds, after the expiration of the 10-day appeal period and if no request for appeal has been filed with the Department of Environmental Protection. Any Permit not recorded by the applicant before work commences may be recorded by the Commission at the applicant's expense.
- 13. With respect to all conditions, the Conservation Commission designates the Conservation Agent as its agent with full powers to act on its behalf in administering and enforcing this Permit.
- 14. This document shall be included in all construction contracts, subcontracts, and specifications dealing with the work proposed and shall supersede any conflicting contract requirements. The applicant shall ensure that all contractors, subcontractors and other personnel performing the permitted work are fully aware of this Permit's terms and conditions. Thereafter, the Applicant, the contractors, and subcontractors will be held jointly liable for any violation of this Permit resulting from failure to comply with its conditions. The Applicant shall ensure that all contractors, subcontractors and other personnel performing the permitted work are fully aware of this Permit terms and conditions. Nothing in this paragraph shall limit or restrict the liability of the Applicant for violations of this OOC.
- 15. It is the responsibility of the applicant to procure all other applicable federal, state and local permits and approvals associated with this project.
- 16. Should issuance of additional permits result in a change in the project, the provisions of condition #12 apply, regarding the process for plan amendments.
- 17. All waste products, refuse, debris, construction materials, etc. shall be contained and then postconstruction, deposited at an appropriate off-site facility.
- 18. There shall be no underground storage of fuel, oil, or hazardous substance on the property within the buffer zones or Wetland Resource Areas except as permitted for utilities required for regular operation of a two family residence.
- 19. Removal and storage of hazardous substances, hazardous waste, or hazardous material if in an area subject to protection under Massachusetts Wetlands Protection Act:
 - a. Shall be conducted only when approved and directed by the Department of Environmental Protection, Environmental Protection Agency or other applicable state or federal agency under which removal or remedial activities are directed and shall be conducted in the manner specified in the Notice of Intent and appropriate agency directives.
 - b. All hazardous materials, hazardous substances, and hazardous waste produced, stored or removed must be handled, treated and disposed of in accordance with local, state and federal law regulating such materials and must be located outside of the buffer zone to wetland

resource areas, unless specifically authorized by the Permit and appropriate state and federal licensing and permitting agencies.

- c. No hazardous materials, substances, or wastes shall be introduced or discharged into or toward wetland resource areas.
- d. No hazardous materials, substances, or wastes shall be introduced or discharged into the sanitary or sewage systems in such a manner which will result in an impact to wetland resource areas unless approved by the Conservation Commission, Board of Health, Massachusetts Department of Environmental Protection and/or the United States Environmental Protection Agency.
- e. Identification of all types of hazardous materials, hazardous substances, or hazardous wastes used, produced, or stored on the site shall be submitted to the Conservation Commission in writing.
- 20. In the case of a conflict between a specific condition in this Permit and a referenced document, the condition shall prevail.
- 21. Prior to any fill being brought onto the premises from any off property sources, the Medway Conservation Commission requires that Any soil, including loam, brought into the resource areas, buffer zones, or other jurisdictional area should be free of trash and deleterious material and free of any chemical contaminants in excess of Massachusetts Contingency Plan (MCP 310 CMR 40.0000) RCS-1 Reportable Concentrations. Soil should also be free of invasive species. While the MCP as a regulation at the State level may or may not apply to the project, soil characterization shall be completed in a manner consistent with this regulation. Prior to delivering to the project soil, material should be characterized by sampling the soil as outlined below and a certification shall be provided to the Conservation Commission or its agent. The certification shall include a letter signed by a Licensed Site Professional (see MCP) describing the Site history of the originating soil location and certifying sampling collection procedures, quality control, results, compliance with RCS-1 Standards, and compliance with the requirements of this condition. Soil containing concentrations of contaminants in Exemptions from reporting outlined in the MCP including but not limited to lead paint, emmissions, arsenic, and ash, shall not be allowed in jurisdictional areas. Sampling and classification of soils shall also be consistent with MassDEP Policy # COMM-97-001.

Required soil testing is outlined below:

One soil sample shall be collected from material at each originating location or soil type. One soil sample shall be collected for every 500 cubic yards of soil.

- Volatile Organic Compounds (VOCs) by EPA Method 8260
- SemiVolatile Organic Compounds (SVOCs) by EPA 8270
- Polychlorinated Biphenyls (PCBs) by EPA Method 8082
- Total Petroleum Hydrocarbons (TPH) by EPA Method 8015 or 8100M.
- Substitute MassDEP VPH/EPH) for TPH allowed
- pH
- Priority Pollutant 13 Metals (total) Sb, As, BA, Be, Cd, Cr, Pb, Ni, Se, Ag, Ti, V, Zn.
- Any other analyses determined by the Conservation Commission, MassDEP, or the LSP necessary to properly characterize the soil for relocation.

Exceptions:

Washed Stone Materials (The Commission may elect to require sampling of these materials if materials are suspect when inspected by the Commission or its Agent)

Alternative Sampling Plans;

The Commission may consider alternative sampling plans or soil materials at its sole discretion. Approval of the commission or its agent is required for alternate plans. These may include management of soils consistent with MassDEP WSC#-13-500, Similar Soils Provision Guidance. These may also include originating facilities that are known to the Commission based on previous certifications, historical operations, and sampling to produce soils below RCS-1.

- 22. The applicant shall supply all costs associated with services provided by a Consulting Engineer for the review and oversight related to, but not limited to, the following construction Services Inspection of all site work related to the construction of the storwmater management system by the Town's Consulting Engineer is required. The Consulting Engineer will document compliance with the OOC and report findings to the Commission. The Applicant shall pay a construction services/consultant peer review fee to the Town of Medway for such inspections. The amount shall be determined by the Medway Conservation Commission based on an estimate provided by the Town's Consulting Engineer based on the scope of the project. The Applicant shall provide supplemental payments to the Town of Medway for reasonable additional construction services upon invoice from the Medway Conservation Commission, until the road construction and stormwater drainage system and other utilities are completed and the as-built and a Certificate of Compliance has been granted determining the infrastructure to be satisfactory in compliance with this Permit. Funds for such account shall be replenished upon notice from the Conservation Commission and/or Agent. If funds are not replenished within fourteen (14) days of request all work within jurisdictional areas shall be suspended until such time when it is replenished.
- 23. This Permit shall apply to any successor in control or successor in interest of the property described in the Notice of Intent and accompanying plans. These obligations shall be expressed in covenants in all deeds to succeeding owners of all or any part of or share (in fact) of the property.
- 24. This document shall be included in all construction contracts, subcontracts, and specifications dealing with the work proposed and shall supersede any conflicting contract requirements. The applicant and its successors shall ensure that all contractors, subcontractors and other personnel performing the permitted work are fully aware of this Land Disturbance Permit terms and conditions. Thereafter, the Applicant, the contractors, and subcontractors will be held jointly liable for any violation of this Permit resulting from failure to comply with its conditions. The Applicant shall ensure that all contractors and other personnel performing the permitted work are fully aware of this Permit terms and conditions. Nothing in this paragraph shall limit or restrict the liability of the Applicant for violations of this Permit.

I. PRE-CONSTRUCTION

- 25. Prior to the Pre-Construction Meeting and any work commencing on the site, a sign of minimum size two-feet by two-feet shall be displayed so as to be clearly visible from the street showing Medway File No. 22-02.
- 26. <u>Emergency Contacts</u> The applicant shall provide to the Commission the identity and 24-hour contact information for one or more persons who will act as emergency contacts in the event of an environmental problem that occurs outside of normal working hours. The applicant shall be responsible for insuring that adequate, round-the-clock coverage including holidays, vacations, weekends, etc. is provided by an adequate number of persons so that a qualified person is always available, and that appropriate contact information has been provided to the Commission. The emergency contact person(s) shall have the authority to expend resources, including necessary manpower, materials, and required subcontracted services, to alleviate any environmental problems at the site in short Permit. The applicant shall be responsible for immediately notifying the Commission of any change in the identity or contact information for the Emergency Contact persons.
- 27. Prior to the Pre-Construction Meeting and commencement of any activity on this site, the approved erosion control and limit of work lines shall be staked, by survey. The location of erosion controls shall be adjusted, if necessary, during the pre-construction meeting.
- 28. No clearing of vegetation, including trees, or disturbance of soil shall occur prior to the Pre-Construction Meeting. Minimal disturbance of shrubs and herbaceous plants shall be allowed prior to the Pre-Construction Meeting if absolutely necessary in order to stake the approved erosion control and limit of work lines where required.
- 29. Prior to the commencement of any activity on this site other than the marking of locations for erosion controls and limits of work, there shall be a PRE-CONSTRUCTION MEETING between the project supervisor, the contractor responsible for the work, and a member of the Conservation Commission or its Agent to ensure that the requirements of the Permit are understood. The staked erosion control line shall be adjusted, if necessary, during the pre-construction meeting to comply with the approved plans. The applicant

shall contact the Conservation Commission office at <u>508-533-3292</u> at least three (3) business days prior to any activity to arrange for the pre-construction meeting.

- 30. Prior to the commencement of work, the applicant shall designate an approved location for concrete washout. This location shall be approved by the Agent and/or the Commission.
- 31. Prior to any work on site, the applicant shall submit to the Commission and/or its Agent for its review and approval a Stormwater Pollution Prevention Plan or (SWPPP).
- 32. Prior to any work on the site the applicant shall submit to the Commission and/or its Agent a filed approved NPDES Permit.
- 33. Immediately after the Pre-Construction Meeting, all erosion controls and limits of work lines shall be installed along the approved and staked line. Erosion controls and limits of work lines shall be installed with minimal disturbance to vegetation. Where possible, erosion controls should go *around* trees, shrubs, and other vegetation, on the uphill side.
- 34. Immediately after installation of erosion controls, the Conservation Commission shall be contacted in order to conduct a follow-up inspection to ensure that erosion controls and limits of work lines have been properly installed. No work shall be conducted in any jurisdictional area of the site until the Commission or its Agent has inspected and approved of the installation of the erosion controls.
- 35. Prior to commencement of construction on site, the Bordering Vegetated Wetlands lines shall be flagged with surveyor's tape numbered to correspond to the wetland delineation on the approved plans and shall remain in place during construction.
- 36. The applicant shall notify the Conservation Commission in writing at least five (5) business days prior to commencement of construction activity on the site and shall advise the Commission of the name(s) and telephone number(s) of the person(s) responsible on site for compliance with this Order. The applicant shall be responsible for immediately notifying the Commission of any change in the identity or contact information for the on-site person responsible for compliance with the Order.
- 37. The applicant shall secure a qualified professional to act as a clerk of the works (the Commission shall review the Clerk of the Works resume for the qualifications) whose information shall be provided to the Commission. The Clerk of the Works will supervise the contractor and will inspect the site regularly.
- 38. The Permit shall be recorded at Norfolk County Registry of Deeds. Any Permit not recorded by the applicant before work commences may be recorded by the Commission at the applicant's expense.

II. EROSION CONTROL AND MONITORING

- 39. It shall be the responsibility of the applicant and his successors to conduct monitoring, maintenance, and repair of erosion control measures, as well as to take any other additional measures necessary to control erosion from the site such that wetland impacts do not occur. The erosion control measures designated on the site plans and described in this Permit of Conditions shall be considered a minimum standard for compliance. In addition, it shall be the responsibility of the applicant to take whatever measures are necessary to prevent any form of wetland impacts not approved within this Permit. Additional requirements related to site monitoring and control are:
- 40. Appropriate erosion control devices shall be in place prior to the beginning of any phases of construction, and shall be maintained during construction in the wetland areas and buffer zone. The erosion control specifications provided in the Land Disturbance Application and the erosion control provision in the Permit and approved site plan will be the minimum standards for this project; additional measures may be required by the Commission. These will be maintained until the Erosion Control Inspector and a member or agent of the Conservation Commission agree that they are no longer needed, at which time they will be removed, using removal procedures that the Commission finds satisfactory. All sedimentation barriers shall be maintained in good repair until all disturbed areas have been fully stabilized with vegetation or other means. At no time shall sediments be deposited in a wetland or water body. During construction, the applicant or his designee shall inspect the erosion controls on a daily basis and shall remove all sediment when accumulated to a depth of two inches or greater. The applicant shall immediately control all erosion on the site, and shall immediately notify the Commission of any breeches of the erosion control barriers by sediment or silt-laden water.
- 41. Placement of erosion controls shall be directed at the site by the applicant and/or property owner and its successors to ensure that no sedimentation will reach the Town right-of-way or abutting properties and the

erosion and sedimentation controls achieve the specifications specified as part of the Notice of Intent and these Permits of Conditions. Choice of suitable silt fence materials should be based on the design specifications listed by various manufacturers, and in accordance with the approved Site Plans and Details.

III. DURING CONSTRUCTION

Staging Areas

- 45. Prior to construction the general contractor shall designate a **construction staging area**, located outside all resource areas and outside the 25' buffer zone and within designed location as depicted on the approved site plan. All construction trailers, portable sanitary facilities, material storage and overnight parking of equipment shall be in the staging area. The perimeter of the staging area shall be protected as necessary with silt fence and the ground surface shall be protected with washed stone or another suitable non-erosive material.
- 46. An area for cleanup and or maintenance of construction equipment shall be designated prior to construction.
 - a. Applicant shall designate wash out areas which will be located over 25' from any wetland resource and surrounded by siltation controls or some other form of protection approved by the Commission
 - b. Any runoff resulting from the washing of trucks or construction equipment shall neither be directed to, nor dumped in, any on-site drainage system or in any area subject to protection under the Mass. Wetlands Protection Act. Any such washing shall occur in a designated area, protected by washed stone, outside of all resource areas. All construction vehicles exiting the property shall be cleaned of soil prior to traveling on public streets within the Town of Medway.
 - c. Any leakage or spillage of oil, hydraulic fluid, gasoline, or other pollutants must be cleaned up immediately and disposed of off the site. All fueling of equipment shall be performed outside of wetland resource areas and buffer zones. The Commission shall be notified immediately in the event of any spillage.
- 47. Prior to commencing any work on the site the applicant shall install a stone construction entrance (tracking pad) not less than 20' wide and not less than 30' in length of a stone size, on the average of 1" to 4".
- 48. All construction equipment employed in the resource areas or buffer zones thereto shall be properly maintained and precautions shall be taken to prevent any leakage or spillage of oil, gasoline, hydraulic fluids, etc. If this is not recommended based on the site conditions, it shall be agreed to remove this requirement by the Agent and/or the Commission.
- 49. All fuel, oil, or other pollutants shall be stored in the designated locations as to not impact abutters, the Town's right-of-way or any resource area or the buffer zone.

Construction

- 50. The applicant shall place all stockpiles shall be within the limit of work approve by the Commission and/or as depicted on the approved site plan.
- 51. If unforeseen problems occur during construction which may affect the statutory interests of the Wetlands Protection Act, upon discovery by either the Conservation Commission, its agent, or the applicant, the Commission shall immediately be notified, and an immediate meeting shall be held between the Commission or its agent, the applicant, and other concerned parties to determine the correct measures to be employed. The applicant shall then act to correct the problems using the corrective measures agreed upon. Subsequent to resolution, the activity and resulting actions shall be documented in writing.
- 52. All equipment shall be operated, parked, and maintained so as to limit impacts to resource area and buffer zone to those areas clearly identified on the plans and demarcated in the field by the flagging and construction barriers installed. No equipment is to enter or cross wetland resource areas at any time unless the location of disturbance is marked on the plans referenced in this Permit and flagged in the field.
- 53. During construction, Town personnel shall exercise extreme care when onsite fueling is underway during construction or storms. Spill kits as required herein shall be maintained at the fueling system during all stages of construction. Any spill of fuel shall be immediately reported to the Medway Fire Department, Police Department and Conservation Commission.

Linda Lindsey 69 Summer Street DEP #216-0996 LD-22-02 (Bylaw)

- 54. All existing and proposed catch basins and water quality inlets on the site or within the parcel that receive runoff from or contributes runoff to the project site shall be cleaned of sediment prior to commencement of work and be protected by Silt Sacks or equivalent to prevent sediment from entering the drainage system. Silt Sacks and sumps shall be maintained and regularly cleaned of sediments until all areas associated with the work permitted by this Permit have been permanently stabilized and the Commission and/or its Agent has formally approved their removal.
- 55. All equipment shall be inspected regularly for leaks. Any leaking hydraulic or other fluid lines, cylinders, containers of any kind, or any other components shall be repaired immediately.
- 56. A copy of this Permit, construction plans, and copies of the documents and reports cited in this Permit shall be on the site upon commencement and during any site work for contractors to view and adhere to.

IV. STORMWATER MANAGEMENT

- 57. The owner(s) and their successors shall follow all requirements of the Conditions in Perpetuity, O&M Plan and if still under Construction SWPPP and Permit of Conditions. *This condition shall remain in perpetuity*.
- 58. The applicant and its successors shall submit annual reports of inspections of all stormwater management structures as prescribed in O&M Plan to the Conservation Commission. Annual report shall be submitted to the Commission no later than December 1st of every year. The inspections shall be done according to the approved O&M Plan. *This condition shall remain in perpetuity.*

V. POST-CONSTRUCTION

59. The Applicant shall submit a final As-Built Plan with a letter from the Engineering stating that all work was completed in conformance with the approved plans, this permit and the Medway Stormwater Bylaw Article XXVI.

Board Members

Matthew J. Hayes, P.E., Chair Robert Tucker, Vice Chair Richard Di Iulio, Clerk Jessica Chabot, Member Sarah Raposa, A.I.C.P., Member Thomas Gay, Associate Member



Medway Town Hall 155 Village Street Medway, MA 02053 Phone (508) 533-3291 Fax (508) 321-4987 Email: planningboard @townofmedway.org www.townofmedway.org

TOWN OF MEDWAY Commonwealth of Massachusetts

PLANNING AND ECONOMIC DEVELOPMENT BOARD

DRAFT – July 22, 2022

Certificate of Action

Boundary Lane Definitive Subdivision Plan ______with Waivers and Conditions

Location:	67R and 69 Summer Street
Assessors' Reference:	Map 37, Parcels 33 & 36
Parcel Size (combined):	11.38 acres
Name/Address of Applicant:	Zachary Lindsey et ux. 69 Summer Street Medway, MA 00253
Name/Address of Property Owners:	Linda Lindsey 69 Summer Street Medway, MA 02053
	David and Renee Sistrand 67R Summer Street Medway, MA 02053
Engineer:	Vito Colonna, P.E. Connorstone Engineering, Inc. 110 Southwest Cutoff, Suite 7 Northborough, MA 01532
Land Surveyor:	Varoujan Hagopian, P.L.S Connorstone Engineering, Inc. 110 Southwest Cutoff, Suite 7 Northborough, MA 01532
Plan:	Definitive Subdivision Plan of Boundary Lane
Plan Dated:	August 20, 2021 last revised July 12, 2022
Zoning District:	Agricultural Residential I
Street Name:	Boundary Lane

I. PROJECT DESCRIPTION: The *Definitive Subdivision Plan for Boundary Lane* shows the reorganization of the subject properties at 67R and 69 Summer Street into three residential lots - one lot for the existing house at 67R Summer Street, one lot with the existing house at 69 Summer Street, a new lot for the construction of a new single-family house for the Applicant, and a drainage parcel for stormwater management. The project also includes construction of an approximately 260' long permanent private roadway (Boundary Lane), the installation of stormwater management facilities, connection to Town sewer, and the installation of private water service. The property is accessed from Summer Street. This application is for a "by right" conventional subdivision as allowed in the Agricultural-Residential I zoning district. A portion of this site is in a Wetland Resource Area which is under the jurisdiction of the Medway Conservation Commission which has issued an Order of Conditions and Land Disturbance Permit.

II. PROCEDURAL SUMMARY:

- A. April 28, 2022, the Planning and Economic Development Board received an application for approval of the *Definitive Subdivision Plan for Boundary Lane*, dated August 20, 2021, last revised February 17, 2022, prepared by Connorstone Engineering, Inc. of Northborough, MA. The application had been preceded by a preliminary subdivision plan application filed with the Board on April 22, 2021.
- B. Notice was posted with the Medway Town Clerk and to the Board's web site on May 18, 2022 and was mailed by *Certified Sent* mail on May 17, 2022 to abutters in Medway within 300 feet of the subject properties and to parties of interest. The public hearing was duly noticed in the *Milford Daily News* on May 31 and June 2, 2022.
- C. On June 14, 2022, the Board commenced the public hearing. The public hearing was continued to July 26, 2022 when a decision was rendered and the hearing was closed. During the course of the public hearing, the Applicant submitted a revision to the *Definitive Subdivision Plan for Boundary Lane* dated July 12, 2022.
- D. All members voting on this Subdivision Certificate of Action were present at all sessions of the public hearing or have provided a certification pursuant to General Laws c. 39 section 23D.

III. PUBLIC HEARING SUMMARY: The public hearing and the Board's review of the *Definitive Plan for Boundary Lane* were conducted over the course of two Planning and Economic Development Board meetings during which substantive information was presented and evaluated. The plan and its submitted revisions were reviewed for compliance with the Board's *Rules and Regulations for the Review and Approval of Land Subdivisions* dated April 26, 2005 which were in effect at the time the Applicant submitted a preliminary subdivision plan to the Board on April 22, 2021.

Specified below is a list of plan documents and support materials, public comments, consultant and town departmental board review documents, and supplemental information which have been provided by the Applicant or placed on the record by the Planning and Economic Development Board. All information is on file in the Medway Planning and Economic Development office and is available for public review.

Boundary Lane Definitive Subdivision Plan Application Materials

- Form C Definitive Plan Application signed April 28, 2022
- Form D Designer's Certificate undated, received April 28, 2022, with deeds
- Form E Certified Abutters' List dated April 19, 2022
- Form F Development Impact Report dated April 1, 2021, prepared by Connorstone Engineering
- Requests for Waivers from the Subdivision Rules and Regulations (7 requests)
- Lot closure calculations prepared by Connorstone Engineering

Definitive Subdivision Plan for Boundary Lane - Connorstone Engineering, dated August 20,

2021, revised February 17, 2022 Revised – July 12, 2022

Stormwater Report for Boundary Lane Subdivision – Connorstone Engineering, dated February 15, 2022 - ANY REVISIONS?

Town Engineering Consultant Reviews – Steven Bouley, P.E., Tetra Tech

June 8, 2022 July 20, 2022

Supplemental Information Provided by Applicant's Consultant

- Letter from Vito Colonna, PE, Connorstone Engineering, Inc. dated July 15, 2022 in response to plan review comments from Tetra Tech dated June 8, 2022
- Draft Boundary Lane Homeowner's Association Trust document

Supplemental Information Entered into the Record by the Medway Planning and Economic Development Board

- Mullins Rule certification from Jess Chabot for the June 14, 2022 hearing
- Mullins Rule certification from Robert Tucker for the June 14, 2022
- Order of Conditions and Land Disturbance Permit issued March 29, 2022 by the Medway Conservation Commission

Citizen/Resident Letters/Communications

• Email communication dated May 23, 2022 from Courtney & Andy Marshall (2 Trail Drive), Matthew Marshall (3 Trail Drive), and Wayne & Sheila Marshall (65 Summer Street)

Professional Testimony

- Steven Bouley, P.E., Tetra Tech Marlborough, MA
- Vito Colonna, P.E. Connorstone Engineering Northborough, MA

Medway Departmental/Board Review Comments

- Email communication dated June 9, 2022 from Health Agent Beth Hallal
- Email communication dated July 20, 2022 from DPW Water/Sewer Superintendent Barry Smith
- Letter dated June 14, 2022 from Deputy Fire Chief Mike Fasolino
- Letter dated June 22, 2022 from Safety Officer Sergeant Jeffrey Watson

IV. ACTION ON REQUESTS FOR WAIVERS OF SUBDIVISION RULES & **REGULATIONS** – The Applicant has requested waivers from the following sections of the *Subdivision Rules and Regulations*, dated April 26, 2005.

SECTION 7.6.2 UTILITIES b) Water Facilities Installation - Water mains, with hydrants, valves and other fittings, shall be constructed and installed within the subdivision as necessary to provide to all lots therein adequate water supply for domestic and fire protection use. Water facilities must conform to the Medway Water Rules and Regulations, which are under the jurisdiction of the Water and Sewer Department. Proper connections shall be made with existing public water systems. Water lines shall be at least 8-inch diameter cement-lined ductile iron, Class 52 or greater, or as currently required by the Town of Medway Water and Sewer Department and shall be furnished with adequate valves and appurtenances to the specifications of the Town of Medway Water and Sewer Department. Water pipes shall be extended and connected to form a loop type system. Easements across lots shall be used to eliminate dead ends.

FINDINGS – The Applicant has requested a waiver from this requirement to install a water line to access the Town's public water supply in Summer Street and instead plans to install a private well for the new Lot 3. This will reduce disturbance and work in Summer Street to make the connection and reduce the Town's ongoing maintenance cost. The plan has been reviewed by the Fire Department which has agreed to waive their requirement for a fire hydrant but has required the new house on Lot 3 to be constructed with a residential sprinkler system to conform with NFPA 13D. The Board of Health has already permitted the private well. For the foregoing reasons, the Board approves this waiver request as being consistent with the purpose and intent of the Medway Subdivision Rules and Regulations which will have no significant detriment to the achievement of any of the purposes of Subdivision Review and Approval.

SECTION 7.7. 2 STORMWATER MANAGEMENT p) - Detention and retention basins and underground infiltration systems and any related drainage structures shall be located on separate parcels and shall not be included on individual house/building lots. The limits of detention and retention basins and related structures shall not be closer than thirty feet (30') from its lot/parcel line and any right-of way.

FINDINGS – The Applicant has requested a waiver to allow for less than a 30' setback from the planned drainage basin on Parcels A & B to the interior lot line of Lot 1 and to the Boundary Lane right-of-way line. HOW FAR IS IT AWAY??: Locating the drainage basin as proposed with the reduced setback enables the use of a low impact stormwater drainage design that will fit with existing topography and site conditions, preserve trees along the roadway and will ebe more aesthetically pleasing. Adhering to the 30' setback would serve to increase the basin depth embankment heights, reduce groundwater recharge, and remove two existing trees. It is noted that the basin will have will be setback at least 30' from Summer Street and the abutting property to the north at 71 Summer Street. For the foregoing reasons, the Board approves this waiver request as being consistent with the purpose and intent of the Medway Subdivision Rules and Regulations which will have no significant detriment to the achievement of any of the purposes of Subdivision Review and Approval.

SECTION 7.7.4 STORMWATER MANAGEMENT Construction - d) An independent drainage system shall be provided to collect and discharge subsurface runoff from the foundation perimeter drains for the houses along the proposed roadway. The system shall be constructed of four inch (4") perforated HDPE pipe wrapped in filter fabric and installed to withstand an H-20 vehicle loading. The depth of installation should be determined to meet this loading requirement assuming the trunkline must flow by gravity and will pass under proposed driveways.

The trunkline must be located within the roadway layout and discharge to an approved outfall location such as a detention pond or predetermined drainage outfall area with the appropriate easements to allow for maintenance access. A backflow preventor or check valve shall be installed at all outfalls within the designated discharge areas within the drainage easement. The outfall shall not be located such that it will discharge to an area that is not designated for drainage purposes and it must be protected so as not to be damaged or clogged by debris.

Connections to this system shall be accomplished using a compatible "T" connector provided by the manufacturer. The installation will be subject to inspection by the Building Inspector, DPS or the Planning Board's representative. All homes within a subdivision may not have to be connected to this system provided the flow can be discharged on the lot so as not to affect abutting properties, sidewalks and the roadway right of way. However, the trunkline will have to be installed as part of the roadway construction for future connections as needed. The maintenance of this independent drainage system shall be the responsibility of a subdivision homeowners association established by the developer. All installations associated with this system shall be shown on the as-built plans prepared for the subdivision. No roof drains, basement drains, driveway drains or other on lot sources shall be connected to the independent drainage system or the roadway drainage system.

FINDINGS – The Applicant has requested a waiver from the requirement to install an independent drain system in the road for foundation perimeter drains. Instead, the Applicant proposes to have the foundation drain daylight at the rear of the new house on Lot 3 which will be located downgradient of the proposed roadway and has sufficient elevation to route a foundation drain to the rear of the lot and away from abutting properties.

BOARD NEEDS TO DISCUSS THIS

SECTION 7.9.5. STREETS AND ROADWAYS GRADE – a) The minimum centerline grade for any street shall not be less than two percent (2%).

FINDINGS – The Applicant has requested a waiver to have a centerline grade of 1% instead of the minimum 2%. The reduced slope minimizes the amount of fill needed for the roadway and reduces the impact on the existing driveways for the houses on Lots 1 and 2. The waiver would allow the roadway to match existing conditions and maintain the look and feel of the existing landscape. For the foregoing reasons, the Board approves this waiver request as being consistent with the purpose and intent of the Medway Subdivision Rules and Regulations which will have no significant detriment to the achievement of any of the purposes of Subdivision Review and Approval.

SECTION 7.9.5 STREETS AND ROADWAYS GRADE – c) Where changes in grade exceed one percent (1%), vertical curves shall be required. Vertical curves having a length less than one hundred feet (100') should be avoided. At the intersection of street right-of-way lines, there shall be provided in a residential subdivision a leveling (fixed slope) area of at least one hundred feet (100') with a maximum grade of two percent (2%), and in all other subdivisions, a leveling (fixed slope) area of at least two hundred feet (200'), with a two percent (2%) grade. Vertical curve calculations, prepared by a Registered Professional Civil Engineer, will be provided for every vertical curve and shown on the drawings. These calculations will show the design speed and conformance with safe stopping sight distance criteria for the design speed.

FINDINGS – The Applicant has requested a waiver of this requirement and wishes to be allowed to have a vertical curve instead of a fixed grade within 100 feet of the intersection (of Boundary Lane and Summer Street). This waiver is requested to minimize the fill needed for road construction and to better match the existing topography and drainage patterns and preserve the look and feel of the existing landscape. It would not exceed the maximum grade of 2% at the noted intersection. For the foregoing reasons, the Board approves this waiver request as being consistent with the purpose and intent of the Medway Subdivision Rules and Regulations which will have no significant detriment to the achievement of any of the purposes of Subdivision Review and Approval.

SECTION 7.10 CURBS AND BERMS

- 1. Vertical granite curbing shall be installed at intersection roundings and cul-de-sac entrances
- 2. Curbing shall be provided along each side of the roadway. Permanent Private Way Hot Mix Asphalt Cape Cod Berm

FINDINGS - The Applicant has requested a waiver from this requirement and instead indicates that grass swales and waterways to be used to direct stormwater flow. This will eliminate the need for a closed drainage system. The approach uses low-impact design measures which will preserve the existing landscape character and provide suitable water quality treatment.

ARE YOU OK with this for the roadway entrance intersection at Summer Street?

SECTION 7.21.1 STREETLIGHTS - It shall be the responsibility of the developer to install street lighting within the subdivision, at the entrance to the subdivision, at all intersections within the subdivision, sharp turns, or other areas where the Traffic Safety Officer deems they are needed for public safety. The quantity, type and location of lights shall be shown on the definitive plan. The developer is responsible for installing the pole, wiring and arranging installation of the light fixture.

FINDINGS - The Applicant proposes to not install any streetlights within the subdivision relying instead on lighting from the existing utility pole on Summer Street which is located 50' north of the proposed Boundary Lane roadway. The road length for Boundary Lane is 260' and only one additional house is to be constructed. The other 2 lots already have houses on them. The Police Department's Safety Officer has reviewed the proposed plan and has advised that the existing streetlight on Summer Street is sufficient for the area. Further, he notes that there are no

safety reasons for installing additional lighting on the new roadway. For the foregoing reasons, the Board approves this waiver request as being consistent with the purpose and intent of the Medway Subdivision Rules and Regulations which will have no significant detriment to the achievement of any of the purposes of Subdivision Review and Approval.

MITIGATION PLAN

A. The new road and stormwater drainage system will be privately owned in perpetuity and maintained by the Boundary Lane Homeowner's Trust thus relieving the Town of this on-going responsibility and expense.

ACTION ON WAIVERS – At a duly called and properly posted meeting of the Medway Planning and Economic Development Board held on July 26, 2022, a motion was made by ______ and seconded by ______ to _____ the above noted waiver requests from the Subdivision Rules and Regulations. The motion was _____ by a vote of _____ in favor and _____ opposed.

V. PROJECT EVALUATION CRITERIA – Before taking action on a definitive subdivision plan, the Board shall evaluate the proposed subdivision according to the criteria as specified in Section 5.16 of the *Subdivision Rules and Regulations*. At a duly called and properly posted meeting of the Medway Planning and Economic Development Board held on July 26, 2022, a motion was made by ______ and seconded by ______ to _____ the Project Evaluation Findings noted below. The motion was ______ by a vote of _____ in favor and _____ opposed.

5.16.1 Completeness and technical accuracy of all submissions.

FINDINGS – All submissions were reviewed by Town staff and/or the Town's Consulting Engineer. Missing or technical inaccuracies were identified and have been remedied through the submittal of a revised plan or requests for waivers from the Subdivision Rules and Regulations.

5.16.2 Determination that the street pattern is safe and convenient, and that proper provision is made for street extension. The Board may disapprove a plan where it determines that dangerous traffic or unsafe conditions may result from the inadequacy of the proposed ways within the subdivision.

FINDINGS – The Board finds that the proposed street pattern within the new subdivision is safe and convenient. The plan has been reviewed by the Town's Fire Chief, Police Safety Officer, and the Board's Consulting Engineer. Comments from them have been incorporated into the design or are specified herein to be added to the plan as a Condition of plan approval. Future roadway extension to adjacent property is not feasible due to the location of the lots.

5.16.3 Determination that development at this location does not entail unwarranted hazard to the safety, health and convenience of future residents of the development or of others because of possible natural disaster, traffic hazard or other environmental degradation.

FINDINGS – The Board finds that the location of the development does not entail unwarranted hazard. A drainage plan has been designed to handle anticipated stormwater runoff and the sight distances from the proposed roadway's intersection with Summer Street. Erosion controls will be in place during construction. The property is subject to an Order of Conditions and Land Disturbance Permit from the Medway Conservation Commission.

5.16.4 Determination, based on the environmental impact analysis, where submitted, that the subdivision as designed will not cause substantial and irreversible damage to the environment, which damage could be avoided or ameliorated through an alternative development plan.

FINDINGS – Due to the small size of the development, no environmental impact analysis is required. The site of the subdivision is not within a Priority Habitat area and the wetlands of the site will be protected through action of the Medway Conservation Commission. Stormwater management has been reviewed by the Town's consulting engineer and is adequately addressed. There will be an increase of only one single-family house to be constructed. Low impact stormwater drainage measures have been incorporated into the plan. The Board finds that the subdivision will not cause substantial and irreversible damage to the environment.

5.16.5 Determination that the roads and ways leading to and from the subdivision shall be adequate to provide emergency medical, fire and police protection as well as safe travel for the projected volume of traffic. The Board may disapprove a plan where it determines that dangerous traffic or unsafe conditions may result from the inadequacy of the proposed access or of any ways adjacent to or providing access to the subdivision.

FINDINGS – The subdivision site is accessed from Summer Street. The Board finds that the Summer Street is adequate to provide emergency medical, fire and police protection as well as safe travel for the anticipated additional volume of traffic to be generated by one additional residence. The plans have been reviewed by the Fire Chief, Police Safety Officer, and Consulting Engineer. Comments from them have been incorporated into the design or are specified herein to be added to the plan as a Condition of plan approval. The roadway shown on the plan will be built according to the Board's construction specifications for Permanent Private Ways. The 20-foot paved roadway width meets national Fire Code standards while also reducing impervious surfaces and stormwater impacts.

5.16.6 Conformity with all applicable requirements of the Medway Zoning Bylaw including but not limited to minimum area and frontage standards.

FINDINGS – The Board finds that the lots created by this plan conform to all applicable requirements of the Medway Zoning Bylaw, including minimum area and frontage requirements for the Agricultural Residential I zoning district.

5.16.7 Consistency with the purposes of the Subdivision Control Law.

FINDINGS – The Board finds that the proposed subdivision is consistent with the purposes of the Subdivision Control Law because the infrastructure proposed is adequate for the new development and the impacts of the subdivision have been

mitigated to a reasonable extent. Reasonable waivers have been granted herein with good cause.

VI. **DECISION** – At a duly called and properly posted meeting of the Medway Planning and Economic Development Board held on July 26, 2022, a motion was made by ______ and seconded by ______ to _____ the **Definitive Subdivision Plan for Boundary Lane**, prepared by Connorstone Engineering, dated August 21, 2021, last revised July 12, 2022 to b further revised as specified herein, subject to the Specific and General Conditions as specified herein and with Waivers from the Subdivision Rules and Regulations dated April 25, 2005, also as approved herein.

The motion was ______by a vote of ____ in favor and ____opposed.

VII. **CONDITIONS** – The following specific and general conditions shall apply to the Permittee, its executors, administrators, devisees, heirs, successors and assigns:

A. Specific Conditions

- 1. Authorization The Boundary Lane subdivision is authorized for no more than three, singlefamily residential house lots. As a permanent condition of the approval of this plan, no further subdivision of the property beyond these three lots is allowed, although lot boundaries within the subdivision may be adjusted so long as no additional lots are created.
- 2. **Completion Schedule** The Permittee or its Assignee shall construct the roadway and all related infrastructure including the stormwater management system, and install all utilities as shown on the endorsed Definitive Subdivision Plan for Boundary Lane, to the satisfaction of the Planning and Economic Development Board, within three (3) years of the date of endorsement of the plan. The time for such construction and/or installation may be extended upon the written request of the applicant, for good cause shown, prior to the expiration of the three (3) year period, upon a vote of the majority of the Planning and Economic Development Board then present.
- 3. **Plan Revisions** Prior to plan endorsement, the Definitive Subdivision Plan for Boundary Lane, last revised July 12, 2022, shall be further revised as follows:
 - The Signature Box on all sheets shall be revised to include a line for Approval Date and another line for Endorsement Date.
 - The cover sheet shall be revised:
 - ✤ to list the APPROVED WAIVERS
 - ✤ to revise the plan title to indicate that Boundary Lane is a permanent private way
 - If available from the Assessor's Department before plan endorsement, the property addresses for the three house lots and the drainage parcel shall be added to the plan sheets.
 - Revise the plan to add signage at the entrance to Boundary Lane, either "no Thru Traffic" or "Dead End", as directed by Safety Officer Watson.
 - Revise the plan to add ADA ramping on the Summer Street sidewalks as directed by Safety Officer Watson.
 - Add a note on the plan that the house on Lot 3 will be constructed with a residential sprinkler system in conformance with NFPA 13D, as directed by Deputy Fire Chief Fasolino.

- 4. Documents to be Prepared and Approved Before Endorsement Prior to plan endorsement, the Permittee shall provide the following documents for review, comments, amendment and approval by Town Counsel and the Board.
 - a. **Subdivision Covenant** Prior to endorsement, the Permittee shall sign a Subdivision Covenant, on a form acceptable to the Planning and Economic Development Board, to secure construction of the ways and all related infrastructure and installation of utilities and services and any off-site mitigation measures as specified in the approved subdivision plan. Reference to the *Subdivision Covenant* shall be noted on the cover sheet of the Definitive Subdivision Plan. The *Subdivision Covenant* shall specify that the roadway and all relevant infrastructure including the stormwater management system shall be constructed and all utilities and services and any off-site mitigation of the Planning and Economic Development Board within three years of the date of plan endorsement. The Subdivision Covenant shall apply to Lot 3 as shown on the plan.
 - b. Articles of Association or Incorporation Prior to plan endorsement, the Permittee shall provide a proposed Articles of Association or Incorporation establishing the Boundary Lane Homeowner's Trust for review and comment by Town Counsel. This document shall include provisions for membership by the owners of Lots 1, 2 and 3, management responsibilities, procedures for voting and fee assessment, and for the ownership and financial responsibility for the on-going maintenance, upkeep and repair of Boundary Lane and Parcels A & B (drainage), including but not limited to snowplowing and sanding, the stormwater management system, and any associated landscaping. The documents shall specify that the costs shall be divided equitably among the members.
 - c. Lot Deeds Prior to plan endorsement, the Permittee shall provide the proposed deeds to convey the reconfigured house lots. Each lot deed shall reference the *Definitive Subdivision Plan for Boundary Lane* and clearly state that the Boundary Lane Homeowner's Trust shall be responsible for the maintenance and upkeep of Boundary Lane as a permanent private road, the landscaping, and the stormwater drainage system. The deeds shall specify that the owners will own to the centerline of the roadway along their property's frontage.

5. Plan Endorsement

- a. Within sixty days but no sooner than twenty days after the Board has filed this decision with the Town Clerk, the Permittee shall submit a revised subdivision plan reflecting all Conditions and required revisions as specified herein, to the Planning and Economic Development Board and the Town's Consulting Engineer, for review and approval prior to plan endorsement. All conditions of this Certificate of Action requiring changes to the definitive subdivision plan must be addressed to the satisfaction of the Town's Consulting Engineer and the Planning and Economic Development Board before the Board will endorse the definitive subdivision plan.
- b. The endorsed plan shall bear the certification of the Town Clerk that twenty days have elapsed after the decision was filed in the Town Clerk's office and no appeal has been filed within said twenty-day period.

- c. Within thirty days after plan endorsement, the Permittee shall provide the Town with two sets of the approved plan in 24" x 36" paper format. The Permittee shall also provide the approved plan in pdf format and CAD format compatible with the Medway GIS and acceptable to the Medway Board of Assessors (ArcInfo shape file .shp). The Permittee shall pay any reasonable associated costs, as may be determined by the Board of Selectmen, to update the Medway GIS/Assessor's maps relative to this subdivision.
- 6. **Recording** The Permittee shall record this decision, the endorsed definitive subdivision plan, and the subdivision covenant at the Norfolk County Registry of Deeds. Within thirty days of such recording, the Permittee shall provide proof of recording to Planning and Economic Development Board. No construction shall begin on the site and no building permit shall be issued before these documents are recorded. The fee for recording or registering shall be paid by the Permittee.
- 7. *Tree Preservation* Sheet 2 of 6 (Construction Plan) of the plan set specifies three trees are to be preserved; they are denoted with a tree icon with the text SAVE. Two are located on Lot 1 and one is located in the right-of way of the roadway adjacent to Lot 2.
 - a. These trees shall be clearly identified (marked) in the field for preservation and such markings shall be verified by the Town's consulting engineer before site preparation and construction commences.
 - b. The Permittee shall make the fullest possible effort to preserve/retain these three noted trees and prevent their removal, demise or damage during construction.
 - c. If any of the above noted trees designated to be preserved/retained are removed or damaged during construction, the Permittee shall be responsible for tree restoration by replacing the removed or damaged trees with nursery grade trees on a one (1) square inch per two (2) square inch replacement basis. The one (1) square inch per two (2) square inch replacement amount is calculated by squaring 1/2 the established diameter of each tree that is removed or damaged and multiplying that amount by 3.14 to determine its trunk area (tree radius squared x Pi (rounded to 3.14). The resulting figure is halved, and that square inch total is the amount of required square inches of the replacement tree(s). A 3" caliper tree equals seven (7) sq. inches. The location of the replacement trees on the house lots shall be recommended by the Permittee and approved by the Tree Warden and the Planning and Economic Development Board as a field change. The planting of replacement trees shall be verified by the Tree Warden as being fully and skillfully performed. The species of replacement tree(s) shall be reviewed and approved by the Tree Warden, or otherwise will be consistent with the species of the removed tree(s).
 - d. In lieu of tree planting on the subdivision property, the Permittee may make a contribution to the Medway Tree Fund in an amount to be determined by the Board upon consultation with the Medway Tree Warden based on wholesale pricing for 3-inch caliper trees from a reputable area landscape supplier. The Permittee may also combine tree planting and a contribution in lieu of tree-planting to be approved by the Board.
 - e. Any such supplemental tree planting shall occur before the occupancy permit is issued for Lot 3. Any contribution in lieu of tree planting shall occur before the occupancy permit is issued for Lot 3.

- 8. *Sidewalk* Any damage to the sidewalk on the west side of Summer Street along the subject site's frontage resulting from site infrastructure and building construction work, shall be repaired or replaced to the satisfaction of the Medway Department of Public Works before the occupancy permit is issued for Lot 3.
- 9. *Ownership of Boundary Lane* The roadway depicted on this subdivision plan shall remain privately owned in perpetuity to the center line by the owners of the adjacent lots. There is no intention or expectation that the Town of Medway will ever accept the roadway as constructed pursuant to this plan.
- 10. *Homeowner's Association* There shall be established a Boundary Lane Homeowner's Trust to be responsible for the on-going maintenance, upkeep, and repair of the roadway including but not limited to snowplowing and sanding and for the stormwater detention/infiltration system, and related infrastructure located within the roadway right of way including landscaping. The organizational document shall specifically refer to the Long-Term Pollution Prevention Plan and associated Stormwater Operations and Management Plan included in the *Stormwater Report for Boundary Lane* dated August 20, 2021, last revised February 15, 2022, prepared by Connorstone Engineering and approved by the Medway Conservation Commission.

11. Maintenance Responsibility During Construction

- a. The Permittee shall provide for snow plowing, sanding and full maintenance of Boundary Lane throughout the entire construction process until the roadway is determined to be complete by the Board. The Permittee shall do nothing which would alter the drainage patterns or characteristics as shown on the approved plan.
- b. Construction is subject to the Storm Water Pollution Plan included in the most recent version of the *Stormwater Report for Boundary Lane* dated August 20, 2021, last revised February 15, 2022, prepared by Connorstone Engineering, as approved by the Conservation Commission in its March 29, 2022 Order of Conditions with Land Disturbance Permit. This document shall be included in all construction contracts, subcontracts and specifications dealing with the proposed work. The Permittee shall ensure that all contractors, subcontractors and other personnel performing the permitted work are fully aware of the Construction Period Operation and Maintenance Plan.
- c. No clearing of vegetation, including trees, or disturbance of soil shall occur prior to the Pre-Construction Meeting.
- d. Prior to the Pre-Construction Meeting and commencement of any activity on the site, the erosion control plan included in the endorsed plan set and the limit of work lines shall be staked. The location of erosion controls shall be adjusted, if necessary, during the first erosion control inspection.
- e. Immediately after installation of erosion controls, the Permittee shall notify the Board's consulting engineer to schedule a follow-up inspection to ensure that erosion controls and limits of work have been properly located and installed. No work shall be conducted until the Board's consulting engineer has inspected and approved the installation of the erosion controls.

- f. It shall be the responsibility of the Permittee to conduct monitoring, maintenance and repair of erosion control measures, as well as to take any other additional measures necessary to control erosion from the site. The erosion control measures designated on the subdivision plan shall be considered a minimum standard for compliance.
- g. All waste products, refuse, debris, grubbed stumps, slash, excavate, construction materials, etc. associated with the planned construction shall be contained and ultimately deposited at an appropriate off-site facility and shall not be incorporated in any manner into the project site.
- 12. *Maintenance Post Construction* As Boundary Lane shall be a permanent, private roadway, the ongoing maintenance responsibility for it, all associated infrastructure, landscaping, and the stormwater management system will ultimately rest with the Boundary Lane Homeowner's Trust. The Town of Medway shall not have, now or ever, any legal responsibility for operation or maintenance of the roadway, snowplowing, stormwater system, sanding. The association shall maintain the stormwater management system in accordance with the long-term stormwater operation and maintenance plan included with the stormwater report.
- 13. *Water Conservation* The Permittee shall incorporate the following water conservation measures for construction of the house on Lot 3.
 - a. rain gauge-controlled irrigation systems
 - b. low flow household fixtures
 - c. water efficient appliances (dishwashers, washer/dryers, toilets, etc.)
- 14. *Addresses* The addresses for the three house lots and the drainage parcel shall be as determined by the Medway Assessor's office upon consultation with the Medway Fire and Police Departments.
- 15. *Order of Conditions* As a component of this development, the Permittee shall comply fully with the Order of Conditions and the associated Land Disturbance Permit issued by the Medway Conservation Commission on March 29, 2022, to be recorded at the Norfolk County Registry of Deeds.
- 16. Community Mailbox If the Postmaster determines that a gang or cluster mailbox is required vs. individual mailboxes for each house and before such cluster mailbox is installed, the Permittee shall request the Board's approval of a field change to specify the location of the communal mailbox and provide a drawing to show a suitable shelter to enclose such mailbox.

B. Standard Conditions

- 1. *Expiration of Appeal Period* Prior to endorsement of the definitive subdivision plan, the Planning and Economic Development Board must receive the statutory notification of the expiration of the twenty-day appeal period from the Town Clerk's office.
- 2. *Payment of Balance of Fees* Prior to plan endorsement, the Permittee shall pay the balance of any outstanding plan review services by any outside consultants retained by the Planning and Economic Development Board.

- 3. **Proof of Taxes Paid** Prior to the Planning and Economic Development Board's endorsement of the plan, approval of the *Release of Covenant* Lot 3, and any form of surety reduction, proof is required from the Medway Town Treasurer/Collector that all real estate taxes and other municipal fees and charges are current for the properties included in this subdivision and for all property owned in Medway by the Permittee.
- 4. *Site Access* Planning and Economic Development Board members, its staff, consultants or other designated Town agents and staff shall have the right to inspect the site during construction for compliance with the endorsed subdivision plan and the provisions of this Decision.

5. Construction Oversight

- a. Construction Account
 - 1) Inspection of roadway and infrastructure and utility construction, and installation of site amenities including landscaping by the Town's Consulting Engineer and review of legal documents by Town Counsel are required. Prior to plan endorsement the Permittee shall pay a construction services fee to the Town of Medway to establish a construction services account for such inspections and legal services. The amount shall be determined by the Planning and Economic Development Board based on an estimate provided by the Town's Consulting Engineer based on the scope of the project. The funds may be used at the Board's discretion to retain professional outside consultants to perform the items listed above as well as the following other tasks inspect the site during construction/installation, identify what site work remains to be completed, prepare bond estimates, conduct other reasonable inspections until the site work is completed and determined to be satisfactory, review as-built plans, and advise the Board as it prepares to issue authorize project completion.
 - 2) Depending on the scope of professional outside consultant assistance that the Board may need, the Permittee shall provide supplemental payments to the project's construction inspection account, upon invoice from the Board, for reasonable additional construction services until the road construction and stormwater drainage system and other utilities are completed and the as-built plan has been reviewed and determined to be satisfactory.
 - 3) Any funds remaining in the Permittee's construction inspection account after project completion shall be returned to the Permittee.
- b. The Department of Public Works will conduct inspections for any construction work occurring in the Town's right-of way in conjunction with the Town of Medway Street Opening/Roadway Access Permit and any utility connection permits.
- c. The Permittee shall have a professional engineer licensed in the Commonwealth of Massachusetts conduct progress inspections of the construction of the approved site improvements. Inspections shall occur at least on a monthly basis. The engineer shall prepare a written report of each inspection and provide a copy to the Board within 5 days of inspection. Failure of the Permittee to provide these reports may be reason to withhold building or occupancy permits.

- 6. *Other Permits* This permit does not relieve the Permittee from its responsibility to obtain, pay and comply with all other required federal, state and Town permits. The contractor for the Permittee or assigns shall obtain, pay and comply with all other required Town permits.
- 7. **Pre-Construction Meeting** At least seven days prior to the start of any site preparation or construction, a pre-construction meeting shall take place with the Town's Consulting Engineer, the Planning and Economic Development Coordinator, the Medway Department of Public Works, the Medway Conservation Agent, the developer and site contractors. The construction schedule shall be reviewed and the procedures for inspections discussed. A copy of the final Stormwater Pollution Prevention Plan (SWPPP) as filed with the US Environmental Protection Agency shall be provided to the Town.
- 8. *Restrictions on Construction Activities* During construction, all local, state and federal laws shall be followed regarding noise, vibration, dust and blocking of Town roads. The Permittee and its contractors shall, at all times, use all reasonable means to minimize inconvenience to abutters and residents in the general area. The following specific restrictions on construction activity shall apply.
 - a. *Construction Time* Construction work at the site and in the building and the operation of construction equipment including truck/vehicular and machine start-up and movement shall commence no earlier than 7 a.m. and shall cease no later than 7 p.m. Monday Saturday. No construction shall take place on Sundays or legal holidays without the advance approval of the Inspector of Buildings. These rules do not apply to interior construction work such as painting, installation of drywall, flooring, etc.
 - b. *Neighborhood Relations* The Permittee shall notify neighbors in the general area around the site when site work and construction are scheduled to begin and provide a phone number for them to use for questions and concerns that arise during construction.
 - c. The Permittee shall take all measures necessary to ensure that no excessive dust leaves the premises during construction including use of water spray to wet down dusty surfaces.
 - d. There shall be no tracking of construction materials onto any public way. Daily sweeping of roadways adjacent to the site shall be done to ensure that any loose gravel/dirt is removed from the roadways and does not create hazardous or deleterious conditions for vehicles, pedestrians or abutting residents. In the event construction debris is carried onto a public way, the Permittee shall be responsible for all clean-up of the roadway which shall occur as soon as possible and in any event within twelve (12) hours of its occurrence.
 - e. The Permittee is responsible for having the contractor clean-up the construction site and the adjacent properties onto which construction debris may fall on a daily basis.
 - f. All erosion and siltation control measures shall be installed by the Permittee prior to the start of construction and observed by the Planning and Economic Development Board's consulting engineer and maintained in good repair throughout the construction period.
 - g. *Construction Traffic/Parking* During construction, adequate provisions shall be made on-site for the parking, storing, and stacking of construction materials and vehicles. All parking for construction vehicles and construction related traffic shall be maintained on

site. No parking of construction and construction related vehicles shall take place on adjacent public or private ways or interfere with the safe movement of persons and vehicles on adjacent properties or roadways.

- h. *Noise* Construction noise shall not exceed the noise standards as specified in the *Zoning Bylaw*, Section 7.3.C.2. Environmental Standards.
- 9. *Occupancy Permit* Pursuant to Section 6.6.3 of the *Subdivision Rules and Regulations*, the Permittee shall not be allowed to secure an occupancy permit for Lot 3 until the following subdivision infrastructure items, at a minimum, have been installed, inspected and approved by the Board or its agent:
 - a. Gravel subbase
 - b. Binder course
 - c. Drainage system completed to the proposed outfall with frame and grates set to binder grade, as well as detention basins, swales, infiltration systems or any other stormwater management facilities.
 - d. As-built plan of each detention pond and forebay contoured in two-foot (2') intervals; and all critical elevations and details of the structures, pipes and headwalls within the detention pond area.
 - e. Street name sign indicating that Boundary Lane is a Permanent Private Way in a size and form as specified by the Medway Department of Public Works, and all regulatory signs as specified in the approved plan.
 - f. Stop line pavement markings.
 - h. Provisions for fire prevention and protection constructed, installed and functional in the area of the subdivision in which the lots are located.

10. Subdivision Performance Surety

- a. Alternative Performance Security At such time as the Permittee wishes to secure a occupancy permit for Lot 3, the security provided by the Subdivision Covenant shall be replaced by a subdivision surety in compliance with General Laws chapter 41 §81U and the Board's *Regulations*, which method or combination of methods may be selected and from time to time varied by the Permittee, in a sufficient amount, source and form acceptable to the Board, the Treasurer/Collector and Town Counsel. The surety shall be provided prior to the Planning and Economic Development Board's approval of the *Release of Covenant* for Lot 3.
- b. *Surety Amount* The amount of the performance guarantee shall be equal to 100% of the amount that would be required for the Town of Medway to complete construction of the roadway and installation of stormwater management facilities, utilities, services, pedestrian facilities and all site amenities as specified in the Decision and Plan that remain unfinished at the time the performance guarantee estimate is prepared if the Permittee failed to do so. The security amount shall be approved by the Planning and Economic Development Board based on an estimate provided by the Town's Consulting Engineer based on the latest weighted average bid prices issued by the Mass Department of Transportation. The estimate shall reflect the cost for the Town to complete the work as a public works project which may necessitate additional engineering, inspection, legal and administrative services, staff time and public bidding procedures. The estimate shall also include the cost to maintain the roadway and infrastructure in the event the Permittee fails to adequately perform such. In determining the amount, the Board shall be guided by

the following formula in setting the sum: estimate of the Town's Consulting Engineer of the cost to complete the work plus a 30% contingency.

- c. *Surety Agreement* The Permittee shall enter into a surety agreement with the Planning and Economic Development Board as provided in the *Regulations* to define the obligations of the Permittee and the performance guarantee company including:
 - 1) the date by which construction shall be completed
 - 2) a statement that the agreement does not expire until released in full by the Board
 - 3) procedures for collection upon default.
- d. *Minimum Work for Lot Release* Prior to releasing Lot 3 from the *Subdivision Covenant*, the items listed in Condition 9 Occupancy Permit herein shall be installed and inspected and approved by the Board.
- e. Adjustment of Performance Guarantee At the Permittee's written request, the amount of the performance guarantee may be reduced from time to time over the course of the construction project by vote of the Board upon the partial completion of the roadway and infrastructure improvements as defined herein. In order to establish the amount to adjust the performance guarantee, the Town's Consulting Engineer shall prepare an estimate of the current cost for the Town to complete all work as specified on the approved Plan that remains unfinished at the time the estimate is submitted to the Board. The estimate shall be based on unit prices in the latest Weighted Average Bid Prices issued by the Mass Department of Transportation. The estimate shall reflect the cost for the Town to complete the work as a public works project, which may necessitate additional engineering, inspection, legal and administrative fees, staff time and public bidding procedures. The estimate shall also include the cost to maintain the roadway and infrastructure in the event the Permittee fails to adequately perform such. In determining the amount of the adjustment of the performance guarantee, the Board shall be guided by the following formula to determine the reduction amount: the estimate of the Town's Consulting Engineer of the cost to complete the work; plus, a 30% contingency. The Board may authorize up to three reductions in the amount of performance security however, the Board shall not reduce the performance security below \$40,000.
- f. *Final Release of Performance Security* Final release of performance security is contingent on project completion.

11. Compliance with Plan and Decision

- a. All construction shall be as specified in the approved definitive subdivision plan and any modifications thereto and in full compliance with the *Subdivision Rules and Regulations* and all applicable local, state and federal laws, including but not limited to the Americans with Disabilities Act, the NPDES permit requirements, the Massachusetts Department of Environmental Protection Stormwater Management Policy requirements, MEPA requirements, the Massachusetts Wetland Protection Act (Chapter 131, Section 40, M.G.L.) and the regulations of the Massachusetts Architectural Access Board for handicap accessibility.
- b. The Planning and Economic Development Board or its agent(s) shall use all legal options available to it, including referring any violation to the Building Commissioner/Zoning Enforcement Officer for appropriate enforcement action, to ensure compliance with this Decision.

c. The Conditions of Approval are enforceable under Section 3.1. F. of the *Medway Zoning Bylaw* (non-criminal disposition) and violations or non-compliance are subject to the appropriate fine.

12. On-Site Field Changes

- a. During construction, the Permittee may be authorized to make limited, minor, on-site field changes to the approved plan based on unforeseen site or job conditions, situations, or emergencies necessitated by field conditions or due to practical considerations. These field changes shall not alter items which may affect the site's compliance with this decision and the *Bylaw* nor conflict with a specific condition of the decision. Field changes shall not substantially alter the intent, layout or design of the endorsed plan.
- b. Prior to undertaking such field changes, the Permittee and/or contractor shall discuss the possible field changes with the Town's Consulting Engineer and submit a letter and drawings to the Planning and Economic Development Coordinator and the Building Commissioner describing the proposed changes and what conditions, situations, or emergencies necessitate such changes. The Building Commissioner may determine that the field change is insubstantial, authorize the change, and so notify the Board. Otherwise, the Board shall review the proposed field changes at a public meeting and determine whether the proposed field changes are reasonable and acceptable based on the unforeseen conditions, situations, or emergencies and whether other options are feasible or more suitable. A written authorization of field change will be provided. Any approved field change shall be reflected in the as-built plan to be provided at project completion.

13. Modification of Plan and/or Decision

- a. Proposed modifications to the plan or decision, not included on-site field changes, shall be subject to review by the Board.
- b. This approval is subject to all subsequent conditions that may be imposed by other Town departments, boards, agencies or commissions. Any changes to the plan that may be required by the decisions of other Town boards, agencies or commissions shall be submitted to the Planning and Economic Development Board for review as a subdivision plan modification.
- c. Any work that deviates from the approved subdivision plan or this Decision shall be a violation of the *Medway Zoning Bylaw*, unless the Permittee requests approval of a plan modification and such approval is provided in writing by the Planning and Economic Development Board.
- d. Whenever additional reviews by the Planning and Economic Development Board, its staff or consultants are necessary due to proposed subdivision plan modifications, the Permittee shall be billed and be responsible for all supplemental costs including filing fees, plan review fees and all costs associated with another public hearing including legal notice and abutter notification. If the proposed revisions affect only specific limited aspects of the site, the Planning and Economic Development Board may reduce the scope of the required review and waive part of the filing and review fees.
- e. The Board shall issue its Modification Decision, file such with the Town Clerk and provide copies to the Building Commissioner, other Town officials and the Permittee. Any modifications approved by the Board shall be made a permanent part of the approved project. Any plan modifications shall be shown on the final as-built plan.

14. Landscape Maintenance

- a. Any shrubs, trees, bushes or other landscaping features shown on the Plan that die shall be replaced by the following spring.
- b. Within 60 days after two years after the occupancy permit is issued, the Town's Consulting Engineer or the Inspector of Buildings shall conduct an initial inspection of the landscaping to determine whether and which landscape items need replacement or removal and provide a report to the Board. At any time, subsequent to this initial inspection, the Town's Consulting Engineer or the Inspector of Buildings may conduct further inspections of the landscaping to determine whether and which landscaping items need replacement or removal and provide a report to the Board. The Board may seek enforcement remedies with the Inspector of Buildings/Zoning Enforcement Officer to ensure that the comprehensive landscaping plan is maintained.
- 15. *Project Completion* The Board shall determine project completion and refund/release the performance security once the Permittee has completed the following tasks to the Board's satisfaction:
 - a. provided the Board with written certification from a Professional Engineer registered in the Commonwealth of Massachusetts that all site work has been completed in substantial compliance with the approved and endorsed Plan, and any modifications thereto; and
 - b. submitted an As-Built Construction Plan prepared by a registered Professional Land Surveyor or Engineer registered in the Commonwealth of Massachusetts in accordance with the *Subdivision Rules and Regulations* in effect at the time the plans are submitted to the Board for review by the Town's Consulting Engineer and the Board's approval. The Permittee shall provide the final as-built plan in CAD format compatible with the Medway GIS and acceptable to the Medway Board of Assessors (ArcInfo shape file .shp).
 - c. paid the Town of Medway for any taxes/fees associated with these parcels or other property owned by the Permittee in the Town of Medway; and
 - d. completed any mitigation measures specified in the subdivision certificate of action to the satisfaction of the Board.

VII. APPEAL

The Board and the Permittee have complied with all statutory requirements for the issuance of this Decision on the terms set forth herein. A copy of this Decision will be filed with the Medway Town Clerk and mailed to the Permittee, and notice will be mailed to all parties in interest.

Any person aggrieved by the decision of the Board may appeal to the appropriate court pursuant to Massachusetts General Laws, ch 41, § 81BB, which shall be filed within twenty days after the filing of this decision in the office of the Medway Town Clerk.

###

BOUNDARY LANE DEFINITIVE SUBDIVISION PLAN CERTIFICATE OF ACTION MEDWAY PLANNING AND ECONOMIC DEVELOPMENT BOARD

Date of Action by the Medway Planning and Economic Development Board: July 26, 2022

AYE:

Member		Date
Member		Date
Member		Date
Member		Date
Member NAY:		Date
Member		Date
Member		Date
Copies To:	Zachary Lindsey Linda Lindsey David and Renee Sistrand Vito Colonna, Connorstone Engineering Michael Boynton, Town Manager Stephanie Carlisle, DPW Compliance Office Mike Fasolino, Deputy Fire Chief Bridget Graziano, Conservation Agent Donna Greenwood, Assessor Jeff Lynch, Fire Chief Jack Mee, Building Commissioner Pete Pelletier, DPW Director Joanne Russo, Treasurer/Collector Barbara Saint Andre, Community and Econo Barry Smith, DPW Water/Sewer Superintene Lieutenant Jeffrey Watson, Police Safety Off Steve Bouley, Tetra Tech	omic Development Director dent

Medway Planning and Economic Development Board Request for Waiver from Subdivision Rules and Regulations Complete 1 form for each waiver request

Project Name:	Boundary Lane	
Property Location:	67R-69 Summer Street	
Type of Project/Permit:	Definitive Subdivision Plan	
Identify the number and title of the relevant Section of the Subdivision Plan Rules and Regulations from which a waiver is sought.	Section 7.7.2.p Stormwater Management	
Summarize the text of the relevant Section of the Rules and Regulations from which a waiver is requested.	Detention basins shall be located on separate parcels and shall not be included on individual house/building lots.	
What aspect of the Regulation do you propose be waived?	Waive the requirement of a separate parcel	
What do you propose instead?	Place the basin within a drainage easement on Lot 1	
Explain/justify the waiver request. Why is the waiver needed? Describe the extenuating circumstances that necessitate the waiver request.	Per the request of Town Staff (Assessors)	
What is the estimated value/cost savings to the applicant if the waiver is granted?	\$0	
How would approval of this waiver request result in a superior design or provide a clear and significant improvement to the quality of this development?	The waiver to allow an easement would maintain the same level of access to the basin for maintenance as a separate parcel, while also providing more clarity for the Town Assessors office on ownership.	
What is the impact on the development if this waiver is denied?	Additional burden on Town Staff	
What are the design alternatives to granting this waiver?	Provide a drainage easement on Lot 1.	
Why is granting this waiver in the Town's best interest?		
<i>If this waiver is granted, what is the estimated cost savings and/or cost avoidance to the Town?</i>	N/A	
What mitigation measures do you propose to offset not complying with this particular Rule/Regulation?	Provide a drainage easement for future maintenance	
What is the estimated value of the proposed mitigation measures?	\$0	
Other Information?		
Waiver Request Prepared By:	Connorstone Engineering Inc.	
Date:	7/26/2022	
Questions?? - Please contact the Medway PED office at 508-533-3291.		



July 26, 2022 Medway Planning & Economic Development Board Meeting

Public Hearing Continuation Milford Hospital Medical Facility

- Notice dated July 1, 2022 to continue the Milford Hospital public hearing to July 26, 2022
- REVISED site plan dated June 29, 2022, received July 15, 2022
- Collection of submittals from Guerriere & Halnon associated with the revised site plan, received July 15, 2022 including responses to Tetra Tech review letters, responses to Town staff comments, revised waivers, updated special permit descriptions, etc.
- Tetra Tech review letter dated July 19, 2022 on the revised site plan dated June 29, 2022
- Letter dated July 21, 2022 from Building Commissioner Jack Mee re: building type classification, under the new CBD zoning regulations
- Letter dated May 31, 2022 from Jeffrey Dirk of Vanasse Associates, for the applicant, in response to Tetra Tech's May 23, 2022 review letter of the Vanasse April 2022 *Transportation Impact Assessment* report
- Letter dated July 15, 2022 from Jeffrey Dirk of Vanasse Associates re: traffic intersection improvements

NOTE – This project is scheduled to meet again with the DRC on August 1 to review the updated site plan and architecture.

Board Members

Matthew Hayes, P.E., Chair Robert Tucker, Vice Chair Richard Di Iulio, Clerk Jessica Chabot, Member Sarah Raposa, A.I.C.P, Member Thomas Gay, Associate Member



TOWN OF MEDWAY

COMMONWEALTH OF MASSACHUSETTS

PLANNING AND ECONOMIC DEVELOPMENT BOARD

Medway Town Hall 155 Village Street Medway, MA 02053 Phone (508) 533-3291 Fax (508) 321-4987 Email: planningboard @townofmedway.org www.townofmedway.org

RECEIVED TOWN CLERK JUL 1'22 AM10:24

MEMORANDUM

July 1, 2022

TO: Stefany Ohannesian, Town Clerk Town of Medway Departments, Boards and Committees

FROM: Susy Affleck-Childs, Planning and Economic Development Coordinato

RE: **Public Hearing Continuation for Milford Regional Hospital Medical Center Site Plan and Groundwater Protection Special Permit - 86 Main Street** Continuation Date – Tuesday, July 26, 2022 at 7:45 p.m.

At its June 14, 2022 meeting, the Planning and Economic Development Board voted to continue the public hearing on the application of Lobisser Companies of Hopedale, MA for approval of a major site plan and a groundwater protection special permit for the proposed 21,900 sq. ft. medical office building to be constructed on a portion of 86 Holliston Street to the Board's meeting on Tuesday, July 26, 2022 at 7:45 p.m. at Medway Town Hall, 155 Village Street.

The proposed facility is to be located on approximately 2.2 acres on the eastern end of the subject property. The building will be accessed from the existing curb cut and driveway from Main Street currently used by Walgreens. Other planned site improvements include parking, utilities, grading, lighting, landscaping, and stormwater management. The facility will offer pediatric care, women's health, wellness, urgent care, lab & x-ray services. A total of 102 parking spaces are proposed.

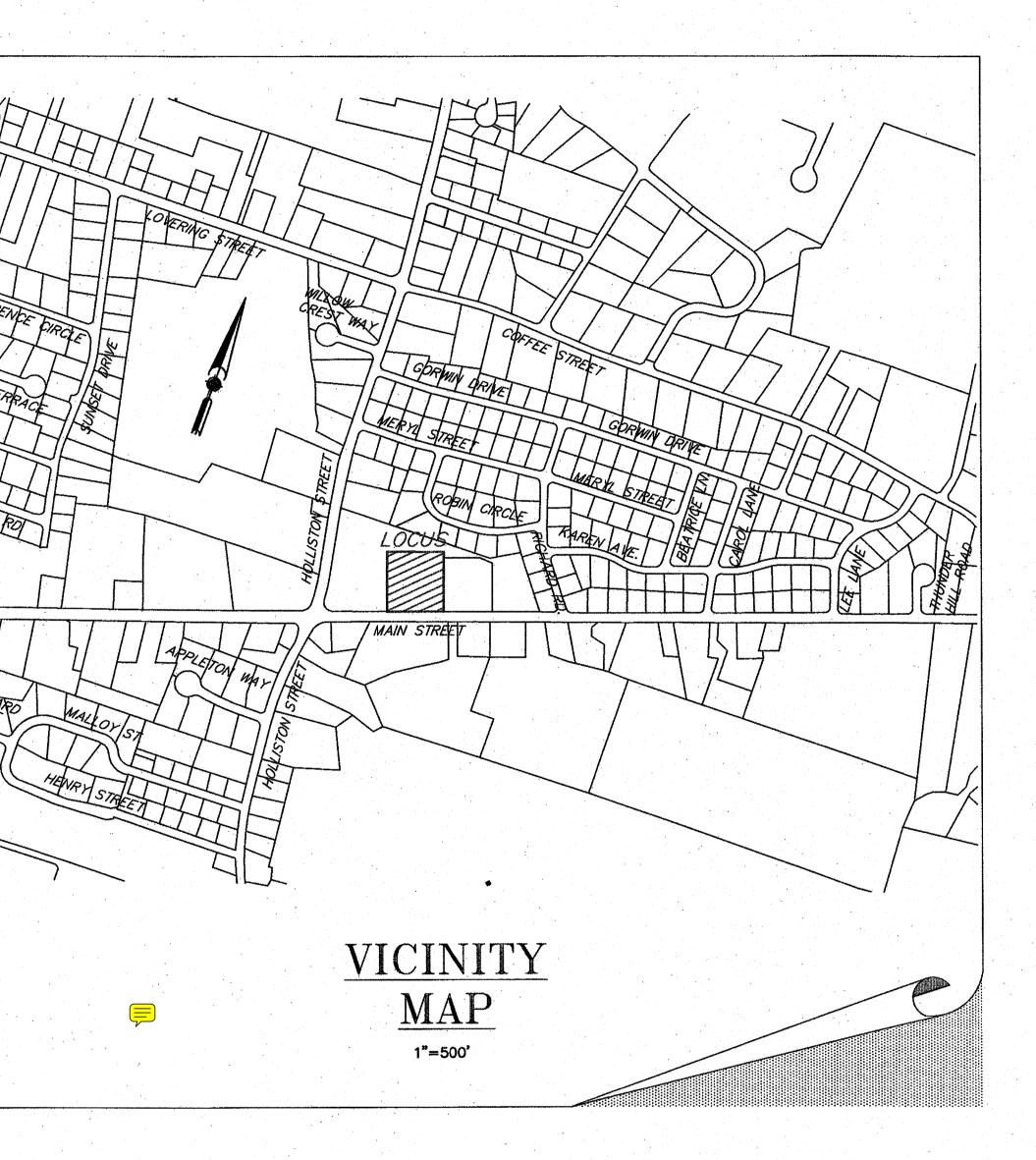
The planned improvements are shown on *Site Plan, 86 Holliston Street, Medway, MA* dated April 14, 2022, prepared by Guerriere & Halnon, Inc. of Franklin, MA. The site is also under the jurisdiction of the Conservation Commission for an Order of Conditions and a Land Disturbance Permit.

The plan and associated application documents are on file with the Medway Town Clerk and the Community and Economic Development office at Medway Town Hall. The information is also posted at Board's page at: https://www.townofmedway.org/planning-economic-development-board/pages/milford-regional-medical-center

Based on the feedback provided during the May 10th and June 14th hearings including comments from Town staff and boards and the Board's engineering consultants, the applicant is revising the site plan and will submit it for further review at the July 26th hearing. We expect to receive that revised site plan on July 6th or 7th; it will be posted to the Board's web page upon receipt. The Board welcomes your review and comments by July 20th. Please don't hesitate to contact me if you have any questions. Thanks.

I	NDEX
1.	COVER SHEET
2.	ABUTTER SHEET
3.	EXISTING CONDITIONS
4.	EROSION CONTROL
5.	PROPOSED SITE LAYOUT
6.	GRADING PLAN
7.	UTILITY PLAN
8.	LANDSCAPING PLAN
9.	CONSTRUCTION DETAILS
10.	CONSTRUCTION DETAILS
11	CONSTRUCTION DETAILS
12.	CONSTRUCTION DETAILS
РНОТ	OMETRIC PLAN (BY OTHERS)
ARCH	IITECTURAL PLANS (BY OTHERS)

SITE PLAN 86 HOLLISTON STREET MEDWAY MASSACHUSETTS



RIGHT-OF-WAY LINE OF A SPECIAL PERMIT

WAIVERS REQUESTED

REQUEST FROM THE TOWN MEDWAY PLANNING BOARD RULES AND REGULATIONS CHAPTER 200

- SECTION 204-5 B SITE CONTEXT SHEET
- SECTION 204-5 D.8.A LANDSCAPE PLAN NOT PREPARED BY REGISTERED LANDSCAPE ARCHITECT SECTION 207-9 B.1 SIDEWALK WIDTH REDUCTION AT VEHICLE OVERHANG
- SECTION 207-12 G.3.A PARKING WITHIN 20' OF BUILDING ENTRANCE
- SECTION 207-19 LANDSCAPING. B.2 LANDSCAPE BUFFERS
- 6. SECTION 207-19 LANDSCAPING. C.1.A PARKING AREAS

ZONING BYLAWS 7. SECTION 10.2.D.A OFF STREET PARKING EXCEEDING MAXIMUM 8. SECTION 207-19 LANDSCAPING. H.6. SECTION 207-12 PARKING SPACE G. (3) LOCATION (a)

I, STEFANY OHANNESIAN, CLERK OF THE TOWN OF MEDWAY, RECEIVED AND RECORDED FROM THE PLANNING BOARD COVENANT APPROVAL OF THIS PLAN ON AND NO APPEAL WAS TAKEN FOR TWENTY DAYS NEXT AFTER RECEIPT AND RECORDING OF SAME.

RORFR

CONSTANTINE,

No. 49611

DATE

TOWN CLERK

SPECIAL PERMITS REQUESTED

REQUEST FROM THE TOWN MEDWAY PLANNING BOARD

1. ZONING BYLAWS SECTION 5.6.3 GROUNDWATER PROTECTION DISTRICT TO ALLOW IMPERVIOUS COVERAGE IN EXCESS OF 15% OR 2500 SF WHICHEVER IS GREATER, WITHIN A GROUNDWATER PROTECTION DISTRICT. 2. ZONING BYLAWS SECTION 10 CENTRAL BUISINESS DISTRICT DEVELOPMENT STANDARDS § 2.D.2 C PARKING PLACEMENT OFF STREET PARKING AND LOADING TO ALLOW PARKING WITHIN THE FRONT YARD SETBACK BETWEEN A PUBLIC STREET AND THE STREET FACING FASCADE OF A PRIMARY BUILDING HAVING A SETBACK GREATER THAN 20 FEET FROM THE STREET LINE AND STREETSCAPE TREATMENT.

3. ZONING BYLAWS SECTION 10 CENTRAL BUSINESS DISTRICT DEVELOPMENT STANDARDS § 2.D.2.C PARKING PLACEMENT - TO ALLOW VEHICULAR PARKING BETWEEN THE FRONT BUILDING LINE AND THE STREET

4. ZONING BYLAWS SECTION 10 CENTRAL BUSINESS DISTRICT DEVELOPMENT STANDARDS § 4.C.2 TO ALLOW AN ALTERNATIVE BUILDING TYPE OTHER THAN ONE OF THE BUILDING TYPES SPECIFICALLY ALLOWED BY ISSUANCE

APPROVED BY THE TOWN OF MEDWAY PLANNING & ECONOMIC DEVELOPMENT BOARD BOARD MEMEBER DATE LEGAL NOTES UTILITIES ARE PLOTTED AS A COMPILATION OF RECORD DOCUMENTS, MARKINGS OBSERVED EXAMENCE UNDERGROUND) CONSIDERED APPROXIMA THE EXACT LOCATION CANNOT BE RELIABLY DEPION UTILITIES, EVIDENCED BY PHYSICAL EVIDENCE MAX EXIST. ACCORDANCE WITH MASS.GL CHAPTER 82

ONLY

USE

RY

F4516

CALL DIGSAFE AT 1(888)DIG-SAFE{7233} CONSTRUCTION ON THIS LAND IS SUBJECT TO ANY EASEMENTS, RIGHTS-OF-WAY, RESTRICTIONS, RESERVATIONS, OR OTHER LIMITATIONS WHICH MAY BE REVEALED BY AN EXAMINATION OF THE TITLE.

40 AS AMENDED) MUST CONTACT ALL UTILITY COMPANIES BEFORE EXCAVATING AND DRILLING AND

OWNER

FREIL REALTY II, LLC DEED BOOK 27992 PAGE 300 PLAN BK. 515, PG 721 OF 2003 A.M. 41 LOT 8

APPLICANT

LOBISSER COMPANIES 1 CHARLESVIEW ROAD HOPEDALE, MA 01747

SITE PLAN **86 HOLLISTON STREET** MEDWAY MASSACHUSETTS

COVER SHEET

APRIL 14, 2022

REVISION DESCRIPTION DATE 6/29/2022 REVISED PER TOWN COMMENTS





OWNER(S)/ASSESSOR INFORMATION: PARCEL IDs:

41-007 DEIDRE ODONNELL 64 MAIN ST. MEDWAY, MA.

40-049 FREIL REALTY II, LLC. 86 HOLLISTON ST. MEDWAY, MA.

40-088 LOK CHING NOMINEE TRUST 6 HAVEN WAY HOPEDALE, MA.

31-092 JAMES M. CASSIDY 90 HOLLISTON ST. MEDWAY, MA

40-063 P & A REALTY TRUST 82 HOLLISTON ST. MEDWAY, MA

41-027 SEAN M CURRIVAN TRUSTEE 36 ELLIS ST. MEDWAY, MA.

40-050 CHARLES RIVER BANK 70 MAIN ST. MEDWAY, MA

41-10 REBECCA L. PURCELL 4 KAREN AVE. MEDWAY, MA.

40-061 DAVID J. MCWHINNIE 11 ROBIN CIRCLE MEDWAY, MA.

40-047 HERISTON PINTO 91 HOLLISTON ST. MEDWAY, MA.

31-090 CHARLES J. DUDDY JR. 15 ROBIN CIRCLE MEDWAY, MA.

41-021 ANGELO MUCCI TRUSTEE 2 RICHARD RD. MEDWAY, MA.

32-086 GEORGE M. FASOLINO 8 ROBIN CIRCLE MEDWAY, MA.

32-067 MICHAELS TRAINOR 10 RICHARD RD. MEDWAY, MA.

40-059 FREIL REALTY II, LLC 86 HOLLISTON ST. MEDWAY, MA.

40-064 NORMAN W. GREEN REALTY TRUST 71 MAIN ST. MEDWAY, MA.

41-023 HIDDEN ACRES REALTY I, LLC 1371 OAKLAND BLVD. WALNUT CREEK, CA.

41-023-067 HIDDEN ACRES REALTY I, LLC. (67 C MAIN ST) 75 HOLLYHILL LANE GREENWICH, CT.

32-085 CHRISTOPHER A. ANTHONY 6 ROBIN CIRCLE MEDWAY, MA.

41-022 ERIC H. KESSLER 4 RICHARD RD. MEDWAY, MA.

PARCEL IDs:

32-079 KATHLEEN A. BUXTON 8 RICHARD RD. MEDWAY, MA.

32-082 ALAN J. MEISTER 9 RICHARD RD. MEDWAY, MA.

41-023-067 (67 A MAIN ST) 75 HOLLY HILL LANE GREENWICH, CT.

41-023-067 PO BOX 902 SPENCER MA.

31–085 JOSEPH J. LATOSEK JR. **10 ROBIN CIRCLE** MEDWAY, MA.

41-023-067 (67 D MAIN ST.) ONE CVS DRIVE WOONSOCKET, RI.

31-091 CHARLES J. DUDDY JR. 15 ROBIN CIRCLE MEDWAY, MA.

41-25 FREIL REALTY I, LLC. 86 HOLLISTON ST. MEDWAY, MA.

32-083 DIANE PRIDE 2 ROBIN CIRCLE MEDWAY, MA.

41-004 SYDNEY LAMPKE 5 RICHARD RD. MEDWAY, MA.

41-020 SAMUEL S. TORREY JR. 62 MAIN ST. MEDWAY, MA.

40-086 CHEN DE XIANG TRUSTEE 6 HAVEN WAY HOPEDALE, MA.

32-078 (1 KAREN AVE) MARGARET A. LE COADY 7539 DANVERS CIRCLE PORT CHARLOTTE, FL.

32-084 RYAN P. SULLIVAN 4 ROBIN CIRCLE MEDWAY, MA.

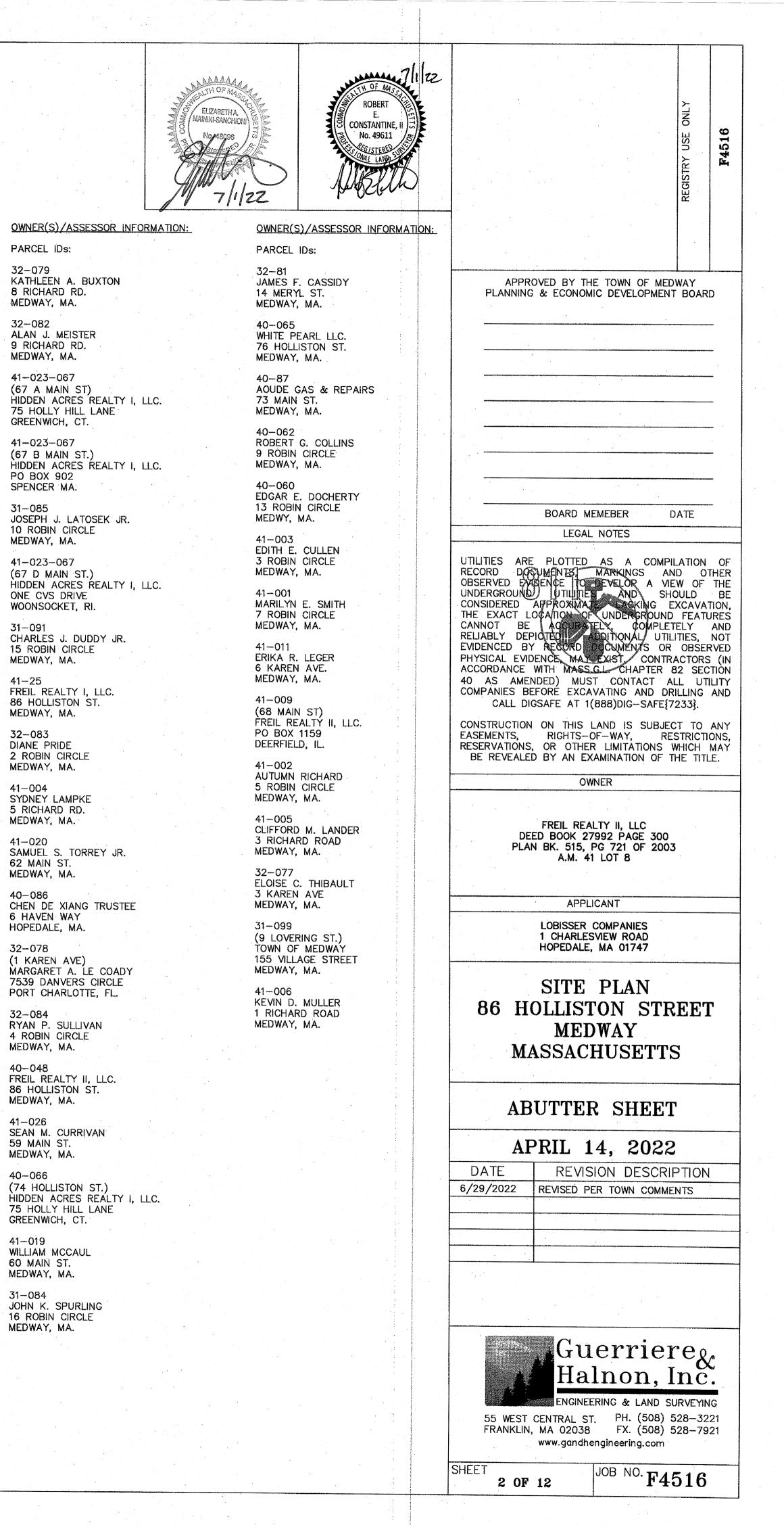
40-048 FREIL REALTY II, LLC. 86 HOLLISTON ST. MEDWAY, MA.

41-026 SEAN M. CURRIVAN 59 MAIN ST. MEDWAY, MA.

40-066 GREENWICH, CT.

41-019 WILLIAM MCCAUL 60 MAIN ST. MEDWAY, MA.

31-084 JOHN K. SPURLING 16 ROBIN CIRCLE MEDWAY, MA.



ZONING DISTRICT CENTRAL BUSINESS

		REQUIRED
	MIN. LOT AREA	10,000 SF
	MIN. LOT FRONTAGE	NAf
	MIN. YARD SETBACKS	
	FRONT	10 FT
	SIDE	10 FT 25 FT°
	REAR	25 FT
•	STRUCTURE COVERAGE	80%
	MAXIMUM IMPERVIOUS COVERAGE	NA
	MINIMUM OPEN SPACE	15%

"WHEN ABUTTING A RESIDENTIAL DISTRICT

PROPERTIES IN THE CENTRAL BUSINESS DISTRICT THAT DO NOT HAVE FRONTAGE ON A PUBLIC STREET SHALL BE REQUIRED TO HAVE AN EASEMENT OF AT LEAST 30 FEET IN WIDTH PROVIDING ACCESS TO A PUBLIC STREET.

LEGEND

⊞	CATCH BASIN		\$	LIGHT POLE
0	DRAIN MANHOLE		ဝိ	UTILITY POLE
E	ELECTRIC MANHOLE		-3	GUY WRE
S	SEWER MANHOLE		-0-	SIGN
0	MANHOLE		•	WETFLAG
Xs	GAS VALVE		ср	UTILITY POLE
්ර	GAS SHUT OFF VALVE		¢	PROP. STREET LIGHTING
X≸	WATER VALVE			
්රී	WATER SHUT OFF VA	LVE	x 000.0	SPOT ELEVATION
¥	FIRE HYDRANT			RIPRAP
	000	EXISTING (CONTOUR	· · · · · ·
	— D ———	EXISTING L	DRAIN LIN	E
	W	EXISTING I	WATER LIN	ΙE
_ 	-xxx	EXISTING I	ENCE	
- x		FLOOD ZO	NE X- MI	NIMAL RISK AREA
	WPD2	ZONE 2 W	ELLHEAD	PROTECTION DISTRICT
	***************************************	1000		

NOTES

1. THIS LAND IS ZONED CENTRAL BUSINESS.

2. A PORTION OF THIS SITE IS LOCATED FLOOD HAZARD ZONE X PER FEMA FLOOD MAP 25021C0143E, EFFECTIVE DATE 7/17/2012.

3. THE WETLANDS WERE EVALUATED BY GODDARD CONSULTING LLC. ON DECEMBER 13, 2021 AND JANUARY 28, 2022 SEE WETLAND REPORTS FOR FURTHER INFORMATION. WETLANDS WERE FIELD LOCATED BY GUERRIERE & HALNON, INC.

4. REFER TO MEDWAY ASSESSORS MAP 41 LOT 008

5. THIS SITE IS LOCATED WITHIN THE GROUNDWATER PROTECTION DISTRICT.

6. ALL REFERENCED DEEDS ARE ON RECORD AT THE NORFOLK REGISTRY OF DEEDS.

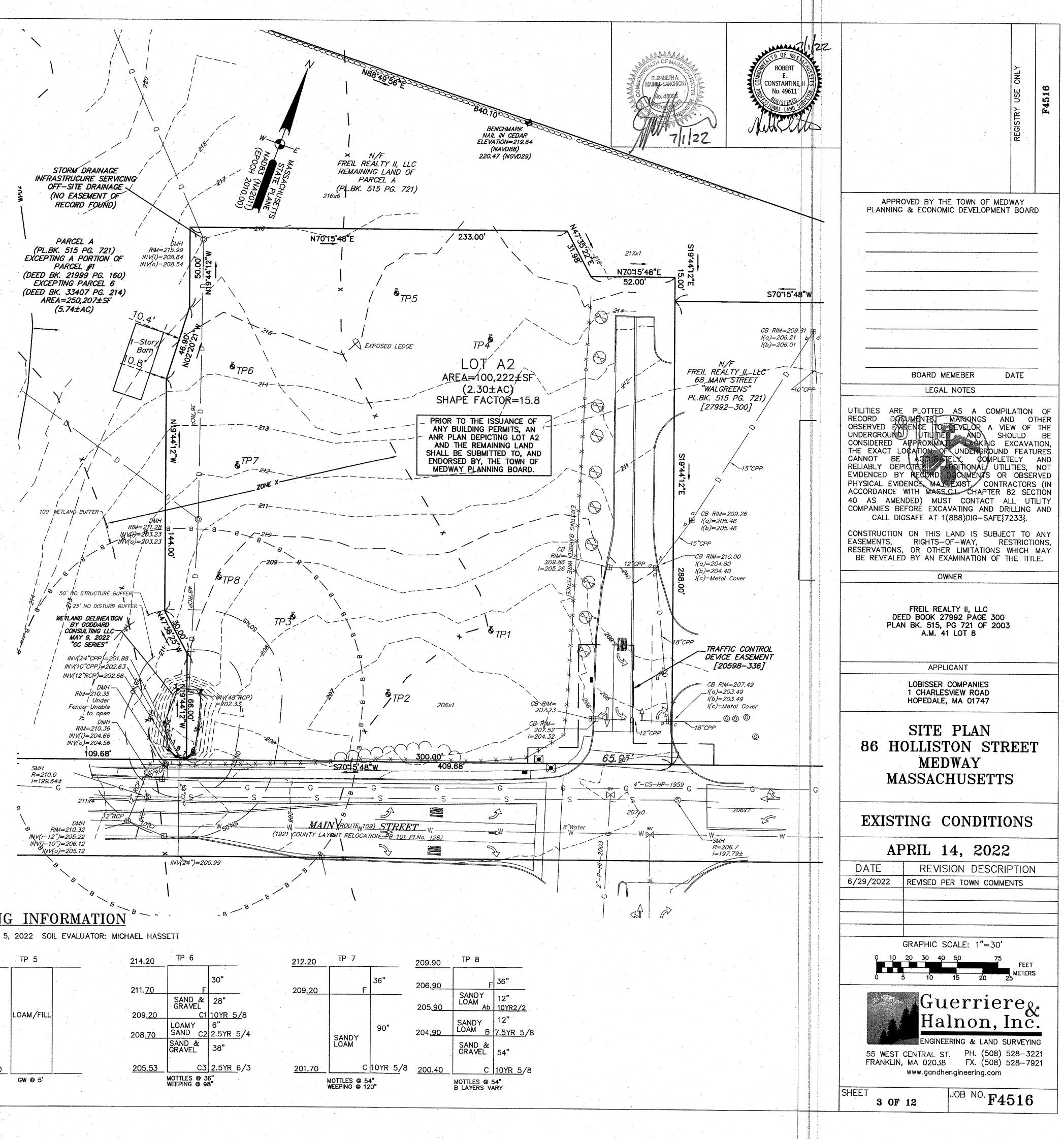
7. THIS SITE IS NOT LOCATED WITHIN A NATURAL HERITAGE AND ENDANGERED SPECIES PROGRAM AREA.

8. ELEVATIONS ARE BASED ON HORIZONTAL DATUM: NAD83; VERTICAL DATUM: NAVD88.

9. EXISTING SEWER INVERTS IN MAIN STREET OBTAINED FROM PLAN TITLED "TOWN OF MEDWAY, MASSACHUSETTS BOARD OF WATER/SEWER COMMISSIONERS SANITARY SEWER PROGRAM MAIN STREET - STA. 45+00 TO STA. 55+60.71" SHEET 5 OF 16 DATED 3-20-84, REVISED THROUGH 4-7-89, AND PREPARED BY METCALF & EDDY, INC./ENGINEERS.

10. EXISTING SEWER INVERTS TO BE VERIFIED PRIOR TO START OF CONSTRUCTION.

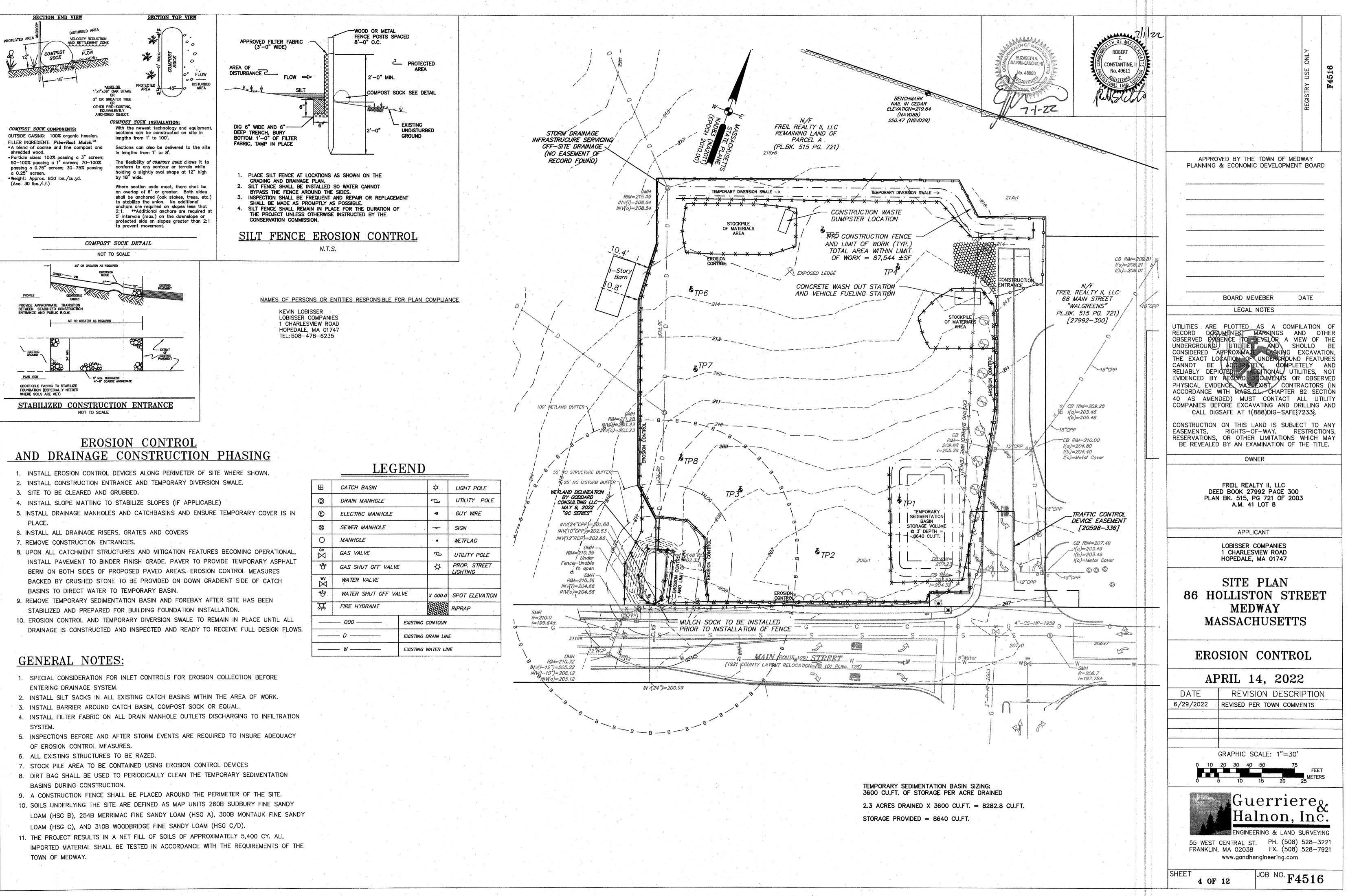
						•.	• .	•			· .	
207.60	TP 1	49 primero anti-	•	206.5	TP 2		208.1	TP 3		214.20	TP 4	•
206 <u>.94</u>	SANDY LOAM A	8" <u>10YR 2</u> /2		203 <u>.00</u>	F	42"	205 <u>.10</u>	<u> </u>	36"			
205 <u>.36</u>	SANDY LOAM B	19" 7.5YR 5/8	•	201. <u>50</u>	SANDY LOAM Ab	18" 10YR 2/2	204 <u>.10</u>	SANDY LOAM	12" 10YR2/2		- jæ	
203 <u>.62</u>	and the second	21" 10YR 5/8	•		LOAMY SAND	63"	202.60	SANDY LOAM B	18"	i	LOAM/FILL	
202 <u>.29</u>	SANDY LOAM C2	16" 2.5YR 5/4			Ab VARIES		202 <u>.99</u>	SAND & GRAVEL	42"			
198.49	SAND & GRAVEL C3	46" <u>2.5YR 6</u> /3		196.25		10YR 5/4	199.10	c	10YR 5/8	210.90		
	WEEPING @ 7 MOTTLES @ 2 NO REFUSAL	7" 27"205.35			MOTTLES @ 3 WEEPING @ 6.	4"203.67 5'		Mottles @ 42 Weeping @ 78	204.60		GW @ 3.3'	· ·
•	•								·			



TESTING INFORMATION

TESTING DATE: JANUARY 5, 2022 SOIL EVALUATOR: MICHAEL HASSETT

214.80	TP 5		214.20	TP 6]	212.20	TP 7	алана 1 1	209.90	TP 8	
			211.70	F	30"	209.20	F	36"	206 <u>.90</u>	F	36"
				SAND & GRAVEL	28"	200 <u>.20</u>			205 <u>,90</u>	SANDY LOAM Ab	12" 10YR2/2
	LOAM/FILL		209 <u>.20</u> 208 <u>.70</u>	LOAMY	10YR 5/8 6" 2.5YR 5/4		CANDY	90"	204 <u>.90</u>	SANDY LOAM B	12" 7.5YR 5/
				SAND & GRAVEL	38"		SANDY LOAM			SAND & GRAVEL	54"
209.80		na se la companya de la companya de La companya de la comp	205.53	C3	2.5YR 6/3	<u>201.70</u>	С	10YR 5/8	200.40	С	10YR 5/
	GW © 5'			MOTTLES @ 3 WEEPING @ 9	6" 8"		Mottles @ 54 Weeping @ 12	μ" Ο"		MOTTLES @ B LAYERS V	54" ARY



\blacksquare CATCH BASIN \diamondsuit \textcircled{O} DRAIN MANHOLE \bigcirc \textcircled{O} ELECTRIC MANHOLE \bullet \textcircled{O} ELECTRIC MANHOLE \bullet \textcircled{O} SEWER MANHOLE \neg \bigcirc SEWER MANHOLE \neg \bigcirc GAS VALVE \bigcirc \bigtriangledown GAS VALVE \bigcirc \bigtriangledown GAS SHUT OFF VALVE \checkmark \bigtriangledown WATER VALVE \checkmark \checkmark WATER SHUT OFF VALVEx 000.0 \checkmark FIRE HYDRANT \checkmark \bigcirc DEXISTING CONTOUR \bigcirc DEXISTING WATER LU				·····
€ ELECTRIC MANHOLE -• S SEWER MANHOLE -• O MANHOLE • O MANHOLE • S GAS VALVE • S GAS VALVE • S GAS SHUT OFF VALVE ↓ N WATER VALVE ↓ N WATER SHUT OFF VALVE ↓ N WATER SHUT OFF VALVE ↓ O FIRE HYDRANT ↓ O OOO EXISTING CONTOUR	Œ	CATCH BASIN		\$
Sewer Manhole ○ MANHOLE • Sw GAS VALVE • Sw GAS VALVE • Sw GAS SHUT OFF VALVE ↓ W WATER VALVE ↓ Sw WATER SHUT OFF VALVE ↓ Sw FIRE HYDRANT ↓ OOO Existing Contour D Existing DRAIN LII	Ō	DRAIN MANHOLE		မာ
○ MANHOLE • GV GAS VALVE • S GAS VALVE • S GAS SHUT OFF VALVE ↓ WV WATER VALVE ↓ WV WATER SHUT OFF VALVE ↓ S FIRE HYDRANT ↓ − 000 − EXISTING CONTOUR − D −	©	ELECTRIC MANHOLE		-0
GV GAS VALVE 50.5 SO GAS SHUT OFF VALVE SO WV WATER VALVE SO SO WATER VALVE SO SO WATER SHUT OFF VALVE X 000.0 SO FIRE HYDRANT SO OOO EXISTING CONTOUR OO EXISTING DRAIN LIN	S	SEWER MANHOLE	•	-0-
GAS VALVE Go So GAS SHUT OFF VALVE W WATER VALVE W WATER SHUT OFF VALVE So FIRE HYDRANT OOO Existing Contour	0	MANHOLE		•••
WV WATER VALVE ** WATER SHUT OFF VALVE ** FIRE HYDRANT 000 Existing Contour Existing Drain Lii		GAS VALVE		ഹ
Image: Normal water Image: Normal water	්රී	GAS SHUT OFF VALVE		Ø
FIRE HYDRANT OOO D D	wv ⊠	WATER VALVE		
000 Existing contour D Existing drain Lii	*8	WATER SHUT OFF VA	LVE	x 000.0
D EXISTING DRAIN LI	ж,	FIRE HYDRANT	··· · · · · · · · · · · · · · · · · ·	
		000	EXISTING (CONTOUR
W EXISTING WATER LI		D	EXISTING I	DRAIN LIN
		W	EXISTING	WATER LII

CENTRA	L BUSINESS	
	REQUIRED	<u>PROPOSED</u>
MIN. LOT AREA	10,000 SF	100,222 SF
MIN. LOT FRONTAGE	NAf	300.00 FT
MIN. YARD SETBACKS		
FRONT	10 FT	112.3 FT
SIDE	10 FT 25 FT ^e	55.4 FT
REAR	25 FT	54.8 FT
STRUCTURE COVERAGE	80%	21.9%
MAXIMUM IMPERVIOUS COVERAGE**	NA	68.3%**
MINIMUM OPEN SPACE	15%	31.7%
INTERIOR PARKING LANDSCAPING	10%	11.0%

FRONTAGE ON A PUBLIC STREET SHALL BE REQUIRED TO HAVE AN EASEMENT OF AT LEAST 30 FEET IN WIDTH PROVIDING ACCESS TO A PUBLIC STREET.

**MAXIMUM IMPERVIOUS COVERAGE IN A GROUND WATER PROTECTION DISTRICT: ANY USE THAT WILL RENDER IMPERVIOUS MORE THAN 15% OR 2500 SF. OF ANY LOT WHICHEVER IS GREATER.

NOTE

LOT COVERAGE CALCULATION:

NEW LOT AREA = $100,222\pm$ SF. EXISTING PAVEMENT = $10,263\pm$ SF.

PROPOSED BUILDING = $21,900\pm$ SF. PROPOSED PAVEMENT = $36,329\pm$ SF. TOTAL IMPERVIOUS = $68,492\pm$ SF.

(68.3%)

LEGEND

⊞	CATCH BASIN		\$	LIGHT POLE
0	DRAIN MANHOLE		പ	UTILITY POLE
Ē	ELECTRIC MANHOLE		-0	GUY WIRE
S	SEWER MANHOLE		- 0 -	SIGN
0	MANHOLE	· · ·	•	WETFLAG
ςγ	GAS VALVE		പ	UTILITY POLE
ోరి	GAS SHUT OFF VALVE	-	Å	PROP. STREET LIGHTING
₩V X	WATER VALVE		VGC	VERTICAL GRANITE CURB
*8	WATER SHUT OFF VA	LVE	x 000.0	SPOT ELEVATION
Д.	FIRE HYDRANT			RIPRAP
	000	EXISTING	CONTOUR	
	D	EXISTING I	DRAIN LIN	E
	— W —	EXISTING	WATER LIN	VE

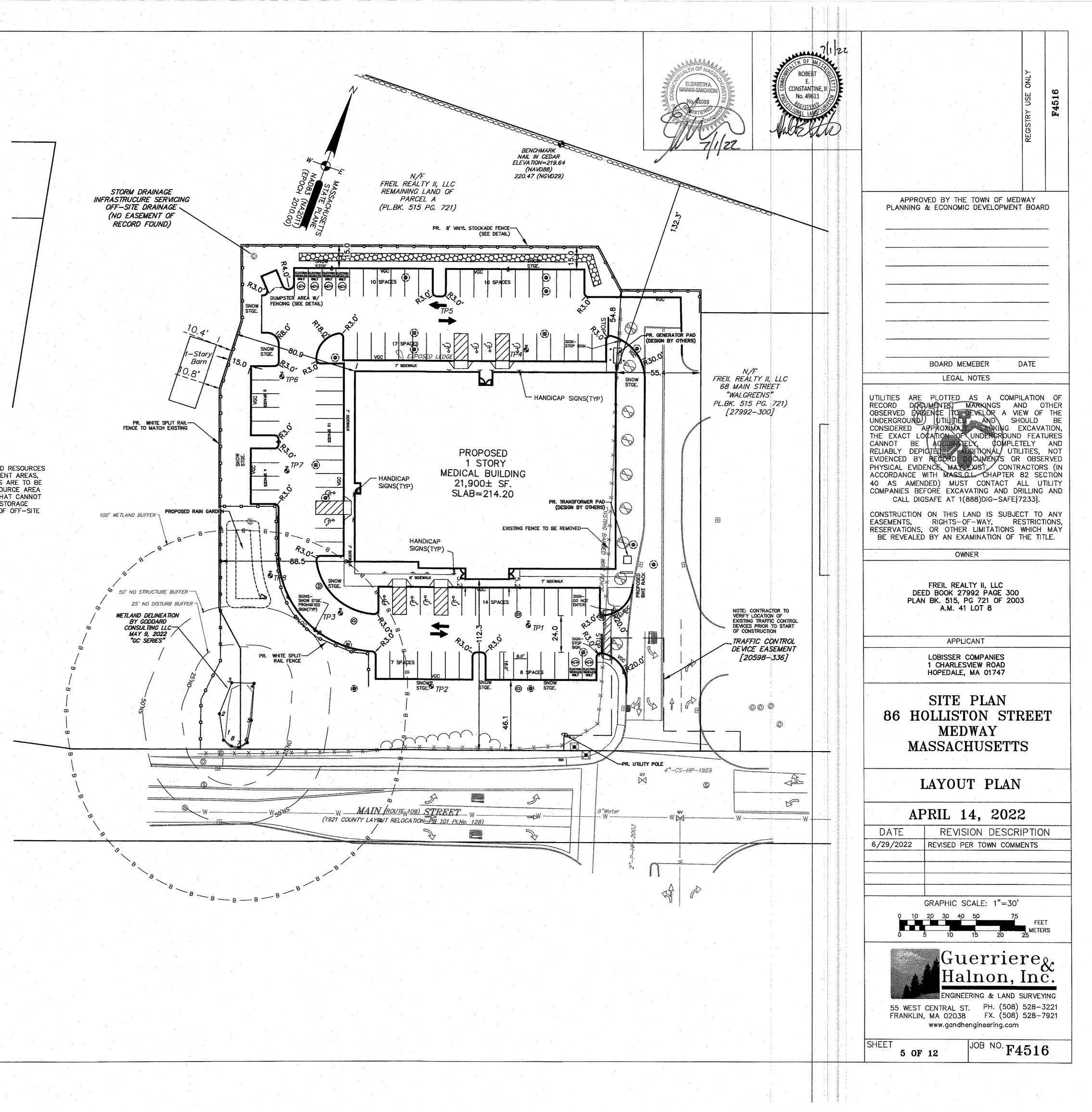
NOTE: NO SNOW IS TO BE STORED WITHIN WETLAND RESOURCES OR THEIR BUFFERS, STORMWATER MANAGEMENT AREAS, OR PARKING SPACES. SNOW STORAGE SIGNS ARE TO BE PROVIDED ADJACENT TO THE WETLAND RESOURCE AREA AS SHOWN ON THIS PLAN. EXCESS SNOW THAT CANNOT BE STORED WITHIN THE DESIGNATED SNOW STORAGE AREAS IS TO BE REMOVED AND DISPOSED OF OFF-SITE WITHIN 72 HOURS.

PARKING NOTES

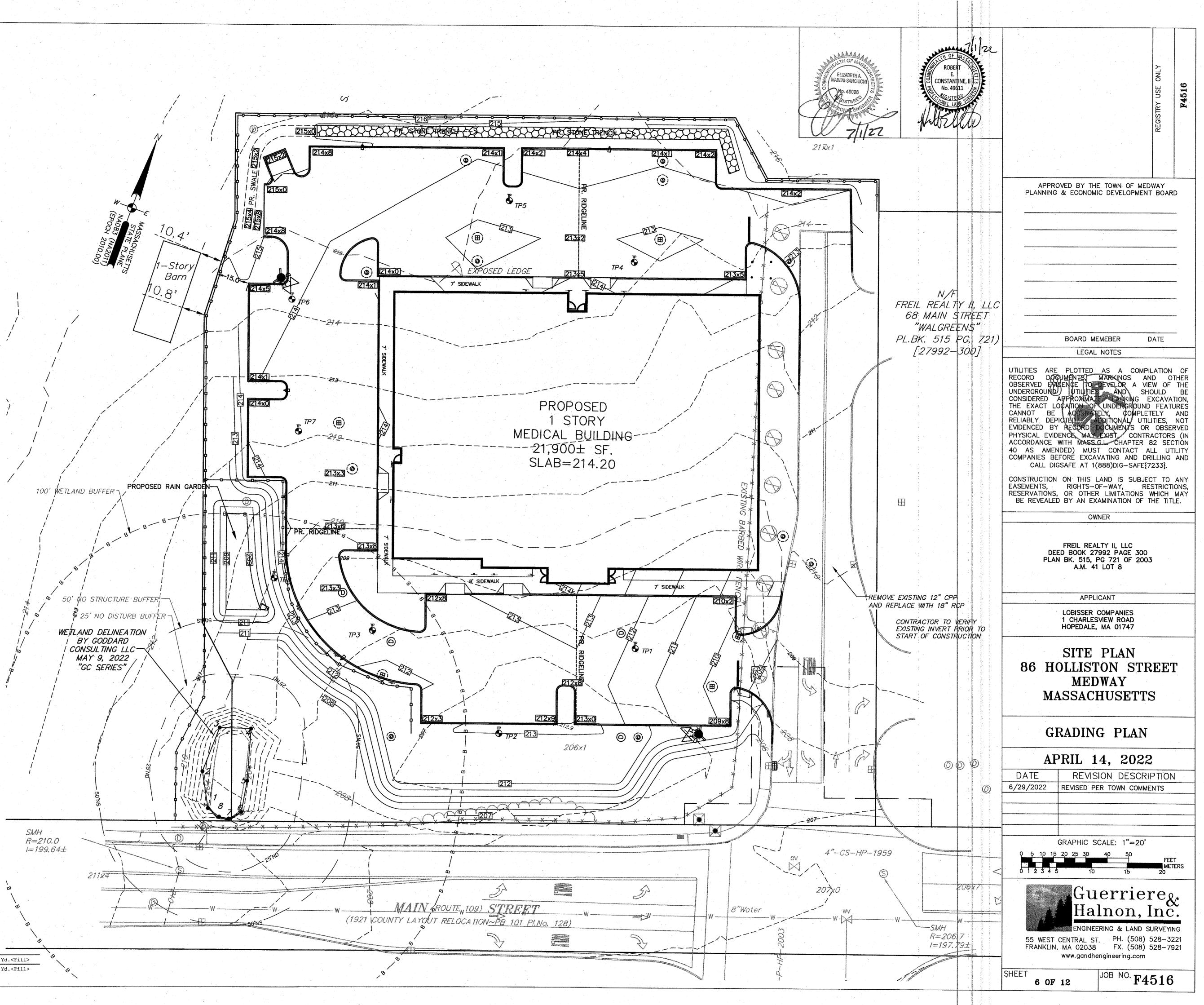
PARKING REQUIREMENTS PER ZONING: TABLE 3. SCHEDULE OF OFF STREET PARKING REQUIREMENTS

MEDICAL OFFICE OR CLINIC: 1 SPACE PER 300 SF. = 73 SPACES REQUIRED NUMBER OF EMPLOYEES = 41 PARKING SPACES PROVIDED = 88 SPACES TYPICAL PARKING SPACE: 18' X 9'

> ELECTRIC VEHICLE SPACES REQ'D = 4 ELECTRIC VEHICLE SPACES PROVIDED = 6



	LEG	END		
Ħ	CATCH BASIN		\$	LIGHT POLE
© ¹	DRAIN MANHOLE		പ	UTILITY POLE
Ē	ELECTRIC MANHOLE		-0	GUY WRE
S	SEWER MANHOLE		-0-	SIGN
0	MANHOLE	******	•	WETFLAG
GV	GAS VALVE		പ	UTILITY POLE
්ර්	GAS SHUT OFF VALVE		\$	PROP. STREET LIGHTING
××	WATER VALVE			
්ර්	WATER SHUT OFF VA	LVE	x 000.0	SPOT ELEVATION
Ķ	FIRE HYDRANT			RIPRAP
*****	000	EXISTING (CONTOUR	
	D	EXISTING L	DRAIN LIN	E
	W	EXISTING V	NATER LIN	ΙE



Cut/F	ill Summa	ary							1	\$	
Name	Cut Factor	Fill Factor	2d Area		Cut	Fill		Net	·····		
CUTFILL	1.000	1.000	80176 Sq. F	't.	709 Cu. Yo	. 6106 C	u. Yd.	5397 Cu.	Yd. <fill></fill>	&	· .
Totals			80176 Sq. F	Ϋ́t.	709 Cu. Yo	. 6106 C	u. Yd.	5397 Cu.	Yd. <fill></fill>		8

LEGEND

			·	
Ē	CATCH BASIN		\$	LIGHT POLE
D	DRAIN MANHOLE		Ъ.	UTILITY POLE
Ē	ELECTRIC MANHOLE		-0	GUY WIRE
S	SEWER MANHOLE		- 0 -	SIGN
0	MANHOLE		•	WETFLAG
сх	GAS VALVE	· · · · ·	പ	UTILITY POLE
රී	GAS SHUT OFF VALVE	-	\$	PROP. STREET LIGHTING
××	WATER VALVE			
*Š	WATER SHUT OFF VA	LVE	x 000.0	SPOT ELEVATION
¥	FIRE HYDRANT			RIPRAP
	000	EXISTING (ONTOUR	
	D	EXISTING L	RAIN LIN	E
	— <i>W</i> ———	EXISTING	WATER LIN	IE
			1	

STORM DRAINAGE NOTES

ALL DRAINAGE PIPES TO BE 12" RCP UNLESS OTHERWISE NOTED. WHERE LESS THAN 3.5' OF COVER IS PROVIDED, CLASS V RCP SHALL BE USED.

2. DMH #1, DMH #7, CB #4, AND CB #7 SHALL BE CONTECH CDS1515-3-C WATER QUALITY MANHOLES.

3. NON-METAL ROOFS ARE PROPOSED FOR THE PROPOSED BUILDING.

FILL MATERIAL BENEATH THE PROPOSED INFILTRATION CHAMBER SYSTEMS AND RAIN GARDEN SHALL BE REMOVED TO THE DEPTH OF THE NATURALLY OCCURRING SANDY MATERIAL IDENTIFIED IN THE TEST PIT SOIL LOGS, AND THE SYSTEM BROUGHT TO GRADE WITH SAND, CRUSHED STONE, OR OTHER ACCEPTABLE MATERIAL, AS DETERMINED BY THE DESIGN ENGINEER AND THE TOWN OF MEDWAY.

SPECIAL CONSIDERATION FOR INLET CONTROLS FOR EROSION COLLECTION BEFORE ENTERING DRAINAGE SYSTEM:

A. INSTALL SILT SACKS.

BARRIER AROUND CATCH BASIN, COMPOST SOCK OR EQUAL C. INSTALL FILTER FABRIC ON ALL DRAIN MANHOLE OUTLETS DISCHARGING TO INFILTRATION SYSTEM.

D. INSPECTIONS BEFORE AND AFTER STORM EVENTS ARE REQUIRED TO INSURE ADEQUACY OF EROSION CONTROL MEASURES.

CONTRACTOR & ARCHITECT ARE TO VERIFY SITE UTILITIES PRIOR TO

ALL PIPE GASKETS SHALL BE PRE-MOLDED NEOPRENE O-RING TYPE (300-11 B.(2)(A)).

SITE DRAINAGE INSTALLATIONS NOTES

1. EACH SUBSURFACE CHAMBER WILL BE INSTALLED SEPARATELY TO DESIGN ELEVATION.

2. INSTALL CONNECTIONS TO CATCH BASINS, WATER QUALITY MANHOLE (WQMH) AND DRAIN MANHOLES.

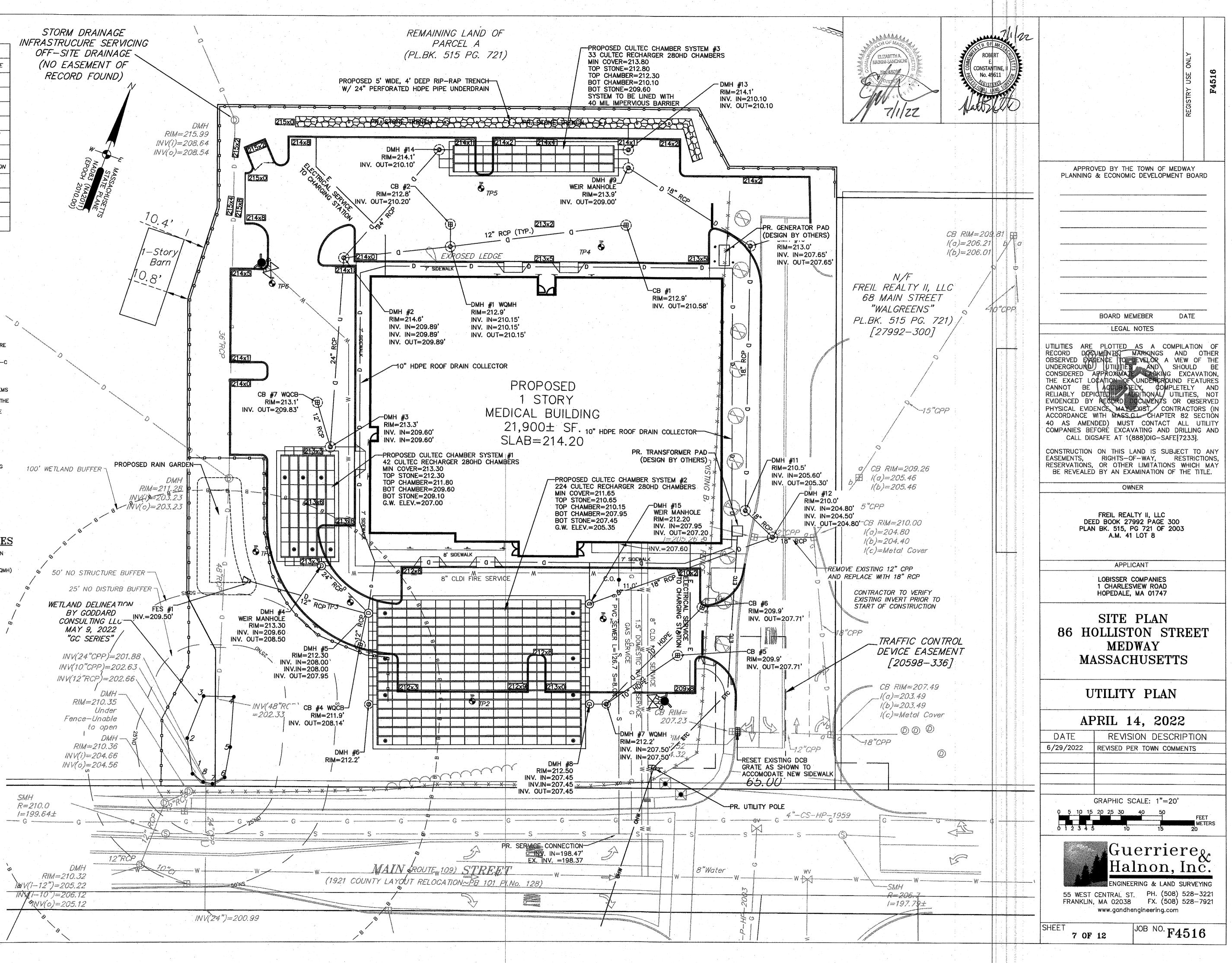
3. EXCAVATE AND INSTALL SUBSURFACE UNIT, BACKFILL W/ STONE MAINTAINING 18"-24" COVER AND AS-BUILT EACH SECTION.

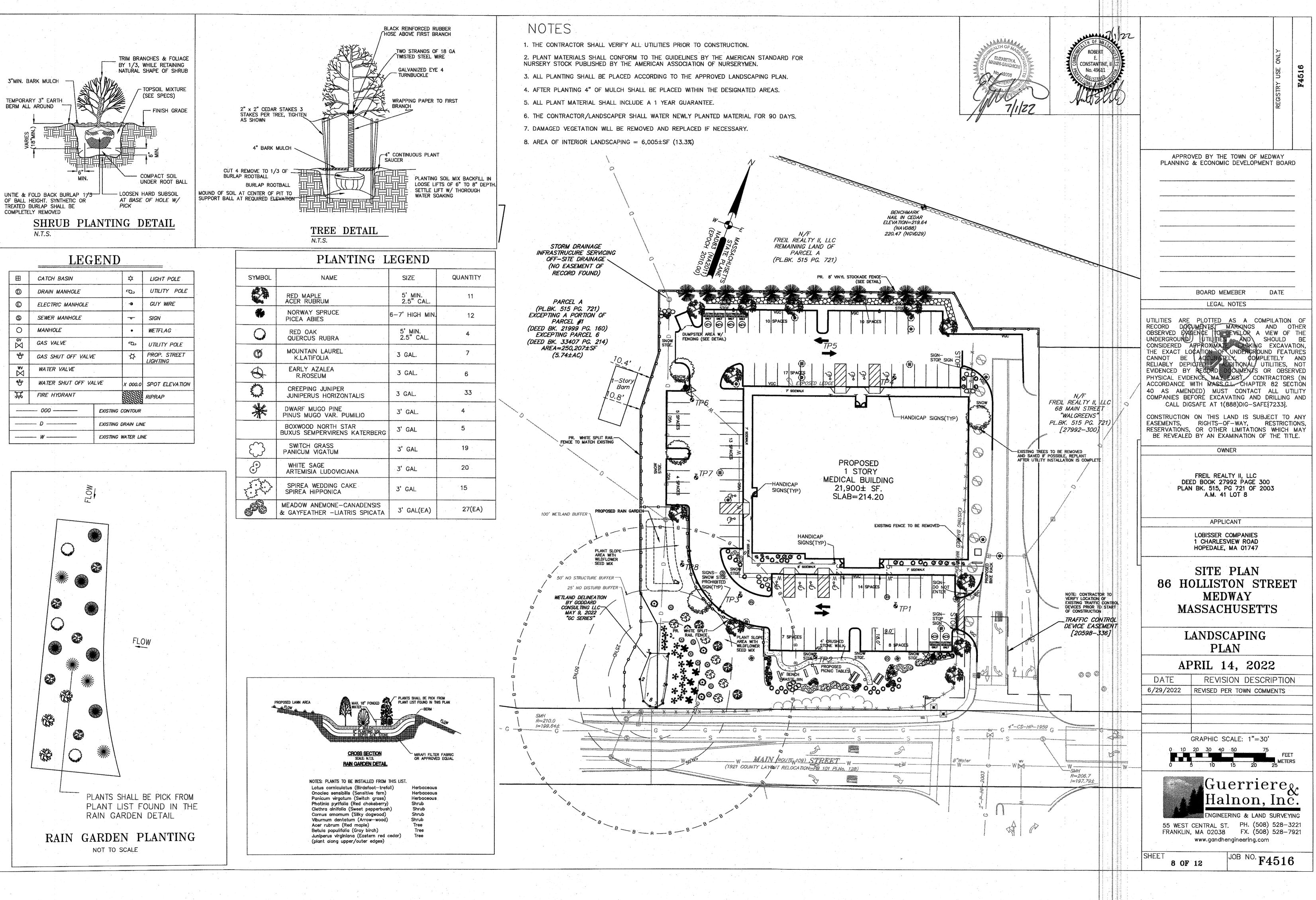
UTILITY NOTE

ALL UTILITIES SHALL BE CONSTRUCTED AND TESTED ACCORDING TO STATE AND LOCAL REGULATIONS.

ALL WATER AND SEWER UTILITIES TO COMPLY WITH THE TOWN OF MEDWAY DEPARTMENT OF PUBLIC WORKS STANDARD DETAILS. WHERE CONFLICTS EXIST, THE TOWNS SPECIFICATIONS SHALL CONTROL.

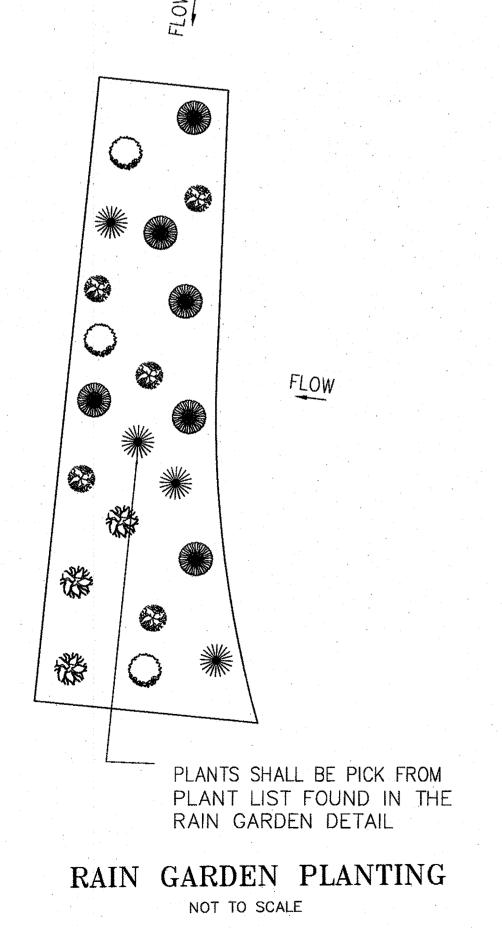
ALL WATER AND SEWER LINE WORK WITHIN THE STREET OR SIDEWALK MUST UTILIZE FLOWABLE FILL TO THE SATISFACTION OF THE MEDWAY DEPARTMENT OF PUBLIC WORKS.

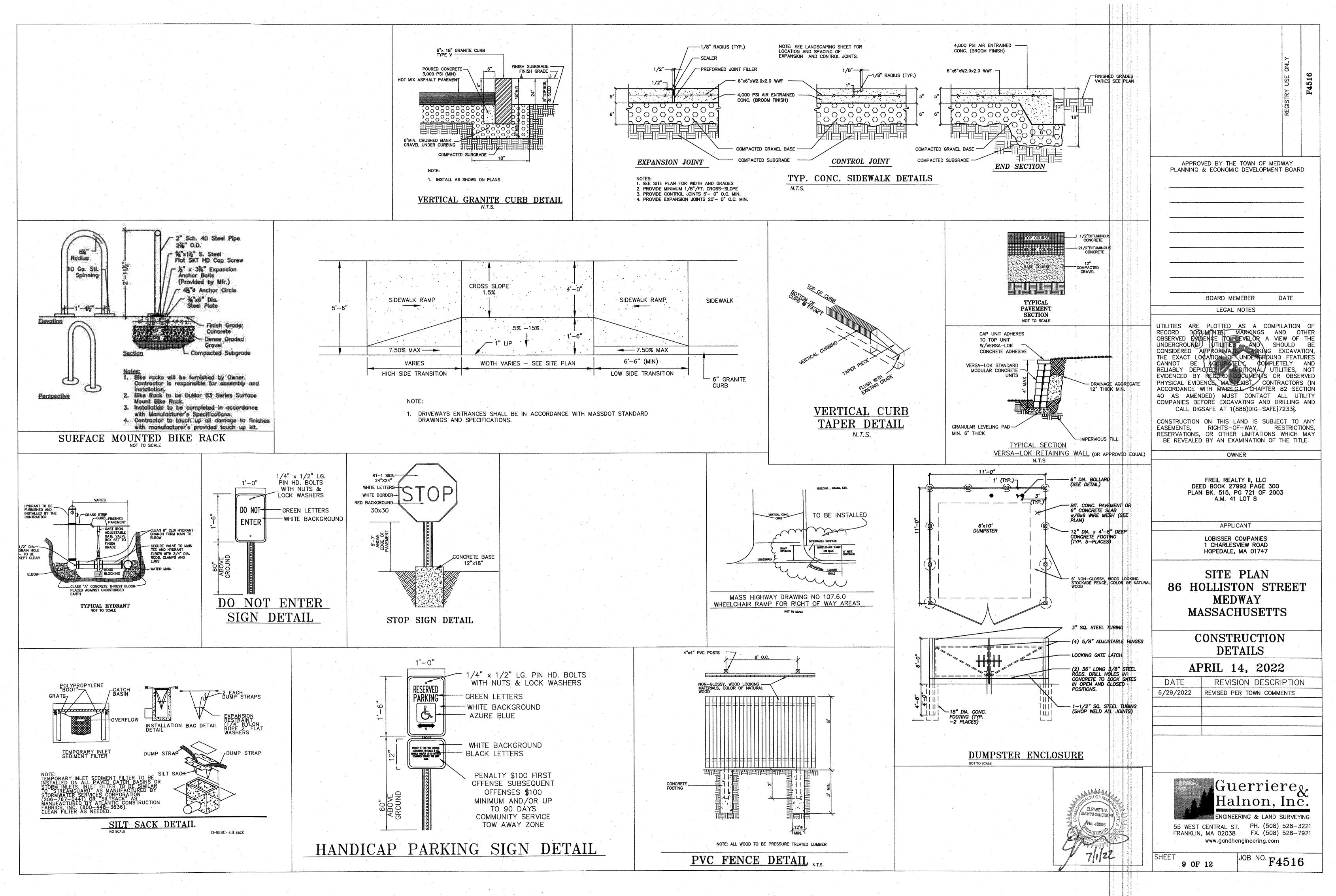




	DLLL	EIND		······
⊞	CATCH BASIN	\$	LIGHT POLE	
Ô	DRAIN MANHOLE		ې	UTILITY POLE
Ē	ELECTRIC MANHOLE	arra - a a a a a a a a a a a a a a a a a	-0	GUY WIRE
S	SEWER MANHOLE	• • • • • • • •	8	SIGN
0	MANHOLE		•	WETFLAG
°× S	GAS VALVE	- <u></u> ,	പ	UTILITY POLE
ර්	GAS SHUT OFF VALVE	-	\$	PROP. STREET LIGHTING
₩¥ X	WATER VALVE			
*ð	WATER SHUT OFF VA	LVE	x 000.0	SPOT ELEVATION
ж,	FIRE HYDRANT			RIPRAP
	000	EXISTING (CONTOUR	
	— D ———	EXISTING L	DRAIN LIN	E
	W	EXISTING	WATER LIN	<i>Ι</i> Ε
		••••••••••••••••••••••••••••••••••••••		

	PLANTING L	EGEND
SYMBOL	NAME	SIZE
	RED MAPLE ACER RUBRUM	5' MIN. 2.5" CAL.
*	NORWAY SPRUCE PICEA ABIES	6—7' HIGH MIN.
0	RED OAK QUERCUS RUBRA	5' MIN. 2.5" CAL.
Ø	MOUNTAIN LAUREL K.LATIFOLIA	3 GAL.
	EARLY AZALEA R.ROSEUM	3 GAL.
AND THE REAL PROPERTY OF	CREEPING JUNIPER JUNIPERUS HORIZONTALIS	3 GAL.
₩	DWARF MUGO PINE PINUS MUGO VAR. PUMILIO	3' GAL.
	BOXWOOD NORTH STAR BUXUS SEMPERVIRENS KATERBERG	3' GAL
	SWITCH GRASS PANICUM VIGATUM	3' GAL
P	WHITE SAGE ARTEMISIA LUDOVICIANA	3' GAL
	SPIREA WEDDING CAKE SPIREA HIPPONICA	3' GAL
<u>o</u> b	MEADOW ANEMONE-CANADENSIS & GAYFEATHER -LIATRIS SPICATA	3' GAL(EA)

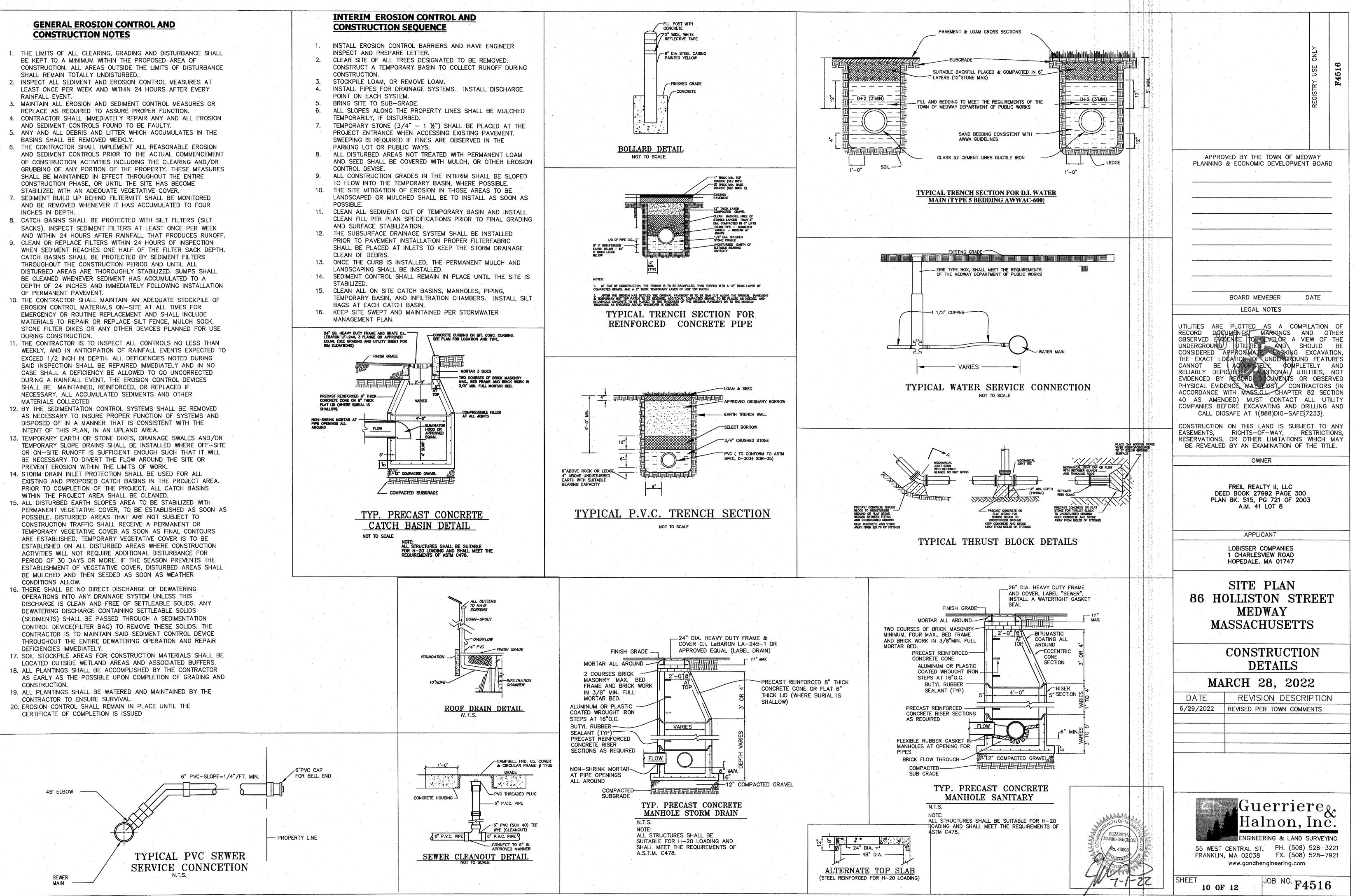


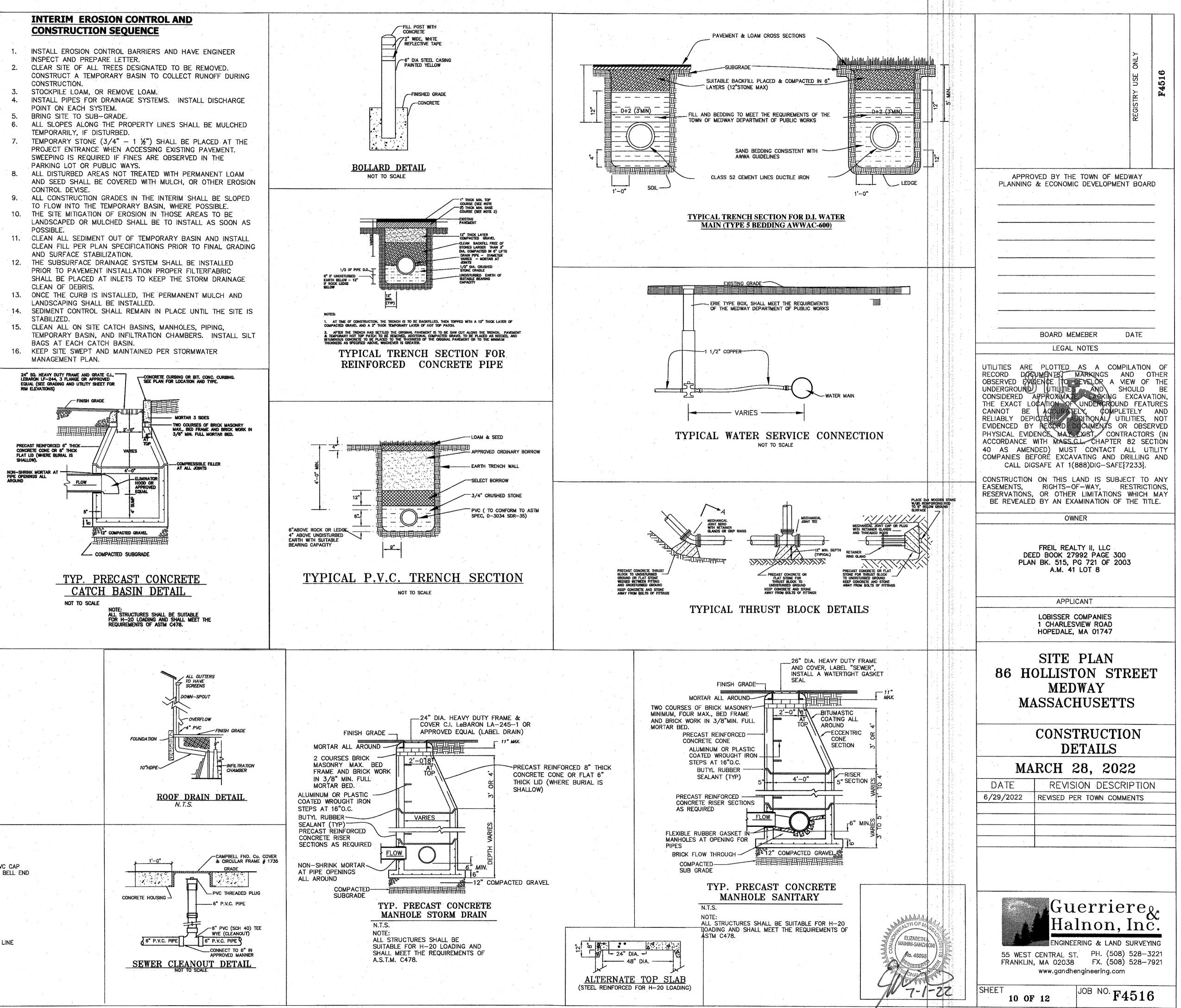


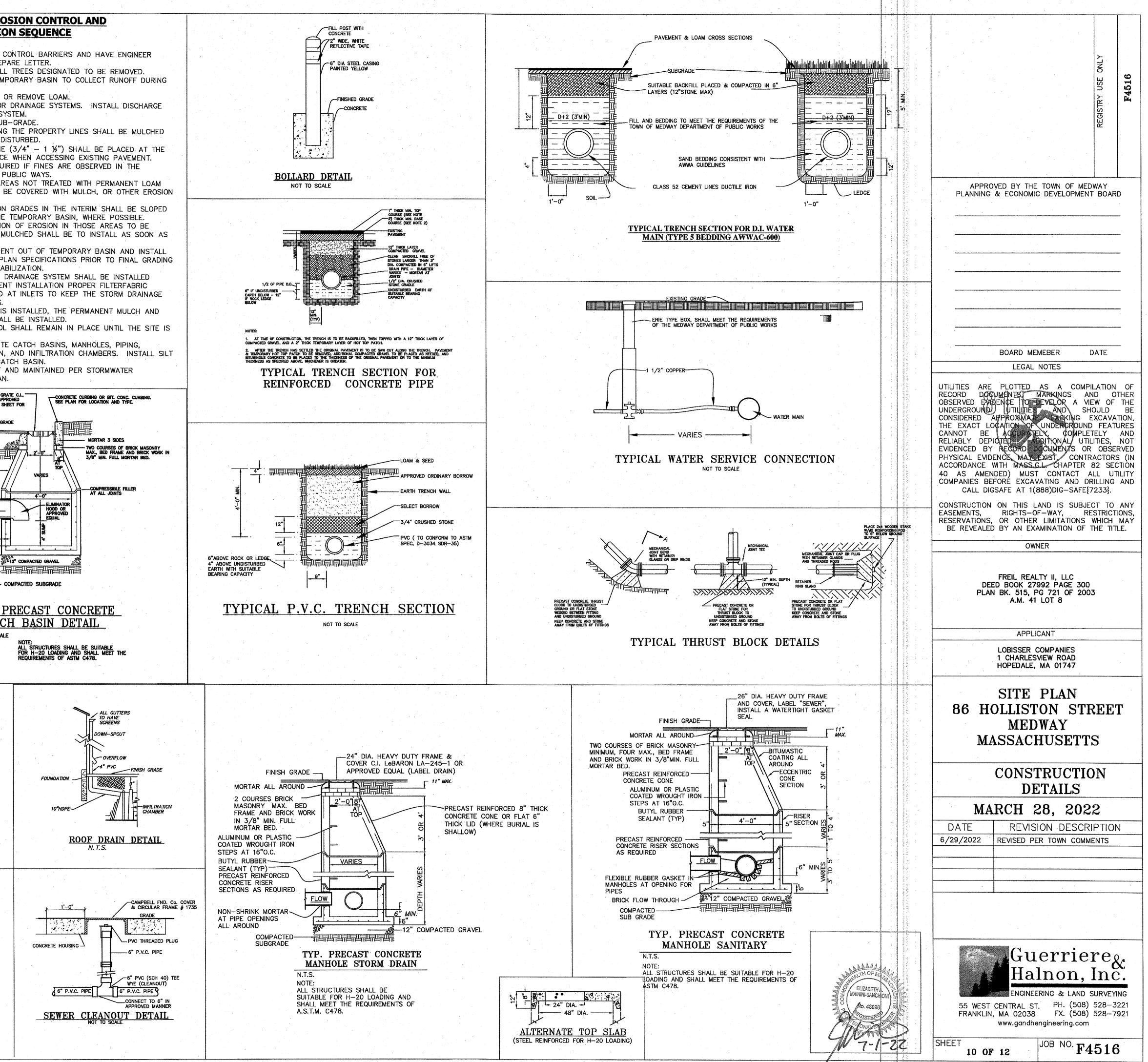
3DFranklin/F4516/DWG/F4516 detail.dwg, 7/1/2022 9:2

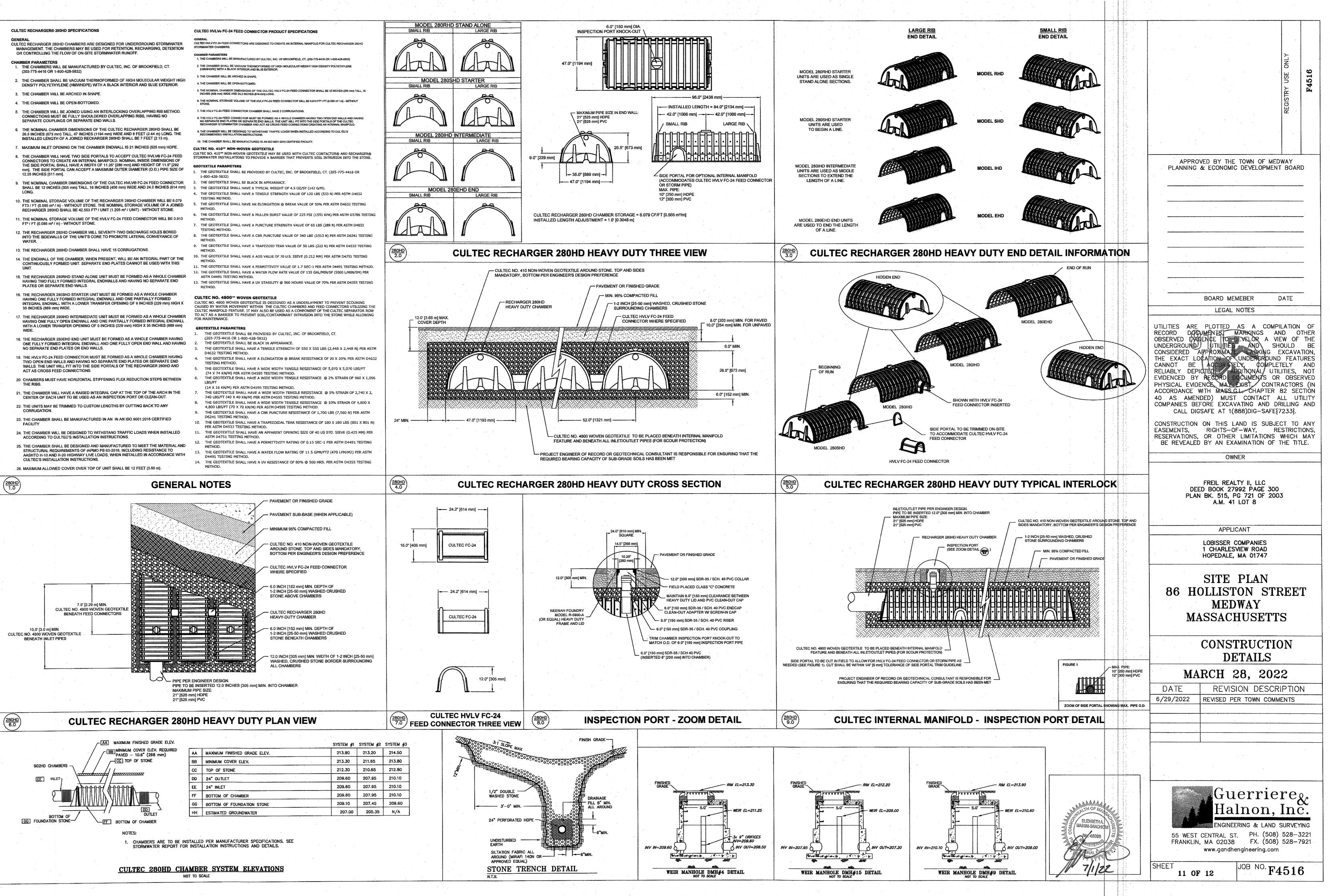
- BE KEPT TO A MINIMUM WITHIN THE PROPOSED AREA OF CONSTRUCTION. ALL AREAS OUTSIDE THE LIMITS OF DISTURBANCE
- RAINFALL EVENT.

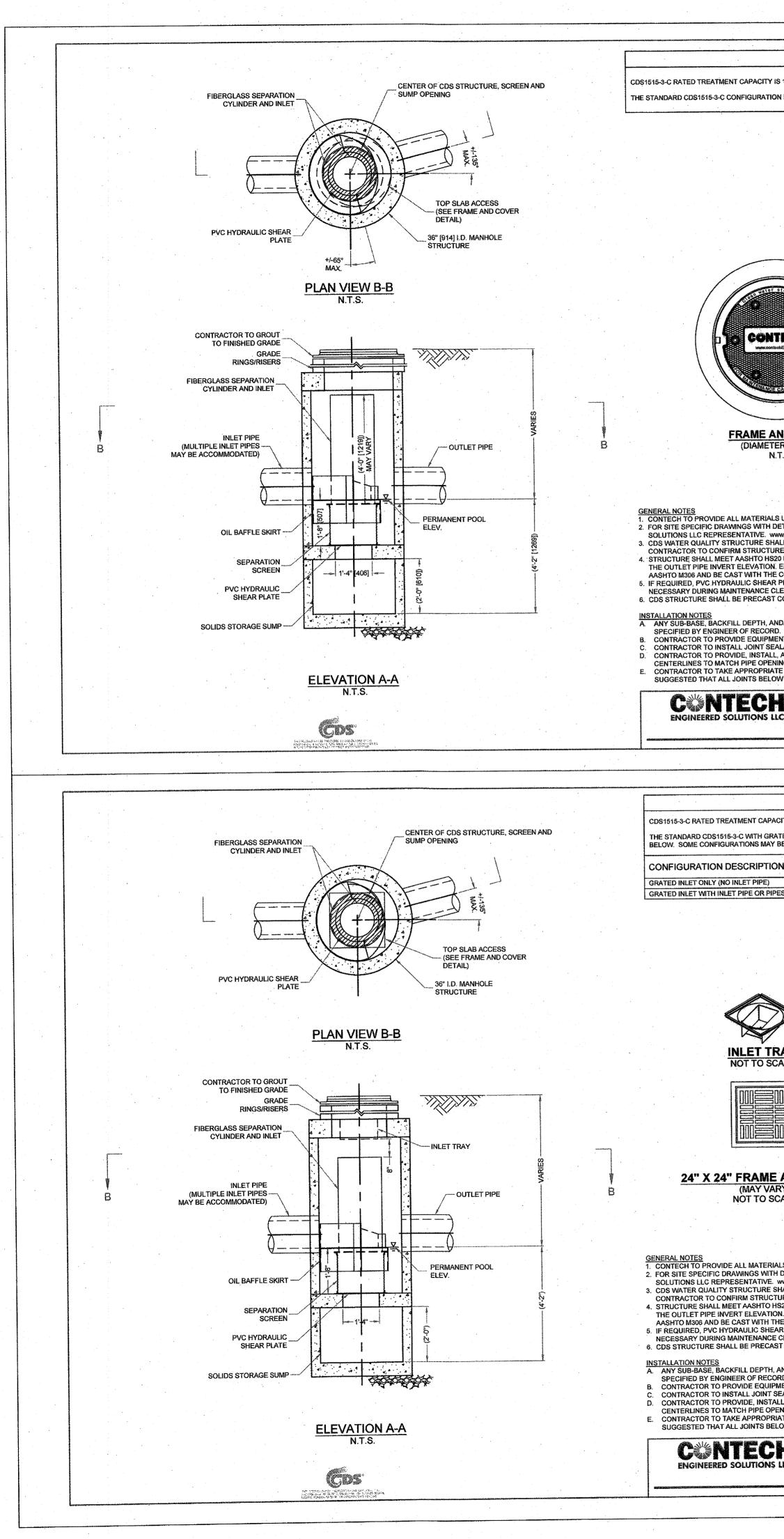
- AND SEDIMENT CONTROLS PRIOR TO THE ACTUAL COMMENCEMENT OF CONSTRUCTION ACTIVITIES INCLUDING THE CLEARING AND/OR GRUBBING OF ANY PORTION OF THE PROPERTY. THESE MEASURES SHALL BE MAINTAINED IN EFFECT THROUGHOUT THE ENTIRE CONSTRUCTION PHASE, OR UNTIL THE SITE HAS BECOME
- INCHES IN DEPTH.
- SACKS). INSPECT SEDIMENT FILTERS AT LEAST ONCE PER WEEK
- CATCH BASINS SHALL BE PROTECTED BY SEDIMENT FILTERS THROUGHOUT THE CONSTRUCTION PERIOD AND UNTIL ALL DISTURBED AREAS ARE THOROUGHLY STABILIZED. SUMPS SHALL BE CLEANED WHENEVER SEDIMENT HAS ACCUMULATED TO A DEPTH OF 24 INCHES AND IMMEDIATELY FOLLOWING INSTALLATION
- EROSION CONTROL MATERIALS ON-SITE AT ALL TIMES FOR EMERGENCY OR ROUTINE REPLACEMENT AND SHALL INCLUDE MATERIALS TO REPAIR OR REPLACE SILT FENCE, MULCH SOCK, STONE FILTER DIKES OR ANY OTHER DEVICES PLANNED FOR USE DURING CONSTRUCTION.
- EXCEED 1/2 INCH IN DEPTH. ALL DEFICIENCIES NOTED DURING SAID INSPECTION SHALL BE REPAIRED IMMEDIATELY AND IN NO CASE SHALL A DEFICIENCY BE ALLOWED TO GO UNCORRECTED DURING A RAINFALL EVENT. THE EROSION CONTROL DEVICES SHALL BE MAINTAINED, REINFORCED, OR REPLACED IF NECESSARY. ALL ACCUMULATED SEDIMENTS AND OTHER MATERIALS COLLECTED
- AS NECESSARY TO INSURE PROPER FUNCTION OF SYSTEMS AND DISPOSED OF IN A MANNER THAT IS CONSISTENT WITH THE
- TEMPORARY SLOPE DRAINS SHALL BE INSTALLED WHERE OFF-SITE OR ON-SITE RUNOFF IS SUFFICIENT ENOUGH SUCH THAT IT WILL BE NECESSARY TO DIVERT THE FLOW AROUND THE SITE OR PREVENT EROSION WITHIN THE LIMITS OF WORK.
- PRIOR TO COMPLETION OF THE PROJECT, ALL CATCH BASINS WITHIN THE PROJECT AREA SHALL BE CLEANED.
- PERMANENT VEGETATIVE COVER, TO BE ESTABLISHED AS SOON AS POSSIBLE. DISTURBED AREAS THAT ARE NOT SUBJECT TO CONSTRUCTION TRAFFIC SHALL RECEIVE A PERMANENT OR TEMPORARY VEGETATIVE COVER AS SOON AS FINAL CONTOURS ARE ESTABLISHED. TEMPORARY VEGETATIVE COVER IS TO BE ESTABLISHED ON ALL DISTURBED AREAS WHERE CONSTRUCTION ACTIVITIES WILL NOT REQUIRE ADDITIONAL DISTURBANCE FOR PERIOD OF 30 DAYS OR MORE. IF THE SEASON PREVENTS THE ESTABLISHMENT OF VEGETATIVE COVER, DISTURBED AREAS SHALL BE MULCHED AND THEN SEEDED AS SOON AS WEATHER
- OPERATIONS INTO ANY DRAINAGE SYSTEM UNLESS THIS DISCHARGE IS CLEAN AND FREE OF SETTLEABLE SOLIDS. ANY DEWATERING DISCHARGE CONTAINING SETTLEABLE SOLIDS (SEDIMENTS) SHALL BE PASSED THROUGH A SEDIMENTATION CONTROL DEVICE(FILTER BAG) TO REMOVE THESE SOLIDS. THE DEFICIENCIES IMMEDIATELY.
- LOCATED OUTSIDE WETLAND AREAS AND ASSOCIATED BUFFERS. AS EARLY AS THE POSSIBLE UPON COMPLETION OF GRADING AND
- CERTIFICATE OF COMPLETION IS ISSUED



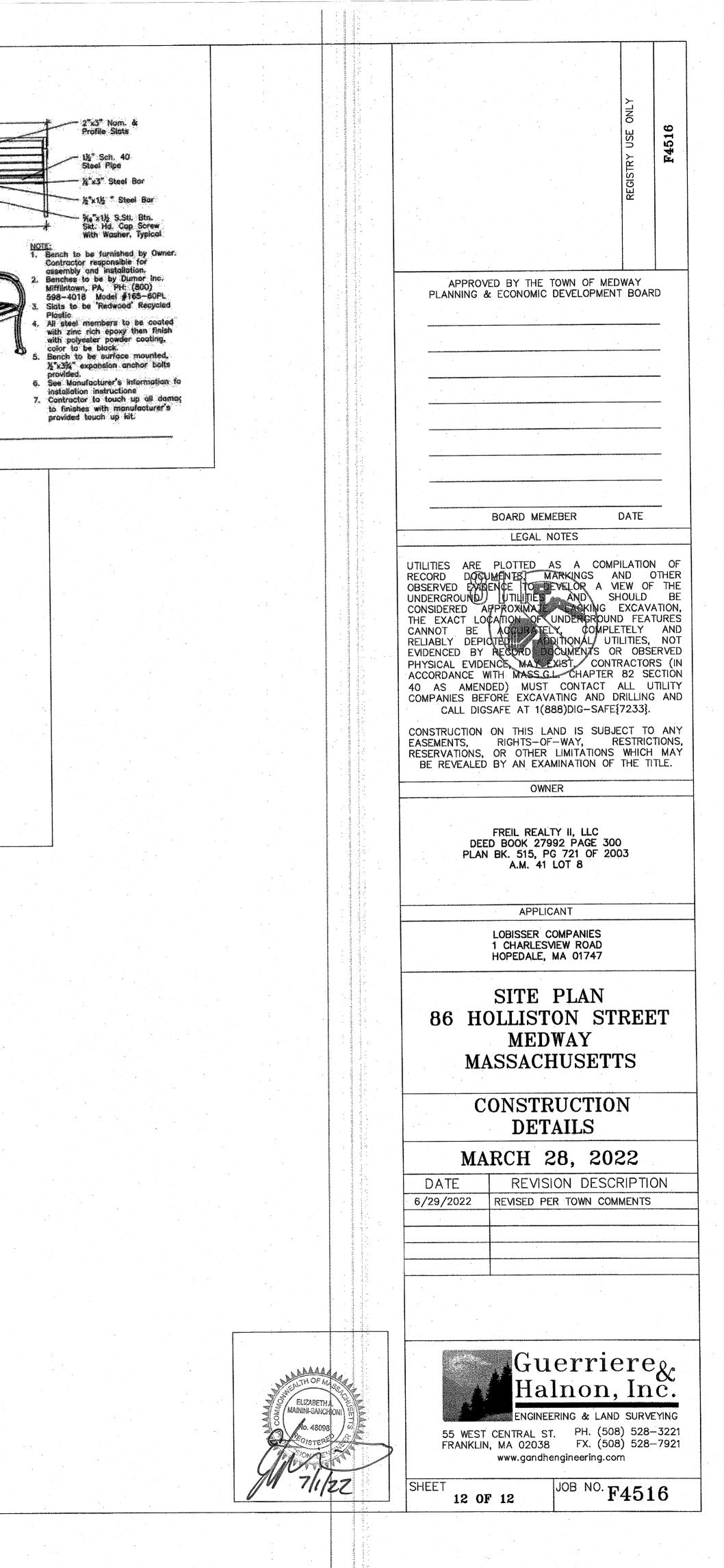


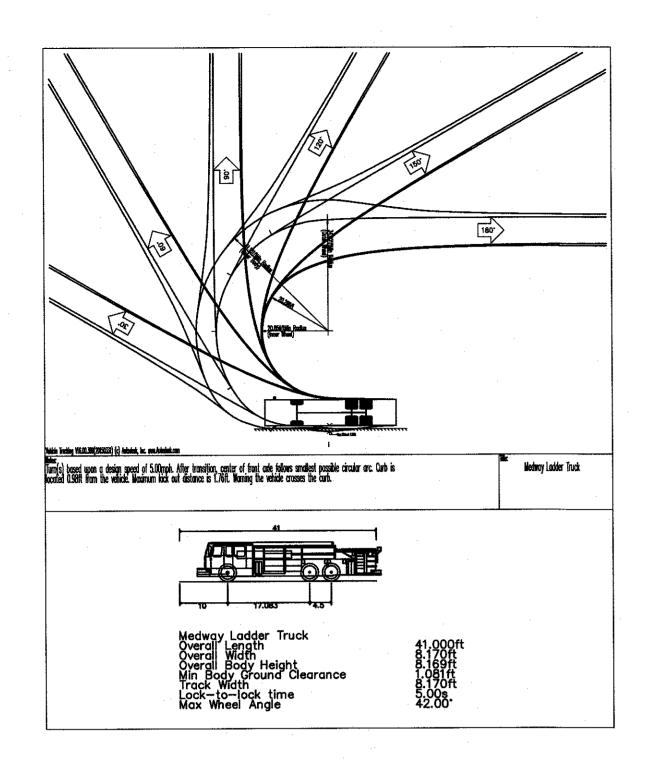






CDS1515	5-3-C DESIGN NOTES	
IS 1.0 CFS, OR PER LO	OCAL REGULATIONS.	1-2'-3%6"-16'-3"
		- Bench to be
		Mounted Below Rubberized Safety to Surface (Shown) or Surface Mounted On
		Surface (Shown) or Surface Mounted On Conc. Pad Per Backless Bench Detail. See 2/L-7.4.
		- 4000 PSi Conc. Pad Compacted Dense
•		3" /-615/16" Graded Gravel Tamper-Resistant Anchor Bolts.
	SITE SPECIFIC DATA REQUIREMENTS	Shim as Needed
	STRUCTURE ID WATER QUALITY FLOW RATE (CFS OR L/s)	
	PEAK FLOW RATE (CFS OR L/s) RETURN PERIOD OF PEAK FLOW (YRS) SCREEN APERTURE (2400 OR 4700)	
₀∕∕	PIPE DATA: I.E. MATERIAL DIAMETER INLET PIPE 1 INLET PIPE 2	STEEL FRAME BOLTING ENLARGEMENT
	OUTLET PIPE	(1) 6' Bench With Back
AND COVER	ANTI-FLOTATION BALLAST WIDTH HEIGHT NOTES/SPECIAL REQUIREMENTS:	$(1) \frac{D}{Scale: 3/4' = 1'-0''}$
TER VARIES) N.T.S.	* PER ENGINEER OF RECORD	
	L	
LS UNLESS NOTED OT DETAILED STRUCTUR	THERWISE. RE DIMENSIONS AND WEIGHT, PLEASE CONTACT YOUR CONTECH ENGINEERED	
HALL BE IN ACCORDA	INCE WITH ALL DESIGN DATA AND INFORMATION CONTAINED IN THIS DRAWING. IMENTS OF PROJECT. ISUMING EARTH COVER OF 0' - 2', AND GROUNDWATER ELEVATION AT, OR BELOW, IORD TO CONFIRM ACTUAL GROUNDWATER ELEVATION. CASTINGS SHALL MEET	1/4" x 1/2" LG. PIN HD. BOLTS WITH NUTS & LOCK WASHERS
E CONTECH LOGO R PLATE IS PLACED C CLEANING.	ON SHELF AT BOTTOM OF SCREEN CYLINDER. REMOVE AND REPLACE AS	SNOW STORAGEWHITE BACKGROUND
	RMING TO ASTM C-478 AND AASHTO LOAD FACTOR DESIGN METHOD.	PROHIBITED- BLACK LETTERING
ALANT RETAKEN AL	NT LIFTING AND REACH CAPACITY TO LIFT AND SET THE CDS MANHOLE STRUCTURE. L STRUCTURE SECTIONS AND ASSEMBLE STRUCTURE. TAND OUTLET PIPE(S). MATCH PIPE INVERTS WITH ELEVATIONS SHOWN. ALL PIPE	
NING CENTERI INES	SSURE UNIT IS WATER TIGHT, HOLDING WATER TO FLOWLINE INVERT MINIMUM. IT IS	
H	CDS1515-3-C	
	ONLINE CDS STANDARD DETAIL	60" ABOVE GROUND
CDS1	515-3-C DESIGN NOTES	SNOW STORAGE SIGN
ATED INLET CONFIGU	PER LOCAL REGULATIONS. URATION IS SHOWN. ALTERNATE CONFIGURATIONS ARE AVAILABLE AND ARE LISTED	
P BE COMBINED TO SU	UIT SITE REQUIREMENTS.	
PES		
	SITE SPECIFIC	
RAY	DATA REQUIREMENTS	
CALE	WATER QUALITY FLOW RATE (CFS OR L/s) PEAK FLOW RATE (CFS OR L/s) RETURN PERIOD OF PEAK FLOW (YRS)	
	SCREEN APERTURE (2400 OR 4700) PIPE DATA: I.E. MATERIAL DIAMETER	
	INLET PIPE 1 INLET PIPE 2 OUTLET PIPE	
	RIM ELEVATION ANTI-FLOTATION BALLAST WIDTH HEIGHT	
E AND GRAT ARY) ICALE	NOTES/SPECIAL REQUIREMENTS:	
	* PER ENGINEER OF RECORD	
IALS UNLESS NOTED	OTHERWISE.	
H DETAILED STRUCT www.ContechES.com SHALL BE IN ACCORE	TURE DIMENSIONS AND WEIGHT, PLEASE CONTACT YOUR CONTECH ENGINEERED DANCE WITH ALL DESIGN DATA AND INFORMATION CONTAINED IN THIS DRAWING.	
HS20 LOAD RATING, A ON. ENGINEER OF RE	ASSUMING EARTH COVER OF 0' - 2', AND GROUNDWATER ELEVATION AT, OR BELOW, ECORD TO CONFIRM ACTUAL GROUNDWATER ELEVATION. CASTINGS SHALL MEET	
E CLEANING	D ON SHELF AT BOTTOM OF SCREEN CYLINDER. REMOVE AND REPLACE AS FORMING TO ASTM C-478 AND AASHTO LOAD FACTOR DESIGN METHOD.	
ORD. PMENT WITH SUFFICI	ATION PROVISIONS ARE SITE-SPECIFIC DESIGN CONSIDERATIONS AND SHALL BE IENT LIFTING AND REACH CAPACITY TO LIFT AND SET THE CDS MANHOLE STRUCTURE.	
SEALANT BETWEEN / ALL, AND GROUT INLE PENING CENTERLINES	ALL STRUCTURE SECTIONS AND ASSEMBLE STRUCTURE. ET AND OUTLET PIPE(S). MATCH PIPE INVERTS WITH ELEVATIONS SHOWN. ALL PIPE S.	
ELOW PIPE INVERTS A		
S LLC	CDS1515-3-C ONLINE CDS	
	and water to a strend to similar dealer that and all to the	
	STANDARD DETAIL	





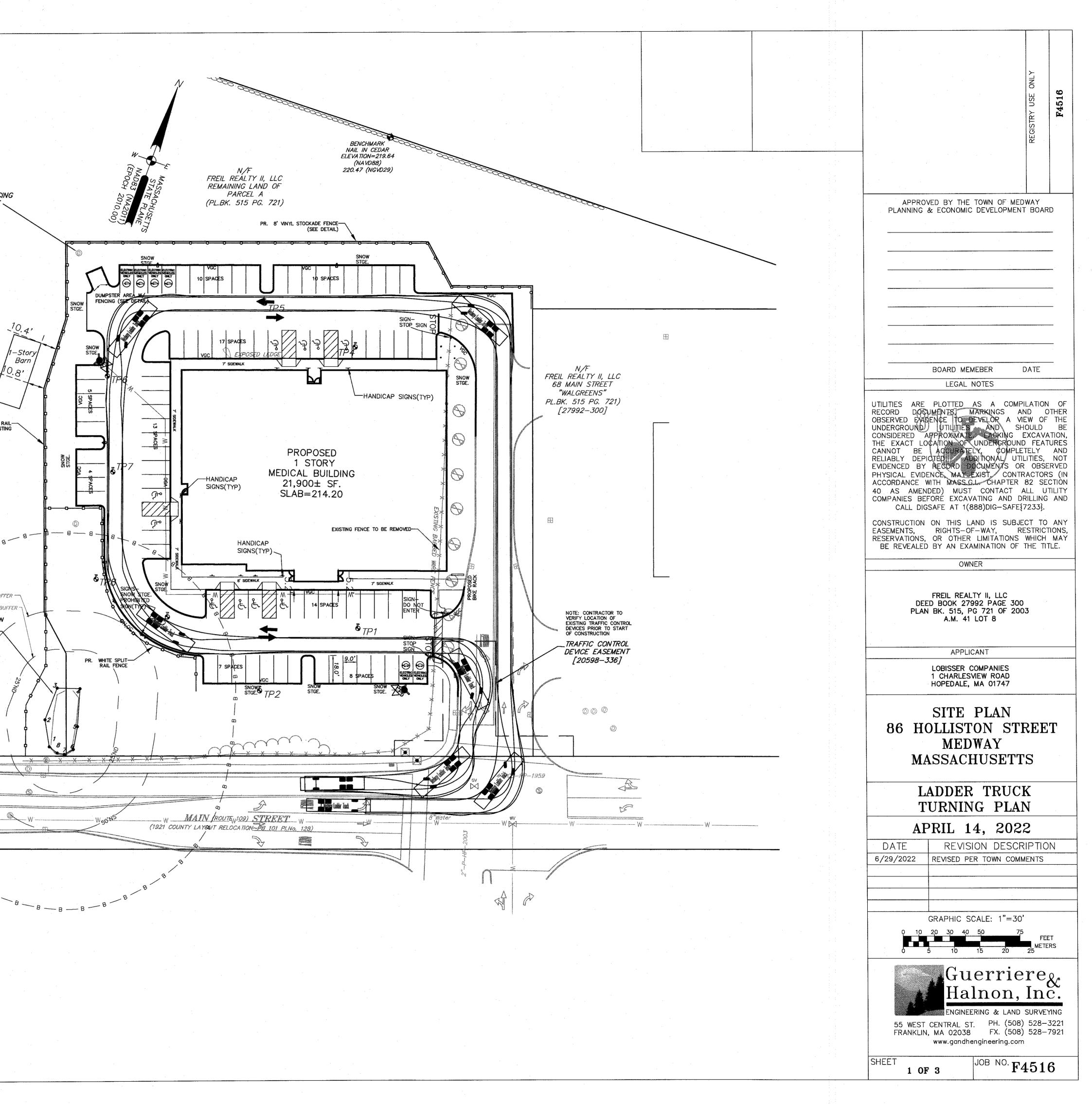
		END		
⊞	CATCH BASIN		\$	LIGHT POLE
Ø	DRAIN MANHOLE		ц С	UTILITY POLE
Ē	ELECTRIC MANHOLE		-0	GUY WIRE
S	SEWER MANHOLE		-	SIGN
0	MANHOLE	•	WETFLAG	
с×Х	GAS VALVE	ل	UTILITY POLE	
්	GAS SHUT OFF VALVE		Ø	PROP. STREET LIGHTING
wv ⊠	WATER VALVE		VGC	VERTICAL GRANITE CURB
ð	WATER SHUT OFF VA	LVE	x 000.0	SPOT ELEVATION
¥6	FIRE HYDRANT			RIPRAP
	000	EXISTING CONTOUR		
	D	EXISTING I	DRAIN LIN	E
	W	EXISTING	WATER LIN	VE

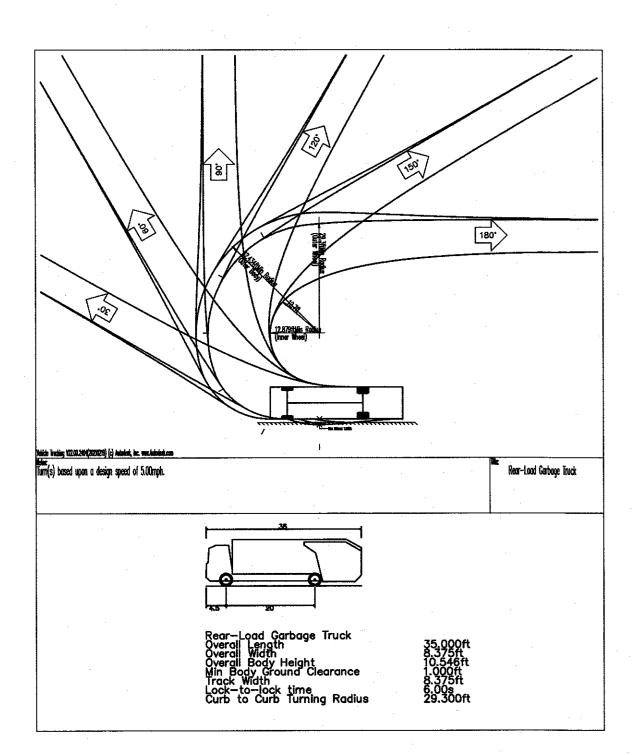
LEGEND

STORM DRAINAGE INFRASTRUCURE SERVICING OFF-SITE DRAINAGE (NO EASEMENT OF RECORD FOUND)

PR. WHITE SPLIT RAIL

100' WETLAND BUFFER 50' NO STRUCTURE BUFFER 25' NO DISTURB BUFFER -WETLAND DELINEATION BY GODDARD CONSULTING LLC MAY 9, 2022 "GC SERIES"





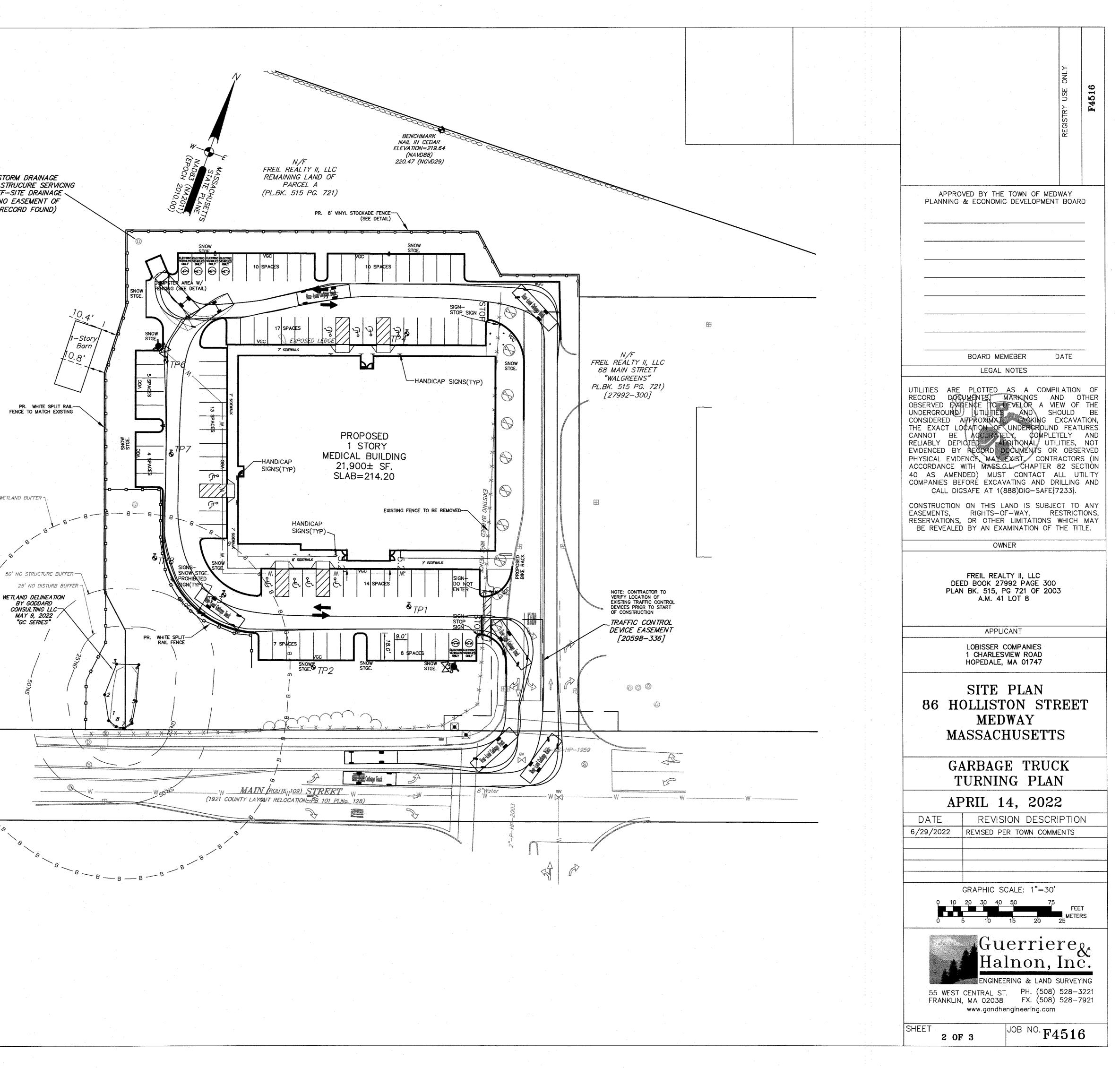
STORM DRAINAGE INFRASTRUCURE SERVICING OFF-SITE DRAINAGE (NO EASEMENT OF RECORD FOUND)

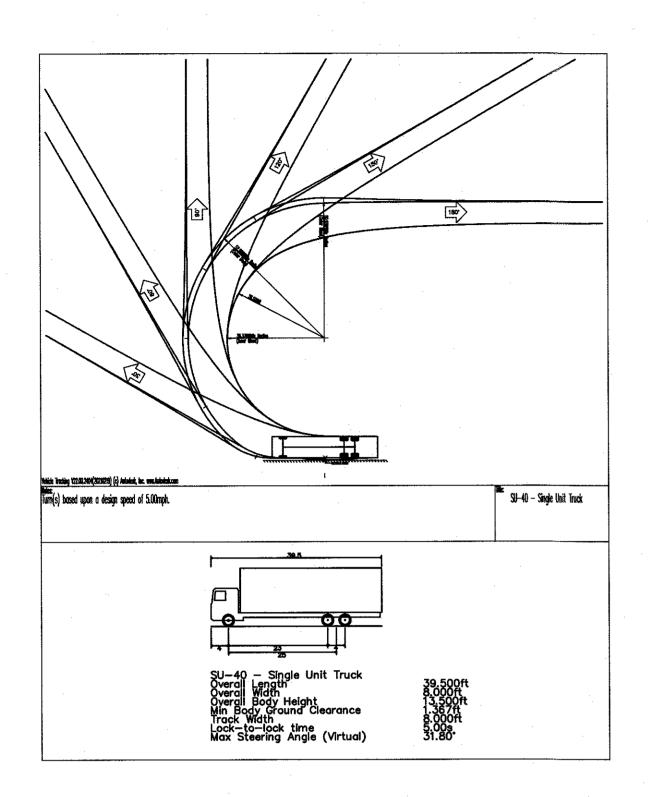
PR	. ١	MHIT	e sf	
FENCE	TO	MAT	[CH	EXI

100' WETLAND BUFFER

Ħ	CATCH BASIN		\$	LIGHT POLE
D	DRAIN MANHOLE	പ	UTILITY POLE	
Ē	ELECTRIC MANHOLE		· - • ·	GUY WIRE
S	SEWER MANHOLE		SIGN	
0	MANHOLE	•	WETFLAG	
GV M	GAS VALVE		ى س	UTILITY POLE
්රී	GAS SHUT OFF VALVE		Þ	PROP. STREET LIGHTING
wv ⊠	WATER VALVE		VGC	VERTICAL GRANITE CURB
*а	WATER SHUT OFF VA	LVE	x 000.0	SPOT ELEVATION
¥	FIRE HYDRANT			RIPRAP
	000	EXISTING CONTOUR		
	D	EXISTING	DRAIN LIN	E

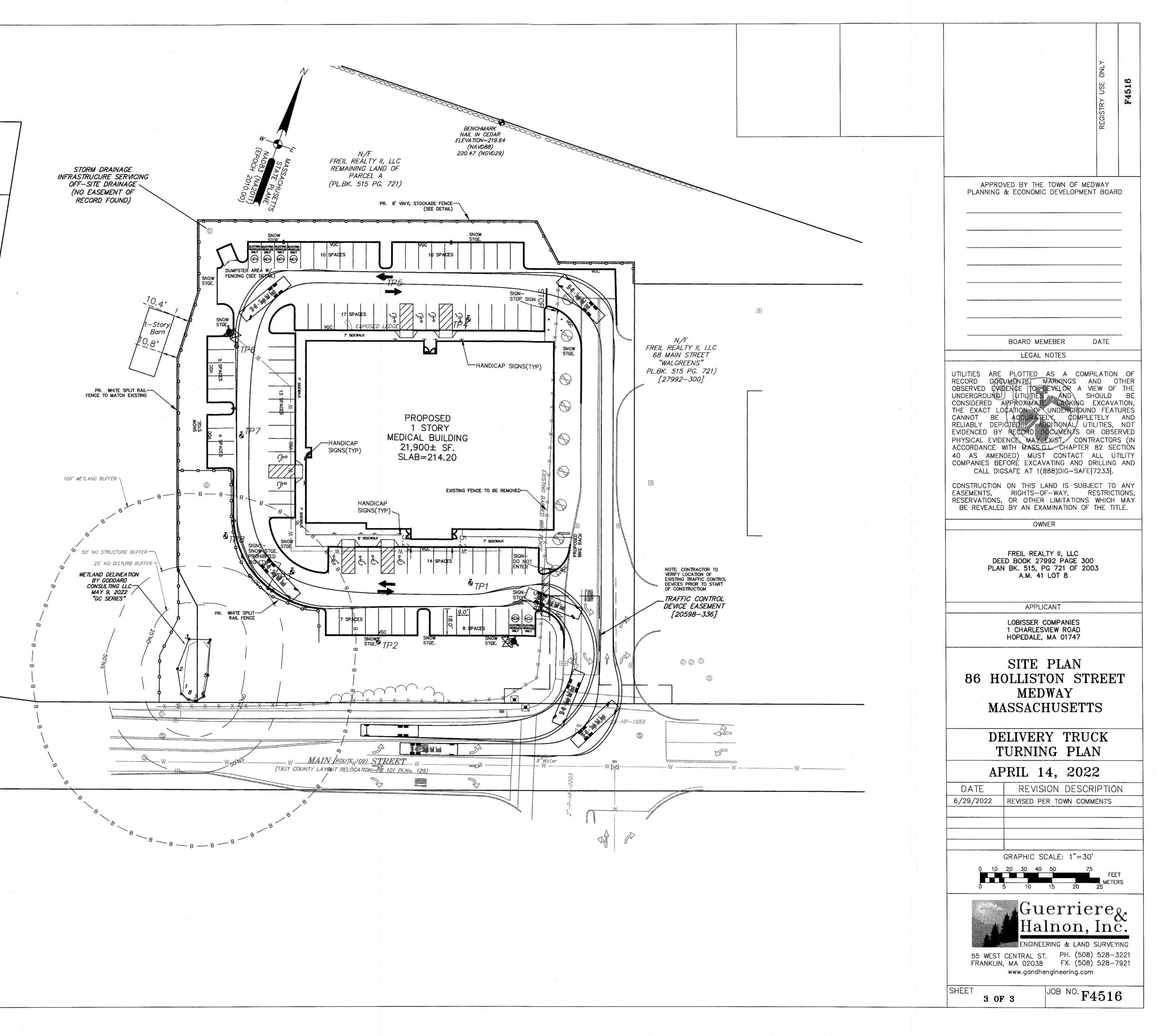
TECEND

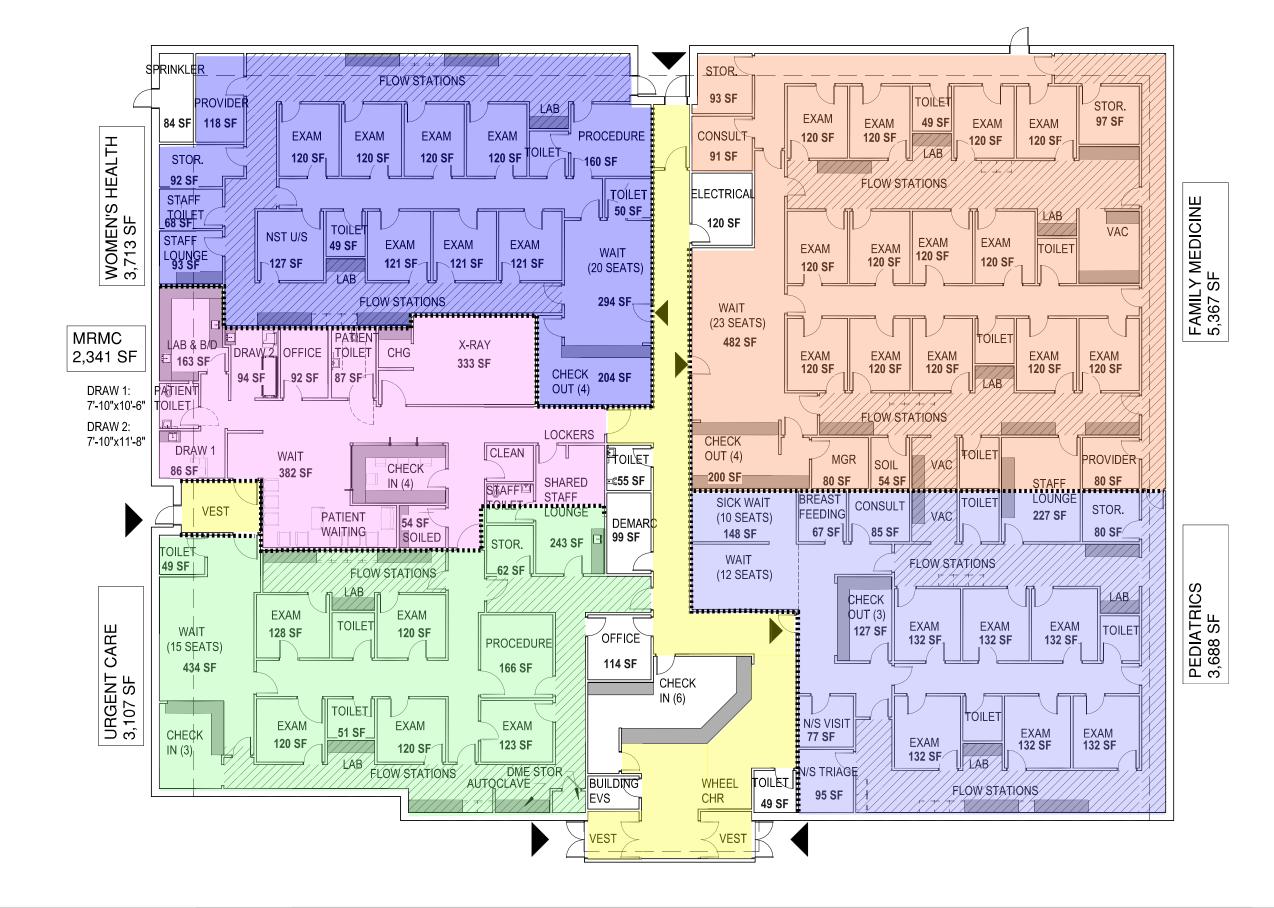




		END			
E	CATCH BASIN		\$	LIGHT POLE	
Ō	DRAIN MANHOLE		Ср	UTILITY POLE	
Ē	ELECTRIC MANHOLE	· · ·	-0	GUY WIRE	
S	SEWER MANHOLE		-0-	SIGN	
0	MANHOLE	•	WETFLAG		
GV	GAS VALVE	പ	UTILITY POLE		
లి	GAS SHUT OFF VALVE	-	Ø	PROP. STREET LIGHTING	
wv X	WATER VALVE		VGC	VERTICAL GRANITE CURB	
*So	WATER SHUT OFF VA	LVE	x 000.0	SPOT ELEVATION	
ж,	FIRE HYDRANT			RIPRAP	
	000	EXISTING CONTOUR			
	D	EXISTING DRAIN LINE			
	W	EXISTING WATER LINE			

LEGEND







Ground Floor Plan 04/07/22 SCALE: 1/16" = 1'-0"



🗰 SLAM

The **SILIAIM** Collaborative Boston, MA Phone: 617 357.1800 www.**slamcoll**.com

0.0 0.1 0.1 0.1 0.0 0.0 0.0 22 08 10 12 7.5 3 16 0.7 0.4 0.3 0.3 0.4 0.6 08 0.8 0.8 0.6 0.5 0.3 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.1 8 0.8 1.8 3.1 4.0 25 2.8 1.5 0.8 0.4 0.3 0.2 0.3 0.4 00 0.5 0.1 0.8 0.6 1.2 2.0 2.3 2.3 4.7 2.1 0.7 0.4 0.2 0.7 0.2 0.2 0.3 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 21,900± SF. SLAB=214.20 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 K 0.2 0.3 0.4 07 0.0 0.1 0.7 0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 04 0.4 0.5 0.5 0.4 0.3 0.2 0.1 0.4 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.1 0.1 3.8 8.2868 41 02 2.4 1.8 12 0.8 5 0.4 0.4 0.5 0.9 1.4 15 2.9 2.8 2.2 11 02 0.2 0.2 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0 0.0 00 00 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 ••• 00 00 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 • • • • ••• Scale: 1 inch= 50 Ft.

	Prepared By:	Job Name:	Scale: as noted	Project ID: 192568	The Lighting Analysis, ezLayout, Energy Analysis and/or Visual Simulation ("Lighting Desig prediction of lighting system performance based upon design parameters and information
Houseon Accorney	Holbrook-Associated 35 Reservoir Park Drive	Medical Office Building Medway, MA	Date:7/6/2022	Rep: AH	provided by others have not been field verified by Holbrook-Associated and therefore act Holbrook-Associated recommends that design parameters and other information be field
HOLBROOK - ASSOCIATED Electrical Manufacturer's Representatives	Rockland, MA 02370		Filename: MOB REVISED 2.4	AGI	Holbrook-Associated neither warranties, either implied or stated with regard to actual m by the Lighting Design. Holbrook-Associated neither warranties, either implied or stated, intent as compliant with any applicable regulatory code requirements with the exceptior
			Drawn By: JHolbrook		The Lighting design is issued, in whole or in part, as advisory documents for informational project's construction documentation package.
	Filename: C:\Users\iholbrook\Documents\AGI32 - Designs\20	22 Designs\Andrew Holbrook\Medical Office Building\MOB REVISED 2.AGI	- ·		

0	• 0.0	• • •	• • •	• • •	• • •	• • •	• • •	• • •	• • •	• • •	• • •	• • •	• • •	• • •	•	
	• •	-	-	-	-	_	-	-	-	-	-	-	_	-		
	• 0.0															
	• 0.0	-	-	-	-		-		-	-		-		-		
	0 .0	-	-	-	-	_	-	-	-	-	_	-	-	-	_	
0.0	• 0.0	0.0														
0.0	• 0.0	• 0.0	• 0.0	• 0.0	0 .0	• 0.0	• 0.0	• 0.0	• 0.0	0 .0	• 0.0	• 0.0	• 0.0	• 0.0	0.0	
0.0	0 .0	• 0.0	0.0													
0.0	0 .0	• 0.0	0.0													
0.0	0 .0	• 0.0	0 .0	• 0.0	• 0.0	0 .0	• 0.0	0 .0	• 0.0	0.0						
0.0	0 .0	• 0.0	• 0.0	• 0.0	• 0.0	0 .0	• 0.0	• 0.0	• 0.0	• 0.0	0.0					
0.0	0 .0	• 0.0	0 .0	• 0.0	0.0											
0.0	• 0.0	• 0.0	• 0.0	• 0.0	0 .0	• 0.0	• 0.0	• 0.0	• 0.0	0 .0	• 0.0	• 0.0	0 .0	• 0.0	0.0	
0.0	0 .0	• 0.0	• 0.0	• 0.0	0 .0	• 0.0	• 0.0	0 .0	• 0.0	0.0						
0.0	0 .0	• 0.0	0 .0	0 .0	0 .0	0 .0	• 0.0	0.0								
0.0	0 .0	0.0	0 .0	0 .0	0.0	0 .0	• 0.0	0 .0	• 0.0	0.0	0:0	0.0	0 .0	• 0.0	0.0	
0.0	0 .0	0.0	0.0	0,00	*0.0	0.0	• 0.0	• 0.0	0 .0	• 0.0	0.0					
0.0	0 .0	0.0	0.0	OF OF		F 0.0	0.0	0 .0	0 .0	0.0	0 .0	0 .0	0.0	0 .0	0.0	
).0		VERIFYL	0.0	0.0	0.0	0 .0	0 .0	0 .0	• 0.0	0 .0	0 .0	0 .0	0.0	0 .0	0.0	
). O	0.0	0.0	0.0	0.0	0.0	0 .0	0.0	0.0	0 .0	0.0	0 .0	0.0	0.0	0 .0	0.0	
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
	0.0															
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0 .0	0.0	0.0	0.0	0.0	0 .0	0.0	
	0.0	-	-	-	-	_	-	-	-	-	_	-	-	-		
	0.0															
	0.0	-	-	_	-	-	-	-	-	_	_	-	-	-		
	0.0															
	0.0	-	-	-	-		-		-	-		-		-		
	0.0															
	0.0															
	0.0															
	0.0															
	0.0															
	0.0															
	0.0 0.0															
	0.0 0.0															
	0.0 0.0															
	0.0 0.0															
	0.0 0.0										-		-			
	0.0 0.0	-	-	-	-	_	-	-	-	-	-	-	-	-		
	0.0 0.0															
	0.0 0.0	-	-	-	-		-		-	-		-		-		
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.9	

esign") provided by Holbrook-Associated represent an anticipated tion supplied by others. These design parameters and information actual measured r esults may vary from the actual field conditions.

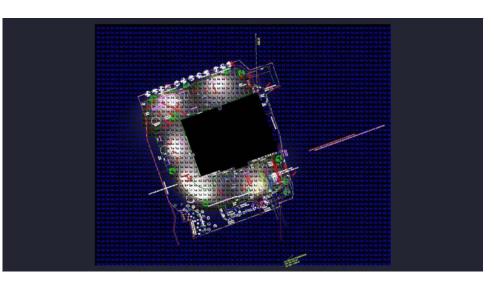
eld verified to reduce variation.

I measured light levels or energy consumption levels as compared to those illustrated ed, nor represents the appropriateness, completeness or suitability of the Lighting Design ion of those specifically stated on drawings created and submitted by Hobrook-Associated. nal purposes and is not intended for construction nor as being part of a

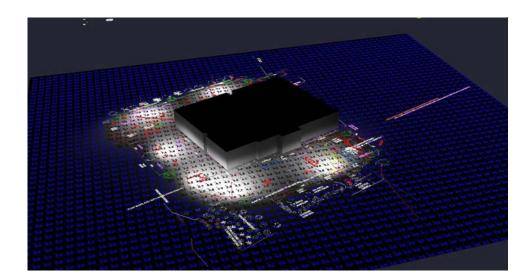
Calculation Summary											
Label	CalcType	Units	Avg	Max	Min	Avg/Min	Max/Min	Description	PtSpcLr	PtSpcTb	Meter
Site	Illuminance	Fc	0.18	8.5	0.0	N.A.	N.A.	Readings Taken @ 0'-0" AFG	10	10	Horizo
Parking Lot	Illuminance	Fc	1.58	8.5	0.0	N.A.	N.A.	Readings Taken @ 0'-0" AFG			

Luminaire S	uminaire Schedule All quotes/orders generated from this layout will be processed by Holbrook-Associated											
Symbol	Qty	Tag	Label	Arrangement	LLF	Description	BUG Rating					
	6 A ALED4T78		Single	1.000	ALED4T78 - RWLED4T78 - RWLED4T78SF - WPLED4T78	B1-U0-G2						
						(TYPE IV)						

Expanded Luminaire Location Summary										
Тад	x	Y	MTG HT	Orient	Tilt					
A	681287.844	2880954.96 9	20	286.843	0					
A	681395.939	2880993.21 1	20	285.945	0					
А	681293.99	2880836.88	20	13.046	0					
A	681320.158	2880764.62 5	20	18.733	0					
A	681361.081	2880727.91 7	20	71.242	0					
А	681488.116	2880740.5	20	108.825	0					
Total Qu	antity: 6	1	1							



Render Image - Top View



Render Image - Side View

Project ID: 192568 Scale: as noted The Lighting Analysis, etLayout, Energy Analysis and/or Visual Simulation ("Lighting Design") provided by Holbrook-Associated represent an anticipated prediction of lighting system performance based upon design parameters and information supplied by others. These design parameters and information provided by others have not been field verified by Holbrook-Associated and therefore actual measured r esults may vary from the actual field conditions. Prepared By: Job Name: Holbrook-Associated Medical Office Building Date:7/6/2022 Rep: AH Holbrook-Associated recommends that design parameters and other information be field verified to reduce variation. 35 Reservoir Park Drive Medway, MA HOLBROOK-ASSOCIATED Holbrook-Associated neither warranties, either implied or stated with regard to actual measured light levels or energy consumption levels as compared to those illustrated by the Lighting Design. Holbrook-Associated neither warranties, either implied or stated, nor represents the appropriateness, completeness or suitability of the Lighting Design intent as compliant with any applicable regulatory code requirements with the exception of those specifically stated on drawings created and submitted by Holbrook-Associated. The Lighting design is issued, involve or in part, as advisory documents for informational purposes and is not intended for construction nor as being part of a project's construction documentation package. Rockland, MA 02370 Filename: MOB REVISED 2.AGI Amores Drawn By: JHolbrook

Filename: C:\Users\jholbrook\Documents\AGI32 - Designs\2022 Designs\Andrew Holbrook\Medical Office Building\MOB REVISED 2.AGI

er Type izontal

NOTES: * The light loss factor (LLF) is a product of many variables, only lamp lumen depreciation (LLD) has been applied to the calculated results unless otherwise noted. The LLD is the result (quotient) of mean lumens / initial lumens per lamp manufacturers' specifications.

* Illumination values shown (in footcandles) are the predicted results for planes of calculation either horizontal, vertical or inclined as designated in the calculation summary. Meter orientation is normal to the plane of calculation.

* The calculated results of this lighting simulation represent an anticipated prediction of system performance. Actual measured results may vary from the anticipated performance and are subject to means and methods which are beyond the control of Holbrook-Associated.

* Mounting height determination is job site specific, our lighting simulations assume a mounting height (insertion point of the luminaire symbol) to be taken at the top of the symbol for ceiling mounted luminaires and at the bottom of the symbol for all other luminaire mounting configurations.

* It is the Owner's responsibility to confirm the suitability of the existing or proposed poles and bases to support the proposed fixtures, based on the weight and EPA of the proposed fixtures and the owner's site soil conditions and wind zone. It is recommended that a professional engineer licensed to practice in the state the site is located be engaged to assist in this determination.

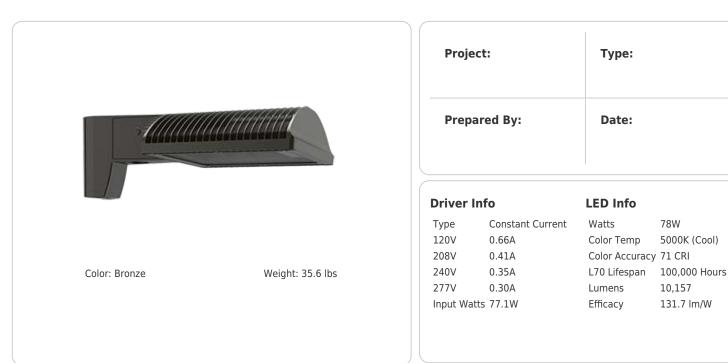
* The landscape material shown hereon is conceptual, and is not intended to be an accurate representation of any particular plant, shrub, bush, or tree, as these materials are living objects, and subject to constant change. The conceptual objects shown are for illustrative purposes only. The actual illumination values measured in the field will vary.

* Photometric model elements such as buildings, rooms, plants, furnishings or any architectural details which impact the dispersion of light must be detailed by the customer documents for inclusion in the holbrook-Associated lighting design model. Holbrook-Associated is not responsible for any inaccuracies caused by incomplete information on the part of the customer, and reserves the right to use best judgement when translating customer requests into photometric studies.

* RAB Lighting Inc. luminaire and product designs are protected under U.S. and International intellectual property laws. Patents issued or pending apply.

ALED4T78

RAB



Technical Specifications

Compliance

UL Listed:

Suitable for wet locations as a downlight

DLC Listed:

This product is on the Design Lights Consortium (DLC) Qualified Products List and is eligible for rebates from DLC Member Utilities. DLC Product Code: P0000170X

IESNA LM-79 & IESNA LM-80 Testing:

RAB LED luminaires and LED components have been tested by an independent laboratory in accordance with IESNA LM-79 and LM-80.

Dark Sky Conformance:

Conforms to (allows for conformance to) the IDA's fully shielding requirement, emitting no light above 90 degrees (with the exclusion of incidental light reflecting from fixture housing, mounts, and pole).

Performance

Lifespan:

100,000-Hour LED lifespan based on IES LM-80 results and TM-21 calculations

Construction

IES Classification:

The Type IV distribution (also known as a Forward Throw) is especially suited for mounting on the sides of buildings and walls, and for illuminating the perimeter of parking areas. It produces a semicircular distribution with essentially the same candlepower at lateral angles from 90° to 270°.

Ambient Temperature:

Suitable for use in up to 40°C (104°F)

Cold Weather Starting:

Minimum starting temperature is -40°C (-40°F)

Thermal Management:

Superior heat sinking with external Air-Flow fins

Lens:

Tempered glass lens

Housing:

Die-cast aluminum housing, lens frame and mounting arm

IP Rating:

Ingress protection rating of IP66 for dust and water

Mounting:

Universal mounting arm compatible for hole spacing patterns from 1" to 5 1/2" center to center. Round Pole Adaptor plate included as a standard. Easy slide and lock to mount fixture with ease. Round pole diameter must be >4" to mount fixtures at 90° orientation.

Reflector:

Specular vacuum-metallized polycarbonate

Technical Specifications (continued)

Construction

Gaskets:

High-temperature silicone gaskets

EPA:

- 1 Fixture: 0.75 2 Fixtures at 90°: 1.2 2 Fixtures at 180°: 2.4
- 3 Fixtures at 90°: 2.4
- 4 Fixtures at 90°: 1.8

Finish:

Formulated for high durability and long-lasting color

Green Technology:

Mercury and UV free. RoHS-compliant components.

LED Characteristics

LEDs:

Six (6) multi-chip, 13W, high-output, long-life LEDs

Color Consistency:

3-step MacAdam Ellipse binning to achieve consistent fixture-to-fixture color

Color Stability:

LED color temperature is warrantied to shift no more than 200K in color temperature over a 5-year period

Color Uniformity:

RAB's range of Correlated Color Temperature follows the guidelines of the American National Standard for Specifications for the Chromaticity of Solid State Lighting (SSL) Products, ANSI C78.377-2017.

Electrical

Driver:

Constant Current, Class 2, 2000mA, 100-277V, 50-60Hz, 1.1A, Power Factor 99%

THD:

5.1% at 120V, 13.2% at 277V

Power Factor:

99.5% at 120V, 93.6% at 277V

Surge Protection:

4kV

Other

Patents:

The ALED design is protected by patents in the U.S. Pat. 668,370, Canada Pat. 144956, China ZL201230100154.X, and Mexico Pat. 38423. Pending patents in Taiwan.

BAA Compliance:

Click here for BAA compliance.

Warranty:

RAB warrants that our LED products will be free from defects in materials and workmanship for a period of five (5) years from the date of delivery to the end user, including coverage of light output, color stability, driver performance and fixture finish. RAB's warranty is subject to all terms and conditions found at <u>rablighting.com/warranty.</u>

Equivalency:

Replaces 250W Metal Halide

Buy American Act Compliance:

RAB values USA manufacturing! Upon request, RAB may be able to manufacture this product to be compliant with the Buy American Act (BAA). Please contact customer service to request a quote for the product to be made BAA compliant.

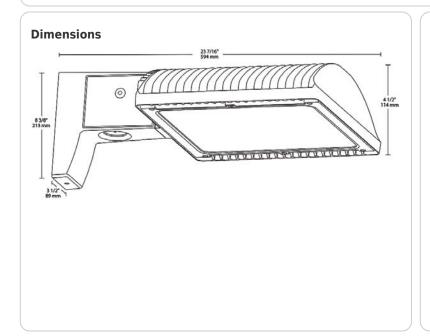
Optical

BUG Rating:

B1 U0 G2

Features

66% energy cost savings vs. HID 100,000-hour LED lifespan 5-Year, No-Compromise Warranty



ALED4T78

RAB

Ordering	g Matrix							
Family	Optics	Wattage	Mounting	Color Temp	Finish	Driver Options	Options	Other Options
ALED	4T	78						
	4T = Type IV 3T = Type III 2T = Type II	50 = 50W 78 = 78W 105 = 105W 125 = 125W 150 = 150W	Blank = Pole mount SF = Slipfitter	Blank = 5000K (Cool) N = 4000K (Neutral) Y = 3000K (Warm)	Blank = Bronze RG = Roadway Gray W = White K = Black	Blank = 120-277V /480 = 480V /BL = Bi-Level /D10 = 0-10V Dimming /480/D10 = 480V, 0-10V Dimming	Blank = No Option /LC = Lightcloud® Controller /PCS = 120V Swivel Photocell /PCS2 = 277V Swivel Photocell /PCT = 120-277V Twistlock Photocell /PCS4 = 480V Swivel Photocell /PCT4 = 480V Twistlock Photocell /PCT4 = 480V Twistlock Photocell /WS2 = Multi-Level Motion Sensor 20 ft. /WS4 = Multi-Level Motion Sensor 40 ft.	Blank = Standard USA = BAA Compliant

PS4-11-20D2

RAB



Compliance

CSA Listed:	Bronze powder coating	4"	
Suitable for wet locations	Height:	Hand Hole Dimensions:	
Construction	20 FT	3" x 5"	
Shaft:	Weight:	Bolt Circle:	
46,000 p.s.i. minimum yield.	137 lbs	8 1/2"	
Hand Holes:	Gauge:	Base Dimension:	
Reinforced with grounding lug and removable cover	11	8"	
Base Plates:	Wall Thickness:		
Slotted base plates 36,000 p.s.i.	1/8"		
Shipping Protection:			
All poles are shipped in individual corrugated cartons to prevent finish damage			

Shaft Size:

Color:

Technical Specifications (continued)

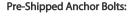
Construction

Anchor Bolt:

Galvanized anchor bolts and galvanized hardware and anchor bolt template. All bolts have a 3" hook.

Anchor Bolt Templates:

WARNING Template must be printed on 11" x 17" sheet for actual size. CHECK SCALE BEFORE USING. Templates shipped with anchor bolts and available online.



Bolts can be pre-shipped upon request for additional freight charge

Max EPA's/Max Weights:

70MPH 10.7 ft./360 lb. 80MPH 7.0 ft./350 lb. 90MPH 4.3 ft./350 lb. 100MPH 2.5 ft./350 lb. 110MPH 1.1 ft./350 lb. 120MPH 0.1 ft./340lb



Terms of Sale:

Pole Terms of Sale is available online.

Buy American Act Compliance:

RAB values USA manufacturing! Upon request, RAB may be able to manufacture this product to be compliant with the Buy American Act (BAA). Please contact customer service to request a quote for the product to be made BAA compliant.

Features

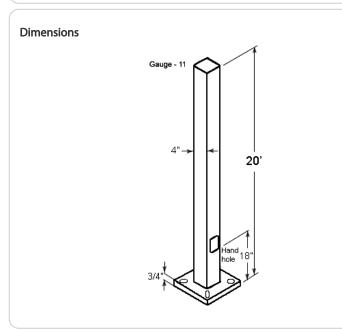
Designed for ground mounting

Heavy duty TGIC polyester coating

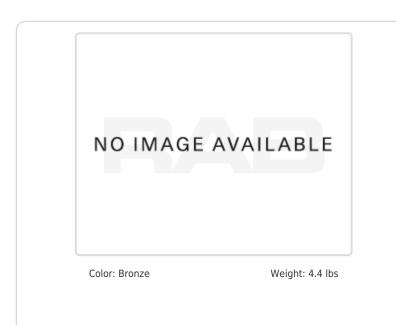
Reinforced hand holes with grounding lug and removable cover for easy wiring access

Pole caps, base covers & bolts are sold separately

Custom manufactured for each application



RAB



Projec	t:	Туре:
Prepa	red By:	Date:

Technical Specifications

Other

Description:

4" square steel with 7 & 11 guage pole base cover and cap kit

Buy American Act Compliance:

RAB values USA manufacturing! Upon request, RAB may be able to manufacture this product to be compliant with the Buy American Act (BAA). Please contact customer service to request a quote for the product to be made BAA compliant.

Construction

Finish:

Formulated for high durability and long-lasting color

RAB



Project:	Туре:
Prepared By:	Date:

Technical Specifications	
Construction	Other
Finish:	Buy American Act Compliance:
Formulated for high durability and long-lasting color	RAB values USA manufacturing! Upon request, RAB may be able to manufacture this product to be compliant with the Buy American Act (BAA). Please contact customer service to request a quote for the product to be made BAA compliant.



July 6, 2022

Mr. Kevin Lobisser Lobisser Companies One Charlesview Road, Suite 1 Hopedale, MA 01747

Re: 86 Holliston Street, Medway, MA – Sound Study

Ref. 4765

Dear Kevin:

Tech Environmental, Inc. (Tech) is pleased to provide this letter report summarizing the results of an acoustic modeling study of the proposed medical building at 86 Holliston Street in Medway, MA. The proposed Project includes a 21,900 SF medical building. The one-story building will be approximately 15 feet tall. The goal of this study is to demonstrate that the Project will comply with the sound limits in the Town of Medway Zoning (Section 7.3 Environmental Standards).

This letter report summarizes the modeling analyses performed for this study. Section 1.0 introduces the common measures of environmental sound. Section 2.0 presents the applicable noise regulations, and Section 3.0 presents the acoustic modeling approach and results. The study concludes that the proposed medical building rooftop HVAC equipment and with the use of acoustic blankets on the HVAC compressors to reduce sound levels will fully comply with the Town of Medway Zoning (Section 7.3 Environmental Standards).

1.0 Common Measures of Environmental Sound

Noise is defined as "unwanted sound", which implies sound pressure levels that are annoying or disrupt activities that people are engaged in. The human sense of hearing is subjective and highly variable between individuals. Noise regulations and guidelines set quantitative limits to the sound pressure level (measured with sound analyzers and predicted with computer models) to protect people from sound exposures that most would judge to be annoying or disruptive.

The loudness of a sound is dependent on the radiated energy of the sound source and the propagation and attenuation characteristics of the air. The standard unit of sound pressure level (L_p) is the decibel (dB). A property of the decibel scale is that the sound pressure levels of two separate sounds are not directly additive. For example, if a sound of 40 dB is added to another sound of 40 dB, the total is only a 3 dB increase, not a doubling to 80 dB. For broadband sounds, a 3 dB change is the minimum change perceptible to the human ear. Table 1 presents the perceived change in loudness of different changes in sound pressure levels.

TABLE 1

SUBJECTIVE EFFECT OF CHANGES IN SOUND PRESSURE LEVELS

Change in Sound Pressure Level	Perceived Change in Loudness
3 dB	Just perceptible
5 dB	Noticeable
10 dB	Twice (or half) as loud

The acoustic environment in a rural commercial/residential area, such as that surrounding Holliston Street in Medway primarily results from motor vehicle traffic on local roadways. Typical sound levels associated with various activities and environments are presented in Table 2.¹

TABLE 2

COMMON SOUND LEVELS

Sound Level	Common Indoor	Common Outdoor
(dBA)	Sounds	Sounds
$ \begin{array}{r} 110\\ 100\\ 90\\ 80\\ 70\\ 60\\ 50\\ 40\\ 25 \end{array} $	Rock Band Inside NYC Subway Train Food Blender at 3' Garbage Disposal at 3' Vacuum Cleaner at 10' Normal Speech at 3' Dishwasher in Next Room Empty Conference Room Empty Concert Hall	Jet Takeoff at 1000' Chain Saw at 3' Impact Hammer (Hoe Ram) at 50' Diesel Truck at 100' Lawn Mower at 100' Auto (40 mph) at 100' Busy Suburban Area at night Quiet Suburban Area at night Rural Area at night

¹U.S. DOT, FHWA, Noise Fundamentals Training Document, <u>Highway Noise Fundamentals</u>, September, 1980.



2.0 Local Noise Bylaws

This section describes the applicable noise bylaws used as part of this sound study.

2.1 Medway General Bylaw

The Town of Medway General Bylaw does not have applicable quantitative sound limits.

2.2 Medway Zoning Noise Bylaw

The Medway Zoning Bylaw has established sound limits under Section 7.3 Environmental Standards, D. 2. a. 1) for continuous sound sources that are applicable to this project. A summary of the applicable sound limits is presented below.

Continuous Noise. For the purposes of this bylaw, continuous noise restrictions apply to permanent nonresidential uses and home-based businesses where noise is a by-product of business operations (such as from exhaust equipment). Maximum permissible sound pressure levels measured at the property line of the noise source shall not exceed the values specified in the tables below. In addition, maximum permissible sound levels measured at Sensitive Receptors positioned anywhere on a property that is wholly or partially located within two-thousand feet of the property line of the source of continuously radiated noise shall not exceed the values in the tables below. In the calculation of day-evening-night levels (known as Lden), Daytime is defined as between the hours of 7:00 a.m. and 7:00 p.m.; Evening is defined as between the hours of 7:00 p.m. and 11:00 p.m.; and Nighttime is defined as between the hours of 11:00 p.m. and 7:00 a.m.1 These time periods will be used to determine compliance as per the tables below.

Industrial or Commercial Zoned Property to Residential Zoned Property

- The introduction of any potential new noise sources cannot result in an increase in broadband sound pressure levels of more than 2 dB above the existing ambient conditions at the nearest residential property line or any Sensitive Receptor; and
- The introduction of any potential noise sources cannot result in overall noise levels that exceed the following:

	Daytime	Evening	Nighttime	Evening &	
	7:00 a.m. –	7:00 pm –	11:00 p.m. –	Nighttime	
	7:00 p.m.	11:00 pm	7:00 a.m.	7:00 p.m. –	
	@ any	@ any	@ any	7:00 a.m.	
	Residential	Residential	Residential	@ Sensitive	
	Property Line	Property Line	Property Line	Receptors	
Maximum Overall Noise Level (dBA)	47	45	42	32	



2) **Tonal Requirements** – The presence of prominent discrete tones, as defined in Section 7.3 (c) herein at any industrial, commercial, or residential property line shall be considered a violation.

The focus of our acoustic modeling analysis will focus on meeting the sound limits in the table above and does not include performing ambient sound monitoring to demonstrate compliance with the first bullet above.

3.0 Modeling Assumptions and Results

This section describes the modeling approach and assumptions included in our acoustic modeling analysis and predicted sound levels at the residences nearest to the Project.

3.1 Modeling Assumptions

Future sound levels of the Project were calculated with the CadnaA acoustic model were based on the following assumptions:

- 1. The location of the Project and associated grading was based on site plans by Guerriere & Halnon, Inc.² The plans show the proposed location of the medical building in the center of the lot.
- 2. The primary sources of continuous operational sounds are six (6) 10-ton Carrier or equivalent rooftop-mounted heating, ventilation, and air conditioning (HVAC) equipment. The locations of the HVAC equipment are in the center of the roof. The sound power levels for the HVAC equipment, including octave bands are included in Appendix A.
- 3. A small gas-fired emergency generator (14-kilowatts) was not included in the modeling analysis since it is exempt from air quality and noise requirements under the Massachusetts Department of Environmental Protection (MassDEP) 310 CMR 7.26(42). Furthermore, the unit will only operate during the daytime for weekly routine maintenance.
- 4. Modeling was performed to demonstrate compliance with the most restrictive nighttime sound limits of 42 dBA at the sensitive receptor property line and 32 dBA at the sensitive receptor.
- 5. The use of acoustic blankets on the AC compressors to reduce HVAC equipment sound levels by approximately 5 dB.³
- 6. The HVAC equipment has the potential to operate up to 24 hours per day, seven days per week.

3.2 Future Sound Levels

CadnaA is a sophisticated 3-D model for sound propagation and attenuation based on International Standard ISO 9613.⁴ Absorption of sound assumed standard conditions and is significant at large

⁴ International Standard, ISO 9613-2, <u>Acoustics – Attenuation of Sound During Propagation Outdoors</u>, -- Part 2 General Method of Calculation.



² Site Plan 86 Holliston Street Medway Massachusetts, 04/14/2022.

³ Brinmar HVAC Products – The Brinmar Universal Fit Sound Blankets.

distances and at high frequencies. ISO 9613 was used to calculate propagation and attenuation of sound energy by hemispherical divergence with distance, surface reflection, ground, and shielding effects by barriers, buildings, and ground topography. Offsite topography was determined using MassGIS digital terrain models.⁵

The predicted maximum sound levels are conservative because:

- 1. The model assumes a ground-based temperature inversion, such as may occur on a clear, calm night when sound propagation is at a maximum. This worst-case condition is infrequent.
- 2. The model assumes that all rooftop HVAC equipment operates at maximum load simultaneously (a worst-case condition not likely to occur).

The acoustic model included ten (10) sensitive receptor locations representing the five (5) nearest residential dwellings on Robin Circle and their five (5) abutting property lines to the Project. Figure 1 shows the sensitive receptor locations. Table 3 summarizes the modeling results that the Project would result in sound level impacts that range from 26 dBA to 31 dBA at the dwellings and range from 27 dBA to 32 dBA at the property lines. The sound level impacts from the Project at locations further away would be even less. Furthermore, the modeled sound level impact at the nearest property lines do not demonstrate the presence of a pure tone condition. Table 3 confirms that the Project will comply with the sound limits in the Town of Medway Zoning (Section 7.3 Environmental Standards).

In conclusion, the proposed medical building rooftop HVAC equipment at 86 Holliston Road in Medway, MA will fully comply with the sound limits in the Town of Medway Zoning (Section 7.3 Environmental Standards).

If you have any questions, please call me at 781-890-2220.

Sincerely,

TECH ENVIRONMENTAL, INC.

Warc Wallace

Marc C. Wallace, QEP, INCE Vice President

4765/Medway Medical Building Sound Study

⁵https://docs.digital.mass.gov/dataset/massgis-data-digital-terrain-model-dtm-files



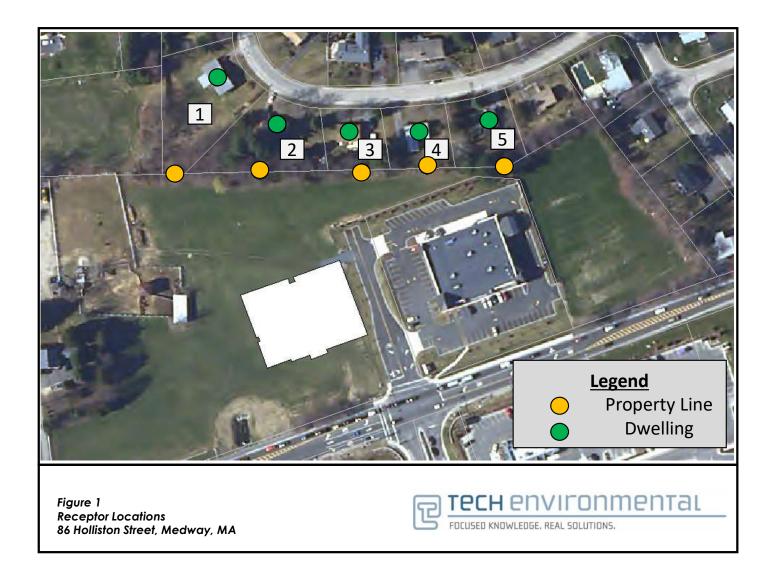


TABLE 3

PREDICTED SOUND LEVELS FROM THE MEDICAL BUILDING HVAC EQUIPMENT

Receptor	Address	Project Predicted So (dB	Complies?	
ID		Property Line	Dwelling	
1	13 Robin Cir.	30	29	Yes
2	11 Robin Cir.	32	31	Yes
3	9 Robin Cir.	31	30	Yes
4	7 Robin Cir.	30	28	Yes
5	5 Robin Cir.	27	26	Yes
Medway	Sound Limits	42	32	



Sound Source	31	63	125	250	500	1K	2K	4K	8K	Total
	Hz	Hz	Hz	Hz	Hz	Hz	Hz	Hz	Hz	(dBA)
Carrier HVAC Equipment*	89	89	85	82	80	77	74	71	66	83

*The model includes that the acoustic blankets reduce HVAC equipment sound levels stated above by approximately 5 dB.



DWD ENGINEERING, INC.

5 MICHAEL ROAD EAST BRIDGEWATER, MA 02333 (508) 378-9602 domdean@aol.com

June 22, 2022

Medway Planning and Economic Development Board and Conservation Commission Town of Medway 155 Village Street Medway, MA 02053

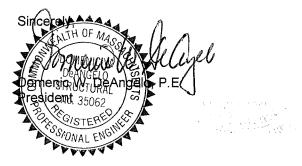
RE: Underground Piping 86 Holliston Street-Medway, MA

To whom it may concern.

On Thursday, June 2nd, I met with Developer Kevin Lobisser at the above referenced site to determine what the impact of construction activities and the proposed parking lot would have on the underground piping that had been installed years earlier. In addition to our site visit additional exploratory work was done by accessing the existing drain system through (2) existing manholes as well as accessing the open end of the drainpipe. The following is a summation of my observations along with several photographs depicting the conditions.

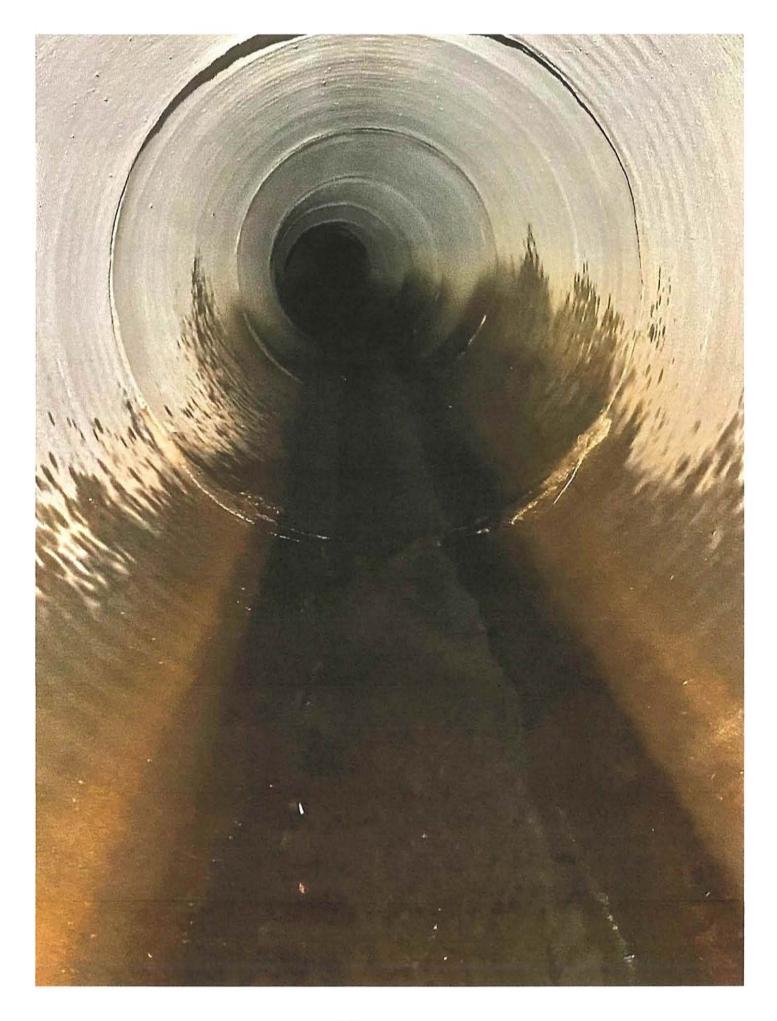
The piping in question consists of round reinforced concrete with diameters varying from 36" to 48" depending upon the location. The top of the piping is approximately 3 to 4 feet below the proposed finish grade which will consist of structural fill and asphalt in select areas. Because of the configuration of the pipe, its existing condition, its reinforcement, and its depth below the finish grade the imposed loading will be distributed around the pipe and not adversely affect it.

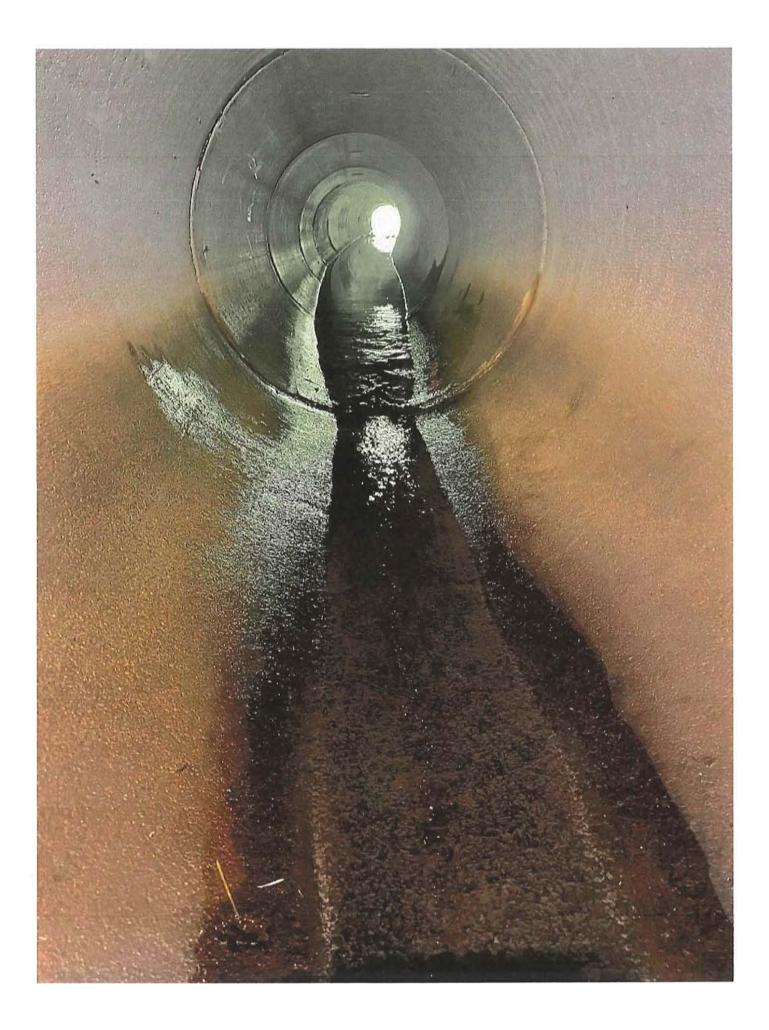
Based on my observations and subsequent exploration it is my professional opinion that the piping will not be structurally affected by the proposed construction activities and future vehicles in the parking lot. If you have any questions concerning this letter or if I can be of further assistance, please do not hesitate to contact me.













Milford Office 333 West Street, P. O. Box 235 Milford, MA 01757-0235 (508) 473-6630/Fax (508) 473-8243

Franklin Office 55 West Central Street Franklin, MA 02038-2101 (508) 528-3221/Fax (508) 528-7921

Whitinsville Office 1029 Providence Road Whitinsville, MA 01588-2121 (508) 234-6834/Fax (508) 234-6723

Est. 1972

F4516

July 12, 2022

Medway Planning Board 155 Village Street Medway, MA 02053 Attn: Matthew Hayes, Chairman

RE: 2nd Planning Board Submittal Summary of Documents Milford Regional Medical Facility at 86 Holliston Street

Dear Members of the Board:

On behalf of our client, Lobisser Companies, please find enclosed the following documents associated with comments received during the public hearings, Town Departments and Town peer reviewer for the proposed medical facility located at 86 Holliston Street, Medway, Massachusetts:

- Response to email correspondence from the Director of Community and Economic Development dated April 27, 2022 and associated attachments summarized below;
- Response to email correspondence from the Department of Planning & Economic Development Board dated May 9, 2022 and associated attachments summarized below;
- Response to email correspondence from the Medway Police Department dated May 10, 2022 and associated attachments summarized below;
- Response to comments from Tetra Tech dated May 23, 2022 and associated attachments summarized below; and
- Response to email correspondence from the Department of Public Works dated May 25, 2022 and associated attachments summarized below.

Attachments:

- Updated Project Narrative;
- Development Impact Statement;
- Updated Waiver Request Forms;
- Revised Application for Approval of a Special Permit with attachments;
- Ground Floor Plan of proposed Medical Facility prepared by The SLAM Collaborative dated April 7, 2022;
- Response to Major Site Plan Review letter correspondence prepared by Vanasse & Associates, Inc. dated May 31, 2022;
- Underground Piping Inspection prepared by DWD Engineering dated June 22, 2022.

- Revised lighting plan prepared by Holbrook-Associated dated July 6, 2022 and associated light fixture specifications;
- Sound Study prepared by Tech Environmental dated July 6, 2022; and

We believe this submittal has addressed the concerns expressed at the public hearings, from the Town Departments and peer reviewer. Should you have any further questions or concerns, please contact our office.

Sincerely, Guerriere & Halnon, Inc.

angrola Caralum

Amanda Cavaliere Franklin Office Manager

Attachments



Milford Office 333 West Street, P. O. Box 235 Milford, MA 01757-0235 (508) 473-6630/Fax (508) 473-8243

Franklin Office 55 West Central Street Franklin, MA 02038-2101 (508) 528-3221/Fax (508) 528-7921

Whitinsville Office 1029 Providence Road Whitinsville, MA 01588-2121 (508) 234-6834/Fax (508) 234-6723

E · 4080

Est. 1972

F4516

July 12, 2022

Medway Planning Board 155 Village Street Medway, MA 02053 Attn: Matthew Hayes, Chairman

RE: Comments from Community and Economic Development Director: Milford Regional Medical Facility at 86 Holliston Street

Dear Members of the Board:

On behalf of our client, Lobisser Companies, Guerriere & Halnon, Inc. has prepared the following information to address comments contained in the email from Barbara J. Saint Andre, Community & Economic Development Director, dated 4/27/22.

Barbara J. Saint Andre's findings, comments and recommendations are shown in *italics* followed by our response in **bold**.

1. The site plan shows a "Possible Storm Drainage Easement No Easement of Record Found". It is my understanding that this drainage structure was constructed many years ago and carries stormwater from Holliston Street. If this easement is not on record, would the owner be willing to provide the town with an easement now in order to memorialize this? This is not a requirement of the applicant, but it seems an opportune time to nail this down while we are reviewing this plan.

GH: There are no easements on record or anticipated in the future for the existing drainage infrastructure onsite. Based on discussions with the Department of Public Works, Planning Board, and Conservation Commission, there is no plan to provide the town with an easement at this time.

2. There is no Project Description as required by the site plan regulations, although it is checked off on the checklist; perhaps the applicant inadvertently did not include it.

GH: A Project Description in accordance with the site plan regulations is attached.

3. There is a note on the Layout Plan that a special permit is required under Section 7.1.1.K(4) for parking in front of the building, but no such special permit application has been filed. Also, because this property is in the CB District, a special permit is required under Section 10.2.D.2.c to allow parking between the front building line and the street right of way. It would seem that the provisions of Section 10.2.D.2.c would be the applicable provision, rather than Section 7.1.1.K(4) since it is specific to the CB zone.

GH: A special permit application requesting relief from the provisions of Section 10.2.D.2.c is attached.

3. Section 10.2.D.2.a provides that the minimum number of off-street parking spaces set forth in Table 3 of Section 7.1.1.D shall be interpreted as both a minimum and a maximum amount of parking spaces, and a waiver from the PEDB is required for additional off-street parking. The site plan shows that 73 spaces are required under Table 3, but 102 are provided. This requires a waiver under Section 10.2.D.2.a but no such waiver request is included in the application.

GH: A request for a waiver from the requirements of Section 10.2.D.2.a has been added to the plan and provided with the revised submittal package.

4. Section 10.2.D.2.b provides certain requirements for parking areas. Although the applicant has requested waivers of certain similar site plan regulations, these are requirements of the zoning by-law.

GH: The proposed landscaping provides 15 trees within 3-5' of the proposed parking areas and maneuvering aisles, exclusive of the screening trees provided along the rear lot line and existing trees along the Walgreens driveway. The size of these trees has been adjusted to comply with section 10.2.D.2.b. Additionally, 23 shrubs have been added to the plan as required. The combined effect of the trees and shrubs serves to provide shade, visual relief and wind interruption within the parking area, as required by section 10.2.D.2.b.

5. There are no Outdoor Amenity spaces identified on the site plan, see Section 10.D.2.F and Section 10.5.B.

GH: Outdoor amenity space has been provided at the front of the property, including picnic tables, benches, landscaping, and trash receptacles. See landscaping and detail sheets.

6. The building should comply with Section 10.4. Under Section 10.4.C, the building type needs to be determined. It would appear that this building does not fall within any of the building type categories listed, in which case it would require a special permit from the PEDB under Section 10.4.C.2.

GH: A special permit application requesting relief from the provisions of Section 10.4.C.2 is enclosed.

We believe these responses have addressed the concerns expressed by Barbara J. Saint Andre from their review letter. Should you have any further questions or concerns, please contact our office.

Sincerely, Guerriere & Halnon, Inc.

made Cavalle

Amanda Cavaliere Franklin Office Manager

Attachments



Milford Office 333 West Street, P. O. Box 235 Milford, MA 01757-0235 (508) 473-6630/Fax (508) 473-8243

Franklin Office 55 West Central Street Franklin, MA 02038-2101 (508) 528-3221/Fax (508) 528-7921

Whitinsville Office 1029 Providence Road Whitinsville, MA 01588-2121 (508) 234-6834/Fax (508) 234-6723

www.gandhengineering.com

Est. 1972

F4516

July 12, 2022

Medway Planning Board 155 Village Street Medway, MA 02053 Attn: Matthew Hayes, Chairman

RE: Comments from Community and Economic Development Coordinator Susan E. Affleck-Childs

Dear Members of the Board:

On behalf of our client, Lobisser Companies, Guerriere & Halnon, Inc. has prepared the following information to address comments contained in the email from Susan Affleck-Childs May 9, 2022.

<u>Susan E. Affleck-Childs</u> findings, comments and recommendations are shown in *italics* followed by our response in **bold**.

SITE PLAN SUBMITTAL - ITEMS MISSING OR LACKING IN DETAIL

1. 204-3 PEDB Submittals. C. Project Narrative. The submitted Project description is not complete as it does not include or address all of the items noted in the Site Plan Rules and Regulations. No waiver is requested.

GH: The Project narrative has been revised to comply with the Site Plan Rules and Regulations.

2. 204-3 PEDB Submittals. F. Development Impact Statement. No waiver is requested.

GH: A Development Impact Statement has been provided.

3. 204-3. PEDB Submittals. H. Construction Management Plan. No waiver is requested.

GH: Construction activities are anticipated to be completed within 10 months of obtaining the Town approvals.

4. 204-3 PEDB Submittals. I. Earth Removal Calculations and J. Earth Fill Calculations. No waiver is requested.

GH: Earth removal and fill calculations have been provided on Sheet 6 of the revised site plan set.

5. 204-5 Site Plan Contents. D. 10) Color Renderings. No waiver is requested.

GH: Color renderings will be provided under a separate cover.

6. 204-5 Site Plan Contents. D. 13) Site Amenities. Are details provided for all items including benches, trash containers, bollards, planters, fences and retaining walls?

GH: Details have been provided for the proposed site amenities in the revised site plan set.

GENERAL ZONING

1. Requirement for 15% open space area per Section 6.2 Table 2 Dimensional and Density Regulations. No open space area is specifically designated.

GH: The total open space is 31.7% and designated in the zoning table on Sheet 5 of the revised site plan set.

OTHER COMMENTS

1. The parcel as indicated on the site plan does not yet exist. The applicant and property owner will need to file an ANR plan for the Board's endorsement and subsequent recording at the Norfolk County Registry of Deeds to formally create the lot.

GH: Acknowledged.

2. Address for the new parcel. The parcel from which this new lot is to be created has an 86 Holliston Street address. Vehicular and pedestrian access to this new facility will be from Main Street, so it needs a Main Street address. Walgreens is 68 Main Street. Charles River Bank is 70 Main Street. Discussion will be needed with Town Assessor Donna Greenwood along with Police Chief Allen Tingley and Fire Chief Jeff Lynch to determine a suitable address for the new parcel.

GH: Based on our discussions with the Town Assessor the requested address of 68A Main Street needs to be reviewed by the Boston Post Office. The Town Assessor has forwarded our request for consideration and will be further discussed with Police and Fire in the future.

We believe these responses have addressed the concerns expressed by Susan Affleck-Childs from their review letter. Should you have any further questions or concerns, please contact our office.

Sincerely, Guerriere & Halnon, Inc.

amanda Cavalur Amanda Cavaliere Franklin Office Manager

Attachments



Milford Office 333 West Street, P. O. Box 235 Milford, MA 01757-0235 (508) 473-6630/Fax (508) 473-8243

Franklin Office 55 West Central Street Franklin, MA 02038-2101 (508) 528-3221/Fax (508) 528-7921

Whitinsville Office 1029 Providence Road Whitinsville, MA 01588-2121 (508) 234-6834/Fax (508) 234-6723

www.gandhengineering.com

Est. 1972

F4516

July 12, 2022

Medway Planning Board 155 Village Street Medway, MA 02053 Attn: Matthew Hayes, Chairman

RE: Comments from Department of Public Works Director: Milford Regional Medical Facility at 86 Holliston Street

Dear Members of the Board:

On behalf of our client, Lobisser Companies, Guerriere & Halnon, Inc. has prepared the following information to address comments contained in the email from Department of Public Works Director dated 5/25/22.

DPW Director's findings, comments and recommendations are shown in *italics* followed by our response in **bold**.

1. Water service connection needs to be copper from Main to Curb. Bleeder valves not allowed. Must be Erie box with heavy foot piece with stainless steel rod.

GH: The detail sheets have been revised to comply with the DPW's requirements. In addition, a note has been added to Sheet 7 requiring all water and sewer utilities meet DPW standards.

2. Sand around all water related pipes not stone.

GH: The Typical Trench Section for DI Water Main detail on Sheet 10 has been revised to specify sand bedding consistent with AWWA guidelines. In addition, a note has been added to Sheet 7 requiring all water and sewer utilities meet DPW standards.

3. Any work in the street or sidewalk must be flow filled.

GH: A note has been added to Sheet 7 requiring flowable fill be used for any water or sewer utility work within the street or sidewalk, as requested.

4. Any Sewer frames and covers must be 26" not 24".

GH: The Typ. Precast Concrete Manhole Sanitary Detail has been revised to specify a 26" frame and cover as requested.

5. What's the diameter of the existing drain pipe? Material? Condition? Is it rated to have 15 parked cars on top of it? Has a structural engineer evaluated the pipes condition?

GH: The existing drain pipe under the proposed parking is reinforced concrete pipe and consists of two runs, a 36" section and a 48" section. The existing drainage infrastructure in this area was evaluated by DWD Engineering, Inc., a structural engineering firm. A structural report documenting the condition of the culvert is included in the revised submittal package.

6. Snow storage locations – will snow melt into the roadway? The other snow storage location is where the proposed generator pad is located. If that has to be changed will more snow be needed in the front of the building and is it possible for untreated snow melt to enter the infiltration system through CB#3?.

GH: All snow melt will be captured by the proposed catch basins, rain garden, stone trench, or existing catch basins within the driveway. No snow storage is proposed within the wetland buffer areas. Provisions have been added to sheet 5 and the stormwater report requiring any excess snow be disposed of off-site within 72 hours.

7. What is the TSS removal and phosphorus removal for the proposed infiltration systems and water quality units?.

GH: TSS removal for the water quality units is reported at 50%, in accordance with the NJCAT approval, and the infiltration basin is rated at 80% TSS removal. Documentation of compliance with the phosphorus removal requirements of Medway Stormwater bylaw section 26.5.8.3.b.(7)(a) is provided in the stormwater report narrative, standard 4. Please see the appendix of the stormwater report for full documentation of the sites treatment trains.

8. Is there an emergency overflow? What's the storage volume of the underground units?

GH: Catch Basins #5 & 6 serve as the overflow structures during extreme storms, discharging to the existing double catch basin in the driveway. The total storage volume of the proposed chamber systems is 21,331 cu.ft.

We believe these responses have addressed the concerns expressed by Pete Pelletier from their review letter. Should you have any further questions or concerns, please contact our office.

Sincerely, Guerriere & Halnon, Inc.

Cimade Cascher

Amanda Cavaliere Franklin Office Manager

Attachments

Milford Regional Medical Center Major Site Plan

Review 86 Holliston

Milford Office 333 West Street, P. O. Box 235 Milford, MA 01757-0235 (508) 473-6630/Fax (508) 473-8243

Franklin Office 55 West Central Street Franklin, MA 02038-2101 (508) 528-3221/Fax (508) 528-7921

Whitinsville Office 1029 Providence Road Whitinsville, MA 01588-2121 (508) 234-6834/Fax (508) 234-6723



Est. 1972

July 12, 2022

Medway Planning Board 155 Village Street Medway, MA 02053 Attn: Matthew Hayes, Chairman

RE: Comments from Tetra Tech Steven Bouley, P.E. : Milford Regional Medical Facility at 86 Holliston Street

Dear Members of the Board:

On behalf of our client, Lobisser Companies, Guerriere & Halnon, Inc. has prepared the following information to address comments contained in a comment letter dated May 23, 2022 by Tetra Tech.

<u>Tetra Tech's</u> findings, comments and recommendations are shown in *italics* followed by our response in **bold**.

F4516

SITE PLAN REVIEW

Site Plan Rules and Regulations (Chapter 200)

1. An Environmental Impact Assessment has not been provided. (Ch. 200§204-3.F.2)

GH: An Environmental Impact Statement has been provided.

2. A Neighborhood Impact Assessment has not been provided. (Ch. 200§204-3.F.3)

GH: A Neighborhood Impact Statement has been provided.

3. A Parking Impact Assessment has not been provided. (Ch. 200§204-3.F.4)

GH: A Parking Impact Statement has been provided.

4. Earth removal calculations have not been provided. (Ch. 200§204-3.I)

GH: Earth removal calculations have been provided on Sheet 6 of the revised site plan set.

5. Earth fill estimates have not been provided. (Ch. 200§204-3.J)

GH: Earth removal calculations have been provided on Sheet 6 of the revised site plan set.

6. Wetlands adjacent to the site have been identified and displayed on the Plans. However, a copy of an Order of Resource Area Delineation (ORAD) from the Medway Conservation Commission depicting the approved wetland resource affecting the proposed Project has not been provided. (Ch. 200§204-3.K)

GH: A notice of intent has been filed with the Medway Conservation Commission and public hearings for the project are underway. Upon issuance of an Order of Conditions for the project, copies will be provided to the Planning Board as required.

7. A Site Context Sheet has not been provided. However, a Vicinity Map providing parcels with 2,000 feet of the site is provided on the Cover Sheet and an Abutter Sheet is also included in the Plans. A waiver has been requested from this Regulation. (Ch. 200§204-5.B)

GH: G&H respectfully defers to the commission on granting of the requested waiver.

8. The Applicant has not included proposed setback lines on the Plans. (Ch. 200§204-5.D.1)

GH: Dimensions from the proposed building to the front, side, and rear lot lines have been added to the site plan. Compliance with the minimum setback distances is summarized in the zoning table on sheet 5 of the revised site plan set.

9. A Landscaping Plan has been provided. However, it is not stamped by a RegisteredProfessional Landscape Architect. A waiver has been requested from this Regulation. (Ch. 200 §204-5.D.8)

GH: G&H respectfully defers to the commission on granting of the requested waiver.

10. Floor plans with the use of all interior areas have not been provided. (Ch. 200 §204-5.D.11)

GH: Architectural floor plans have been provided as requested.

11. A Master Signage Plan has not been provided. (Ch. 200§204-5.D.14)

GH: On behalf of the Applicant, we respectfully request a waiver to the master signage plan requirement. The Waiver Request Form has been attached for review and will be added to the Cover Sheet prior to endorsement.

12. The Applicant has requested a waiver to provide 5-foot-wide sidewalks between the parking area and the building entrance. However, it appears the sidewalks on the Plans exceed 5 feet throughout. Applicant or GHI to advise and update as needed. (Ch. 200 §207-9.B.1)

GH: The proposed sidewalk at the front of the building narrows to a 5' width between the building entrances where 7' is required, as parking overhangs the sidewalk. G&H respectfully defers to the commission on granting of the requested waiver.

13. The Applicant has included a large portion of the proposed parking along the street frontage. We recommend the Applicant consider relocating the building closer to the frontage with all parking to the side and rear of the Project. This condition would also help alleviate potential issues with the south entrance/egress and the anticipated queue at the traffic signal. If parking is required along the frontage, we recommend removing parking facing the roadway and including one-way circulation (egress) at the south drive aisle to incentivize parking in the northerly portions of the site. (Ch. 200 §207-12.B)

GH: G&H has evaluated Tetra Tech's recommendation to relocate parking to the rear of the property and found it incompatible with the requirements of the project. However the total number of proposed parking spaces has been reduced from 102 to 88, with the reduction occurring primarily in the front left corner. G&H notes that landscaped amenity space has been provided between the proposed parking and Main Street and will provide increased screening of the parking area. Additionally, the site and its driveway connections has been shifted an additional 15' north and the south driveway connection revised to exit only.

14. The parking lot layout has several spaces adjacent to building entrances. Parking spaces shall not be located within 20 feet of building entrances, building exits, and emergency access points. A waiver has been requested form this Regulation. (Ch. 200§207-12.G.3.a)

GH: G&H respectfully defers to the commission on granting of the requested waiver.

15. It appears the proposed parking may be within 15 feet to a property line at the north side of the Project. The Applicant should show dimensioning from the property lines to the closets parking space. (Ch. 200 §207-12.G.3.b)

GH: Dimensions demonstrating compliance with required parking setbacks have been provided on the revised site plan set.

16. The Applicant has not included curb radius throughout the site. All curbing shall have a minimum radius of three feet. (Ch. 200 §207-12.H.2)

GH: Curb radius labels have been added to the site plan as requested. All proposed radii meet the minimum 3' requirement.

17. Provisions for the installation of underground telephone and cable TV have not been provided on the Plans. Additionally, electric runs to proposed lighting and the proposed electric vehicle charging has not been provided. (Ch. 200 §207-16.A)

GH: The proposed electric service has been revised to include telephone and cable, and electric runs added to the vehicle charging stations as requested.

18. The Applicant should confirm if two 6-foot square dumpsters are sufficient to serve the proposed building. The dumpster area appears to be undersized for the use. The narrative shall also elaborate on medical waste disposal and how that will occur. (Ch. 200 §207-17)

GH: The applicant has reviewed the requirements of a similar multi-practice facility on Commerce Drive in Northbridge. The Northbridge facility is slightly larger, and utilizes a single 6'x8' dumpster, emptied twice a week. Accordingly our proposed dumpster enclosure has been revised to accommodate a 6'x10' dumpster and relocated to the northwest corner to avoid maneuvering conflicts with the existing driveway.

19. The Applicant has provided a Landscaping Plan with evergreen landscape buffers only located at the rear property line. Perimeter landscaping with evergreens are required between the site and all adjoining properties. A waiver has been requested from this Regulation. (Ch. 200§207-19.B.2)

GH: G&H respectfully defers to the Board on granting of the requested waiver. G&H notes the building façade is designed to match the aesthetic of the abutting farm property and that the abutting properties to the west and east share the same owner as the project.

20. Shade trees are required for every 6 parking spaces. It does not appear the site provides enough shade trees adjacent to parking areas in the Landscaping Plan. A waiver has been requested from this Regulation. (Ch. 200 §207-19.C.1.d)

GH: A total of 15 shade trees, exclusive of evergreen screening trees and existing shade trees along the walgreens driveway, have been provided for the 88 proposed spaces on the revised site plan, meeting the requirement of 1 tree per 6 spaces. Accordingly, the waiver request has been withdrawn.

GENERAL SITE PLAN COMMENTS

21 We recommend the Applicant consider land banking the southernmost parking aisle to reduce overall impervious area on the site which is currently at approximately 74% impervious coverage. The Applicant is providing 29 additional parking spaces as compared to required spaces calculated by the use.

GH: The total number of proposed spaces has been reduced from 102 to 88, with the removal of spaces occurring in the southwest corner of the parcel. The total impervious coverage has been reduced to 68.3%.

22 The Applicant should provide narrative on potential modification of the striping on the existing driveway to accommodate the new development. Additionally, stop bars are recommended at stop signs for consistency.

GH: The south entrance has shifted 15' north from its originally proposed location and has been revised to exit only at the request of the Board and peer review. Accordingly, no modification to the striping on the existing driveway is proposed.

23 The waiver list on the Cover Sheet is inconsistent with the waiver requests provided in the Major Site Plan Application and should be coordinated.

GH: The cover sheet and site plan application waiver lists have been coordinated as requested.

24 The Applicant should provide detail on the proposed generator pad and any additional required screening.

GH: Additional screening has been provided around the proposed generator pad, as requested. The proposed generator pad size is preliminary and details on its pad will be provided prior to construction.

TRAFFIC REVIEW – PLEASE SEE ATTACHED LETTER CORRESPONDENCE FROM VANASSE & ASSOCIATES DATED MAY 31, 2022 ATTACHED

Project Study Area Intersections

25 The traffic impact assessment (TIA) evaluated two existing, signalized intersections including the Route 109/Holliston Street intersection and the Route 109/Walgreens/Medway Commons intersection. The Project proposes to share access to the site with the Walgreens driveway on Route 109. Town of Medway Planning & Economic Development Board Rules and Regulations require TIA's to include all intersections within one- quarter mile of a site which would include the Route 109/Richard Road intersection for the proposed medical office building Project. Although not specifically evaluated as part of the TIA, the traffic study estimates that the proposed medical office building will generate approximately 15 to 23 vehicle trips through this intersection during peak hours. This represents an additional vehicle trip every 2 to 4 minutes which would not be expected to materially impact operations at the Route 109/Richard Road intersection. Therefore, the study area presented in the TIA is appropriate for a Project of this size and land use.

Study Time Periods

26 The study includes an impact analysis of the weekday morning (7am-9am) and weekday evening (4pm-6pm) peak periods. The proposed medical office building is anticipated to also provide outpatient emergency care (in addition to women's health and wellness and pediatric care). Therefore, the study also includes an impact analysis of the Saturday midday (11am-2pm) peak periods. The time periods chosen for detailed analysis are appropriate for this type of medical office use.

TRAFFIC VOLUMES

27 The turning movement counts (TMCs) and automatic traffic recorder (ATR) counts were conducted on Thursday, February 17, 2022 and Saturday, February 19, 2022 at the study intersections. The traffic volumes were increased by 12.5 percent for seasonality (February was determined to be a below-average traffic month) based on MassDOT historical traffic count data. The study also reviewed historical count data at the Route 109/Walgreens/Medway Commons intersection from October 2018. The study determined that no adjustments to the observed February 2022 traffic volumes were warranted as a result of the ongoing COVID-19 pandemic. Tetra Tech generally concurs with this methodology.

PUBLIC TRANSPORTATION

28. The TIA states that the Greater Attleboro-Taunton Regional Transit Authority (GATRA) provides Dial-a-Ride paratransit services to eligible persons in the community. However, regularly scheduled public transportation is not provided in the immediate vicinity of the site, with the closest GATRA bus stop located more than 10 minutes away. Therefore, the TIA did not reduce the estimate vehicle trip generation for the proposed medical office building as a result of area public transportation services. Tetra Tech agrees with this methodology.

SIGHT DISTANCE

- 29. The TIA evaluated available sight distances at the existing Walgreens driveway on Route 109 since this driveway is also proposed to support access to the site. The sight distance evaluation was based on procedures outlined in the American Association of State Highway and Transportation Officials' (AASHTO) A Policy on Geometric Design of Highways and Streets, 7th Edition (2018). The sight distance evaluation was based on the posted speed limit of 35 miles per hour (mph). The observed 85th percentile travel speeds on Route 109 were not included in the evaluation as they were lower than the posted speed limit. Tetra Tech generally concurs with this methodology.
- 30. Tetra Tech identified discrepancies between the tabular summary of the sight distance analysis presented in the TIA and the supporting calculations provided in the attachment materials. However, the discrepancies do not change the overall conclusion reported in the TIA that the available stopping sight and intersection sight distance on Route 109 at the shared access way with the site/Walgreens exceeds minimum AASHTO requirements for the posted speed limit.

SAFETY ANALYSIS

- 31. The TIA provided a crash analysis for the existing study intersections between 2015 and 2019 (the most recent complete year of MassDOT data) based on MassDOT crash data which is generally consistent with industry standard methodology. During the five-year study period, intersection improvements were implemented by others at the Route 109/Holliston Street intersection to address safety issues identified in the 2014 Road Safety Audit (RSA) prepared for the intersection. The TIA did not provide the crash data in the appendix material. Tetra Tech recommends the MassDOT crash data be provided for completeness.
- 32. The TIA reported a total of 36 crashes at the Route 109/Holliston Street intersection and 25 crashes at the Route 109/Medway Commons Driveway intersection during the five-year study period, resulting in crash rates consistent with or below the MassDOT Statewide (0.78) and Districtwide (0.89) averages for signalized intersections. Tetra Tech generally concurs with the crash rate calculations provided.
- 33. Although not discussed in the TIA, VAI has completed an RSA for the Route 109/Medway Commons/Walgreens driveway intersection (Dated April 2022) as part of the nearby multifamily residential development Project to be located at 39 Main Street in Medway. The April 2022 RSA identified numerous potential short-term and long-term improvements to enhance safety at the Route 109/Medway Commons/Walgreens driveway intersection. Given that this intersection will serve as the de facto access

to the 86 Holliston Street site, Tetra Tech recommends that the Applicant work with the Town to identify which, if any, of the safety improvements identified in the April 2022 should be implemented as part of the proposed medical office building Project.

Study Time Horizon

34. The TIA utilized a seven-year planning horizon from the year the traffic study was submitted (2029 Future Year condition) which is consistent with MassDOT traffic studyguidelines.

FUTURE NO-BUILD TRAFFIC VOLUMES

35. A one percent annual growth rate was applied for seven years from the 2022 Existing peak hour traffic volumes to estimate peak hour traffic volumes in the planning year 2029. This growth rate was based on MassDOT continuous count station data. The TIA also considered traffic associated with specific area development Projects based on consultation with the Medway Planning and Economic Development Department. Tetra Tech generally concurs with this methodology.

TRIP GENERATION

36. Trip Generation Land Use Code (LUC) 720 – Medical-Dental Office trip rates from the Institute of Transportation Engineers (ITE) Trip Generation Manual, 11th Edition were applied. This methodology is reasonable for the proposed medical office building use.

TRIP DISTRIBUTION/TRIP ASSIGNMENT

37. The distribution of Project trips through the study intersections is based on existing travel patterns adjacent to the site during peak commuting periods. Tetra Tech recommends that the Applicant provide the supporting trip distribution calculations for review.

INTERSECTION OPERATIONAL ANALYSIS

- 38. The TIA utilized Highway Capacity Manual (HCM) methodology for the signalized intersections using Synchro software to conduct the intersection capacity analyses. This is consistent with industrystandard methodology.
- 39. The TIA indicates that the study intersections operate at overall levels of service (LOS) D or better operations during the peak hours under existing conditions and future year conditions (with or without the Project). Industry standards suggest that LOS D or better operations during peak hours are generally considered acceptable for most intersections. The TIA also reports that all movements at the intersection will operate at LOS D or better operations with or without the Project. The exception is the Holliston Street southbound movement at Route 109 which is expected to operate at longer delays (LOS E) during the weekday morning peak hour. However, this LOS E condition will occur independently of the proposed medical office building use, with a Project-related delay increase to this movement of less than 2 seconds. Project-related vehicle queues at the study intersections are shown to increase by up to 7 vehicles during peak hours. Additionally, field observations conducted by Tetra Tech during the weekday evening peak hour indicate that existing vehicle queues on Route 109 westbound at Holliston Street extend back through the Route 109/Medway Commons Walgreens driveway intersection at times. Tetra Tech recommends that the Applicant consider evaluating traffic signal timing modifications at the study intersections to determine if improved vehicle queueing can be achieved.

PARKING

40. Per the parking summary provided in site Layout Plan Sheet 5, the total proposed parking supply of 102 spaces exceeds the Town requirement of 73 spaces (1 space per 300 sf applied to a 21,900-sf medical office building). Therefore, preparation of a parking analysis is not warranted for the Project. However, please see prior comments regarding parking in the Site Plan Review section.

SITE ACCESS/EMERGENCY ACCESS

- 41. The TIA recommended numerous Project access improvements including a minimum internal circulation aisle width of 24 feet, compliance with Manual on Uniform Traffic Control Devices (MUTCD) standards for all proposed signage and pavement markings, compliance with American with Disabilities Act (ADA) standards for all proposed crosswalks and wheelchair ramps, maintenance of proposed signage and landscaping so as not to restrict sight lines at the site driveway and the timely removal of snow accumulations (windrows) within site driveway sight line triangles. Tetra Tech generally concurs with these recommendations.
- 42. The Project is committed to implementing a Transportation Demand Management (TDM) program aimed at reducing single-occupancy vehicle usage at the site. Tetra Tech agrees with the implementation of a TDM program for the site and recommends that the Applicant work with the Town to finalize the specific elements of the program including the location and number of proposed bicycle parking.
- 43. Queues from vehicles waiting to exit the shared access way onto Route 109 could block vehicles from entering the front (south side) of the proposed medical office building site due to the close proximity of the southerly site driveway and the Route 109 signal. Tetra Tech recommends that the Applicant evaluate the feasibility of restricting the southerly driveway to exit-only movements or implementing alternative traffic guidance/control at the internal southerly intersection with Walgreens (i.e., Do Not Block pavement markings and signage, all-way Stop control, etc.) to minimize vehicle conflicts on the north leg of the Route 109/Walgreens driveway intersection.
- 44. The Project proposes to install Stop signs at the Project driveway approaches to the shared access way with Walgreens. Tetra Tech recommends that MUTCD-compliant Stop bar pavement markings also be installed at these locations.
- 45. The Project proposes to locate the medical office building's trash pick-up/drop-off area at the intersection with the proposed northerly site driveway and the shared access way with Walgreens. Although this is a low-volume intersection, the location of the proposed trash area will require a trash truck to pull in and/or back out in the intersection causing a potentially unsafe condition. Tetra Tech recommends that the Applicant explore the feasibility of relocating the proposed trash area so that a trash truck can safely maneuver in and out of the trash area with minimal impacts to vehicles traveling through this area.
- 46. Tetra Tech recommends that the Applicant provide information on the proposed loading/delivery operations and ensure that proposed loading activity will not impede access and circulation for patients, staff or emergency vehicles.
- 47. Tetra Tech recommends that the Applicant provide AutoTurn analyses to ensure that the largest emergency vehicle, delivery vehicle and trash truck can adequately access the site. The emergency circulation should be reviewed with the Medway Fire Department.
- 48. The proposed snow storage location in the northeast portion of the site could block the sight line of the trash area for vehicles entering the rear part of the site at this location.
- 49. The proposed snow storage in the southwest corner of medical office building could block the views of oncoming traffic and vehicles pulling in or backing out of parking spaces in this area of the site.

We believe these responses have addressed the concerns expressed by Tetra Tech from their review letter. Should you have any further questions or concerns, please contact our office.

Sincerely, Guerriere & Halnon, Inc.

amanda Ceder

Amanda Cavaliere Franklin Office Manager

Attachments



Est. 1972

Milford Office 333 West Street, P. O. Box 235 Milford, MA 01757-0235 (508) 473-6630/Fax (508) 473-8243

Franklin Office 55 West Central Street Franklin, MA 02038-2101 (508) 528-3221/Fax (508) 528-7921

Whitinsville Office 1029 Providence Road Whitinsville, MA 01588-2121 (508) 234-6834/Fax (508) 234-6723

July 12, 2022

Medway Planning Board 155 Village Street Medway, MA 02053 Attn: Matthew Hayes, Chairman

RE: Comments from Medway Police Department Jeffrey W/ Watson Sergeant/Safety Officer: Milford Regional Medical Facility at 86 Holliston Street

F4516

Dear Members of the Board:

On behalf of our client, Lobisser Companies, Guerriere & Halnon, Inc. has prepared the following information to address comments contained in the letter from Sergeant Jeffery W. Watson dated May 10, 2022.

<u>Sergeant Watson's</u> findings, comments and recommendations are shown in *italics* followed by our response in **bold**.

I would request that the South Side Entrance become exit only. All traffic entering the complex would enter through the North entrance. Do not Enter signs would be installed on the outside of the Exit. I would also request Stop signs and painted stop lines at both the north and south Exits.

GH: The southern exit has been revised to be exit only, and stop bars and signs have been added to both the north and south exits, as requested.

In March of 2022 a Road Safety Audit was done by Mass DOT on the intersection of Main St at Medway Commons and Walgreens. The audit shows many rear end accidents at this intersection on the West bound lane. The current southern exit and entrance is too close to the Main St intersection. This has the potential to have cars queuing up causing a great safety concern for even more rear end accidents.

GH: The southern entrance has been adjusted to intersect with the existing driveway 15' further north. In addition, the applicant has agreed to follow the recommendations of the safety audit and is coordinating with the Town DPW / Highway Department on implementation of the recommendations.

I would also request the Town look at Table Three, page 10 and 11 of the Safety Audit. This table shows the potential safety enhancements necessary for this intersection. If we are to add this type of traffic to this area, I would ask that the Town request these recommendations.

GH: The applicant has agreed to follow the recommendations of the safety audit and is coordinating with the Town DPW /Highway Department on implementation of the recommendations.

We believe these responses have addressed the concerns expressed by Sergeant Jeffery W. Watson from his review letter. Should you have any further questions or concerns, please contact our office.

Sincerely, Guerriere & Halnon, Inc.

amarda Cumles

Amanda Cavaliere Franklin Office Manager

F-4516 Town of Medway Site Plan Rules and Regulations Chapter 204-3(C) - Project Narrative 86 Holliston Street Medway, MA 02053

1, 2 and 3) Current and Proposed Use with Description of Work:

The project area is located at 86 Holliston Street and consists of approximately 100,222 +/- sf. (2.30 +/- Ac.) of land owned by Freil Realty II, LLC and being developed by Lobisser Companies. The project area will be created from the larger parcel (8.02+/- acres), which is currently used as a farm, with livestock grazing within the project area. The property is bordered by a residential neighborhood to the north, a Walgreens pharmacy store to the east, Main Street and a commercial plaza to the south, and the remaining portion of the farm to the west. The site is located within the Central Business zoning district and has frontage along Main Street. Portions of the site lie within the jurisdictional buffers of bordering vegetated wetlands, FEMA flood zone X, and the site is located within the Medway Ground Water Protection District.

The topography is mainly grass and consists of slopes ranging from 0% to 10% grade. A 36" culvert, originating offsite, daylights on-site near the southwestern portion of the site adjacent to Main Street. The area that daylights was designated by Goddard Consulting, LLC as a regulated resource, or bank of intermittent stream channel and has a 100-ft jurisdictional buffer zone. A report and associated wetland data forms prepared by Goddard Consulting, dated December 14, 2021 is attached for your reference.

The Applicant is proposing to construct a one story 21,900 +/- sf medical building and associated driveways, parking lots, utilities, landscaping and grading. Drainage infrastructure associated with the new development will also be constructed. The proposed medical building will consist of pediatric care, women's health, family medicine, emergency/urgent care, laboratory and x-ray.

4 and 5) Projected Water and Sewer Demand:

Projected water and sewer demand calculations were based on 41 employees, which include 8-10 doctors. The water usage/sewer rates are estimated to be 2,665 gallons per day (gpd) and 2,500 gpd, respectively. Water usage is based on 65 gallons per capita per day (gpcd) multiplied by the number of employees and sewer rates are 250 gpd per doctor in accordance with 310 CMR 15.203 System Sewage Flow Design Criteria for a doctor's office.

6) Proposed Hours of Operation:

The proposed operating hours for the facility are Monday through Friday 8am - 5 pm with the possibility of additional hours on Saturday between 8am - 3pm for emergency/urgent care.

7) Existing and Proposed Means of Vehicular and Pedestrian Access and Egress:

As depicted on the enclosed plan set, there is an existing paved access drive with a traffic loop detector and traffic lights that will serve as the main point of access and egress for vehicular traffic to the proposed medical facility and Main Street (Route 109) and sidewalk for pedestrians. A floor plan has been attached depicting pedestrian access/egress to the facility.

8)Parking Accommodations:

In accordance with the Town of Medway Zoning Bylaw Table 3 Schedule of Off-Street Parking Requirements 1 space per 300 sf is required for a medical office or clinic. As depicted on Sheet 5 – Layout Plan, the site will consist of 88 parking spaces, including 6 spaces for electric vehicle, 10 handicap

F-4516 Town of Medway Site Plan Rules and Regulations Chapter 204-3(C) - Project Narrative 86 Holliston Street Medway, MA 02053

accessible spaces and 72 standard size 18' long x 9'wide spaces. Based on discussions with the Applicant, parking assessments for similar facilities previously constructed by Lobisser Companies in surrounding areas it is our understanding that additional parking accommodations are necessary to mitigate any adverse impacts on the abutting properties.

9)Proposed Lot Coverage and Impervious Surface:

- Total Lot Area = 100,222+/- sf
- Existing Pavement = 10,263+/- sf
- Proposed Building = 21,900 +/- sf
- Proposed Pavement = 36,329+/- sf
- Total Impervious Coverage = 68,492+/- sf (68.3%)

10) Timetable for Project Completion:

Timetable for project completion is in progress and can be provided upon request.

11) Proposed On and Off-Site Mitigation Measures:

Stormwater mitigation measures prior to commencing construction activities, include the installation of erosion and sedimentation control surrounding the project area, temporary diversion swale, stabilized construction entrance and temporary sedimentation basin to manage runoff both during and after significant storm events. Temporary stockpile, concrete wash out stations and vehicle fueling areas onsite will be isolated with erosion control materials as shown on Sheet 4.

Permanent on-site mitigation measures proposed to be constructed includes an extensive subsurface stormwater management system to mitigate runoff during and after storm events, as well as the construction of a rain garden. The Applicant will limit construction debris and materials onsite. In the event that debris is carried onto the public way, the owner/applicant shall be responsible for all cleanup within the roadway.

Construction activities will be conducted in accordance with the Town's Zoning Bylaws, which will be between 7am and 7pm Monday thru Friday. No construction will take place on Sundays, federal holidays or state legal holidays without advance written approval from the Building Commissioner.

12) List of other Permits Required:

The Applicant is currently before the Town of Medway Conservation Commission presenting both a Notice of Intent for proposed construction activities within 100 feet of a bordering vegetated wetland/intermittent stream located at the southwest portion of the project site and a Stormwater Management/Land Disturbance Permit. The next public hearing is scheduled for July 14, 2022.

Development Impact Statement Site Plan and Special Permit 86 Holliston Street Medway, MA 02053

In accordance with the Town of Medway Planning Board Site Plan Rules and Regulations Chapter 200 Article IV Major Site Plan Review §204-3(F), Guerriere & Halnon, Inc. has prepared the Development Impact Statement for the proposed project located at 86 Holliston Street, Medway Massachusetts.

1) Traffic Impact Assessment

A Transportation Impact Assessment (TIA) was prepared by Vanasse & Associates, Inc. entitled *Proposed Medical Office Building*, 86 Holliston Street, Medway, Massachusetts dated April 2022 and previously submitted to the Planning Board for review. A copy of the report along with supplemental information responding to comments received by Tetra Tech dated May 31, 2022 are enclosed.

2) Environmental Impact Assessment

The proposed project area will be created from the larger parcel (8.02+/- acres), which is currently used as a farm, with livestock grazing within the project area. The property is bordered by a residential neighborhood to the north, a Walgreens pharmacy store to the east, Main Street and a commercial plaza to the south, and the remaining portion of the farm to the west. The site is located within the Central Business zoning district and has frontage along Main Street. Portions of the site lie within the jurisdictional buffers of bordering vegetated wetlands, FEMA flood zone X, and the site is located within the Medway Ground Water Protection District.

The proposed project will generally consist of constructing a single story 21,900+/- sf medical building associated with Milford Regional Hospital and Milford Physicians Group. The facility will have medical offices for pediatric care, women's health, family medicine, emergency/urgent care, laboratory and x-ray. In addition to the proposed medical facility, the site will consist of 88 parking spaces, including handicap accessible and electric charging stations, amenity space and rain gardens above grade and associated subsurface utilities for stormwater management, water, sewer and electrical.

Corresponding design documents describing the potential impacts of the proposed development both onsite and off-site environmental quality, including the Stormwater Management Report prepared by Guerriere & Halnon, Inc. dated April 14, 2022 last revised June 29, 2022 and Sound Study prepared by Tech Environmental dated July 6, 2022 are enclosed.

3) Neighborhood Impact Assessment

The proposed medical facility is located off Main Street (Route 109) within the Central Business District and surrounded by residential development (Robin Circle) to the north, commercial/retail facilities to the east and south and the Holliston Street/Main Street intersection to the west. The abutting residential property will be screened with an 8' fence and trees to minimize the view of the development. No significant impacts to the surrounding properties are anticipated.

The proposed architectural features are consistent with the Town of Medway Design Review Guidelines and align with the Town of Medway's long-term development plan for this area of Town. Color renderings and architectural plans are enclosed.

Development Impact Statement Site Plan and Special Permit 86 Holliston Street Medway, MA 02053

4) Parking Impact Assessment

In accordance with the Town of Medway Zoning Bylaw Table 3 Schedule of Off-Street Parking Requirements 1 space per 300 sf is required for a medical office or clinic. As depicted on Sheet 5 – Layout Plan, the site will consist of 88 parking spaces, including 6 spaces for electric vehicle, 10 handicap accessible spaces and 72 standard size 18' long x 9'wide spaces. Based on discussions with the Applicant, parking assessments for similar facilities previously constructed by Lobisser Companies in surrounding areas it is our understanding that additional parking accommodations are necessary to mitigate any adverse impacts on the abutting properties.

Screening along the rear of the property has been incorporated to minimize neighboring areas visibility including an 8' fence and trees as depicted on Sheet 8-Landscaping Plan. Additionally, shade trees are proposed throughout the parking lot in accordance with the Town of Medway Site Plan Rules and Regulations.

Project Name	Site Plan 86 Holliston Street Medway, Massachusetts
Property Location	86 Holliston Street
Type of Permit	Major Site Plan and Special Permit
Identify the number and title of the relevant section of the <i>Site</i> <i>Plan Rules and Regulations</i> from which a waiver is sought.	Section 204-5 (D)(14) Master Signage Plan.
Summarize the text of the relevant section of the <i>Rules and Regulations</i> from which a waiver is requested.	Section 204-5 (D) (14)in its entirety
What aspect of the <i>Rule and</i> <i>Regulation</i> do you propose be waived?	Request the Planning Board waive the requirement to submit a Master Signage Plan as part of the major site plan set submittal.
What do you propose as an alternative to the standard?	Request the Decision include a condition that the Master Signage Plan will be submitted to Planning Board for review/approval prior to issuing a Certificate of Occupancy.
Explanation/justification for the waiver request. How does the particular rule/regulation not apply to the site or situation under review?	The master signage will be submitted under a separate permit application for Planning Board review and does not pertain to the overall site plan currently under review
Explanation/justification. How would approval of this waiver request not be significantly detrimental to achieving the purposes of site plan review?	The Master Signage Plan will be submitted under a separate permit application for Planning Board review and will not be significantly detrimental to achieving the purposes of the Site Plan Review. A request to include a condition in the Decision that this requirement be met prior to issuing an Occupancy Permit has been suggested as a proposed alternative.
Explanation/justification. How would approval of this waiver request result in a superior design or provide a clear and significant improvement to the quality of this development?	N/A as a Master Signage Plan will be submitted to Planning Board for review under a separate permit application.
What is the impact on the development if this waiver request is denied?	If this waiver request is denied, construction activities would be delayed until the Master Signage Plan is coordinated
What mitigation measures do you propose to offset not complying with the particular Rule/Regulation?	Request the Decision include a condition that the Master Signage Plan will be submitted to Planning Board for review/approval prior to issuing a Certificate of Occupancy.
Waiver Request Prepared By:	Mike Hassett
Date:	7/1/2022
Questions?? -	Please contact the Medway PEDB office at 508-533-3291.

2/7/2022

Project Name	Site Plan 86 Holliston Street Medway, Massachusetts
Property Location	86 Holliston Street
Type of Permit	Major Site Plan and Special Permit
Identify the number and title of the relevant section of the <i>Site</i> <i>Plan Rules and Regulations</i> from which a waiver is sought.	Section 204-5 (B) Site Context Sheet.
Summarize the text of the relevant section of the <i>Rules and Regulations</i> from which a waiver is requested.	Section 204-5 (B) in its entirety
What aspect of the <i>Rule and</i> <i>Regulation</i> do you propose be waived?	To provide a locus map with less information than typically required.
What do you propose as an alternative to the standard?	An abutter sheet (Sheet 2) depicting the vicinity map with a list of abutters within 300' of the property boundary, zoning parcel ID and street names only.
Explanation/justification for the waiver request. How does the particular rule/regulation not apply to the site or situation under review?	The proposed project area is within the Central Business District and is relatively flat with one residential neighborhood directly abutting the lot. The abutter sheet (Sheet 2) provides a similar overview to the requirement.
Explanation/justification. How would approval of this waiver request not be significantly detrimental to achieving the purposes of site plan review?	Approval to this waiver request would not be significantly detrimental to achieving the purpose of site plan review since similar information is provided and depicts sufficient information to identify where the project area is in relationship to the surrounding areas.
Explanation/justification. How would approval of this waiver request result in a superior design or provide a clear and significant improvement to the quality of this development?	N/A
What is the impact on the development if this waiver request is denied?	If this waiver request is denied, additional engineering would be necessary to add the Site Context Sheet information on a plan that currently depicts the intent of the requirement.
What mitigation measures do you propose to offset not complying with the particular Rule/Regulation?	N/A
Waiver Request Prepared By:	Mike Hassett
Date:	4/14/2022/REVISED 7/6/2022
Questions?? - Please contact the Medway PEDB office at 508-533-3291.	
	2/7/2022

Project Name	Site Plan 86 Holliston Street Medway, Massachusetts
Property Location	86 Holliston Street
Type of Permit	Major Site Plan and Special Permit
Identify the number and title of the relevant section of the <i>Site</i> <i>Plan Rules and Regulations</i> from which a waiver is sought.	Section 204-5 (D) (8) (a) Landscape Plan
Summarize the text of the relevant section of the <i>Rules and Regulations</i> from which a waiver is requested.	(a) To provide a landscape plan by a Registered Professional Landscape Architect
What aspect of the <i>Rule and</i> <i>Regulation</i> do you propose be waived?	To provide a landscape plan that is not prepared by a Reg. Professional Landscape Architect
What do you propose as an alternative to the standard?	Provide a landscape plan that has been prepared by an in-house site designer with 25+ years landscape design experience for similar projects.
Explanation/justification for the waiver request. How does the particular rule/regulation not apply to the site or situation under review?	Waiver requested because proposed landscaping design requirements are not outside our designers area of expertise and the intent of the landscaping requirements will remain consistent with the Site Plan Rules & Regulations.
Explanation/justification. How would approval of this waiver request not be significantly detrimental to achieving the purposes of site plan review?	
Explanation/justification. How would approval of this waiver request result in a superior design or provide a clear and significant improvement to the quality of this development?	
What is the impact on the development if this waiver request is denied?	If this waiver request is denied, additional engineering will be required on a plan that currently depicts the intent of this requirement
What mitigation measures do you propose to offset not complying with the particular Rule/Regulation?	N/A
Waiver Request Prepared By:	Mike Hassett
Date:	4/14/2022/ REVISED 7/6/2022
Questions?? - Please contact the Medway PEDB office at 508-533-3291.	
	2/7/2022

Project Name	Site Plan 86 Hellicton Street Medway, Massachusette
	Site Plan 86 Holliston Street Medway, Massachusetts
Property Location	86 Holliston Street
Type of Permit	Major Site Plan and Special Permit
Identify the number and title of the relevant section of the <i>Site</i> <i>Plan Rules and Regulations</i> from which a waiver is sought.	Section 207-9 (B)(1) Pedestrian and Bicycle Access and Sidewalks.
Summarize the text of the relevant section of the <i>Rules and Regulations</i> from which a waiver is requested.	Five foot sidewalks shall be provided within parking areas. Where sidewalks abut parking areas. The sidewalk width shall be increased by 2' to accommodate vehicular bumper overhang.
What aspect of the <i>Rule and</i> <i>Regulation</i> do you propose be waived?	To provide 5' sidewalks for approximately 28+/- feet in front of building where 7' is required.
What do you propose as an alternative to the standard?	Propose car stops within the parking spaces directly abutting the 5' sidewalk
Explanation/justification for the waiver request. How does the particular rule/regulation not apply to the site or situation under review?	The entrance to the building is to the right and left of the proposed sidewalk that is 5' wide. Pedestrians can access the building from either entrance and not be impeded by the car overhang.
Explanation/justification. How would approval of this waiver request not be significantly detrimental to achieving the purposes of site plan review?	There are no access points to the building within the 28'+/- feet where the sidewalk is reduced to 5' and does not detrimentally impact the intent of this requirement.
Explanation/justification. How would approval of this waiver request result in a superior design or provide a clear and significant improvement to the quality of this development?	
What is the impact on the development if this waiver request is denied?	
What mitigation measures do you propose to offset not complying with the particular Rule/Regulation?	
Waiver Request Prepared By:	Mike Hassett
Date:	4/14/2022/ REVISED 7/7/2022
Questions?? -	Please contact the Medway PEDB office at 508-533-3291.
	2/7/2022

2/7/2022

Project Name	Site Plan 86 Holliston Street Medway, Massachusetts
Property Location	86 Holliston Street
Type of Permit	Major Site Plan and Special Permit
Identify the number and title of the relevant section of the <i>Site</i> <i>Plan Rules and Regulations</i> from which a waiver is sought.	Section 207-12 (B) Parking G.(3) Location(a)
Summarize the text of the relevant section of the <i>Rules and Regulations</i> from which a waiver is requested.	No parking spaces within twenty feet of building entrances or building exits.
What aspect of the <i>Rule and</i> <i>Regulation</i> do you propose be waived?	To allow parking within twenty feet of building entrances and building exits.
What do you propose as an alternative to the standard?	Propose to have parking within twenty feet of building entrances and building exits based on the medical office use.
Explanation/justification for the waiver request. How does the particular rule/regulation not apply to the site or situation under review?	The proposed site is a medical building, parking allowed within twenty feet of building entrances and building exits would provide safer access/egress for patients.
Explanation/justification. How would approval of this waiver request not be significantly detrimental to achieving the purposes of site plan review?	N/A
Explanation/justification. How would approval of this waiver request result in a superior design or provide a clear and significant improvement to the quality of this development?	The waiver would provide safer access/egress for patients utilizing the medical facility.
What is the impact on the development if this waiver request is denied?	If this waiver is denied, patients will have further distance to travel to access/egress the facility.
What mitigation measures do you propose to offset not complying with the particular Rule/Regulation?	
Waiver Request Prepared By:	Mike Hassett
Date:	4/14/2022/REVISED 7/7/2022
Questions?? - Please contact the Medway PEDB office at 508-533-3291. 2/7/2022	

Project Name	Site Plan 86 Holliston Street Medway, Massachusetts
Property Location	86 Holliston Street
Type of Permit	Major Site Plan and Special Permit
Identify the number and title of the relevant section of the <i>Site</i> <i>Plan Rules and Regulations</i> from which a waiver is sought.	Section 207-19 Landscaping B. (2) Landscape buffers
Summarize the text of the relevant section of the <i>Rules and Regulations</i> from which a waiver is requested.	Waiver request for perimeter landscaping between adjoining properties.
What aspect of the <i>Rule and</i> <i>Regulation</i> do you propose be waived?	To allow an evergreen buffer along the rear of the site only.
What do you propose as an alternative to the standard?	
Explanation/justification for the waiver request. How does the particular rule/regulation not apply to the site or situation under review?	Planting along the west side of the site would conflict with the existing subsurface drainage located along the property line. Evergreen plantings on the easterly site would interfere with site lines along the access road.
Explanation/justification. How would approval of this waiver request not be significantly detrimental to achieving the purposes of site plan review?	
Explanation/justification. How would approval of this waiver request result in a superior design or provide a clear and significant improvement to the quality of this development?	
What is the impact on the development if this waiver request is denied?	
What mitigation measures do you propose to offset not complying with the particular Rule/Regulation?	
Waiver Request Prepared By:	Mike Hassett
Date:	4/14/2022/REVISED 7/7/2022
Questions?? -	Please contact the Medway PEDB office at 508-533-3291.
	2/7/2022

Project Name	Site Plan 86 Holliston Street Medway, Massachusetts
Property Location	86 Holliston Street
Type of Permit	Major Site Plan and Special Permit
Identify the number and title of the relevant section of the <i>Site</i> <i>Plan Rules and Regulations</i> from which a waiver is sought.	Zoning Bylaws Section 10 Central Business District (2.D.2.A) Off-Street Parking Requirements
Summarize the text of the relevant section of the <i>Rules and Regulations</i> from which a waiver is requested.	To allow additional off-street parking spaces greater than the min/max specified by use in Table 3 Section 7.1.1.D by request of a waiver from the Planning and Economic Development Board.
What aspect of the <i>Rule and</i> <i>Regulation</i> do you propose be waived?	Request to waive the requirement of 1 space per 300 sf associated with a medical office or clinic.
What do you propose as an alternative to the standard?	To allow 1 space per 250 sf for a medical office or clinic.
Explanation/justification for the waiver request. How does the particular rule/regulation not apply to the site or situation under review?	
Explanation/justification. How would approval of this waiver request not be significantly detrimental to achieving the purposes of site plan review?	Approval of this waiver would not be detrimental to achieving the purposes of site plan review. Based on data from similar sites, the additional parking being requested does not deviate significantly from the required amount of spaces.
Explanation/justification. How would approval of this waiver request result in a superior design or provide a clear and significant improvement to the quality of this development?	Approval of this waiver allows for additional electric vehicle parking above the required amount and provide sufficient parking accommodations for the proposed use.
What is the impact on the development if this waiver request is denied?	Based on data from other similar sites, 1 space per 300 sf would result in an insufficient amount of parking spaces and promote parking off-site burdening other businesses.
What mitigation measures do you propose to offset not complying with the particular Rule/Regulation?	Additional electric vehicle parking spaces and handicap accessible parking spaces are being provided above the amount required.
Waiver Request Prepared By:	Amanda Cavaliere
Date:	7/7/2022
Questions?? -	Please contact the Medway PEDB office at 508-533-3291.
	2/7/2022



Planning & Economic Development Board Town of Medway, MA

Application for Approval of Special Permit

INSTRUCTIONS TO APPLICANT/OWNER

This Application is made pursuant to the Medway Zoning Bylaw.

The Town's Planning and Engineering Consultants will review the Application and associated submittals and provide review letters to the Planning and Economic Development Board. A copy of those review letters will be provided to you in advance of the meeting.

You and/or your duly authorized Agent/Official Representative are expected to attend the Board meeting at which your Application will be considered to answer any questions and/or submit such additional information as the Board may request. Your absence may result in a delay the Board's review of the special permit application.

	,
APPLICANT INFO	RMATION
Applicant's Name:	Lobisser Companies
Mailing Address:	1 Charlesview Road Hopedale, MA 01747
Name of Primary Cor	ntact: Kevin Lobisser
Telephone: Office: 508-478-	6235 Cell: 508-294-3177
Email address:	kevin@lobissercompanies.com
Please check he	ere if the Applicant is the equitable owner (purchaser on a purchase and sales agreement.)
PROPERTY INFO	RMATION
Location Address:	86 Holliston Street
The land shown on the	ne plan is shown on Medway Assessor's Map # as Parcel #
Size of Development	Parcel(s): 2.2 Acres
Development Name:	Milford Begional Medical Center
General Description	
Medway Zoning Distr	ict Classification: Central Business District

____, 20____

13

TYPE OF SPECIAL PERMIT

As provided in the following Section(s) of the Medway Zoning Bylaw. List all that apply.

See attached

PROPERTY	OWNER INFORMATION (if not applicant)
Property Own	er's Name: Freil Realty II, LLC
Mailing Addre	ss: 86 Holliston Street Medway, MA 02053
Primary Conta	ct: David Cassidy
Telephone: V Office:	508 533 - 8939 Cell: 508 - 493 8939
Email address	
OFFICIAL R	EPRESENTATIVE INFORMATION
Name:	Guerriere & Halnon, Inc.
Address:	55 West Central Street Franklin, MA 02038
Telephone: Office:	508-528-3221 Cell:
Email address	acavaliere@gandhengineering.com
SIGNATURE	S

The undersigned, being the Applicant, herewith submits this application for a special permit(s) to the Medway Planning and Economic Development Board for review and action.

I hereby certify, under the pains and penalties of perjury, that the information contained in this application is a true, complete and accurate representation of the facts regarding the property under consideration.

(If applicable, I hereby authorize <u>Guerriere & Halnon, Inc.</u> to serve as my Agent/Official Representative to represent my interests before the Medway Planning & Economic Development Board with respect to this application.)

In submitting this application, I authorize the Board, its consultants and agents, Town staff, and members of the Design Review Committee and other Town boards and committees to access the site during the special permit review process.

Signature of Property Owner re pro Signature of Applicant (if other than Property Owner)

Signature of Agent/Official Representative

Date

SPECIAL PERMIT APPLICATION/FILING FEES There is no separate special permit application fee when the project also requires site plan review.

SPECIAL PERMIT APPLICATION CHECKLIST

It is understood that the applicant shall also file a corresponding application for Site Plan Review and Approval with all required submittals.

Х

Complete and detailed narrative on how the proposed development project meets the special permit criteria included in the Medway Zoning Bylaw, SECTION 3.4 Special Permit Criteria AND any specific criteria included in the particular section(s) of the Zoning Bylaw for which a special permit is sought.

7-20-2018

F-4516

Special Permit Application Town of Medway Zoning Bylaw Section 5.6.3-Groundwater Protection District 86 Holliston Street Medway, MA 02053

Applicant: Lobisser Companies, 1 Charlesview Road, Hopedale, MA 01747 *Owner:* Freil Realty II, LLC 86 Holliston Street, Medway, MA 02053

Request for Special Permit approval: Section 5.6.3-Groundwater Protection District. To allow by Special Permit impervious coverage in excess of 15% or 2,500 sf, whichever is greater, within a Groundwater Protection District as shown on the Plan entitled: "Site Plan 86 Holliston Street Medway Massachusetts dated April 14, 2022 and last revised June 29, 2022" prepared by Guerriere & Halnon, Inc. 55 West Central Street Franklin, MA 02038.

SPECIAL PERMIT APPROVAL

1. <u>Special Permit Approval Requirements under Section 5.6.3 (G) of the Zoning By-</u> Laws, states in part:

Criteria: The Board of Appeals may adopt regulations to govern design features of projects. Such regulations shall be consistent with the Planning and Economic Development Board's subdivision rules and regulations.

WHEREFORE, The Applicant respectfully requests that the Planning Board grant a SPECIAL PERMIT to allow impervious coverage in excess of 15% or 2,500 sf, whichever is greater, within a Groundwater Protection District as shown on the Plan entitled: "Site Plan 86 Holliston Street Medway Massachusetts dated April 14, 2022 and last revised June 29, 2022" prepared by Guerriere & Halnon, Inc. 55 West Central Street Franklin, MA 02038.

Dated: July 12, 2022

Respectfully Submitted,

names Cavalla

Amanda K. Cavaliere Office Manager, Franklin Guerriere & Halnon, Inc 55 West Central Street Franklin, MA 02038

(508) 528-3221

Guerriere & Halnon, Inc. Engineering & Land Surveying

F-4516

Special Permit Application Town of Medway Zoning Bylaw Section 10 Central Business District §2.D.2.C – Parking Placement 86 Holliston Street Medway, MA 02053

Applicant: Lobisser Companies, 1 Charlesview Road, Hopedale, MA 01747 *Owner:* Freil Realty II, LLC 86 Holliston Street, Medway, MA 02053

Request for Special Permit approval: Section 10 §2.D.2.C – Parking Placement.

To allow by Special Permit vehicular parking between the front building line and the street rightof-way line as shown on the Plan entitled: "Site Plan 86 Holliston Street Medway Massachusetts dated April 14, 2022 and last revised June 29, 2022" prepared by Guerriere & Halnon, Inc. 55 West Central Street Franklin, MA 02038.

SPECIAL PERMIT APPROVAL

<u>Special Permit Approval Requirements under Section 10.3(E) of the Zoning By-Laws,</u> <u>states in part:</u>

Criteria:

- 1. Special permits granted under this Section 10.3 are not subject to the special permit criteria under Section 3.4.
- 2. Before granting a special permit for a mixed-use development or flexible site design of a permitted use in the Central Business district, the PEDB shall find that all of the following criteria are met:

a. The proposed uses and site design represent the qualities of a traditional New England town center;

The proposed use and site design is consistent with the qualities of traditional New England Town Center. The building and driveways have been strategically placed to blend with the existing Walgreens site as well as the potential for development connection points throughout the property.

b. The proposed site design is environmentally sound and is readily accessible to and useable by pedestrians;

The site design is environmentally sound and readily accessible to and useable by pedestrians. Sidewalks and outdoor amenities welcome the pedestrian traffic and business with picnic tables, benches and landscaping around the property.

c. The proposed site design reflects and advances the goals and objectives of the Medway Master Plan as updated;

The proposed site design is consistent with the Town of Medway Design Review Guidelines and Master Plan which includes redevelopment of key properties on Main Street (Route 109).

d. Adequate pedestrian and (where applicable) vehicular linkages within the site and connecting to abutting properties are provided;

The proposed site design has incorporated areas within the site to allow for future vehicular connections.

e. Streets, driveways, sidewalks, landscaped areas and public services are laid out in a safe manner;

Streets, driveways, sidewalks, landscaped areas and public services are laid out in a safe manner and in accordance the Town of Medway Design Review Guidelines and Site Plan Rules and Regulations.

f. Any detrimental impacts of the use on abutting properties and/or residential neighborhoods have been adequately mitigated; and

Please refer to the Development Impact Statement enclosed for mitigation measures proposed to alleviate any detrimental impacts of the use on abutting properties.

g. The site design incorporates the site's existing topography and protects natural features to the maximum extent feasible.

The site design incorporates the site's existing topography and protects the natural features with native species and wetland protection measures to minimize impacts to the existing intermittent stream along with architectural features such as the split rail fence and building materials to enhance the agricultural history of the property.

WHEREFORE, The Applicant respectfully requests that the Planning Board grant a SPECIAL PERMIT to allow vehicular parking between the front building line and the street right-of-way line as shown on the Plan entitled: "Site Plan 86 Holliston Street Medway Massachusetts dated April 14, 2022 and last revised June 29, 2022" prepared by Guerriere & Halnon, Inc. 55 West Central Street Franklin, MA 02038.

Dated: July 12, 2022

Respectfully Submitted,

amada Caralus

Amanda K. Cavaliere Office Manager, Franklin Guerriere & Halnon, Inc 55 West Central Street Franklin, MA 02038

(508) 528-3221

Guerriere & Halnon, Inc. Engineering & Land Surveying

F-4516

Special Permit Application Town of Medway Zoning Bylaw Section 10 Central Business District §4.C.2 – Alternative Building Type 86 Holliston Street Medway, MA 02053

Applicant: Lobisser Companies, 1 Charlesview Road, Hopedale, MA 01747 *Owner:* Freil Realty II, LLC 86 Holliston Street, Medway, MA 02053

Request for Special Permit approval: Section 10 §4.C.2 – Alternative Building Types To allow by Special Permit an alternative building type as shown on the Plan entitled: "Site Plan 86 Holliston Street Medway Massachusetts dated April 14, 2022 and last revised June 29, 2022" prepared by Guerriere & Halnon, Inc. 55 West Central Street Franklin, MA 02038.

SPECIAL PERMIT APPROVAL

1. <u>Special Permit Approval Requirements under Section 10.3(E) of the Zoning By-Laws,</u> <u>states in part:</u>

Criteria:

1. Special permits granted under this Section 10.3 are not subject to the special permit criteria under Section 3.4.

2. Before granting a special permit for a mixed-use development or flexible site design of a permitted use in the Central Business district, the PEDB shall find that all of the following criteria are met:

a. The proposed uses and site design represent the qualities of a traditional New England town center;

The proposed use and site design is consistent with the qualities of traditional New England Town Center and reflected in the proposed architectural renderings of the building.

b. The proposed site design is environmentally sound and is readily accessible to and useable by pedestrians;

The site design is environmentally sound and readily accessible to and useable by pedestrians. Sidewalks and outdoor amenities welcome the pedestrian traffic and business with picnic tables, benches and landscaping around the property.

c. The proposed site design reflects and advances the goals and objectives of the Medway Master Plan as updated;

The proposed site design is consistent with the Town of Medway Design Review Guidelines and Master Plan which includes redevelopment of key properties on Main Street (Route 109).

d. Adequate pedestrian and (where applicable) vehicular linkages within the site and connecting to abutting properties are provided;

The proposed site design has incorporated areas within the site to allow for future vehicular connections.

e. Streets, driveways, sidewalks, landscaped areas and public services are laid out in a safe manner;

Streets, driveways, sidewalks, landscaped areas and public services are laid out in a safe manner and in accordance the Town of Medway Design Review Guidelines and Site Plan Rules and Regulations.

f. Any detrimental impacts of the use on abutting properties and/or residential neighborhoods have been adequately mitigated; and

Please refer to the Development Impact Statement enclosed for mitigation measures proposed to alleviate any detrimental impacts of the use on abutting properties.

g. The site design incorporates the site's existing topography and protects natural features to the maximum extent feasible.

The site design incorporates the site's existing topography and protects the natural features with native species and wetland protection measures to minimize impacts to the existing intermittent stream along with architectural features such as the split rail fence and building materials to enhance the agricultural history of the property.

WHEREFORE, The Applicant respectfully requests that the Planning Board grant a SPECIAL PERMIT to allow an alternative building type as shown on the Plan entitled: "Site Plan 86 Holliston Street Medway Massachusetts dated April 14, 2022 and last revised June 29, 2022" prepared by Guerriere & Halnon, Inc. 55 West Central Street Franklin, MA 02038.

Dated: July 12, 2022

Respectfully Submitted,

imanda Casallie

Amanda K. Cavaliere Office Manager, Franklin Guerriere & Halnon, Inc 55 West Central Street Franklin, MA 02038

(508) 528-3221

Guerriere & Halnon, Inc. Engineering & Land Surveying



May 23, 2022 (revised July 19, 2022)

Ms. Susan E. Affleck-Childs Medway Planning and Economic Development Coordinator Medway Town Hall 155 Village Street Medway, MA 02053

Re: Milford Regional Medical Center Major Site Plan Review 86 Holliston Street Medway, Massachusetts

Dear Ms. Affleck-Childs:

Tetra Tech (TT) has performed a review of the proposed Site Plan for the above-mentioned Project at the request of the Town of Medway Planning and Economic Development Board (PEDB). The proposed Project is located at 86 Holliston Street in Medway, Massachusetts. The Project consists of construction of a 21,900 square-foot medical building with associated driveways, parking lot containing 102 parking spaces, utilities, and drainage infrastructure.

TT is in receipt of the following materials:

- A plan (Plans) set titled "Site Plan, 86 Holliston Street, Medway, Massachusetts" dated April 14, 2022, prepared by Guerriere & Halnon, Inc. (GHI).
- A Stormwater Report (Report), containing the Project Narrative and other required submittals for Major Site Plan Review, titled "Stormwater Report for Medway Medical Building, 86 Holliston Street, Medway, MA" dated April 14, 2022, prepared by GHI.
- A Transportation Impact Assessment (TIA), dated April 2022, prepared by Vanasse & Associates, Inc. (VAI).
- Architectural Renderings, dated February 11, 2021, prepared by HPA Design, Inc. (HPA).
- A Photometric Plan, dated April 15, 2022, prepared by Holbrook-Associated, Inc. (HAI).
- An Application for Major Site Plan Approval, dated April 14, 2022, prepared by GHI.
- An Application for Approval of Special Permit, dated April 13, 2022, prepared by the Applicant.

The Plans and accompanying materials were reviewed for conformance with the following Regulations and Bylaws:

 Town of Medway Planning & Economic Development Board Rules and Regulations, Chapter 200 – Site Plans, Rules & Regulations for Submission, Review and Approval of Site Plans. (Amended October 8, 2019)

The Project was also reviewed for good engineering practice and overall site plan efficiency. The Project's TIA has been reviewed for conformance with standard professional practices in the state of Massachusetts for the preparation of traffic impact and access studies for Projects of the size and nature of the proposed development. Review of the Project for zoning and stormwater related matters is being conducted by Town personnel and is excluded from this review.

TT 7/19/22 Update

The Applicant has supplied TT with a revised submission addressing comments provided in our previous letter including the following documents:

- A revised plan (Plans) set titled "Site Plan, 86 Holliston Street, Medway, Massachusetts," dated April 14, 2022 with revisions through June 29, 2022, prepared by GHI.
- A response to comments letter, dated July 12, 2022, prepared by GHI.
- A sound study (Sound Study) letter titled "86 Holliston Street, Medway, MA Sound Study" dated July 6, 2022, prepared by Tech Environmental (Tech Env).
- A floor plan (Floor Plan) titled "Ground Floor Plan," dated April 7, 2022, prepared by the SLAM Collaborative (SLAM).
- A lighting and fixtures layout plan (Lighting Plan) set, dated July 6, 2022, prepared by Holbrook-Associated, Inc. (HAI).
- An underground piping inspection (Piping Inspection) letter titled "Underground Piping, 86 Holliston Street-Medway, MA," dated June 22, 2022, prepared by DWD Engineering, Inc. (DWD)
- A traffic study (Traffic Study) letter with responses to traffic comments titled "Response to Major Site Plan Review, Proposed Medical Office Building – 86 Holliston Street, Medway, Massachusetts," dated May 31, 2022, prepared by VAI.
- A traffic study (Traffic Study) letter titled "Transportation Improvement Program, Proposed Medical Office Building 86 Holliston Street, Medway, Massachusetts," dated July 15, 2022, prepared by VAI.

The revised Plans and supporting information were reviewed against our previous comment letter (May 23, 2022) and comments have been tracked accordingly. Text shown in <u>gray</u> represents information contained in previous correspondence while new information is shown in <u>black</u> text.

SITE PLAN REVIEW

Site Plan Rules and Regulations (Chapter 200)

- 1. An Environmental Impact Assessment has not been provided. (Ch. 200 §204-3.F.2)
 - GHI 7/12/22 Response: An Environmental Impact Statement has been provided.
 TT 7/19/22 Update: In our opinion, this comment is resolved.
- 2. A Neighborhood Impact Assessment has not been provided. (Ch. 200 §204-3.F.3)
 - GHI 7/12/22 Response: A Neighborhood Impact Statement has been provided.
 TT 7/19/22 Update: In our opinion, this comment is resolved.
- 3. A Parking Impact Assessment has not been provided. (Ch. 200 §204-3.F.4)
 - GHI 7/12/22 Response: A Parking Impact Statement has been provided.
 TT 7/19/22 Update: In our opinion, this comment is resolved.
- 4. Earth removal calculations have not been provided. (Ch. 200 §204-3.I)
 - GHI 7/12/22 Response: Earth removal calculations have been provided on Sheet 6 of the revised site plan set.
 - TT 7/19/22 Update: In our opinion, this comment is resolved.
- 5. Earth fill estimates have not been provided. (Ch. 200 §204-3.J)
 - GHI 7/12/22 Response: Earth removal calculations have been provided on Sheet 6 of the revised site plan set.
 - TT 7/19/22 Update: In our opinion, this comment is resolved.

- 6. Wetlands adjacent to the site have been identified and displayed on the Plans. However, a copy of an Order of Resource Area Delineation (ORAD) from the Medway Conservation Commission depicting the approved wetland resource affecting the proposed Project has not been provided. (Ch. 200 §204-3.K)
 - GHI 7/12/22 Response: A notice of intent has been filed with the Medway Conservation Commission and public hearings for the project are underway. Upon issuance of an Order of Conditions for the project, copies will be provided to the Planning Board as required.
 - TT 7/19/22 Update: In our opinion, this comment is resolved.
- 7. A Site Context Sheet has not been provided. However, a Vicinity Map providing parcels with 2,000 feet of the site is provided on the Cover Sheet and an Abutter Sheet is also included in the Plans. A waiver has been requested from this Regulation. (Ch. 200 §204-5.B)
 - GHI 7/12/22 Response: G&H respectfully defers to the commission on granting of the requested waiver. • TT 7/19/22 Update: No further action necessary until Board decision on Waiver requests.
- 8. The Applicant has not included proposed setback lines on the Plans. (Ch. 200 §204-5.D.1)
 - GHI 7/12/22 Response: Dimensions from the proposed building to the front, side, and rear lot lines have been added to the site plan. Compliance with the minimum setback distances is summarized in the zoning table on sheet 5 of the revised site plan set.
 - TT 7/19/22 Update: In our opinion, this comment is resolved.
- 9. A Landscaping Plan has been provided. However, it is not stamped by a Registered Professional Landscape Architect. A waiver has been requested from this Regulation. (Ch. 200 §204-5.D.8)
 - GHI 7/12/22 Response: G&H respectfully defers to the commission on granting of the requested waiver.
 TT 7/19/22 Update: No further action necessary until Board decision on Waiver requests.
- 10. Floor plans with the use of all interior areas have not been provided. (Ch. 200 §204-5.D.11)
 - GHI 7/12/22 Response: Architectural floor plans have been provided as requested.
 - TT 7/19/22 Update: In our opinion, this comment is resolved.
- 11. A Master Signage Plan has not been provided. (Ch. 200 §204-5.D.14)
 - GHI 7/12/22 Response: On behalf of the Applicant, we respectfully request a waiver to the master signage plan requirement. The Waiver Request Form has been attached for review and will be added to the Cover Sheet prior to endorsement.
 - TT 7/19/22 Update: No further action necessary until Board decision on Waiver requests.
- 12. The Applicant has requested a waiver to provide 5-foot-wide sidewalks between the parking area and the building entrance. However, it appears the sidewalks on the Plans exceed 5 feet throughout. Applicant or GHI to advise and update as needed. (Ch. 200 §207-9.B.1)
 - GHI 7/12/22 Response: The proposed sidewalk at the front of the building narrows to a 5' width between the building entrances where 7' is required, as parking overhangs the sidewalk. G&H respectfully defers to the commission on granting of the requested waiver.
 - TT 7/19/22 Update: The proposed sidewalks appear to be minimum 7-feet wide along the building as required. In our opinion, this comment is resolved.
- 13. The Applicant has included a large portion of the proposed parking along the street frontage. We recommend the Applicant consider relocating the building closer to the frontage with all parking to the side and rear of the Project. This condition would also help alleviate potential issues with the south entrance/egress and the anticipated queue at the traffic signal. If parking is required along the frontage, we recommend removing parking facing the roadway and including one-way circulation (egress) at the south drive aisle to incentivize parking in the northerly portions of the site. (Ch. 200 §207-12.B)
 - GHI 7/12/22 Response: G&H has evaluated Tetra Tech's recommendation to relocate parking to the rear of the property and found it incompatible with the requirements of the project. However the total number of proposed parking spaces has been reduced from 102 to 88, with the reduction occurring

primarily in the front left corner. G&H notes that landscaped amenity space has been provided between the proposed parking and Main Street and will provide increased screening of the parking area. Additionally, the site and its driveway connections has been shifted an additional 15' north and the south driveway connection revised to exit only.

- TT 7/19/22 Update: We recommend discussion of this comment at the next PEDB meeting. We believe the site layout is sufficient given site constraints related to the adjacent resource area.
- 14. The parking lot layout has several spaces adjacent to building entrances. Parking spaces shall not be located within 20 feet of building entrances, building exits, and emergency access points. A waiver has been requested form this Regulation. (Ch. 200 §207-12.G.3.a)
 - GHI 7/12/22 Response: G&H respectfully defers to the commission on granting of the requested waiver.
 TT 7/19/22 Update: No further action necessary until Board decision on Waiver requests.
- 15. It appears the proposed parking may be within 15 feet to a property line at the north side of the Project. The Applicant should show dimensioning from the property lines to the closets parking space. (Ch. 200 §207-12.G.3.b)
 - GHI 7/12/22 Response: Dimensions demonstrating compliance with required parking setbacks have been provided on the revised site plan set.

TT 7/19/22 Update: In our opinion, this comment is resolved.

- 16. The Applicant has not included curb radius throughout the site. All curbing shall have a minimum radius of three feet. (Ch. 200 §207-12.H.2)
 - GHI 7/12/22 Response: Curb radius labels have been added to the site plan as requested. All proposed radii meet the minimum 3' requirement.
 - TT 7/19/22 Update: In our opinion, this comment is resolved.
- 17. Provisions for the installation of underground telephone and cable TV have not been provided on the Plans. Additionally, electric runs to proposed lighting and the proposed electric vehicle charging has not been provided. (Ch. 200 §207-16.A)
 - GHI 7/12/22 Response: The proposed electric service has been revised to include telephone and cable, and electric runs added to the vehicle charging stations as requested.
 - TT 7/19/22 Update: We anticipate the proposed electric utility will be installed underground from the proposed utility pole to the transformer. However, we recommend the Applicant specifically note underground installation of the utilities on the Plans.
- 18. The Applicant should confirm if two 6-foot square dumpsters are sufficient to serve the proposed building. The dumpster area appears to be undersized for the use. The narrative shall also elaborate on medical waste disposal and how that will occur. (Ch. 200 §207-17)
 - GHI 7/12/22 Response: The Applicant has reviewed the requirements of a similar multi-practice facility on Commerce Drive in Northbridge. The Northbridge facility is slightly larger, and utilizes a single 6'x8' dumpster, emptied twice a week. Accordingly our proposed dumpster enclosure has been revised to accommodate a 6'x10' dumpster and relocated to the northwest corner to avoid maneuvering conflicts with the existing driveway.
 - TT 7/19/22 Update: The detail appears to show a proposed stockade style fence for the dumpster enclosure. The Applicant shall confirm with the PEDB if the stockade fence is the preferred style noted by the DRC.

- 19. The Applicant has provided a Landscaping Plan with evergreen landscape buffers only located at the rear property line. Perimeter landscaping with evergreens are required between the site and all adjoining properties. A waiver has been requested from this Regulation. (Ch. 200 §207-19.B.2)
 - GHI 7/12/22 Response: G&H respectfully defers to the Board on granting of the requested waiver. G&H notes the building facade is designed to match the aesthetic of the abutting farm property and that the abutting properties to the west and east share the same owner as the project.
 - TT 7/19/22 Update: No further action necessary until Board decision on Waiver requests.
- 20. Shade trees are required for every 6 parking spaces. It does not appear the site provides enough shade trees adjacent to parking areas in the Landscaping Plan. A waiver has been requested from this Regulation. (Ch. 200 §207-19.C.1.d)
 - GHI 7/12/22 Response: A total of 15 shade trees, exclusive of evergreen screening trees and existing shade trees along the Walgreens driveway, have been provided for the 88 proposed spaces on the revised site plan, meeting the requirement of 1 tree per 6 spaces. Accordingly, the waiver request has been withdrawn.
 - TT 7/19/22 Update: In our opinion, this comment is resolved.

General Site Plan Comments

- 21. We recommend the Applicant consider land banking the southernmost parking aisle to reduce overall impervious area on the site which is currently at approximately 74% impervious coverage. The Applicant is providing 29 additional parking spaces as compared to required spaces calculated by the use.
 - GHI 7/12/22 Response: The total number of proposed spaces has been reduced from 102 to 88, with the removal of spaces occurring in the southwest corner of the parcel. The total impervious coverage has been reduced to 68.3%.
 - TT 7/19/22 Update: In our opinion, this comment is resolved.
- 22. The Applicant should provide narrative on potential modification of the striping on the existing driveway to accommodate the new development. Additionally, stop bars are recommended at stop signs for consistency.
 - GHI 7/12/22 Response: The south entrance has shifted 15' north from its originally proposed location and has been revised to exit only at the request of the Board and peer review. Accordingly, no modification to the striping on the existing driveway is proposed.

TT 7/19/22 Update: In our opinion, this comment is resolved.

- 23. The waiver list on the Cover Sheet is inconsistent with the waiver requests provided in the Major Site Plan Application and should be coordinated.
 - GHI 7/12/22 Response: The cover sheet and site plan application waiver lists have been coordinated as requested.
 - TT 7/19/22 Update: We recommend a Condition requiring the Applicant show all requested/approved Waivers on the cover sheet prior to final Plan endorsement.
- 24. The Applicant should provide detail on the proposed generator pad and any additional required screening.
 - GHI 7/12/22 Response: Additional screening has been provided around the proposed generator pad, as requested. The proposed generator pad size is preliminary and details on its pad will be provided prior to construction.
 - TT 7/19/22 Update: In our opinion, this comment is resolved.

TRAFFIC REVIEW

Project Study Area Intersections

- 25. The traffic impact assessment (TIA) evaluated two existing, signalized intersections including the Route 109/Holliston Street intersection and the Route 109/Walgreens/Medway Commons intersection. The Project proposes to share access to the site with the Walgreens driveway on Route 109. Town of Medway Planning & Economic Development Board Rules and Regulations require TIA's to include all intersections within one-quarter mile of a site which would include the Route 109/Richard Road intersection for the proposed medical office building Project. Although not specifically evaluated as part of the TIA, the traffic study estimates that the proposed medical office building will generate approximately 15 to 23 vehicle trips through this intersection during peak hours. This represents an additional vehicle trip every 2 to 4 minutes which would not be expected to materially impact operations at the Route 109/Richard Road intersection. Therefore, the study area presented in the TIA is appropriate for a Project of this size and land use.
 - VAI 5/31/22 Response: No formal response from Applicant.
 - TT 7/19/22 Update: The original comment was a statement made about the quality and completeness of the study and was not an issue noted in the analysis. No further updates required. In our opinion, this comment is resolved.

Study Time Periods

- 26. The study includes an impact analysis of the weekday morning (7am-9am) and weekday evening (4pm-6pm) peak periods. The proposed medical office building is anticipated to also provide outpatient emergency care (in addition to women's health and wellness and pediatric care). Therefore, the study also includes an impact analysis of the Saturday midday (11am-2pm) peak periods. The time periods chosen for detailed analysis are appropriate for this type of medical office use.
 - VAI 5/31/22 Response: See response at Comment 25.
 - TT 7/19/22 Update: See Update at Comment 25.

Traffic Volumes

- 27. The turning movement counts (TMCs) and automatic traffic recorder (ATR) counts were conducted on Thursday, February 17, 2022 and Saturday, February 19, 2022 at the study intersections. The traffic volumes were increased by 12.5 percent for seasonality (February was determined to be a below-average traffic month) based on MassDOT historical traffic count data. The study also reviewed historical count data at the Route 109/Walgreens/Medway Commons intersection from October 2018. The study determined that no adjustments to the observed February 2022 traffic volumes were warranted as a result of the ongoing COVID-19 pandemic. Tetra Tech generally concurs with this methodology.
 - VAI 5/31/22 Response: See response at Comment 25.
 - TT 7/19/22 Update: See Update at Comment 25.

Public Transportation

- 28. The TIA states that the Greater Attleboro-Taunton Regional Transit Authority (GATRA) provides Dial-a-Ride paratransit services to eligible persons in the community. However, regularly scheduled public transportation is not provided in the immediate vicinity of the site, with the closest GATRA bus stop located more than 10 minutes away. Therefore, the TIA did not reduce the estimate vehicle trip generation for the proposed medical office building as a result of area public transportation services. Tetra Tech agrees with this methodology.
 - VAI 5/31/22 Response: See response at Comment 25.
 - TT 7/19/22 Update: See Update at Comment 25.

Sight Distance

- 29. The TIA evaluated available sight distances at the existing Walgreens driveway on Route 109 since this driveway is also proposed to support access to the site. The sight distance evaluation was based on procedures outlined in the American Association of State Highway and Transportation Officials' (AASHTO) A Policy on Geometric Design of Highways and Streets, 7th Edition (2018). The sight distance evaluation was based on the posted speed limit of 35 miles per hour (mph). The observed 85th percentile travel speeds on Route 109 were not included in the evaluation as they were lower than the posted speed limit. Tetra Tech generally concurs with this methodology.
 - VAI 5/31/22 Response: See response at Comment 25.
 - TT 7/19/22 Update: See Update at Comment 25.
- 30. Tetra Tech identified discrepancies between the tabular summary of the sight distance analysis presented in the TIA and the supporting calculations provided in the attachment materials. However, the discrepancies do not change the overall conclusion reported in the TIA that the available stopping sight and intersection sight distance on Route 109 at the shared access way with the site/Walgreens exceeds minimum AASHTO requirements for the posted speed limit.
 - VAI 5/31/22 Response: The subject calculations have been revised and are attached. As noted by TT and identified in the April 2022 TIA, the available lines of sight at the intersection exceed the recommended minimum distances for safe and efficient operation.
 - $\circ~$ TT 7/19/22 Update: In our opinion, this comment is resolved.

Safety Analysis

- 31. The TIA provided a crash analysis for the existing study intersections between 2015 and 2019 (the most recent complete year of MassDOT data) based on MassDOT crash data which is generally consistent with industry standard methodology. During the five-year study period, intersection improvements were implemented by others at the Route 109/Holliston Street intersection to address safety issues identified in the 2014 Road Safety Audit (RSA) prepared for the intersection. The TIA did not provide the crash data in the appendix material. Tetra Tech recommends the MassDOT crash data be provided for completeness.
 - VAI 5/31/22 Response: The MassDOT crash data is attached.
 - TT 7/19/22 Update: In our opinion, this comment is resolved.
- 32. The TIA reported a total of 36 crashes at the Route 109/Holliston Street intersection and 25 crashes at the Route 109/Medway Commons Driveway intersection during the five-year study period, resulting in crash rates consistent with or below the MassDOT Statewide (0.78) and Districtwide (0.89) averages for signalized intersections. Tetra Tech generally concurs with the crash rate calculations provided.
 - VAI 5/31/22 Response: See response at Comment 25.
 - TT 7/19/22 Update: See Update at Comment 25.
- 33. Although not discussed in the TIA, GHI has completed an RSA for the Route 109/Medway Commons/Walgreens driveway intersection (Dated April 2022) as part of the nearby multifamily residential development Project to be located at 39 Main Street in Medway. The April 2022 RSA identified numerous potential short-term and long-term improvements to enhance safety at the Route 109/Medway Commons/Walgreens driveway intersection. Given that this intersection will serve as the de facto access to the 86 Holliston Street site, Tetra Tech recommends that the Applicant work with the Town to identify which, if any, of the safety improvements identified in the April 2022 should be implemented as part of the proposed medical office building Project.
 - VAI 7/15/22 Response: ...Based on our discussion and with input from both the Medway Department of Public Works and Tetra Tech, the scope of the off-site improvements to be undertaken as a part of the Project will focus on improvements at the route 109/Medway Commons/Walgreens driveway intersection and will entail the following elements:

- Review and modify (reconstruct) the wheelchair ramps for crossing the Walgreens/Project site driveway at Route 109 to meet Americans with Disabilities Act (ADA) requirements;
- Upgrade the existing pedestrian push button assemblies and indications at the intersection to meet ADA requirements, including the installation of countdown-type indications;
- > Install retroreflective tape on backplates for the traffic signal indications;
- > Review existing trees and trim as necessary to improve visibility of the traffic signal indications;
- > Restripe the existing pavement markings along Route 109 and the Project site driveway;
- > Install "Watch for Solar Glare" sign on Route 109 westbound east of the intersection; and
- > Restripe the crosswalks across Route 109 and the Project site driveway to ladder-style.
- TT 7/19/22 Update: In our opinion, this comment is resolved.

Study Time Horizon

- 34. The TIA utilized a seven-year planning horizon from the year the traffic study was submitted (2029 Future Year condition) which is consistent with MassDOT traffic study guidelines.
 - VAI 5/31/22 Response: See response at Comment 25.
 - TT 7/19/22 Update: See Update at Comment 25.

Future No-Build Traffic Volumes

- 35. A one percent annual growth rate was applied for seven years from the 2022 Existing peak hour traffic volumes to estimate peak hour traffic volumes in the planning year 2029. This growth rate was based on MassDOT continuous count station data. The TIA also considered traffic associated with specific area development Projects based on consultation with the Medway Planning and Economic Development Department. Tetra Tech generally concurs with this methodology.
 - VAI 5/31/22 Response: See response at Comment 25.
 TT 7/19/22 Update: See Update at Comment 25.

Trip Generation

- 36. Trip Generation Land Use Code (LUC) 720 Medical-Dental Office trip rates from the Institute of Transportation Engineers (ITE) Trip Generation Manual, 11th Edition were applied. This methodology is reasonable for the proposed medical office building use.
 - VAI 5/31/22 Response: See response at Comment 25.
 - TT 7/19/22 Update: See Update at Comment 25.

Trip Distribution/Trip Assignment

- 37. The distribution of Project trips through the study intersections is based on existing travel patterns adjacent to the site during peak commuting periods. Tetra Tech recommends that the Applicant provide the supporting trip distribution calculations for review.
 - VAI 5/31/22 Response: A diagram has been provided as an attachment that summarizes the existing trip distribution patterns within the study area during the peak hours. These patterns were used as the basis of the trip distribution pattern for Project-generated trips.
 - TT 7/19/22 Update: In our opinion, this comment is resolved.

Intersection Operational Analysis

- 38. The TIA utilized Highway Capacity Manual (HCM) methodology for the signalized intersections using Synchro software to conduct the intersection capacity analyses. This is consistent with industry-standard methodology.
 - VAI 5/31/22 Response: See response at Comment 25.
 - TT 7/19/22 Update: See Update at Comment 25.
- 39. The TIA indicates that the study intersections operate at overall levels of service (LOS) D or better operations during the peak hours under existing conditions and future year conditions (with or without the Project). Industry standards suggest that LOS D or better operations during peak hours are generally considered acceptable for most intersections. The TIA also reports that all movements at the intersection will operate at LOS D or better operations with or without the Project. The exception is the Holliston Street southbound movement at Route 109 which is expected to operate at longer delays (LOS E) during the weekday morning peak hour. However, this LOS E condition will occur independently of the proposed medical office building use, with a Project-related delay increase to this movement of less than 2 seconds. Project-related vehicle queues at the study intersections are shown to increase by up to 7 vehicles during peak hour. Additionally, field observations conducted by Tetra Tech during the weekday evening peak hour indicate that existing vehicle queues on Route 109 westbound at Holliston Street extend back through the Route 109/Medway Commons Walgreens driveway intersection at times. Tetra Tech recommends that the Applicant consider evaluating traffic signal timing modifications at the study intersections to determine if improved vehicle queueing can be achieved.
 - VAI 5/31/22 Response: As shown on Table 1A, with the implementation of an optimal traffic signal timing and phasing plan at the study area intersections, overall motorist delay will be reduced to the extent that all movements operate at LOS D or better, with minor increases (up to three (3) vehicles) and more substantial decreases (up to five (5) vehicles) in vehicle queuing shown to occur. To the extent so desired by the Town, the Project proponent will design and implement an optimal traffic signal timing and phasing plan for the intersections of Route 109 at Holliston Street and Route 109 at the Project site driveway and the Medway Commons driveway. These improvements will be completed prior to the issuance of a Certificate of Occupancy for the Project, subject to receipt of all necessary rights, permits and approvals.
 - TT 7/19/22 Update: The Applicant met with representatives from the Town and TT on July 14, 2022 to discuss RSA improvements from the 39 Main Street Project that may be implemented as part of this Project. During that discussion, the Applicant noted they intended to retime the Holliston Street signal to mitigate for the proposed development. Medway DPW responded and noted that they have recently been conducting signal retiming at the intersection and did not want any others touching the signal at this time. We recommend a Condition requiring the Applicant monitor the progress of the DPW's retiming effort and coordinate with the Medway DPW to mitigate traffic related to this Project.

Parking

- 40. Per the parking summary provided in site Layout Plan Sheet 5, the total proposed parking supply of 102 spaces exceeds the Town requirement of 73 spaces (1 space per 300 sf applied to a 21,900-sf medical office building). Therefore, preparation of a parking analysis is not warranted for the Project. However, please see prior comments regarding parking in the Site Plan Review section.
 - VAI 5/31/22 Response: See response at Comment 25.
 - TT 7/19/22 Update: See Update at Comment 25.

Site Access/Emergency Access

41. The TIA recommended numerous Project access improvements including a minimum internal circulation aisle width of 24 feet, compliance with Manual on Uniform Traffic Control Devices (MUTCD) standards for all proposed signage and pavement markings, compliance with American with Disabilities Act (ADA)

standards for all proposed crosswalks and wheelchair ramps, maintenance of proposed signage and landscaping so as not to restrict sight lines at the site driveway and the timely removal of snow accumulations (windrows) within site driveway sight line triangles. Tetra Tech generally concurs with these recommendations.

• VAI 5/31/22 Response: See response at Comment 25.

• TT 7/19/22 Update: See Update at Comment 25.

- 42. The Project is committed to implementing a Transportation Demand Management (TDM) program aimed at reducing single-occupancy vehicle usage at the site. Tetra Tech agrees with the implementation of a TDM program for the site and recommends that the Applicant work with the Town to finalize the specific elements of the program including the location and number of proposed bicycle parking.
 - VAI 5/31/22 Response: The Project proponent will work with the Town to finalize the elements of the Transportation Demand Management (TDM) program for the Project, including the location and amount of bicycle parking to be provided.
 - TT 7/19/22 Update: We recommend a Condition requiring the Applicant seek input from the PEDB regarding this comment.
- 43. Queues from vehicles waiting to exit the shared access way onto Route 109 could block vehicles from entering the front (south side) of the proposed medical office building site due to the close proximity of the southerly site driveway and the Route 109 signal. Tetra Tech recommends that the Applicant evaluate the feasibility of restricting the southerly driveway to exit-only movements or implementing alternative traffic guidance/control at the internal southerly intersection with Walgreens (i.e., Do Not Block pavement markings and signage, all-way Stop control, etc.) to minimize vehicle conflicts on the north leg of the Route 109/Walgreens driveway intersection.
 - VAI 5/31/22 Response: As suggested by TT, the south driveway will be reconfigured to serve as a oneway exit from the Project site or "Do Not Block" pavement markings with accompanying signs will be installed. The selected traffic control strategy will be shown on a subsequent revision of the Site Plans that will be submitted by others under separate cover.
 - TT 7/19/22 Update: In our opinion, this comment is resolved.
- 44. The Project proposes to install Stop signs at the Project driveway approaches to the shared access way with Walgreens. Tetra Tech recommends that MUTCD-compliant Stop bar pavement markings also be installed at these locations.
 - VAI 5/31/22 Response: Stop-bar pavement markings will be added and shown on a subsequent revision of the Site Plans that will be submitted by others under separate cover.
 - TT 7/19/22 Update: These items have been provided on the updated Site Plans. In our opinion, this comment is resolved.
- 45. The Project proposes to locate the medical office building's trash pick-up/drop-off area at the intersection with the proposed northerly site driveway and the shared access way with Walgreens. Although this is a low-volume intersection, the location of the proposed trash area will require a trash truck to pull in and/or back out in the intersection causing a potentially unsafe condition. Tetra Tech recommends that the Applicant explore the feasibility of relocating the proposed trash area so that a trash truck can safely maneuver in and out of the trash area with minimal impacts to vehicles traveling through this area.
 - VAI 5/31/22 Response: The dumpster location will be reviewed and relocated so as to avoid the conflict identified by TT, and will be shown on a subsequent revision of the Site Plans that will be submitted by others under separate cover.
 - TT 7/19/22 Update: The dumpster has been relocated to the northwest portion of the site which should mitigate potential conflicts. In our opinion, this comment is resolved.

- 46. Tetra Tech recommends that the Applicant provide information on the proposed loading/delivery operations and ensure that proposed loading activity will not impede access and circulation for patients, staff or emergency vehicles.
 - VAI 5/31/22 Response: A narrative describing loading and delivery operations will be provided by others under separate cover. These activities will be scheduled to occur during off-peak patient periods.
 - TT 7/19/22 Update: We recommend this item be discussed at the next PEDB meeting to ensure all parties are in agreement on proposed loading and delivery times.
- 47. Tetra Tech recommends that the Applicant provide AutoTurn analyses to ensure that the largest emergency vehicle, delivery vehicle and trash truck can adequately access the site. The emergency circulation should be reviewed with the Medway Fire Department.
 - VAI 5/31/22 Response: A vehicle turning analysis will be provided for a service/delivery vehicle and the Medway Fire Department design vehicle, and will be submitted by others under separate cover.
 - TT 7/19/22 Update: The Turning Analysis Plan has not been provided. We recommend a Condition requiring the Applicant provide the Plan prior to final Plan endorsement.
- 48. The proposed snow storage location in the northeast portion of the site could block the sight line of the trash area for vehicles entering the rear part of the site at this location.
 - VAI 5/31/22 Response: The snow storage areas will be reviewed and adjusted as necessary so as not to inhibit sight lines. These adjustments will be shown on a subsequent revision of the Site Plans that will be submitted by others under separate cover.
 - TT 7/19/22 Update: The trash area has been relocated to the northwest portion of the site. In our opinion, this comment is resolved.
- 49. The proposed snow storage in the southwest corner of medical office building could block the views of oncoming traffic and vehicles pulling in or backing out of parking spaces in this area of the site.
 - VAI 5/31/22 Response: The snow storage areas will be reviewed and adjusted as necessary so as not to inhibit sight lines. These adjustments will be shown on a subsequent revision of the Site Plans that will be submitted by others under separate cover.
 - TT 7/19/22 Update: In our opinion, this comment is resolved.

ADDITIONAL COMMENTS

- 50. The Applicant is proposing an approximate 5,400± earth fill for the Project and should meet Section 207-8.F of the Regulations.
- 51. The Applicant shall install Cultec Separator Rows on the proposed SIS systems as required by Section 207-14.D of the Regulations.
- 52. We recommend rounding the northern end of the access driveway to prevent vehicles parking at the squared-off (as currently shown) portion of the driveway.

These comments are offered as guides for use during the Town's review and additional comments may be generated during the course of review. The Applicant shall be advised that any absence of comment shall not relieve him/her of the responsibility to comply with all applicable local, state and federal regulations for the Project. If you have any questions or comments, please feel free to contact us at (508) 786-2200.

Very truly yours,

twee boules

Steven M. Bouley, PE (Site Review) Project Manager

Country & Sudak

Courtney E. Sudak, PE (Traffic Review) Project Manager

P:\21583\143-21583-22013 (PEDB 86 HOLLISTON ST)\DOCS\86 HOLLISTON ST-PEDBREV(2022-07-19).DOCX



TOWN OF MEDWAY Commonwealth of Massachusetts

Medway Town Hall 155 Village Street Medway, MA 02053 Phone (508) 533-3253 jmee@townofmedway.org

BUILDING DEPARTMENT

Building Commissioner Jack Mee

July 21, 2022

Matthew Hayes, Chair Planning & Economic Development Board Town of Medway

Dear Mr., Hayes,

I have recently reviewed the submitted plans for Milford Hospital, 86 Holliston St. per section 10.4.C.1 of the Medway Zoning Bylaws. This references the Building Type classifications included in Section 9.4 Oak Grove – Building Types, Use and Design Standards, specifically Table 9.4.C.1.B and provides that the Building Commission make a determination of building type.

This new building does not fit within any of the descriptions of section 10.4.C.1. Thus, by default this would be classified under 10.4.C.2 as Alternative Building Types. "If the Building Commissioner cannot classify a proposed new building as one of the building types specifically allowed by this section, the building type is subject to issuance of a special permit by the PEDB."

Sincerely,

Jack Mee



Ref: 9242

May 31, 2022

Ms. Susan E. Affleck-Childs Planning and Economic Development Coordinator Town of Medway 155 Village Street Medway, MA 02053

Re: Response to Major Site Plan Review Proposed Medical Office Building – 86 Holliston Street Medway, Massachusetts

Dear Ms. Affleck-Childs:

Vanasse & Associates, Inc. (VAI) is providing responses to the comments that were raised in the May 23, 2022 *Major Site Plan Review* letter prepared by Tetra Tech (TT) in reference to their review of the April 2022 *Transportation Impact Assessment* (the "April 2022 TIA") prepared by VAI in support of the proposed medical office building to be located at 86 Holliston Street in Medway, Massachusetts (hereafter referred to as the "Project"). Listed below are the comments requiring response identified in the "Traffic Review" section of the subject letter followed by our response on behalf of the Applicant.

TRAFFIC REVIEW

Sight Distance

- **Comment 30:** Tetra Tech identified discrepancies between the tabular summary of the sight distance analysis presented in the TIA and the supporting calculations provided in the attachment materials. However, the discrepancies do not change the overall conclusion reported in the TIA that the available stopping sight and intersection sight distance on Route 109 at the shared access way with the site/Walgreens exceeds minimum AASHTO requirements for the posted speed limit.
- **Response:** The subject calculations have been revised and are attached. As noted by TT and identified in the April 2022 TIA, the available lines of sight at the intersection exceed the recommended minimum distances for safe and efficient operation.

Ms. Susan E. Affleck-Childs May 31, 2022 Page 2 of 5

Safety Analysis

- **Comment 31:** The TIA provided a crash analysis for the existing study intersections between 2015 and 2019 (the most recent complete year of MassDOT data) based on MassDOT crash data which is generally consistent with industry standard methodology. During the five year study period, intersection improvements were implemented by others at the Route 109/Holliston Street intersection to address safety issues identified in the 2014 Road Safety Audit (RSA) prepared for the intersection. The TIA did not provide the crash data in the appendix material. Tetra Tech recommends the MassDOT crash data be provided for completeness.
- **Response:** The MassDOT crash data is attached.
- **Comment 33:** Although not discussed in the TIA, VAI has completed an RSA for the Route 109/Medway Commons/Walgreens driveway intersection (Dated April 2022) as part of the nearby multifamily residential development Project to be located at 39 Main Street in Medway. The April 2022 RSA identified numerous potential short-term and long-term improvements to enhance safety at the Route 109/Medway Commons/Walgreens driveway intersection. Given that this intersection will serve as the de facto access to the 86 Holliston Street site, Tetra Tech recommends that the Applicant work with the Town to identify which, if any, of the safety improvements identified in the April 2022 should be implemented as part of the proposed medical office building Project.
- **Response:** The April 2022 RSA that was prepared for the Route 109/Medway Commons/ Walgreens driveway intersection suggested that the following short-term, low-cost improvements be implemented at the intersection in order to enhance safety:
 - Check the "yellow" and "all-red" clearance intervals and adjust if necessary;
 - Install retroreflective tape on backplates for the traffic signal indications;
 - Review existing trees and trim as necessary to improve visibility of the traffic signal indications;
 - Restripe the existing pavement markings along Route 109 and the Project site driveway;
 - Install "Watch for Solar Glare" sign on Route 109 westbound east of the intersection; and
 - Restripe the crosswalks across Route 109 and the Project site driveway to ladder-style.

To the extent so desired by the Town, the Project proponent will design and construct the short-term, low-cost improvements that were suggested as an outcome of the RSA prior to the issuance of a Certificate of Occupancy for the Project, subject to receipt of all necessary rights, permits and approvals.



Ms. Susan E. Affleck-Childs May 31, 2022 Page 3 of 5

Trip Distribution/Trip Assignment

- **Comment 37:** The distribution of Project trips through the study intersections is based on existing travel patterns adjacent to the site during peak commuting periods. Tetra Tech recommends that the Applicant provide the supporting trip distribution calculations for review.
- **Response:** A diagram has been provided as an attachment that summarizes the existing trip distribution patterns within the study area during the peak hours. These patterns were used as the basis of the trip distribution pattern for Project-generated trips.

Intersection Operational Analysis

- Comment 39: The TIA indicates that the study intersections operate at overall levels of service (LOS) D or better operations during the peak hours under existing conditions and future year conditions (with or without the Project). Industry standards suggest that LOS D or better operations during peak hours are generally considered acceptable for most intersections. The TIA also reports that all movements at the intersection will operate at LOS D or better operations with or without the Project. The exception is the Holliston Street southbound movement at Route 109 which is expected to operate at longer delays (LOS E) during the weekday morning peak hour. However, this LOS E condition will occur independently of the proposed medical office building use, with a Project-related delay increase to this movement of less than 2 seconds. Project-related vehicle queues at the study intersections are shown to increase by up to 7 vehicles during peak hours. Additionally, field observations conducted by Tetra Tech during the weekday evening peak hour indicate that existing vehicle queues on Route 109 westbound at Holliston Street extend back through the Route 109/Medway Commons Walgreens driveway intersection at times. Tetra Tech recommends that the Applicant consider evaluating traffic signal timing modifications at the study intersections to determine if improved vehicle queueing can be achieved.
- **Response:** As shown on Table 1A, with the implementation of an optimal traffic signal timing and phasing plan at the study area intersections, overall motorist delay will be reduced to the extent that all movements operate at LOS D or better, with minor increases (up to three (3) vehicles) and more substantial decreases (up to five (5) vehicles) in vehicle queuing shown to occur. To the extent so desired by the Town, the Project proponent will design and implement an optimal traffic signal timing and phasing plan for the intersections of Route 109 at Holliston Street and Route 109 at the Project site driveway and the Medway Commons driveway. These improvements will be completed prior to the issuance of a Certificate of Occupancy for the Project, subject to receipt of all necessary rights, permits and approvals.

Site Access/Emergency Access

Comment 42: The Project is committed to implementing a Transportation Demand Management (TDM) program aimed at reducing single-occupancy vehicle usage at the site. Tetra Tech agrees with the implementation of a TDM program for the site and recommends that the Applicant work with the Town to finalize the specific elements of the program including the location and number of proposed bicycle parking.



Ms. Susan E. Affleck-Childs May 31, 2022 Page 4 of 5

- **Response:** The Project proponent will work with the Town to finalize the elements of the Transportation Demand Management (TDM) program for the Project, including the location and amount of bicycle parking to be provided.
- **Comment 43:** *Queues from vehicles waiting to exit the shared access way onto Route 109 could block vehicles from entering the front (south side) of the proposed medical office building site due to the close proximity of the southerly site driveway and the Route 109 signal. Tetra Tech recommends that the Applicant evaluate the feasibility of restricting the southerly driveway to exit-only movements or implementing alternative traffic guidance/control at the internal southerly intersection with Walgreens (i.e., Do Not Block pavement markings and signage, all-way Stop control, etc.) to minimize vehicle conflicts on the north leg of the Route 109/Walgreens driveway intersection.*
- **Response:** As suggested by TT, the south driveway will be reconfigured to serve as a one-way exit from the Project site or "Do Not Block" pavement markings with accompanying signs will be installed. The selected traffic control strategy will be shown on a subsequent revision of the Site Plans that will be submitted by others under separate cover.
- **Comment 44:** The Project proposes to install Stop signs at the Project driveway approaches to the shared access way with Walgreens. Tetra Tech recommends that MUTCD-compliant Stop bar pavement markings also be installed at these locations.
- **Response:** Stop-bar pavement markings will be added and shown on a subsequent revision of the Site Plans that will be submitted by others under separate cover.
- **Comment 45:** The Project proposes to locate the medical office building's trash pick-up/drop-off area at the intersection with the proposed northerly site driveway and the shared access way with Walgreens. Although this is a low-volume intersection, the location of the proposed trash area will require a trash truck to pull in and/or back out in the intersection causing a potentially unsafe condition. Tetra Tech recommends that the Applicant explore the feasibility of relocating the proposed trash area so that a trash truck can safely maneuver in and out of the trash area with minimal impacts to vehicles traveling through this area.
- **Response:** The dumpster location will be reviewed and relocated so as to avoid the conflict identified by TT, and will be shown on a subsequent revision of the Site Plans that will be submitted by others under separate cover.
- **Comment 46:** Tetra Tech recommends that the Applicant provide information on the proposed loading/delivery operations and ensure that proposed loading activity will not impede access and circulation for patients, staff or emergency vehicles.
- **Response:** A narrative describing loading and delivery operations will be provided by others under separate cover. These activities will be scheduled to occur during off-peak patient periods.



Ms. Susan E. Affleck-Childs May 31, 2022 Page 5 of 5

- **Comment 47:** Tetra Tech recommends that the Applicant provide AutoTurn analyses to ensure that the largest emergency vehicle, delivery vehicle and trash truck can adequately access the site. The emergency circulation should be reviewed with the Medway Fire Department.
- **Response:** A vehicle turning analysis will be provided for a service/delivery vehicle and the Medway Fire Department design vehicle, and will be submitted by others under separate cover.
- **Comment 48:** The proposed snow storage location in the northeast portion of the site could block the sight line of the trash area for vehicles entering the rear part of the site at this location.
- **Response:** The snow storage areas will be reviewed and adjusted as necessary so as not to inhibit sight lines. These adjustments will be shown on a subsequent revision of the Site Plans that will be submitted by others under separate cover.
- **Comment 49:** The proposed snow storage in the southwest corner of medical office building could block the views of oncoming traffic and vehicles pulling in or backing out of parking spaces in this area of the site.
- **Response:** The snow storage areas will be reviewed and adjusted as necessary so as not to inhibit sight lines. These adjustments will be shown on a subsequent revision of the Site Plans that will be submitted by others under separate cover.

We trust that this information is responsive to the comments that were raised in the May 23, 2022 *Major Site Plan Review* letter prepared by TT. If you should have any questions or would like to discuss our responses in more detail, please feel free to contact me.

Sincerely,

VANASSE & ASSOCIATES, INC.

frey S. Dirk

effrey S. Dirk, P.E., PTOE, FITE Managing partner

Professional Engineer in CT, MA, ME, NH, RI and VA

AJA/jd

Attachments

cc: S. Bouley, P.E. – TT (via email)
C. Sudak, P.E. – TT (via email)
A. Cavaliere – Guerriere & Hanlon, Inc. (via email)
File



ATTACHMENTS

TABLES SIGHT DISTANCE CALCULATIONS MASSDOT CRASH DATA ROAD SAFETY AUDIT TRIP DISTRIBUTION WORKSHEET CAPACITY ANALYSIS WORKSHEETS



TABLES



Table 1AMITIGATED SIGNALIZED INTERSECTION LEVEL-OF-SERVICE AND VEHICLE QUEUE SUMMARY

		2029 N	No-Build			202	9 Build		2029 Build with Mitigation				
Signalized Intersection/Peak Hour/Movement	V/C ^a	Delay ^b	LOS ^c	Queue ^d 50 th /95 th	V/C	Delay	LOS	Queue 50 th /95 th	V/C	Delay	LOS	Queue 50 th /95 th	
Route 109 at Holliston Street													
Weekday Morning:													
Route 109 EB LT	0.38	13.1	В	2/3	0.39	13.3	В	2/3	0.37	13.0	В	2/3	
Route 109 EB TH	0.91	39.4	D	12/24	0.97	51.1	D	19/25	0.88	36.5	D	17/22	
Route 109 EB RT	0.14	0.2	А	0/0	0.14	0.2	А	0/0	0.14	0.2	А	0/0	
Route 109 WB LT	0.17	16.5	В	1/1	0.17	16.8	В	1/1	0.18	16.7	В	1/1	
Route 109 WB TH	0.62	25.9	С	6/8	0.63	25.9	С	6/8	0.55	21.3	С	8/8	
Route 109 WB RT	0.05	0.1	А	0/0	0.05	0.1	А	0/0	0.05	0.1	А	0/0	
Holliston Street NB LT	0.77	32.1	С	5/7	0.77	32.1	С	5/7	0.87	48.0	D	6/10	
Holliston Street NB TH/RT	0.79	43.3	D	7/11	0.82	46.3	D	7/11	0.80	46.7	D	8/12	
Holliston Street SB LT	0.46	27.2	С	2/3	0.51	27.5	С	2/3	0.57	32.5	С	3/4	
Holliston Street SB TH	0.91	66.3	Е	6/9	0.91	66.3	Е	6/9	0.82	35.5	D	7/8	
Holliston Street SB RT	0.11	22.6	С	0/1	0.11	22.6	С	0/1	0.11	25.6	С	0/1	
Overall		32.3	С			35.5	D			32.1	С		
Weekday Evening:													
Route 109 EB LT	0.43	14.8	В	2/3	0.44	15.1	В	2/3	0.45	15.3	В	2/3	
Route 109 EB TH	0.60	21.3	С	9/13	0.60	21.3	С	9/14	0.60	21.2	С	9/14	
Route 109 EB RT	0.15	0.2	Ă	0/0	0.15	0.2	Ā	0/0	0.15	0.2	Ā	0/0	
Route 109 WB LT	0.09	10.9	В	1/1	0.13	11.6	В	1/1	0.13	12.1	В	1/1	
Route 109 WB TH	0.79	26.5	Ĉ	8/13	0.81	27.2	č	10/13	0.80	27.2	č	10/13	
Route 109 WB RT	0.05	0.1	Ă	0/0	0.06	0.1	Ă	0/0	0.06	0.1	Ă	0/0	
Holliston Street NB LT	0.76	35.7	D	4/8	0.78	38.4	D	4/8	0.76	34.5	C	4/8	
Holliston Street NB TH/RT	0.63	37.5	D	5/8	0.66	39.4	D	5/8	0.58	34.8	č	5/8	
Holliston Street SB LT	0.50	27.4	C	3/5	0.53	28.0	C	3/5	0.54	30.0	C	3/5	
Holliston Street SB TH	0.50	45.2	D	5/8	0.74	45.2	D	5/8	0.77	48.5	D	5/9	
Holliston Street SB RT	0.23	24.9	C	1/3	0.24	25.0	C	1/3	0.24	25.8	C	1/3	
Overall	0.23	24.9	č		0.24	25.0 25.3	č		0.24	25.0	č		
Saturday Midday:		24.0	C			23.3	C			23.0	C		
Route 109 EB LT	0.47	15.4	В	2/4	0.48	15.9	В	2/4	0.47	13.7	В	1/3	
Route 109 EB TH	0.47	23.1	C	11/21	0.48	24.0	C	12/22	0.47	21.4	C	1/3	
Route 109 EB RT	0.72	0.2	A	0/0	0.74	0.2	A	0/0	0.75	0.2	A	0/0	
	0.18	0.2 14.9	B	1/1	0.18	15.2	B	0/0 1/2	0.18	12.8	A B	0/0 1/1	
Route 109 WB LT											В С		
Route 109 WB TH	0.85	33.7	C	12/22	0.86	34.8	C	13/23	0.80	26.9		11/17	
Route 109 WB RT	0.08	0.1	A	0/0	0.08	0.1	A	0/0	0.08	0.1	A	0/0	
Holliston Street NB LT	0.74	31.5	C	5/9	0.74	31.8	C	5/9	0.77	32.4	C	5/8	
Holliston Street NB TH/RT	0.49	32.0	C	4/7	0.51	32.6	C	4/7	0.51	29.8	C	4/7	
Holliston Street SB LT	0.34	26.0	C	2/3	0.37	26.3	C	2/4	0.45	29.2	C	2/4	
Holliston Street SB TH	0.48	34.0	C	3/6	0.48	34.2	C	3/6	0.66	40.5	D	3/7	
Holliston Street SB RT	0.17	21.6	С	1/3	0.18	21.8	С	1/3	0.14	23.2	С	0/2	
Overall		23.7	С			24.3	С			22.2	С		

See notes at end of table.

Table 1A (Continued) MITIGATED SIGNALIZED INTERSECTION LEVEL-OF-SERVICE AND VEHICLE QUEUE SUMMARY

		2029 N	No-Build			2029	9 Build		2029 Build with Mitigation				
Signalized Intersection/Peak Hour/Movement	V/C ^a	Delay ^b	LOS ^c	Queue ^d 50 th /95 th	V/C	Delay	LOS	Queue 50 th /95 th	V/C	Delay	LOS	Queue 50 th /95 th	
Route 109 at the Project site driveway and the Medway Commons Driveway													
2													
Weekday Morning: Route 109 EB LT	0.00	4.9	А	0/0	0.06	4.9	А	0/1	0.06	1.8	А	0/0	
Route 109 EB TH	0.00	4.9 7.4	A	4/5	0.08	4.9 8.0	A	4/11	0.08	3.9	A	3/5	
Route 109 EB RT	0.07	9.0	A	4/3 0/0	0.07	8.0 9.0	A	4/11 0/0	0.05	0.4	A	0/0	
Route 109 EB R1 Route 109 WB LT		9.0 4.1		0/0	0.05			0/0	0.05	0.4 4.1			
	0.08	4.1 5.7	A	0/1 3/7	0.08	4.2 6.8	A			4.1 6.6	A	0/1 5/8	
Route 109 WB TH/RT	0.36		A				A	5/8	0.38		A		
Medway Commons driveway NB LT/TH	0.44	38.9	D	2/3	0.45	39.1	D	2/3	0.46	43.7	D	2/3	
Medway Commons driveway NB RT	0.06	35.5	D	0/1	0.06	35.5	D	0/1	0.06	39.7	D	0/1	
Project site driveway SB LT	0.00	0.0	A	0/0	0.04	35.4	D	0/1	0.04	39.6	D	0/1	
Project site driveway SB TH/RT	0.01	35.2	D	0/0	0.02	35.3	D	0/1	0.02	39.5	D	0/1	
Overall		10.3	В			10.8	В			9.1	Α		
Weekday Evening:										• •			
Route 109 EB LT	0.06	4.3	A	0/1	0.10	4.4	A	0/1	0.10	3.9	A	0/1	
Route 109 EB TH	0.44	7.6	А	5/6	0.44	7.8	А	5/6	0.44	7.3	А	5/5	
Route 109 EB RT	0.11	4.7	А	0/1	0.11	4.7	А	0/1	0.10	3.8	А	0/1	
Route 109 WB LT	0.19	4.2	А	1/2	0.19	4.4	А	1/2	0.19	4.4	А	1/2	
Route 109 WB TH/RT	0.47	8.7	А	4/13	0.49	8.7	А	8/13	0.49	9.8	А	8/13	
Medway Commons driveway NB LT/TH	0.48	36.5	D	2/4	0.50	36.5	D	2/4	0.50	36.6	D	2/4	
Medway Commons driveway NB RT	0.05	32.5	С	0/1	0.05	32.5	С	0/1	0.05	32.3	С	0/1	
Project site driveway SB LT	0.10	32.9	С	1/1	0.18	33.3	С	1/2	0.18	33.3	С	1/2	
Project site driveway SB TH/RT	0.05	32.5	С	0/1	0.08	32.5	С	0/2	0.08	32.5	С	0/2	
Overall		11.3	В			12.5	В			12.3	С		
Saturday Midday:													
Route 109 EB LT	0.10	9.4	А	0/1	0.20	9.9	А	1/1	0.19	8.0	А	1/1	
Route 109 EB TH	0.64	15.6	В	7/13	0.64	15.7	В	7/13	0.62	13.1	В	6/10	
Route 109 EB RT	0.17	11.3	В	1/3	0.17	11.3	В	1/3	0.12	8.9	А	0/1	
Route 109 WB LT	0.24	7.4	А	1/2	0.24	7.8	А	1/2	0.23	6.4	А	1/1	
Route 109 WB TH/RT	0.68	14.3	В	6/14	0.72	16.6	В	10/15	0.72	14.4	В	8/12	
Medway Commons driveway NB LT/TH	0.58	24.1	С	3/5	0.60	24.5	С	3/5	0.70	28.4	С	3/5	
Medway Commons driveway NB RT	0.10	18.9	В	0/1	0.10	18.9	В	0/1	0.10	17.9	В	0/1	
Project site driveway SB LT	0.05	18.6	В	0/1	0.09	18.9	В	1/1	0.11	18.0	В	1/1	
Project site driveway SB TH/RT	0.08	18.7	В	1/1	0.10	18.8	В	1/1	0.11	17.9	В	1/1	
Overall		15.4	B			16.2	B			14.7	B		

^aVolume-to-capacity ratio. ^bControl (signal) delay per vehicle in seconds.

^cLevel-of-Service.

^dQueue length in vehicles based on 25-feet per vehicle.

NB = northbound; SB = southbound; EB = eastbound; WB = westbound; LT = left-turning movements; TH = through movements; RT = right-turning movements.



SIGHT DISTANCE CALCULATIONS

Sight Distance Calculations

Equations: $ISD = 1.47 \times V \times t$

Variables: V = 35 mpht = 8.0 s

Intersection Sight Distance: looking to the west (turning left from stop):

 $ISD = 1.47 \times 35 \times 8.0 = 411.6 \approx 415$

MASSDOT CRASH DATA



90 MEDWAY 05/12/2016 Thu	Non-fatal i Closed	11:04 AM 2016	Non-fatal i	2 Local police	16-17	5-74	11:00AM t D1:	(No im D1: Not	DisCollision w Yes	Davlight Rear-end	3	PW20161:Drv	Not at junc MAPC	0	1 No control: Two-way, rV1: Slowin(V1:(Passen V1	No) / VV1:(No) / VV1: W / V2Clea	NORFOLK 2016	0000 Roadway At Address No hit and	V1:(Collisic None	No. school	30 Yes, device V1:(CollisicNo	207533 877960.1 42.15203 -71.4089 75	MAIN ST R	
MEDWAY 11/29/2016 Tue	Property diClosed	5:05 PM 2016	No injury	2 Local police			05:00PM tr		Collision w Yes	Dark - light Rear-end	3	PW20163:Wet	Four-way in MAPC	0	0 Traffic contTwo-way, cV1: Turnin;V1:(Passen V1	No) / VV1:(No) / VV1: S / V2: Rain	NORFOLK 2016	0000 Roadway At Intersec No hit and	V1:(Collisic None	No, school	30 Yes, device V1:(CollisitNo	207560.8 877969.5 42.15212 -71.4085	MAIN ST /	
9 MEDWAY 12/05/2016 Mon	Non-fatal i Closed	12:19 PM 2016	Non-fatal i	2 Local police	45-54	5-74	12:00PM tr D1:	(No im D1: Not	DisCollision w Yes	Daylight Rear-end	3	PW201634Wet	Four-way in MAPC	0	1 Traffic contTwo-way, rV1: Slowin;V1:(Passen V1	No) / VV1:(No) / VV1: N / V2 Snov	lice NORFOLK 2016	0000 Roadway At Intersec No hit and	V1:(Collisic Road si	urfa No, school	Yes, device V1:(CollisitNo	207560.8 877969.5 42.15212 -71.4085	HOLLISTOI	
31 MEDWAY 12/17/2016 Sat	Non-fatal i Closed	4:20 AM 2016	Non-fatal i	1 Local police	21-24	1-24	04:00AM t D1:	(Failure	Collision w Yes	Dark - light Fixed-Obje	3	PW201705Snow	Four-way in MAPC	0	1 Traffic contTwo-way, rV1: TravelliV1:(Passen V1	No) V1:(No) V1: N Snow	lice NORFOLK 2016	0000 Roadside At Address No hit and	V1:(Collisic None	No, school	30 Yes, device V1:(CollisitNo	207565.7 877971.3 42.15213 -71.4085 73	MAIN ST	
55 MEDWAY 01/14/2017 Sat	Property d: Closed	8:12 PM 2017	No injury	2 Local police	18-20	5-54	08:00PM tr D1:	(No im	Collision w Yes	Dark - light Rear-end	3	PW201701Dry	Four-way in MAPC	0	0 Traffic contTwo-way, rV1: SlowingV1:(Passen V1	No) / VV1:(No) / VV1: S / V2: Clea	NORFOLK 2017	0000 Roadway At Intersec No hit and	V1:(Collisic None	No, school	30 Yes, device V1:(CollisixNo	207560.8 877969.5 42.15212 -71.4085	MAIN STR	
07 MEDWAY 03/13/2017 Mon	Not Report Closed	5:00 PM 2017	Not report	2 Local police	35-44	5-44 55-64 55-6	i4 05:00PM tr		Collision w Yes	Daylight Rear-end	3	PW201707Dry	Four-way in MAPC	0	0 Traffic contTwo-way, rV1: Not repV1:(PassenV1	No) / VV1:(No) / VV1: N / V2 Clea	NORFOLK 2017	0000 Roadway At Address No hit and	V1:(Collisic None	No, school	Yes, device V1:(CollisicNo	207560.3 878018.3 42.15256 -71.4085 82	HOLLISTOI	
28 MEDWAY 04/28/2017 Fri	Property d: Closed	12:18 PM 2017	No injury	2 Local police	18-20	5-34	12:00PM tr D1:	(No im D1: Not	Dis Collision w Yes	Daylight Rear-end	3	PW201712Dry	Four-way in MAPC	0	0 Traffic contTwo-way, rV1: SlowingV1:(Passen V1	No) / VV1:(No) / VV1: S / V2: Clea	NORFOLK 2017	0000 Roadway At Intersec No hit and	V1:(Collisic None	No, school	30 Yes, device V1:(CollisixNo	207560.8 877969.5 42.15212 -71.4085	HOLLISTOI	
0 MEDWAY 06/17/2017 Sat	Property d: Closed	7:30 PM 2017	No injury	1 Local police	25-34	5-34	07:00PM tr D1:	(Distra D1: Mar	nuaCollision w Yes	Daylight Fixed-Obje	3	PW201717Dry	Not report MAPC	0	0 Not report Two-way, rV1: TravelliV1:(Passen V1	No) V1:(No) V1: Not Re Clea	NORFOLK 2017	0000 Outside ro: At Address No hit and	V1:(Collisic Not rep	ort No, school	Yes, device V1:(CollisicNo	207533 877960.1 42.15203 -71.4089 75	MAIN ST	
44 MEDWAY 08/01/2017 Tue	Property d: Closed	8:26 PM 2017	No injury	3 Local police	25-34	5-64	08:00PM tr D1:	(Follow D2: Not	Dis Collision w Yes	Dusk Rear-end	3	PW201722Dry	Four-way in MAPC	0	0 Traffic contTwo-way, rV1: TravelliV1:(Passen V1	No) / V V1:(Yes, ve V1: E / V2: Clea	NORFOLK 2017	0000 Roadway At Address No hit and	V1:(Collisic None	No, school	30 Yes, device V1:(CollisixNo	207560.3 878018.3 42.15256 -71.4085 82	HOLLISTOI	
4 MEDWAY 08/09/2017 Wed	Not Report Closed	12:04 PM 2017	Not report	3 Local police	45-54	5-54	12:00PM tr		Collision w Yes	Daylight Rear-end	3	PW201722Dry	Four-way in MAPC	0	0 Traffic contTwo-way, rV1: SlowingV1:(Light trV1	No) / VV1:(No) / VV1: W / V2Clea	NORFOLK 2017	0000 Roadway At Intersec No hit and	V1:(Collisic None	No, school	Yes, device V1:(CollisicNo	207560.8 877969.5 42.15212 -71.4085	MAIN STR	
LMEDWAY 08/14/2017 Mon	Not Report Closed	8:54 AM 2017	Not report	3 Local police	25-34	5-84	08:00AM ti		Collision w Yes	Daylight Rear-end	3	PW201722Dry	Four-way in MAPC	0	0 Traffic contTwo-way, rV1: SlowingV1:(Passen V1	No) / VV1:(No) / VV1: E / V2: Clea	NORFOLK 2017	0000 Roadway At Address No hit and	V1:(Collisic Not rep	ort No, school	Yes, device V1:(CollisicNo	207533 877960.1 42.15203 -71.4089 75	MAIN ST R	
04 MEDWAY 10/15/2017 Sun	Property d: Closed	8:21 PM 2017	No injury	2 Local police	18-20	8-20	08:00PM tr D1:	(No im D1: Not	Dis Collision w Yes	Dark - light Angle	3	PW201725Dry	Four-way in MAPC	0	0 Traffic contTwo-way, cV1: TravelliV1:(Passen V1	No) / VV1:(No) / VV1: S / V2: Clea	NORFOLK 2017	0000 Roadway At Intersec No hit and	V1:(Collisic None	No, school	25 Yes, device V1:(CollisicNo	207560.8 877969.5 42.15212 -71.4085	HOLLISTOI	
55 MEDWAY 10/18/2017 Wed	Non-fatal i Closed	4:21 PM 2017	Non-fatal i	2 Local police	21-24	5-64	04:00PM tr D1:	(No im D1: Not	Dis Collision w Yes	Daylight Angle	3	PW201725Dry	Not report MAPC	0	1 No control: Two-way, rV1: TravelliV1: (Passen V1	No) / VV1:(No) / VV1: E / V2: Clea	NORFOLK 2017	0000 Roadway At Address No hit and	V1:(Collisic None	No, school	Yes, device V1:(CollisicNo	207533 877960.1 42.15203 -71.4089 75	MAIN STR	
91 MEDWAY 12/10/2017 Sun	Property d: Closed	11:29 AM 2017	No injury	2 Local police	25-34	5-84	11:00AM t D1:	(No im D1: Not	Dis Collision w Yes	Daylight Rear-end	3	PW201734Dry	Four-way in MAPC	0	0 Traffic contTwo-way, rV1: SlowingV1:(Light trV1	No) / VV1:(No) / VV1: E / V2: Clea	NORFOLK 2017	0000 Roadway At Intersec No hit and	V1:(Collisic None	No, school	30 Yes, device V1:(CollisicNo	207560.8 877969.5 42.15212 -71.4085	MAIN ST R	
01 MEDWAY 01/13/2018 Sat	Unknown Closed	1:00 PM 2018	Not report	3 Local police	35-44	5-84	01:00PM tr		Collision w Yes	Daylight Rear-end	3	PW201801Dry	Four-way in MAPC	0	0 Traffic contTwo-way, rV1: SlowingV1:(Passen V1	No) / VV1:(No) / VV1: N / V2 Clea	NORFOLK 2018	0000 Roadway At Address No hit and	V1:(Collisic None	No, school	Yes, device V1:(CollisicNo	207550.4 877966 42.15209 -71.4086 70	MAIN ST	
4 MEDWAY 03/15/2018 Thu	Non-fatal i Closed	8:18 AM 2018	Non-fatal i	2 Local police	55-64	5-74	08:00AM t D1:	(No im	Collision w Yes	Daylight Rear-end	3	PW201807Dry	Four-way in MAPC	0	1 Traffic contTwo-way, rV1: SlowingV1:(Light trV1	No) / VV1:(No) / VV1: E / V2: Clea	NORFOLK 2018	0000 Roadway At Intersec No hit and	V1:(Collisic None	No, school	30 Yes, device V1:(CollisicNo	207560.8 877969.5 42.15212 -71.4085	HOLLISTOI	
2 MEDWAY 05/18/2018 Fri	Property d: Closed	1:08 PM 2018	No injury	2 Local police	16-17	5-44	01:00PM tr D2:	(Follow	Not report Yes	Daylight Rear-end	3	PW201815Dry	Four-way in MAPC	0	0 Traffic contNot report V2: TravelliV2:(Light trV2	No) / VV2:(Yes, veV2: W / V1Clou	y NORFOLK 2018	0000 V1: (No, no No, not fee Not report At Intersec No hit and	V2:(Collisic Not rep	ort No, school	30 Yes, device V2:(CollisixNo	207560.8 877969.5 42.15212 -71.4085	MAIN STR	
8 MEDWAY 05/22/2018 Tue	Non-fatal i Closed	11:07 AM 2018	Non-fatal i	2 Local police	35-44	5-54	11:00AM t D1:	(Failure	Collision w Yes	Daylight Sideswipe,	3	PW201815Dry	Four-way in MAPC	0	1 Traffic contTwo-way, rV1: Overta V1:(Light trV1	No) / VV1:(No) / VV1: E / V2: Clou	y NORFOLK 2018	0000 Roadway At Intersec No hit and	V1:(Collisic None	No, school	30 Yes, device V1:(CollisicNo	207560.8 877969.5 42.15212 -71.4085	MAIN ST /	
03 MEDWAY 05/31/2018 Thu	Non-fatal i Closed	7:50 AM 2018	Non-fatal i	2 Local police	16-17	5-64	07:00AM t D1:	(Inatte D2: Not	Dis Collision w Yes	Daylight Rear-end	3	PW201815Dry	Four-way in MAPC	0	1 Traffic contTwo-way, rV1: TravelliV1:(Light trV1	No) / VV1:(No) / VV1: E / V2: Clea	NORFOLK 2018	0000 Roadway At Intersec No hit and	V1:(Collisic None	No, school	30 Yes, device V1:(CollisicNo	207560.8 877969.5 42.15212 -71.4085	MAIN ST R	
57 MEDWAY 08/09/2018 Thu	Property d: Closed	3:16 PM 2018	No injury	2 Local police	16-17	8-20	03:00PM tr D2:	(No im D2: Not	Dis Collision w Yes	Daylight Sideswipe,	3	PW201823Dry	Four-way in MAPC	0	0 Traffic contTwo-way, rV1: TravelliV1:(Passen V1	No) / VV1:(No) / VV1: W / V2Clea	NORFOLK 2018	0000 Roadway At Address No hit and	None	No, school	Yes, device V1:(CollisicNo	207569.2 877972.6 42.15215 -71.4084 71	MAIN ST	
58 MEDWAY 08/09/2018 Thu	Property d: Closed	7:28 PM 2018	No injury	2 Local police	35-44	5-64	07:00PM tr D1:	(No im D1: Not	Dis Collision w Yes	Dusk Rear-end	3	PW201823Dry	Four-way in MAPC	0	0 Traffic contNot report V1: SlowingV1:(Passen V1	No) / VV1:(No) / VV1: W / V2Clea	NORFOLK 2018	0000 Roadway At Address No hit and	V1:(Collisic None	No, school	30 Yes, device V1:(CollisicNo	207569.2 877972.6 42.15215 -71.4084 71	MAIN ST R	
7 MEDWAY 10/26/2018 Fri	Property d: Closed	10:37 AM 2018	No injury	2 Local police	18-20	5-54	10:00AM t D1:	(No im D1: Not	Dis Collision w Yes	Daylight Rear-end	3	PW20183(Dry	Four-way in MAPC	0	0 No control: Two-way, rV1: TurningV1: (Passen V1	No) / VV1:(No) / VV1: E / V2: Clea	NORFOLK 2018	0000 Roadway At Intersec No hit and	V1:(Collisic None	No, school	Yes, device V1:(CollisicNo	207560.8 877969.5 42.15212 -71.4085	MAIN ST R	
08 MEDWAY 12/06/2018 Thu	Property d: Closed	4:55 PM 2018	No injury	2 Local police	45-54	5-74	04:00PM tr D1:	(No im D1: Not	Dis Collision w Yes	Dark - light Rear-end	3	PW201834Dry	Four-way in MAPC	0	0 Yield signs Two-way, rV1: SlowingV1:(Passen V1	No) / VV1:(No) / VV1: S / V2: Clea	NORFOLK 2018	0000 Roadway At Intersec No hit and	V1:(Collisic None	No, school	Yes, device V1:(CollisicNo	207560.8 877969.5 42.15212 -71.4085	MAIN ST /	
4 MEDWAY 01/08/2019 Tue	Property d: Closed	7:20 AM 2019	No injury	2 Local police	55-64	5-64	07:00AM t D1:	(No im D1: Not	Dis Collision w Yes	Daylight Angle	3	PW20190(Wet	Not at junc MAPC	0	0 No control: Two-way, rV1: TravelliV1: (Passen V1	No) / V V1:(Yes, ve V1: E / V2: Snov	lice NORFOLK 2019	0000 Roadway At Address No hit and	V1:(Collisic None	No, school	35 Yes, device V1:(CollisicNo	207569.2 877972.6 42.15215 -71.4084 71	MAIN ST F Rte 109	
57 MEDWAY 01/27/2019 Sun	Property d: Closed	7:26 PM 2019	No injury	2 Local police	21-24	5-54	07:00PM tr D1:	(No im D1: Not	Dis Collision w Yes	Dark - light Angle	3	PW201905Dry	Four-way in MAPC	0	0 Traffic contTwo-way, rV1: TravelliV1:(Passen V1	No) / V V1:(Yes, ve V1: W / V2 Clea	NORFOLK 2019	0000 Roadway At Address No hit and	V1:(Collisic	No, school	Yes, device V1:(CollisicNo	207550.4 877966 42.15209 -71.4086 70	MAIN ST R	
61 MEDWAY 02/05/2019 Tue	Not Report Closed	11:11 AM 2019	Not report	3 Local police	25-34	5-74	11:00AM b		Collision w Yes	Daylight Rear-end	3	PW201905Dry	Four-way in MAPC	0	0 Traffic contTwo-way, rV1: MakingV1:(Light trV1	No) / VV1:(No) / VV1: W / V2Clea	NORFOLK 2019	0000 Roadway At Address No hit and		No, school	Yes, device V1:(CollisicNo	207550.5 877966 42.15209 -71.4086 73	MAIN ST	
64 MEDWAY 02/21/2019 Thu	Property d: Closed	8:03 AM 2019	No injury	2 Local police	45-54	5-54	08:00AM t D1:	(No im D1: Not	Dis Collision w Yes	Daylight Rear-end	3	PW201905Wet	Driveway MAPC	0	0 No control:Two-way, rV1: Slowin(V1:(Light trV1	No) / VV1:(No) / VV1: E / V2: Clou	y NORFOLK 2019	0000 Roadway At Intersec No hit and	V1:(Collisic	No, school	Yes, device V1:(CollisicNo	207560.8 877969.5 42.15212 -71.4085	MAIN ST /	
74 MEDWAY 03/13/2019 Wed	Property d: Closed	5:54 AM 2019	No injury	2 Local police	25-34	5-54	05:00AM t/D1:	(No im	Collision w Yes	Dawn Sideswipe,	3	PW201907Dry	Four-way in MAPC	0	0 Traffic contTwo-way, rV1: TravelliV1:(Light trV1	No) / VV1:(No) / VV1: S / V2: Clea	NORFOLK 2019	0000 Roadway At Address No hit and	V1:(Collisic None	No, school	Yes, device V1:(CollisicNo	207550.4 877966 42.15209 -71.4086 70	MAIN ST	
92 MEDWAY 04/18/2019 Thu	Property d: Closed	9:18 PM 2019	No Appare	2 Local police	16-17	5-44	09:00PM tr D1:	(Failed D2: Not	Dis Collision w Yes	Dark - light Angle	3	PW20191(Dry	Four-way in MAPC	0	0 Traffic contTwo-way, rV1: TurningV1:(Light trV1	No) / VV1:(No) / VV1: E / V2: Clea	NORFOLK 2019	0000 Roadway At Address No hit and	V1:(Collisic None	No, school	Yes, device V1:(CollisicNo	207550.4 877966 42.15209 -71.4086 70	MAIN ST	
4 MEDWAY 05/02/2019 Thu	Property d: Closed	4:31 PM 2019	No Appare	2 Local police	25-34	5-54	04:00PM tr D1:	(Swerv D1: Not	Dis Collision w Yes	Daylight Sideswipe,	3	PW201921	Four-way in MAPC	0	0 Traffic contTwo-way, rV1: TurningV1:(Passen V1	No) / VV1:(No) / VV1: W / V2Clea	NORFOLK 2019	0000 Roadway Operator E No hit and	V1:(Collisic	No, school	30 Yes, device V1:(CollisicNo	207560.8 877970.4 42.15213 -71.4085	HOLLISTOI	CVS
9 MEDWAY 05/30/2019 Thu	Property d: Closed	5:23 PM 2019	No Appare	2 Local police	35-44	5-64	05:00PM tr D1:	(No im D1: Not	Dis Collision w Yes	Daylight Rear-end	3	PW201921	Four-way in MAPC	0	0 Traffic contTwo-way, rV1: SlowingV1:(Light trV1	No) / VV1:(No) / VV1: W / V2Clea	NORFOLK 2019	0000 Roadway At Address No hit and	V1:(Collisic	No, school	30 Yes, device V1:(CollisicNo	207569.2 877972.6 42.15215 -71.4084 71	MAIN ST R	
4 MEDWAY 06/22/2019 Sat	Property diClosed	5:57 PM 2019	No Appare	2 Local police	35-44	5-54	05:00PM tr D1:	(No im D1: Not	Dis Collision w Yes	Daylight Rear-end	3	PW201921	Not at junc MAPC	0	0 No control: Two-way, rV1: TravelliV1:(Passen V1	No) / VV1:(No) / VV1: Not Re Clea	NORFOLK 2019	0000 Roadway At Address No hit and	V1:(Collisic	No, school	Yes, device V1:(CollisicNo	207550.4 877966 42.15209 -71.4086 70	MAIN ST	
56 MEDWAY 07/17/2019 Wed	Property d: Closed	7:02 AM 2019	No Appare	2 Local police	18-20	5-44	07:00AM t D1:	(No im D1: Not	Dis Collision w Yes	Daylight Rear-end	3	PR201932 Dry	Four-way in MAPC	0	0 Traffic contTwo-way, rV1: SlowingV1:(Passen	V1:(No) / VV1: E / V2: Clea	NORFOLK 2019	0000 Roadway At Address No hit and	V1:(Collisic None	No, school	Yes, device V1:(CollisicNo	207559.5 877956.4 42.152 -71.4085 82	HOLLISTOI	
53 MEDWAY 10/19/2019 Sat	Property d: Closed	12:26 PM 2019	No Appare	2 Local police	21-24	5-54	12:00PM tr D1:	(No im D1: Not	Dis Collision w Yes	Daylight Other (Bac	3	PW201931Dry	Four-way in MAPC	0	0 Traffic contTwo-way, cV1: SlowingV1:(Light trV1	No) / VV1:(No) / VV1: S / V2: Clea	NORFOLK 2019	0000 Roadway At Intersec No hit and	V1:(Collisic None	No, school	30 Yes, device V1:(CollisixNo	207560.8 877969.5 42.15212 -71.4085	MAIN ST /	
4 MEDWAY 11/19/2019 Tue	Unknown Closed	5:31 AM 2019	Not report	2 Local police	55-64	5-74	05:00AM b		Collision w Yes	Dark - light Rear-end	3	PW201932Wet	Four-way in MAPC	0	0 Traffic contTwo-way, rV1: SlowintV1:(PassenV1	No) / VV1:(No) / VV1: E / V2: Rain	NORFOLK 2019	0000 Roadway At Intersec No hit and	V1:(Collisic None	No, school	35 Yes, device V1:(CollisicNo	207560.8 877969.5 42.15212 -71.4085	MAIN ST R	
51 MEDWAY 11/24/2019 Sun	Property d:Closed	12:38 AM 2019	No Appare	1 Local police	21-24	1-24	12:00AM t D1:	(No im D1: Not	DisCollision w Yes	Dark - light Other (Dee	3	PW202002Dry	Not at junc MAPC	0	0 No control: Two-way, rV1: TravelliV1: (Passen V1	No) V1:(No) V1:W Clea	NORFOLK 2019	0000 Roadway At Address No hit and	V1:(Collisic None	No, school	35 Yes, device V1:(CollisicNo	207519.5 877955.5 42.15199 -71.409 72	MAIN ST R	

Crash Num City Town I Crash Date Day										otal Fatali Tota	tal Non-ITraffic Con Trafficway Vehicle Act Vehicle Cor Vehicle Em Veh								r Inters Distance ar Milema	.rke Milemarke Distance ar	IFExit NumbeExit Route Dist	tance ar Landmark Distance ar
4020404 MEDWAY 03/11/2015 Wed		Non-fatal ir 1 Loca		1-24 21-24	11:00PM tcD1: (Other D1: Not DisCollision wiY		3	PW201507 Wet	Four-way is MAPC	0	1 Traffic contTwo-way, rV1: TurningV1:(Passen V1:(No) V1:			Roadside At Address No hit and	V1:(Collisio None No, school		207748.9 878037.5 42.15274 -71.4062 70	MAIN ST				
4051316 MEDWAY 06/10/2015 Wed		No injury 2 Loca		5-34 65-74	04:00PM tcD1: (No impD1: Not DisCollision wiY	es Daylight Rear-end	3	PW20151€ Dry	Four-way is MAPC	0	0 Traffic contTwo-way, rV1: SlowingV1:(Passen V1:(No) / VV1:		NORFOLK 201500000	Roadway At Address No hit and	V1:(Collisia None No, school	30 Yes, device V1:(Collisic No	207759.1 878041.2 42.15276 -71.4061 68	MAIN ST R	300 feet E			
4054226 MEDWAY 06/22/2015 Mon	Property di Closed 4:10 PM 2015 N	No injury 2 Loca	al police 2	5-34 45-54	04:00PM tcD1: (No impD1: Not DisCollision wiY		3	PW201517 Dry	Four-way is MAPC	0	0 Traffic contTwo-way, rV1: SlowingV1:(Passen V1:(No) / VV1:	:(No) / VV1: W / V2Clear	NORFOLK 201500000	Roadway At Address No hit and	V1:(Collisia None No, school	30 Yes, device V1:(Collisic No	207748.9 878037.5 42.15274 -71.4062 67	MAIN STRE				
4081454 MEDWAY 09/04/2015 Fri	Non-fatal ir Closed 6:39 AM 2015 N	Non-fatal ir 4 Loca	al police 2	1-24 35-44	06:00AM tr Collision wiY	s Daylight Rear-end	3	PW201525 Dry	Not at junc MAPC	0	1 Not report: Two-way, cV1: SlowingV1:(Passen V1:(No) / VV1:	:(No) / V V1: E / V2: Clear	NORFOLK 201500001	Roadway At Address No hit and	V1:(Collisia None No, school	Yes, device V1:(Collisic No	207748.9 878037.5 42.15274 -71.4062 70	MAIN STRI HOL	LISTOP			
4092540 MEDWAY 10/03/2015 Sat	Non-fatal ir Closed 1:46 PM 2015 N	Non-fatal ir 4 Loca	al police 2	5-34 65-74	01:00PM tcD3: (No impD3: Not DisCollision wiY	s Daylight Rear-end	3	PW201527 Dry	Four-way is MAPC	0	1 Traffic contTwo-way, cV1: SlowingV1:(Passen V1:(No) / VV1:	(No) / VV1: W / V2Cloudy	NORFOLK 201500001	Roadway At Address No hit and	V1:(Collisio None No, school	35 Yes, device V1:(Collisic No	207759.1 878041.2 42.15276 -71.4061 68	/ MAIN ST				
4111561 MEDWAY 10/29/2015 Thu	Property di Closed 12:06 PM 2015 N	No injury 2 Loca	al police >	84 >84	12:00PM tcD2: (Other Collision wiY	s Daylight Sideswipe,	3	PW201532 Dry	Not report MAPC	0	0 Not report: Two-way, cV1: Slowing V1: (Passen V1: (No) / VV1:	:(No) / VV1: W / V2Clear	NORFOLK 201500001	Roadway At Address No hit and	V1:(Collisio None No, school	35 Yes, device V1:(Collisic No	207759.1 878041.2 42.15276 -71.4061 68	MAIN ST				SHOPPING
4120972 MEDWAY 12/13/2015 Sun	Property di Closed 2:57 PM 2015 N	No injury 2 Loca	al police 1	8-20 35-44	02:00PM tcD1: (No im;D1: Not DisCollision wiY	s Daylight Rear-end	3	PW201534 Dry	Not at junc MAPC	0	0 No control: Two-way, cV1: Slowins V1: (Passen V1: (No) / VV1:	(No) / VV1: W / V2Clear	NORFOLK 201500001	Roadway At Address No hit and	V1:(Collisio None No, school	35 Yes, device V1:(CollisicNo	207759.1 878041.2 42.15276 -71.4061 68	MAIN STRE				
4126111 MEDWAY 12/15/2015 Tue	Property di Closed 3:51 PM 2015 N	No injury 3 Loca	al police 2	1-24 45-54	03:00PM tcD1: (No impD1: Not DisCollision wiY	s Daylight Rear-end	3	PW201536 Dry	Four-way is MAPC	0	0 Traffic contTwo-way, r V1: Slowing V1:(Light tr V1:(No) / V V1:	:(No) / VV1: W / V2Clear	NORFOLK 201500001	Roadway At Address No hit and	V1:(Collisio None No, school	35 Yes, device V1:(Collisic No	207759.1 878041.2 42.15276 -71.4061 68	/ / / MAI		109	109	WALGREEN
4130626 MEDWAY 01/05/2016 Tue	Non-fatal in Closed 4:59 PM 2016 N	Non-fatal ir 2 Loca	al police 1	8-20 45-54	04:00PM tcD1: (No im;D1: Not DisCollision wiY	s Dark - light Rear-end	3	PW20160(Dry	T-intersect MAPC	0	1 Traffic cont Two-way, r V1: Slowing V1: (Passen V1: (No) / V V1:	(No) / VV1: W / V2Clear	NORFOLK 201600000	Roadway At Address No hit and	V1:(Collisio None No, school	30 Yes, device V1:(CollisicNo	207748.9 878037.5 42.15274 -71.4062 70	MAIN ST R				
4180952 MEDWAY 03/07/2016 Mon	Property di Closed 3:04 PM 2016 N	No injury 2 Loca	al police 1	6-17 16-17	03:00PM tcD2: (Inatter Collision wiY	s Daylight Rear-end	3	PW201611Dry	Four-way is MAPC	0	0 Traffic contTwo-way, r V1: Slowing V1:(Passen V1:(No) / V V1:	(No) / VV1: W / V2Clear	NORFOLK 201600000	Roadway At Address No hit and	V1:(Collisia Not report: No, school	30 Yes, device V1:(Collisic No	207759.1 878041.2 42.15276 -71.4061 68	MAIN ST				
4172154 MEDWAY 04/03/2016 Sun	Non-fatal ir Closed 9:20 PM 2016 N	Non-fatal ir 1 Loca	al police 1	8-20 18-20	09:00PM tcD1: (InatterD1: Other aCollision wiY	s Dark - light Fixed-Objer	3	PW201605 Wet	Not at junc MAPC	0	2 No control: Two-way, r V1: Travelli V1: (Passen V1: (No) V1:	(Yes, ve V1: W Clear	NORFOLK 201600000	Roadside At Address No hit and	V1:(Collisio None No, school	30 Yes, device V1:(CollisicNo	207748.9 878037.5 42.15274 -71.4062 70	MAIN ST R	100 feet W			
4174237 MEDWAY 04/09/2016 Sat	Property di Closed 12:13 PM 2016 N	No injury 2 Loca	al police 2	5-34 55-64	12:00PM tcD1: (No im;D1: Not DisCollision wiY	s Daylight Angle	3	PW20161(Dry	Not at junc MAPC	0	0 No control: Two-way, r V1: Travelli V1: (Light tr V1: (No) / V V1:	(No) / VV1: W / V2Clear	NORFOLK 201600000	Roadway At Address No hit and	V1:(Collisio None No, school	Yes, device V1:{CollisicNo	207748.9 878037.5 42.15274 -71.4062 67	MAIN ST				
4180320 MEDWAY 04/23/2016 Sat	Property di Closed 2:01 PM 2016 N	No injury 2 Loca	al police 2	5-34 25-34	02:00PM tcD1: (No im;D1: Not DisCollision wiY	s Daylight Rear-end	3	PW201611Dry	Not at junc MAPC	0	0 No control: Two-way, r V1: Slowins V1: (Light tr V1: (No) / V V1:	(No) / VV1: W / V2Cloudy	NORFOLK 201600000	Roadway At Address No hit and	V1:(Collisio None No, school	30 Yes, device V1:(CollisicNo	207748.9 878037.5 42.15274 -71.4062 67	MAIN ST R				
4241656 MEDWAY 09/02/2016 Fri	Property di Closed 11:54 AM 2016 N	No injury 3 Loca	al police 2	5-34 75-84	11:00AM trD1: (No impD1: Not DisCollision wiY	s Daylight Rear-end	3	PW201624 Dry	Not at junc MAPC	0	0 No control: Two-way, r V1: Slowins V1: (Passen V1: (No) / VV1:	(No) / VV1: E / V2: Clear	NORFOLK 201600000	Roadway At Address No hit and	V1:(Collisio None No, school	20 Yes, device V1:(CollisicNo	207748.9 878037.5 42.15274 -71.4062 67	MAIN ST				
4246285 MEDWAY 09/12/2016 Mon	Property di Closed 9:36 AM 2016 N	No injury 2 Loca	al police 2	5-34 65-74	09:00AM tcD1: (No impD1: Not DisCollision wiY	s Daylight Rear-end	3	PW201625 Dry	Not at junc MAPC	0	0 No control: Two-way, r V1: Slowin; V1: (Passen V1: (No) / V V1:	Yes, ve V1: W / V2Clear	NORFOLK 201600000	Roadway At Address No hit and	V1:(Collisia None No, school	30 Yes, device V1:(Collisit No	207748.9 878037.5 42.15274 -71.4062 70	MAIN ST R				
4297859 MEDWAY 12/01/2016 Thu	Non-fatal in Closed 10:53 PM 2016 N	Non-fatal ir 2 Loca	al police 3	5-44 35-44	10:00PM tcD2: (Opera Collision wiY	s Dark - light Angle	3	PW201635 Dry	Four-way is MAPC	0	1 Traffic cont Two-way, r V1: Travelli V1:(Light tr V1:(No) / V V1:	Yes, ve V1: S / V2: Clear	NORFOLK 201600001	Roadway At Address No hit and	V1:(Collisio None No, school	Yes, device V1:{CollisicNo	207748.9 878037.5 42.15274 -71.4062 70	MAIN ST				
4307717 MEDWAY 01/07/2017 Sat	Not Report Closed 1:16 PM 2017 N	Not reporte 2 Loca	al police 3	5-44 35-44	01:00PM tc Collision wiY	s Davlight Rear-end	3	PW20170(Snow	Not at junc MAPC	0	0 Traffic cont Two-way, cV1: Slowing V1:(Light tr V1:(No) / VV1:	(No) / VV1: W / V2Snow	NORFOLK 201700000	Roadway At Address No hit and	V1:(Collisio Road surfa No. school	35 Yes, device V1:(Collisis No	207773.3 878046.2 42.15281 -71.406 68	MAIN STRE				
4319409 MEDWAY 01/31/2017 Tue	Property di Closed 3:34 PM 2017 N	No iniury 1 Loca	al police 1	8-20 18-20	03:00PM tcD1: (Opera Collision wiY	s Daylight Fixed-Objer	3	PW20170: Snow	Not at junc MAPC	ò	0 No control: Two-way, r V1: Travelli V1: (Passen V1: (No) V1:	(Yes, ye V1: N Snow	NORFOLK 201700000	Roadway At Address No hit and	V1:(Collisio None No. school	25 Yes, device V1:(Collisis No	207737 878033.3 42.15269 -71.4064 67	MAIN ST				
4389178 MEDWAY 07/12/2017 Wed	Property di Closed 4:49 PM 2017 N	No iniury 1 Loca	al police 6	5-74 65-74	04:00PM tcD1: (No im:D1: Not DisCollision wiY	s Davlight Rear-end	3	PW201715 Dry	Four-way is MAPC	0	0 Traffic cont Two-way, r V1: Slowing V1:(Passen V1:(No) V1:	(No) V1: E Clear	NORFOLK 201700000	Roadway At Address No hit and	V1:(Collisio None No. school	30 Yes, device V1:(Collisis No	207748.9 878037.5 42.15274 -71.4062 67	MAIN ST R	500 feet E			
4447015 MEDWAY 10/27/2017 Fri	Property di Closed 5:17 PM 2017 N	No iniury 2 Loca	al police 3	5-44 35-44	05:00PM tcD1: (No imj Collision wiY	s Daylight Rear-end	3	PW20173(Drv	Four-way is MAPC	ò	0 Traffic cont Two-way, r V1: Slowing V1:(Light tr V1:(No) / V V1:	(No) / VV1: W / V2Clear	NORFOLK 201700001	Roadway At Address No hit and	V1:(Collisio Not report: No. school	35 Yes, device V1:(Collisis No	207759.1 878041.2 42.15276 -71.4061 68	MAIN ST				
4496235 MEDWAY 01/30/2018 Tue		No iniury 2 Loca	al police 4	5-54 55-64	01:00PM tcD1: (No im) Collision wiY		3	PW20180: Wet	Driveway MAPC	0	0 No control: Two-way, r V1: Turnins V1: (Light tr V1: (No) / V V1:	(No) / VV1: S / V2: Cloudy	NORFOLK 201800000	Roadway At Address No hit and	V1:(Collisio None No. school	30 Yes, device V1:(Collisis No	207748.9 878037.5 42.15273 -71.4062 70	MAIN ST				
4498525 MEDWAY 02/09/2018 Fri	Unknown Closed 8:33 AM 2018 N	Not reporte 2 Loca	al police 5	5-64 75-84	08:00AM tr Collision wiY		3	PW201804 Drv	Four-way is MAPC	ò	0 Traffic contTwo-way, rV1: Enterin V1:(Light trV1:(No) / VV1:	(Yes, ye V1: W / V2Clear	NORFOLK 201800000	Roadway At Address No hit and	V1:(Collisia Not report: No, school	30 Yes, device V1:(Collisis No	207748.9 878037.5 42.15273 -71.4062 70	MAIN ST				
4510572 MEDWAY 03/06/2018 Tue				5-44 55-64	04:00PM tcD1: (No imtD1: Not DisCollision wi Y		3	PW201806 Dry	Not at junc MAPC	0	2 No control: Not report: V1: Travelli V1: (Passen V1: (No) / VV1:		NORFOLK 201800000	Roadway At Address No hit and	V1:(Collisio None No. school		207748.9 878037.5 42.15273 -71.4062 70	MAIN ST R	100 feet W			
4554157 MEDWAY 05/24/2018 Thu		No iniury 3 Loca	al police	5-34 65-74	02:00PM tcD1: (No imtD1: Not DisCollision wiY		3	PW201817 Dry	Four-way is MAPC	õ	0 Traffic contTwo-way, r V1: Slowin(V1:(Passen V1:(No) / VV1:		NORFOLK 201800000	Roadway At Address No hit and	V1:(Collisia Not report: No, school		207759.1 878041.2 42.15276 -71.4061 68	MAIN ST				
4548358 MEDWAY 06/05/2018 Tue				5-34 35-44	03:00PM tcD1: (No im:D1: Not DisCollision wi Y		3	PW201815 Wet	Not report MAPC	0	0 Traffic cont Two-way, r V1: Slowint V1:(Passen V1:(No) / V V1:		NORFOLK 201800000	Roadway At Address No hit and	V1:(Collisio Not report: No. school	Yes, device V1:(Collisi(No	207737 878033.3 42.15269 -71.4064 67	MAIN ST				
							-			-		,		,								

ROAD SAFETY AUDIT



ROAD SAFETY AUDIT

Main Street (Route 109) at Medway Commons and Walgreens Driveways

Town of Medway

March 2022

Prepared For:



On Behalf of: Toll Brothers Apartment Living

Prepared By:



Transportation Engineers & Planners

35 New England Business Center Drive Suite 140 Andover, MA 01810-1066

Table 3: Potential Safety Enhancement Summary – Main Street at Medway Commons and Walgreens Driveways

Safety Issue	Potential Safety Enhancement	Safety Payoff	Time Frame	Cost	Jurisdiction
Congestion	Consider coordinating the Main Street at Medway Commons and Walgreens driveways signal with the Main Street at Holliston Street signal	Medium	Short-Term	Medium	Town of Medway
Clearance Intervals	Check clearance intervals and consider updating if they do not meet MassDOT standards	Medium	Short-Term	Low	Town of Medway
Troffic Signal Hood	Install retroreflective strips to the backplates of the signal heads to improve signal head conspicuity	Medium	Short-Term	Low	Town of Medway
Traffic Signal Head Conspicuity	Consider trimming trees on the north side of Main Street if it is determined they hang down and obscure the signal heads when the tree have leaves	Low	Short-Term	Low	Town of Medway
Pavement Markings	Consider striping pavement markings on Medway Commons entering approach to delineate between the two entering lanes	Low	Short-Term	Low	Owner of Medway Commons
	Consider restriping the intersection	Low	Short-Term	Low	Town of Medway

Table 3: Potential Safety Enhancement Summary –

Main Street at Medway Commons and Walgreens Driveways (continued)

Safety Issue	Potential Safety Enhancement	Safety Payoff	Time Frame	Cost	Jurisdiction
Driver Distraction/ Inattention	Consider educational outreach/ campaigns for residents to better inform the public of the safety issue surrounding distracted drivers and inattention.	Low	Long-Term	Low	Town of Medway
	Increase police enforcement of cell phone use and other activities that distract drivers.	Medium	Long-Term	Low	Town of Medway
	Consider posting warning signs that caution drivers of possible solar glare on Main Street westbound.	Low	Short-Term	Low	Town of Medway
Solar Glare	Consider educational outreach to residents to inform them of the hazard of glare, specifically westbound on Main Street in the afternoons and methods for handling the glare.	Low	Long-Term	Low	Town of Medway

Table 3: Potential Safety Enhancement Summary –

Main Street at Medway Commons and Walgreens Driveways (continued)

Safety Issue	Potential Safety Enhancement	Safety Payoff	Time Frame	Cost	Jurisdiction
	Update the crosswalks at the intersection from Standard crosswalks to Ladder crosswalks	Low	Short-Term	Low	Town of Medway
Pedestrian	Update all wheelchair ramps at the intersection to ADA standards including installing standard tactile warning panels	Medium	Mid-Term	Medium	Town of Medway
Accommodations	Upgrade the pedestrian signal heads to ADA standards including a pedestrian countdown signal	Medium	Mid-Term	Medium	Town of Medway
	Upgrade the pedestrian push buttons to Accessible Pedestrian Signal (APS) buttons that have auditory function	Medium	Mid-Term	Medium	Town of Medway



TRIP DISTRIBUTION WORKSHEET

Transportation Impact Assessment - Proposed Medical Office Building - Medway, Massachusetts

Legend:

- XX Weekday Morning
- (XX) Weekday Evening

[XX] Saturday Midday

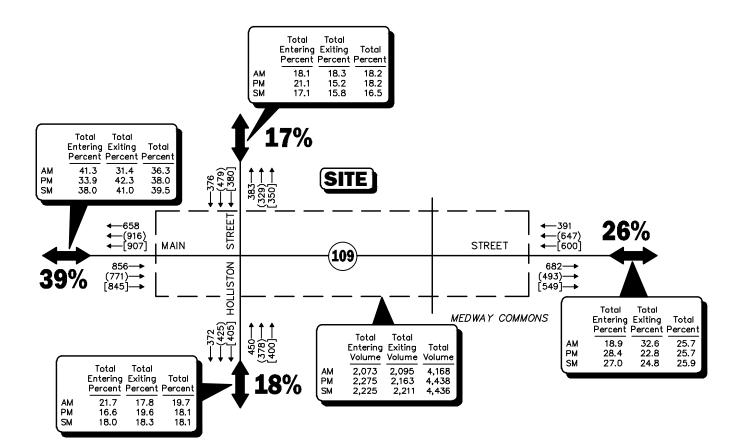




Figure 1A

Trip Distribution Worksheet 2022 Existing Peak-Hour Traffic Volumes

CAPACITY ANALYSIS WORKSHEETS

Route 109 at Holliston Street Route 109 at the Project site driveway and the Medway Commons driveway



Route 109 at Holliston Street



2029 Mitigated Weekday Morning Peak Hour Traffic Volumes 1: Holliston Street & Route 109

	≯	-	\mathbf{F}	4	+	*	1	Ť	۲	1	ŧ	1
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	ሻ	↑	1	ሻ	↑	1	ሻ	4		ሻ	↑	1
Traffic Volume (vph)	131	632	181	29	393	65	217	224	53	97	196	120
Future Volume (vph)	131	632	181	29	393	65	217	224	53	97	196	120
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.850			0.850		0.971				0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1652	1845	1538	1589	1783	1478	1652	1767	0	1636	1749	1531
Flt Permitted	0.330			0.107	1 = 0.0		0.224			0.285		
Satd. Flow (perm)	574	1845	1538	179	1783	1478	389	1767	0	491	1749	1531
Satd. Flow (RTOR)	454	750	218		110	218	0.11	11		100	0 (0	164
Adj. Flow (vph)	156	752	215	31	418	69	261	270	64	133	268	164
Lane Group Flow (vph)	156	752	215	31	418	69	261	334	0	133	268	164
Turn Type	pm+pt	NA	Free	pm+pt	NA	Free	pm+pt	NA		pm+pt	NA	pm+ov
Protected Phases	5	2	E.e.e.	1	6	E.e.e.	3	8		7	4	5
Permitted Phases	2	2	Free	6	1	Free	8 3	0		4	4	4 5
Detector Phase	5	2		I	6		3	8		1	4	5
Switch Phase	6.0	10.0		6.0	10.0		6.0	6.0		6.0	6.0	6.0
Minimum Initial (s) Minimum Split (s)	0.0 12.5	16.5		0.0 12.5	16.5		0.0	0.0 11.0		0.0 11.0	11.0	6.0 12.5
Total Split (s)	12.5	50.0		12.5	49.0		14.0	26.0		12.0	24.0	12.5
Total Split (%)	13.0%	50.0%		12.0%	49.0%		14.0%	26.0%		12.0%	24.0%	13.0%
Maximum Green (s)	6.5	43.5		5.5	49.07		9.0	20.078		7.0	19.0	6.5
Yellow Time (s)	4.5	43.5		4.5	42.5		4.0	4.0		4.0	4.0	4.5
All-Red Time (s)	2.0	2.0		2.0	2.0		1.0	1.0		1.0	1.0	2.0
Lost Time Adjust (s)	-2.5	-2.5		-2.5	-2.5		-1.0	-1.0		-1.0	-1.0	-2.5
Total Lost Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	4.0
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag		Lead	Lag	Lead
Lead-Lag Optimize?	Loud	Lug		Eouu	Lug		Loud	Edg		Loud	Eug	Loud
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	3.0
Recall Mode	None	C-Min		None	C-Min		None	None		None	None	None
v/c Ratio	0.38	0.83	0.14	0.15	0.55	0.05	0.88	0.80		0.57	0.82	0.27
Control Delay	13.1	32.7	0.2	9.8	21.3	0.1	59.5	51.5		34.6	59.4	5.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Total Delay	13.1	32.7	0.2	9.8	21.3	0.1	59.5	51.5		34.6	59.4	5.2
Queue Length 50th (ft)	43	423	0	7	203	0	~137	199		60	163	0
Queue Length 95th (ft)	68	#548	0	18	193	0	#238	#300		84	197	21
Internal Link Dist (ft)		220			570			220			220	
Turn Bay Length (ft)	200		200	105		115	150			85		100
Base Capacity (vph)	413	905	1538	206	802	1478	297	417		232	349	603
Starvation Cap Reductn	0	0	0	0	0	0	0	0		0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0		0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0		0	0	0
Reduced v/c Ratio	0.38	0.83	0.14	0.15	0.52	0.05	0.88	0.80		0.57	0.77	0.27

Intersection Summary

Cycle Length: 100 Actuated Cycle Length: 100 Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Yellow, Master Intersection Natural Cycle: 90

Lanes, Volumes, Timings AJA/Vanasse & Assoc., Inc. Synchro 11 Report S:\Jobs\9242\Analysis\29AMBM.syn Control Type: Actuated-Coordinated

- ~ Volume exceeds capacity, queue is theoretically infinite.
- Queue shown is maximum after two cycles.95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

Splits and Phases: 1: Holliston Street & Route 109

Ø1	Ø2 (R)	▲ Ø3	Ø4
12 s	50 s	14 s	24 s
	✓ Ø6 (R)	Ø7	Ø8
13 s	49 s	12 s 2	6s 🛛

2029 Mitigated Weekday Morning Peak Hour Traffic Volumes 1: Holliston Street & Route 109

	٦	-	\mathbf{F}	•	-	*	1	Ť	1	1	ŧ	~
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	۲	•	1	٦	•	1	٦	el 🕯		٦	•	1
Traffic Volume (vph)	131	632	181	29	393	65	217	224	53	97	196	120
Future Volume (vph)	131	632	181	29	393	65	217	224	53	97	196	120
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	10	12	12	10	11	10	10	12	12	10	11	11
Total Lost time (s)	4.0	4.0	1.5	4.0	4.0	1.5	4.0	4.0		4.0	4.0	4.0
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.97		1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)	1652	1845	1538	1589	1783	1478	1652	1768		1636	1749	1531
Flt Permitted	0.33	1.00	1.00	0.11	1.00	1.00	0.22	1.00		0.29	1.00	1.00
Satd. Flow (perm)	574	1845	1538	179	1783	1478	389	1768		491	1749	1531
Peak-hour factor, PHF	0.84	0.84	0.84	0.94	0.94	0.94	0.83	0.83	0.83	0.73	0.73	0.73
Adj. Flow (vph)	156	752	215	31	418	69	261	270	64	133	268	164
RTOR Reduction (vph)	0	0	0	0	0	0	0	8	0	0	0	115
Lane Group Flow (vph)	156	752	215	31	418	69	261	326	0	133	268	49
Heavy Vehicles (%)	2%	3%	5%	6%	3%	2%	2%	4%	6%	3%	5%	2%
Turn Type	pm+pt	NA	Free	pm+pt	NA	Free	pm+pt	NA		pm+pt	NA	pm+ov
Protected Phases	5	2		1	6		3	8		7	4	5
Permitted Phases	2		Free	6		Free	8			4		4
Actuated Green, G (s)	50.9	44.0	100.0	43.7	40.4	100.0	34.0	22.1		25.4	17.8	24.7
Effective Green, g (s)	55.9	46.5	100.0	48.7	42.9	100.0	35.7	23.1		27.4	18.8	29.7
Actuated g/C Ratio	0.56	0.46	1.00	0.49	0.43	1.00	0.36	0.23		0.27	0.19	0.30
Clearance Time (s)	6.5	6.5		6.5	6.5		5.0	5.0		5.0	5.0	6.5
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	3.0
Lane Grp Cap (vph)	422	857	1538	168	764	1478	301	408		233	328	454
v/s Ratio Prot	c0.03	c0.41	0.1.1	0.01	0.23	0.05	c0.11	0.18		0.05	0.15	0.01
v/s Ratio Perm	0.17	0.00	0.14	0.08	0.55	0.05	c0.20	0.00		0.11	0.00	0.02
v/c Ratio	0.37	0.88	0.14	0.18	0.55	0.05	0.87	0.80		0.57	0.82	0.11
Uniform Delay, d1	12.5	24.2	0.0	18.4	21.3	0.0	25.9	36.2		29.2	39.0	25.5
Progression Factor	1.00	1.00	1.00	0.88	0.87	1.00	1.00	1.00		1.00	1.00	1.00
Incremental Delay, d2	0.5	12.3	0.2	0.5	2.7	0.1	22.1	10.4		3.4	14.5	0.1
Delay (s)	13.0	36.5	0.2	16.7	21.3	0.1	48.0	46.7		32.5	53.5	25.6
Level of Service	В	D	A	В	C	A	D	D		С	10 E	U
Approach Delay (s)		26.3 C			18.2 B			47.3 D			40.5	
Approach LOS		C			В			D			D	
Intersection Summary												
HCM 2000 Control Delay			32.1	Н	CM 2000	Level of	Service		С			
HCM 2000 Volume to Capa	icity ratio		0.87									
Actuated Cycle Length (s)			100.0		um of los				16.0			
Intersection Capacity Utiliza	ation		73.9%	IC	U Level	of Service	9		D			
Analysis Period (min)			15									

c Critical Lane Group

2029 Mitigated Weekday Evening Peak Hour Traffic Volumes 1: Holliston Street & Route 109

	≯	-	\mathbf{F}	4	←	•	1	t	۲	1	Ŧ	~
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	٦	•	1	ሻ	•	1	٦	ef.		٦	↑	1
Traffic Volume (vph)	124	499	234	42	610	80	213	163	39	136	194	195
Future Volume (vph)	124	499	234	42	610	80	213	163	39	136	194	195
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.850			0.850		0.971				0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1685	1881	1615	1620	1818	1507	1668	1830	0	1652	1801	1561
Flt Permitted	0.156			0.308			0.261			0.512		
Satd. Flow (perm)	277	1881	1615	525	1818	1507	458	1830	0	890	1801	1561
Satd. Flow (RTOR)	104	505	242		(05	242		12		451		167
Adj. Flow (vph)	131	525	246	44	635	83	239	183	44	156	223	224
Lane Group Flow (vph)	131	525	246	44	635	83	239	227	0	156	223	224
Turn Type	pm+pt	NA	Free	pm+pt	NA	Free	pm+pt	NA		pm+pt	NA	pm+ov
Protected Phases	5	2		1	6	E	3	8		7	4	5
Permitted Phases	2	2	Free	6	/	Free	8	0		4	4	4 5
Detector Phase	5	2		I	6		3	8		1	4	5
Switch Phase	6.0	10.0		6.0	10.0		6.0	6.0		6.0	6.0	6.0
Minimum Initial (s) Minimum Split (s)	0.0 12.5	16.5		0.0 12.5	16.5		0.0	0.0 11.0		0.0 11.0	11.0	6.0 12.5
Total Split (s)	12.5	43.5		12.5	43.5		15.0	23.0		11.0	19.0	12.5
Total Split (%)	13.9%	43.3%		13.9%	43.3%		16.7%	25.6%		12.2%	21.1%	13.9%
Maximum Green (s)	6.0	37.0		6.0	37.0		10.778	18.0		6.0	14.0	6.0
Yellow Time (s)	4.5	4.5		4.5	4.5		4.0	4.0		4.0	4.0	4.5
All-Red Time (s)	2.0	2.0		2.0	2.0		1.0	1.0		1.0	1.0	2.0
Lost Time Adjust (s)	-2.5	-2.5		-2.5	-2.5		-1.0	-1.0		-1.0	-1.0	-2.5
Total Lost Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	4.0
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag		Lead	Lag	Lead
Lead-Lag Optimize?		9			9			9			9	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	3.0
Recall Mode	None	C-Min		None	C-Min		None	None		None	None	None
v/c Ratio	0.46	0.57	0.15	0.12	0.80	0.06	0.77	0.60		0.54	0.77	0.38
Control Delay	14.6	20.7	0.2	8.8	28.1	0.1	41.8	37.8		31.2	55.5	9.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Total Delay	14.6	20.7	0.2	8.8	28.1	0.1	41.8	37.8		31.2	55.5	9.4
Queue Length 50th (ft)	32	225	0	7	319	0	105	110		65	122	23
Queue Length 95th (ft)	58	335	0	m24	#255	0	#186	183		110	#214	73
Internal Link Dist (ft)		220			570			220			220	
Turn Bay Length (ft)	200		200	105		115	150			85		100
Base Capacity (vph)	285	924	1615	381	805	1507	312	395		289	300	583
Starvation Cap Reductn	0	0	0	0	0	0	0	0		0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0		0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0		0	0	0
Reduced v/c Ratio	0.46	0.57	0.15	0.12	0.79	0.06	0.77	0.57		0.54	0.74	0.38

Intersection Summary

Cycle Length: 90 Actuated Cycle Length: 90 Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Yellow, Master Intersection Natural Cycle: 80

Lanes, Volumes, Timings AJA/Vanasse & Assoc., Inc. Synchro 11 Report S:\Jobs\9242\Analysis\29PMBM.syn Control Type: Actuated-Coordinated

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 1: Holliston Street & Route 109

Ø1	Ø2 (R)	Ø 3	∳ø4
12.5 s	43.5 s	15 s	19 s
ᢞ _{Ø5}	€ Ø6 (R)	Ø7	≜
12.5 s	43.5 s	11 s	23 s

2029 Mitigated Weekday Evening Peak Hour Traffic Volumes 1: Holliston Street & Route 109

	٦	-	\mathbf{r}	4	←	*	1	Ť	1	1	Ŧ	~
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	1	•	1	<u>۲</u>	•	1	۲	el 🗧		٦	1	1
Traffic Volume (vph)	124	499	234	42	610	80	213	163	39	136	194	195
Future Volume (vph)	124	499	234	42	610	80	213	163	39	136	194	195
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	10	12	12	10	11	10	10	12	12	10	11	11
Total Lost time (s)	4.0	4.0	1.5	4.0	4.0	1.5	4.0	4.0		4.0	4.0	4.0
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.97		1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)	1685	1881	1615	1620	1818	1507	1668	1830		1652	1801	1561
Flt Permitted	0.16	1.00	1.00	0.31	1.00	1.00	0.26	1.00		0.51	1.00	1.00
Satd. Flow (perm)	277	1881	1615	525	1818	1507	458	1830		890	1801	1561
Peak-hour factor, PHF	0.95	0.95	0.95	0.96	0.96	0.96	0.89	0.89	0.89	0.87	0.87	0.87
Adj. Flow (vph)	131	525	246	44	635	83	239	183	44	156	223	224
RTOR Reduction (vph)	0	0	0	0	0	0	0	10	0	0	0	122
Lane Group Flow (vph)	131	525	246	44	635	83	239	217	0	156	223	102
Heavy Vehicles (%)	0%	1%	0%	4%	1%	0%	1%	1%	0%	2%	2%	0%
Turn Type	pm+pt	NA	Free	pm+pt	NA	Free	pm+pt	NA		pm+pt	NA	pm+ov
Protected Phases	5	2		1	6		3	8		7	4	5
Permitted Phases	2		Free	6		Free	8			4		4
Actuated Green, G (s)	45.2	39.1	90.0	40.2	36.6	90.0	28.2	17.3		20.4	13.4	19.5
Effective Green, g (s)	50.2	41.6	90.0	45.2	39.1	90.0	30.2	18.3		22.4	14.4	24.5
Actuated g/C Ratio	0.56	0.46	1.00	0.50	0.43	1.00	0.34	0.20		0.25	0.16	0.27
Clearance Time (s)	6.5	6.5		6.5	6.5		5.0	5.0		5.0	5.0	6.5
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	3.0
Lane Grp Cap (vph)	289	869	1615	337	789	1507	313	372		289	288	424
v/s Ratio Prot	c0.04	0.28		0.01	c0.35		c0.10	0.12		0.05	0.12	0.02
v/s Ratio Perm	0.21		0.15	0.06		0.06	c0.15			0.09		0.04
v/c Ratio	0.45	0.60	0.15	0.13	0.80	0.06	0.76	0.58		0.54	0.77	0.24
Uniform Delay, d1	14.2	18.1	0.0	12.5	22.1	0.0	24.0	32.4		28.1	36.2	25.5
Progression Factor	1.00	1.00	1.00	0.95	0.87	1.00	1.00	1.00		1.00	1.00	1.00
Incremental Delay, d2	1.1	3.1	0.2	0.2	7.9	0.1	10.5	2.3		1.9	12.2	0.3
Delay (s)	15.3	21.2	0.2	12.1	27.2	0.1	34.5	34.8		30.0	48.5	25.8
Level of Service	В	С	А	В	С	А	С	С		С	D	С
Approach Delay (s)		14.6			23.3			34.6			35.3	
Approach LOS		В			С			С			D	
Intersection Summary												
HCM 2000 Control Delay			25.0	H	ICM 2000	Level of	Service		С			
HCM 2000 Volume to Capa	city ratio		0.78									
Actuated Cycle Length (s)			90.0		um of lost				16.0			
Intersection Capacity Utiliza	ition		74.3%	10	CU Level o	of Service	Э		D			
Analysis Period (min)			15									

c Critical Lane Group

2029 MItigated Saturday Midday Peak Hour Traffic Volumes 1: Holliston Street & Route 109

Lane Group EBL EBT EBR WBL WBT WBR NBL NBT NBR SBL SBT SBR Lane Configurations 132 551 253 48 577 115 253 138 49 110 143 167 Future Volume (vph) 132 551 253 48 577 115 253 138 49 110 143 167 Lane Utill. Factor 1.00 <t< th=""></t<>
Traffic Volume (vph) 132 551 253 48 577 115 253 138 49 110 143 167 Future Volume (vph) 132 551 253 48 577 115 253 138 49 110 143 167 Lane Util. Factor 1.00
Future Volume (vph) 132 551 253 48 577 115 253 138 49 110 143 167 Lane Util. Factor 1.00
Lane Util. Factor 1.00
Frt 0.850 0.850 0.961 0.850 Flt Protected 0.950 0.950 0.950 0.950 Satd. Flow (prot) 1685 1881 1615 1685 1837 1507 1685 1826 0 1685 1837 1561 Flt Permitted 0.156 0.219 0.353 0.629 0.629 0.629 0.629 Satd. Flow (perm) 277 1881 1615 388 1837 1507 626 1826 0 1115 1837 1561 Satd. Flow (RTOR) 273 273 273 19 168 1837 1561 Adj. Flow (vph) 148 619 284 51 614 122 278 152 54 118 154 180 Lane Group Flow (vph) 148 619 284 51 614 122 278 206 0 118 154 180 Lare Group Flow (vph) 148 619 284 51 614 122 278 206 0 118 154 180 Lare Group Flow (vph) 148 619 284 51 614 122 278 206 0 118 154 180 Lare Group Flow (vph) 148 619 284 51 614 122 278 206 0 118 154 180 Lare Group Flow (vph) 148 619 284 51 616 122 766 60
Fit Protected0.9500.9500.9500.950Satd. Flow (prot)168518811615168518371507168518260168518371561Fit Permitted0.1560.2190.3530.6290.5630.6290.5630.6290.5630.629Satd. Flow (perm)277188116153881837150762618260111518371561Satd. Flow (RTOR)2732731916851826011181541800Lane Group Flow (vph)1486192845161412227820601181541800Turn Typepm+ptNAFreepm+ptNAFreepm+ptNApm+ptNApm+ovProtected Phases521638745Switch Phase2Free6Free844Detector Phase521638745Switch Phase512.516.511.011.011.011.012.516.3Minimum Split (s)12.516.512.516.511.011.011.013.013.0Total Split (%)16.3%47.5%4.54.54.04.04.04.04.5Yellow Time (s)4.54.54.54.54.04.04.04.0
Satd. Flow (prot) 1685 1881 1615 1685 1837 1507 1685 1826 0 1685 1837 1561 Flt Permitted 0.156 0.219 0.353 0.629 0.618 180 180 180 180 180 180 180 180 180 180 180 180 180 180 180 180 180 190 0.60 0.60 0.60 0.60
Fit Permitted0.1560.2190.3530.629Satd. Flow (perm)277188116153881837150762618260111518371561Satd. Flow (RTOR)27327319168Adj. Flow (vph)1486192845161412227815254118154180Lane Group Flow (vph)148619284516141222782060118154180Turn Typepm+ptNAFreepm+ptNAFreepm+ptNApm+ptNApm+ovProtected Phases521638745Permitted Phases2Free6Free844Detector Phase521638745Switch Phase52110.6.06.06.06.06.06.0Minimun Initial (s)6.010.06.010.06.011.011.011.012.5Total Split (s)13.038.013.038.016.316.3%16.3%16.3%Maximum Green (s)6.531.56.531.511.013.06.08.06.5Yellow Time (s)4.54.54.54.04.04.04.04.5All-Red Time (s)2.02.02.01.01.01.
Satd. Flow (perm)277188116153881837150762618260111518371561Satd. Flow (RTOR)27327319168Adj. Flow (vph)1486192845161412227815254118154180Lane Group Flow (vph)148619284516141222782060118154180Turn Typepm+ptNAFreepm+ptNAFreepm+ptNApm+ovProtected Phases521638745Permitted Phases2Free6Free844Detector Phase521638745Switch Phase52116.511.011.011.011.012.5Total Split (s)12.516.512.516.511.011.011.013.013.0Total Split (%)16.3%47.5%16.3%47.5%20.0%22.5%13.8%16.3%16.3%Maximum Green (s)6.531.56.531.511.013.06.08.06.5Yellow Time (s)4.54.54.54.04.04.04.04.5All-Red Time (s)2.02.02.01.01.01.01.01.02.0
Satd. Flow (RTOR)27327319168Adj. Flow (vph)1486192845161412227815254118154180Lane Group Flow (vph)148619284516141222782060118154180Turn Typepm+ptNAFreepm+ptNAFreepm+ptNApm+ptNApm+ovProtected Phases521638745Permitted Phases2Free6Free844Detector Phase521638745Switch Phase521638745Switch Phase521106.06.06.06.06.06.0Minimum Initial (s)6.010.06.010.06.011.011.011.012.5Total Split (s)12.516.512.516.511.011.011.013.013.0Total Split (%)16.3%47.5%16.3%47.5%20.0%22.5%13.8%16.3%16.3%Maximum Green (s)6.531.56.531.511.013.06.08.06.5Yellow Time (s)2.02.02.02.01.01.01.01.02.0
Adj. Flow (vph)1486192845161412227815254118154180Lane Group Flow (vph)148619284516141222782060118154180Turn Typepm+ptNAFreepm+ptNAFreepm+ptNApm+ptNApm+ovProtected Phases521638745Permitted Phases2Free6Free844Detector Phase521638745Switch Phase5211638745Switch Phase5211.010.06.06.06.06.06.06.06.0Minimum Initial (s)6.010.06.010.06.011.011.011.012.5Total Split (s)12.516.512.516.511.011.011.013.013.0Total Split (%)16.3%47.5%16.3%47.5%20.0%22.5%13.8%16.3%16.3%Maximum Green (s)6.531.56.531.511.013.06.08.06.5Yellow Time (s)4.54.54.54.04.04.04.04.04.0All-Red Time (s)2.02.02.02.01.01.01.01.01.
Lane Group Flow (vph)148619284516141222782060118154180Turn Typepm+ptNAFreepm+ptNAFreepm+ptNApm+ptNApm+ovProtected Phases521638745Permitted Phases2Free6Free844Detector Phase521638745Switch Phase5211638745Minimum Initial (s)6.010.06.010.06.06.06.06.06.0Minimum Split (s)12.516.512.516.511.011.011.012.5Total Split (s)13.038.013.038.016.018.011.013.013.0Total Split (%)16.3%47.5%16.3%47.5%20.0%22.5%13.8%16.3%16.3%Maximum Green (s)6.531.56.531.511.013.06.08.06.5Yellow Time (s)4.54.54.54.54.04.04.04.5All-Red Time (s)2.02.02.01.01.01.01.01.02.0
Turn Typepm+ptNAFreepm+ptNAFreepm+ptNApm+ptNApm+ptNApm+ovProtected Phases521638745Permitted Phases2Free6Free844Detector Phase521638745Switch Phase521638745Minimum Initial (s)6.010.06.010.06.06.06.06.06.0Minimum Split (s)12.516.512.516.511.011.011.012.5Total Split (s)13.038.013.038.016.018.011.013.013.0Total Split (%)16.3%47.5%16.3%47.5%20.0%22.5%13.8%16.3%16.3%Maximum Green (s)6.531.56.531.511.013.06.08.06.5Yellow Time (s)4.54.54.54.54.04.04.04.5All-Red Time (s)2.02.02.02.01.01.01.01.02.0
Protected Phases 5 2 1 6 3 8 7 4 5 Permitted Phases 2 Free 6 Free 8 4 4 Detector Phase 5 2 1 6 3 8 7 4 5 Switch Phase 5 2 1 6 3 8 7 4 5 Switch Phase
Permitted Phases2Free6Free844Detector Phase521638745Switch PhaseMinimum Initial (s)6.010.06.010.06.06.06.06.06.0Minimum Split (s)12.516.512.516.511.011.011.011.012.5Total Split (s)13.038.013.038.016.018.011.013.013.0Total Split (%)16.3%47.5%16.3%47.5%20.0%22.5%13.8%16.3%16.3%Maximum Green (s)6.531.56.531.511.013.06.08.06.5Yellow Time (s)4.54.54.54.04.04.04.04.5All-Red Time (s)2.02.02.01.01.01.01.02.0
Detector Phase521638745Switch PhaseMinimum Initial (s)6.010.06.010.06.06.06.06.06.0Minimum Split (s)12.516.512.516.511.011.011.011.012.5Total Split (s)13.038.013.038.016.018.011.013.013.0Total Split (%)16.3%47.5%16.3%47.5%20.0%22.5%13.8%16.3%16.3%Maximum Green (s)6.531.56.531.511.013.06.08.06.5Yellow Time (s)4.54.54.54.04.04.04.04.5All-Red Time (s)2.02.02.01.01.01.01.02.0
Switch PhaseMinimum Initial (s)6.010.06.010.06.06.06.06.06.06.0Minimum Split (s)12.516.512.516.511.011.011.011.012.5Total Split (s)13.038.013.038.016.018.011.013.013.0Total Split (%)16.3%47.5%16.3%47.5%20.0%22.5%13.8%16.3%16.3%Maximum Green (s)6.531.56.531.511.013.06.08.06.5Yellow Time (s)4.54.54.54.04.04.04.04.5All-Red Time (s)2.02.02.01.01.01.01.02.0
Minimum Initial (s)6.010.06.010.06.06.06.06.06.06.0Minimum Split (s)12.516.512.516.511.011.011.011.012.5Total Split (s)13.038.013.038.016.018.011.013.013.0Total Split (%)16.3%47.5%16.3%47.5%20.0%22.5%13.8%16.3%16.3%Maximum Green (s)6.531.56.531.511.013.06.08.06.5Yellow Time (s)4.54.54.54.04.04.04.04.5All-Red Time (s)2.02.02.01.01.01.01.02.0
Minimum Split (s)12.516.512.516.511.011.011.011.012.5Total Split (s)13.038.013.038.016.018.011.013.013.0Total Split (%)16.3%47.5%16.3%47.5%20.0%22.5%13.8%16.3%16.3%Maximum Green (s)6.531.56.531.511.013.06.08.06.5Yellow Time (s)4.54.54.54.04.04.04.04.5All-Red Time (s)2.02.02.01.01.01.01.02.0
Total Split (s)13.038.013.038.016.018.011.013.013.0Total Split (%)16.3%47.5%16.3%47.5%20.0%22.5%13.8%16.3%16.3%Maximum Green (s)6.531.56.531.511.013.06.08.06.5Yellow Time (s)4.54.54.54.04.04.04.04.5All-Red Time (s)2.02.02.02.01.01.01.02.0
Total Split (%)16.3%47.5%16.3%47.5%20.0%22.5%13.8%16.3%16.3%Maximum Green (s)6.531.56.531.511.013.06.08.06.5Yellow Time (s)4.54.54.54.04.04.04.04.5All-Red Time (s)2.02.02.02.01.01.01.01.02.0
Maximum Green (s)6.531.56.531.511.013.06.08.06.5Yellow Time (s)4.54.54.54.04.04.04.04.5All-Red Time (s)2.02.02.02.01.01.01.01.02.0
Yellow Time (s)4.54.54.54.64.04.04.04.5All-Red Time (s)2.02.02.02.01.01.01.02.0
All-Red Time (s) 2.0 2.0 2.0 2.0 1.0 1.0 1.0 1.0 2.0
Lost Time Adjust (s) -2.5 -2.5 -2.5 -2.5 -1.0 -1.0 -1.0 -2.5
Total Lost Time (s) 4.0
Lead/Lag Lead Lag Lead Lag Lead Lag Lead
Lead-Lag Optimize?
Vehicle Extension (s) 3.0
Recall Mode None Min None Min None None None None None None
v/c Ratio 0.47 0.70 0.18 0.15 0.83 0.08 0.76 0.51 0.42 0.72 0.32
Control Delay 13.3 22.9 0.2 8.2 32.2 0.1 37.8 31.9 25.8 54.6 6.5
Queue Delay 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.
Total Delay 13.3 22.9 0.2 8.2 32.2 0.1 37.8 31.9 25.8 54.6 6.5
Queue Length 50th (ft) 30 256 0 10 256 0 113 87 43 76 4
Queue Length 95th (ft) 56 383 0 24 #408 0 #196 156 83 #168 50
Internal Link Dist (ft) 220 570 220 220
Turn Bay Length (ft) 200 200 105 115 150 85 100
Base Capacity (vph) 315 890 1615 353 816 1507 369 404 284 215 568
Starvation Cap Reductn 0
Spillback Cap Reductn 0
Storage Cap Reductn 0
Reduced v/c Ratio 0.47 0.70 0.18 0.14 0.75 0.08 0.75 0.51 0.42 0.72 0.32

Intersection Summary

Cycle Length: 80 Actuated Cycle Length: 76.8 Natural Cycle: 70 Control Type: Actuated-Uncoordinated

Lanes, Volumes, Timings AJA/Vanasse & Assoc., Inc. Synchro 11 Report S:\Jobs\9242\Analysis\29SMBM.syn

95th percentile volume exceeds capacity, queue may be longer.Queue shown is maximum after two cycles.

Splits and Phases:	I: Holliston Street & Route 109		
√ Ø1	A 102	1 Ø3	↓ _{Ø4}
13 s	38 s	16 s	13 s
₽ Ø5	₹ Ø6	Ø7	↑ Ø8
13 s	38 s	11 s	18 s

2029 MItigated Saturday Midday Peak Hour Traffic Volumes 1: Holliston Street & Route 109

	٦	-	*	4	ł	*	•	Ť	1	1	ţ	~
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	ľ	•	1	1	•	1	ľ	et.		1	•	1
Traffic Volume (vph)	132	551	253	48	577	115	253	138	49	110	143	167
Future Volume (vph)	132	551	253	48	577	115	253	138	49	110	143	167
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	10	12	12	10	11	10	10	12	12	10	11	11
Total Lost time (s)	4.0	4.0	1.5	4.0	4.0	1.5	4.0	4.0		4.0	4.0	4.0
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.96		1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)	1685	1881	1615	1685	1837	1507	1685	1825		1685	1837	1561
Flt Permitted	0.16	1.00	1.00	0.22	1.00	1.00	0.35	1.00		0.63	1.00	1.00
Satd. Flow (perm)	277	1881	1615	389	1837	1507	627	1825		1115	1837	1561
Peak-hour factor, PHF	0.89	0.89	0.89	0.94	0.94	0.94	0.91	0.91	0.91	0.93	0.93	0.93
Adj. Flow (vph)	148	619	284	51	614	122	278	152	54	118	154	180
RTOR Reduction (vph)	0	0	0	0	0	0	0	15	0	0	0	125
Lane Group Flow (vph)	148	619	284	51	614	122	278	191	0	118	154	55
Heavy Vehicles (%)	0%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Turn Type	pm+pt	NA	Free	pm+pt	NA	Free	pm+pt	NA		pm+pt	NA	pm+ov
Protected Phases	5	2	_	1	6	_	3	8		7	4	5
Permitted Phases	2	00.0	Free	6	01.0	Free	8	45.4		4	0.0	4
Actuated Green, G (s)	40.3	33.8	80.6	34.7	31.0	80.6	25.1	15.4		13.9	9.2	15.7
Effective Green, g (s)	45.3	36.3	80.6	39.7	33.5	80.6	26.1	16.4		15.9	10.2	20.7
Actuated g/C Ratio	0.56	0.45	1.00	0.49	0.42	1.00	0.32	0.20		0.20	0.13	0.26
Clearance Time (s)	6.5	6.5		6.5	6.5		5.0	5.0		5.0	5.0	6.5
Vehicle Extension (s)	3.0	3.0	4/45	3.0	3.0	4507	3.0	3.0		3.0	3.0	3.0
Lane Grp Cap (vph)	312	847	1615	291	763	1507	359	371		260	232	400
v/s Ratio Prot	c0.05	0.33	0.10	0.01	c0.33	0.00	c0.11	0.10		0.03	0.08	0.02
v/s Ratio Perm	0.21	0.70	0.18	0.07	0.00	0.08	c0.14	0 5 1		0.06	0.77	0.02
v/c Ratio	0.47	0.73 18.1	0.18 0.0	0.18 12.5	0.80	0.08 0.0	0.77 22.4	0.51 28.6		0.45	0.66	0.14
Uniform Delay, d1	12.6 1.00	18.1	1.00	12.5	20.7 1.00	1.00	22.4 1.00	28.0		27.9 1.00	33.6 1.00	23.1 1.00
Progression Factor Incremental Delay, d2	1.00	3.3	0.2	0.3	6.2	0.1	10.0	1.00		1.00	7.0	0.2
Delay (s)	13.7	21.4	0.2	12.8	26.9	0.1	32.4	29.8		29.2	40.5	23.2
Level of Service	13.7 B	21.4 C	0.2 A	12.0 B	20.9 C	A	52.4 C	27.0 C		29.2 C	40.5 D	23.2 C
Approach Delay (s)	D	14.6	A	D	21.8	A	C	31.3		C	30.7	C
Approach LOS		14.0 B			21.0 C			51.5 C			50.7 C	
		U			C			C			C	
Intersection Summary					014 0000		<u> </u>					
HCM 2000 Control Delay	., .,		22.2	Н	ICM 2000	Level of	Service		С			
HCM 2000 Volume to Capa	acity ratio		0.78	-					1(0			
Actuated Cycle Length (s)	- 11		80.6		um of los				16.0			
Intersection Capacity Utiliza	ation		72.6%	IC	CU Level	of Service	5		С			
Analysis Period (min)			15									

c Critical Lane Group

Route 109 at the Project site driveway and the Medway Commons driveway



2029 Mitigated Weekday Morning Peak Hour Traffic Volumes2: Medway Commons Driveway/Project Site Driveway & Route 109

	۶	-	\mathbf{F}	4	+	*	•	1	1	1	Ļ	~
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	1	•	1	ľ	el el			र्च	1	ľ	et	
Traffic Volume (vph)	37	674	71	32	422	13	54	0	69	3	1	11
Future Volume (vph)	37	674	71	32	422	13	54	0	69	3	1	11
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.850		0.995				0.850		0.862	
Flt Protected	0.950			0.950				0.950		0.950		
Satd. Flow (prot)	1745	1845	1583	1851	1960	0	0	1736	1583	1805	1638	0
Flt Permitted	0.417			0.308				0.742		0.711		
Satd. Flow (perm)	766	1845	1583	600	1960	0	0	1356	1583	1351	1638	0
Satd. Flow (RTOR)			98		3				98		22	
Adj. Flow (vph)	39	717	76	39	508	16	71	0	91	6	2	22
Lane Group Flow (vph)	39	717	76	39	524	0	0	71	91	6	24	0
Turn Type	pm+pt	NA	Perm	pm+pt	NA		Perm	NA	Perm	Perm	NA	
Protected Phases	5	2		1	6			8			4	
Permitted Phases	2		2	6			8		8	4		
Detector Phase	5	2	2	1	6		8	8	8	4	4	
Switch Phase												
Minimum Initial (s)	6.0	10.0	10.0	6.0	10.0		6.0	6.0	6.0	6.0	6.0	
Minimum Split (s)	12.0	16.0	16.0	12.0	16.0		12.0	12.0	12.0	12.0	12.0	
Total Split (s)	12.0	71.0	71.0	12.0	71.0		17.0	17.0	17.0	17.0	17.0	
Total Split (%)	12.0%	71.0%	71.0%	12.0%	71.0%		17.0%	17.0%	17.0%	17.0%	17.0%	
Maximum Green (s)	6.0	65.0	65.0	6.0	65.0		11.0	11.0	11.0	11.0	11.0	
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5		3.5	3.5	3.5	3.5	3.5	
All-Red Time (s)	2.5	2.5	2.5	2.5	2.5		2.5	2.5	2.5	2.5	2.5	
Lost Time Adjust (s)	-2.0	-2.0	-2.0	-2.0	-2.0			-2.0	-2.0	-2.0	-2.0	
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0			4.0	4.0	4.0	4.0	
Lead/Lag	Lead	Lag	Lag	Lead	Lag							
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0	3.0	3.0	
Recall Mode	None	C-Min	C-Min	None	C-Min		None	None	None	None	None	
v/c Ratio	0.06	0.52	0.06	0.07	0.36			0.42	0.32	0.04	0.11	
Control Delay	1.7	4.3	0.1	3.0	7.4			46.9	10.1	36.3	16.8	
Queue Delay	0.0	0.1	0.0	0.0	0.0			0.0	0.0	0.0	0.0	
Total Delay	1.7	4.4	0.1	3.0	7.4			46.9	10.1	36.3	16.8	
Queue Length 50th (ft)	3	120	0	4	130			42	0	3	1	
Queue Length 95th (ft)	m3	m79	m0	12	202			68	24	8	8	
Internal Link Dist (ft)		570			220			220			219	
Turn Bay Length (ft)	100		100	230						60		
Base Capacity (vph)	689	1413	1235	579	1501			191	307	190	250	
Starvation Cap Reductn	0	131	0	0	0			0	0	0	0	
Spillback Cap Reductn	0	0	0	0	0			0	0	0	0	
Storage Cap Reductn	0	0	0	0	0			0	0	0	0	
Reduced v/c Ratio	0.06	0.56	0.06	0.07	0.35			0.37	0.30	0.03	0.10	
Intersection Summary												
Cycle Length: 100												

Cycle Length: 100

Actuated Cycle Length: 100

Offset: 39 (39%), Referenced to phase 2:EBTL and 6:WBTL, Start of Yellow Natural Cycle: 60

Lanes, Volumes, Timings AJA/Vanasse & Assoc., Inc. Synchro 11 Report S:\Jobs\9242\Analysis\29AMBM.syn Control Type: Actuated-Coordinated

m Volume for 95th percentile queue is metered by upstream signal.



Splits and Phases: 2: Medway Commons Driveway/Project Site Driveway & Route 109

2029 Mitigated Weekday Morning Peak Hour Traffic Volumes 2: Medway Commons Driveway/Project Site Driveway & Route 109

	٦	+	*	4	ł	•	•	1	1	1	Ŧ	~
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	۲	†	1	۲	¢Î			र्स	1	۲	et 🗧	
Traffic Volume (vph)	37	674	71	32	422	13	54	0	69	3	1	11
Future Volume (vph)	37	674	71	32	422	13	54	0	69	3	1	11
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	11	12	12	14	14	14	12	12	12	12	12	12
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0			4.0	4.0	4.0	4.0	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00			1.00	1.00	1.00	1.00	
Frt	1.00	1.00	0.85	1.00	1.00			1.00	0.85	1.00	0.86	
Flt Protected	0.95	1.00	1.00	0.95	1.00			0.95	1.00	0.95	1.00	
Satd. Flow (prot)	1745	1845	1583	1851	1960			1736	1583	1805	1639	
Flt Permitted	0.42	1.00	1.00	0.31	1.00			0.74	1.00	0.71	1.00	
Satd. Flow (perm)	766	1845	1583	600	1960			1355	1583	1350	1639	
Peak-hour factor, PHF	0.94	0.94	0.94	0.83	0.83	0.83	0.76	0.76	0.76	0.50	0.50	0.50
Adj. Flow (vph)	39	717	76	39	508	16	71	0	91	6	2	22
RTOR Reduction (vph)	0	0	22	0	1	0	0	0	81	0	20	0
Lane Group Flow (vph)	39	717	54	39	523	0	0	71	10	6	4	0
Heavy Vehicles (%)	0%	3%	2%	4%	3%	0%	4%	0%	2%	0%	0%	0%
Turn Type	pm+pt	NA	Perm	pm+pt	NA		Perm	NA	Perm	Perm	NA	
Protected Phases	5	2		1	6			8			4	
Permitted Phases	2		2	6			8		8	4		
Actuated Green, G (s)	72.7	68.9	68.9	72.7	68.9			9.3	9.3	9.3	9.3	
Effective Green, g (s)	76.7	70.9	70.9	76.7	70.9			11.3	11.3	11.3	11.3	
Actuated g/C Ratio	0.77	0.71	0.71	0.77	0.71			0.11	0.11	0.11	0.11	
Clearance Time (s)	6.0	6.0	6.0	6.0	6.0			6.0	6.0	6.0	6.0	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0			3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	644	1308	1122	532	1389			153	178	152	185	
v/s Ratio Prot	0.00	c0.39		c0.00	0.27						0.00	
v/s Ratio Perm	0.04		0.03	0.05				c0.05	0.01	0.00		
v/c Ratio	0.06	0.55	0.05	0.07	0.38			0.46	0.06	0.04	0.02	
Uniform Delay, d1	3.1	6.9	4.4	4.0	5.8			41.5	39.6	39.5	39.4	
Progression Factor	0.57	0.42	0.08	1.00	1.00			1.00	1.00	1.00	1.00	
Incremental Delay, d2	0.0	1.0	0.0	0.1	0.8			2.2	0.1	0.1	0.1	
Delay (s)	1.8	3.9	0.4	4.1	6.6			43.7	39.7	39.6	39.5	
Level of Service	A	A	A	A	A			D	D	D	D	
Approach Delay (s)		3.5			6.4			41.5			39.5	
Approach LOS		А			А			D			D	
Intersection Summary												
HCM 2000 Control Delay			9.1	Н	CM 2000	Level of	Service		А			
HCM 2000 Volume to Capa	acity ratio		0.51									
Actuated Cycle Length (s)			100.0	S	um of losi	t time (s)			12.0			
Intersection Capacity Utiliz	ation		55.5%	IC	CU Level	of Service	;		В			
Analysis Period (min)			15									
a Critical Lana Croup												

c Critical Lane Group

2029 Mitigated Weekday Evening Peak Hour Traffic Volumes2: Medway Commons Driveway/Project Site Driveway & Route 109

	٦	-	\mathbf{F}	4	+	*	•	1	1	1	Ļ	~
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	ሻ	↑	1	ሻ	4			୍ କ	1	ሻ	4	
Traffic Volume (vph)	46	479	149	117	581	22	78	8	73	32	6	73
Future Volume (vph)	46	479	149	117	581	22	78	8	73	32	6	73
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.850		0.995				0.850		0.861	
Flt Protected	0.950			0.950				0.956		0.950		
Satd. Flow (prot)	1745	1881	1615	1869	1997	0	0	1800	1583	1805	1636	0
Flt Permitted	0.343			0.371				0.676		0.670		
Satd. Flow (perm)	630	1881	1615	730	1997	0	0	1273	1583	1273	1636	0
Satd. Flow (RTOR)			140		4				109		85	
Adj. Flow (vph)	48	504	157	123	612	23	91	9	85	37	7	85
Lane Group Flow (vph)	48	504	157	123	635	0	0	100	85	37	92	0
Turn Type	pm+pt	NA	Perm	pm+pt	NA		Perm	NA	Perm	Perm	NA	
Protected Phases	5	2		1	6			8			4	
Permitted Phases	2		2	6			8		8	4		
Detector Phase	5	2	2	1	6		8	8	8	4	4	
Switch Phase							-	-				
Minimum Initial (s)	6.0	10.0	10.0	6.0	10.0		6.0	6.0	6.0	6.0	6.0	
Minimum Split (s)	12.0	16.0	16.0	12.0	16.0		12.0	12.0	12.0	12.0	12.0	
Total Split (s)	12.0	54.0	54.0	14.0	56.0		22.0	22.0	22.0	22.0	22.0	
Total Split (%)	13.3%	60.0%	60.0%	15.6%	62.2%		24.4%	24.4%	24.4%	24.4%	24.4%	
Maximum Green (s)	6.0	48.0	48.0	8.0	50.0		16.0	16.0	16.0	16.0	16.0	
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5		3.5	3.5	3.5	3.5	3.5	
All-Red Time (s)	2.5	2.5	2.5	2.5	2.5		2.5	2.5	2.5	2.5	2.5	
Lost Time Adjust (s)	-2.0	-2.0	-2.0	-2.0	-2.0		2.0	-2.0	-2.0	-2.0	-2.0	
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0			4.0	4.0	4.0	4.0	
Lead/Lag	Lead	Lag	Lag	Lead	Lag			4.0	4.0	4.0	4.0	
Lead-Lag Optimize?	Loud	Eug	Eug	Loud	Lug							
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0	3.0	3.0	
Recall Mode	None	C-Min	C-Min	None	C-Min		None	None	None	None	None	
v/c Ratio	0.09	0.44	0.15	0.19	0.47		None	0.50	0.25	0.18	0.28	
Control Delay	2.9	8.2	1.4	4.3	10.8			42.1	5.6	33.0	10.6	
Queue Delay	0.0	0.2	0.0	0.0	0.0			0.0	0.0	0.0	0.0	
Total Delay	2.9	8.2	1.4	4.3	10.8			42.1	5.6	33.0	10.6	
Queue Length 50th (ft)	4	107	0	15	183			53	0.0	18	3	
Queue Length 95th (ft)	m8	129	10	36	326			91	22	41	38	
Internal Link Dist (ft)	IIIO	570	10	50	220			220	22	41	219	
Turn Bay Length (ft)	100	570	100	230	220			220		60	217	
Base Capacity (vph)	543	1151	1042	667	1350			259	409	259	401	
Starvation Cap Reductn	043	0	1042	007	1350			259	409		401	
Spillback Cap Reductin										0		
	0	0	0	0	0			0	0	0	0	
Storage Cap Reductn	0	0	0 15	0 10	0			0 20	0	0	0	
Reduced v/c Ratio	0.09	0.44	0.15	0.18	0.47			0.39	0.21	0.14	0.23	
Intersection Summary												
Cycle Length: 90												

Cycle Length: 90 Actuated Cycle Length: 90

Offset: 20 (22%), Referenced to phase 2:EBTL and 6:WBTL, Start of Yellow Natural Cycle: 55

Lanes, Volumes, Timings AJA/Vanasse & Assoc., Inc. Synchro 11 Report S:\Jobs\9242\Analysis\29PMBM.syn

Control Type: Actuated-Coordinated

m Volume for 95th percentile queue is metered by upstream signal.



Splits and Phases: 2: Medway Commons Driveway/Project Site Driveway & Route 109

2029 Mitigated Weekday Evening Peak Hour Traffic Volumes 2: Medway Commons Driveway/Project Site Driveway & Route 109

	٦	-	\mathbf{F}	4	+	•	•	Ť	۲	1	ţ	~
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	۲	•	1	1	¢Î			ب ا	1	۲	4Î	
Traffic Volume (vph)	46	479	149	117	581	22	78	8	73	32	6	73
Future Volume (vph)	46	479	149	117	581	22	78	8	73	32	6	73
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	11	12	12	14	14	14	12	12	12	12	12	12
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0			4.0	4.0	4.0	4.0	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00			1.00	1.00	1.00	1.00	
Frt	1.00	1.00	0.85	1.00	0.99			1.00	0.85	1.00	0.86	
Flt Protected	0.95	1.00	1.00	0.95	1.00			0.96	1.00	0.95	1.00	
Satd. Flow (prot)	1745	1881	1615	1869	1996			1801	1583	1805	1637	
Flt Permitted	0.34	1.00	1.00	0.37	1.00			0.68	1.00	0.67	1.00	
Satd. Flow (perm)	631	1881	1615	730	1996			1273	1583	1273	1637	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.86	0.86	0.86	0.86	0.86	0.86
Adj. Flow (vph)	48	504	157	123	612	23	91	9	85	37	7	85
RTOR Reduction (vph)	0	0	55	0	1	0	0	0	72	0	72	0
Lane Group Flow (vph)	48	504	102	123	634	0	0	100	13	37	20	0
Heavy Vehicles (%)	0%	1%	0%	3%	1%	0%	1%	0%	2%	0%	0%	0%
Turn Type	pm+pt	NA	Perm	pm+pt	NA		Perm	NA	Perm	Perm	NA	
Protected Phases	5	2		1	6			8			4	
Permitted Phases	2		2	6			8		8	4		
Actuated Green, G (s)	56.6	52.6	52.6	63.0	55.8			12.2	12.2	12.2	12.2	
Effective Green, g (s)	60.6	54.6	54.6	67.0	57.8			14.2	14.2	14.2	14.2	
Actuated g/C Ratio	0.67	0.61	0.61	0.74	0.64			0.16	0.16	0.16	0.16	
Clearance Time (s)	6.0	6.0	6.0	6.0	6.0			6.0	6.0	6.0	6.0	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0			3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	499	1141	979	659	1281			200	249	200	258	
v/s Ratio Prot	0.01	0.27	0.01	c0.02	c0.32			0.00	0.04	0.00	0.01	
v/s Ratio Perm	0.06		0.06	0.12	A 40			c0.08	0.01	0.03		
v/c Ratio	0.10	0.44	0.10	0.19	0.49			0.50	0.05	0.18	0.08	_
Uniform Delay, d1	5.6	9.5	7.4	4.2	8.4			34.7	32.2	32.9	32.3	
Progression Factor	0.68	0.66	0.48	1.00	1.00			1.00	1.00	1.00	1.00	_
Incremental Delay, d2	0.1	1.0	0.2	0.1	1.4			2.0	0.1	0.4	0.1	
Delay (s)	3.9	7.3	3.8	4.4	9.8			36.6	32.3	33.3	32.5	_
Level of Service	A	A	A	A	A			D	С	С	C	
Approach Delay (s)		6.3			8.9 A			34.6 C			32.7	
Approach LOS		А			A			C			С	
Intersection Summary												
HCM 2000 Control Delay			12.3	Н	CM 2000	Level of S	Service		В			
HCM 2000 Volume to Capacity ratio			0.48									
Actuated Cycle Length (s)			90.0		um of lost				12.0			
Intersection Capacity Utiliza	ation		58.3%	IC	CU Level o	ot Service			В			_
Analysis Period (min)			15									

c Critical Lane Group

2029 MItigated Saturday Midday Peak Hour Traffic Volumes 2: Medway Commons Driveway/Project Site Driveway & Route 109

	۶	-	$\mathbf{\hat{z}}$	4	+	*	•	1	1	1	ŧ	~
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	ሻ	↑	1	ሻ	eî 👘			र्भ	1	<u>۲</u>	ef 👘	
Traffic Volume (vph)	55	486	169	97	552	31	135	12	123	17	15	53
Future Volume (vph)	55	486	169	97	552	31	135	12	123	17	15	53
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.850		0.992				0.850		0.883	
Flt Protected	0.950	4000	4/45	0.950	0010			0.956	4/45	0.950	4 (70	
Satd. Flow (prot)	1745	1900	1615	1925	2010	0	0	1800	1615	1805	1678	0
Flt Permitted	0.194	1000	1/15	0.285	2010	0	0	0.674	1/15	0.565	1/70	0
Satd. Flow (perm)	356	1900	1615	578	2010	0	0	1269	1615	1074	1678	0
Satd. Flow (RTOR)	41	E 40	188 188	115	6 657	37	170	17	164 162	25	77 22	
Adj. Flow (vph) Lane Group Flow (vph)	61 61	540 540	188	115 115	694	37	178 0	16 194	162	25	99	77 0
Turn Type		NA	Perm		NA	0	Perm	NA	Perm	Perm	NA	U
Protected Phases	pm+pt 5	2	FCIIII	pm+pt 1	6		Fenn	8	Fenn	r ciili	4	
Permitted Phases	2	2	2	6	0		8	0	8	4	4	
Detector Phase	5	2	2	1	6		8	8	8	4	4	
Switch Phase	0	2	2	•	Ū		0	Ū	0	•	•	
Minimum Initial (s)	6.0	10.0	10.0	6.0	10.0		6.0	6.0	6.0	6.0	6.0	
Minimum Split (s)	12.0	16.0	16.0	12.0	16.0		12.0	12.0	12.0	12.0	12.0	
Total Split (s)	12.0	31.0	31.0	12.0	31.0		17.0	17.0	17.0	17.0	17.0	
Total Split (%)	20.0%	51.7%	51.7%	20.0%	51.7%		28.3%	28.3%	28.3%	28.3%	28.3%	
Maximum Green (s)	6.0	25.0	25.0	6.0	25.0		11.0	11.0	11.0	11.0	11.0	
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5		3.5	3.5	3.5	3.5	3.5	
All-Red Time (s)	2.5	2.5	2.5	2.5	2.5		2.5	2.5	2.5	2.5	2.5	
Lost Time Adjust (s)	-2.0	-2.0	-2.0	-2.0	-2.0			-2.0	-2.0	-2.0	-2.0	
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0			4.0	4.0	4.0	4.0	
Lead/Lag	Lead	Lag	Lag	Lead	Lag							
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0	3.0	3.0	
Recall Mode	None	Min	Min	None	Min		None	None	None	None	None	
v/c Ratio	0.15	0.62	0.22	0.21	0.69			0.67	0.33	0.10	0.22	_
Control Delay	4.9	16.4	2.7	5.2	16.9			35.6	6.2	20.2	9.3	
Queue Delay	0.0	0.0	0.0	0.0	0.0			0.0	0.0	0.0	0.0	
Total Delay	4.9	16.4	2.7	5.2	16.9			35.6	6.2	20.2	9.3	
Queue Length 50th (ft)	7	142	0	13 25	197			65 #107	0	7	6	
Queue Length 95th (ft) Internal Link Dist (ft)	17	234 570	29	25	283 220			#107	25	18	24 219	
Turn Bay Length (ft)	100	570	100	230	220			220		60	219	
Base Capacity (vph)	410	965	913	538	1062			310	519	262	468	
Starvation Cap Reductn	410	905	913	0	1002			0	0	202	400	
Spillback Cap Reductin	0	0	0	0	0			0	0	0	0	
Storage Cap Reductin	0	0	0	0	0			0	0	0	0	
Reduced v/c Ratio	0.15	0.56	0.21	0.21	0.65			0.63	0.31	0.10	0.21	
Intersection Summary	0.10	0.00	5.21	0.21	0.00			0.00	0.01	0.10	5.21	

Cycle Length: 60 Actuated Cycle Length: 54.5 Natural Cycle: 60 Control Type: Actuated-Uncoordinated

Lanes, Volumes, Timings AJA/Vanasse & Assoc., Inc. Synchro 11 Report S:\Jobs\9242\Analysis\29SMBM.syn

95th percentile volume exceeds capacity, queue may be longer.Queue shown is maximum after two cycles.

 ✓ Ø1
 ✓ Ø2

 12s
 31s

 Ø5
 ✓ Ø6

 12s
 31s

 17s

 Ø5
 ✓ Ø6

 17s

 17s

 Ø5
 ✓ Ø6

 17s

 Ø5

 17s

Splits and Phases: 2: Medway Commons Driveway/Project Site Driveway & Route 109

2029 MItigated Saturday Midday Peak Hour Traffic Volumes 2: Medway Commons Driveway/Project Site Driveway & Route 109

	٦	+	*	4	ł	•	•	1	1	1	ţ	~
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	ľ	•	1	ľ	¢Î			ŧ	1	1	et.	
Traffic Volume (vph)	55	486	169	97	552	31	135	12	123	17	15	53
Future Volume (vph)	55	486	169	97	552	31	135	12	123	17	15	53
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	11	12	12	14	14	14	12	12	12	12	12	12
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0			4.0	4.0	4.0	4.0	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00			1.00	1.00	1.00	1.00	
Frt	1.00	1.00	0.85	1.00	0.99			1.00	0.85	1.00	0.88	
Flt Protected	0.95	1.00	1.00	0.95	1.00			0.96	1.00	0.95	1.00	
Satd. Flow (prot)	1745	1900	1615	1925	2010			1800	1615	1805	1678	
Flt Permitted	0.19	1.00	1.00	0.29	1.00			0.67	1.00	0.57	1.00	
Satd. Flow (perm)	356	1900	1615	578	2010			1268	1615	1074	1678	
Peak-hour factor, PHF	0.90	0.90	0.90	0.84	0.84	0.84	0.76	0.76	0.76	0.69	0.69	0.69
Adj. Flow (vph)	61	540	188	115	657	37	178	16	162	25	22	77
RTOR Reduction (vph)	0	0	102	0	3	0	0	0	127	0	60	0
Lane Group Flow (vph)	61	540	86	115	691	0	0	194	35	25	39	0
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	1%	0%	0%	0%	0%	0%
Turn Type	pm+pt	NA	Perm	pm+pt	NA		Perm	NA	Perm	Perm	NA	
Protected Phases	5	2		1	6			8			4	
Permitted Phases	2		2	6			8		8	4		
Actuated Green, G (s)	27.3	24.0	24.0	29.7	25.2			10.4	10.4	10.4	10.4	
Effective Green, g (s)	31.3	26.0	26.0	33.7	27.2			12.4	12.4	12.4	12.4	
Actuated g/C Ratio	0.55	0.46	0.46	0.59	0.48			0.22	0.22	0.22	0.22	
Clearance Time (s)	6.0	6.0	6.0	6.0	6.0			6.0	6.0	6.0	6.0	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0			3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	325	868	737	496	960			276	351	234	365	
v/s Ratio Prot	0.02	0.28		c0.03	c0.34						0.02	
v/s Ratio Perm	0.09		0.05	0.11				c0.15	0.02	0.02		
v/c Ratio	0.19	0.62	0.12	0.23	0.72			0.70	0.10	0.11	0.11	
Uniform Delay, d1	7.7	11.7	8.9	6.1	11.8			20.5	17.8	17.8	17.8	
Progression Factor	1.00	1.00	1.00	1.00	1.00			1.00	1.00	1.00	1.00	
Incremental Delay, d2	0.3	1.4	0.1	0.2	2.6			7.9	0.1	0.2	0.1	
Delay (s)	8.0	13.1	8.9	6.4	14.4			28.4	17.9	18.0	17.9	
Level of Service	A	В	A	A	В			С	В	В	В	
Approach Delay (s)		11.7			13.3			23.6			18.0	
Approach LOS		В			В			С			В	
Intersection Summary												
HCM 2000 Control Delay			14.7	Н	CM 2000	Level of S	Service		В			
HCM 2000 Volume to Capacity ratio			0.66									
Actuated Cycle Length (s)			56.9		um of lost				12.0			
Intersection Capacity Utilization			60.7%	IC	CU Level o	of Service			В			
Analysis Period (min)			15									
a Critical Lana Croup												

c Critical Lane Group



Ref: 9242

July 15, 2022

Ms. Susan E. Affleck-Childs Planning and Economic Development Coordinator Town of Medway 155 Village Street Medway, MA 02053

Re: Transportation Improvement Program Proposed Medical Office Building – 86 Holliston Street Medway, Massachusetts

Dear Ms. Affleck-Childs:

By way of follow-up to our July 14, 2022 coordination meeting, Vanasse & Associates, Inc. (VAI) is providing a summary of the elements of the transportation improvement program that were discussed for the proposed medical office building to be located at 86 Holliston Street in Medway, Massachusetts (hereafter referred to as the "Project"). Based on our discussions and with input from both the Medway Department of Public Works and Tetra Tech, the scope of the off-site improvements to be undertaken as a part of the Project will focus on improvements at the Route 109/Medway Commons/ Walgreens driveway intersection and will entail the following elements:

- Review and modify (reconstruct) the wheelchair ramps for crossing the Walgreens/Project site driveway at Route 109 to meet Americans with Disabilities Act (ADA) requirements;
- Upgrade the existing pedestrian pushbutton assemblies and indications at the intersection to meet ADA requirements, including the installation of countdown-type indications;
- Install retroreflective tape on backplates for the traffic signal indications;
- Review existing trees and trim as necessary to improve visibility of the traffic signal indications;
- Restripe the existing pavement markings along the Project site driveway;
- Install "Watch for Solar Glare" sign on Route 109 westbound east of the intersection; and
- Restripe the crosswalk across the Project site driveway to ladder-style.

These improvements will be completed by the Applicant prior to the issuance of a Certificate of Occupancy for the Project, subject to receipt of all necessary rights, permits and approvals.

The elements of the transportation improvement program for the Project have been refined to reflect the improvements that are being advanced by the Town along Route 109, including the repaying of the roadway, installation of new pavement marking and the optimization of the traffic signal timing at both the Route 109/Holliston Street and Route 109/Medway Commons/Walgreens driveway intersections.

Ms. Susan E. Affleck-Childs July 15, 2022 Page 2 of 2

If you should have any questions regarding the elements of the transportation improvement program for the Project, please feel free to contact me.

Sincerely,

VANASSE & ASSOCIATES, INC.

effrey S. Dirk

effrey S. Dirk, P.E., PTOE, FITE Managing partner

Professional Engineer in CT, MA, ME, NH, RI and VA

JSD/jsd

cc: S. Bouley, P.E. – TT (via email)
C. Sudak, P.E. – TT (via email)
A. Cavaliere – Guerriere & Hanlon, Inc. (via email)





July 26, 2022 Medway Planning & Economic Development Board Meeting

<u>Public Hearing Continuation – Phytopia,</u> <u>6 Industrial Park Road</u>

• Notice dated July 18, 2022 to continue the Phytopia public hearing to July 26, 2022

NOTE – I have not been able to begin work on a draft decision for this project. I would suggest that the Board continue the hearing to August 9, 2022.

Board Members

Matthew J. Hayes, P.E., Chair Robert Tucker, Vice Chair Richard Di Iulio, Clerk Jessica Chabot, Member Sarah Raposa, A.I.C.P, Member Thomas Gay, Associate Member



Medway Town Hall 155 Village Street Medway, MA 02053 Phone (508) 533-3291 Fax (508) 321-4987 Email: planningboard @townofmedway.org www.townofmedway.org

TOWN OF MEDWAY

COMMONWEALTH OF MASSACHUSETTS

PLANNING AND ECONOMIC DEVELOPMENT BOARD

MEMORANDUM

July 18, 2022

 TO: Stefany Ohannesian, Town Clerk Town of Medway Departments, Boards and Committees
 FROM: Susy Affleck-Childs, Planning and Economic Development Coordinator
 RE: Public Hearing Continuation for Phytopia, Inc - Major Site Plan, Groundwater Protection Special Permit, and Reduced Parking Special Permit Continuation Date – Tuesday, July 26, 2022

At its July 12, 2022 meeting, the Planning and Economic Development Board voted to continue the public hearing on the application of Phytopia, Inc. of Peabody, MA for approval of a major site plan, a groundwater protection district special permit, and a reduced parking special permit for its proposed development at 6 Industrial Park Road to the Board's meeting on Tuesday, July 26, 2022 at 8:30 p.m. at Medway Town Hall, 155 Village Street. The meeting will also be available via Zoom.

On November 30, 2021, the Board approved special permits to use the existing 53,128 sq. ft. industrial manufacturing building at 6 Industrial Park Road and construct a 66,238 sq. ft., 2-story addition to the existing building for the cultivation, manufacturing, processing, and packaging of marijuana for medical use and adult recreational use and the delivery of such products off site to retail marijuana establishments in other communities.

The planned scope of work currently under review for site plan approval and for the groundwater protection and reduced parking special permits includes interior renovations to the existing building, construction of the addition, improvements to the access/egress driveways, installation of curbing, parking area improvements, landscaping, lighting, and installation of and improvements to stormwater drainage facilities. The project is also before the Conservation Commission for an Order of Conditions and a Land Disturbance Permit.

The revised site plan titled *Industrial Park Road*, last revised dated May 13, 2022 prepared by Williams & Sparages Engineers, Planners and Surveyors of Middleton, MA. is posted at the Board's page at the Town's web site at: <u>https://www.townofmedway.org/sites/g/files/vyhlif8006/f/uploads/spindustrial6_r10stamped</u> <u>signed.pdf</u> Please review the revised site plan and provide comments to us by July 21, 2022. The Board plans to begin work on a decision on this project at its July 26th meeting.

Please do not hesitate to contact me if you have any questions at 508-533-3291. Thanks.



July 26, 2022 Medway Planning & Economic Development Board Meeting

Discuss Medway GRID BESS Project

- Draft Host Community Agreement
- Medway GRID's petition to the Energy Facilities Siting Board
- Proposed Site plan as provided to the Energy Facilities Siting Board
- Tetra Tech review letter dated 6-21-22 (as if the project was subject to Medway's site plan review regulations)

NOTES

- 1. Town Manager Michael Boynton has asked for comments on the draft Host Community Agreement.
- 2. The EFSB hearing on the Medway GRID project was held via Zoom on July 13, 2022. It is available for viewing at: <u>https://www.youtube.com/watch?v=8gid7PILV0M</u>

HOST COMMUNITY AGREEMENT

This HOST COMMUNITY AGREEMENT ("HCA" or the "Agreement") is entered into as of the _____ day of August, 2022 ("Effective Date"), by and between the Town of Medway, Massachusetts (the "Town" or "Medway"), a municipal corporation and body politic of the Commonwealth of Massachusetts, having its offices at 155 Village Street, Medway, Massachusetts 02053, and Medway Grid, LLC ("Medway Grid"), a Delaware limited liability company, having a business address of 988 Howard Avenue, Suite 200, Burlingame, CA 94010 Medway and Medway Grid are referred to herein collectively as the "Parties" and individually as "Party."

RECITALS

WHEREAS, Medway is host community to the proposed 250-megawatt ("MW") battery energy storage system ("BESS") at 49 Milford Street in Medway to be constructed, owned and operated by Medway Grid, as described in Exhibit A (the "Project");

WHEREAS, the Project was selected by ISO-NE to enhance the reliability of the electric transmission system in the Southeastern, Massachusetts ("SEMA") zone and to ensure that the Commonwealth meets its goals regarding renewable energy and reduced reliance on fossil fuels from 2024-2031;

WHEREAS, Medway Grid has filed a petition with the Massachusetts Energy Facilities Siting Board ("EFSB") for approval to construct the Project;

WHEREAS, Medway Grid will apply, or has applied, for all necessary permits and approvals for the Project, including, but not necessarily limited to, the following additional agencies: Environmental Protection Agency (National Pollutant Discharge Elimination System General Permit); Massachusetts Environmental Policy (Expanded Environmental Notification Form and Single Environmental Impact Report); the Massachusetts Department of Public Utilities; and the Massachusetts State Historic Preservation Office (Project Notification Form);

WHEREAS, Medway intends, through this Agreement and all legal powers and remedies available to it, to protect the best interests of its residents, businesses, and its corporate organization at all times to ensure that the Project is safe, efficient, and beneficial for the Medway community;

WHEREAS, Medway's technical consultants, officials, staff and legal counsel have extensively analyzed the Project and concluded that, subject to the terms of this Agreement, and Medway Grid's reasonable adherence to Applicable Laws (as defined herein), the net result of the Project's construction and operation is designed to minimize impacts to the environment, ensure the safety of the public, minimize disruption to the Town and the public, provide reasonable assurance to the Town and its residents that such construction impacts will be mitigated and facilitates the use of efficient construction methods; WHEREAS, Medway Grid is willing to make environmental, public health and public safety payments and other investments, undertake protective or mitigation measures and other certain non-monetary public health and public safety measures, as set forth herein; and

WHEREAS, both the Town and Medway Grid desire that, should the proposed Project be authorized by the applicable regulatory agencies and government authorities and thereafter be constructed by Medway Grid, the construction be carried out, subject to such authorizations, in a manner that: minimizes impacts to the environment, ensures the safety of the public, and minimizes disruption to the Town and the public resulting from the Project; provides reasonable assurance to the Town and its residents that such construction impacts will be mitigated; and facilitates the use of efficient construction methods; and

WHEREAS, Medway and Medway Grid desire to have this Agreement submitted to the EFSB and incorporated into the final decision issued by the EFSB related to the Project;

NOW, THEREFORE, in consideration of the mutual promises and covenants of each to the other contained herein and for other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the Town and Medway Grid hereby covenant and agree as follows:

1. <u>Cooperation Between Medway Grid and Medway</u>

The Town and Medway Grid have entered into this Agreement to foster a cooperative working relationship with respect to the Project. Both Parties agree to work constructively and in good faith with the other to promote their mutual interests and further agree to cooperate to the maximum extent consistent with their respective activities and responsibilities. The rights, duties and obligations of the Parties hereunder shall be exercised in good faith and in a commercially reasonable manner.

2. <u>Term</u>

This Agreement shall commence on the Effective Date hereof and, except as otherwise provided herein, shall end on the last day of the calendar year in which the Project is last operated by either Medway Grid or a successor Project owner the "Term"). This Agreement shall remain in full force and effect regardless of the standing and status of any other agreement and remains enforceable in full by the Parties hereto. The provisions of this Agreement that shall expressly survive termination of this Agreement are set forth in Section 26.

3. <u>Permitting</u>

Medway Grid shall be responsible for applying for all applicable and required local permits and shall be responsible for the payment of all permitting and inspection fees in effect at the time of application for each. Medway Grid agrees to on-site inspections as reasonably required for approval of applicable local permits during construction or operation of the Project. As of the time of execution of this Agreement, the Parties agree that, to the best of their knowledge and belief at the time of execution of this Agreement, such permits are limited to: Use variance from the ZBA and Site Plan approval from the Planning and Economic Development Board, although the parties agree that this is not applicable if the Department of Public Utilities grants an individual and/or comprehensive zoning exemption pursuant to G.L. c. 40A;

Land Disturbance Permit, Article XXVI, Stormwater Management and Land Disturbance, of the General By-laws, from Conservation Commission;

Order of Conditions under Wetlands Protection Act and Town Wetlands By-law from Conservation Commission;

Water Connection Approval, Department of Public Works, although the parties agree that this is not applicable if no new connection is required;

Street Opening Permit, Department of Public Works;

Demolition permits, including Historical Commission review pursuant to Article XVII of the General Bylaws (Above-ground Storage Tank Removal, if applicable), Commercial Building permit, Electrical permit, Plumbing permit, from the Building Department; and

Site Plan Review from the Medway Fire Department, pursuant to 527 CMR 1.05 Table 1.12.8.32.

4. <u>Zoning Exemptions</u>

Medway acknowledges Medway Grid has filed for a comprehensive zoning exemption from the Massachusetts Department of Public Utilities ("DPU") of the Town's zoning by-laws that in the event of approval, would allow for the construction and operation of the BESS located at the above-referenced address.

5. <u>Independent Agreement</u>

It is acknowledged and agreed that this Agreement, in part and in its entirety, is and shall remain separate and distinct from any other agreements made between Medway Grid and Medway relative to this Project, including any tax agreement that may be entered into between Medway Grid and the Medway Select Board regarding the tax valuation of the Project ("Tax Agreement").

6. <u>Amount and Term of Payments</u>

The payments made pursuant to this Agreement shall be independent of, and are in no way dependent upon, payments to be made to Medway pursuant to any Tax Agreement. Unless different payment dates are expressly set forth herein, initial payments due hereunder shall be made on or before the thirtieth day after the Effective Date and June 30th of each succeeding

Town of Medway, Working Draft, 7.11.22

year, and payments referencing Commercial Operations, as defined herein, shall be due no later than sixty days following such initial date of Commercial Operations.

A. Emergency Preparedness and Fire Safety Assistance Funds

- i. Medway Grid shall provide emergency management preparedness training, via its battery supplier and/or operations and maintenance provider, to Medway on an annual basis. Medway Grid will also provide Medway with an Emergency Response Plan that will be provided to Medway prior to Medway Grid's commissioning of the Project.
- ii. To the extent that Medway identifies additional training that is required to render emergency response services to the Project beyond what is provided in (i) above, the Town shall describe in writing those additional needs and Medway Grid shall fund such additional training measures in an amount not to exceed fifteen thousand dollars (\$15,000) per year.
- iii. To assist the Community with Emergency Preparedness, Medway Grid shall pay the Town the sum of twenty thousand dollars (\$20,000) annually due each June 30th to be used by the Town for any public safety or emergency management purposes, exclusive of any other payments under this Agreement.
- B. Technical Review Fund
- i. For Review and Participation in Permitting for the Project

Medway Grid shall provide Medway with funding for costs incurred by the Town to retain independent consultants and counsel necessary for the Town to review and participate in any proceeding(s) regarding permits for the Project. This one-time payment shall be one hundred thousand (\$100,000) and shall be paid to the Town not later than thirty days following the Effective Date of this Agreement.

ii. For the Independent Study Regarding Future BESS

Medway Grid understands that Medway has retained an independent consultant to, among other things, assist its Planning and Economic Development Board, Select Board, and Town staff with the development of future BESS projects. The contract with the independent consultant requires, among other things, a report of findings and recommendations specific to drafting appropriate Town zoning and/or other regulations for BESS facilities, and assisting with information about locating land within Medway for construction and operation of future BESS facilities. Medway Grid shall provide Medway with funding for costs incurred by the Town to retain such independent consultant. This one-time payment shall be sixty-five thousand dollars (\$65,000), and shall be paid to the Town not later than thirty days following the Effective Date of this Agreement.

C. Town's Master Plan Fund

Medway Grid recognizes the efforts of the Town to investigate the future of BESS and the impacts and benefits of renewable energy. As such, Medway Grid agrees to pay a one-time contribution of \$50,000 to support the Town's Master Plan renewal efforts paid not later than thirty days following the Effective Date of this Agreement.

D. Property Value Security Fund

Medway Grid agrees to pay residential homeowners who are located within three hundred feet of the Project's perimeter (on the date that construction begins) for a material reduction in the value of their home that a homeowner can demonstrate was directly attributable to the construction of the Project in an amount not to exceed twenty-five thousand dollars (\$25,000) per property. This clause applies to the addresses/tax parcel numbers listed in Exhibit C.

Claims for payment must be filed with the Board of Assessors within five years of the date of commencement of construction of the Project. Medway shall provide Medway Grid with written notice of such claim, and Medway Grid and the Town shall provide the homeowner with a list of three appraisers that are mutually acceptable to the Town and Medway Grid. The homeowner shall select one appraiser from that list. The homeowner and Medway Grid shall each pay half of the cost of such independent, third-party appraiser. If the appraiser's findings confirm that the homeowner has experienced an economic loss due to a material reduction in the value of their home directly attributable to the Project, then Medway Grid shall refund the homeowner's cost of the appraisal and shall compensate the homeowner in the amount of the diminution in property value, up to a maximum of twenty-five thousand dollars (\$25,000).

On or prior to the commencement of construction of the Project: (a) Medway Grid shall establish an escrow account (the "Security Account") with a national banking institution, and shall maintain such account until the later to occur of: (i) the date that is five years after the commencement of construction of the Project; and (ii) that date on which the last properly-filed claim under this Section has been resolved; and (b) shall initially deposit \$50,000 into the Security Account.

Funds in the Security Account shall be used by Medway Grid to compensate homeowners in accordance with this Article. In the event that, at the end of any month during the term of the Security Account as set forth above, the balance of funds in the Security Account is less than \$50,000, Medway Grid shall, on or before the 15th day of the subsequent month, deposit sufficient additional funds into the Security Account so as to restore the balance to not less than \$50,000.

For the purposes of this subsection, in the event that more than one entity owns an interest in such a property, all such owners with respect to a property shall collectively, and not individually, be deemed one homeowner.

E. Sidewalk Fund

Medway Grid, in an effort to improve pedestrian safety in the area of the Project, shall pay \$250,000 to the Town as a one-time contribution to aid in the installation of sidewalks on Milford Street from Highland Street to Summer Street, said sidewalks to be constructed according to a road and sidewalk improvement plan that may be established by the Town. Payment of this amount shall occur not later than sixty days after the commencement of Commercial Operations. For the purposes of this Section and this Agreement generally, Commercial Operations shall be defined herein as the date that Medway Grid achieves Forward Capacity Market ("FCM") participation status as defined by ISO-NE's Open Access Transmission Tariff.

F. Risk Reduction Training Position Fund

Medway Grid shall provide the Town with a sum of money for the first four years of this agreement to help fund a Risk Reduction and Training position within the Medway Fire Department. The amounts due to the Town on the dates shown are as follows:

30 days after the Effective Date - \$97,500 June 30, 2023 - \$75,000 June 30, 2024 - \$50,000 June 30, 2025 - \$25,000

It is agreed that the Town shall be responsible for any benefits associated with said position.

G. Energy Conservation, Sustainability and Resiliency Fund

Medway Grid, as part of its commitment to support local energy and climate resiliency and sustainability, as well as energy conservation and renewable energy programming and efforts, shall pay the sum of \$150,000 to the Town within sixty days after the commencement of Commercial Operations. These funds shall be administered by the Select Board for energy, environmental and/or sustainability projects and programming.

H. Abutting Neighbors Landscaping Fund

Medway Grid shall, not later than sixty days after the commencement of Commercial Operation, provide the Town with the sum of \$85,000 which shall be used by the Town for the purposes of providing each abutting landowner within three hundred feet of the perimeter of the Project with a one-time landscaping allowance of \$5,000. The Town shall manage this program as it deems appropriate. This clause applies to those addresses/tax parcel numbers listed in Exhibit C.

7. <u>Facilitation of the Project</u>

A. Medway agrees to take reasonable measures with respect to which it has legal capacity to facilitate and expedite the review of all local permits and approvals necessary to accomplish the Project and to act at all times during such review within its legal capacity. This Section is not intended to and shall not be construed to imply that the Select Board has the authority to direct

the outcome of any application submitted to any independent, local permit-issuing authority nor that the Select Board has the independent or concurrent authority to issue any permits or other such approvals for the Project. Further, this Section is not intended to limit the exercise of the Town's police powers or duty to protect public health and safety.

B. Upon request of the Town, Medway Grid shall cooperate with and provide assistance to the Town in its efforts to review and evaluate the Project, including, but not limited to, all geotechnical, topographic, conservation, and civil engineering reviews, as well as any environmental, noise testing or other reports submitted by Medway Grid to any Governmental Authority as defined in Section 8), including changes to or modifications of the Project. Medway Grid shall provide Medway with funding for costs incurred by the Town related to such reviews and reports. This one-time payment shall be seventy-five thousand dollars (\$75,000), and shall be paid to the Town not later than thirty days following the Effective Date of this Agreement.

C. Consistent with Section 17(D) below, Medway Grid shall create, no later than ninety (90) days after the Effective Date, and maintain a web page that provides up-to-date information about the Project and an opportunity for the Medway community to communicate online with, and ask questions of, representatives of Medway Grid and receive timely responses to any such questions about the Project.

D. Medway Grid agrees to work in good faith with the Town's Community & Economic Development officials to (i) consider any design changes to the Project and site plan (as part of the EFSB process) and (ii) address material engineering and technical review concerns proposed by the Town to protect the health and safety of residents, onsite employees and the impacts on surrounding properties and environmental resources.

8. <u>Compliance with Laws</u>

- A. Medway Grid shall ensure that the design, construction and operation of the Project conform to and comply with Applicable Laws (as defined below) including, but not limited to, as follows: (A) any environmental impacts of the Project such as set forth in M.G.L. c. 164, §69J; (B) any traffic, noise or visual requirements or limitations; (C) any applicable building, plumbing, electrical, gas, and fire safety codes; and (D) configuration of all lighting, landscaping, building and site design(s), and signage and National Fire Prevention Agency (NFPA) 855 Standard for the Installation of Stationary Energy Storage Systems.
- B. Medway Grid and any successor Project owner shall operate the Project in accordance with Good Industry Practice, as defined herein.
- C. Medway Grid shall ensure that any subcontractors hired to perform construction or operation of the Project shall be required to comply with Applicable Laws and do so in accordance with Good Industry Practice and shall be adequately insured.

D. For purposes of this Agreement, the term "Applicable Laws" shall mean any present and future law, act, rule, code, requirement, order, bylaw, ordinance, regulation, judgment, decree, or injunction of or by any Governmental Authority, ordinary or extraordinary, foreseen or unforeseen, and all licenses, permits, tariffs, and other governmental consents, which may at any time be applicable to a Party's rights and obligations hereunder, including, without limitation, the construction, operation, ownership, maintenance, repair, decommissioning and removal of the Project. For purposes of this Agreement, "Good Industry Practice" shall mean the practices, methods and acts (including, but not limited to, the practices, methods and acts engaged in or approved by a significant portion of the energy storage industry in the construction, operation and maintenance of energy storage systems similar in size and technology to the Project) that, at a particular time, in the exercise of reasonable judgment in light of the facts known or that should have been known at the time a decision was made, would have been expected to accomplish the desired result in a manner consistent with law, regulation, reliability, safety, environmental protection, economy and expedition. Good Industry Practice is not intended to be limited to consideration of the best or any one practice, method or act, to the exclusion of all others, but rather, is intended to require the consideration of a spectrum or possible practices, methods or acts. For purposes of this Agreement, "Governmental Authority" shall mean the United States of America, the Commonwealth of Massachusetts, and any political or municipal subdivision thereof including Medway, and any agency, department, commission, board, bureau, independent electric system operator, or instrumentality of any of them, or any court or tribunal.

9. <u>Incorporation into EFSB Petition</u>

Medway Grid agrees to submit this Agreement to the EFSB as an addendum to its petition for approval of the Project and to request that the EFSB incorporate this Agreement into the final decision issued by the EFSB.

10. Construction Management Plan

- A. Medway Grid shall prepare a construction management plan ("Construction Management Plan") to the Town as set forth herein that shall include all Medway Grid obligations provided in Sections 11 (Noise and Visual Mitigation), 12 (Traffic Impacts), and 13 (Fire, Health and Safety). The Construction Management Plan shall be coordinated with and provided to the Town prior to Medway Grid conducting any construction or preconstruction activities. The Construction Management Plan shall include, among other things, a written timetable setting forth the pre-construction, construction and completion schedule ("Critical Path Method"). Medway Grid shall provide prior notice to Medway of any material changes to the Construction Management Plan, which shall include in the case of any delay of three months or more in the pre-construction, construction, or completion schedule(s).
- B. To the extent that Medway Grid may expand or modify the Project during the Term of this Agreement, Medway Grid will notify the Town of and will prepare a new construction management plan for such expansion or modification. In particular,

Medway Grid will work with the Town in relation to (i) any new visual or noise impacts to landowners by such expansion or modification, (ii) any traffic impacts from additional construction; (iii) any new fire, health and safety impacts related to any Project upgrade or modifications; and (iv) any additional impacts that may be raised by changing BESS technology to the extent that Medway Grid seeks to upgrade the Project.

11. Noise and Visual Mitigation

The Parties agree that there are abutting landowners to the Project that may have visual and noise impacts as a result of the Project. Medway Grid agrees to mitigate these impacts as follows during construction and operation of the Project and as further provided in Medway Grid's Construction Management Plan:

- A. Medway Grid's active construction of the Project will be conducted in accordance with Applicable Laws but in no case shall be outside of the following hours: Monday – Friday, 7.30 a.m. to 6 p.m., excluding legal holidays. Under no circumstances shall these hours be altered without the written approval of the Chief of Police in his/her sole discretion.
- B. Medway Grid shall use best efforts to respond to complaints received by the Town about noise from construction and/or operation of the Project and Medway Grid shall undertake any and all commercially reasonable actions to address such complaints.
- C. Medway Grid shall use commercially reasonable efforts through final design and construction of the Project to shield abutting properties from increases in noise and visual impacts. Medway Grid shall accomplish this in part through plantings, landscaping, buffering walls, berm development, and/or fencing that shall be properly maintained throughout the course of the Term of the Agreement.
- D. Medway Grid shall establish a post construction sound monitoring protocol for the Town with the Massachusetts Department of Environmental Protection ("MassDEP") and the Town's designated representative. Medway Grid shall perform post construction sound monitoring as required by its operating permits and shall promptly forward the results of any required testing directly to the Town's designated representative. The Town's designated representative may witness the post construction operational sound level measurements. Sound levels from the facility will comply with the requirements set forth in the MassDEP Noise Policy. Per the Noise Policy, sound level increases at nearby residences and property lines due to operation of the Project are limited to a 10 dBA above ambient levels (except as may be required by ISO-New England).

12. Traffic Impacts

Medway Grid agrees to work with Medway officials, including the Medway Chief of Police, to address both construction- and operations-phase traffic, and to include traffic mitigation as part of its Construction Management Plan.

- A. Medway Grid agrees to utilize Medway police details as may be required or directed by the Town during construction and operation of the Project to ensure the safety of the surrounding area. Any costs incurred by the Town to employ police officers to oversee the traffic during construction shall be paid for Medway Grid. Use of such details in connection with construction or operation of the Project or upon local public ways shall be subject to the rules and requirements of the Medway Chief of Police.
- B. During construction, any deviations from the Construction Management Plan must be submitted to the Medway Chief of Police for his approval, not to be unreasonably withheld.
- C. Medway Grid shall, following construction of the Project (but in no event later than six (6) months following completion of the construction), repair any damage to Milford Street (Route 109) in Medway caused by construction of the Project. Such repair shall be completed in accordance with commonly accepted standards of road construction and condition.
- D. Medway Grid hereby agrees to coordinate with the Medway Chief of Police and the Medway Director of Public Works in advance of any transportation of oversized and/or overweight loads in connection with construction or operation of the Project.
- E. During construction, Medway Grid shall ensure that large truck, heavy equipment and machinery, semi-trailer truck and oversized load traffic to and from the Project shall only utilize State numbered routes within the Town for access.

13. Fire, Health and Safety

The Medway Fire Chief shall be consulted in the design, construction and operation of the Project, including the Construction Management Plan, related to fire safety and emergency medical requirements. The Medway Fire Chief's suggestions shall be incorporated into the design and operations plans for the Project, as reasonably appropriate. The Town shall include reference to the Project and its operations as necessary in its emergency management procedures. The design and operations of the Project shall include, among other things, the following:

A. Medway Grid and any successor or other owner of the Project shall provide and maintain a Company employee or employees as a point of contact for the Town ("Medway Grid Representative(s)"). The Medway Grid Representative(s) shall be knowledgeable of the Project and be in a position of authority to assist the Town with construction, operation, emergency and decommissioning questions. Upon the Effective Date, Medway Grid shall provide Medway the contact information (name, address, telephone and email address) of the Medway Grid Representative(s) and promptly update the Town in the event of a change in the Medway Grid Representative(s). In the event of any assignment or sale of the Project pursuant to Section 21, Medway Grid shall promptly notify the successor owner of this requirement to provide and maintain an owner company contact with the Town.

- B. Upon reasonable request, the Medway Grid Representative(s) shall provide Medway safety officials with reasonable access to the Project to ensure the operations at the Project adhere to Applicable Laws and this Agreement. In association with Section 7(a)(i) above, the Medway Grid Representative(s) shall provide access to the Project to Medway officials for annual emergency response training and shall coordinate participation by Medway Grid representatives in such emergency response training at a mutually acceptable time.
- C. As part of this Agreement, Medway Grid shall provide the Medway Fire Department with appropriate tools and supplies to provide for adequate fire suppression materials in the event of a fire or incident at the Project. The Fire Chief shall specify the exact specifications of each material or equipment annually to ensure that the most appropriate version or type of material or equipment is procured. The amount of funding in this regard is capped at \$5,000 annually. Medway Grid shall also replace and/or restock said materials that may be used for fire suppression efforts at the Project. Emergency notification systems used for safety and/or fire monitoring shall provide for immediate notification to the Medway Fire Department in addition to any offsite third-party monitoring company or agent. Medway Grid must immediately notify Medway public safety officials of any hazardous condition or potentially hazardous condition at the facility.
- D. Fire Suppression: Medway Grid shall install (at Medway Grid's cost and expense), to the reasonable satisfaction of the Fire Chief and Water & Sewer Superintendent, sufficient fire protection materials and equipment that provide for maximum fire protection on the property. Further, Medway Grid shall be responsible for reimbursing the Town for all water used on the property for fire suppression efforts, whether from on-site hydrants, mains or lines, or from off-property sources, with said amounts to be determined by the Town through meters or any estimating process that the Town deems reasonable.
- E. Water Collection Fire Suppression: Runoff resulting from water used in fire suppression activities will be directed into the stormwater management system for the Project site. The stormwater management design will meet the Massachusetts Stormwater Policy recommendations, and the Project will fully comply with MassDEP Stormwater Standards and reasonable suggestions by the Town. Water collected in the stormwater management detention basin, catch basins, vortex units (or similar) and/or other collection facilities will be monitored during firefighting activities. Medway Grid shall have a licensed environmental services company on contract to remove and properly dispose of affected runoff water within the stormwater management system. No more than 30 days following Commercial Operation, Medway Grid shall provide the Town with documentation demonstrating a valid contract in full force and effect with a licensed environmental services company in its emergency response plan for immediate dispatch to the Project in the event of an active fire and further, shall maintain such a contract for the life of the operation of the Project.
- F. Medway Grid shall not deploy, install, or use any secondhand, reconditioned, or previously used battery systems on the property. All batteries or battery systems used on

the property shall be tested and certified by United Laboratories with a 9540A certificate as safe. The Town agrees that this provision will be reviewed after twenty years of Commercial Operation.

- G. Spacing between battery packs and battery systems on the property shall be in such a manner as to prevent propagation or so called "thermal runaway" conditions where a fire in one pack could spread to an adjoining pack or packs.
- H. When a battery, battery pack, or other item including equipment, supply or material is deactivated or no longer used for power storage and/or related technical use, it shall be removed from the property as soon as possible, but in no case more than thirty calendar days following said deactivation.
- I. A snow storage and snow removal plan shall be provided to the Town for approval. Snow must be cleared from the property and provisions developed to prevent snow from limiting or restricting access by emergency personnel to any batter pack or energy system on the property.

14. <u>Use of Local Labor</u>

Medway Grid agrees to use commercially reasonable efforts to hire local labor in connection with the construction of the Project.

15. <u>Decommissioning</u>

Medway Grid shall decommission and remove the Project following the end of all use and/or operations of the Project, at Medway Grid's sole cost and expense, in accordance with Applicable Laws and Good Industry Practice and in a safe and environmentally controlled process. Medway Grid shall provide the Town with a copy of any decommissioning plan it files with any Governmental Authority in connection with permitting or approval of the Project. Medway Grid shall provide Medway with at least one hundred and eighty days' prior written notice of the decommissioning of the Project. This Section shall survive the termination of this Agreement until all obligations hereunder have been fully discharged.

Within sixty days of the date of initial Commercial Operation of the Project, Medway Grid shall establish and annually maintain a bond to provide for funding to decommission and remove said Project. The initial amount of said bond shall be five million dollars (\$5,000,000). At a date no earlier than the tenth anniversary of the Commercial Operation of the Project, the Town may request that a qualified independent engineer mutually acceptable to the Parties perform an appraisal of the estimated cost required to remove all equipment and structures from the site, address any hazardous materials or contamination that may be identified, and to restore the site to a condition equal to that in existence at the time of acquisition by Medway Grid at the end of the expected useful life of the Project. If the Parties are unable to mutually agree on an independent engineer after thirty days of negotiations regarding the selection of the same, one shall be appointed by the American Arbitration Association, Boston office, pursuant to its "Arbitrator Select, List and Appointment" program and Section 29 hereof. Notwithstanding the

foregoing, any appraisal shall be final and not subject to further review and the Parties shall each pay one half of the cost of such independent engineer'sappraisal. Within sixty days of receipt of the results of the independent engineer'sappraisal, Medway Grid shall post a bond in the amount of the estimated cost to decommission the Project as set forth in such appraisal; provided, however, that in no case shall the amount of said Bond exceed fifteen million dollars (\$15,000,000). The Town of Medway shall be listed as a beneficiary of said bond.

16. Local Purchasing

Medway Grid agrees to use commercially reasonable efforts to purchase goods and services necessary for the construction of the Project from local vendors.

17. <u>Community Updates</u>

- A. Medway Grid agrees to provide promptly to the Town copies of material filings and other information submitted or received in connection with such proceedings in any filing before an agency or department of the Commonwealth, including, without limitation, EFSB 22-02, DPU 22-18, DPU 22-19, and MEPA EEA 16525. Medway Grid shall provide promptly to the Town notice of and where possible, a hyperlink to, all other material filings and other information submitted or received before the Federal Energy Regulatory Commission or any other federal agency and ISO-NE
- B. Once construction commences, Medway Grid shall establish a community outreach plan with Medway officials that will provide for timely public dissemination of information regarding construction schedule, work hours, etc. ("Community Outreach Plan"). Medway Grid will keep Medway reasonably apprised of progress in constructing the Project and shall identify and describe, as promptly as practicable, any significant construction issue which might be reasonably expected to affect the interests of Medway, and provide not less than one day advance notice of any need to conduct construction activities after the standard construction day shift set forth in accordance with Section 12 of this Agreement.
- C. Medway Grid shall periodically (but at least once every six months or upon reasonable request of the Medway Select Board) during pre-construction and construction activities provide public reports to Medway at meetings of the Select Board, describing its progress in obtaining necessary permits and the status of construction of the Project, and, matters that may reasonably be expected to affect the Town's interests, describing major issues which may have arisen and responding to questions from Town officials and/or the public.
- D. Medway Grid shall create and maintain a web page that it will regularly update to provide the community with status and progress reports on the permitting, construction, and operation of the Project.
- 18. Insurance and Indemnification

- A. Subject to the minimum coverages set forth in Exhibit B, Medway Grid shall at all times maintain insurance coverage as required and appropriate for the Project, including insurance for claims arising out of injury to persons or property, relative to either sudden and accidental occurrences or non-sudden and accidental occurrences, resulting from construction or operation of the Project. Medway Grid shall maintain or cause to be maintained insurance against such risks and for such amounts as are customarily insured against by projects of similar size and scope.
- B. Medway Grid shall indemnify, defend and hold harmless the Town and its officers, employees, agents and representatives ("Medway Indemnified Parties") from and against any and all costs, claims, liabilities, damages, expenses (including reasonable attorneys' fees), causes of action or suits or judgments by third parties, incurred by, on behalf of or involving any one of the foregoing parties to the extent arising, directly or indirectly, from or in connection with: (i) any material breach by Medway Grid of its obligations, covenants, representations or warranties contained in this Agreement; or (ii) Medway Grid's material act or omission that constitutes a violation of Applicable Laws; provided that: (a) the Town has not materially breached any obligation, covenant, representation or warranty contained in this Agreement or taken any act or omission that constitutes a violation of Applicable Laws; and (b) the defenses available to Medway Grid against such claims are similar to those available to Medway.
- C. If a Medway Indemnified Party seeks indemnification pursuant to this Section, the Town shall notify Medway Grid of the existence of a claim, or potential claim as soon as practicable after learning of such claim, or potential claim, describing with reasonable particularity the circumstances giving rise to such claim. Medway Grid shall be required to reimburse the Town for any documented reasonable costs associated with a claim for indemnification by a Medway Indemnified Party within sixty days of the Town's submission of its documented costs to Medway Grid. Upon written acknowledgment by Medway Grid that it will assume the defense and indemnification of a claim from a Medway Indemnified Party, Medway Grid may assert any defenses which are or would otherwise be available to the Medway Indemnified Party. Medway Grid shall have full control of such defense and proceedings, including the selection of counsel and any settlement of the proceedings.
- D. No later than thirty days after the Effective Date, Medway Grid shall deliver to the Town a parent guaranty from Eolian, L.P., Medway Grid's parent, in a form reasonably acceptable to the Town (the "Guaranty"). The Guaranty shall: (i) guarantee Medway Grid's obligation to make the payments due hereunder upon the commencement of Commercial Operations, ii) Medway Grid's other obligations hereunder, and (iii) be capped at an amount equal to (A) from and after the date that is thirty days after the Effective Date and through the date that is the fifth anniversary of Commercial Operation of the Project, two million dollars (\$2,000,000), (B) from the date that is the fifth anniversary of Commercial Operation of the Project until the date that is the tenth anniversary of Commercial Operation of the Project, one million and five hundred thousand dollars (\$1,500,000), and (C) from the date that is the tenth anniversary of

Commercial Operation of the Project until the termination of this Agreement, one million dollars (\$1,000,000).

E. Notwithstanding any provision contained herein, the provisions of this Section shall survive the termination or expiration of this Agreement for a period of three years with respect to any claims which occurred or arose prior to such termination or expiration.

19. <u>Representations and Warranties</u>

- A. <u>Town Representations and Warranties</u>. As of the Effective Date, the Town represents and warrants to Medway Grid:
- i. The Town is a municipality in the Commonwealth of Massachusetts with full legal right, power and authority to enter into and to fully and timely perform its obligations under this Agreement;
- ii. The execution of the Agreement has been duly authorized, and each person executing the Agreement on behalf of the Town has full authority to do so and to fully bind the Town; and
- iii. The Town knows of no pending or threatened action, suit, proceeding, inquiry, or investigation before or by any judicial court or administrative or law enforcement agency against or affecting the Town or its properties wherein any unfavorable decision, ruling, or finding would materially and adversely affect the validity or enforceability of the Agreement or the Town's ability to carry out its obligations under the Agreement.
- B. <u>Medway Grid Representations and Warranties</u>. As of the Effective Date, Medway Grid represents and warrants to the Town:
- i. Medway Grid has full legal capacity to enter into this Agreement;
- ii. The execution of the Agreement has been duly authorized, and each person executing the Agreement on behalf of Medway Grid has full authority to do so and to fully bind Medway Grid; and
- iii. Medway Grid knows of no pending or threatened action, suit, proceeding, inquiry, or investigation before or by any judicial court or administrative or law enforcement agency against or affecting Medway Grid or its properties wherein any unfavorable decision, ruling, or finding would materially and adversely affect the validity or enforceability of the Agreement or Medway Grid's ability to carry out its obligations under the Agreement.

20. Events of Default; Remedies; Limitation of Liability

A. <u>Events of Default by Medway Grid</u>. The following shall each constitute an event of default by Medway Grid ("Medway Grid Event of Default"):

- i. Medway Grid breaches any non-monetary material obligation under the Agreement, and fails to cure such breach within thirty days after notification by the Town of the breach and such failure is not proximately caused by a Town Event of Default as set forth in this Agreement;
- ii. Medway Grid fails to make any payment due under this Agreement within thirty days of such due date;
- iii. If any material representation or warranty made by Medway Grid in this Agreement proves to have been misleading or false in any material respect when made and Medway Grid does not cure the underlying facts so as to make such representation or warranty correct and not misleading within thirty days of written notice from the Town;
- iv. Medway Grid: (a) files a petition or answer seeking reorganization or arrangement under the federal bankruptcy laws or any other applicable law or statute of the United States of America or any state, district or territory thereof; (b) makes an assignment for the benefit of creditors; (c) consents to the appointment of a receiver of the whole or any substantial part of its assets; (d) has a petition in bankruptcy filed against it, and such petition is not dismissed within ninety days after the filing thereof; (e) a court of competent jurisdiction enters an order, judgment, or decree appointing a receiver of the whole or any substantial part of Medway Grid's assets, and such order, judgment or decree is not vacated or set aside or stayed within ninety days from the date of entry thereof; or (f) under the provisions of any other law for the relief or aid of debtors, any court of competent jurisdiction shall assume custody or control of the whole or any substantial part of Medway Grid's assets and such custody or control is not terminated or stayed within ninety days from the date of assumption of such custody or control; or
- v. Medway Grid consolidates or amalgamates with, or merges with or into, or transfers all or substantially all of its assets to, another entity, and the resulting, surviving or transferee entity fails to assume, effective immediately upon the effectiveness of such consolidation, amalgamation, merger or transfer, each and all of the obligations of Medway Grid under this Agreement.
- B. <u>Events of Default by Town</u>. It shall constitute an event of default by the Town ("Town Event of Default") if the Town breaches any non-monetary material obligation under the Agreement and fails to cure such breach within thirty days after notification by Medway Grid of the breach.
- C. <u>Remedies; Limitations</u>. In the event of a Medway Grid Event of Default under Section 20.A.ii of this Agreement, and the failure to cure within 30 days of after notification by the Town of the Event of Default, the Town, subject to any limitations under Applicable

Laws, shall add to any amount due and owing a 12% interest charge per year, prorated for the length of such Medway Grid Event of Default.

- D. The Parties confirm that the express remedies and measure of damages provided in this Agreement satisfy the essential purposes hereof. For breach of any provision for which an express remedy or measure of damages is provided, such express remedy or measure of damages will be the sole and exclusive remedy, the obligor's liability will be limited as set forth in such provision and all other remedies or damages at law or in equity are waived. If no remedy or measure of damages is expressly provided herein, the Parties reserve and shall have all rights and remedies available to them at law or in equity with respect to the performance or non-performance of the other Party hereto under this Agreement.
- E. NEITHER PARTY SHALL BE LIABLE TO THE OTHER FOR ANY INDIRECT, INCIDENTAL, CONSEQUENTIAL, OR PUNITIVE DAMAGES OF ANY CHARACTER RESULTING FROM, ARISING OUT OF, IN CONNECTION WITH OR IN ANY WAY INCIDENT TO ANY ACT OR OMISSION OF EITHER PARTY RELATED TO THE PROVISIONS OF THIS AGREEMENT, IRRESPECTIVE OF WHETHER CLAIMS OR ACTIONS FOR SUCH DAMAGES ARE BASED UPON CONTRACT, WARRANTY, NEGLIGENCE, STRICT LIABILITY OR ANY OTHER THEORY AT LAW OR EQUITY.

21. Assignment

Medway Grid agrees that this Agreement shall be binding upon and inure to the benefit of successor owners and operators of the Project. Medway Grid further agrees that it will not sell, lease or otherwise dispose of the Project (each a "Transfer") to any person or entity ("a Transferee") without prior written consent by the Town, such consent not to be unreasonably withheld, unless (i) Medway Grid reasonably believes such person or entity has the resources and ability to operate the Project in accordance with Applicable Laws and in accordance with this Agreement and (ii) at the time of such Transfer, Medway Grid obtains a written agreement of the Transferee to be bound by this Agreement, in which case notice will be provided to the Town. Any assignment by Medway Grid in connection with any financing, or to any entity controlling, controlled by, or under common control with Medway Grid shall give notice thereof to the Town and identify the Transferee, along with a statement that after due diligence, Medway Grid reasonably believes that the conditions of this Section 21 are fulfilled with respect to such Transferee.

22. Termination

This Agreement shall not be subject to termination, except for the following events of termination:

i. By mutual agreement of the Town and Medway Grid;

- ii. By Medway Grid in the event that it abandons the Project prior to the commencement of construction or Commercial Operation or there is any regulatory or legal proceeding or government investigation that results in an unfavorable judgment, order, decree, stipulation or injunction that prevents Medway Grid from constructing or operating the Project; or
- iii. By the Town in the event of: (i) an incurable Medway Grid Event of Default pursuant to Section 20; or (ii) a Medway Grid Event of Default pursuant to any other provision of this Agreement which is not cured within eighteen (18) months of the date of the Event of Default and which failure to earlier cure is due to an event of Force Majeure as set forth below.

23. Force Majeure

For the purposes of this Agreement, "Force Majeure" means any cause not within the reasonable control of Medway Grid which precludes it from carrying out, in whole or in part, its obligations under this Agreement, including, but not limited to, Acts of God; winds; hurricanes; tornadoes; extreme weather; fires; pandemics; epidemics; landslides; earthquakes; floods; other natural catastrophes; strikes; lock-outs or other industrial disturbances; acts of public enemies; acts of terrorism; acts, failures to act or orders of any kind of any Governmental Authority acting in its regulatory or judicial capacity; insurrections; military action; war, whether or not it is declared; sabotage; riots; civil disturbances or explosions. Nothing in this provision is intended to excuse Medway Grid from performing due to any governmental act, failure to act, or order, where it was reasonably within Medway Grid's power to prevent such act, failure to act, or order. Notwithstanding anything in the Agreement to the contrary, *Force Majeure* shall not mean:

- i. Customary inclement weather (in contrast to extreme weather) affecting construction, operation, or decommissioning of the Project.
- ii. Unavailability of equipment, repairs or parts for the Project, except to the extent due to a qualifying event of Force Majeure (whether such event affects Medway Grid directly or any supplier, manufacturer, shipper or warehouseman, including the delay in obtaining construction materials as a result of a qualifying Force Majeure event).
- iii. Any nonpayment under this Agreement.
- iv. Economic hardship of Medway Grid.

24. Notices

All notices, demands, requests, consents or other communications required or permitted to be given or made under the Agreement shall be in writing and addressed to the following:

If to Medway:

Town Manager Town of Medway 155 Village Street Medway, Massachusetts 02053 (508) 533-3200 mboynton@townofmedway.org

with a copy to:

Jeffrey M. Bernstein, Esq. BCK Law, P.C. P.O. Box 205 Woodstock, Vermont 05091 802.457.9050 jbernstein@bck.com

If to Medway Grid:

Medway Grid, LLC c/o Eolian, L.P, 988 Howard Ave., Suite 200 Burlingame, CA 94010 Attn: Christina Wolf Email: contracts@eolianenergy.com

and

Pierce Atwood LLP 100 Summer Street, 22nd Floor Boston, MA 02110 Attn: Andrew Kaplan, Esq. Email: akaplan@PierceAtwood.com Phone: 617-488-8104

Notices hereunder shall be deemed properly served: (a) by hand delivery, on the day and at the time on which delivered to the intended recipient at the address set forth in the Agreement; (b) if sent by mail, on the third business day after the day on which deposited in the United States certified or registered mail, postage prepaid, return receipt requested, addressed to the intended recipient at its address set forth in the Agreement; or (c) if by Federal Express or other reputable express mail service, on the next business day after delivery to such express mail service, addressed to the intended recipient at its address set forth in the Agreement. Notices may also be transmitted by electronic mail, provided that any notice transmitted solely by electronic mail which is not confirmed as received by the receiving Party shall be followed up by personal delivery or overnight delivery within forty-eight (48) hours. Either Party may change its address and contact person for the purposes of this Section by promptly giving notice thereof in the manner required herein.

25. Entire and Complete Agreement; Binding Effect

This Agreement, along with the Exhibit(s) attached (or to be attached) hereto, constitutes the entire and complete agreement of the Parties with respect to the subject matter hereof, exclusive of all prior understandings, arrangements and commitments, all of which, whether oral or written, having been merged herein, except for contemporaneous or subsequent written understandings, arrangements, or commitments signed by the parties intended to be bound thereby. This Agreement shall bind and inure to the benefit of the Parties to this Agreement and any successor or assignee acquiring an interest hereunder.

26. Survival

Termination of this Agreement for any reason shall not relieve of any obligation accrued or accruing prior to such termination, including, but not limited to, the obligations set forth in Sections 15, 18, 28, 29 and 30. **[Will need to do a final check]**

27. Other Documents

Each Party promises and agrees to execute and deliver any instruments and to perform any acts which may be necessary or reasonably requested by the other party in order to give full effect to this Agreement.

28. Governing Law

This Agreement and the rights and duties of the Parties hereunder shall be governed by and shall be construed, enforced and performed in accordance with the laws of the Commonwealth of Massachusetts without regard to principles of conflicts of law.

29. Dispute Resolution and Venue

Unless otherwise expressly provided for in this Agreement, the dispute resolution procedures of this Section shall be the exclusive mechanism to resolve disputes arising under this Agreement between the Town and Medway Grid. The Town and Medway Grid agree to use their respective best efforts to resolve any dispute(s) that may arise regarding this Agreement.

Any dispute that arises under or with respect to this Agreement that cannot be resolved in the daily management and implementation of this Agreement shall in the first instance be the subject of informal negotiations between management personnel from Medway Grid and the Town Manager of Medway, as the case may be, who shall use their respective best efforts to resolve such dispute. The period for informal negotiations shall not exceed thirty days from the time the dispute arises, unless it is modified by written agreement of the Parties. The dispute shall be considered to have arisen when one Party sends the other Party a written notice of dispute.

In the event that the Parties cannot resolve a dispute by informal negotiations under the preceding Section of this provision, the Parties agree to submit the dispute to mediation. Within fourteen days following the expiration of the time period for informal negotiations, the Parties shall propose and agree upon a neutral and otherwise qualified mediator. In the event that the Parties fail to agree upon a mediator, the Parties shall request the American Arbitration Association, Boston office, to appoint a mediator. The period for mediation shall commence upon the appointment of the mediator and shall not exceed sixty days, unless such time period is modified by written agreement of the Parties involved in the dispute. The decision to continue mediation shall be in the sole discretion of each Party. The Parties will bear their own costs of the mediation.

In the event that the Parties cannot resolve a dispute by informal negotiations or mediation, venue for judicial enforcement shall be Norfolk County Superior Court, Dedham, Massachusetts. Notwithstanding the foregoing, injunctive relief may be sought without resorting to alternative dispute resolution to prevent irreparable harm that would be caused by a breach of this Agreement. In any such judicial action, the "Prevailing Party" shall be entitled to payment from the opposing party of its reasonable costs and fees, including, but not limited to attorneys' fees, arising from the civil action. As used herein, the phrase "Prevailing Party" shall mean the party who, in the reasonable discretion of the finder of fact, most substantially prevails in its claims or defenses in the civil action.

30. Confidentiality

The Parties understand that the Town is subject to, among other laws, the Massachusetts Public Records Act, G.L. c. 66, § 10 and G.L. c. 4, § 7, cl. 26, pursuant to which all documents and records made or received by the Town shall, absent an exemption or law to the contrary, constitute a public record subject to disclosure. To the extent not inconsistent with the Town's duty set forth in the preceding sentence, if either Party or its representatives provides to the other Party or its representatives confidential information, including business plans, strategies, financial information, proprietary, patented, licensed, copyrighted or trademarked information, and/or technical information regarding the design, operation and maintenance of the Project or of a Party's business ("Confidential Information"), the receiving Party shall protect the Confidential Information from disclosure to third parties with the same degree of care accorded its own confidential and proprietary information, but in any event not less than a commercially reasonable degree of care, and refrain from using such Confidential Information except in the negotiation and performance of this Agreement. Notwithstanding any other provision herein, neither Party shall be required to hold confidential any information that: (i) becomes publicly available other than through the receiving Party; (ii) is required to be disclosed by a Governmental Authority, under Applicable Laws or pursuant to a validly issued subpoena, but a receiving Party subject to any such requirement shall promptly notify the disclosing Party of such requirement; (iii) is independently developed by the receiving Party; or (iv) becomes available to the receiving Party without restriction from a third party under no obligation of confidentiality.

31. Amendments

This Agreement may only be amended or modified by a written amendment to the Agreement signed by both Parties hereto.

32. Severability

If any Section, phrase or portion of the Agreement is, for any reason, held or adjudged to be invalid, illegal or unenforceable by any court of competent jurisdiction, such Section, phrase, or portion so adjudged will be deemed separate, severable and independent and the remainder of the Agreement will be and remain in full force and effect and will not be invalidated or rendered illegal or unenforceable or otherwise affected by such adjudication, provided the basic purpose of the Agreement and the benefits to the Parties are not substantially impaired.

33. Headings and Captions

The headings and captions appearing in this Agreement are intended for reference only and are not to be considered in construing the Agreement.

34. Counterparts; Scanned Copies

This Agreement may be executed in counterparts, each of which shall be deemed an original and all of which shall constitute one and the same instrument. The Parties agree that a scanned or electronically reproduced copy or image of this Agreement bearing the signatures of the Parties hereto shall be deemed an original and may be introduced or submitted in any action or proceeding as competent evidence of the execution, terms and existence of this Agreement notwithstanding the failure or inability to produce or tender an original, executed counterpart of this Agreement and without the requirement that the unavailability of such original, executed counterpart of this Agreement first be proven.

35. Waiver

No waiver by either Party hereto of any one or more defaults by the other Party in the performance of any provision of the Agreement shall operate or be construed as a waiver of any future default, whether of like or different character. No failure on the part of either Party hereto to complain of any action or non-action on the part of the other Party, no matter how long the same may continue, shall be deemed to be a waiver of any right hereunder by the Party so failing. A waiver of any of the provisions of the Agreement shall only be effective if made in writing and signed by the Party who is making such waiver.

36. Joint Work Product

This Agreement shall be considered the work product of both Parties hereto, and, therefore, no rule of strict construction shall be applied against either Party.

37. Successors and Assigns

This Agreement shall be binding upon Medway Grid, Medway and each of Medway Grid's affiliates, parents, successors and permitted assigns and inure to the benefit of and be enforceable by Medway Grid, Medway and each of Medway Grid's affiliates, parents, successors and permitted assigns.

38. No Joint Venture

Nothing herein contained shall be deemed to constitute either Party a partner, agent or legal representative of the other Party or to create a joint venture, partnership, agency or any relationship between the Parties. The obligations of the Parties are individual and not collective in nature.

39. Further Assurances

From time to time and at any time at and after the execution of the Agreement, each Party shall execute, acknowledge and deliver such documents and assurances, reasonably requested by the other and shall take any other action consistent with the terms of the Agreement that may be reasonably requested by the other for the purpose of effecting or confirming any of the transactions contemplated by the Agreement.

40. No Limitation of Regulatory Authority

The Parties acknowledge that nothing in this Agreement shall be deemed to be an agreement by Medway to issue or cause the issuance of any permit or approval, or to limit or otherwise affect the ability of Medway or the Commonwealth of Massachusetts to fulfill its regulatory mandate or execute its regulatory powers consistent with Applicable Laws.

[Signature Page to Follow]

IN WITNESS WHEREOF, Medway has caused this Agreement and has caused its seal to be attached to this Agreement on the day of August, 2022.

ATTEST:	TOWN OF MEDWAY
By:	By: [Name, Title]
	By: [Name, Title]

IN WITNESS WHEREOF, Medway Grid has caused this Agreement to be executed in its name by its duly authorized officer and has caused its corporate seal to be attached to this Agreement, on the day of August, 2022.

ATTEST:

By:_____

By:_____ [Name, Title]

MEDWAY GRID, LLC

EXHIBIT A: PROJECT DESCRIPTION

The Project is a 250MW/500MWh battery energy storage system and ancillary project substation to be located on the south side of Milford Street (Route 109) in the Town of Medway, Massachusetts. The Project is comprised of the addresses known as 49 Milford Street (tax parcels 56-006 & 46-055), 53 Milford Street (tax parcel 46-056) and 55 Milford Street (tax parcel 46-057) and totals approximately 10.6 acres. Of this 10.6 acre site, approximately 5.2 acres will be developed for the battery energy storage system and the ancillary Project substation.

Prior to construction of the Project, the properties are currently developed with 3 residential homes, accessory structures like a barn and shed, and an auto repair shop. The Project also includes a new 345kV underground transmission line of approximately 1,325 linear feet, interconnecting the project substation to the existing West Medway Substation. The transmission line will traverse two parcels owned and/or controlled by Eversource which are known as 53-R Milford Street (56-004) and 34 West Street (66-012). The Project will obtain an easement, license or alternate instrument from Eversource in order to place the transmission line within these parcels and the location of the transmission route has been designed to avoid biological resources. The easement or license will be 25 feet in width, however the roadway that allows for access along the route will be approximately 12 feet. The Project is designed to utilize lithiumion batteries which will be housed in approximately 141 above-ground enclosures. The enclosures will be arranged throughout the site in a back-to-back orientation and spaced in compliance with the manufacturer's installation requirements. The project will also include approximately 71 medium voltage transformers. The enclosures and the medium voltage transformers will be supported on concrete slabs and pier foundations and surrounded by crushed stone. The Project will also include a stormwater management system and associated above ground detention basin, internal circulation roads as well as a combination of a security fence and a sound attenuation barrier.

The Project substation will be located entirely on the Project site to the south of the battery energy storage system. The substation equipment is included, but not limited to, a 345kV/34.5 kV main power transformer, switchgear, circuit breakers, disconnect switches, low and high buses. This substation equipment will be within a graveled yard and surrounded by security fencing.

- Additional detail regarding the Project is available in the following public filings:
- MEPA EEA Number 16525
- EFSB 22-02
- DPU 22-18
- DPU 22-19

EXHIBIT B: INSURANCE MINIMUM COVERAGES

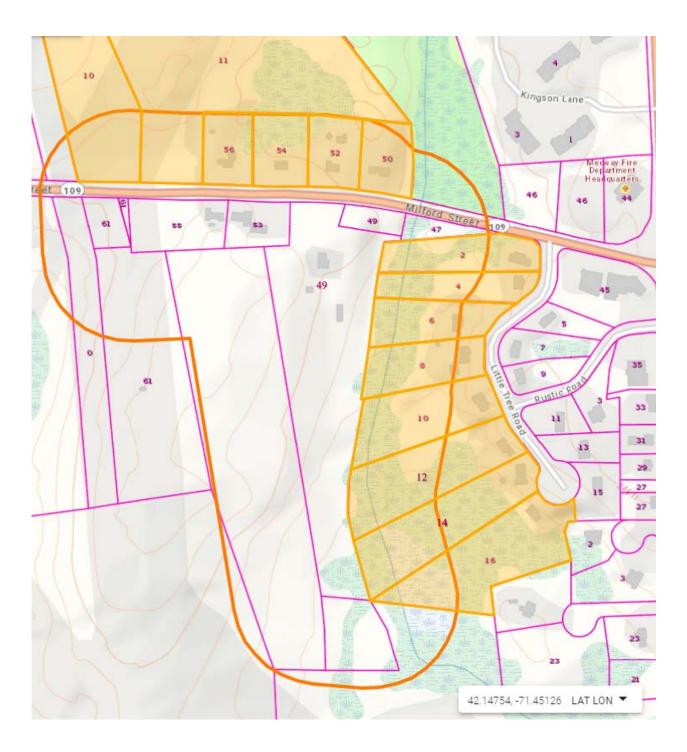
Subject to commercial availability on reasonable terms and conditions, Medway Grid shall obtain and maintain insurance policies in compliance with the following requirements:

- 1. **Commercial General Liability Insurance** written on an ISO CG 00 01 occurrence form or the equivalent with limits of \$1,000,000 per occurrence, \$2,000,000 aggregate and \$2,000,000 products-completed operations, which can be met through a combination of primary and excess liability coverage.
- 2. Umbrella or Excess Liability Insurance following the form and at least as broad as the underlying Commercial General Liability policy, in an amount not less than \$20,000,000 per occurrence, \$20,000,000 aggregate, and \$20,000,000 completed operations aggregate.

Parcel	Name	Address	City	Zip
ID				
46-005	DUNNE RICHARD J & MARIANNE K	11 BAYBERRY LN	MEDWAY	02053
46-004	LAMSON ROBERT C.	10 BAYBERRY LN	MEDWAY	02053
56-008	BELL CHRISTOPHER J	8 LITTLE TREE RD	MEDWAY	02053
46-053	BOYSON BRIAN J	2 LITTLE TREE RD	MEDWAY	02053
56-010	FLANNAGAN JOHN J	12 LITTLE TREE RD	MEDWAY	02053
56-007	HENRY MICHAEL R	6 LITTLE TREE RD	MEDWAY	02053
56-011	HOUSER ADAM A	14 LITTLE TREE RD	MEDWAY	02053
56-009	MATHEW MANOJ V	10 LITTLE TREE RD	MEDWAY	02053
46-052*	MENON SAURABH	4 LITTLE TREE RD	MEDWAY	02053
56-012	MUNISAMY THIRUVENGADAM	16 LITTLE TREE RD	MEDWAY	02053
46-020	HERBERT JR TRUSTEE FRANCIS J	56 MILFORD ST	MEDWAY	02053
46-019	MACLEOD KENNETH J	54 MILFORD ST	MEDWAY	02053
46-018	ROBINSON JASON L	52 MILFORD ST	MEDWAY	02053
46-017	SMITH FRANCIS E	50 MILFORD ST	MEDWAY	02053

EXHIBIT C: LIST OF ABUTTING HOMEOWNERS Residential Properties 300 Foot Radius (01/12/2022)

*Owner address 195 BURLINGTON STREET, LEXINGTON, MA 02420



SCHEDULES: LIST ANY PLANS, SCHEDULES, COPY OF EFSB PETITION

Link to those filings known as EFSB 22-02, DPU 22-18, DPU 22-19 https://www.mass.gov/info-details/medway-grid-battery-project

COMMONWEALTH OF MASSACHUSETTS ENERGY FACILITIES SITING BOARD

Petition of Medway Grid, LLC)Pursuant to G.L. c. 164, § 69J ¼ for Approval to)Construct a 250 MW Battery)Energy Storage System in Medway, MA)

EFSB 22-02

PETITION OF MEDWAY GRID, LLC FOR APPROVAL TO CONSTRUCT A 250 MW BATTERY ENERGY STORAGE PROJECT

NOW COMES Medway Grid, LLC ("Medway Grid", the "Company" or the "Applicant"), pursuant to G.L. c. 164, § 69J ¼, seeking approval from the Energy Facilities Siting Board (the "Siting Board" or "EFSB") to construct a 250 megawatt ("MW")/500 megawatt-hour ("MWh") standalone battery energy storage system ("BESS"), including a new electric substation, on approximately 10.6 acres of land to be located in the Town of Medway (the "Town" or "Medway") (the "Medway Grid Energy Storage Project" or the "Project").

G.L. c. 164, § 69J ¼ states that the Siting Board shall approve construction of a generating facility where the applicant has demonstrated that: (i) the description of the proposed generating facility and its environmental impacts are substantially accurate and complete; (ii) the description of the site selection process used is accurate; (iii) the plans for the construction of the proposed generating facility are consistent with current health and environmental protection policies of the Commonwealth and with such energy policies as are adopted by the Commonwealth for the specific purpose of guiding the decisions of the Board; (iv) such plans minimize the environmental impacts consistent with the minimization of costs associated with the mitigation, control, and reduction of the proposed zero greenhouse gas emission-generating facility contributes to a clean regional energy supply with minimal environmental impacts.

As demonstrated herein, the Project is located in an area that allows for interconnection adjacent to an existing NSTAR Electric Company d/b/a Eversource Energy ("Eversource") substation, is consistent with current health, safety and environmental regulations and policies, and is designed to avoid, minimize, and/or mitigate for environmental impacts. As such, the Project is consistent with the requirements for approval of the Project under the Siting Board requirements.

In support of the Application, the Company states as follows:

1. The Siting Board Has Jurisdiction over the Proposed Project

The Siting Board has jurisdiction to review and approve "generating facilities" pursuant to G.L. c. 164, § 69J ¼, defined as "any generating unit designed for or capable of operating at a gross capacity of 100 MW or more, including associated buildings, ancillary structures, transmission and pipeline interconnections that are not otherwise facilities, and fuel storage facilities." The Project is a standalone energy storage system, in that it is not designed as a co-located or a hybrid installation with renewable energy generation onsite. The Project proposes to: (1) have a nameplate capacity of 250 MW; (2) be connected to the ISO-NE administered transmission system and (3) has successfully participated in the ISO-NE wholesale market and the ISO-NE Forward Capacity Market ("FCM").

While the Siting Board's statutes and regulations do not explicitly define what constitutes a "generating unit," "generation," or a "generating facility", the Siting Board has, in the past, looked to definitions in Section 1 of Chapter 164 when a particular term is not defined in G.L. c. 164 § 69G. Chapter 164 defines generation as "the act or process of transforming other forms of energy into electric energy or the amount of electric energy so produced." Relatedly, a "generation facility" is defined as a "plant or equipment used to produce, manufacture or otherwise generate electricity and which is not a transmission facility, or an energy storage system procured by a distribution company for

support in delivering energy services to end users."¹ Medway Grid meets these definitions. Medway Grid is a BESS, which is defined as "a commercially available technology that is capable of absorbing energy, storing it for a period of time and thereafter dispatching the energy."² Medway Grid was not procured by a distribution company for support in delivering energy services to end users. Rather, Medway Grid is a BESS that can participate in the ISO-NE marketplace as a Generator Asset, which is defined in the ISO-NE Tariff as a "device (or a collection of devices) that is capable of injecting real power onto the grid."³ Because Medway Grid will function as a generator, it is a "generating facility" subject to Siting Board review.

Medway Grid has been designed to participate in ISO-NE's Forward Capacity Market ("FCM") and will contribute 250 MW of capacity within ISO-NE's SENE capacity zone. The Project, located in ISO-NE's Southeast Massachusetts ("SEMA") load zone, may also participate in the Day-Ahead and Real-Time energy markets as well as ISO-NE's ancillary services markets where products such as frequency response, regulation, and reserves maintain system reliability. From a wholesale electricity market standpoint, the Project will operate much like a generator in that it will act as a source of wholesale electricity and provide wholesale services in the same manner as other resources, *i.e.*, by dispatching electricity into the marketplace.

Essentially, under ISO New England's market rules, a BESS acts as and is modeled a generator when dispatching electricity into the marketplace.

The size of the Project, at 250 MW, exceeds the Siting Board's 100 MW jurisdictional threshold. Moreover, given Medway Grid's intended participation in the wholesale electricity markets and ISO-NE's characterization of storage facilities as Generator

¹ G.L. c. 164 § 1.

² Id.

³ ISO-NE Tariff § "Generator Asset."

Assets under the market rules, this Project qualifies as a "generating unit" or a "generating facility," and its operation should be considered to be "generation" over which the Siting Board's exercise of jurisdiction is appropriate.

- 2. ISO-NE has Awarded a Capacity Contract for the Project ISO-New England, Inc. ("ISO-NE") procures electric capacity for various capacity zones in New England, based upon its load forecasts for these different zones. The Project was awarded a capacity contract in the Southeastern New England ("SENE") capacity zone, via the Forward Capacity Auction ("FCA") 15, based upon its ability to provide this needed capacity by June 1, 2024.
- **3.** Project Has Minimal Environmental Impacts

The Project has fewer environmental considerations and impacts for EFSB review than traditional generation projects. Regardless, the Project has been sited and designed to avoid and/or minimize impacts to environmental resources and provides sufficient mitigation for any unavoidable environmental impacts. In summary, the Project will generate zero air emissions, will not directly impact water resources, will not directly impact rare species, will not interfere with any existing agricultural uses, and is not anticipated to have an adverse effect on any existing sensitive cultural resources. The Project has been sited to avoid impacts to vegetated wetland areas and designed to comply with all applicable state and local regulatory performance standards related to other wetland resources (i.e., Riverfront Area). The stormwater management design for the Project will meet the Massachusetts Stormwater Policy recommendations, and the Project will fully comply with MassDEP Stormwater Standards. Noise mitigation measures have been incorporated into the design of the proposed facility to minimize the potential for operational noise to impact the surrounding public. Traffic impacts due to initial construction of the Project and occasional on-site maintenance visits during operations will all be minimal.

4. The Project Site Selection is Preferred

The Project Site, presented herein, was selected as the Preferred Site over two other potential candidate sites due to its proximity to the interconnection point to the existing 345 kV transmission system at the West Medway Substation, existing access from a major arterial roadway, ability of the Proponent to secure the parcels, ability to avoid and minimize wetland resource area impacts and comply with regulatory performance standards, and ability to take advantage of existing developed areas on the site parcels.

5. Consistency with Massachusetts Energy Policies and Initiatives

The Commonwealth has set forth goals to achieve 1000MWh of battery storage by 2025. This Project would provide 500MWh towards that goal.

WHEREFORE, Medway Grid, LLC respectfully requests that the Energy Facilities Siting Board approve this Application.

> Respectfully submitted, Medway Grid, LLC

By its attorney,

Andrew O. Kaplan Pierce Atwood LLP 100 Summer Street Boston, Massachusetts 02110

Dated: February 25, 2022

COMMONWEALTH OF MASSACHUSETTS ENERGY FACILITIES SITING BOARD

Petition of Medway Grid, LLC for Approval to Construct a 250 MW Battery Energy Storage Facility in Medway, MA Docket No. EFSB 22-02

> Submitted by: Medway Grid, LLC

> > Prepared by:

PIERCE ATWOOD LLP 100 Summer Street Boston, MA 02110

EPSILON ASSOCIATES, INC. 3 Mill & Main Place, Suite 250 Maynard, MA 01754

> EXPONENT, INC. 1075 Worcester Street Natick, MA 01760

COMMONWEALTH HERITAGE GROUP, INC. 410 Great Road, Suite B14 Littleton, MA 01460

February 25, 2022

ANALYSIS IN SUPPORT OF PETITION

Table of Contents

SECTION	1.0	THE PROJECT	1
	1.1	PROJECT OVERVIEW	1
	1.2.	HOW THE PETITION IS STRUCTURED	2
	1.3	PROJECT TEAM	4
	1.3.1	Epsilon Associates, Inc	4
	1.3.2	Exponent, Inc	4
	1.3.3	Commonwealth Heritage Group, Inc.	4
	1.3.4	Pierce Atwood LLP	4
	1.3.5	Burns McDonnell	5
	1.3.6	Power Engineers	5
SECTION	2.0	SITE DESCRIPTION	6
SECTION	3.0	PROJECT DESCRIPTION1	5
	3.1.	BATTERY ENERGY STORAGE SYSTEM 1	5
	3.1.1	Battery Energy Storage System (Augmentation) 1	6
	3.2	PROPOSED PROJECT SUBSTATION1	6
	3.3	PROPOSED TRANSMISSION INTERCONNECTION	20
	3.4	PROPOSED EVERSOURCE UPGRADES 2	20
	3.5	ANTICIPATED PROJECT SCHEDULE AND CONSTRUCTION HOURS	21
	3.6	PROJECT PERMITTING OVERVIEW	
SECTION	4.0	ENVIRONMENTAL IMPACTS AND MITIGATION MEASURES	24
	4.1	AIR QUALITY/EMISSIONS	24
	4.1.1	Technology Performance Standards2	25
	4.1.2	Air Emissions/Quality Mitigation Measures During Construction 2	
	4.2	WATER RESOURCES/SUPPLY	26
	4.3	WETLANDS	26
	4.3.1	Proposed Wetland Mitigation Measures 2	28
	4.4	STORMWATER	
	4.4.1	MassDEP Stormwater Management Standards	0
	4.4.2	Resilient Massachusetts Action Team Climate Design Standards 3	51
	4.4.3	Town Of Medway Stormwater Management Bylaw	52
	4.5	SOLID AND HAZARDOUS WASTE	
	4.5.1	Construction	2

	4.5.2	Operations	. 33
	4.6	VISUAL	. 33
	4.7	NOISE	. 38
	4.8	ELECTRIC AND MAGNETIC FIELDS	. 38
	4.9	CULTURAL RESOURCES	. 39
	4.10	TRAFFIC	. 40
SECTION	5.0	BATTERY SAFETY	. 41
	5.1	SAFETY STANDARDS	. 41
	5.2	MITIGATION, HAZARD CONTROL AND LOCAL COORDINATION	. 42
SECTION	6.0	SITE SELECTION / TRANSMISSION ALTERNATIVES CONSIDERED) 44
	6.1	STANDARD OF REVIEW	. 44
	6.2	SITE SELECTION PROCESS	. 44
	6.2.1	Environmental Criteria	. 45
	6.2.2	Candidate Site Overview	. 45
	6.2.3	Candidate Site 1 (Milford Street Parcels)	. 47
	6.2.4	Candidate Site 2 (Eversource Parcels)	. 51
	6.2.5	Candidate Site 3 (Southwest Medway Parcels)	. 54
	6.3	EVALUATION OF CANDIDATE SITES	. 57
	6.3.1	Candidate Site 1 (Milford Street Parcels)	. 57
	6.3.2	Candidate Site 2 (Eversource Parcels)	. 57
	6.3.3	Candidate Site 3 (Southwest Medway Parcels)	. 58
	6.4	NO BUILD ALTERNATIVE	. 58
	6.5	CONCLUSION	. 59
	6.6	TRANSMISSION INTERCONNECTION ALTERNATIVES CONSIDERED	. 59
SECTION	7.0	COMMUNITY OUTREACH	. 60
	7.1	INTRODUCTION	. 60
	7.1.1	Website	. 60
	7.1.2	Project E-mail	. 60
	7.1.3	Phone Number	. 60
	7.1.4	Construction Community Outreach Plan	. 61
	7.1.5	Open House	. 61
	7.1.6	Contractor Training	. 62
	7.1.7	Municipal and Stakeholder Briefings	. 62
SECTION	8.0	CONSISTENCY WITH COMMONWEALTH POLICIES	. 64
	8.1	CONSISTENCY WITH POLICIES OF THE COMMONWEALTH	. 64

8.2	GLOBAL WARMING SOLUTIONS ACT	64
8.3	ENERGY STORAGE INITIATIVE	65
8.4	CLEAN PEAK STANDARD	66
8.5	ENVIRONMENTAL JUSTICE POLICY	67

<u>Figures</u>

Figure 2-1	Site Locus Map
Figure 2-2	Site Locus Map (Tax Parcels)
Figure 2-3	Existing Conditions
Figure 2-4	Distances to Adjacent Residential Areas
Figure 3-1	Project Substation Layout
Figure 3-2	Project Substation Cross-Section
Figure 4-1a	Existing and Proposed View from Milford Street (Route 109)
Figure 4-1b	Existing and Proposed View from Milford Street (Route 109)
Figure 4-2	Line of Sight Profiles
Figure 6-1	Overview of Candidate Sites
Figure 6-2a	Candidate Site 1 (Milford Street Parcels) – USGS Locus Map
Figure 6-2b	Candidate Site 1 (Milford Street Parcels) – Locational/Environmental Considerations Map
Figure 6-3a	Candidate Site 2 (Eversource Parcels) – USGS Locus Map
Figure 6-3b	Candidate Site 2 (Eversource Parcels) – Locational/Environmental Considerations Map
Figure 6-4a	Candidate Site 3 (Southwest Medway Parcels) – USGS Locus Map
Figure 6-4b	Candidate Site 3 (Southwest Medway Parcels) – Locational/Environmental Considerations Map

Attachments

Attachment A:	Project Plans
Attachment B:	Stormwater Management Report
Attachment C:	Sound Level Assessment Report
Attachment D:	Expanded Environmental Notification Form
Attachment E:	Electric and Magnetic Fields Assessment Report
Attachment F:	Agency Correspondence
Attachment G:	Draft Emergency Response and Operations Plan

<u>Exhibits</u>

Testimony of Christina Wolf
Testimony of Justin Adams
Testimony of Marc Bergeron
Testimony of AJ Jablonowski
Testimony of Robert O'Neal
Testimony of Benjamin Cotts
Testimony of Jason Knedlhans

SECTION 1.0 THE PROJECT

1.1 PROJECT OVERVIEW

Medway Grid, LLC (the "Company" or the "Applicant" or "Medway Grid" is proposing to construct a 250 MW/500 MWh battery energy storage system and an ancillary new electric substation ("the Project Substation"), to be located on the south side of Milford Street (Route 109) in the Town of Medway, Massachusetts ("the Project Site"). As part of the Project, the Company is also proposing to construct a new 345kV underground transmission line interconnection ("the Proposed Transmission Interconnection") from the proposed Project Substation to Eversource Energy's existing West Medway Substation ("the Eversource Substation"), a distance of approximately 1,325 linear feet. The Project also includes some upgrades to Eversource facilities to enable the interconnection; these will be undertaken by Eversource and are described in more detail below. The Project is designed to utilize lithiumion batteries, which will be housed in approximately 140 above-ground enclosures. The Project Site is approximately 10.6 acres in size and contains approximately 0.85 acres of previously developed areas associated with three existing residences and an existing automotive repair facility. Of the 10.6-acre Project Site, approximately 5.2 acres will be developed for the BESS and the ancillary Project Substation.⁴

The Project was awarded a capacity contract in the Southeastern New England ("SENE") capacity zone, via the Forward Capacity Auction ("FCA") 15, based upon its ability to provide this needed capacity by June 1, 2024. In general, the Project will store electricity, during times of oversupply, and dispatch the electricity, during times of peak demand onto the electric grid. More specifically, charging and discharging will be dictated by directives of the

⁴ On this date, Medway Grid submitted with the Department of Public Utilities, (1) pursuant to G.L. c. 40A, a motion for an individual and comprehensive zoning exemption, and (2) G.L. c. 164 § 72, a motion for approval of a new 345 kV transmission line. Concomitantly, the Company has submitted a motion to consolidate both those dockets into EFSB 22-X for evaluation by the Siting Board in the instant docket. Moreover, the Company has incorporated by reference into both the 40A, and Section 72 petitions all information contained in this EFSB Petition, including the Analysis and Attachments

Clean Peak Program, requirements of the capacity contract, and overall energy market needs. In addition, the Project is being proposed in furtherance of the Commonwealth of Massachusetts goals to achieve 1000MWh of battery storage by 2025. This Project would provide 500 MWh towards that goal.

The proposed Project Substation is an ancillary structure to the BESS and will be located entirely on the Project Site. The function of this substation is to take the routed power output from the BESS to a 34.5kV collection switchgear and step it up to a transmission voltage of 345kV to allow the power from the BESS to be connected to the Eversource Substation via the proposed Transmission Interconnection. The Proposed Transmission Interconnection will run south and west, from the Project Site, crossing two Eversourcecontrolled parcels to connect to the existing Eversource Substation. The proposed underground transmission line will require the clearing of vegetation up to 25-feet-wide along its 1,325-foot corridor. An approximately 12-foot-wide gravel roadway will be installed over the underground transmission line within this 25-foot-wide corridor to provide permanent access to the Transmission Interconnection.

The BESS will be surrounded by a combination of a minimum 8-foot-high security fence in certain sections and a 22-foot-high sound attenuation barrier wall. The sound attenuation barrier is approximately 1,280 feet in length, located along the north and east sides of the BESS. Access gates will be locked at all times and only accessible by qualified personnel.

1.2. HOW THE PETITION IS STRUCTURED

There are eight sections that make up the Company's Siting Board application including the Project Overview. Collectively, they demonstrate that Medway Grid, LLC's proposed Project meets or exceeds the statutory requirements, pursuant to G.L. c. 164 § 69J ¼. As detailed herein, testimony as to the overview of the Project will be offered by Christina Wolf, the Development Lead for the Project. Ms. Wolf's testimony is attached hereto as Exhibit MG-CW.

Section 2 provides details about the Project's site and Section 3 details the Project components, as well as the proposed permitting and construction schedule. Testimony on these sections will be offered by Justin Adams, Director of Permitting and Marc Bergeron, Principal of Epsilon Associates, Inc. Messrs. Adams' and Bergeron's testimony is attached hereto as Exhibits MG-JA and MG-MB, respectively.

Section 4 presents the environmental assessment completed by the Company to demonstrate that the Project will have minimal impact on the surrounding built and natural environment, including, but not limited to; air quality/emissions, water resources/supply, wetlands, stormwater management, solid and hazardous waste, noise, traffic, electric and magnetic fields ("EMF"), and visual. Marc Bergeron, AJ Jablonowski and Robert O'Neil, both principals will Epsilon Associates and Ben Cotts, with Exponent, will testify on these matters. Messrs. Jablonowski's, O'Neil's and Cotts' testimony is attached hereto as Exhibits MG-AJJ, MG-RO and MG-BC, respectively.

Section 5 describes the safety testing, evaluations, analyses, and planning that the Company has undertaken to ensure that the Project is constructed and operated in a safe and secure manner. Testimony on the Project's safety will be offered by Jason Knedlhans. Mr. Knedlhans testimony is attached hereto as Exhibit MG-JK.

Section 6 details the Site Selection process, including information about alternative sites that were considered, but for a variety of reasons, ultimately not chosen. Ms. Wolf and Mr. Adams will sponsor this section.

Section 7 outlines the Company's outreach to provide information about the Project to the community. This Section is sponsored by Ms. Wolf's testimony.

Section 8 provides information about the Commonwealth's policies designed to promote energy storage and how this Project will help propel the Commonwealth in meeting those policy goals. This Section is sponsored by the testimony of Ms. Wolf.

1.3 PROJECT TEAM

The Company has assembled a capable and highly experienced team of project planners, engineers, environmental scientists, attorneys, and outreach specialists for the Project. The team's principal organizations are described below.

1.3.1 Epsilon Associates, Inc.

Epsilon Associates, Inc. ("Epsilon") is an approximately 60-person engineering and environmental consulting firm based in Maynard, Massachusetts. Epsilon's engineers, scientists, planners, and regulatory specialists are engaged in environmental analyses, modeling, licensing, and permitting for energy infrastructure projects throughout the northeast. Epsilon conducted the noise analysis and the assessment of environmental impacts for the Project and is providing local, state, and federal environmental permitting support.

1.3.2 Exponent, Inc.

Exponent Inc. ("Exponent"), with an office located in Natick, Massachusetts, is a multidisciplinary organization of scientists, physicians, engineers, and business consultants that performs in-depth investigations including evaluation of complex human health and environmental issues. Exponent conducted assessments of electric and magnetic fields ("EMF") and applicable safety-related topics for the Project.

1.3.3 Commonwealth Heritage Group, Inc.

Commonwealth Heritage Group, Inc. ("CHG") is a full-service heritage management and consulting firm headquartered in Michigan, with a local office in Littleton, Massachusetts. CHG conducted cultural resource assessment for the Project and is providing the necessary permitting support related to cultural resources.

1.3.4 Pierce Atwood LLP

Pierce Atwood LLP is a full-service law firm, representing a broad range of utilities, developers, and other stakeholders before federal and state agencies. Pierce Atwood clients include energy storage developers, solar, wind and biomass companies, developers of natural

gas-fired generation facilities, electric and natural gas utilities, hospitals, global governmental agencies, and industrial facilities.

1.3.5 Burns McDonnell

Burns McDonnell is a full-service engineering, architecture, construction, environmental and consulting solutions firm based in Kansas City, Missouri. Burns McDonnell works on numerous energy storage projects around the country and is providing site planning, landscape design, and visual simulation support for the Project.

1.3.6 Power Engineers

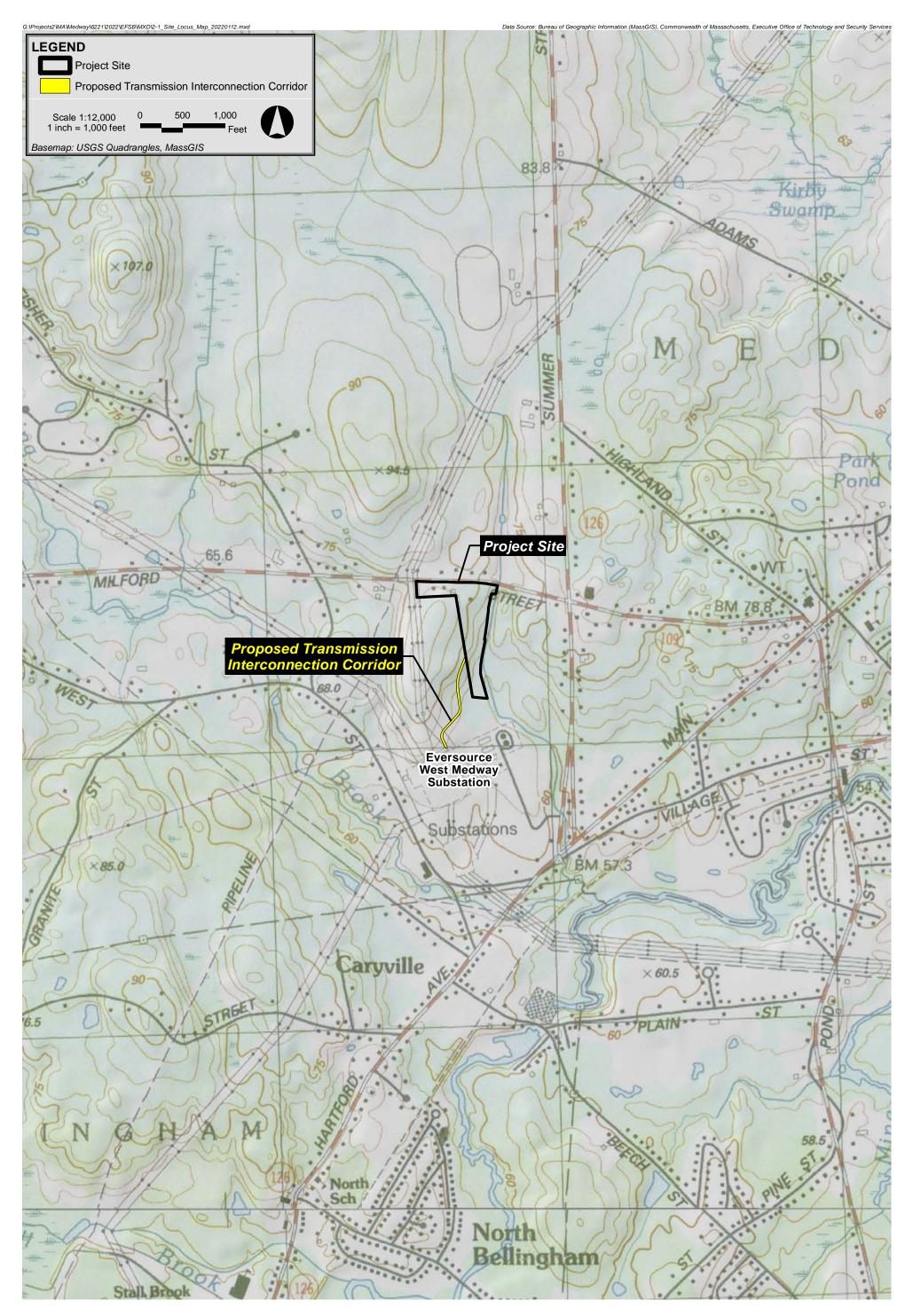
Power Engineers is an engineering and consulting firm that focuses on, among other disciplines, designing power delivery solutions. Power Engineers focuses on the transmission engineering for the Project, designing the Project substation, transmission line and advising on the connection with Eversource infrastructure.

SECTION 2.0 SITE DESCRIPTION

The Project Site is approximately 10.6 acres in size and as per the Town of Medway Assessor's maps is composed of four parcels (Parcels 46-057, 46-056, 46-055, and 56-006). Figure 2-1 below provides a site locus map (USGS base) for the Project Site, while Figure 2-2 below presents the four parcels that comprise the Project Site (aerial photo base). The Project Site contains approximately 0.85 acres of previously developed areas associated with three existing residences and an existing automotive repair facility, with the remaining approximately 9.76 acres predominantly forested upland and/or wetlands. Access is from Milford Street (Route 109) along the northern boundary of the Project Site. According to the MassDOT Road Inventory and a list of accepted town roads on the Town of Medway's website⁵, this portion of Milford Street (Route 109) is a town accepted roadway. There is an existing Eversource electric transmission corridor and other undeveloped land owned by Eversource to the west along with the existing Eversource West Medway Substation and the Exelon Corporation West Medway Generating Station to the south, a perennial stream (Center Brook) and residences on Little Tree Road and Summer Street to the east, and residences across Milford Street (Route 109) to the north.

⁵ https://www.townofmedway.org/sites/g/files/vyhlif866/f/uploads/accepted_street_list_12-17-21.pdf

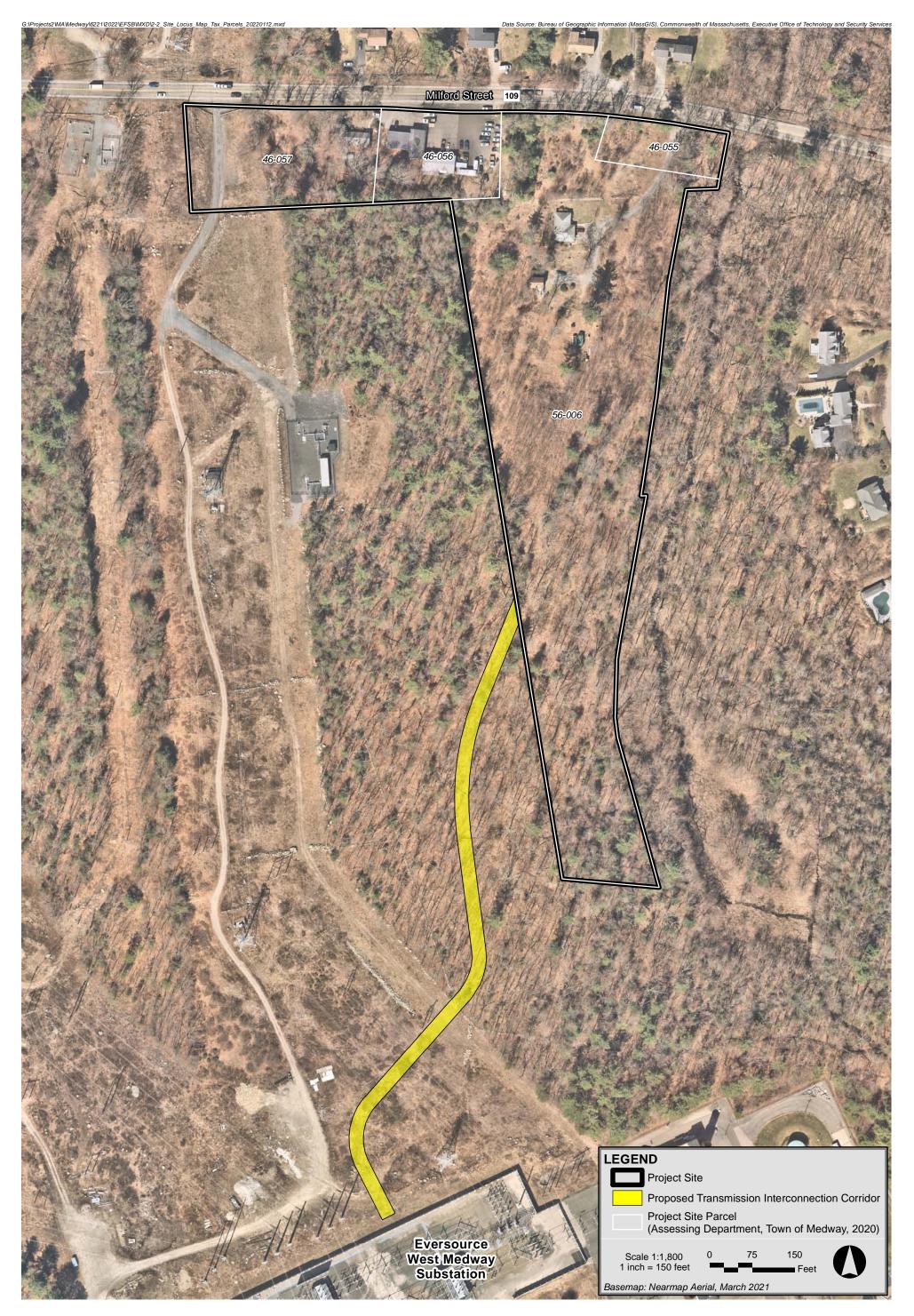
Figure 2-1 Site Locus Map



Medway Grid Energy Storage Project Medway, Massachusetts



Figure 2-1 Site Locus Map



Medway Grid Energy Storage Project Medway, Massachusetts



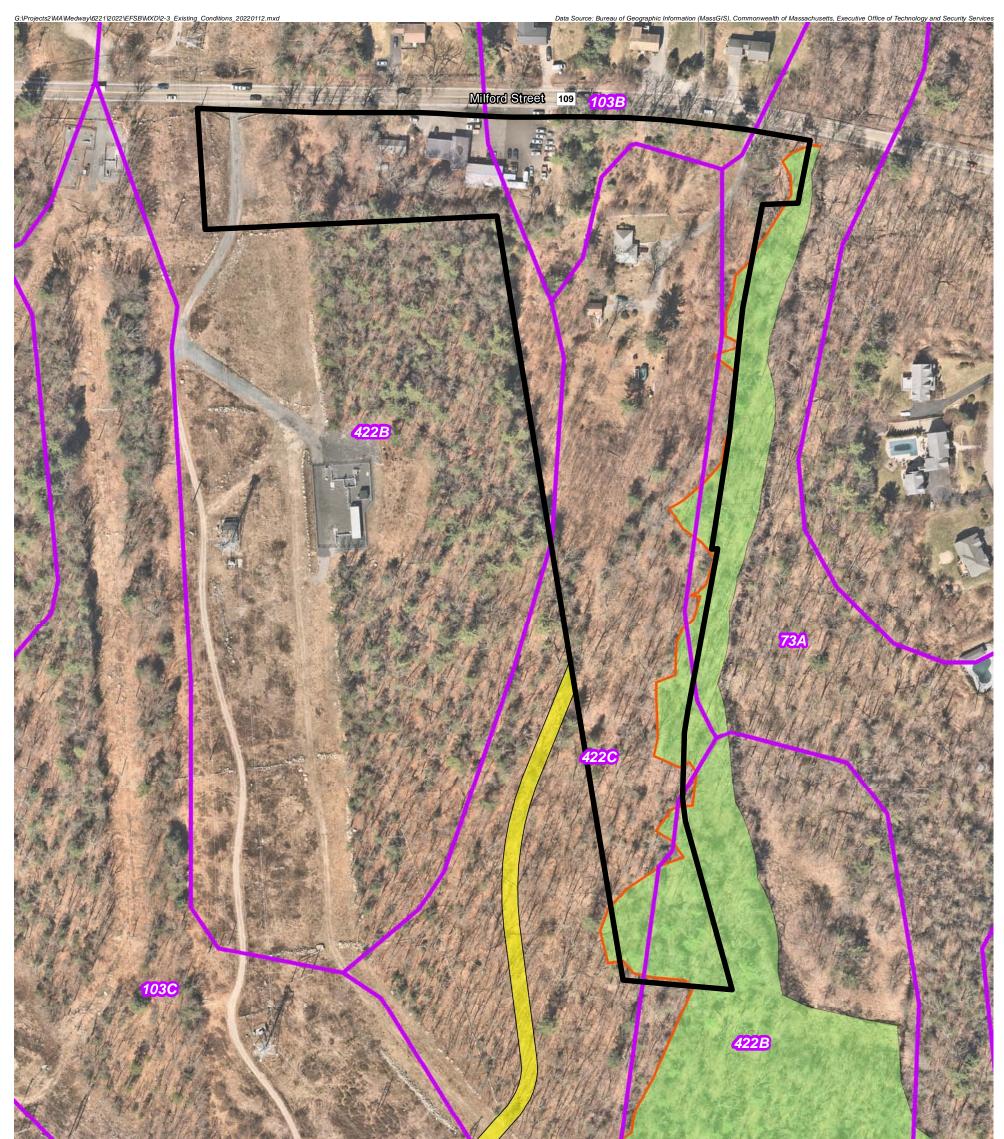
Figure 2-2 Site Locus Map (Tax Parcels)

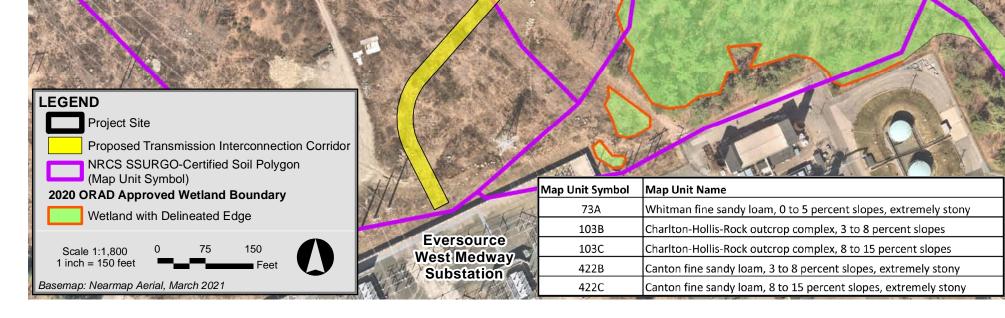
The terrain on the Project Site is gently sloping from the west side to the east side. The Project Site is best characterized as a mixed upland forest. The dominant vegetation in the uplands consists of red oak (Quercus rubra), white oak (Quercus alba), white pine (Pinus strobus), red maple (Acer rubrum), lowbush blueberry (Vaccinium angustifolium), American witch-hazel (Hamamelis virginiana), bitternut hickory (Carva cordiformis), northern dewberry (Rubus flagellaris), and intermediate wood fern (Dryopteris intermedia). A palustrine forested wetland that borders Center Brook is located along the eastern side of the Project Site and extends off-site towards Little Tree Road and to the south toward the West Medway Generating Station. Center Brook is a perennial waterbody that flows from north to south and is a tributary to the Charles River. This forested wetland is predominantly vegetated with green ash (Fraxinus pennsylvanica), red maple (Acer rubrum), white pine (Pinus strobus), winterberry (Ilex verticillata), Japanese barberry (Berberis thunmergii), multiflora rose (Rosa multiflora), tussock sedge (Carex stricta), and skunk cabbage (Symplocarpus foetidus). The wetland boundary on the eastern portion of the Project Site has been verified and approved by the Medway Conservation Commission through an Order of Resource Area Delineation ("ORAD"), issued on February 27, 2020.⁶ Wetland resource areas on the Project Site and along/adjacent to the proposed transmission interconnection are associated with Center Brook and are subject to jurisdiction under the Massachusetts Wetlands Protection Act ("MWPA") (G.L. c. 131 § 40), its implementing Regulations (310 CMR 10.00), the Town of Medway Wetlands Protection Bylaw (Article XXI), and the Rules and Regulations of the Town of Medway Conservation Commission (amended June 25, 2020). State and local wetland resource areas located on the Project Site and along/adjacent to the proposed transmission interconnection include Bordering Vegetated Wetland("BVW"), Riverfront Area ("RFA"), and the 100-foot Buffer Zone to BVW.

⁶ https://www.townofmedway.org/sites/g/files/vyhlif866/f/minutes/concom_02_27_20minutes.pdf

Soils on the Project Site consist of the following soil types: 60 % Canton fine sandy loam, 8 to 15 percent slopes, extremely stony, well-drained; Canton fine sandy loam, 0 to 8 percent slopes, extremely stony, well-drained; 12% Charlton-Hollis Rock outcrop complex, 3 to 8 percent slopes, well-drained; and 10% Whitman fine sandy loam, 0 to 3 percent slopes, extremely stony and very poorly drained. The Natural Resources Conservation Service considers Whitman fine sandy loam, 0 to 3 percent slopes a hydric soil. None of the Site's soils are considered Prime Farmland. Figure 2-3 below presents the existing conditions on the Project Site.

Figure 2-3 Existing Conditions

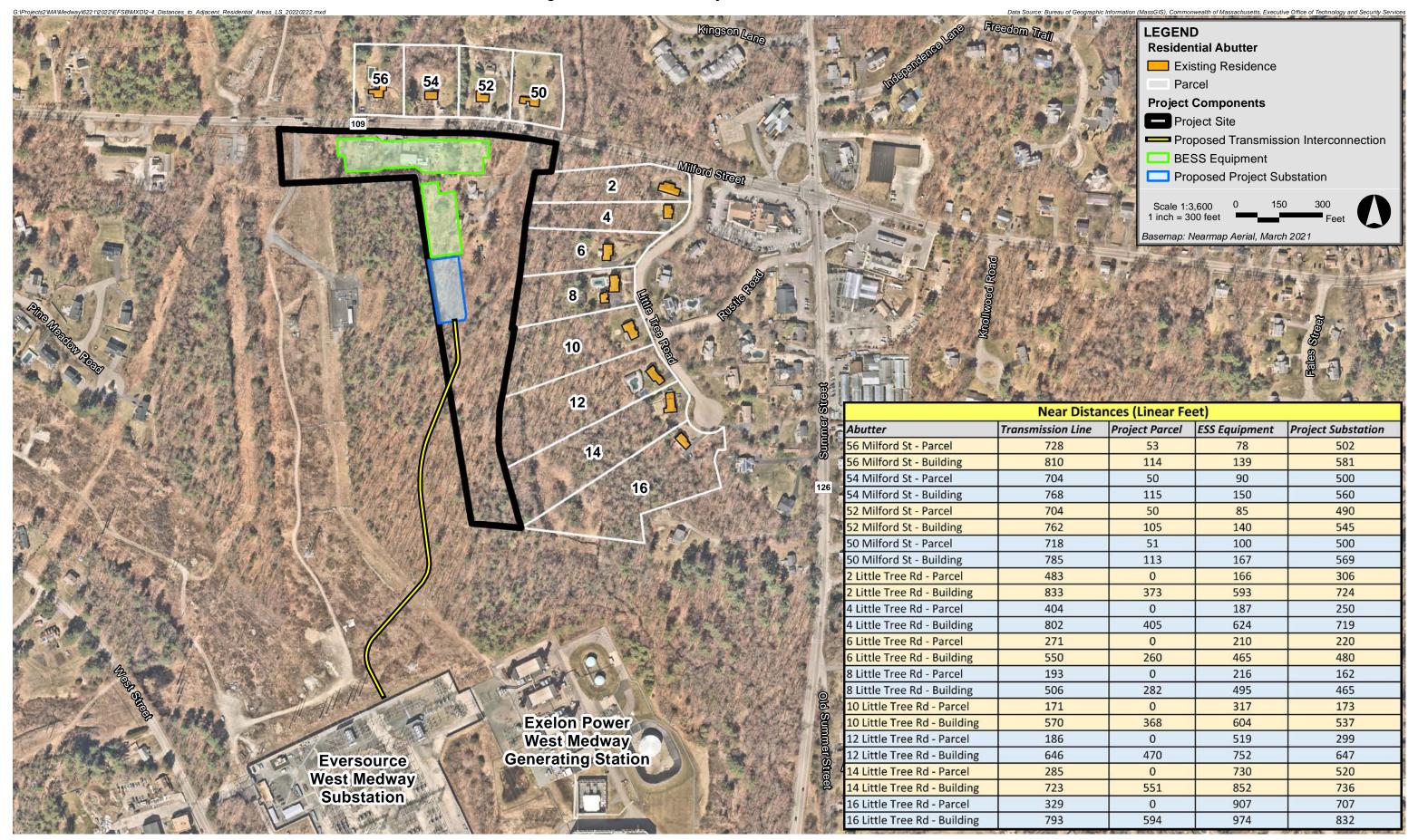




Medway Grid Energy Storage Project Medway, Massachusetts



Figure 2-3 Existing Conditions The closest residences are located to the north of the Project Site on the opposite side of Milford Street (Route 109). There are four separate residences in this area that are between approximately 105-115 feet from the northern parcel boundary of the Project Site. In addition, there are approximately eight separate residences located to the east of the Project Site, off Little Tree Road that range in distance from approximately 260 to 595 feet from the Project Site's eastern parcel boundary. The West Medway Generating Station and the existing Eversource substation facility are approximately 460 to 500 feet from the Project Site's southern parcel boundary. Figure 2-4 below presents distances from the Project Site to adjacent residences.





There are no Outstanding Resource Waters ("ORWs"), Areas of Critical Environmental Concern ("ACECs"), or 100-year floodplain areas located near the Project Site. The Project Site is not located in a MassDEP Approved Zone I or Interim Wellhead Protection Area (Zone II). According to Massachusetts Natural Heritage and Endangered Species Program ("NHESP") Atlas (August 1, 2021, 15th Edition), the site is not located within an area of Estimated Habitats of Rare Wildlife or an area of Priority Habitats of Rare Species. There are no mapped certified or potential vernal pools located on or near the site.

SECTION 3.0 PROJECT DESCRIPTION

The proposed Project consists of a 250 megawatt ("MW") / 500 megawatt-hour ("MWh") standalone battery energy storage system ("BESS") and a new 345kV/34.5kV electric substation ("the Project Substation") on approximately 10.6 acres of land off Milford Street (Route 109) in Medway, Massachusetts. The Project also includes the construction of a new, approximately 1,325-foot long underground 345 kV transmission line interconnection from the proposed Project Substation to Eversource Energy's existing West Medway Substation ("the Eversource Substation") to the south. Other Project features include a stormwater management system, retaining walls, security fencing, sound attenuation barriers, access roads, and landscaping. The proposed layout for the BESS, the proposed Project Substation, and the proposed Transmission Interconnection plan set are included as Attachment A. The following sections provide details related to all components of the Project.

3.1. BATTERY ENERGY STORAGE SYSTEM

The BESS will consist of 140 Tesla Megapack ("Megapack") enclosed units located on the westernmost portion of the Project Site. The Megapack is a standalone modular system with integrated lithium-ion batteries, a bi-directional inverter, a thermal management system, and a Tesla Site Controller with intelligent controls software. Each Megapack is approximately 30 feet long (359 in.), 5.5 feet wide (65 ¼ in.) and 9 feet tall (110 ¼ in.) and will be shipped to the site pre-assembled with a maximum weight of 84,000 pounds. The Megapacks will be arranged throughout the site in a back-to-back orientation and spaced in compliance with the manufacturer's installation requirements. The coupled Megapacks are placed immediately adjacent to a medium voltage transformer. The site will have 70 medium voltage transformers. Each Megapack and the medium voltage transformers will be supported on concrete slabs and pier foundations and surrounded by crushed stone and/or gravel. The energy stored or discharged from each Megapack will pass through the medium voltage transformer and travel to the Project Substation via a series of underground conduits. From this point the energy will be

delivered to the Eversource Substation via the proposed Transmission Interconnection.

The Megapack architecture consists of battery cells aggregated into 24 modules. They are thermally managed by an integrated liquid cooling and heating system for thermal safety. The Megapack architecture also includes sensors supporting embedded monitoring and controls as well as electrical interface equipment including an industry standard breaker for AC protection.

3.1.1 Battery Energy Storage System (Augmentation)

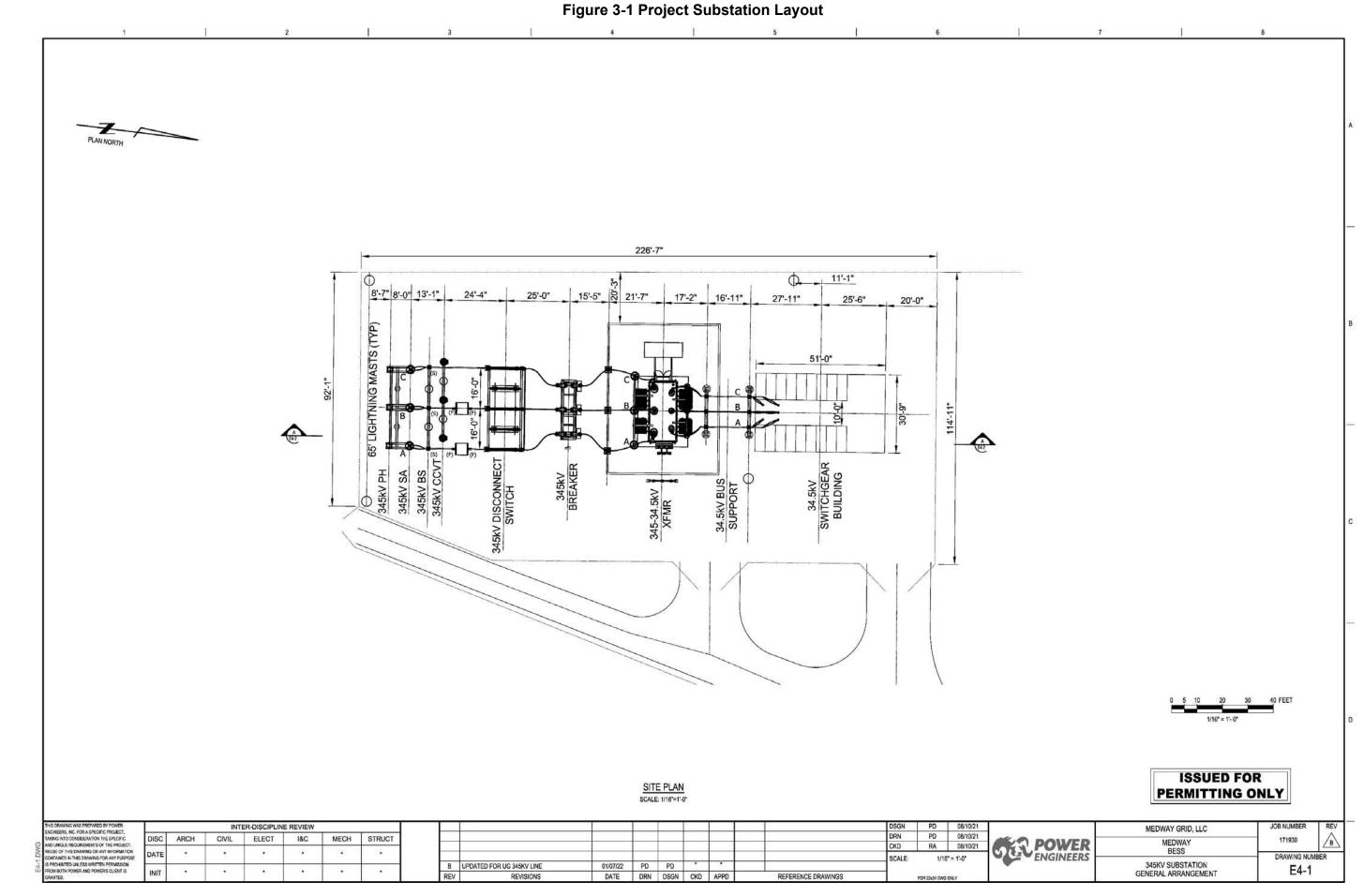
To mitigate the typical battery degradation associated with lithium-ion batteries and to maintain the Project's proposed net energy storage rating of 500MWh, the Project will augment individual batteries or cabinets, as needed, throughout the life of the Project. Augmentation will not change the total energy storage rating of 500 MWh. No additional inverters will be added and the Project's real power rating of 250MW will remain unchanged. To show the maximum possible development footprint of the Project over its life, the Project layout plan (Attachment A) shows "augmentation areas" where these additional cabinets may be added in the future should the need arise.

3.2 PROPOSED PROJECT SUBSTATION

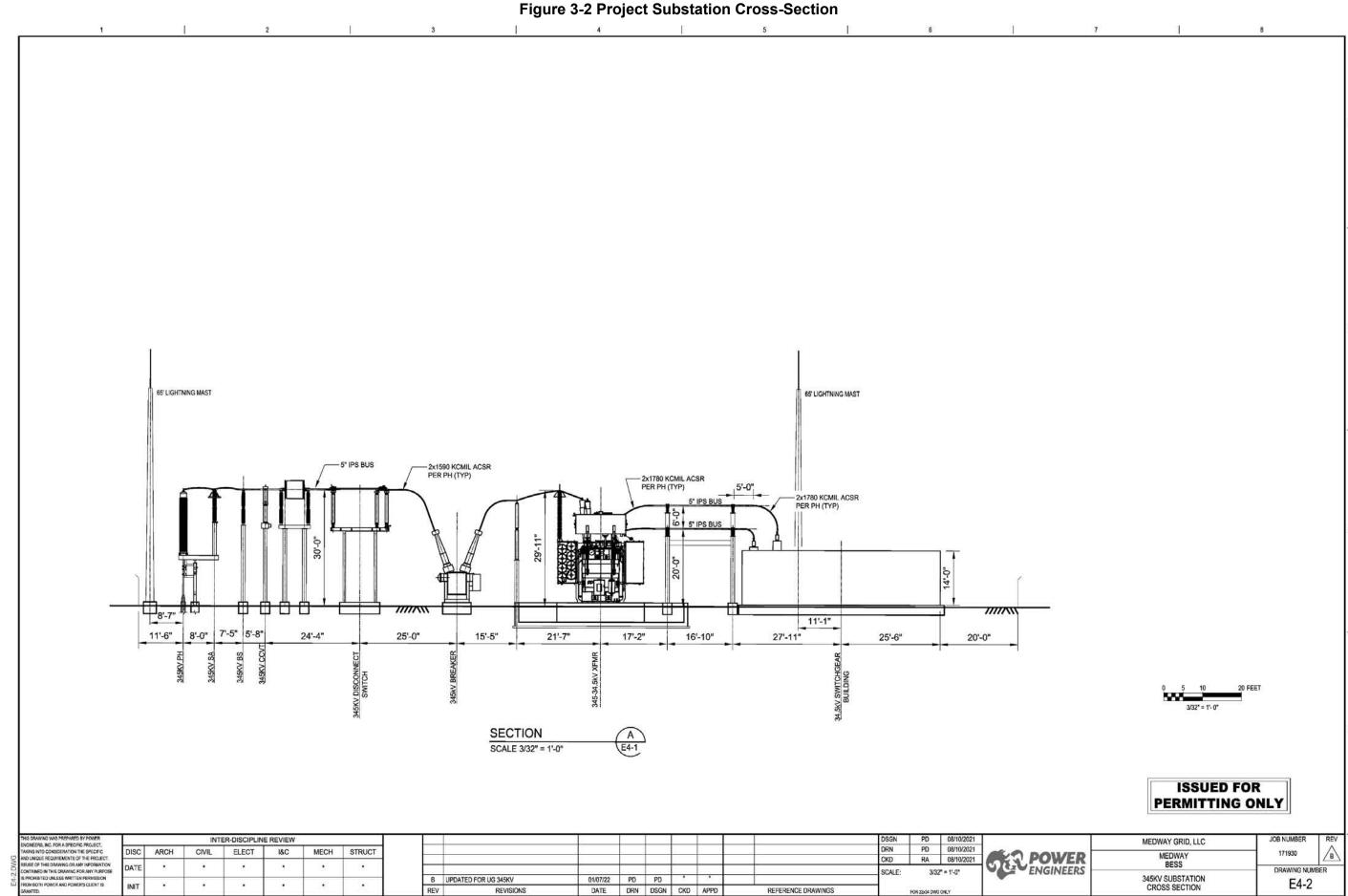
The proposed Project Substation is an ancillary structure to the BESS and will include; the new substation equipment, graveled yard area, and surrounding security fencing. The Project Substation will be located entirely on the Project Site to the south of the BESS and includes equipment such as a 345kV/34.5 kV main power transformer, switchgear, circuit breakers, disconnect switches, low and high buses, and will be up to 65 feet high at its tallest point (static mast). The function of this substation is to take the routed power output from the BESS to a 34.5kV collection switchgear and step it up to a transmission voltage of 345kV to allow the power from the BESS to be connected to the Eversource Substation via the proposed Transmission Interconnection. During charging, the proposed Transmission Interconnection will carry electricity from the Eversource Substation back to the Proposed Project Substation where

it will step-down to 34.5kV. At this voltage it can then be routed to the BESS for storage.

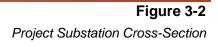
Figures 3-1 and 3-2 below present the Proposed Project Substation layout and cross section, respectively.











POWER	MEDWAY GRID, LLC	JOB NUMBER REV
	MEDWAY BESS	171930 B
	345KV SUBSTATION CROSS SECTION	E4-2

3.3 PROPOSED TRANSMISSION INTERCONNECTION

Electricity will be transported from the Project Substation to the Eversource Substation via a 345 kV underground transmission line, owned by Medway Grid, which will cross from Medway Grid-owned land to land owned and/or controlled by Eversource. The Transmission Interconnection will consist of three, 8-inch 345 kV solid dielectric cables within a duct bank conduit system. These cables will be installed in a single duct bank that will be approximately 4feet wide by 5-feet deep, with the cables buried a minimum of 3-feet below the existing ground surface. At the Proposed Project Substation, the Transmission Interconnection will terminate above ground within the walled substation yard. The proposed underground transmission line will require the clearing of vegetation up to 25-feet-wide along its 1,325-foot corridor (0.76 acres). An approximately 12-foot-wide gravel roadway will be installed over the underground transmission line within this 25-foot-wide corridor to provide permanent access to the Transmission Interconnection. The remaining areas within the 25-foot-wide corridor will be allowed to revegetate with low growing vegetation. Areas along the edge of the 12-foot-wide gravel access road would be moved on a routine basis with the goal of preventing roots from trees to grow deep enough to interfere with the safe and efficient operation of the transmission line. Attachment A includes the proposed Transmission Interconnection Plans.

3.4 PROPOSED EVERSOURCE UPGRADES

The Project will include some upgrades to existing Eversource interconnection facilities, undertaken by Eversource, in order for the Project to be interconnected at the West Medway Grid substation. These interconnection upgrades will include the installation of a new 345kV breaker, 345kV breaker disconnects, a 345kV line terminal disconnect, a line terminal structure, CCVT's, lightning arresters, as well as associated civil work and wiring and protection and control equipment. These interconnection upgrades will take place within the walls of the existing substation.

In addition to this work within the substation, some additional upgrades are required for Medway Grid's power to be fully deliverable in the Southeastern Massachusetts capacity zone. These include increasing clearances on line 325 (to increase the line's LTE operating temperature) in order to achieve the required LTE rating on the line. This work will require increasing the height of several structures along the length of the line and/or reducing the sag of the lines carried by those structures. Upgrade work may also include the replacement of a disconnect switch associated with the 389 line which will raise its LTE rating to approximately 1938MVA.

3.5 ANTICIPATED PROJECT SCHEDULE AND CONSTRUCTION HOURS

The Project is contractually committed to meeting the capacity needs of Southeast Massachusetts as determined by ISO-New England, Inc. ("ISO-NE") by June 1, 2024. To meet this goal, the Company anticipates commencing construction in March 2023. Active construction of all the Project components would extend through January 2024, a planned duration of 11 months. Upon the completion of construction there will be a testing period (January 2024 to June 2024) to ensure that the Project fully operational in June 2024.

As per the most current Town of Medway Zoning Bylaw regarding construction noise; construction work hours for the Project could be proposed to be from 7:00 a.m. to 7:00 p.m. Monday through Saturday; no construction will take place on Sundays, federal holidays, or state legal holidays without the advance written approval of the Town of Medway Building Commissioner.

3.6 **PROJECT PERMITTING OVERVIEW**

To meet the necessary start of construction date identified above, the Company is targeting to have all permits in hand in February 2023. On January 28, 2022, an Expanded Environmental Notification Form ("EENF") was submitted to the Massachusetts Environmental Policy Act Office ("MEPA") (see Attachment D). The EENF included a request for the MEPA office to review and issue a Certificate for the Project through a Single Environmental Impact

Report. Relatively few remaining permits or regulatory reviews are needed for the development of the Project. The timeline for the remaining anticipated permits / approvals is presented below in Table 3-1.

Regulatory Authority	Permit/Review/Approval	Status and Anticipated Timeframe	
FEDERAL			
Environmental Protection Agency	NPDES General Permit for Discharges from Construction Activities	Anticipate filing Notice of Intent in December 2023	
STATE			
Massachusetts Energy Facilities Siting Board	Medway Grid, LLC, Pursuant to G.L. c. 164, § 69J ¼ for Approval to Construct a 250-MW BESS	Filed on February 25, 2022	
Massachusetts Energy Facilities Siting Board	Medway Grid, LLC, Pursuant to G.L. c. 164 § 72 for Approval to Construct a new 345kV Transmission Line	Filed on February 25, 2022	
Massachusetts Department of Public Utilities	Medway Grid, LLC, Pursuant to G.L. Chapter 40A§ 3 for Comprehensive Zoning Exemption	Filed on February 25, 2022	
Massachusetts Environmental Policy Act (MEPA) Office	Expanded Environmental Notification Form (EENF) and Environmental Impact Report pursuant to 309 CMR 11.03(7)(1)	Filed EENF on January 28, 2022	
Massachusetts Historic Commission	Project Notification Form	MHC Review in Process (since Dec. 3, 2021)	
LOCAL			
Medway Conservation Commission	Wetlands Protection Act Order of Conditions Local Wetland Bylaw Order of Conditions Land Disturbance Permit	Anticipate filing Notice of Intent by September 2022	
Medway Inspectional Services Department	Building Permit Electrical Permit Mechanical Permit Demolition Permit	Anticipate applications to be submitted by December 2022	
Medway Fire Department	Above Ground Storage Tank Removal Permit	Anticipate filing December 2022	
Medway DPW	Street Opening Permit	Anticipate filing December 2022	

SECTION 4.0 ENVIRONMENTAL IMPACTS AND MITIGATION MEASURES

G.L. c. 164 § 69J ¼ requires the Siting Board to determine whether the plans for construction of the Project minimize the environmental impacts of the proposed Project consistent with minimization of costs associated with the mitigation, control, and reduction of the environmental impacts of the Project. To make this determination, the Siting Board assesses the impacts of the Project in eight areas prescribed by G.L. c. 164, § 69J ¼, including air quality, water resources, wetlands, solid waste, visual impacts, noise, local and regional land use, and health. For purposes of completeness, the Company addresses each potential environmental impact below and demonstrates how it is not applicable to the Project or, alternatively, how the Project's environmental impact is minimal and presents the proposed mitigation techniques for these minimal impacts.

4.1 AIR QUALITY/EMISSIONS

G.L. c. 164, § 69J ¼ requires that a Petition include "either (a) evidence that the expected emissions from the Facility meet the technology performance standard in effect at the time of filing, or (b) a description of the environmental impacts, costs, and reliability of other fossil fuel generating technologies, and an explanation of why the proposed technology was chosen [over these alternatives]." As explained in further detail in Section 69J ¼, the purpose of the technology performance standards is to "streamline the [Siting Board's] review of petitions to construct generating facilities that have state of the art environmental performance characteristics." A petition for approval must include an analysis of the proposed facility's expected emissions of the criteria and non-criteria pollutants listed in 980 CMR 12.03. If the expected emissions from a proposed generating facility meet the technology performance standards, the Petition does not need to include information regarding other fossil fuel technologies. Furthermore, applicants proposing the use of fuel types that do not contain pollutants specified in the technology performance standards and do not result in pollutants

specified in the technology performance standards when burned, will not be required to provide modelling, or testing results, guarantees, work papers or other similar documents with respect to those pollutants.

4.1.1 Technology Performance Standards

During operation, the Project has no combustion or chemical processes that emit pollutants that degrade air quality, harm human health or the environment, or contribute to greenhouse gas. Criteria pollutants such as nitrogen dioxide, sulfur dioxide, volatile organic compounds, carbon monoxide, and fine particulate matter are regulated by the U.S. EPA ("EPA") and the Massachusetts Department of Environmental Protection ("MassDEP") because they can harm public health and the environment, and cause property damage. Sulfur dioxide emissions contribute to acid rain, and nitrogen oxides and volatile organic compounds are precursors to ground level ozone (smog). Carbon dioxide and methane are greenhouse gases ("GHGs") that drive global climate change. Each of these pollutants is emitted by fossil-fuel fired electric generating units; none of these pollutants is emitted by battery energy storage systems.

4.1.2 Air Emissions/Quality Mitigation Measures During Construction

The following best management practices ("BMPs") will be implemented related to dust control and air quality during construction of the Project.

To minimize the potential for airborne dust from earth disturbing activities, the Company will require its contractors to place water trucks with misters in or near the work areas during construction activities and utilize them as appropriate when conditions require. In addition, if it is necessary to stockpile excavated soil on the site, they will be covered with plastic sheeting or a similar barrier to minimize the potential for the release of dust and for soil migration from the work area. There also will be installation of anti-tracking pads at construction entrances and regular sweeping of the pavement of adjacent roadway surfaces during the construction period to minimize the potential for construction traffic to kick up dust and particulate matter.

To minimize air emissions from construction equipment, the Company will comply with state law (G.L. c. 90, § I6A) and MassDEP regulations (310 CMR 7. 11 (1)(b)), which limit vehicle idling to no more than five minutes except for vehicles being serviced, vehicles making deliveries that need to keep their engines running, and vehicles that need to run their engines to operate accessories. In addition, the Proponent will encourage the contractor to use United States Environmental Protection Agency ("USEPA") Tier 4 standards or retrofitted equipment to minimize emissions from construction equipment.

4.2 WATER RESOURCES/SUPPLY

The Siting Board has historically based its determination regarding water supply upon a demonstration by the applicant of (1) an agreement for, or documentation of, an adequate water supply for the operational needs of the facility; (2) that the required water supply infrastructure exists or can be constructed with minimal environmental impacts; and (3) that historical and projected water withdrawals are within the permitted limits for the water supply source. While typical generation requires water for steam generation, cooling ponds or outfalls, and wash ponds, a BESS does not require a source of onsite water for its safe and efficient operation. The Project does not generate any process-related wastewater and will not require any sanitary sewer connection to the Town's existing sewer system. The Project is not located in a MassDEP Approved Zone I or Interim Wellhead Protection Area (Zone II) and it is not located in any locally mapped Groundwater Protection Districts ("GPDs"). The Project has no potential to impact any public water supply sources or other water resources. For firefighting activities and in compliance with NFPA 855, the Project will be connected to public water for fire protection with the installation of 5 hydrants.

4.3 WETLANDS

The Siting Board examines direct wetlands alteration, disturbance of wetland buffer zones or coastal wetland resource areas. Specifically, whether, and if so, how much of the Project footprint or site access would be located in or disturb wetlands. The Massachusetts

Wetlands Protection Act ("WPA"), G.L. c. 131 § 40, protects water-related lands such as wetlands, rivers and streams, floodplains, ponds, estuaries, and others and establishes performance standards by which work is conducted in these resource areas. The implementation of the WPA wetlands regulations is delegated, in part, to local Conservation Commissions. Any proposed activity that will remove, fill, dredge, alter, or build upon a protected area or within 100 feet of a protected area (the Buffer Zone), requires the filing of a Notice of Intent. Many Massachusetts communities have local wetlands protection non-zoning bylaws or ordinances that give a municipality the authority to regulate activities in or near wetlands or waterbodies by imposing stronger protective measures than the state WPA. These local laws are administered and enforced by the local Conservation Commission. Each local bylaw or ordinance specifies wetland areas subject to protection and identifies proposed activities that require the filing of a Notice of Intent. The Town of Medway has a local wetlands protection bylaw with associated regulations. The Medway Conservation Commission will review the Notice of Intent, which will be filed under both the WPA and the local bylaw/ordinance (if applicable) and will issue a permit in the form of an Order of Conditions. An Order of Conditions ensures that the proposed Project will contribute to the protection of the interests of the WPA and includes conditions under which work will be carried out to minimize impacts to wetland resource areas and may include conditions for long-term operation and maintenance of the stormwater management system that will continue after the work is done.

The wetland resource area boundaries on the Project Site and along/adjacent to the proposed Transmission Interconnection have been verified and approved by the Medway Conservation Commission through an Order of Resource Area Delineation ("ORAD"), issued on February 27, 2020. State and local wetland resource areas located on or near the Project Area include; Bordering Vegetated Wetland ("BVW"), Riverfront Area ("RFA"), and the 100-foot Buffer Zone (local bylaw wetland resource area only). The extent of wetland resource areas on the Project Site is presented in Figure 2-3 and the Project Plans in Attachment A.

The Project has been designed to comply with all applicable regulatory performance standards prescribed under the WPA and the Medway Wetlands Protection Bylaw and Regulations. The following paragraphs present details regarding how the Project will fully comply with the WPA and the Medway Bylaw/Regulations.

The Project has been sited and designed to completely avoid direct alteration of Bordering Vegetated Wetlands. In addition, the Project has been designed to maximize the use of previously developed and disturbed areas on the Project Site, including those within the RFA. The Project Site contains approximately 198,700 square feet of RFA and complies with applicable performance standards associated with Riverfront Area as follows; (1) the Project will alter less than 10% of the total RFA on the Project Site (6,996 square feet or 3.5%, with most of the work located entirely outside the RFA and only a portion located towards the outer edge of the RFA boundary), (2) the Project will maintain either a 100-foot-wide area of undisturbed vegetation or preserve existing vegetation if a 100-foot-wide area of undisturbed vegetation does not exist, and (3) stormwater will be managed according to the standards established by the Massachusetts Department of Environmental Protection in its Stormwater Policy.

The Town of Medway Wetlands Protection Bylaw and associated regulations require a 25-foot No Disturbance Setback from certain wetland resource areas (e.g., BVW). The Project has been designed to comply with this setback requirement. In addition, the Project only involves limited work in the remainder of the Buffer Zone (approximately 5,435 s.f. total).

4.3.1 **Proposed Wetland Mitigation Measures**

The Project qualifies for coverage under the USEPA Construction General Permit ("CGP") for Stormwater Discharges from Construction Sites, which requires a proponent to develop and maintain a Stormwater Pollution Prevention Plan ("SWPPP") for the Project that will identify controls to be implemented to mitigate the potential for erosion and sedimentation from soil disturbance during construction. Proposed work within the 100-foot Buffer Zone will include the use of BMP's such as erosion control barriers to establish limits of work and to ensure that

there are no short or long-term impacts to adjacent wetland resource areas. In addition, all stockpiles (if necessary) will be located outside of the 100-foot Buffer Zone and refueling, or storage of equipment will not be permitted within 100-feet of vegetated wetland resource areas.

The SWPPP will include a construction personnel contact list, a description of the proposed work, stormwater controls and spill prevention measures, and inspection practices to be implemented for the management of construction-related storm water discharges from the Project. The SWPPP will be adhered to by the contractor during all phases of Project construction. The Company will require that the construction contractor designate a construction supervisor or equivalent to be responsible for coordinating regular inspections and compliance with CGP and Order of Conditions requirements. This person will be responsible for providing appropriate training and direction to the other members of the construction crew regarding work methods as they relate to permit compliance and construction training on appropriate environmental protection and compliance obligations prior to the start of construction of the Project. Regular construction progress meetings will be held to reinforce contractor awareness of these mitigation measures. The SWPP will be prepared prior to the start of grading or other ground disturbance.

4.4 STORMWATER

The Siting Board examines whether an applicant has a comprehensive plan for minimizing impacts resulting from stormwater-related discharges, *i.e.*, runoff resulting from rainfall events and snow melt. The 10.6-acre Project Site contains approximately 0.85 acres of previously developed areas associated with three existing residences and an existing automotive repair facility. There are approximately 0.3 acres of existing impervious areas around the existing automotive repair facility. The Project will result in a total of 1.8 acres of impervious surfaces on the Project Site.

4.4.1 MassDEP Stormwater Management Standards

MassDEP has issued the Massachusetts Stormwater Handbook, as well as Stormwater Management Standards pursuant to the Wetlands Protection Act, G.L. c. 131 § 40, and the Massachusetts Clean Waters Act, G.L. c. 21, §§ 26-53, to promote increased stormwater recharge, the treatment of more runoff from polluting land uses, low impact development ("LID") techniques, pollution prevention, the removal of illicit discharges to stormwater management systems, and improved operation and maintenance of stormwater Best Management Practices. The Company has completed a Stormwater Management Report for the Project. This report, included as Attachment B, presents the engineering calculations completed to design the stormwater management system for the Project, as well as provides a detailed description of the proposed system, and how it complies with all applicable standards of the MassDEP Stormwater Management Standards. In summary, the proposed stormwater management system for the Project will include LID techniques designed to capture, treat, and recharge stormwater runoff, including but not limited to:

- A network of perforated curtain drains to collect surface runoff.
- Deep sump catch basins to pretreat the water.
- Subsurface infiltration structure to recharge clean stormwater back into the ground.
- A dry detention basin to provide peak flow attenuation.
- Proprietary Vortex Units (or similar) to maximize total suspended solids ("TSS") removal from stormwater after leaving the detention basin and prior to leaving the site.

It is expected that post-development stormwater will substantially infiltrate on-site because the BESS yard surface will be predominantly permeable (e.g., crushed stone and/or gravel). However, during substantial stormwater events, runoff will flow from crushed stone parking and driveways, roof tops, crushed stone yard areas, and any landscaped or grassed areas to likely pretreatment best management practices (BMPs) and then into the underground infiltration systems. Deep sump catch basins, Vortex units (or similar), underground infiltration systems, and a dry detention basin will provide a treatment train that improves the quality of stormwater runoff, reduces the quantity of stormwater runoff, and provides infiltration and recharge to groundwater. These are considered BMPs by the MassDEP. Stormwater features are shown in the Project Plans in Attachment B.

4.4.2 Resilient Massachusetts Action Team Climate Design Standards

The Massachusetts Environmental Policy Act ("MEPA") Interim Protocol on Climate Change Adaptation and Resiliency ("Climate and Resiliency Interim Protocol), effective October 1, 2021, complies with Governor Baker's Executive Order 569, which directs the Executive Office of Energy and Environmental Affairs ("EEA") and the Executive Office of Public Safety and Security ("EOPSS") to coordinate efforts across the Commonwealth to strengthen the resilience of communities, prepare for the impacts of climate change, and proactively plan for and mitigate damage from extreme weather events. The Climate and Resiliency Interim Protocol prescribes that all new projects filing with the MEPA Office will be required to print the output report generated from the Resilient Massachusetts Action Team ("RMAT") Climate Resilience Design Standards Tool and submit it as an attachment to an Environmental Notification Form ("ENF") or Expanded Environmental Notification Form ("EENF") submittal. A copy of the RMAT report generated for the Project is included in the EENF filed for the Project (see Attachment D).

The Climate and Resiliency Interim Protocol encourages, but does not require, project proponents to utilize the recommended design standards and associated methodologies associated with Tier 1, 2, or 3 classified projects. The Project has been sited and designed in consideration of the RMAT Climate Resilience Design Guidelines and utilizes methodologies outlined in the Climate Resilience Design Standards & Guidelines, dated April 1, 2021. Specifically, the Project's proposed stormwater management system has been designed RMAT guidance to consider future storm intensity and frequency from climate change. A more detailed discussion regarding RMAT design considerations is presented in the Stormwater Management

Report provided as Attachment B.

4.4.3 Town Of Medway Stormwater Management Bylaw

Article XXVI of the Town of Medway Stormwater Management and Land Disturbance Bylaw regulate stormwater pollution at the Town's Municipal Separate Storm Water System (MS4), defined as: "The Stormwater collection system which is made up of open water courses, swales, 71 ditches, culverts, canals, streams, catch basins and pipes through which the stormwater flows and the Town Public Ways over which it flows which is owned and operated by the Town for the purpose of collecting or conveying stormwater to a discharge point."⁷

The Project does not require any "direct connections" to the MS4, defined as: "Any discernible, confined and discrete conveyance including but not limited to any pipe, drain, channel, conduit, tunnel, or swale whether above ground or below ground which directs water into the MS4." However, the Project may have "indirect connections" to the MS4, defined as "natural drainage of Stormwater over or under the surface of the ground (whether instigated by human endeavor or not) via gravity into the MS4." These indirect connections require sub-surface infiltration trenches to be used which comply with criteria established in the Town's Subdivision Rules and Regulations. The Facility will comply with all requirements of the Stormwater Management and Land Disturbance Bylaw.

4.5 SOLID AND HAZARDOUS WASTE

The following sections describe the Company's plans for addressing solid (nonhazardous) and hazardous wastes during construction and operation of the Project.

4.5.1 Construction

All wastes generated during demolition, site preparation, construction and operation of the Project will be transported offsite in accordance with local, state, and federal guidelines

https://www.townofmedway.org/sites/g/files/vyhlif866/f/uploads/sw bylaw clean voted at june 8 2020 tm final bjs .pdf

and regulations.

During the demolition phase of the Project, solid waste such as metal, scrap wood, asphalt, brick, and concrete are anticipated. The Project will implement measures to minimize the generation of solid and other waste and will encourage recycling of debris to the extent possible. As necessary, separate containers will be provided for recyclable materials that will be picked up by a recycling contractor or the solid waste disposal contractor for proper processing and recycling. Any non-recyclable solid wastes will be transported to a licensed solid waste landfill.

Individual Phase I Environmental Site Assessments ("ESA") were conducted or are underway for each parcel. These assessments revealed no evidence of RECs, CRECs, or HRECs in connection with the parcels. Stockpiled excess topsoil will be re-used during site restoration for site grading. It is unlikely that there will be excess soils during site preparation and some soil may need to be imported, but to the extent that there is excess soil that cannot be used onsite, it would be removed for off-site disposal at an appropriate receiving facility. Six above ground storage tanks were identified in the ESA for 53 Milford Street. These tanks contain oil and are in good condition with no signs of leakage. These tanks will be emptied and removed by a qualified and licensed vendor, in accordance with applicable regulations.

4.5.2 Operations

During operation of the BESS no solid or hazardous waste stream will be generated on a regular basis. However, because lithium-ion batteries currently have a useful life of approximately ten years it is assumed they will need to be replaced throughout project operation. Any used batteries will be removed from the site, transported, and managed in accordance with all local, state, and federal guidelines and regulations.

4.6 VISUAL

The Company has considered the potential visual impact of the Project to residential abutters across Milford Street (Route 109) to the north and along Little Tree Road to the east.

The greatest visual change from the Project will be along Milford Street (Route 109). There are four existing residences in this area that have a view into the Project Site. These views currently include either existing wooded areas or the existing automotive repair shop and residence. As shown in Figures 4-1a and 4-1b below, once the Project is constructed, the view from these residences along Milford Street (Route 109) will be of the proposed sound attenuation barrier and landscaping. The visual impact of the Project to the residences along Little Tree Road is minimal due to the location and orientation of the proposed BESS and Project Substation on the Project Site. As seen in Figure 4-2 below, the proposed limits of work on the Project Site are approximately 412 feet from the nearest residence (8 Little Tree Road) and the direct line of sight from this residence toward the development on the Project Site is shielded by forest. Residences along Little Tree Road may be able to partially see the static masts above the tree line year-round and may be able to see the sound attenuation barrier through forested areas during leaf-off conditions.



Figure 4-1a Existing and Proposed View from Milford Street

EXISTING VIEW Captured 5/28/2021



PROPOSED VIEW Generated 2/10/2022





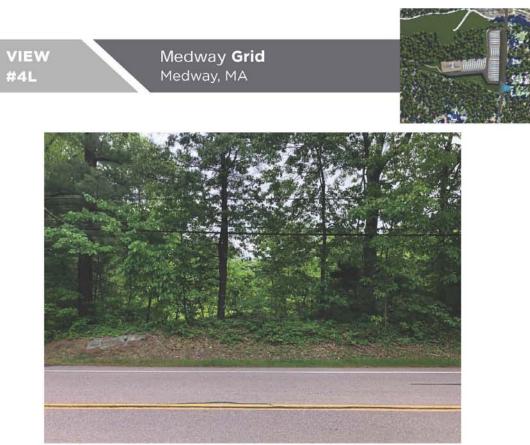


Figure 4-1b Existing and Proposed View from Milford Street

EXISTING VIEW Captured 5/28/2021

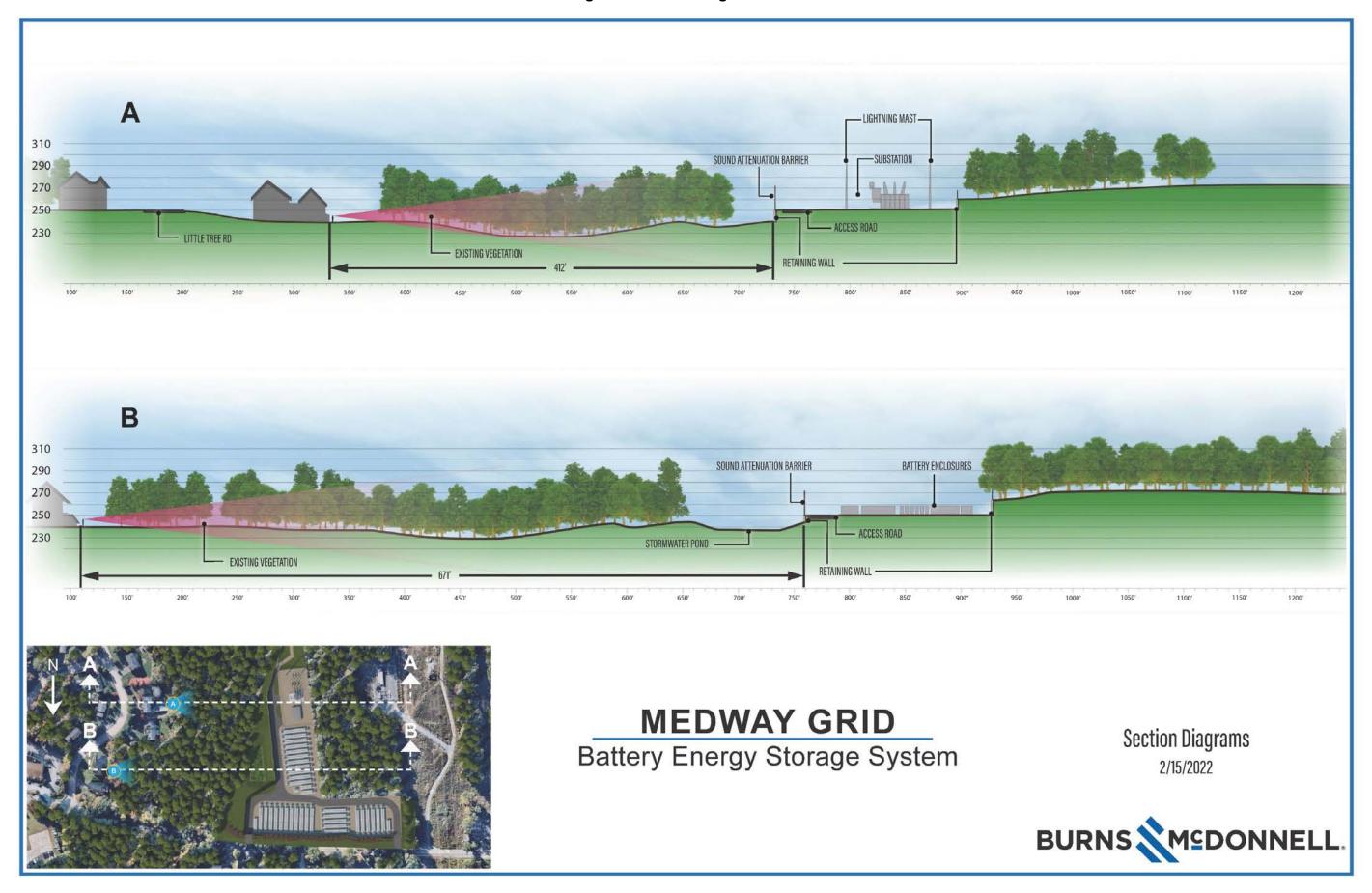


PROPOSED VIEW Generated 2/10/2022





Figure 4-2 Line of Sight Profiles





As for visual impacts that could result from lighting, the Town of Medway Zoning Bylaws limit construction work hours to daylight hours between 7:00 a.m. to 7:00 p.m. As such, temporary lighting is not anticipated. During operations, the Project will not be lit. There will be security lighting at the facility that complies with local lighting standards, but it will remain off unless lights need to be manually turned on for occasional maintenance visits.

4.7 NOISE

The Company has completed a Sound Level Assessment Report for the proposed Project, attached hereto as Attachment C. As explained in the Report, noise mitigation measures have been incorporated into the Project's design to minimize the potential for operational noise to impact the surrounding public. These mitigation measures include low noise equipment, a sound attenuation barrier, and operational restrictions. Results of a complete sound level assessment demonstrate that the noise level from the facility will comply with the requirements set forth in the MassDEP Noise Policy, as well as the recommended EPA noise guidelines. Similarly, work hours during construction will comply with the Town of Medway Zoning Bylaw.

4.8 ELECTRIC AND MAGNETIC FIELDS

The Company completed an analysis on the anticipated effect on electric and magnetic field ("EMF") levels from the development of the Project. In summary, post-development, sources of EMF within the Project Site will include direct current ("DC") magnetic fields from the battery banks and from the cables connecting the battery banks to the power inverters, as well as alternating current ("AC") fields from the power inverters, Project Substation equipment, and the 345-kV AC underground Transmission Interconnection.

The DC magnetic-field levels produced from the Project's BESS and related equipment are expected to be a small fraction of earth's natural static geomagnetic field and significantly lower than the International Commission on Non-ionizing Radiation Protection ("ICNIRP") standard. Therefore, the operation of these sources would not appreciably change the EMF

levels outside the Project Site. The highest levels of EMF outside the Project Site are expected to occur directly above the underground 345-kV Transmission Interconnection from the Project Substation to the existing Eversource West Medway Substation. However, there are no residences or other public facilities in close vicinity of this underground transmission line. At the northern boundary of the Project Site, the nearest residences on Milford Street are located approximately 600 feet or more from the Project Substation, the 345-kV Transmission Interconnection, and the existing transmission lines within the Eversource right-of-way. Similarly, residences to the east of the Project Site along Little Tree Road are more than 450 feet from these elements. These distances are sufficiently great such that the AC EMF levels from this equipment at residences would fall within the range of background values encountered in most communities and would be far below the exposure limits for the general public recommended by ICNIRP and International Committee on Electromagnetic Safety ("ICES"). Scientific and health organizations have been consistent in their overall conclusions that background values of EMF at the levels experienced in our everyday environment do not cause or contribute to adverse health effects in adults or children. The full report on electric and magnetic fields completed by Exponent for the Project is included as Attachment E.

4.9 CULTURAL RESOURCES

The Company completed a cultural resource sensitivity assessment and due diligence to identify historic architectural properties and archaeological sites on and in the vicinity of the Project. The cultural resources due diligence review encompassed the vicinity of the Project in Medway, Massachusetts. Properties were identified through a search of the Massachusetts Historical Commission's ("MHC") Inventory of the Historic and Archaeological Assets of the Commonwealth. In addition, the Project Site was assessed for archaeological sensitivity through field visits by a Principal Archaeologist. In summary, this assessment concluded that there are no historic or archaeological resources on the Project Site and the Project Site has "limited" archaeological sensitivity. To determine the effect of the Project on cultural resources,

the Company initiated formal consultation with MHC through the submission of a Project Notification Form ("PNF"), on December 3, 2021. MHC responded to the Company's PNF submission on December 16, 2021, requesting additional information. The Company provided that information on January 6, 2022. In a letter dated February 1, 2022, MHC recommended that the Company conduct a locational archaeological study of the Project Site. The Company anticipates applying to MHC for the permit and conducting the survey as soon as field conditions allow. A copy of all correspondence with MHC is included as Attachment F.

4.10 TRAFFIC

Traffic impacts due to initial construction of the Project and occasional on-site maintenance visits during operations will all be minimal. No delays to local traffic should be experienced except where the delivery vehicles may need to travel on narrow roadways, or when there is an occasional oversized vehicle. In these scenarios, the Company will work with the Town to manage local traffic.

Construction personnel parking is anticipated to be established either in a designated area on the site with access/egress via Route 109 or at a remote location where workers can be shuttled to the Project Site. Any remote parking areas and/or contractor staging/laydown areas will be located within previously developed and disturbed areas in proximity to the Project Site. Once operational, the Project will be remotely monitored; any traffic to the Project Site will be limited to periodic site inspections and maintenance visits.

SECTION 5.0 BATTERY SAFETY

5.1 SAFETY STANDARDS

The proposed BESS was designed in strict conformance with all relevant codes and standards to ensure it is constructed and operated in a manner that remains safe to the public, emergency responders and operators. This includes a series of redundant safeguards built into the hardware and management systems of the BESS that mitigate the risk of fire and thermal events (both creation of and response to). In addition, the design, construction, installation, commissioning, operation, maintenance, and decommissioning of stationary ESS will conform to National Fire Protection Association's NFPA 855, Standard for the Installation of Stationary Energy Storage Systems.

The BESS will adhere to international, national, and state safety requirements and standards, including but not limited to:

- UL 1973 Standard for Batteries for Use in Light Electric Rail (LER) Applications and Stationary Applications - These requirements cover battery systems as defined by this standard for use as energy storage for stationary applications such as for PV, wind turbine storage or for UPS, etc. applications. This standard evaluates the battery system's ability to safely withstand simulated abuse conditions. This standard evaluates the system based upon the manufacturer's specified charge and discharge parameters. Requires that an Energy Storage System (ESS) is not allowed to be an explosion hazard when exposed to an external fire source and that a single cell failure will not result in a cascading thermal runaway of cells.
- UL 9540 Standard for Energy Storage Systems and Equipment Test Method for Evaluating Thermal Runaway Fire Propagation in Battery Energy Storage Systems. The requirement addresses the inherent design and performance, as well as the interface of the energy storage system with the infrastructure. Addresses

construction, performance, electrical, mechanical, environmental, manufacturing and markings.

- UL9540A: Test Method for Evaluating Thermal Runaway Fire Propagation in Battery Energy Storage Systems – this test methodology evaluates the fire characteristics of a battery energy storage system that undergoes thermal runaway. The data generated can be used to determine the fire and explosion protection required for an installation of a battery energy storage system.
- IEC 62619 Secondary cells and batteries containing alkaline or other non-acid electrolytes - Safety requirements for secondary lithium cells and batteries, for use in industrial application.
- Massachusetts Comprehensive Fire Safety Code (527 CMR 1.00) is based on the 2015 edition of NFPA 1 National Fire Code, with Massachusetts amendments.
- Chapter 52 of NFPA 1 (2015) addresses requirements for stationary storage battery systems (including lithium-ion battery systems).
- NFPA 855 Energy Storage Systems Standard. Standard for the Installation of Stationary Energy Storage Systems - establishes criteria for minimizing the hazards associated with ESS.

5.2 MITIGATION, HAZARD CONTROL AND LOCAL COORDINATION

The Project will be controlled remotely and have internal sensors that continuously monitor system operation. If safety circuits detect a condition outside normal operating parameters, the energy supply and discharge are stopped, and individual system components are automatically shut down. The operator can also remotely initiate any emergency sequence. An emergency stop initiates an automatic shutdown sequence that puts the system into safe mode and causes it to stop exporting or importing power. Energy storage facility operators can assess different scenarios and take the necessary actions to

mitigate impacts on the batteries and accessory equipment during maintenance work, shutdowns or outages and enable them to come back online smoothly and efficiently when the disruption is completed. In addition, the Project team is working with the Medway Fire Department to develop an emergency response plan and safety training document. The Company has developed a Draft Emergency Response and Operations Plan for the Project, included herein as Attachment G. This plan will be finalized prior to operation of the facility in collaboration with the Fire Department, the battery supplier and the operations and maintenance team. The purpose of the plan is to provide guidance and documentation of the facility information, roles and responsibilities for safety and emergency response, identifies protocol for severe weather planning, identifies protocol for the preparation and planning for emergencies, and identifies emergency procedures and fire response plans.

SECTION 6.0 SITE SELECTION / TRANSMISSION ALTERNATIVES CONSIDERED

6.1 STANDARD OF REVIEW

G.L. c. 164, § 69J ¼ requires the Siting Board to determine whether an applicant's description of the site selection process used is accurate. An accurate description of an applicant's site selection process includes a complete description of the environmental, reliability, regulatory, and other considerations that led to the applicant's decision to pursue the project as proposed at the proposed site, as well as a description of other siting and design options that were considered as part of the site selection process.

As set forth herein, Medway Grid has fully complied with the Siting Board's requirements relative to site selection by providing an accurate description of the process that led to selection of the proposed Project Site. The Company's site selection process presented herein is governed by the fact that the Company has a successful interconnection agreement at the existing Eversource West Medway Substation and has been selected by ISO-NE to provide capacity to serve the Southeast New England ("SENE") zone starting in 2024.

In the sections that follow, the Company (1) presents the key objectives and an overview of the Company's site selection process; (2) provides background and information on the criteria used to evaluate and select the Project Site; and (3) presents the detailed evaluation completed for the three candidate sites identified.

6.2 SITE SELECTION PROCESS

Medway Grid employed the following locational considerations as part of its process of selecting its site:

Proximity to Eversource's West Medway Substation. Medway Grid favored sites
within the immediate vicinity of the West Medway Substation to minimize the
potential impacts and costs associated with the necessary electric transmission
interconnection between the Project and the West Medway Substation (point of

interconnection to the regional electric system).

- Sufficient available acreage. Medway Grid considered only those sites that were greater than 5 acres in size.
- Medway Grid favored sites with existing access from a public roadway.
- Compatibility with surrounding land uses.

6.2.1 Environmental Criteria

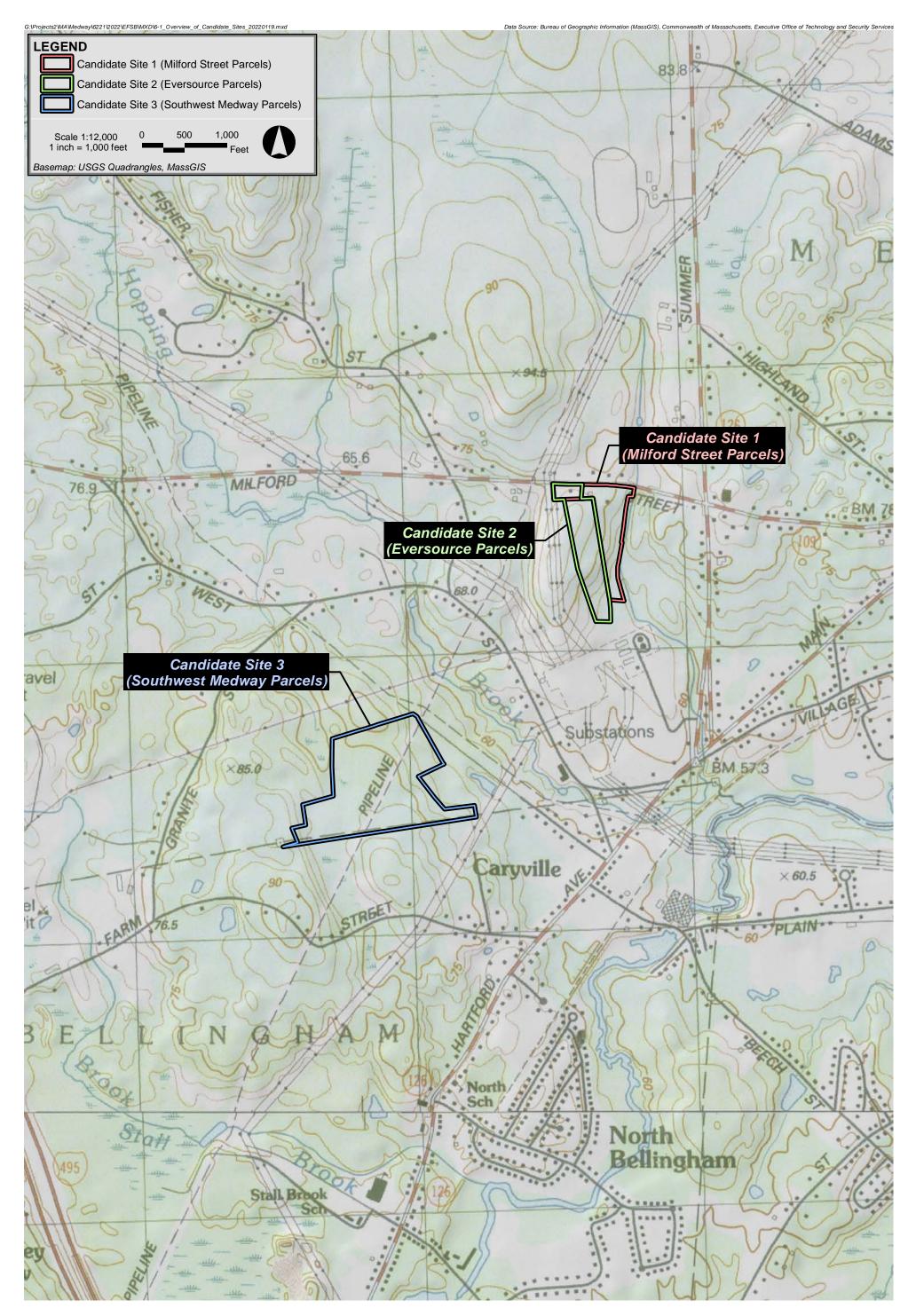
Medway Grid employed the following environmental considerations as part of its process of selecting its site:

- Ability to avoid or minimize wetlands impacts.
- Ability to utilize existing developed areas.
- Ability to avoid or minimize the clearing of existing forested areas.
- Ability to avoid or minimize impacts to certified or potential vernal pools.
- Ability to avoid or minimize impacts to Outstanding Resource Waters.
- Ability to avoid or minimize impacts to Areas of Critical Environmental Concern.

6.2.2 Candidate Site Overview

The Company identified (3) candidate sites in the vicinity of Eversource's West Medway Substation that might be suitable for the Project. The following sections provide a description of each Candidate Site. Figure 6-1 below provides a map showing the location of each of the three Candidate Sites in relation to the West Medway Substation.

Figure 6-1 Overview of Candidate Sites



Medway Grid Energy Storage Project Medway, Massachusetts

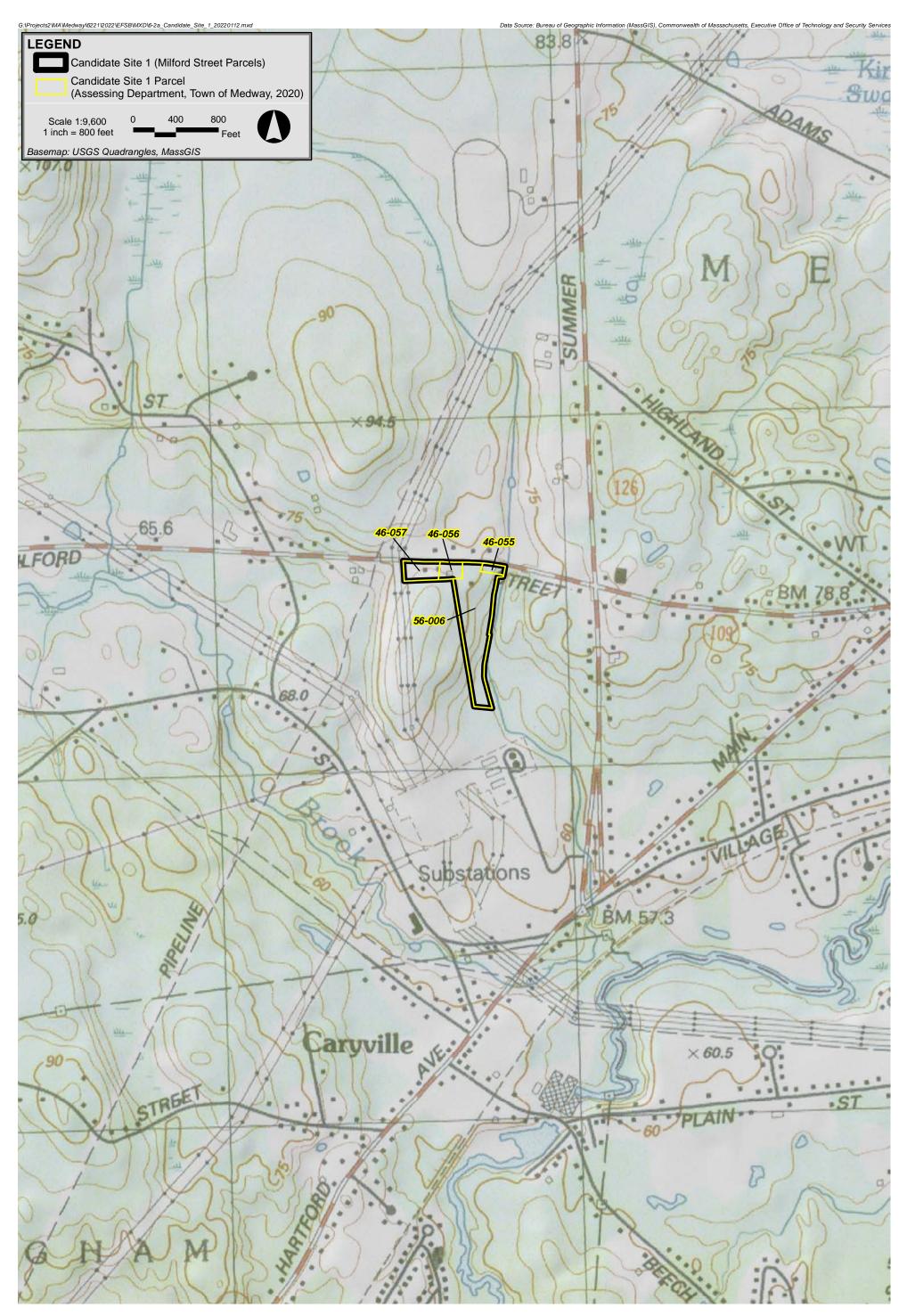


Figure 6-1 Overview of Candidate Sites None of the candidate sites considered contain the following environmental features; Outstanding Resource Waters ("ORWs"), Areas of Critical Environmental Concern ("ACECs"), mapped certified or potential vernal pools, or 100-year floodplain areas. Further, none of them are located within in a MassDEP Approved Zone I or Interim Wellhead Protection Area (Zone II). Lastly, according to Massachusetts Natural Heritage and Endangered Species Program ("NHESP") Atlas (August 1, 2021, 15th Edition), none of the candidate sites are located within an area of Estimated Habitats of Rare Wildlife or an area of Priority Habitats of Rare Species.

6.2.3 Candidate Site 1 (Milford Street Parcels)

Candidate Site 1 is an approximately 10.6-acre site that consists of multiple existing parcels of land owned by multiple landowners. Figure 6-2a below provides a site locus map for Candidate Site 1.

Figure 6-2a Candidate Site 1 USGS Locus Map



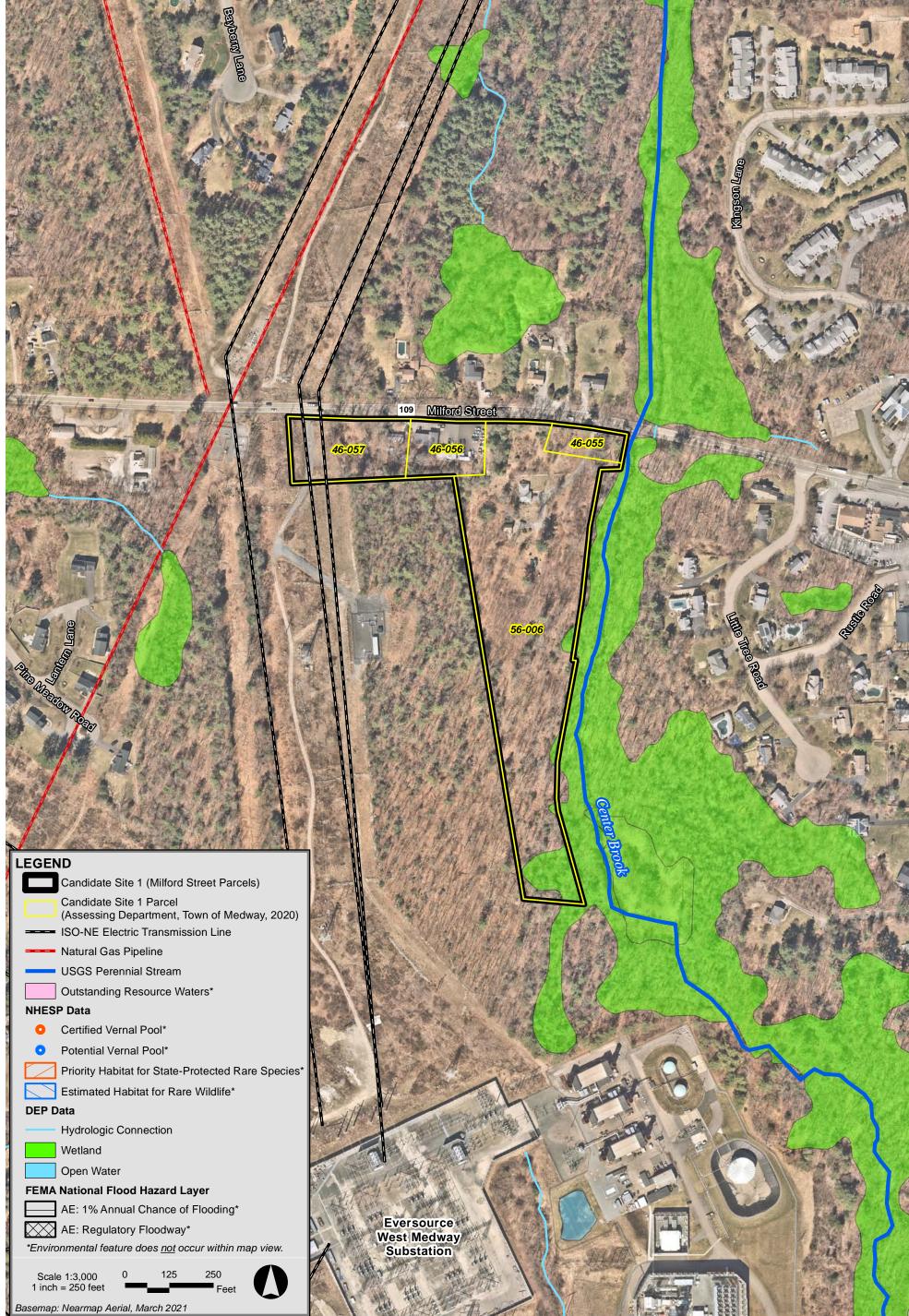
Medway Grid Energy Storage Project Medway, Massachusetts

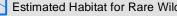


Figure 6-2a Candidate Site 1 (Milford Street Parcels) - USGS Locus Map Candidate Site 1 is an approximately 10.6-acre site that contains approximately 0.85 acres of previously developed areas associated with three existing residences and an existing automotive facility, with the remaining approximately 9.76 acres predominantly forested upland and/or wetlands. Access to this Candidate Site 1 is available from Milford Street (Route 109), located at its northern boundary. There is an existing Eversource electric transmission corridor to the west along with an Eversource Energy's existing West Medway Substation and Exelon Power's West Medway Generating Station to the south, and a perennial stream (Center Brook) and residences off Little Tree Road and Summer Street to the east. The eastern portion of Candidate Site 1 contains vegetated wetlands associated with Center Brook, a perennial waterbody that flows from north to south. Figure 6-2b below shows the existing land uses surrounding this site as well as the environmental features on Candidate Site 1.

phic Info

ion (MassGIS), C





Epsilon

Medway Grid Energy Storage Project Medway, Massachusetts

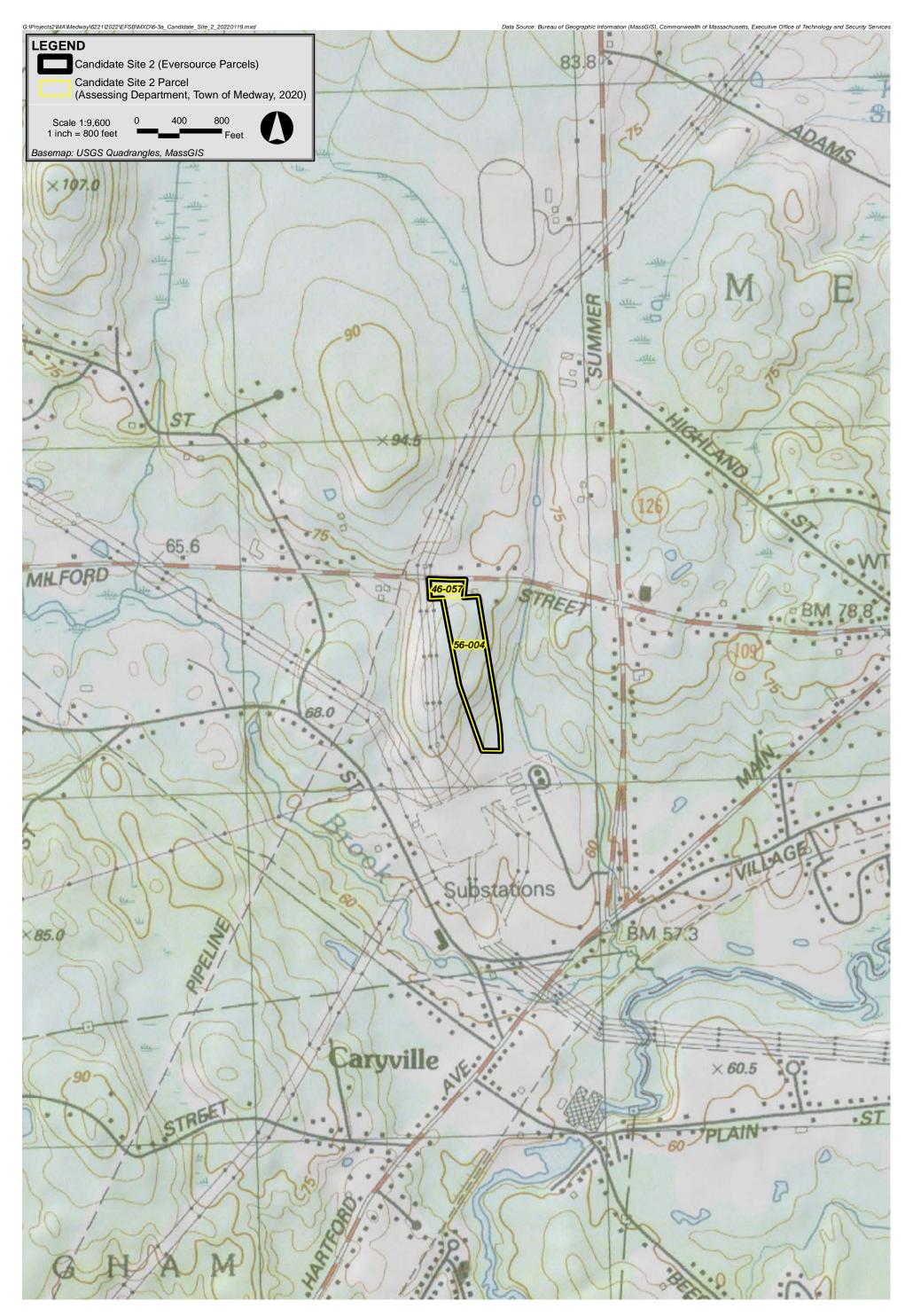
Figure 6-2b

Candidate Site 1 (Milford Street Parcels) -Locational/Environmental Considerations Map

6.2.4 Candidate Site 2 (Eversource Parcels)

Candidate Site 2 is an approximately 11.16-acre site that consists of two parcels of land; one owned by Eversource and the other owned by a private landowner. Figure 6-3a below provides a site locus map for Candidate Site 2. Candidate Site 2 contains a combination of existing electric transmission infrastructure, a private residence and undeveloped forested upland. Access to the Project Site is available from Milford Street. There are existing electric and gas transmission corridors and private residences off Fisher Street and Lantern Lane to the west, the existing West Medway Substation and the Exelon generating station to the south, single family residences and existing electric transmission corridor across Milford Street to the north, and residences and an automotive repair shop along with undeveloped forested uplands and wetlands to the east. Figure 6-3b below shows the existing land uses surrounding this site as well as the environmental features on Candidate Site 2.

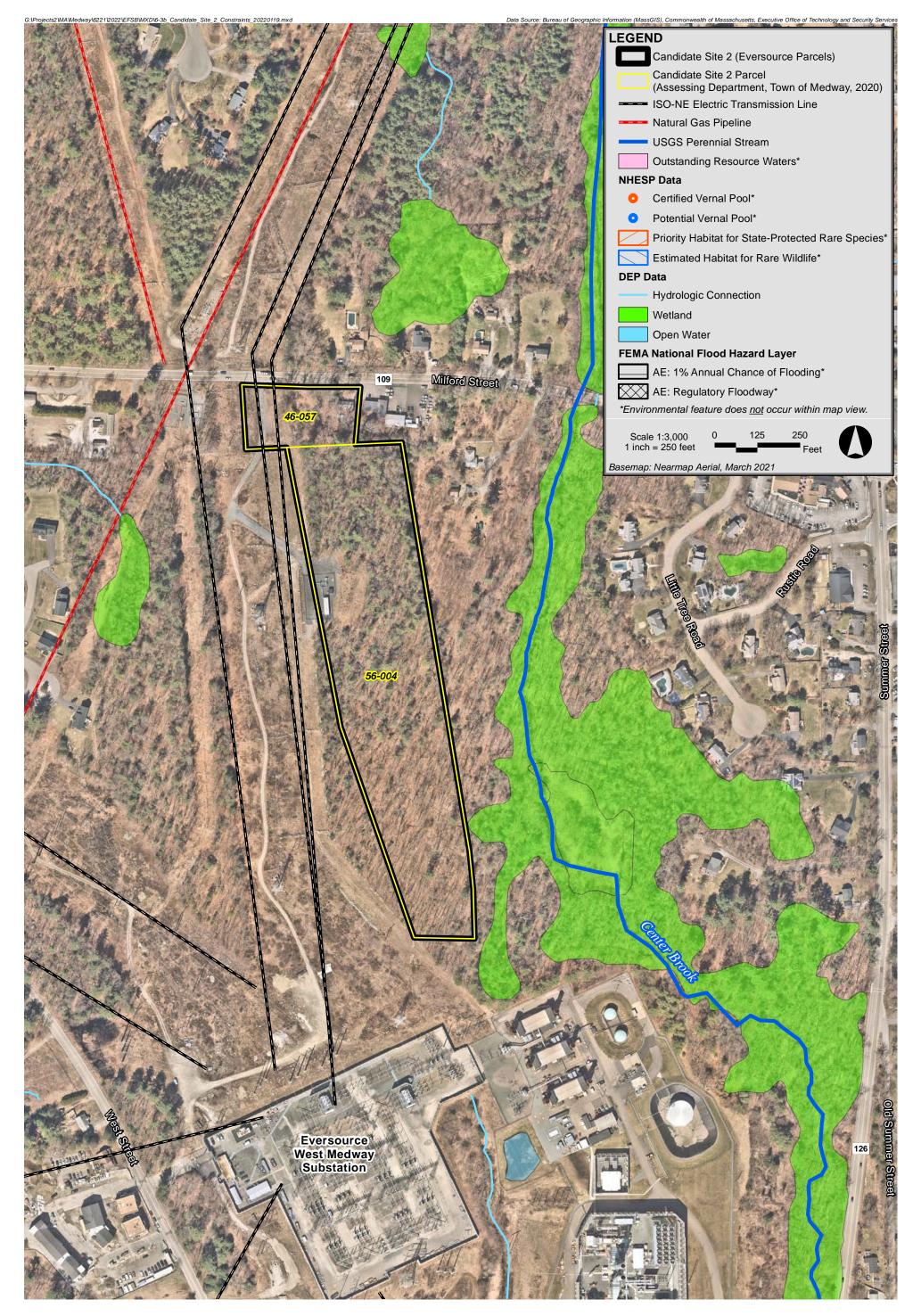
Figure 6-3a Candidate Site 2 USGS Locus Map



Medway Grid Energy Storage Project Medway, Massachusetts



Figure 6-3a Candidate Site 2 (Eversource Parcels) - USGS Locus Map



Medway Grid Energy Storage Project Medway, Massachusetts

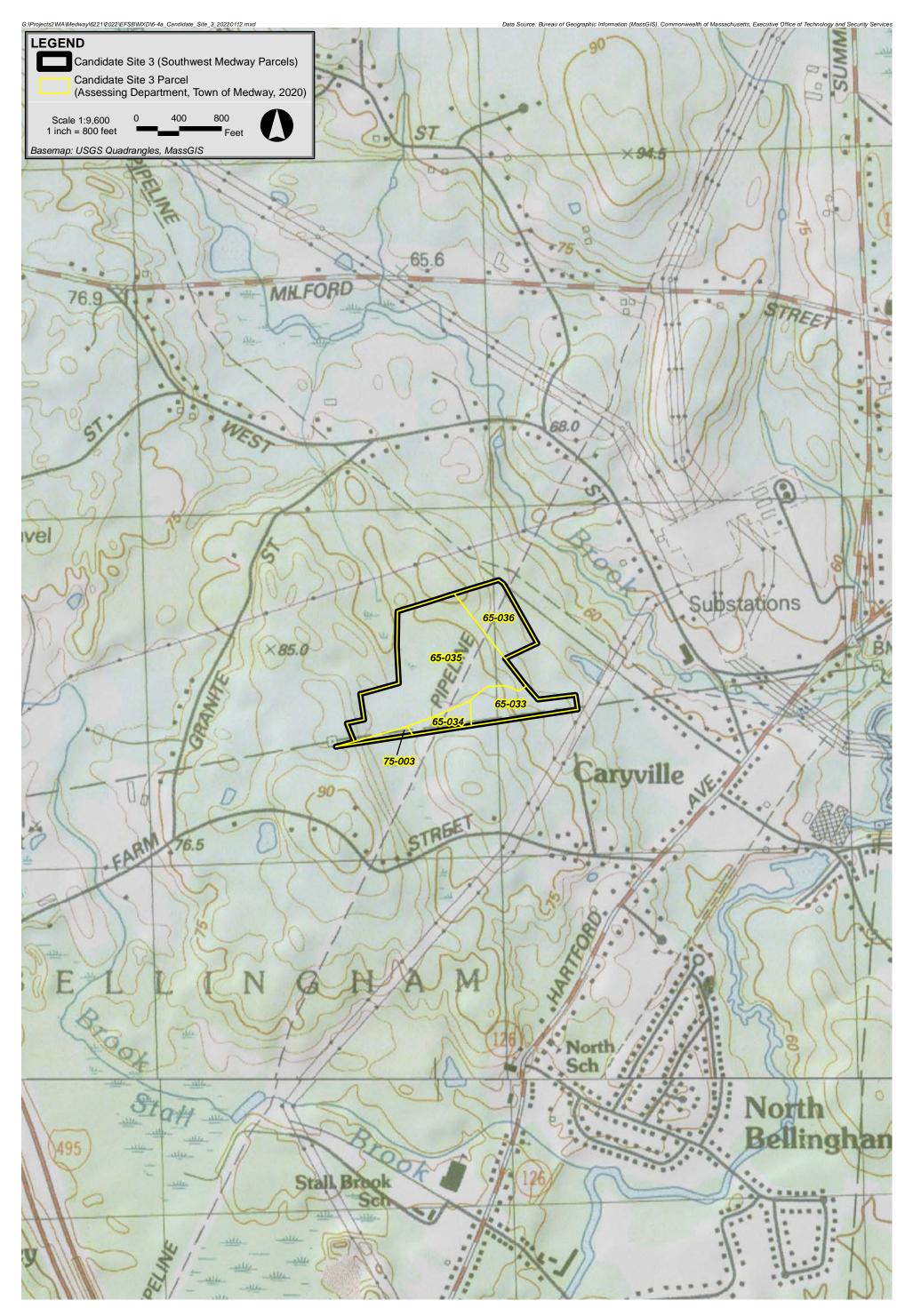


Figure 6-3b

Candidate Site 2 (Eversource Parcels) -Locational/Environmental Considerations Map

6.2.5 Candidate Site 3 (Southwest Medway Parcels)

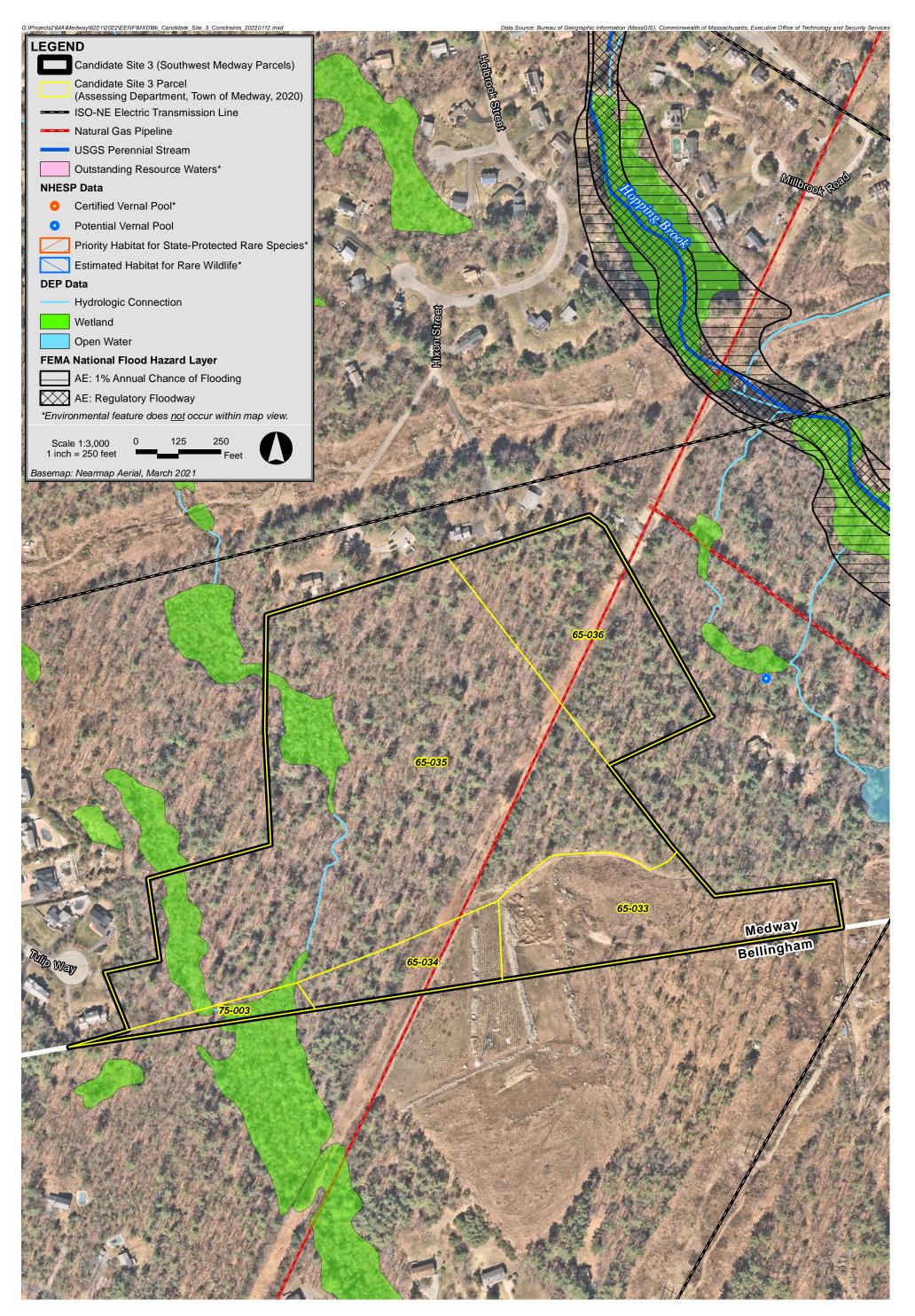
Candidate Site 3 is an approximately 36-acre site that consists of multiple existing parcels of land owned by multiple landowners, located along the Medway/Bellingham town boundary and between Tulip Way and Stone End Road. Figure 6-4a below provides a site locus map for Candidate Site 3. Access to the Project Site is potentially available from Tulip Way or Stone End Road, however, the site does not appear to have frontage on Tulip Way, and it is unclear if access could be obtained from this public roadway. Similarly, the parcel does not appear to have frontage from Stone End Road, but there is an existing dirt access road from Stone End to the agricultural operations and the gas pipeline corridor. There are residences off Hixon Street to the north along with an existing electric transmission corridor, a single-family residence off Stone End Road and undeveloped forested land to the east, undeveloped forested and agricultural land to the south along with an existing electric transmission corridor, and residences along Tulip Way and undeveloped forested land to the east. This site is predominantly undeveloped and forested but does have an existing natural gas transmission corridor crossing it and a portion of the site (approximately 3.3 acres) in the southeast corner has been cleared for what appears to be agricultural purposes. There is an extensive wetland system and waterbody in the western portion of this candidate site. Figure 6-4b below shows the existing land uses surrounding this site as well as the environmental features on Candidate Site 3.



Medway Grid Energy Storage Project Medway, Massachusetts



Figure 6-4a Candidate Site 3 (Southwest Medway Parcels) - USGS Locus Map



Medway Grid Energy Storage Project Medway, Massachusetts



Figure 6-4b

Candidate Site 3 (Southwest Medway Parcels) -Locational/Environmental Considerations Map

6.3 EVALUATION OF CANDIDATE SITES

Using the considerations set forth in Sections 6.2.1 and 6.2.2, the Company evaluated and compared the three candidate sites.

6.3.1 Candidate Site 1 (Milford Street Parcels)

The location of these parcels within the SENE capacity zone and their proximity to the point of interconnection make them a viable option for the Project, and as compared to the other two Candidate Sites, this site is superior for the following reasons. First, the size of the 4 combined parcels, at approximately 10.6 acres, meets the requisite land area needed for a project of the size proposed. Second, the large size of the combined parcels allows the Project site to be buffered from the nearest residence, avoid direct vegetated wetland impacts, and have minimal, if any, impact on the surrounding residential land uses and natural areas. In addition, these parcels contain previously developed areas associated with an existing automotive repair shop and two existing residences. A proposed project at this location could redevelop these existing disturbed areas, thus reducing the need to clear forested areas and other naturally vegetated areas. Third, the owners of the parcels of land were willing to sell them, and there is sufficient frontage and access along Milford Street. Fourth, the parcels are adjacent to existing electrical transmission and distribution infrastructure with available capacity. Fifth, the location of the Project is in an area where existing electrical infrastructure is currently located and consistent with the current electrical transmission infrastructure use of adjacent land use west and south of the site. All of these criteria enhance the viability of a project of this size and scope at this location and this Candidate Site is superior to the other Candidate Sites considered by the Proponent.

6.3.2 Candidate Site 2 (Eversource Parcels)

The location of these parcels within the SENE capacity zone and their proximity to the point of interconnection made them attractive, however, as compared to the other two candidate sites, this site is inferior to Candidate Site 1, but superior to Candidate Site 3 for the following

reasons: development would be primarily within the existing undeveloped and forested portions of the site requiring significant tree removal and was not available for lease or purchase For these reasons, the Company did not further consider Candidate Site 2 for development.

6.3.3 Candidate Site 3 (Southwest Medway Parcels)

The location of these parcels within the SENE capacity zone and their proximity to the point of interconnection made them attractive, however, this site is inferior to the other two candidate sites for the following reasons. First, the parcel does not have access from a public roadway. Further, if access could be obtained from Tulip Way, it would be necessary to cross a forested wetland to gain access to upland areas on the interior of the parcel. Similarly, the parcel does not have frontage along Stone End Road, and it appears that it would be necessary to obtain rights from or purchase additional privately held land to gain access to the parcel from this public roadway. Second, a project on this site would require the clearing of existing undeveloped and forested areas or the use of existing agricultural lands to accommodate the project footprint and utility interconnection. As such, development of the Project at this site would result in greater impacts to undeveloped forested lands and existing agricultural land than the other alternatives considered. If access from either of these public roadways could be obtained, the access to the site would be through existing residential neighborhoods. Third, the site would require the project's transmission interconnection route to be approximately twice as long (3,000 feet) as the two other Candidate Sites.

6.4 NO BUILD ALTERNATIVE

Under the No-Build Alternative, the Project would not be constructed, and the Commonwealth would not meet its need for adequate capacity in the SENE capacity zone. ISO-NE procures capacity based upon its load forecasts for different capacity zones. The Project was awarded a capacity contract via the Forward Capacity Auction ("FCA") 15, based upon its ability to provide this needed capacity by June 1, 2024.

6.5 CONCLUSION

In summary, Candidate Site 1 (Milford Street Parcels) was selected as the Preferred Site for the Project because of its proximity to the interconnection point to the existing 345 kV transmission system at the West Medway Substation, existing access from a major arterial roadway, ability to secure the parcels, ability to avoid and minimize wetland resource area impacts and comply with regulatory performance standards, and ability to take advantage of existing developed areas on the site parcels.

6.6 TRANSMISSION INTERCONNECTION ALTERNATIVES CONSIDERED

The Company evaluated both an underground and an overhead transmission corridor option from the existing Project Substation to the West Medway Substation. As per coordination with Eversource on this alignment across their property, an overhead transmission interconnection would be approximately 1,800 feet long and require clearing of a corridor of approximately 100 feet in width. The transmission line would be supported on eight (8) steel lattice structures approximately 120 feet tall. The overhead transmission option would result in approximately 4.13 acres of land alteration and located within the 100-foot buffer zone to BVW. Instead, the Company proposes to construct an underground transmission line that will be 1,325 feet long and require clearing of a corridor of approximately 25 feet in width. In total, approximately 0.76 acres of land alteration would be required with this design alternative, substantially less when compared to the overhead transmission line design. Moreover, the underground transmission line would be located entirely outside of regulated wetland areas including the 100-foot buffer zone to BVW and RFA.

SECTION 7.0 COMMUNITY OUTREACH

7.1 INTRODUCTION

Medway Grid commits to continuing to work with federal, state, and municipal officials, businesses, and residents in the vicinity of the Project and to provide proactive and transparent communications throughout the life of the Project. Medway Grid's extensive outreach efforts have been aimed at briefing all stakeholders on the need for the Project, consulting with stakeholders on the Project components and design, delineating the projected Project schedule, and explaining the permitting and siting processes, including opportunities for public input. Medway Grid will continue outreach efforts during the licensing and permitting process and will take a hands-on, individualized approach to community outreach during the construction and operations phases of the Project.

Key elements of the Company's outreach program are described below.

7.1.1 Website

The Applicant established a Project website in order to provide basic Project information, answers to frequently asked questions, and contact resources; the website will be kept up to date throughout the duration of Project development.

7.1.2 Project E-mail

The Applicant established a dedicated e-mail address to communicate with property owners and other stakeholders regarding the Project. This email address is listed in all Project outreach materials, including mailings, flyers handed out door-to-door, the website, and community events.

7.1.3 Phone Number

In going door-to-door to talk to nearby residents in support of pre-construction outreach efforts, the Project Team provided their cell phone numbers and invited abutters to reach out with any questions or concerns. The Project Team has corresponded directly with many residents, and they have been encouraged to email or phone directly, at any time.

During construction the Project intends to setup a dedicated Project Hotline number that will be monitored real-time in order to promptly respond to questions or concerns. This number will be promoted on all outreach materials including fact sheets, construction update notifications and the Project website.

7.1.4 Construction Community Outreach Plan

Medway Grid will execute a comprehensive community outreach plan to keep property owners, businesses, and municipal officials, including fire, police, and emergency personnel, up to date on planned construction activities. Prior to the start of construction, dedicated field outreach personnel will notify municipal officials and perform door-to-door outreach to inform abutting property owners, residents, and businesses of planned construction start and work schedule. The Company will provide regular communications and work closely with both abutters and municipal officials to minimize construction impacts throughout the construction duration. The outreach plan will also include:

- In-person pre-construction briefings with municipalities, abutting residences and businesses, and other stakeholder groups, as requested, to outline the overall construction process, key milestones, and expected timelines;
- Regular e-mail updates to municipal officials;
- Periodic letters or postcards to abutters and other stakeholders regarding advance notice of scheduled construction activities, large deliveries and/or milestone construction activities;
- Work area signage as appropriate; and
- Outreach staff available to meet with nearby property owners prior to each major stage of construction.

7.1.5 Open House

Medway Grid hosted a virtual Open House to provide the public with the opportunity to interact with Project subject matter experts, ask questions, and share concerns. At the Open House, the Company provided information on the need for and benefits of the Project, described the Project siting process, explained the components of an energy storage project, discussed safety test results and emergency response operations protocols, and provided detail on Project design and location and schedule. The Open House was held via Zoom on June 23, 2021, at 7pm.

Medway Grid mailed invitations to approximately 128 property owners within one-quarter mile of the proposed project, identified through a Town-certified list. Medway Grid also notified Town Staff and elected officials of the meeting, resulting in both the Town and elected officials promoting the event on their social media channels (Facebook and Twitter) as well as other targeted social media including Friends of Medway.

The Project Outreach staff also canvassed door-to-door in advance of the Open House to encourage residents to attend. A copy of the invitation that also included a QR code to scan to join the meeting was provided.

For those individuals who were interested in viewing the Open House but could not attend, the Project Team coordinated for the recording of the event to run several times on Medway Cable Access Television and for the recording to be hosted on their <u>website</u> so that it is available for livestreaming.

7.1.6 Contractor Training

In advance of construction, the Outreach Team will assist with performing contractor training. This training is to stress the importance of contractors working responsibly and respectfully in the community and adhering to commitments and permitted work hours established with the Town.

7.1.7 Municipal and Stakeholder Briefings

Medway Grid has met frequently with municipal officials and other stakeholders in the Town. A summary list of many of the outreach meetings with the municipalities, special interest groups, regulatory agencies and other officials is provided in Table 1-1.

Date	Group	Торіс
December 16, 2021	Medway Staff	Meeting to present project plans to Medway Town Staff, seek input, answer questions
July 23, 2021	Medway Consultant	Meeting to discuss project plan, RFI, and related questions
July 21, 2021 In-Person	Medway Staff	Meeting to discuss EFSB process & schedule; discuss timing to receive input from Town Departments
June 23, 2021 Via Zoom	Medway Residents, Abutters, Elected Officials	Project Open House / Q&A with subject matter experts from Medway Grid Team
June 3, 2021 In-Person	Medway Staff	Meeting to discuss possible local land use permitting paths, save-the-date for upcoming Open House
May 24, 2021 Via Teams	Medway Fire Chief Lynch, Deputy Chief Fasolino	Introductory meeting to discuss Project design, safety protocols, emergency response protocols
May 12, 2021 Via Teams	Medway Staff	Meeting to discuss project plan and related questions
May 5, 2021 Via Zoom	Medway Residents, Elected Officials, Greater Community	Battery Storage 101, Hosted by Representative Jeff Roy Informational Session on Energy Storage
April 2, 2021 Via Teams	Medway Staff & 1-2 Elected Officials	Meeting to discuss upcoming Town Meeting, local planning & zoning process
March 31, 2021 Via Zoom	Medway Energy & Sustainability Committee & Medway Residents	Attend meeting to talk with Committee & public about proposed Project and answer questions
March 30, 2021 Via Zoom	Medway Planning & Economic Development Board & Medway Residents	Attend meeting to talk with Board & public about proposed project and answer questions
March 23, 2021 Via Zoom	Medway Planning & Economic Development Board & Medway Residents	Attend meeting to talk with Board & public about proposed project and answer questions
March 15, 2021 Via Zoom	Medway Select Board & Medway Residents	Attend meeting to talk with Board & public about proposed project and answer questions
March 9, 2021 Via Zoom	Medway Planning & Economic Development Board & Medway Residents	Attend meeting to talk with Board & public about proposed project and answer questions
February 5, 2021 Via Teams	Medway Staff	Meeting to discuss proposed Project and potential for local permitting path
December 17, 2019 In-Person	Medway Staff, Department Heads	Meeting to discuss project concept, project location, intention to bid project to FCA
September 30, 2019 Telephone	Medway Staff	Meeting to introduce project concept, project location, possible approaches to local permitting/zoning
September 23, 2019 In-Person	Medway Staff	Meeting to introduce project concept, project location, possible approaches to local permitting/zoning
December 16, 2021	Medway Staff, Department Heads	Meeting to review the final project layout and details prior to MEPA and EFSB filings.

Table 1-1: Project Outreach Meetings

SECTION 8.0 CONSISTENCY WITH COMMONWEALTH POLICIES

8.1 CONSISTENCY WITH POLICIES OF THE COMMONWEALTH

The Project, if approved, would contribute 500 MWh of energy storage toward the goals delineated by the Commonwealth of Massachusetts in its *State of Charge* report and other initiatives and mandates. As discussed below, it is designed to enhance the efficiency, affordability, resiliency, and cleanliness of the electric grid by modernizing the way that electricity is generated and delivered.

8.2 GLOBAL WARMING SOLUTIONS ACT

The Global Warming Solutions Act ("GWSA") required a 25% reduction in greenhouse gas ("GHG") emissions from all sectors of the economy below the 1990 baseline emission level by 2020, and mandates at least an 80% reduction by 2050. The Executive Office of Energy and Environmental Affairs is working toward the development of the Massachusetts Decarbonization Roadmap to 2050 that will identify "strategies, policies, and implementation pathways for MA to achieve at least 80% GHG reductions by 2050, including multiple pathways to near zero emissions. On January 21, 2020, Governor Baker announced the Commonwealth's intent to pursue the more aggressive near zero target to further reduce emissions.

The GWSA requires that the Secretary of Energy and Environmental Affairs, in consultation with the MassDEP and DOER, adopt separate statewide GHG emissions limits for 2020, 2030, 2040, and 2050. On April 22, 2020, the Secretary established a 2050 statewide emissions limit of near zero greenhouse gas emissions defined as follows:

A level of statewide greenhouse gas emissions that is equal in quantity to the amount of carbon dioxide or its equivalent that is removed from the atmosphere and stored annually by, or attributable to, the Commonwealth; provided, however, that in no event shall the level of emissions be greater than a level that is 85 percent below the 1990 level.

Approval of the Project would contribute to the Commonwealth's achievement of important health, environmental, and energy policies, including meeting the Commonwealth's 2050 near zero emissions goal under the GWSA. Battery storage facilities increase the energy efficiency of the electric grid with minimal environmental impacts. As described throughout this Petition, there is no waste produced by energy storage systems and no fuels emitted by the BESS. Furthermore, the system increases grid reliability during peak load times, and can perform other grid services, thereby offsetting the need for additional fossil-fuel fired peaking units, further reducing greenhouse gas emissions and limiting the environmental impacts of such projects.

8.3 ENERGY STORAGE INITIATIVE

The Project is consistent with the Energy Storage Initiative. As noted above, the Baker Administration launched the Energy Storage Initiative in May 2015 with the goal of advancing the energy storage segment of the Massachusetts clean energy industry by: (1) attracting, supporting and promoting storage companies in Massachusetts; (2) accelerating the development of early commercial storage technologies; (3) expanding markets for storage technologies, and valuing storage benefits to clean energy integration, grid reliability, system wide efficiency, and peak demand reduction; and (4) recommending the developing policies, regulations and programs that help achieve those objectives.

As part of the 2015 Energy Storage Initiative, the Department of Energy Resources ("DOER") and Massachusetts Clean Energy Center partnered to conduct a study, the *State of Charge*, to review the storage industry landscape, review economic development and market opportunities for energy storage, and evaluate potential policies and programs to support energy storage development in Massachusetts. DOER has implemented many of the 2016 *State of Charge* report's recommendations to promote energy storage in the state.

The *State of Charge* report identified ratepayer cost benefits of energy storage associated with "reduced peak demand, deferred transmission and distribution investments,

reduced GHG emissions, reduced cost of renewables integration, deferred new capacity investments, and increased grid flexibility, reliability and resiliency."⁸ The report also identified near and long term economic and workforce benefits to Massachusetts by implementing energy storage.

8.4 CLEAN PEAK STANDARD

The Project is consistent with the Massachusetts Clean Peak Standard ("CPS"). The CPS is "designed to provide incentives to clean energy technologies that can supply electricity or reduce demand during seasonal peak demand periods established by DOER" (*see* Attachments 2 and 3). According to DOER, Clean Peak Resources contribute to the Commonwealth's environmental protection goals concerning air emissions, including those required by the Global Warming Solutions Act ("GWSA"), discussed below, by displacing non-renewable generating resources while reducing peak demand and system losses and increasing grid reliability.

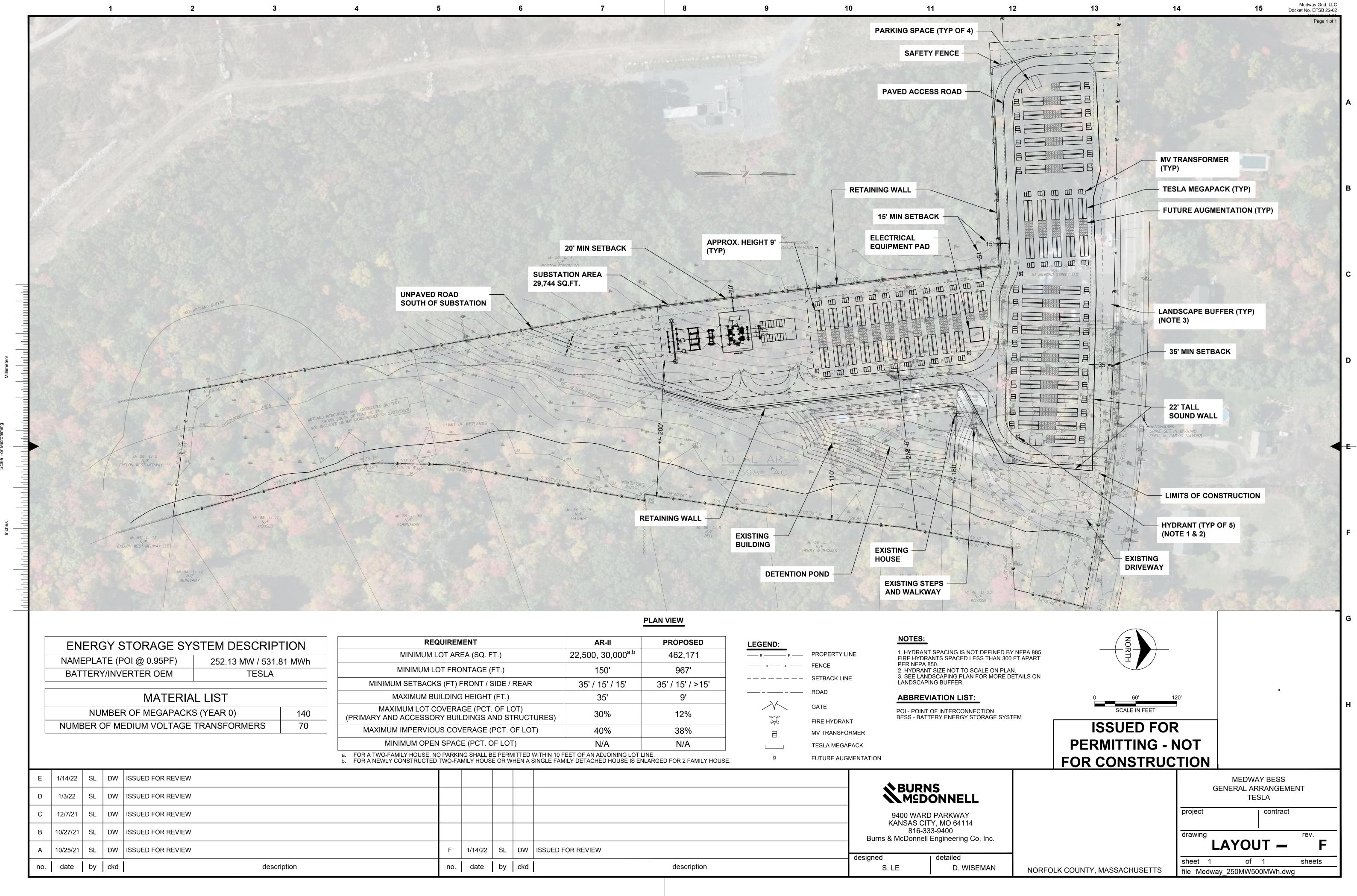
Similar to the Massachusetts Renewable Portfolio Standard, the CPS requires a percentage of electricity delivered during peak hours to come from certain eligible Clean Peak Sources. Clean Peak Sources include Qualified RPS Resources, Qualified Energy Storage Systems, or Demand Response Resources that generate, dispatch, or discharge electricity into the electric distribution system during certain peak periods, or alternatively, reduce load on the system during those periods.

The Project is uniquely positioned to satisfy the CPS. One of the many benefits of the Project is that it is "fully dispatchable," capable of providing an energy source directly to the transmission system during peak load and can store electricity during off peak periods, whereas intermittent renewables and renewable-storage hybrid projects are unable to fully produce on demand and are limited in their charge and discharge by implementation rules of the federal

Investment Tax Credit that they use in financing. Moreover, fully dispatchable BESS installations like the Project can perform additional grid services that are currently provided by traditional power plants. Standalone BESS like the Project are thus the ideal clean facilities to achieve the objectives of the CPS because they displace non-renewable generating sources, thereby reducing air emissions, while reducing peak demand and increasing reliability.

8.5 ENVIRONMENTAL JUSTICE POLICY

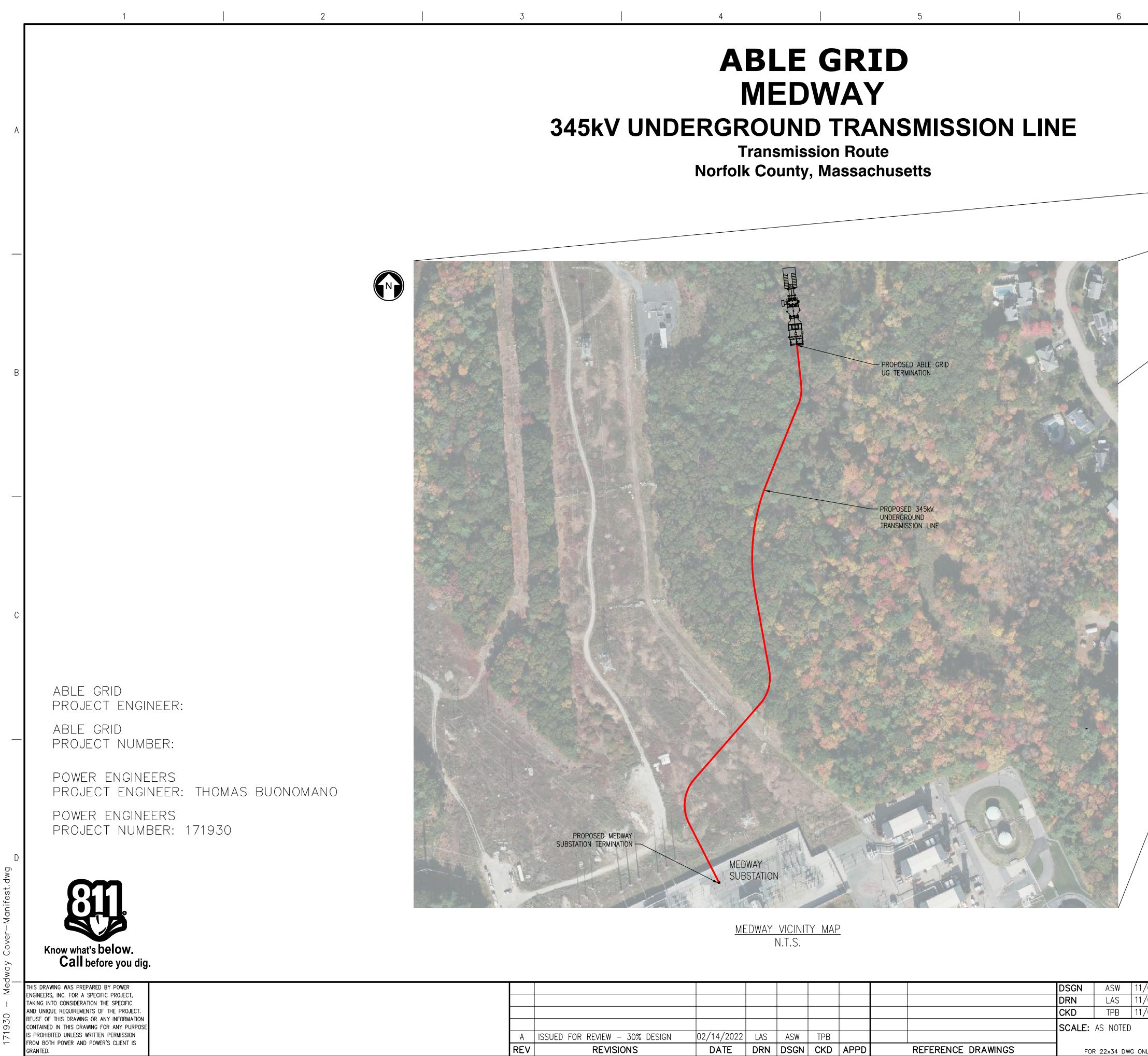
There are no mapped Environmental Justice ("EJ") populations within 1 mile of the proposed Project. There are several mapped areas of EJ populations on the west side of Route 495 in Milford, Massachusetts and along Union Street in Franklin, Massachusetts that are within 5 miles of the proposed Project, however, the Project does not impact air quality or have other environmental impacts that would disproportionately affect these populations. The Project does not qualify for MEPA's enhanced public involvement protocols or enhanced analysis of potential project impacts on environmental justice populations. The closest mapped EJ population is on the west side of Route 495 in Milford and is approximately 2.25 miles from the Project Site.



ENERGY STORAGE SY			REC	QUIREMENT	AR-II	PROPOSED	LEGEND:		NOTES:
NAMEPLATE (POI @ 0.95PF)			MINIMUM L	_OT AREA (SQ. FT.)	22,500, 30,000 ^{a,b}	462,171	₽₽₽	PROPERTY LINE	1. HYDRANT SPACING IS NOT DEFI FIRE HYDRANTS SPACED LESS TH
BATTERY/INVERTER OEM	252.13 MW / 531.81 MV TESLA	VN			150'	967'	x x	FENCESETBACK LINE	PER NFPA 850. 2. HYDRANT SIZE NOT TO SCALE C 3. SEE LANDSCAPING PLAN FOR M LANDSCAPING BUFFER.
MATERIA	LIST			S (FT) FRONT / SIDE / REAR JILDING HEIGHT (FT.)	35' / 15' / 15' 35'	35' / 15' / >15' 9'		– ROAD	ABBREVIATION LIST:
NUMBER OF MEGAPACKS (YEAR 0)140NUMBER OF MEDIUM VOLTAGE TRANSFORMERS70				OVERAGE (PCT. OF LOT) RY BUILDINGS AND STRUCTURES)	30%	12%) X X	GATE FIRE HYDRANT	POI - POINT OF INTERCONNECTION BESS - BATTERY ENERGY STORAG
				US COVERAGE (PCT. OF LOT)	40%	38%		MV TRANSFORMER	
			MINIMUM OPEN	N SPACE (PCT. OF LOT)	N/A	N/A		TESLA MEGAPACK	
				O PARKING SHALL BE PERMITTED WITHIN 10 I TWO-FAMILY HOUSE OR WHEN A SINGLE FAM	Ξ. ∅	FUTURE AUGMENTATION			
/14/22 SL DW ISSUED FOR REVIEW									
1/3/22 SL DW ISSUED FOR REVIEW									NEDONNELL
2/7/21 SL DW ISSUED FOR REVIEW									

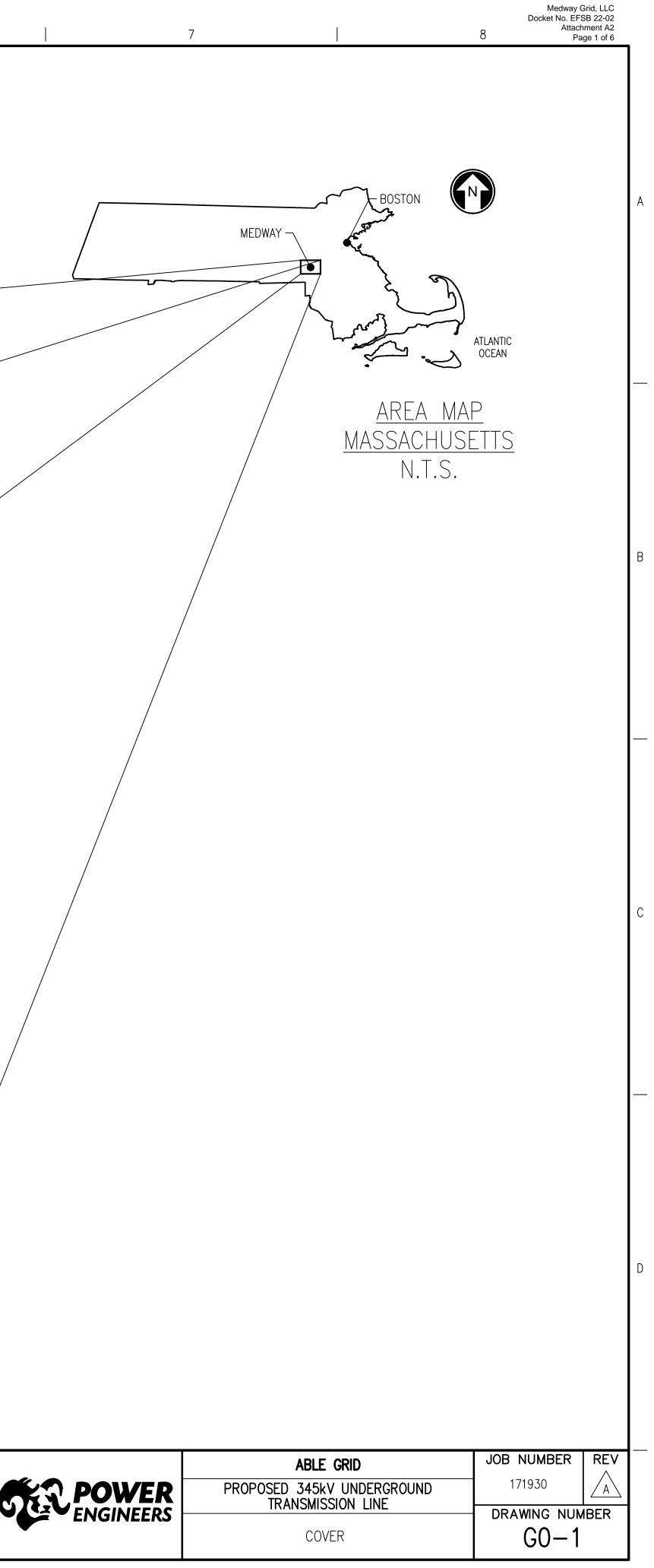
no.	date	by	ckd	description	no.	date
А	10/25/21	SL	DW	ISSUED FOR REVIEW	F	1/14/22
В	10/27/21	SL	DW	ISSUED FOR REVIEW		
С	12/7/21	SL	DW	ISSUED FOR REVIEW		
D	1/3/22	SL	DW	ISSUED FOR REVIEW		

					IS ONNELL
				KANSAS CIT) PARKWAY Y, MO 64114
				816-33 Burns & McDonnell	3-9400 Engineering Co. Inc
22	SL	DW	ISSUED FOR REVIEW	designed	ı detailed
e	by	ckd	description	S. LE	D. WISEMA



GRANTED.

							DSGN	ASW	11/05/2021	
							DRN	LAS	11/05/2021	
							CKD	TPB	11/05/2021	
							SCALE: AS NOTED			
FOR REVIEW – 30% DESIGN	02/14/2022	LAS	ASW	TPB						
REVISIONS	DATE	DRN	DSGN	CKD	APPD	REFERENCE DRAWINGS	FOR 22x34 DWG ONLY			



DRAWING NO.	Т
G0-1	
G0-2	DRAWING MA
P1-1	PLAN & PROF
P1-2	PLAN & PROFI
P2-1	EA
S1-1	TRANSIT

3

2

	 <u>GENERAL NOTES</u> 1. THE UTILITIES AND NATURAL FEATURES SHOWN HEREON ARE BASED ON: GOOGLE EARTH 2020 GEOTECH BORINGS BY GZA ON 10/18/2021 MEDWAY BESS INTERCONNECTION DRAWING PROVIDED BY ABLE GRID ENERGY ON 10/25/2021 UTILITY LOCATES BY GPRS PROVIDED BY ABLE GRID ENERGY ON 10/26/2021 EXELON MAJOR SITE PLAN SET PROVIDED BY ABLE GRID ENERGY ON 10/26/2021 SITE SURVEY DONE BY LAND PLANNING, INC, PROVIDED BY ABLE GRID ENERGY ON 10/26/2021 OTHER FACILITIES MAY EXIST NOT DISCOVERED THROUGH THE RECORD CHECK. THE CONTRACTOR SHALL VERIFY THE EXACT LOCATION, BOTH HORIZONTAL AND VERTICAL, OF ALL
В	 UTILITIES THROUGH THE APPROPRIATE UTILITY COMPANIES. CALL BEFORE YOU DIG, 811 OR 1-888-344-7233. STATE PLANE COORDINATE (HORIZONTAL DATUM): REFERENCES MASSACHUSETTS PLAN COORDINATE SYSTEM - NAD83 1983, US FOOT. STATE PLANE COORDINATE (VERTICAL DATUM): NAVD 1988. THE COORDINATE SYSTEM THAT THIS SURVEY WAS BASED UPON IS STATE PLANE NAD 88. VERTICAL LOCATION OF SUBSURFACE UTILITY LINES ARE BASED ON ASSUMED DEPTHS USING BEST AVAILABLE INFORMATION AND ARE APPROXIMATE AND MAY VARY FROM THE ACTUAL VERTICAL LOCATIONS. BUILDING SERVICE CONNECTIONS (ELECTRIC, GAS, TELEPHONE, WATER AND SANITARY) ARE NOT SHOWN. CONTRACTOR IS TO ASSUME SERVICES ARE PRESENT TO ALL
	 BUILDINGS. ALL WORK SHALL BE PERFORMED WITHIN THE DESIGNATED UTILITY PROPERTY. ALL AREAS DISTURBED BY CONSTRUCTION SHALL BE RETURNED TO THE ORIGINAL CONDITION OR BETTER AS DETERMINED BY OWNER AND IN ACCORDANCE WITH THE APPLICABLE LOCAL AND/OR STATE REQUIREMENTS. CIVIL CONTRACTOR SHALL HAUL AWAY ALL UNUSED EXCAVATED MATERIAL TO PERMITTED SOIL DISPOSAL SITE.
С	 CIVIL CONTRACTOR SHALL BE RESPONSIBLE FOR REPLACING AND REPAIRING ALL PAVEMENT DISTURBED DUE TO THE CONSTRUCTION. ALL REPLACEMENT AND REPAIRS SHALL BE PERFORMED IN ACCORDANCE WITH THE APPLICABLE LOCAL AND/OR STATE REQUIREMENTS. CIVIL CONTRACTOR SHALL BE RESPONSIBLE FOR REPAIRING ANY & ALL UTILITIES AND FACILITIES DAMAGED DURING CONSTRUCTION IN ACCORDANCE WITH THE APPLICABLE UTILITY SPECIFICATION, LOCAL AND/OR STATE REQUIREMENTS. CIVIL CONTRACTOR SHALL BE RESPONSIBLE FOR REMOVING ABANDONED CONDUIT AS REQUIRED IN ACCORDANCE WITH THE APPLICABLE LOCAL AND/OR STATE REQUIREMENTS. CUT AND CAP ABANDONED UTILITIES (DO NOT CUT GAS LINES).
	 CIVIL CONTRACTOR SHALL BE RESPONSIBLE FOR BUILDING TEMPORARY AND PERMANENT ACCESS ROADS. ALL TEMPORARY ACCESS ROADS WILL BE REMOVED AND ORIGINAL GRADE WILL BE RESTORED WHEN WORK IS COMPLETED. CIVIL CONTRACTOR SHALL BE RESPONSIBLE FOR IMPLEMENTING BEST MANAGEMENT PRACTICES FOR CONTROLLING EROSION AND SEDIMENTATION. CIVIL CONTRACTOR SHALL RESTORE GRADE TO PRE-CONSTRUCTION ELEVATIONS UNLESS OTHERWISE NOTED ON THE DRAWINGS. DUCT BANK SHALL MAINTAIN A COVER DEPTH OF 3'-0" BELOW GRADE.
	 ALL VERTICAL RADII ARE 400', AND HORIZONTAL RADII ARE 500' UNLESS OTHERWISE NOTED. DUCT BANK SHALL MAINTAIN MINIMUM HORIZONTAL CLEARANCE OF 1'-0" AND A MINIMUM VERTICAL CLEARANCE OF 1'-0" OVER OR UNDER EXISTING UTILITIES, UNLESS OTHERWISE SHOWN ON DRAWINGS.
Medway Cover-Manifest.dwg 	Know what's below. Call before you dig.
171930 - Med	THIS DRAWING WAS PREPARED BY POWER ENGINEERS, INC. FOR A SPECIFIC PROJECT, TAKING INTO CONSIDERATION THE SPECIFIC AND UNIQUE REQUIREMENTS OF THE PROJECT. REUSE OF THIS DRAWING OR ANY INFORMATION CONTAINED IN THIS DRAWING FOR ANY PURPOSE IS PROHIBITED UNLESS WRITTEN PERMISSION FROM BOTH POWER AND POWER'S CLIENT IS GRANTED.

1

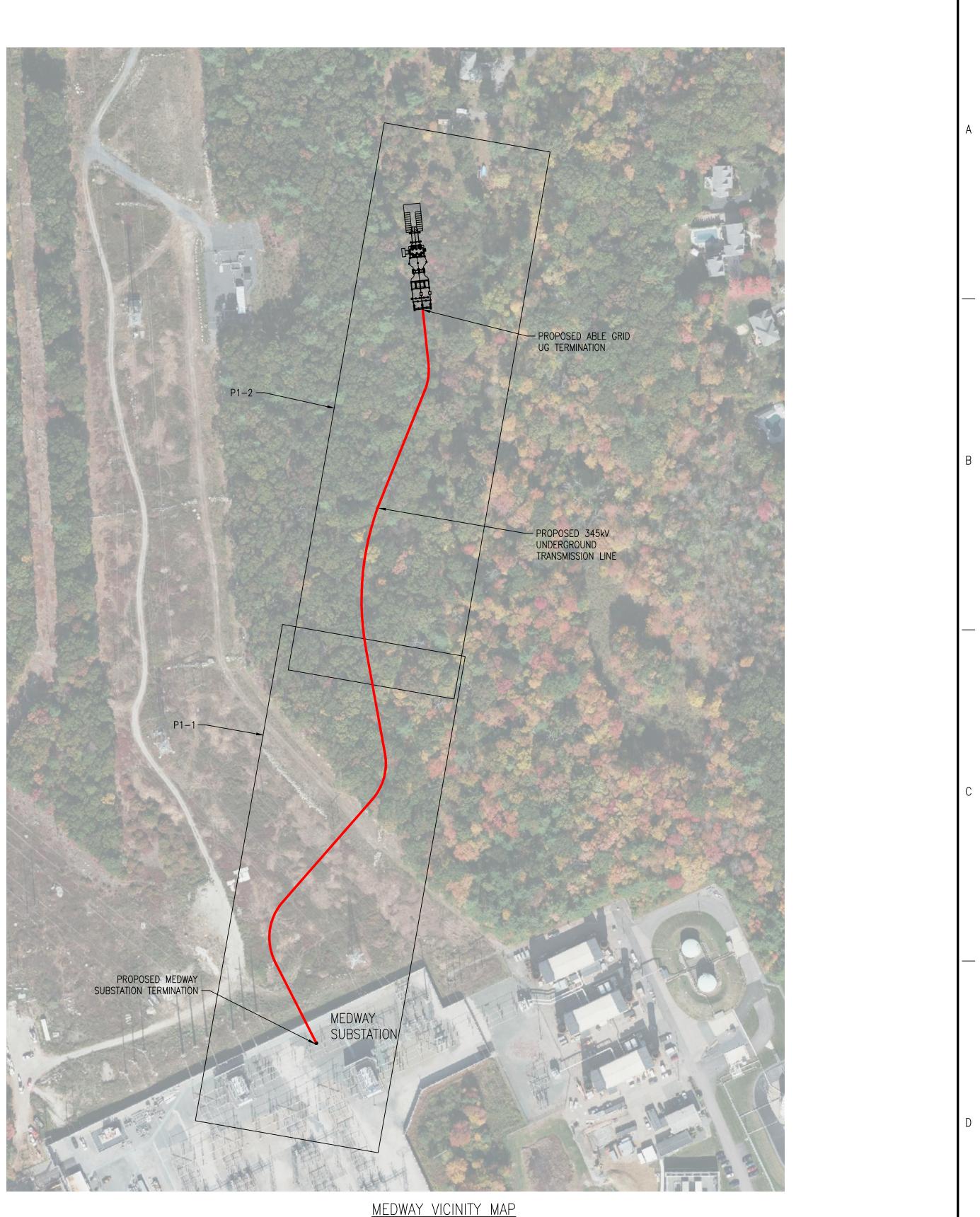
4

5

6

DRAWING MANIFEST		
TLE/DESCRIPTION	REVISION	DATE
COVER	А	2/14/2022
NIFEST AND GENERAL NOTES	А	2/14/2022
LE STA. 0+00 TO STA. 8+00	А	2/14/2022
E STA. 8+00 TO STA. 14+65	А	2/14/2022
SEMENT OVERVIEW	А	2/14/2022
ON STRUCTURE DETAILS	А	2/14/2022



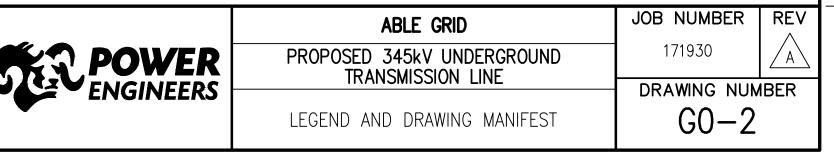


								DSGN	ASW	11/05/2021	
								DRN	LAS	11/05/2021	
								CKD	TPB	11/05/2021	
								SCALE: AS NOTED			V
FOR REVIEW – 30% DESIGN	02/14/2022	LAS	ASW	TPB							
REVISIONS	DATE	DRN	DSGN	CKD	APPD	REFERENC	FOF	22x34 DW	G ONLY		
											-

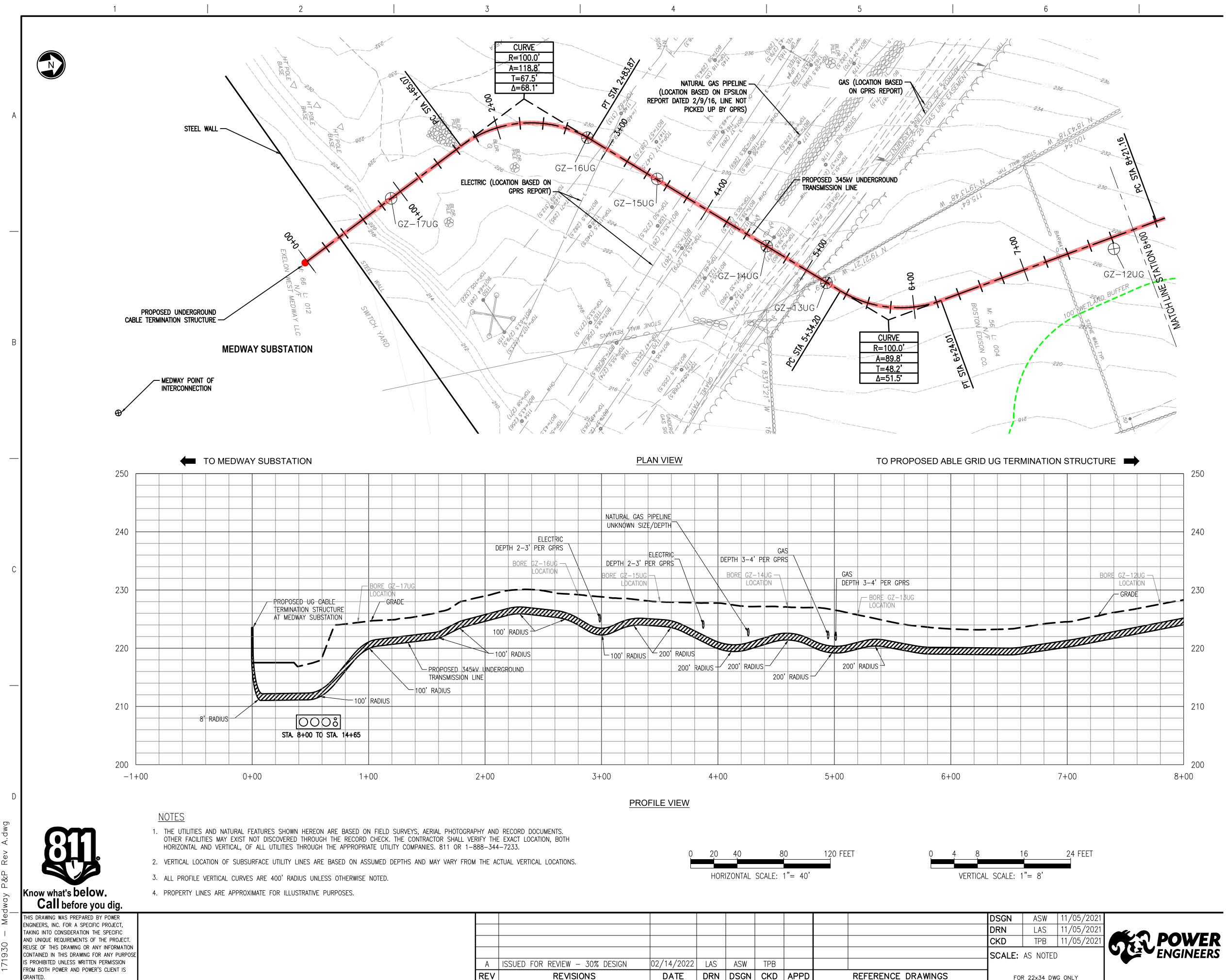
<u>LEGEND</u>

CLF	CHAIN LINK FENCE
⊡ CB/DH	CONCRETE BOUND W/ DRILL HOLE
FND	FOUND
IR/IP	IRON ROD/PIPE
¢	LIGHT POLE
O UP	UTILITY POLE
	CORRUGATED METAL PIPE
CBN	CATCH BASIN
RCP	REINFORCED CONCRETE PIPE
EOP	EDGE OF PAVEMENT
GP 🔘	GATE POST
	SIGN
G	GAS
————— E ————	UNDERGROUND ELECTRIC
—— ОНШ ——	OVERHEAD WIRES
2−3●	WETLAND FLAGS
	100' WETLAND BUFFER ZONE
	200' RIVERFRONT AREA

MEDWAY VICINITY MAP N.T.S.

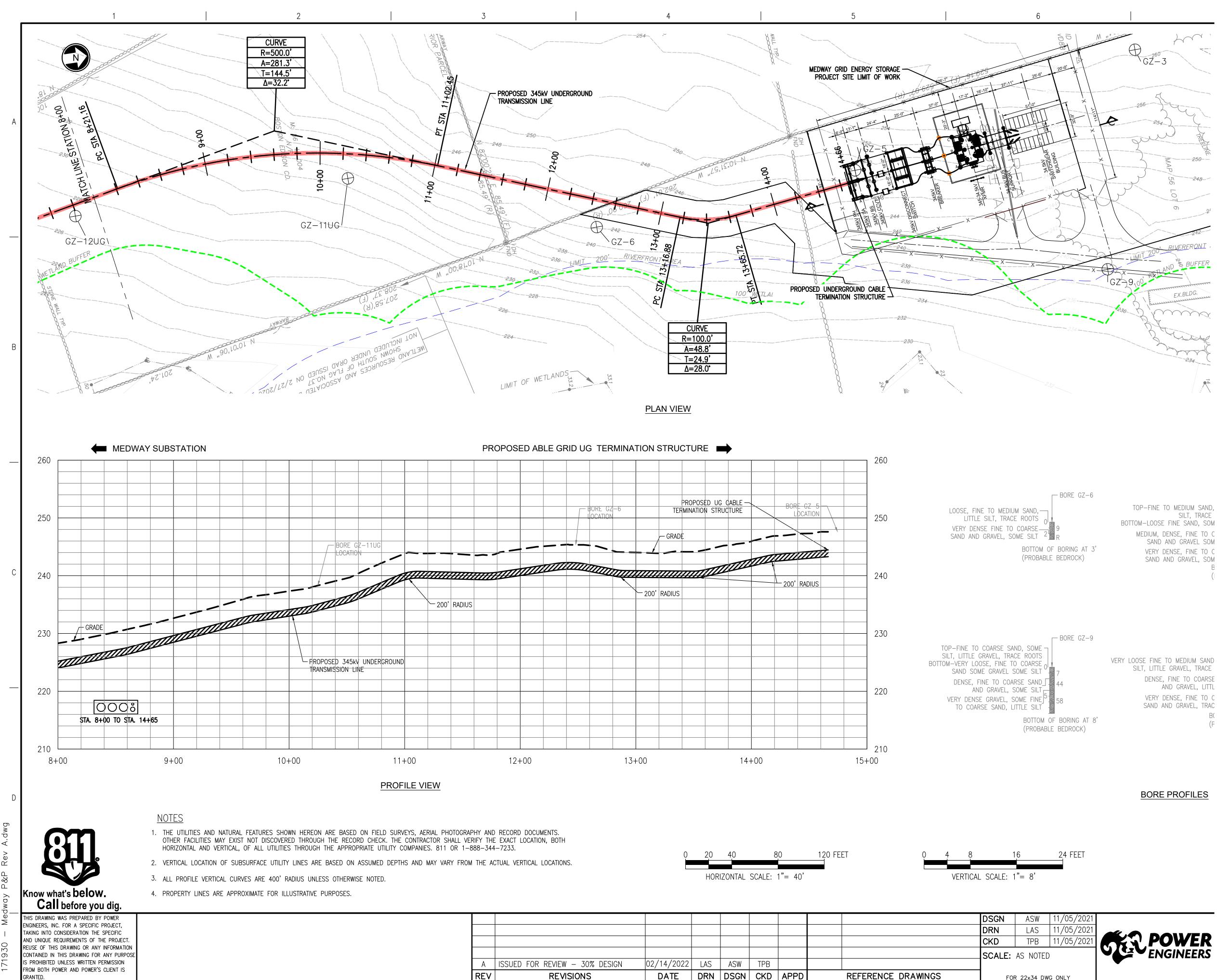


Medway Grid, LLC Docket No. EFSB 22-02 Attachment A2 Page 2 of 6



REVISIONS	DATE	DRN	DSGN	CKD	APPD	REFERENCE DRAWINGS	FO	R 22x34 DW	G ONLY	
FOR REVIEW – 30% DESIGN	02/14/2022	LAS	ASW	TPB				· · · · · · · · - ·		1
							SCALE:	SCALE: AS NOTED		
							CKD	TPB	11/05/2021	
							DRN	LAS	11/05/2021	
							DSGN	ASW	11/05/2021	
			_							

Medway Grid, LLC Docket No. EFSB 22-02 Attachment A2 Page 3 of 6



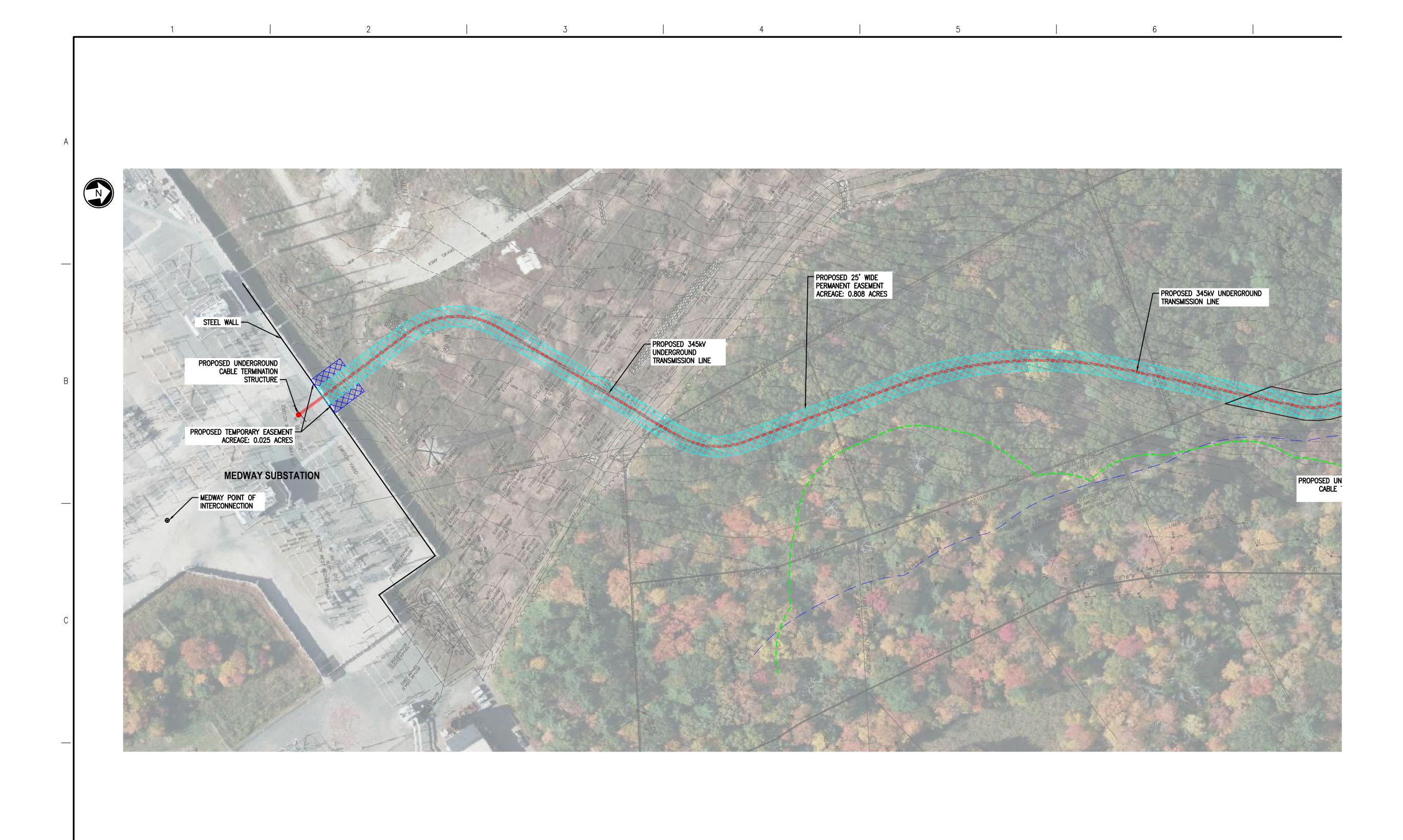
DATE | DRN | DSGN | CKD | APPD REV REVISIONS

GRANTED.

FOR 22x34 DWG ONLY

Medway Grid, LLC Docket No. EFSB 22-02 Attachment A2 Page 4 of 6

TOP-FINE TO MEDIUM SAND, BOTTOM-LOOSE FINE SAND, SOM MEDIUM, DENSE, FINE TO C SAND AND GRAVEL SOM VERY DENSE, FINE TO C SAND AND GRAVEL, SOM





- THE UTILITIES AND NATURAL FEATURES SHOWN HEREON ARE BASED ON FIELD SURVEYS, AERIAL PHOTOGRAPHY AND RECORD DOCUMENTS. OTHER FACILITIES MAY EXIST NOT DISCOVERED THROUGH THE RECORD CHECK. THE CONTRACTOR SHALL VERIFY THE EXACT LOCATION, BOTH HORIZONTAL AND VERTICAL, OF ALL UTILITIES THROUGH THE APPROPRIATE UTILITY COMPANIES. 811 OR 1–888–344–7233.
- 2. VERTICAL LOCATION OF SUBSURFACE UTILITY LINES ARE BASED ON ASSUMED DEPTHS AND MAY VARY FROM THE ACTUAL VERTICAL LOCATIONS.
- 3. ALL PROFILE VERTICAL CURVES ARE 400' RADIUS UNLESS OTHERWISE NOTED.
- 4. PROPERTY LINES ARE APPROXIMATE FOR ILLUSTRATIVE PURPOSES.

Know what's **below**. Call before you dig.

g⊻

σ \triangleleft

Ч Ц

 \bigcirc

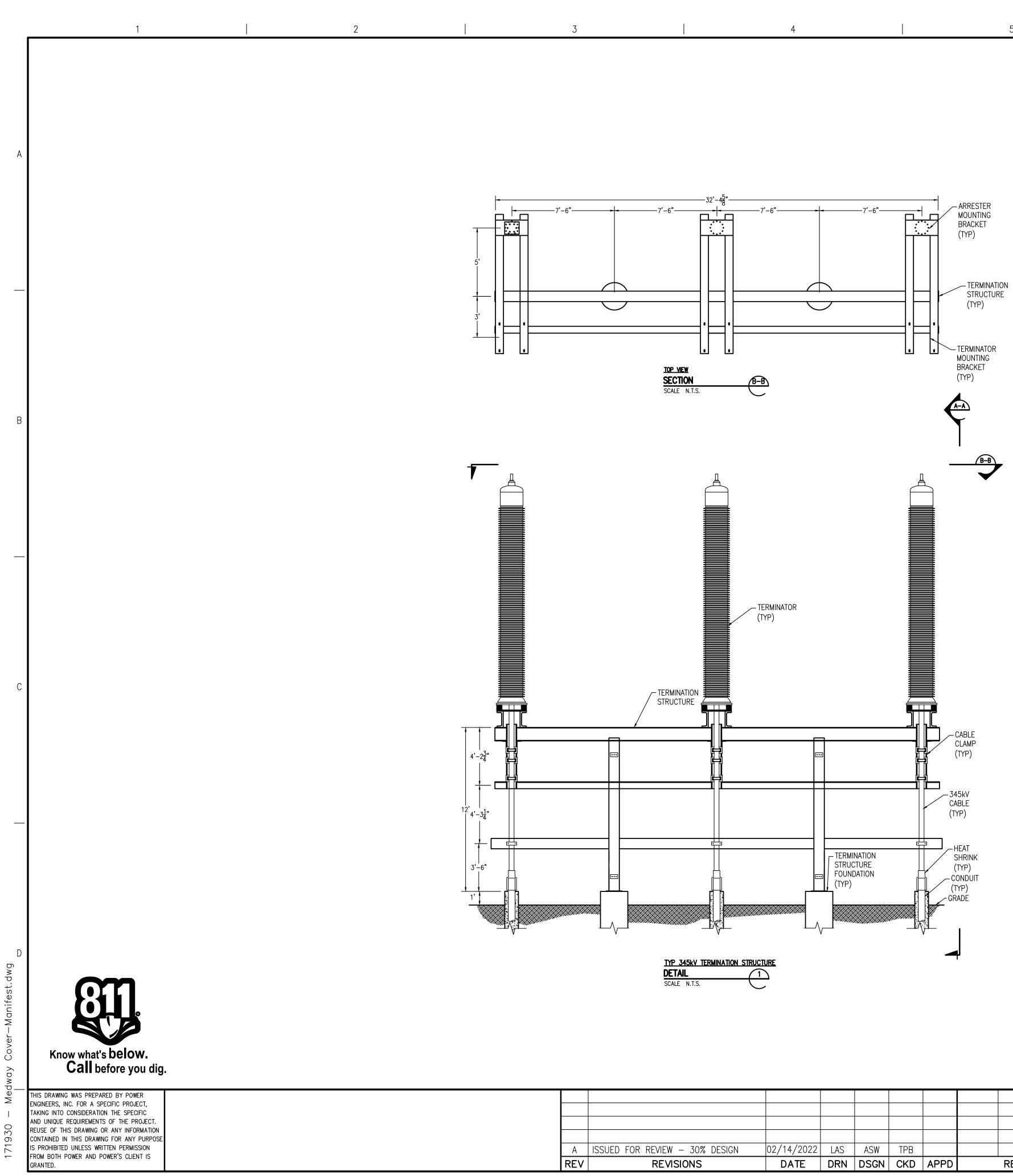
σ

17

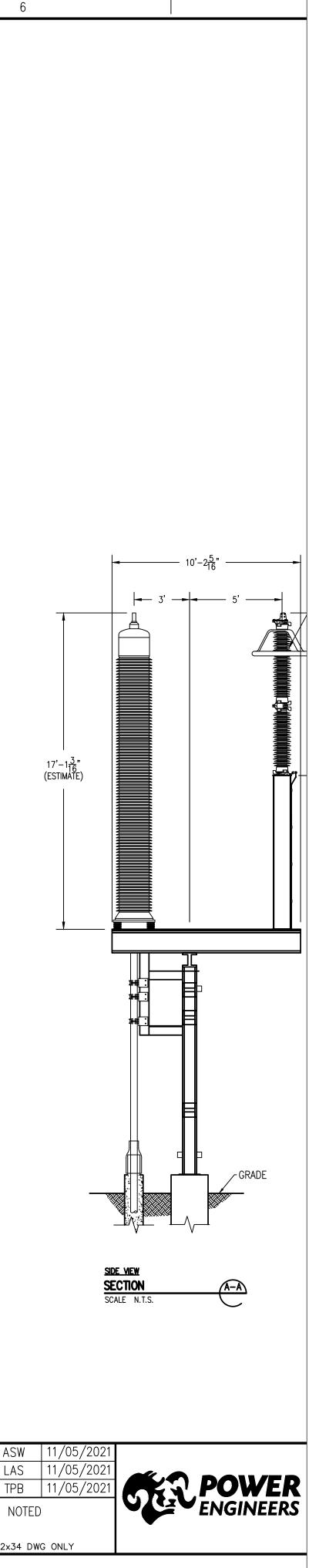
THIS DRAWING WAS PREPARED BY POWER ENGINEERS, INC. FOR A SPECIFIC PROJECT, TAKING INTO CONSIDERATION THE SPECIFIC AND UNIQUE REQUIREMENTS OF THE PROJECT. REUSE OF THIS DRAWING OR ANY INFORMATION CONTAINED IN THIS DRAWING FOR ANY PURPOSE IS PROHIBITED UNLESS WRITTEN PERMISSION FROM BOTH POWER AND POWER'S CLIENT IS GRANTED.

REVISIONS	DATE	DRN	DSGN	CKD	APPD	REFERENCE DRAWINGS	FOR 22x34 DWG ONL			
FOR REVIEW – 30% DESIGN	02/14/2022	LAS	ASW	TPB						
							SCALE: AS NOTED			
							CKD	TPB	11/05/2021	
							DRN	LAS	11/05/2021	
							DSGN	ASW	11/05/2021	



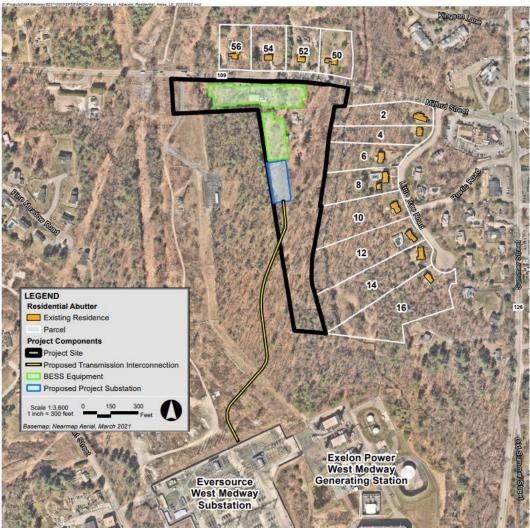


									DSGN	ASW	11/05/2021	
									DRN	LAS	11/05/2021	
									CKD	TPB	11/05/2021	
									SCALE: AS NOTED			
OR REVIEW – 30% DESIGN	02/14/2022	LAS	ASW	TPB								
REVISIONS	DATE	DRN	DSGN	CKD	APPD	REFERENCE DRAWINGS			FOR 22x34 DWG ONLY			



Medway Grid, LLC Docket No. EFSB 22-02 Attachment A2 Page 6 of 6

Medway Grid Project Site Map



Source: Petition to Construct, Figure 2-4

https://fileservice.eea.comacloud.net/FileService.Api/file/FileRoom/14558060#pag e=24)



Proposed View from Milford Street, Rt. 109 After Construction

PROPOSED VIEW Generated 2/10/2022



June 21, 2022

Ms. Susan E. Affleck-Childs Medway Planning and Economic Development Coordinator Medway Town Hall 155 Village Street Medway, MA 02053

Re: Medway Grid BESS Major Site Plan Review 49-61 Milford Street Medway, Massachusetts

Dear Ms. Affleck-Childs:

Tetra Tech (TT) has performed a review of the proposed Site Plan for the above-mentioned Project at the request of the Town of Medway Planning and Economic Development Board (PEDB). The proposed Project is located at 49-61 Milford Street in Medway, Massachusetts and appears to be comprised of multiple existing lots. The Project scope consists of proposed 250-megawatt battery energy storage system (BESS) and new electric substation located on approximately 10.6 acres of partially developed land. The Project also includes a paved access road, 22' tall sound wall and landscape buffer along Milford Street, watermain and hydrants and proposed stormwater detention area.

TT is in receipt of the following materials:

- An Energy Facilities Siting Board (EFSB) submission with supplemental documents to support the filing.
- A site plan (Site Plan) titled "Medway BESS, General Arrangement, TESLA" with revisions dated through January 14, 2022, prepared by Burns & McDonnell Engineering Co, Inc. (BME)
- A plan (Transmission Line Plans) set titled "Able Grid Medway, 345 kV Underground Transmission Line, Transmission Route, Norfolk County, Massachusetts" dated November 5, 2021 with revisions through February 14, 2022, prepared by Power Engineers (POWER)
- A storm water report (Stormwater Report) titled "Stormwater Management Plan, Medway Grid, LLC, Medway Grid Energy Storage Project, Project No. 124220" dated December 7, 2021, prepared by BME.

The Plans and accompanying materials were reviewed for conformance with the following regulatory documents:

- Town of Medway Planning & Economic Development Board Rules and Regulations, Chapter 200 Site Plans, Rules & Regulations for Submission, Review and Approval of Site Plans. (Amended October 8, 2019)
- Town of Medway General Bylaws Article XXVI Stormwater Management and Land Disturbance (Amended June 8, 2020)
- Massachusetts Department of Environmental Protection's (MA DEP) Stormwater Standards (Standards) and appurtenant Stormwater Handbook (Handbook). (Amended February 2008)

The Project was also reviewed for good engineering practice and overall site plan efficiency. Review of the Project for zoning related matters is being conducted by Town personnel and is excluded from this review.

SITE PLAN REVIEW

Site Plan Rules and Regulations (Chapter 200)

- 1. The Applicant has not provided a Project Narrative. However, we believe the information contained within the legal petition to the EFSB satisfies this Regulation. (Ch. 200 §204-3.C)
- 2. The Applicant has not provided a Development Impact Statement. However, we believe the information contained within the legal petition to the EFSB satisfies this Regulation. (Ch. 200 §204-3.F)
- 3. The Applicant has not provided a Construction Management Plan. (Ch. 200 §204-3.H)
- 4. Earth removal calculations have not been provided on the Site Plan. (Ch. 200 §204-3.I)
- The legal petition describes that an Order of Resource Area Delineation (ORAD) was issued by the Medway Conservation Commission on February 27, 2020. However, the ORAD has not been included in the submission documents. (Ch. 200 §204-3.K)
- 6. It does not appear the latest property deeds have been submitted for the properties located within the limits of the Project. (Ch. 200 §204-3.L)
- 7. The Site Plan and Transmission Line Plans have not been stamped by a Massachusetts Professional Engineer. (Ch. 200 §204-4.A)
- The Site Plan has been drawn at a scale of 1" = 60' which does not meet the 1" = 40' required in the Regulations. However, we believe the Site Plan scale is sufficient to show the proposed scope of work. (Ch. 200 §204-4.B)
- 9. A PEDB signature block with space for Decision and plan endorsement dates and town clerk's no appeal certification has not been included on either set of Plans. (Ch. 200 §204-4.E)
- The Applicant has not supplied a Cover Sheet, Site Context Sheet, Existing Conditions Sheet, Erosion and Sediment Control Plan, Landscape Plan, Building Elevations, two additional Color Renderings, Site Amenities, Master Signage Plan, Lighting Plan and Horizontal Site Distances at Project driveway. (Ch. 200 §204-5)
- 11. The Applicant has not included any means for pedestrian and bicycle access to the site. However, we do not anticipate any pedestrian access will be permitted to the site by the Project proponent. Additionally, sidewalks do not exist along or near the frontage of the project on Milford Street, but the Applicant shall confirm with Medway DPW if it has plans to do so. (Ch. 200 §207-9)
- The Project includes a paved access road within the area of the BESS site and gravel roadway above the transmission line alignment. Details have not been provided for the proposed roadway surfaces. (Ch. 200 §207-10)
- 13. The Project scope does not detail the proposed roadway connections to Milford Street. Two curb cuts are proposed for access to the site. The Regulations require one with exceptions made for additional curb cuts for safety purposes. In this instance, we believe the additional curb cut may be warranted to provide secondary access to the site in the event of an emergency. (Ch. 200 §207-11.A.2.a)
- 14. The Applicant has not provided roadway width on the Site Plan, but the roadway appears to be minimum 20-foot required by the Regulations. (Ch. 200 §207-11.A.3)
- 15. The proposed curb cuts are not detailed as mentioned in Comment 14. Curb radii at driveway entrances shall be clearly delineated by vertical granite curbing or other approved material. (Ch. 200 §207-11.A.4)
- 16. Sight distances have not been provided on the Site Plan. (Ch. 200 §207-11.A.10)
- 17. It appears a portion of the westerly driveway will discharge directly to the town right of way. However, the majority of the post-development site is being directed to the east and we anticipate runoff to Milford Street will be decreased in the post-development condition. (Ch. 200 §207-11.A.15)
- 18. The roadways shall be reviewed by the Medway Fire Department to ensure they can support loading from fire apparatus. (Ch. 200 §207-11.A.16)

- 19. The Applicant shall confirm with the Medway Fire Department if adequate access has been provided to the site. (Ch. 200 §207-11.A.17)
- 20. The Applicant has not supplied a summary of required parking for the site on the Site Plan. However, given that the site is not open to the public and is not anticipated to be staffed full-time, we believe the parking scope proposed will be sufficient to serve the use. (Ch. 200 §207-12.G)
- 21. The Project does not propose any electric vehicle charging stations. (Ch. 200 §207-12.I)
- 22. The Applicant shall confirm with the Medway Fire Department if the hydrants proposed are sufficient to serve the scope of the Project. (Ch. 200 §207-15.C)
- 23. The Project documents did not include any plans related to outdoor lighting. (Ch. 200 §207-18)
- 24. A formal landscaping plan was not submitted but it appears landscaping will be proposed along the Project frontage. The Applicant shall provide a Landscaping Plan to confirm the scope of screening for the Project. (Ch. 200 §207-19)
- 25. The Applicant shall confirm areas for snow storage at the site which shall be shown on the Site Plan. (Ch. 200 §207-21)

General Site Plan Comments

- 26. The proposed retaining walls exceed four feet and will require structural design. The Applicant should coordinate the wall design with the Medway Building Department prior to construction.
- 27. The proposed retaining wall adjacent to the stormwater basin should include fencing and/or guard rails to prevent falls.
- 28. The Applicant shall confirm scope for the existing well for the house at #49 Milford Street. The well is located within the limits of the proposed extended dry detention basin.

STORMWATER REVIEW

MA DEP Stormwater Standards/Handbook

- 29. It appears offsite area to the west of the site flows onto the subject property prior to discharge to the wetlands to the east of the site. This area should be included in the analysis since runoff from the west is tributary to the proposed stormwater mitigation on-site. This area should be provided to ensure the pre- vs. post-development runoff is properly accounted for in the analysis. Additionally, the proposed transmission line work should be added to the analysis as those changes will result in increases in runoff in the post-development condition. (Standard 2)
- 30. It appears the post-development runoff from the site exceeds the pre-development condition. For example, the 10-year pre-development flow to the east analysis point is 8.35 cubic feet per second (cfs) and 11.14 cfs in the post-development condition. (Standard 2)
- 31. Test pit data has not been provided in the Stormwater Report. The Applicant is proposing infiltration best management practices (BMP's) to mitigate stormwater and test pits are required to confirm soil texture and elevation of estimated seasonal high groundwater (ESHGW) below the proposed infiltration BMP's. (Standard 3)
- 32. The proposed Extended Dry Detention Basin (EDDB) design includes orifice outlets (outlet control structure) just above the bottom elevation which will reduce the required minimum 24-hour detention time for runoff in the basin. The detention time and proper pretreatment are required to allow use of the 50% TSS removal credit for the basin. (Standard 4)
- 33. The Natural Resources Conservation Service (NRCS) Web Soil Survey provided in the Stormwater Report shows hydrologic soil group (HSG) "A" soils on a portion of the site. The Applicant shall confirm if the proposed infiltration BMP's are in HSG A soil and shall provide one inch water quality volume if so. Additionally, 44% TSS removal is required upstream of infiltration BMP's if the proposed infiltration BMP is located in an HSG A soil. (Standard 4)

- 34. The Applicant has not provided TSS removal worksheets. Additionally, third-party testing data shall be provided to confirm TSS removal efficiency for the proposed water quality treatment unit. (Standard 4)
- 35. The existing site includes an autobody shop. We recommend confirmation that there are no issues with contamination at the site or that the Applicant include a Massachusetts Licensed Site Professional on the Project team during construction. (Standard 5)
- 36. The Project appears to meet the requirements for coverage under the United States Environmental Protection Agency (US EPA) National Pollutant Discharge Elimination System (NPDES) General Permit for Discharges from Construction Activities (CGP). We recommend a Condition requiring the Applicant provide proof of coverage under the current NPDES CGP and provide a copy of the approved SWPPP prior to construction. (Standard 8)
- 37. A Stormwater Operation and Maintenance Plan (O&M Plan) has not been included in the Stormwater Report. We recommend the O&M Plan be a stand-alone document and be included as an appendix to the Stormwater Report. (Standard 9)
- 38. An Illicit Discharge Compliance Statement has not been provided in the Stormwater Report. (Standard 10)
- The Applicant shall provide test pit information at the proposed Extended Dry Detention Basin (EDDB) location to determine elevation of ESHGW. The bottom of the basin shall not intercept ESHGW. (Vol. 2, Ch. 2, Pg. 51)
- 40. The proposed EDDB embankment is 8 feet in height and may be subject to regulation by Commonwealth of Massachusetts Office of Dam Safety. (Vol. 2, Ch. 2, Pg. 51)
- 41. The Applicant has not included a 15-foot maintenance berm around the EDDB. An emergency spillway is also required. (Vol. 2, Ch. 2, Pg. 53)
- 42. The Stormwater report was not stamped by a Registered Professional Engineer Licensed in the Commonwealth of Massachusetts. (Vol. 3, Ch. 1, Pg. 1)

Town Stormwater Management and Land Disturbance Bylaw (Article 26)

- 43. We anticipate this Project will require a Land Disturbance Permit since the Project disturbs greater than 20,000 square feet. (§26.5.1)
- 44. A dedicated Erosion and Sediment Control Plan (ESCP) has not been provided. (§26.5.6.1)
- 45. The Applicant has not included ESHGW elevation at areas used for stormwater detention and infiltration. (§26.5.8.1)
- 46. Standard details of the proposed stormwater management system have not been included in the Site Plan including structures, proposed subsurface infiltration and cross sections of the proposed EDDB. (§26.5.8.2.m.4)
- 47. The Applicant has not provided any documentation related to phosphorus removal for the Project. (§26.5.8.3.c.2.b)
- 48. An O&M Plan has not been provided which should detail the maintenance schedule for the stormwater BMP's proposed on the Project. (§26.5.9)

Town Site Plan Review Stormwater Regulations (Ch. 200 §207-14)

49. The Applicant has not provided any layout, standard details or cross-sections of the proposed subsurface infiltration systems (SIS) to confirm layout of the system and means of access for inspection and maintenance. (Ch. 200 §207-14.D)

General Stormwater Comments

50. Several warnings are present in the report which should be rectified to ensure the model is accurately reflecting studied conditions.

- 51. Piping network should be sized according to the 25-year storm event as is common practice in suburban areas in the Commonwealth of Massachusetts.
- 52. The Time of Concentration (Tc) calculations consider sheet flow in downgradient portions of the flow path which is generally not accepted practice.
- 53. Several Tc calculations yielded values that are less than 0.1 hours, which is the minimum Tc value that shall be used in TR-55 method.
- 54. The Applicant should provide additional detail on management of runoff from the west prior to spilling over the proposed retaining walls. We anticipate a cutoff swale or stone trench will be required to prevent damage to the wall or downgradient areas.
- 55. The proposed water quality treatment unit should be installed upstream of the proposed EDDB to pretreat stormwater prior to discharge to the basin.
- 56. The entire drainage system should be shown on the Site Plan including the proposed perforated drains. Sparse detail was provided on the Site Plan.
- 57. We recommend a level spreader be proposed at the EDDB outlet to redistribute flow from the basin prior to entering the adjacent resource area.

These comments are offered as guides for use during the Town's review and additional comments may be generated during the course of review. The Applicant shall be advised that any absence of comment shall not relieve them of the responsibility to comply with all applicable local, state and federal regulations for the Project. If you have any questions or comments, please feel free to contact us at (508) 786-2200.

Very truly yours,

Steven boules

Steven M. Bouley, P.E. Project Manager

P:\21583\143-21583-22018 (PEDB MEDWAY GRID BESS)\DOCS\MEDWAY GRID BESS-PEDBREV(2022-06-21).DOCX



July 26, 2022 Medway Planning & Economic Development Board Meeting

Possible Zoning Bylaw Amendments

- Solar Electric Installations
- Battery Energy Storage Systems
- Table of Uses
- Multi-Family Housing
- Housekeeping

NOTE – I expect proposed warrant articles for the November 14, 2022 town meeting will probably be due to the Select Board by mid-September.

SOLAR ELECTRIC INSTALLATIONS

Proposed revisions 7.13.22 (bjs) Revised 7-21-22

Article ____: To see if the Town will vote to amend the Zoning Bylaw by amending Section 8.11, Solar Electric Installations, as follows:

SECTION 8.11 SOLAR ELECTRIC INSTALLATIONS

A. Purpose

The purpose of this bylaw is to facilitate and appropriately regulate the creation of Ground-Mounted Solar Electric Installations: (a) by providing standards for the approval, placement, design, construction, operation, monitoring, modification and removal of such installations to protect the public health, safety and welfare, including protection and preservation of Town infrastructure (including roads); providing for public safety; and mitigating any impacts upon environmental, scenic, and historic resources; (b) by providing adequate financial assurance for the eventual decommissioning of such installations; and (c) by protecting large, contiguous blocks of forest land, based on the understanding that large, contiguous tracts provide many ecological benefits, including improved water and air quality, sequestration of carbon, reduced movement of invasive species, provision of wildlife habitat and the support for greater biodiversity; and providing many recreational opportunities for town residents. <u>The Town</u> through this bylaw also seeks to incentivize solar installations within already developed sites and lands with lower resource values (e.g., parking lots, roofs) in accordance with state policies such as the Department of Environmental Protection Wetlands Program Policy 17-1.

B. Definitions

Where the following terms appear in this section 8.11<u>Zoning Bylaw</u>, they shall have the following meanings.

Forestland: A dense growth of trees and shrubs covering an area of one acre or more.

Ground-Mounted Solar Electric Installation: A Solar Electric System that is affixed to the ground (not roof-mounted) and all appurtenant fencing, access driveways, drainage infrastructure, electronics, and any surrounding shade management areas.

Large-Scale Ground-Mounted Solar Electric Installation: A Ground-Mounted Solar Electric Installation which occupies more than one acre of land and no greater than fifteen acres of land; also including a Ground-Mounted Solar Electric Installation with a rated name plate capacity of 250 kW (DC).

Small-Scale Ground-Mounted Solar Electric Installation: A Ground-Mounted Solar Electric Installation which occupies one acre or less of land.

Solar Electric System: A group of Solar Photovoltaic Arrays used for electrical power generation.

Solar Energy: Radiant energy received from the sun that can be collected in the form of heat or light by a solar collector.

Solar Parking Canopy: An elevated structure that hosts solar panels installed over parking lots or other hardscape areas.

Solar Photovoltaic Array: An active Solar Energy collection device that converts solar energy directly into electricity whose primary purpose is to harvest energy by transforming solar energy into another form of energy or transferring heat from a collector to another medium using mechanical, electrical, or chemical means.

C. Applicability

- 1. Roof-mounted Solar Energy Facilities. Solar energy panels mounted on the roof of a building as an accessory portion of the structure, and related equipment which is necessary for and incidental to those solar energy panels, are allowed by right in all zoning districts, and do not need to comply with the other provisions of this Section 8.11.
- 2. Small-Scale Ground-Mounted Solar Electric Installations which are accessory to a residential or non-residential use, and which generate electricity principally used by such residential or non-residential use, may be allowed by special permit in all zoning districts, do not need to comply with the other provisions of this Section 8.11, but require Site Plan Review under Section 3.5 from the Planning and Economic Development Board.
- 3. Solar Parking Canopies which are accessory to a residential or non-residential use may be allowed by special permit in all zones except AR-I, AR-II, <u>OGN</u> and VR, or which are otherwise allowed under the provisions of this Zoning Bylaw, and are subject to the requirements of this Section 8.11.
- 4. All other Small-Scale and Large-Scale Ground-Mounted Solar Electric Installations are subject to the requirements of this Section 8.11, and are allowed in zoning districts only as specified in Table 1: Schedule of Uses, under Section E Industrial and Related Uses, as "Electric power generation, which includes large scale ground mounted solar photovoltaic installations with a rated name plate capacity of 250 kw (DC) or more and other Renewable Energy sources.".
- 5. The Planning and Economic Development Board (the Board) shall be the special permit granting authority for all special permit applications under Section 8.11.

D. General Requirements

- Compliance with Laws, Bylaws, and Regulations The construction and operation of all Ground-Mounted Solar Electric Installations shall be consistent with all applicable local, state and federal requirements, including but not limited to all applicable safety, construction, electrical, and communications requirements, and require Site Plan Review per Section 3.5.3.A.1.d of this Zoning Bylaw.
- 2. Mitigation for Loss of Carbon Sequestration and Forest Habitat If land that is Forestland or has been Forestland within the past year is proposed to be converted to a Ground-Mounted Solar Electric Installation, the plans shall designate thereon an area of unprotected (meaning, not subject to G.L. c. 184, sections 31-33 at time of application) land on the same lot and of a size equal to four times the total area of such installation. Such designated land shall remain in substantially its natural condition without alteration, including prohibition of

Commented [BSA1]: Current ZBL requires Major Site Plan Review for all ground mounted solar.

Commented [BSA2]: Propose adding this section and sections 4 and 5 to special use provisions where it could be applicable.

commercial forestry or tree cutting not related to the maintenance of the installation, until such time as the installation is decommissioned; except in response to a natural occurrence, invasive species or disease that impacts the trees and requires cutting to preserve the health of the forest.

- 3. Mitigation for Loss of Forest Habitat within the Installation If Forestland is proposed to be converted to a Ground-Mounted Solar Electric Installation, the plans shall show mitigation measures that create a wildflower meadow habitat within and immediately around the Solar Electric System, and a successional forest habitat in the surrounding areas managed to prevent shading until such time as the installation is decommissioned. The wildflower meadow shall contain a wide variety of plants that bloom from early spring into late fall, that are planted in clumps rather than single plants to help pollinators find them, and that are native plants adapted to local climate, soil and native pollinators. At least 50% of the array footprint and perimeter shall be planned to have these flowering plants. Mowing shall be limited to no more than once annually. Plans for pollinator-friendly vegetation establishment and maintenance shall be compiled and written by a professional biologist or ecologist with relevant experience and expertise in pollinator habitat creation, grassland habitat restoration, and/or knowledge of native New England plant communities.
- 4. Mitigation for Disruption of Trail Networks If existing trail networks, old roads, or woods or cart roads are disrupted by the location of the Ground-Mounted Solar Electric Installation, the plans shall show alternative trail alignments to be constructed by the applicant, although no rights of public access may be established hereunder.
- 5. Mitigation for Disruption of Historic Resources and Properties Historic resources and properties, such as cellar holes, farmsteads, stone corrals, marked graves, water wells, or pre-Columbian features, including those listed on the Massachusetts Register of Historic Places or as defined by the National Historic Preservation Act, shall be excluded from the areas proposed to be developed, including clearing for shade management. A written assessment of the project's effects on each identified historic resource or property and ways to avoid, minimize or mitigate any adverse effects shall be submitted as part of the application. A suitable buffer area shall be established on all sides of each historic resource.
- 6. All plans and maps shall be prepared, stamped and signed by a Professional Civil Engineer licensed to practice in the Commonwealth of Massachusetts.
- 7. Vehicular access for the purpose of construction shall be from paved streets.
- 8. Lots for Ground-Mounted Solar Electric Installations shall have the required frontage on a street.
- 9. The special permit may be conditioned to effectuate and make enforceable these requirements.

E. Required Documents

The project applicant shall provide the following documents.

- 1. Site Plan. A Site Plan additionally showing:
 - a. Locations of wetlands and Priority Habitat Areas as defined by the Natural Heritage &

Commented [BSA3]: I believe that this type of mitigation is unique to solar arrays, i.e. we can't ask someone who is building a warehouse to plant flowers under the building. Endangered Species Program (NHESP).

- b. Locations of local or National Historic Districts.
- c. Locations of all known, mapped or suspected Native American archaeological sites or sites of Native American ceremonial activity. Identification of such sites shall be based on responses, if any, to written inquiries with a requirement to respond within 35 days, to the following parties: all federally or state recognized Tribal Historic Preservation Officers with any cultural or land affiliation to the Medway area; the Massachusetts State Historical Preservation Officer; tribes or associations of tribes not recognized by the federal or state government with any cultural or land affiliation to the Medway area; and the Medway Historical Commission. Such inquiries shall serve as a notice to the aforesaid parties and shall contain a plan of the project, specific identification of the location of the project, and a statement that permitting for the project is forthcoming. Accompanying the site plan shall be a report documenting such inquiries, the responses from the parties, a description of the location and characteristics, including photographs, of any Native American sites and the outcomes of any additional inquires made based on information obtained from or recommendations made by the aforesaid parties. A failure of parties to respond within 35 days shall allow the applicant to submit the site plans.
- d. The project proponent must submit a full report of all materials to be used, including but not limited to the use of cleaning products, paints or coatings, hydro-seeding, fertilizers, and soil additives. When available, Material Safety Data Sheets will be provided.
- 2. Blueprints. Blueprints or drawings of the installation signed by a Professional Engineer licensed to practice in the Commonwealth of Massachusetts, showing:
 - a. The proposed layout of the system and any potential shading from nearby structures.
 - b. One- or three-line electrical diagram detailing the Ground-Mounted Solar Electric Installation, associated components, and electrical interconnection methods, with all Massachusetts and National Electrical Code compliant disconnects and overcurrent devices.
- 3. General Documentation. The following information shall also be provided:
 - a. A list of any listed hazardous or known carcinogenic materials proposed to be located on the site in excess of household quantities and a plan to prevent their release to the environment as appropriate.
 - b. Name, address, and contact information for proposed system installer.
 - c. The name, contact information and signature of any agents representing the project applicant.
- 4. Site Control The project applicant shall submit documentation of actual or prospective access and control of the project site sufficient to allow for construction and operation of the proposed Ground-Mounted Solar Electric Installation.
- 5. Operation and Maintenance Plan The project applicant shall submit a plan for the operation and maintenance of the Ground-Mounted Solar Electric Installation, which shall include measures for maintaining safe access to the installation, stormwater management (consistent with DEP's and, where appropriate, Medway's stormwater regulations), as well as general procedures for operational maintenance of the installation.
- 6. Financial Surety Applicants for Ground-Mounted Solar Electric Installations shall provide a

form of surety, either through a deposit of money, bond, triparty agreement, or other means acceptable to the Board, to cover the cost of removal in the event the Town must remove the installation and remediate the site to its natural preexisting condition, in an amount and form determined to be reasonable by the Board, but in no event to exceed more than 125% of the cost of removal and compliance with the additional requirements set forth herein. The project applicant shall submit a fully inclusive estimate of the costs associated with removal, prepared by a qualified engineer. The amount shall include a mechanism for calculating increased removal costs due to inflation.

7. Utility Notification - No Ground-Mounted Solar Electric Installation shall be constructed, nor building permit issued until evidence has been provided to the Building Commissioner that the utility company that operates the electrical grid where the installation is to be located has approved the solar electric installation owner or operator's intent to install an interconnected customer-owned generator and that the utility has approved connection of the proposed generator into their power grid. Off-grid systems shall be exempt from this requirement.

8. Proof of Liability Insurance. The applicant or property owner shall provide evidence of liability insurance prior to the issuance of a building permit, and shall continue such insurance in effect until such facility has been decommissioned, removed, and the site restored in accordance with subsection K of this bylaw.

F. Dimensional Requirements

- 1. Minimum setbacks for all Large-Scale Ground-Mounted Solar Electric Installations shall be:
 - Front setback: 500 feet
 - Side and rear setback: 100 feet
- 2. Minimum setbacks for all Small-Scale Ground-Mounted Solar Electric Installations shall be:
 - Front setback: 100 feet
 - Side and rear setback: 50 feet
- 3. Minimum setbacks for all Ground-Mounted Solar Electric Installations that are installed on or above existing paved parking areas (Solar Parking Canopies):
 - Front setback: 50 feet
 - Side and rear setback: 50 feet
- 4. Required setback areas shall not be counted toward a facility's total acreage.

G. Design and Performance Standards

- 1. Lighting Large and Small Scale Solar Electric Installations, except Solar Parking Canopies, shall have no permanently affixed exterior lighting.Lighting shall be limited to that minimally required for safety and operational purposes and shall comply with Section 7.1.2 of this Zoning Bylaw.
- 2. Signage
 - a. Sufficient signage shall be provided to identify the owner of the facility and provide a 24hour emergency contact phone number.
 - b. Signage at the perimeter warning pedestrians is allowable.

Commented [BSA4]: Same language in Section 8.8 small wind generation. I believe it reflects 100% cost plus 25% contingency.

- c. Ground-Mounted Solar Electric Installations shall not be used for displaying any advertising except for reasonable identification of the manufacturer or operator of such installation.
- 3. Control of Vegetation Herbicides or pesticides may not be used to control vegetation or animals at a Ground-Mounted Solar Electric Installation.
- 4. Visual Impacts
 - a. Ground-Mounted Solar Electric Installation shall be designed to minimize visual impacts including preserving natural vegetation to the maximum extent possible, blending in equipment with the surroundings, and adding vegetative buffers to provide an effective visual barrier from adjacent roads and driveways, and to screen abutting residential dwellings.
 - b. When possible, a diversity of plant species shall be used, with a preference for species native to New England.
 - c. Use of invasive or exotic plants, as identified by the most recent copy of the "Massachusetts Prohibited Plant List" maintained by the Massachusetts Department of Agricultural Resources, is prohibited.
 - d. The Board may require vegetative screening, up to 30 feet in depth in locations it deems necessary. Such screening shall be composed of native trees, staggered for height and density, and shall be properly maintained.
 - e. The owner and operator shall not remove any naturally occurring vegetation such as trees and shrubs unless it adversely affects the performance and operation of the solar installation.
 - e. Landscaping shall be maintained and replaced as necessary by the owner and operator of the Ground-Mounted Solar Electric Installation.
- 5. Utility Connections Electrical transformers, wires, or other utility interconnections shall be constructed as required by the utility provider and may be above ground if necessary; provided, however, that every reasonable effort shall be made to place all utility connections underground, depending on appropriate soil conditions and topography of the site and any requirements of the utility provider.
- 6. All electric power generated at a Ground-Mounted Solar Electric Installation shall be from Solar Energy.
- 7. Access Driveways shall be constructed to minimize finished width, grading, removal of stone walls or roadside trees, incompatible appearance from the roadway, and impacts to environmental or historic resources.

H. Safety and Environmental Standards

- 1. Emergency Services
 - a. Ground-Mounted Solar Electric Installations owner or operator shall provide a copy of the project summary, electrical schematic, and site plan to the Fire Chief.
 - b. The owner or operator shall cooperate with local emergency services to develop a written emergency response plan that is provided to police and fire departments
 - c. All means of shutting down the solar electric installation shall be clearly marked on the

Commented [BSA5]: Covered under H.2.a

equipment.

- d. The owner or operator shall identify a responsible person for public inquiries throughout the life of the installation. Contact information shall be provided annually to the Town Manager including name, email and telephone number for the designated person and a back-up person.
- 2. Land Clearing, Soil Erosion and Land Impacts
 - a. The facility shall be designed to minimize impacts to open agricultural land and fields, even if not in production. Clearing of natural vegetation shall be limited to what is necessary for the construction, operation and maintenance of the Ground-Mounted Solar Electric Installation. Grading that substantially disturbs the existing soil profile and structure is prohibited; sites shall be selected where construction may be accomplished without such earth work.
 - b. Prior to any site disturbance and construction, the limits of the work shown on the approved site plan shall be surveyed and clearly marked by a Professional Land Surveyor. Upon completion of the survey, the Professional Land Surveyor shall verify to the Building Commissioner, in writing, that the limit of work, as shown on the approved site plans, has been established on site.
 - c. The design shall minimize the use of concrete and other impervious materials to the maximum extent possible. Except where necessary for structural or other reasons established by the applicant to the reasonable satisfaction of the PEDB, Ground-Mounted Solar Electric Installations, except Solar Parking Canopies, shall be installed on water permeable surfaces in order to promote groundwater recharge, minimize groundwater run-off, preserve wildlife habitat and biodiversity, and reduce heat island effects and climate change impacts.
 - d. Locating Ground-Mounted Solar Electric Installations, including access driveways and any associated drainage infrastructure on original, pre-development grades in excess of 15% is prohibited.
- 3. Habitat Impacts Large-Scale Ground-Mounted Solar Electric Installations shall not be located on permanently protected land subject to G.L. c. 184, sections 31-33, Priority Habitat and Bio Map 2 Critical Natural Landscape Core Habitat mapped by the Natural Heritage and Endangered Species Program (NHESP) and "Important Wildlife Habitat" mapped by the DEP.
- 4. Wetlands
 - a. In order to provide an adequate intervening land area for the infiltration of stormwater runoff from a Solar Electric Installation, ground alterations, such as stump removal, excavation, filling, and grading, or the installation of drainage facilities or solar panels, are prohibited within 100 feet of any wetlands or hydrologic features subject to the jurisdiction of the Conservation Commission.
 - b. The Board may impose conditions to contain and control stormwater runoff that might negatively impact identified wetlands or other hydrologic features even if the proposed work area is outside the jurisdiction of the Conservation Commission.

I. Monitoring, Maintenance and Reporting

1. Solar Electric Installation Conditions

- a. The Ground-Mounted Solar Electric Installation owner or operator shall maintain the facility in good condition.
- b. Maintenance shall include, but not be limited to, painting, structural repairs, and integrity of security measures.
- c. Site access shall be maintained to a level acceptable to the Fire Chief.
- d. The owner or operator shall be responsible for the cost of maintaining the Solar Electric Installation and any access driveways.
- 2. Annual Reporting
 - a. The owner or operator of a Ground-Mounted Solar Electric Installation shall submit an annual report demonstrating and certifying compliance with the Operation and Maintenance Plan, the requirements of this Section 8.11 and the approved special permit, including but not limited to continued management and maintenance of vegetation, compliance with the approved plans and any special permit conditions, continuation of liability insurance, and adequacy of road access.
 - b. The annual report shall also provide information on the maintenance completed during the course of the year and the amount of electricity generated by the facility.
 - c. The report shall be submitted to the Department of Community and Economic Development and Building Commissioner, no later than 45 days after the end of the calendar year.

K. Abandonment or Decommissioning

- 1. Removal Requirements
 - a. Any Ground-Mounted Solar Electric Installation which has reached the end of its useful life, has been abandoned, or taken off line shall be removed.
 - b. The owner or operator shall physically remove the installation no later than 150 days after the date of discontinued operations.
 - c. The owner or operator shall notify the Building Commissioner in writing at least sixty days in advance of the proposed date of discontinued operations and plans for removal.
- 2. Decommissioning shall consist of:
 - a. Physical removal of all components of the Ground-Mounted Solar Electric Installation, including but not limited to structures, foundations, equipment, security barriers, and onsite above-ground transmission lines. Associated off-site utility interconnections shall also be removed if no longer needed.
 - b. Disposal of all solid and hazardous waste in accordance with local, state, and federal waste disposal regulations.
 - c. Restoration of the site, including stabilization or re-vegetation of the site as necessary to minimize erosion. The Board may allow the owner or operator to leave landscaping or designated below-grade foundations and electric lines in order to minimize erosion and disruption to vegetation.
- 3. Decommissioning by the Town If the owner or operator of a Ground-Mounted Solar Electric Installation fails to remove such installation in accordance with the requirements of this Section 8.11 within 150 days of discontinued operations or abandonment, the Town may<u>after compliance with any applicable state and federal constitutional requirements</u>, enter the property and physically remove the installation and stabilize the site, at the owner's expense,

drawing upon the financial surety provided by the applicant.

or act in any manner relating thereto.

Amend Section 2 Definitions:

Electric Power Generation: The process of generating electric power from other sources of primary energy such as electromechanical generators, chemical combustion, and Renewable Energy, but excluding Solar Photovoltaic Arrays.

Renewable Energy: Energy derived from natural resources which are regenerated over time through natural processes. Such energy sources include the sun (solar); wind; moving water (hydro and wave); organic plant materials (biomass); and the earth's heat (geothermal). Renewable energy resources may be used directly, or used indirectly to create more convenient forms of energy. Renewable energy sources also include landfill gas, fuel cells, battery energy storage facilities, recharging stations for electric and hydrogen powered vehicles and biofuels.

DRAFT – BESS Bylaw July 7, 2022 bjs <u>Revised – July 21, 2022</u>

Article _____ To see if the Town will vote to amend the Zoning Bylaw by:

(1) Section 2 Definitions deleting the definition of Battery Energy Storage Facility and adding the following new definition in Section 2:

Battery Energy Storage System (BESS): One or more containers or cabinets containing batteries and related equipment, assembled together, capable of storing electrical energy in order to supply electrical energy at a future time. This includes all accessory equipment necessary for energy storage including but not limited to inverters, transformers, cooling equipment, switching gear, metering equipment, transmission tie-lines, and other power interconnection facilities and/or a project substation, but does not include a stand-alone 12-volt vehicle battery or an electric motor vehicle.

(2) Amending Table 1, Schedule of Uses to add Battery Energy Storage System as follows:

Battery Energy Storage Systems [TBD: zones where BESS to be allowed]

(3) Amending Table 3, Schedule of Off-Street Parking Requirements, by adding a new line:

Battery energy storage systems (as2 spaces for Tier 1principal use)3 spaces for Tier 2

(4) Amending Section 3.5 Site Plan Review as follows:

Amend Section 3.5.3.A.1 Major Site Plan Review by adding: "f. Tier 2 Battery Energy Storage Systems" And amend Section 3.5.3.A.2 Minor Site Plan Review by adding: "h. Tier 1 Battery Energy Storage Systems"

(5) And to add a new Section 8.12 Battery Energy Storage Systems:

Section 8.12 Battery Energy Storage Systems

A. Purpose. The purpose of this Section is to advance and protect the public health, safety, welfare, and quality of life by creating regulations for the installation and use of battery energy storage systems, with the following objectives:

1. To provide a regulatory scheme for the designation of properties suitable for the location, construction and operation of battery energy storage systems <u>consistent with best practices and</u> <u>safety protocols</u>;

2. To ensure compatible land uses in the vicinity of the areas affected by battery energy storage systems and to mitigate any potential impacts on abutting and nearby properties; and

3. To mitigate the impacts of battery energy storage systems on environmental resources such as important agricultural lands, forests, wildlife and other protected resources.

Commented [BSA1]: I think we should put this in Definitions Section 2.

Commented [BSA2]: See separate document with proposed changes to Schedule of Uses.

This Section shall be construed to be consistent with state law, including but not limited to the provisions of General Laws chapter 40A, section 3, and state regulations, including but not limited to the provisions of the State Building Code, State Fire Code, and State Electrical Code. In the event of any conflict between the provisions of this section and the provisions of state law or regulations, the state law and regulations shall prevail.

B. Definitions

As used in this bylaw, the following terms shall have the meanings indicated. Terms that are not defined herein or elsewhere in this Zoning Bylaw shall be as defined in NFPA 855 if applicable.

ANSI: American National Standards Institute

Battery or batteries: A single cell or a group of cells connected together electrically in series, in parallel, or a combination of both, which can charge, discharge, and store energy electrochemically. For the purposes of this bylaw, batteries utilized in consumer products are excluded from these requirements.

Battery Energy Storage Management System: An electronic system that protects energy storage systems from operating outside their safe operating parameters and disconnects electrical power to the energy storage system or places it in a safe condition if potentially hazardous temperatures or other conditions are detected.

Battery Energy Storage System (BESS): One or more containers or cabinets containing batteries and related equipment, assembled together, capable of storing electrical energy in order to supply electrical energy at a future time. This includes all accessory equipment necessary for energy storage including but not limited to inverters, transformers, cooling equipment, switching gear, metering equipment, transmission tie-lines, and other power interconnection facilities and/or a project substation, and does not include a stand alone 12 volt vehicle battery or an electric motor vehicle.

Cell: The basic electrochemical unit, characterized by an anode and a cathode, used to receive, store, and deliver electrical energy.

Commissioning: A systematic process that provides documented confirmation that a battery energy storage system functions according to the intended design criteria and complies with applicable code requirements.

Dedicated-Use Building: A building that is built for the primary intention of housing battery energy storage system equipment, is classified as Group F-1 occupancy as defined in the State Building Code, and complies with the following:

1) The building's only use is battery energy storage, energy generation, and other electrical grid-related operations.

2) No other occupancy types are permitted in the building.

3) Occupants in the rooms and areas containing battery energy storage systems are limited to personnel that operate, maintain, service, test, and repair the battery energy storage system and other energy systems.

4) Administrative and support personnel are permitted in areas within the buildings that do not contain battery energy storage system, provided the following:

a. The areas do not occupy more than 10 percent of the building area of the story in which they are located.

Commented [BSA3]: I think we should put this in Section 2.

b. A means of egress is provided from the administrative and support use areas to the public way that does not require occupants to traverse through areas containing battery energy storage systems or other energy system equipment.

Forestland: A dense growth of trees and shrubs covering an area of one acre or more

Nationally Recognized Testing Laboratory (NRTL): A U.S. Department of Labor designation recognizing a private sector organization to perform certification for certain products to ensure that they meet the requirements of both the construction and general industry OSHA electrical standards.

NFPA: National Fire Protection Association.

Non-Dedicated-Use Building: All buildings that contain a battery energy storage system and do not comply with the dedicated-use building requirements.

Non-Participating Property: Any property that is not a participating property.

Non-Participating Residence: Any residence located on non-participating property.

Participating Property: A battery energy storage system host property or any real property that is the subject of an agreement that provides for the payment of monetary compensation to the landowner from the battery energy storage system owner (or affiliate) regardless of whether any part of a battery energy storage system is constructed on the property.

This bylaw: Section 8.12 of the Zoning Bylaw

UL: Underwriters Laboratory

C. Applicability

1. ____The requirements of this bylaw shall apply to battery energy storage systems permitted, installed, or modified after the effective date of this bylaw, excluding general maintenance and repair. BESS subject to this bylaw are only those that exceed the following capacities; BESS that do not meet the following threshold capacities are not subject to this bylaw:

- Lead-acid with a capacity of greater than 70 kWh
- Nickel with a capacity of greater than 70 kWh
- Lithium-ion with a capacity of greater than 20 kWh
- Sodium nickel chloride with a capacity of greater than 20 kWh
- Flow with a capacity of greater than 20 kWh
- Other battery technologies with a capacity of greater than 10 kWh
- BESS in one- and two-family dwellings with a capacity of greater than 1 kWh

BESS that do not meet the threshold capacities above are not subject to this bylaw and are allowed by right in all zoning districts.

2. A battery energy storage system that is subject to this bylaw is classified as a Tier 1 or Tier 2 Battery Energy Storage System as follows:

Aa). Tier 1 Battery Energy Storage Systems have an aggregate energy capacity less than or equal to 600kWh and, if in a room or enclosed area, consist of only a single energy storage system technology.

Formatted: Indent: Left: 0.5"

Commented [BSA4]: May be easier to add this definition to Section 2 of ZBL. See housekeeping amendment.

3

Bb). Tier 2 Battery Energy Storage Systems have an aggregate energy capacity greater than 600kWh or are comprised of more than one storage battery technology in a room or enclosed area.

D. General Requirements

1. A building permit, an electrical permit, and a fire department permit per state codes shall be required for installation of all battery energy storage systems.

2. All battery energy storage systems, all Dedicated Use Buildings, and all other buildings or structures that (a) contain or are otherwise associated with a battery energy storage system and (b) subject to the requirements of the State Building Code, shall be designed, erected, and installed in accordance with all applicable provisions of the State Building Code 780 CMR, State Fire Code 527 CMR 1.00, and State Electrical Code 527 CMR 12.00. All battery energy storage systems shall comply with NFPA 855, Standard for the Installation of Stationary Energy Storage Systems.

3. Energy storage system capacities, including array capacity and separation, are limited to the thresholds contained in NFPA 855.

E. Permitting Requirements for Tier 1 Battery Energy Storage Systems

Tier 1 Battery Energy Storage Systems <u>are allowed by rightshall be permitted</u> in all zoning districts, subject to applicable provisions of the State Building Code, Electrical Code, Fire Code, and other applicable codes, and are subject to minor site plan review and such provisions of this bylaw as are applicable.

F. Permitting Requirements for Tier 2 Battery Energy Storage Systems

Tier 2 Battery Energy Storage Systems that are subject to this bylaw and require the issuance of a special permit in those zoning districts identified in Table 1, Schedule of Uses, and shall beare subject to Major Site Plan Review pursuant to Section 3.5. Tier 1 and Tier 2 BESS shall comply with the applicable requirements set forth in this bylaw, as well as this Zoning Bylaw, and the Medway General Bylaws. The following requirements apply to all Tier 1 and Tier 2 BESS subject to this bylaw, except where it is specifically noted to apply only to Tier 2 BESS:

1. Utility Lines and Electrical Circuitry. All on-site utility lines shall be placed underground to the extent feasible and as permitted by the serving utility, with the exception of the main service connection at the utility company right-of-way and any new interconnection equipment, including without limitation any poles, with new easements and right-of-way.

2. Signage. Signage shall comply with the requirements of Section 7.2 of this Zoning Bylaw and the following additional requirements; in the event of a conflict between the provisions of Section 7.2 and this section, the requirements of this section shall prevail.

a) The signage shall be in compliance with ANSI Z535 and shall include the type of technology associated with the battery energy storage systems, any special hazards associated, the type of suppression system installed in the area of battery energy storage systems, and 24-hour emergency contact information, including reach-back phone number.

b) As required by the state electrical code, disconnect and other emergency shutoff information shall be clearly displayed on a light reflective surface. A clearly visible warning sign concerning voltage shall be placed at the base of all pad-mounted transformers and substations.

c) Signage compliant with ANSI Z535 shall be provided on doors to rooms, entrances to BESS facilities, and on BESS outdoor containers.

3. Lighting. Lighting of the battery energy storage systems shall be limited to that minimally required for safety and operational purposes and shall comply with Section 7.1.2 of this Zoning Bylaw.

4. Vegetation and tree-cutting. Areas within ten feet on each side of Tier 2 Battery Energy Storage Systems shall be cleared of combustible vegetation and other combustible growth. Single specimens of trees, shrubbery, or cultivated ground cover such as green grass, ivy, succulents, or similar plants used as ground covers shall be permitted to be exempt provided that they do not form a means of readily transmitting fire. Removal of trees should be minimized to the extent possible.

6. Setbacks. Tier 2 Battery Energy Storage Systems shall <u>be set back 50 feet from all side, rear,</u> and front lot lines; access drives and parking are allowed in these setbackseomply with the setback requirements of the underlying zoning district for principal structures. In addition, a minimum of 10 feet must be maintained between BESS <u>components</u> and all buildings, stored combustible materials, hazardous materials, high-piled storage, personnel means of egress, and other exposure hazards not associated with electrical grid infrastructure.

7. Dimensional. Tier 2 Battery Energy Storage Systems shall comply with the dimensional limitations for principal structures of the underlying zoning district as provided in Section 6 of this Zoning Bylaw.

8. Fencing Requirements. Tier 2 Battery Energy Storage Systems, including all mechanical equipment, shall be enclosed by a minimum sixeight foot high fence with a self-locking gate to prevent unauthorized access unless housed in a dedicated-use building. Security barriers, fences, landscaping, and other enclosures must not inhibit required air flow to or exhaust from the BESS and components. Electrical equipment greater than 1,000V require a means to restrict access. NFPA 855 requires specialty safety systems to be provided based on the BESS chemistry and installed location.

9. Screening and Visibility. Tier 2 Battery Energy Storage Systems shall have views minimized from adjacent properties to the extent reasonably practicable using architectural features, earth berms, landscaping, or other screening methods that will harmonize with the character of the property and surrounding area. Such features may not inhibit required air flow to or exhaust from the BESS and components.

10. Mitigation for Loss of Carbon Sequestration and Forest Habitat – If land that is Forestland or has been Forestland within the past year is proposed to be converted to a Tier 2 BESS, the plans shall designate thereon an area of unprotected (meaning, not subject to G.L. c. 184, sections 31-33 at time of application) land on the same lot and of a size equal to four times the total area of such installation. Such designated land shall remain in substantially its natural condition without alteration, including prohibition of commercial forestry or tree cutting not related to the maintenance

of the installation, until such time as the installation is decommissioned; except in response to a natural occurrence, invasive species or disease that impacts the trees and requires cutting to preserve the health of the forest.

<u>11.</u> Mitigation for Disruption of Trail Networks – If existing trail networks, old roads, or woods or cart roads are disrupted by the location of a Tier 2 BESS, the plans shall show alternative trail alignments to be constructed by the applicant, although no rights of public access may be established hereunder.

12. Mitigation for Disruption of Historic Resources and Properties – Historic resources, structures and properties, such as cellar holes, farmsteads, stone corrals, marked graves, water wells, or pre-Columbian features, including those listed on the Massachusetts Register of Historic Places or as defined by the National Historic Preservation Act, shall be excluded from the areas proposed to be developed for a Tier 2 BESS. A written assessment of the project's effects on each identified historic resource or property and ways to avoid, minimize or mitigate any adverse effects shall be submitted as part of the application. A suitable buffer area shall be established on all sides of each historic resource.

103. Decommissioning Plan. The applicant shall submit with its application a decommissioning plan for Tier 2 BESS to be implemented upon abandonment and/or in conjunction with removal fromof the facility. The owner or operator of the BESS shall notify the Building Commissioner in writing at least twenty days prior to when a Tier 2 BESS will be decommissioned. Decommissioning of an abandoned or discontinued Tier 2 BESS shall be completed within six months after the facility ceases operation. The decommissioning plan shall include:

a. A narrative description of the activities to be accomplished, including who will perform that activity and at what point in time, for complete physical removal of all battery energy storage system components, structures, equipment, security barriers, and transmission lines from the site;

b. Disposal of all solid and hazardous waste in accordance with local, state, and federal waste disposal regulations;

c. The anticipated life of the battery energy storage system;

d. The estimated decommissioning costs and how said estimate was determined;

e. The method of ensuring that funds will be available for decommissioning and restoration;

f. The method by which the decommissioning cost will be kept current;

g. The manner in which the site will be restored, including a description of how any changes to the surrounding areas and other systems adjacent to the battery energy storage system, such as, but not limited to, structural elements, building penetrations, means of egress, and required fire detection suppression systems, will be protected during decommissioning and confirmed as being acceptable after the system is removed; and

h. A listing of any contingencies for removing an intact operational energy storage system from service, and for removing an energy storage system from service that has been damaged by a fire or other event.

144. Decommissioning Fund. The owner and/or operator of the energy storage system, shall continuously maintain a fund or other surety acceptable to the Town, in a form approved by the Planning and Economic Development Board and Town Counsel, for the removal of the battery

energy storage system, in an amount to be determined by the Town, for the period of the life of the facility. All costs of the financial security shall be borne by the applicant.

15. Proof of Liability Insurance. The applicant or property owner shall provide evidence of liability insurance prior to the issuance of a building permit, and shall continue such insurance in effect until such facility has been decommissioned, removed, and the site restored in accordance with this bylaw.

G. Site plan application. For a Tier 2 Battery Energy Storage System the site plan application shall include the following information, in addition to that required by Section 3.5 of this Zoning Bylaw and the Planning and Economic Development Board Rules and Regulations Governing Site Plan Applications:

1. A one- or three-line electrical diagram detailing the battery energy storage system layout, associated components, and electrical interconnection methods, with all State Electrical Code compliant disconnects and over current devices.

2. A preliminary equipment specification sheet that documents the proposed battery energy storage system components, inverters and associated electrical equipment that are to be installed. A final equipment specification sheet shall be submitted prior to the issuance of building permit.

3. Name, address, and contact information of proposed or potential system installer and the owner and/or operator of the battery energy storage system. Such information of the final system installer shall be submitted prior to the issuance of building permit.

4. Large-scale fire test data, evaluation information, and calculations, and modeling data. For any of the following, UL 9540A fire test data must be made available to the Planning and Economic Development Board for review:

- BESS systems with spacing between arrays of less than 3 feet

5. Commissioning Plan. The system installer or commissioning agent shall prepare a commissioning plan prior to the start of commissioning. Such plan shall be compliant with NFPA 855 and document and verify that the system and its associated controls and safety systems are in proper working condition per requirements set forth in applicable state codes. Where commissioning is required by the Building Code, battery energy storage system commissioning shall be conducted by a Massachusetts Licensed Professional Engineer after the installation is complete but prior to final inspection and approval. A corrective action plan shall be developed for any open or continuing issues that are allowed to be continued after commissioning. A report describing the results of the system commissioning and including the results of the initial acceptance testing required by applicable state codes shall be provided to Zoning Enforcement Officer prior to final inspection and approval and maintained at an approved on-site location.

6. Fire Safety Compliance Plan. Such plan shall document and verify that the system and its associated controls and safety systems are in compliance with state codes, including documentation that BESS components comply with the safety standards set forth in subsection 8.12.I.

7. Operation and Maintenance Manual. Such plan shall describe continuing battery energy storage system maintenance and property upkeep, as well as design, construction, installation, testing

Commented [BSA5]: Do we need ISO document

⁻ BESS systems with a capacity of greater than 50kWh

and commissioning information and shall meet all requirements set forth state codes and NFPA 855. Maintenance provisions will be driven by manufacturer requirements for the specific listed system.

8. Depending on the location of the BESS in relation to and its interaction with the electrical grid, interconnection will be completed per 527 CMR 12.00. System interconnections into utility grids shall be in accordance with NFPA 855. An accessible disconnect is required per 527 CMR 12.00.

9 Prior to the issuance of the building permit, engineering documents must be signed and sealed by a Massachusetts Licensed Professional Engineer.

10. Emergency Operations Plan. An Emergency Operations Plan compliant with NFPA 855 is required. A copy of the approved Emergency Operations Plan shall be given to the system owner, the local fire department, and local fire code official. For so long as the BESS is operational, the operator shall provide the Fire Department, Police Department, Building Commissioner, and Town Manager's office with contact information for personnel that can be reached 24 hours per day every day, and this contact information shall be updated by the operator whenever there is a change in the information. A permanent copy shall also be placed in an approved location to be accessible to facility personnel, fire code officials, and emergency responders. The emergency operations plan shall include the following information:

a. Procedures for safe shutdown, de-energizing, or isolation of equipment and systems under emergency conditions to reduce the risk of fire, electric shock, and personal injuries, and for safe start-up following cessation of emergency conditions.

b. Procedures for inspection and testing of associated alarms, interlocks, and controls.

c. Procedures to be followed in response to notifications from the Battery Energy Storage Management System, when provided, that could signify potentially dangerous conditions, including shutting down equipment, summoning service and repair personnel, and providing agreed upon notification to fire department personnel for potentially hazardous conditions in the event of a system failure.

d. Emergency procedures to be followed in case of fire, explosion, release of liquids or vapors, damage to critical moving parts, or other potentially dangerous conditions. Procedures can include sounding the alarm, notifying the fire department, evacuating personnel, de-energizing equipment, and controlling and extinguishing the fire.

e. Response considerations similar to a safety data sheet (SDS) that will address response safety concerns and extinguishment when an SDS is not required.

f. Procedures for safe disposal of battery energy storage system equipment damaged in a fire or other emergency event, including maintaining contact information for personnel qualified to safely remove damaged battery energy storage system equipment from the facility.

g. Other procedures as determined necessary by the Town to provide for the safety of occupants, neighboring properties, and emergency responders.

h. Procedures and schedules for conducting drills of these procedures and for training local first responders on the contents of the plan and appropriate response procedures.

H. Ownership Changes. If the owner of the battery energy storage system changes or the owner of the property changes, the special permit shall remain in effect, provided that the successor owner or operator assumes in writing all of the obligations of the special permit, site plan approval, and decommissioning

plan. A new owner or operator of the battery energy storage system shall notify the <u>Building</u> <u>CommissionerZoning Enforcement Officer</u> of such change in ownership or operator within 14 days of the ownership change. A new owner or operator must provide such notification to the <u>Building</u> <u>CommissionerZoning Enforcement Officer</u> in writing. The special permit and all other local approvals forthe battery energy storage system will be void if a new owner or operator fails to provide writtennotification to the Zoning Enforcement Officer in the required timeframe. Reinstatement of a void special permit will be subject to the same review and approval processes for new applications under this Bylaw.

I. Safety

1. System Certification. Battery energy storage systems and equipment shall be listed by a Nationally Recognized Testing Laboratory to UL 9540 (Standard for battery energy storage systems and Equipment) or approved equivalent, with subcomponents meeting each of the following standards as applicable:

a) UL 1973 (Standard for Batteries for Use in Stationary, Vehicle Auxiliary Power and Light Electric Rail Applications),

b) UL 1642 (Standard for Lithium Batteries),

c) UL 1741 or UL 62109 (Inverters and Power Converters),

d) Certified under the applicable electrical, building, and fire prevention codes as required.

e) Alternatively, field evaluation by an approved testing laboratory for compliance with UL 9540 (or approved equivalent) and applicable codes, regulations and safety standards may be used to meet system certification requirements.

2. Site Access. Battery energy storage systems shall be maintained in good working order and in accordance with industry standards. Site access shall be maintained, including snow removal at a level acceptable to the local fire department.

3. Battery energy storage systems, components, and associated ancillary equipment shall have required working space clearances, and electrical circuitry shall be within weatherproof enclosures marked with the environmental rating suitable for the type of exposure in compliance with NFPA 70.

K. Abandonment

The battery energy storage system shall be considered abandoned when it ceases to operate consistently for more than one year. If the owner and/or operator fails to comply with decommissioning refer to decom upon any abandonment, the Town may, after compliance with any applicable state and federal constitutional requirements, enter the property and utilize the available bond and/or security for the removal of a Tier 2 BESS and restoration of the site in accordance with the decommissioning plan.

Or act in any manner relating thereto.

(4) NOTE - Need to deal with the moratorium also; do we repeal it, or leave it in place and let it expire June 2023.

(5) Need to check if any other ZBL provisions need to be amended. dimensional

Commented [CMM6]: Since Town Meeting will likely be held before the moratorium expires in June, I recommend letting it expire and deal with it as a housekeeping matter at a future Town Meeting.

TABLE 1: SCHEDULE OF USES														
											Form-	Based Dis	stricts	
	AR-I	AR-II	VR	СВ	VC	NC	BI	EI	ER	WI	OGVC	OGBP	OGN	
A. Agriculture, Conservation, Re	creati	ion Us	es											
Agriculture, excluding piggeries and fur farms on less than 5 acres of land, and excluding livestock on less than 44,000 sq. ft. of land.	Y	Υ	Ν	N	N	N	N	N	Ν	Ν	N	Ν	Y	
Poultry on less than 1 acre. Minimum lot size for poultry is 5,000 sq. ft. subject to Board of Health regulations.	Y	Y	Y	N	Ν	N	N	N	N	Ν	N	N	Y	
Commercial Greenhouse	SP	SP	Ν	Ν	Ν	Y	Y	N	Ν	Ν	Ν	PB	N	
Nursery	SP	SP	Ν	Ν	Ν	Y	Y	Ν	Ν	Ν	Ν	Ν	Ν	
Recreational facility	SP	SP	Ν	Ν	Ν	Ν	Y	Y	Ν	Ν	Y	Y	PB	
Ski Area	SP	SP	Ν	Ν	Ν	Ν	Ν	Ν	Ν	Ν	Ν	Ν	Ν	
Golf course	SP	SP	N	Ν	Ν	Ν	Ν	Ν	Ν	Ν	Ν	Ν	Ν	
Livery riding stable	Y	Y	N	N	N	N	N	N	N	N	N	PB	PB	
B. PUBLIC SERVICE														
Municipal use	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	
Public utility	SP	SP	SP	SP	Y	Y	Y	Y	Y	Y	Ν	N	N	
C.RESIDENTIAL USES														
Detached single-family house (Amended 5-7-17)	Y	Y	Y	Ν	Y	Ν	N	N	Ν	Ν	Ν	Ν	Y1	
Two-family house/duplex, provided that the exterior of the dwelling has the appearance of a single-family dwelling. (Amended 5-7-17)	Ν	SP	SP	Ν	Ν	Ν	N	N	N	N	N	N	N	
Infill dwelling unit, subject to Section 8.1.	Ν	PB	PB	Ν	Ν	Ν	Ν	Ν	Ν	Ν	Ν	Ν	Ν	
Open space residential development, subject to Section 8.4	PB	PB	Ν	Ν	Ν	Ν	N	N	N	Ν	N	N	N	
Assisted living residence facility	PB	PB	N	Ν	Ν	Ν	Ν	Ν	Ν	Ν	PB	N	N	
Adult retirement community planned unit development, subject to Section 8.5	PB	PB	N	N	N	N	N	N	N	N	N	N	N	
Rowhouse subject to Section 10.0 (Added 5-10-21)	Ν	Ν	Ν	PB	Ν	Ν	Ν	Ν	Ν	Ν	Y ²	Ν	Y	

	TAI	BLE 1:	SCHE	DULE	E OF l	JSES							
											Form-	Based Dis	stricts
	AR-I	AR-II	VR	СВ	VC	NC	BI	EI	ER	WI	OGVC	OGBP	OGN
Multi-Family Building, Apartment Building, and Multi-Family Developments (Amended 11-18-19)		d by spea ard in the Medwa		nily Ove	erlay Dist	rict (See	e Sectio	n 5.6.4) a	and the		Y3	N	Y
Mixed-Use Development and Mixed-Use Building subject to Section 10.0 (Amended 11-16-20 and 5-10-21)	Ν	Ν	N	PB	Ν	N	Ν	N	N	Ν	Y	Y	Ν
Long-term care facility	SP	SP	N	N	Ν	N	N	N	N	N	PB	N	PB
Accessory Uses													
Accessory family dwelling unit, subject to Section 8.2	SP	SP	SP	Ν	SP	Ν	Ν	N	Ν	Ν	Ν	Ν	Ν
Home-based business, subject to Section 8.3 (Amended 5-10-21)	Y	Y	Υ	Υ	Y	Ν	Ν	Ν	Ν	Ν	Y	Ν	Y
Boathouse	Y	Y	Ν	Ν	Ν	Ν	Ν	Ν	Ν	Ν	Ν	Ν	Ν
Greenhouse	Y	Y	Y	N	N	N	N	N	N	N	Y	N	Y
D. BUSINESS USES													
Retail Trade													
Retail bakery (Added 11-16-15)	Ν	N	N	Y	Y	Y	Y	N	Ν	Ν	Y	Y	Ν
Retail sales	Ν	Ν	Ν	Y	Y	Y	Y	Ν	Ν	Ν	Y	Y	Ν
Retail store larger than 20,000 sq. ft. (Amended 5-10-	Ν	N	Ν	PB	Ν	Ν	SP	Ν	N	Ν	PB	PB	Ν
Retail sales, outdoors	Ν	N	N	Ν	Ν	Ν	Y	N	Ν	Ν	N	PB	Ν
Shopping center/multi-tenant development (Amended 5-10-21)	Ν	Ν	Ν	PB	Ν	SP	SP	N	Ν	Ν	PB	PB	Ν
Auto parts	Ν	Ν	Ν	Ν	Ν	Ν	Y	Ν	Ν	Ν	Ν	Ν	Ν
Florist	Ν	N	Ν	Y	Y	Y	Y	Ν	N	Ν	Y	Y	Ν
Indoor sales of motor vehicles, trailers, boats, farm equipment, with accessory repair services and storage, but excluding auto body, welding, or soldering shop (Amended 11-16-20)	N	N	N	N	N	N	N	N	N	N	N	PB	N
Hospitality and Food Services													
Restaurant providing food within a building, which may include outdoor seating on an adjoining patio	Ν	N	N	Y	Y	Y	Y	N	N	N	Y	Y	N

	TA	BLE 1:	SCHE	DULE	E OF I	JSES							
											Form-	Based Dis	stricts
	AR-I	AR-II	VR	СВ	VC	NC	BI	EI	ER	WI	OGVC	OGBP	OGN
Restaurant providing live entertainment within a building, subject to license from the Board of Selectmen	Ν	N	N	Y	SP	SP	N	N	N	N	Y	Y	N
Brew pub	Ν	Ν	Ν	Y	Y	Y	Y	Ν	Ν	Ν	Y	Y	Ν
Motel (Amended 11-16-20 and 5-10-21)	Ν	Ν	Ν	PB	Ν	Ν	Ν	Ν	Ν	Y	PB	PB	Ν
Hotel (Amended 11-16-20 and 5-10-21)	Ν	Ν	Ν	PB	Ν	Ν	Ν	Ν	Ν	Y	Y	Y	Ν
Bed and breakfast	SP	Ν	Ν	Ν	Ν	Ν	Ν	Ν	Ν	Ν	Y	Ν	PB
Inn	SP	SP	SP	SP	SP	Ν	Ν	Ν	Ν	Ν	Y	N	Ν
Cultural and Entertainment Uses													
Studio	Ν	Ν	SP	Y	Y	Y	Ν	Ν	Ν	Ν	Y	Y	Ν
Museum	Ν	N	Ν	Y	SP	SP	Ν	Ν	Ν	Ν	Y	PB	Ν
Movie theatre/cinema	Ν	Ν	Ν	SP	Ν	Ν	Ν	Ν	Ν	Ν	Y	PB	Ν
Gallery	Ν	N	Ν	Y	Y	Y	Ν	Ν	Ν	Ν	Y	PB	Ν
Commercial indoor amusement (Amended 11-15-21)	Ν	N	N	SP	Ν	N	Y	Y	Ν	Y	Y	Y	N
Professional Uses and Financial Services													
Financial institution	Ν	Ν	Ν	Y	Y	Y	Y	Ν	Ν	Ν	Y	Y	Ν
Professional or business office	Ν	Ν	Ν	Y	Y	Y	Y	Y	Y	Y	Y	Y	Ν
Services													
Personal care service establishments	Ν	N	N	Y	Y	Y	Y	N	Ν	Ν	Y	Y	Ν
Service establishment (Amended 11-13-17)	Ν	N	N	Y	Y	Y	Y	Ν	Ν	N	Y	Y	N
Doggie day care	Ν	N	N	Ν	Ν	Ν	SP	Ν	Ν	N	N	Y	N
Repair shop (Amended 5-10-21)	N	N	N	Y	Y	Y	Y	SP	Ν	Ν	Y	Y	Ν
Furniture Repair (Amended 5-10-21)	N	N	N	Y	Y	Y	Y	SP	N	N	N	Y	N
Educational/instructional facility, commercial	Ν	Ν	N	Y	Y	Y	Y	Y	Ν	Ν	Y	PB	Ν
Funeral home	SP	SP	N	SP	Y	Y	Y	Ν	Ν	Ν	Ν	Ν	Ν
Veterinary hospital (Amended 5-10-21)	SP	SP	Ν	PB	Ν	Y	Y	Ν	Ν	Ν	Ν	PB	Ν
Kennel	SP	SP	SP	Ν	SP	Ν	SP	SP	Ν	Ν	Ν	PB	Ν
Medical office or clinic	Ν	Ν	Ν	Y	Y	Y	Y	Ν	Ν	Ν	Y	Y	Ν

	TA	BLE 1:	SCHE	DULE	E OF I	JSES							
											Form-	Based Dis	stricts
	AR-I	AR-II	VR	СВ	VC	NC	BI	EI	ER	WI	OGVC	OGBP	OGN
Adult day care facility, subject to Section 8.5 (Amended 5-10-21)	PB	PB	N	PB	N	N	N	N	N	N	N	N	N
Automotive Uses													
Vehicle fuel station with repair services ⁴ (Amended 5-10-21)	Ν	N	Ν	PB	N	N	PB	N	Ν	Ν	N	N	N
Vehicle fuel station with car wash	Ν	Ν	Ν	Ν	Ν	Ν	PB	Ν	Ν	Ν	Ν	Ν	Ν
Car wash	Ν	Ν	Ν	Ν	Ν	Ν	PB	Ν	Ν	Ν	N	PB	Ν
Vehicle fuel station with convenience store ⁴ (Amended 5-10-21)	Ν	N	Ν	PB	Ν	N	PB	N	Ν	Ν	PB	N	N
Vehicle repair	Ν	Ν	Ν	Ν	PB	Ν	PB	Y	Ν	Ν	Ν	Y	Ν
Auto body shop	Ν	Ν	Ν	Ν	Ν	Ν	PB	Y	Ν	Ν	Ν	Y	Ν
Parking Lot (Added 11-16-20)	Ν	N	N	N	N	N	N	N	Ν	Ν	N	N	N
Other Business Uses: Unclassified													
Adult uses	Ν	Ν	Ν	Ν	Ν	Ν	Ν	Y	Ν	Ν	Ν	Ν	Ν
Mixed-Use Development and Mixed-Use Building subject to Section 10.0 (Added 11-16-20 and 5-10-21)	N	N	N	PB	N	N	N	N	N	N	Y	Y	N
Accessory Uses													
Drive-through facility (Amended 11-16-20 and 5-10-21)	Ν	Ν	Ν	PB	Ν	PB	PB	Ν	Ν	Ν	PB	PB	Ν
Outdoor display	Ν	Ν	Ν	SP	SP	SP	SP	Ν	Ν	Ν	Y	Y	Ν
Outdoor storage of materials and parking of vehicles and equipment associated with a business operated in a building on the premises, subject to Section 7.1.3 of the Zoning Bylaw. (Amended 11-18-19)	Ν	Ν	Ν	N	N	N	Y	Y	N	Y	N	PB	N
Electric vehicle charging station (Added 5-10-21)	Ν	Ν	Ν	Y	Y	Y	Y	Y	Y	Y	Y	Y	Ν
Electric vehicle charging station with digital advertising signage, subject to Section 5.4.2 of the Zoning Bylaw (Added 5-10-21)	Ν	N	Ν	РВ	N	N	N	РВ	Ν	PB	N	N	N

	TAI	BLE 1:	SCHE	DULE	E OF l	JSES							
								_ .			Form-	Based Dis	stricts
	AR-I	AR-II	VR	СВ	VC	NC	BI	EI	ER	WI	OGVC	OGBP	OGN
E. INDUSTRIAL AND RELATED USES	S												
Warehouse/distribution facility	Ν	Ν	Ν	Ν	Ν	Y	Ν	Y	Y	Y	Ν	PB	Ν
Wholesale bakery (Added 11-16-15; amended11-15-21)	N	Ν	Ν	Ν	Ν	Ν	Ν	Y	Ν	Y	Ν	Y	Ν
Wholesale showroom or office, including warehouse (Amended 11-15-21)	Ν	Ν	Ν	Ν	Ν	Ν	Y	Y	Ν	Y	Ν	Y	Ν
Manufacturing (Amended 5-8-17; amended 11-15-21)	Ν	Ν	Ν	Ν	Ν	Ν	Y	Y	Ν	Y	Ν	Y	Ν
Light Manufacturing (Added 5-8-17; amended 11-15-21)	Ν	Ν	Ν	Ν	Ν	Y	Y	Y	Ν	Y	Ν	Y	Ν
Contractor's yard	Ν	Ν	Ν	Ν	Ν	Ν	Y	Y	Ν	Ν	Ν	PB	Ν
Construction Equipment/Machinery Sales, Leasing or Rentals (Added 11-15-21)	Ν	N	Ζ	N	Ν	N	Ν	Ν	N	PB	Ν	Ν	N
Research and development (Amended 11-15-21)	Ν	N	Ν	Ν	Ν	Ν	Y	Y	Ν	Y	Ν	Y	Ν
Brewery (Amended 11-15-21)	N	N	Ν	Ν	Ν	Ν	Y	Y	Ν	Y	N	Y	Ν
Research and development and/or manufacturing of renewable energy products (Amended 11-16-20)	N	N	Ν	N	N	N	Y	Y	Y	Y	N	Y	Ν
Bulk Storage (Added 11-18-19)	Ν	N	Ν	Ν	Ν	Ν	Ν	Ν	Ν	Ν	Ν	Ν	Ν
Electric power generation which includes large- scale ground-mounted solar photovoltaic installations with a rated name plate capacity of 250 kW (DC) or more and other Renewable Energy sources other than solar. (Amended 11-16-20)	N	N	Ν	N	N	N	N	N	Y	N	Ν	Ν	N
Large-scale ground-mounted solar electric installations, including those with a rated name plate capacity of 250 kW (DC) or more; but excluding battery energy storage systems as a principal use.	<u>N</u>	<u>N</u>	<u>N</u>	<u>N</u>	<u>N</u>	N	Y	Y	<u>Y</u>	<u>Y</u>	<u>N</u>	Y	<u>N</u>
Small-scale ground-mounted solar electric installations (as principal use)	<u>N</u>	<u>N</u>	<u>N</u>	N	N	<u>SP</u>	Y	Y	Y	Y	N	<u>Y</u>	<u>N</u>

	TA	BLE 1:	SCHE	DULE	OFl	JSES							
											Form-	Based Dis	stricts
	AR-I	AR-II	VR	СВ	VC	NC	BI	EI	ER	WI	OGVC	OGBP	OGN
Gravel/loam/sand or stone removal, commercial	Ν	Ν	Ν	Ν	Ν	Ν	Ν	Ν	Ν	N	N	Ν	Ν
Tier 1 Battery Energy Storage System	<u>Y</u>	Y	Y	<u>Y</u>	Y	Y	Y	<u>Y</u>	Y	Y	Y	Y	<u>Y</u>
Tier 2 Battery Energy Storage System	<u>N</u>	N	<u>PB</u>	N	<u>N</u>	<u>N</u>	N						
Accessory Uses													
Outdoor storage of materials and parking of vehicles and equipment associated with a business operated in a building on the premises, subject to Section 7.1.3 of the Zoning Bylaw (Amended 11-18-19)	Ν	Ν	Ν	Ν	Ν	Ν	Y	Y	Y	Y	N	PB	N
Small-scale ground-mounted solar electric installations	<u>PB</u>												
Solar Parking Canopies	<u>N</u>	<u>N</u>	<u>N</u>	<u>PB</u>	<u>N</u>								
Tier 1 Battery Energy Storage System	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
F. INSTITUTIONAL USES													
Community center	SP	Ν	Ν	Ν	Y	PB	PB						
Lodge or Club (Amended 5-10-21)	SP	SP	SP	PB	Ν	Ν	Ν	Ν	Ν	Ν	Y	Y	Ν

	TABLE 1: SCHEDULE OF USES														
									55		Form-Based Districts				
	AR-I	AR-II	VR	СВ	VC	NC	BI	EI	ER	WI	OGVC	OGBP	OGN		
G. MARIJUANA RELATED USES															
Recreational Marijuana Establishment (Added 3-19- 18 and amended 5-21-18)	Ν	Ν	Ν	N	N	N	N	PB	N	PB	N	N	N		
Recreational Marijuana Retailer (Added 3-19-18 and amended 5-21-19)	Ν	Ν	Ν	N	N	Ν	Ν	Ν	Ν	Ν	N	Ν	Ν		
Recreational Marijuana Social Consumption Establishment (Added 5-21-18)	Ν	N	Ν	N	N	N	N	N	Ν	N	N	N	N		
Registered Medical Marijuana Facility (Retail) (Added 5-21-18)	Ν	N	Ν	N	Ν	N	PB	N	Ν	Ν	N	N	N		
Registered Medical Marijuana Facility (Non-retail) (Added 5-21-18)	Ν	N	Ν	N	N	N	N	PB	N	PB	N	N	N		

Footnotes:

1. In the OGN District, detached single family homes are permitted if they meet the designs standards for cottages under Section 9.4

2. In the OGVC and CB District, multi-family dwellings and developments include rowhouses (attached single family units) which are subject to the design standards under Section 9.4 (Amended 5-10-21)

3. Allowed by special permit from the Planning and Economic Development Board in the Multi-Family Overlay District (See Section 5.6.4) and the Medway Mill Conversion Subdistrict (See Section 5.6.2 E). (Added 5-10-21)

4. Vehicle fuel station with convenience store in the Central Business District (CB) is only allowed on the site of an existing vehicle fuel station with convenience store or an existing vehicle fuel station with repair services. Any substantial improvement to the existing building(s) or fueling station(s) shall require the site to comply with the design standards of Gas Station and Convenience Store in Section 9. Table 9.4.C.1.B (*Added 5-10-21*)

MULTIFAMILY HOUSING

Proposed amendments - July 22, 2022/sac

ARTICLE : To amend the Medway Zoning Bylaw, Section 5.6.4 Multi-Family Housing, as follows:

By revising item 1. in C. Dimensional Regulations. Proposed language is noted in bold.

1. The minimum dimensional regulations as specified in Table 2 shall be the same **for a proposed multifamily building, apartment building, or multi-family development** as for the underlying zoning district in which the parcel is located. However, the Planning and Economic Development Board may adjust these dimensional requirements by a four-fifths vote if, in its opinion, such adjustment will result in a more desirable design of the development or provide enhanced buffering for adjacent residential properties. Such adjustment may include increasing the underlying setback requirements.

By adding a new item 5. In C. Dimensional Regulations

5. The minimum lot size for a Multi-Family Building shall be one/half acre.

By amending D. Density Regulations by revising items 1 and 2 as follows, inserting a new item 3, and changing the numbering of item 3 to item 4.

- 1. For lots of one acre or more:
 - a. The density of a Multi-Family Building or a Multi-Family Development without an Apartment Building shall not exceed 8 dwelling units per whole acre Acres Available for Development. For example, the maximum density of a lot with 1.8 Acres Available for Development shall not exceed 8 dwelling units.
 - b. The density of an Apartment Building or a Multi-Family Development which includes an Apartment Building shall not exceed 12 dwelling units per whole acre-Acres Available for Development.
- 2. For lots under one acre, the density of a Multi-Family Building or a Multi-Family development shall not exceed its relative portion of an acre Acre Available for Development.
- 3. Acres Available for Development = Total area of the site minus the area covered by upland utility easements minus 50% of wetland and riverfront resource areas.

By revising item 3. Parking in E. Special Regulations

3. Parking: At least one and on half two off-street parking spaces shall be provided for each dwelling unit plus one additional visitor parking space for every two dwelling units. The Planning and Economic Development Board may adjust this requirement by a four-fifths vote, in consideration of the size of the proposed dwelling units.

By adding a new item 8 in E. Special Regulations

8. Architectural Character – The architecture of proposed new construction of a Multi-Family Building, Apartment Building, or Multi-Family development shall be compatible with the architecture of the surrounding neighborhood and comply with Section 4. C. Residential Zones Architectural Guidelines of the *Medway Design Review Guidelines*.

2022 Fall Town Meeting bjs draft – 7-15-22

Article ____ Housekeeping

To see if the Town will vote to amend the Zoning Bylaw, as provided below

1. Amend Open Space Residential Development, Section 8.4.F.1 by changing the reference "Paragraph I" to "Paragraph J"

2. Add a new definition:

Forestland: A dense growth of trees and shrubs covering an area of one acre or more.

3. Change all references that now read "Board of Selectmen" to "Select Board".

or act in any manner related thereto.