Tuesday, July 12, 2022
Medway Planning and Economic Development Board
155 Village Street
Medway, MA 02053

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

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

PRESENT VIA ZOOM:
Steve Bouley, Tetra Tech
Barbara Saint Andre, Director of Community and Economic Development

The meeting was called to order by Chair Hayes.

There were no Citizen Comments.

Public Briefing Continuation - BRIGHTPATH CHILD CARE CENTER SITE PLAN – 67 C MAIN STREET:

The Board is in receipt of the following documents which were entered into the record: (**See Attached**)

- Revised draft decision dated 7-7-22
- Review letter from Safety Officer Jeff Watson dated 7-6-22
- Email communication dated 7-8-22 from Karen Johnson

The Board was made aware that member Tucker will not be able to vote on the decision as he has missed two meetings. Ms. Affleck-Childs announced that member Chabot had provided a Mullins Rule Certification for the June 14, 2022 meeting.

Ms. Karen Johnson from Charter Realty was present via Zoom along with John Lorden from Tighe and Bond and Harry Freeman from BrightPath Childcare.

Ms. Johnson communicated that there is nothing further to present.

There was a Share Screen of the revised draft decision.

The draft Conditions were discussed.

- There will be some wayfinding signage which will need to be provided to guide vehicles about the changed traffic pattern throughout site. There will be further refinement of language on how this will work around the site. There can be language added that a master signage plan needs to be done within 90 days after a Certificate of Occupancy is issued.
- The Board wis amenable to having the applicant install some temporary internal directional signs prior to the opening of site.

There was a question about what will happen to the site if the childcare tenant leaves. Ms. Johnson communicated that this could be another education or childcare center. This would need to be determined at that time.

On a motion made by Matt Hayes, seconded by Sarah Raposa, the Board voted unanimously to grant the requested waiver from the *Site Plan Rules and Regulations* as discussed. (4-0)

On a motion made by Sarah Raposa, seconded by Rich Di Iulio, the Board voted unanimously to approve the site plan with Conditions and Findings as written, discussed and refined. (4-0)

NOTE – The Board signed the decision.

Public Hearing Continuation - WINGATE FARM SUBDIVISION MODIFICATION

Ms. Affleck-Childs reported that the applicant has asked for a continuation of the public hearing. A revised site plan will be submitted prior to the next meeting.

On a motion made by Jessica Chabot, seconded by Bob Tucker, the Board voted to continue the public hearing for Wingate Farm to August 23, 2022 at 8:30 p.m. (3-1-1) Di Iulio voted NO; Raposa abstained.

ELECTION OF PEDB OFFICERS:

Chair:
On a motion made by Jessica Chabot, seconded by Sarah Raposa, the Board voted unanimously to nominate Matt Hayes as the Chair.

Vice Chairman:
On a motion made by Jessica Chabot, seconded by Sarah Raposa, the Board voted unanimously to nominate Bob Tucker as the Vice Chair.

Clerk:
On a motion made by Jessica Chabot, seconded by Sarah Raposa, the Board voted unanimously to nominate Rich Di Iulio as the clerk.

Public Hearing Continuation – PHYTOPIA Site Plan, Reduced Parking Special Permit and Groundwater Protection Special Permit

The Board is in receipt of the following documents which were entered into the record: **(See Attached)**

- Notice to continue the public hearing to 7-12-22
- Tetra Tech plan review letter dated 4-22-22
- Pete Pelletier review letter dated 5-6-22
- Jack Mee review letter dated 5-13-22
- Mike Fasolino review letter dated 5-20-22
- Applicant's requests for waivers from *Site Plan Rules and Regulations*
- Attorney Ted Cannon email dated 5-17-21
- Site plan dated 3-7-22

The Chairman opened the continued public hearing.

Attorney Ted Cannon was present in person representing the applicant. Project engineer Chris Sparges was present via Zoom. The Board was informed that the Conservation Commission has issued an Order of Conditions. The items noted in the Tetra Tech review letter dated April 22, 2022 have also been addressed. The final site plan has been provided (dated May 14, 2022) but Tetra Tech has not reviewed this plan for the PEDB. It was approved by Conservation Commission. The Board was informed that the applicant has met with the DRC and the Chair of the DRC is going to supply a letter that the Committee is fine with what was presented. That DRC review letter is still needed. There was also an email from Building Commissioner Jack Mee indicating that the parking spaces are adequate for the site.

Mr. Sparges reviewed the May 14, 2022 site plan with the Board via Share Screen. The few outstanding items to discuss included:

- There needs to be follow up with the Fire Department and a written correspondence and this can be part of a condition.
- There is a proposal to match the existing curbing within the site.
- There was a recommendation to add two more trees for landscaping.
- There will be 4 EV spaces added to the plan along with conduits along the side parking area to expand the # of EV spaces.
- There is no requirement for a MS4CD permit based on letter dated May 6, 2022 from Medway DPS
- The stormwater changes were satisfactory to the Conservation Commission and the pretreatment will be able to remove the phosphorus.
- There will be additional landscaping and trees on site.
- There was an email indicating that the parking is 73 spaces short. However, that has been further addressed with the Building Commissioner who has provided an updated email.
- The Board will need to act on waiver requests.
- There is an email dated May 20, 2022 from Deputy Chief Fasolino regarding the proposed changes for the site plan.

The Board would like a draft decision to be prepared for the next meeting.

On a motion made by Rich Di Iulio, seconded by Bob Tucker, the Board voted unanimously to continue the hearing to July 26, 2022 at 8:30 am. (Sarah Raposa abstained)

Public Hearing Continuation - 288 Village Street

The Board is in receipt of the following documents which were entered into the record: **(See Attached)**

- Public Hearing Continuation Notice to July 12, 2022
- Revised site plan dated June 30, 2022 by Land Planning, Inc.
- Tetra Tech review letter dated July 7, 2022
- Front elevation planting plan
- Additional requests for waivers from the **Site Plan Rules and Regulations**
- Review comments dated July 11, 2022 from Conservation Agent Bridget Graziano
- Draft decision dated July 11, 2022

The applicant had been supplied with the draft decision. This was shown on the Share Screen for review.

The following was discussed:

- A final photometric plan will be provided.
- There was language added about the open space regulation. This will be added to the detail plan.
- There was a condition included about that a landscaping plan will be revised to include details about the landscape installation along the eastern side of the site to screen to the development from the abutting property. However, the Board deleted that item. The plan needs to be revised to indicate that the buffer area is comprised of existing landscape.

On a motion made by Jessica Chabot, seconded by Sarah Raposa, the Board voted unanimously to approve the Findings as presented. (5-0)

The Board next discussed the requested waivers from the *Site Plan Rules and Regulations*.

- Section 204-3. F.1 Traffic Impact Assessment
- Section 204-3. F.2 Environmental Impact Assessment
- Section 204-3. F.3 Neighborhood Impact Assessment
- Section 203-3H. Construction Management Plan - The applicant will provide an updated construction sequencing plan at the time of the pre-construction meeting.
- Section 204-5 D. 8. Landscape Plan – There needs to be more clarity on the mitigation for the removal of a 24' tree located in the proposed parking area as required by Section 207-19 H. Tree Replacement. The Applicant indicated that the tree is not 24 inches but smaller maybe 8-12". So, it should be removed from the Existing Conditions sheet.
- Section 204-5D. 10) Color Renderings – The color elevations of the building were shown to the DRC and the waiver is recommended.
- Section 204-5 D. 14 Master Signage Plan
- Section 204.5 D. 15 Lighting Plan – There are no light poles proposed in the parking lot area. The plan proposed is consistent with residential use.
- Section 207-11A.3. – Site entrance and exit driveways. The Fire Chief has reviewed this and approved the reduced driveway width to 16'.
- Section 207-11 A. 4 – Site Entrances - The applicant will match the type of curbing that was done along the rest of Village Street.
- Section 207-11 A.13.
- Section 207-11 B.2
- Section 207-12 G. 3. – The waiver allows for the placement for the required parking spaces
- Section 207-12 H.1. - Perimeter of the parking area shall be bounded with vertical granite curbing. This is consistent with the neighborhood.
- Section 207-12 H.2. – The applicant has requested a waiver from the three-foot radius requirement to allow for curb radii measuring two feet.
- Section 207-16 - The waiver is sought to allow them to use the existing utility pole located on the south side of Village Street and run the overhead electrical service from that pole across Village Street to the new building on the subject property.
- Section 207-19. H. Landscaping – Tree replacement. Not needed.

On a motion made by Bob Tucker, seconded by Sarah Raposa, the Board voted

unanimously to approve the waivers as discussed.

The Board discussed the Conditions.

On a motion made by Bob Tucker, seconded by Sarah Raposa, the Board voted to approve The Multi-Family Development Special Permit, Major Site Plan, and Land Disturbance Permit for 288 Village Street with conditions and findings. (5-0)

On a motion made by Sarah Raposa, seconded by Bob Tucker, the Board voted to close the Public hearing for the Multi-Family Development Special Permit. Major Site Plan and Land Disturbance Permit for 288 Village Street. (5-0)

NOTE – The Board signed the decision.

Zoning for Fall Town Meeting:

The Board is in receipt of the following document which was entered into the record: (**See Attached)**

- DRAFT of BESS Zoning dated 7-7-22 prepared by Barbara Saint Andre

The draft of the BESS Bylaw was shown on the Share Screen. Proposed is amending Table 1, Schedule of Uses to add Battery Energy Storage to the certain zones (to be determined). There are new lines to be inserted into the Table of Uses for Tier 1 and Tier 2 BESS. The draft Bylaw was modeled from the State of New York. A new Section 8.12 was reviewed. BESS systems will be regulated by zoning, fire code, electrical code and building code. The applicability is such that the if the BESS systems do not meet the noted threshold capacities, then those would not be subject to the bylaw.

Ms. Chabot asked about the proposed host community agreement for Medway GRID that was discussed at the Select Board's July 11th meeting. It is not clear if that project will need to come before the Planning Board. Ms. Affleck-Childs noted that Town Manager Boynton had circulated the draft agreement to Town staff and has asked for comments. The Board would like to discuss this further an at upcoming board meeting.

Housing Production Plan Revision:

Ms. Saint Andre informed the Board that the Town had submitted an updated Housing Production Plan to the MA Department of Housing and Community Development for review and approval. The document had been reviewed and approved by the Affordable Housing Trust, PEDB, and Select Board. The DHCD has advised the Town to designate "two or more sites" as possible future comprehensive development sites (40 B) even though the Town is over the 10% SHI threshold.

The parcels suggested for potential future 40B development are as follows: **See Attached map**.

- 150 Village Street
- 8 Broad Street
- 155 Village Street

On a motion made by Jessica Chabot, seconded by Sarah Raposa, the Board voted unanimously to approve the revisions to the Housing Production Plan to include the noted parcels. (4-1). Member Tucker voted NO.

Public Hearing Continuation 2 Marc Road Special Permit:

The applicant for 2 Marc Road has sought a continuation to the hearing. **See Attached**.

On a motion made by Jessica Chabot, seconded by Rich Di Iulio, the Board voted unanimously to continue the public hearing to August 9, 2022 at 7:45 pm.

Cassidy Field Site Plan Endorsement:

The Board is in receipt of the following which was entered into the record: (**See Attached**)

- Revised Cassidy Field Site Plan dated July 11, 2022 by Tetra Tech

The required revisions have been made and the plan is ready for the Board's endorsement.

On a motion made by Jessica Chabot, seconded by Sarah Raposa, the Board voted to endorse the revised Cassidy Site Plan dated July 11, 2022.

Public Briefing - Master's Touch Minor Site Plan– 83 Main Street:

The Board is in receipt of the following documents which were entered into the record: **(See Attached)**

- Public briefing Notice dated 6-8-22
- Minor Site Plan Application 6-6-22
- Project Narrative 2-7-22 by Spruhan Engineering
- Site Plan dated 2-14-22 by Spruhan Engineering
- Building elevations 6-15-22 by SAH Design, LLC
- Landscape plan dated 6-17-22 by Collins Landscaping
- Email from Susy Affleck-Childs to Town boards and committees dated 6-8-22
- Review comments dated 6-9-22 from DPW Compliance Officer Stephanie Carlisle
- Review comments dated 6-9-22 from Fire Chief Jeff Lynch
- Email communication dated 6-27-22 from abutter Ed Skou
- Tetra Tech review letter dated 7-8-22

Applicant Doug Masters and Jacob Gadbois of Master's Touch were present via Zoom along with Guillermo Beltran from Spruhan Engineering. The applicant seeks minor site plan approval and possibly a land disturbance permit to improve and expand the existing building, construct a new building for storage, and make a series of site improvements at 83 Main Street. The property will be used by Master's Touch, a custom home design build construction and remodeling firm, for its offices, showroom, and storage. The applicant informed the Board that he has met with the Fire Chief who is OK with the plan. The applicant would like a second curb cut onto Main Street. The intent is to enable trucks to get behind the existing building on the east side of the property to access the new storage building in the back. Tetra Tech does not recommend a second curb cut on Main Street. There was a question about the three parking areas, especially the parking at the back of the site. This needs to be reconsidered. The concern is that the driveway is not really going to be used. It was suggested to ask for a waiver on the parking requirements. There should be the existing vegetative buffer and not a driveway. This site is subject to the Central Business District zoning provisions; staff still needs to provide a review of this proposed project based on those regulations. The drainage will have an infiltration area. The test pits have not been done. This application will go to DRC next week for a review of the building design.

Tetra Tech explained that there were many administrative items which need to be addressed. The project will need a street opening permit from the DPW for the second curb cut. The drive aisle width is about 16 ft. It was recommended that the addition should not have so much depth. There are numerous items which have not been addressed by the engineering firm regarding the S*ite Plan Rules and Regulations*. The site circulation needs to be further refined. If the warehouse is removed, the majority of the parking can go behind the building, especially for employee parking. It was suggested using a low impact, surface drainage design instead of a sub-surface system. The site seems tight for the warehouse use and the associated delivery trucks. The access around the site is tight. The new building technically meets the requirements, but the parking needs to be pulled in. There are options for waivers which can be sought. The Board would like to see an auto turn analysis for how large delivery trucks will maneuver on the site.

Consultant Bouley had the following recommendations:

- Confirm that the parking spaces calculations are correct.
- Recommend the applicant provide a layout and materials plan and separate grading, drainage and utilities plan.
- Dimensions should be coordinated between the different plans.
- Plan shows inconsistent measurements from the proposed warehouse to the property lines on plot plan.
- Adjust the paving limits to the east entrance to provide additional green space.
- The applicant needs to supply a stormwater O & M plan
- The phosphorus removal calculations have not been provided.

Abutter, Edward Skou – 14 Malloy:
Mr. Skou was at the meeting and in person and is concerned about the stormwater drainage. He provided a comment letter. (**See Attached**.) He indicated that he has significant water flowing to his and his neighbors' properties at 14, 16 and 18 Malloy Street from the bank's lot bank. He currently has three sump pumps in his basement. He is concerned that this additional building will make the situation worse.

Continuation:
On a motion made by Jessica Chabot, seconded by Sarah Raposa, the Board voted unanimously to continue the public briefing on this project to August 9, 2022 at 8:15 pm.

Extension Deadline:
On a motion made by Jessica Chabot, seconded by Sarah Raposa, the Board voted to approve the applicant's request to extend the action deadline to September 30, 2022.

NOTE - Member Tucker left at 10:23 pm.

APPROVAL OF PEDB MEETING MINUTES:

June 14, 2022 Regular Minutes

On a motion made by Sarah Raposa, seconded by Jess Chabot, the Board voted to approve the minutes from June 14, 2022 as written.

June 28, 2022 Regular Meeting

On a motion made by Sarah Raposa, seconded by Jess Chabot, the Board voted to approve the minutes from June 28, 2022 with revisions.

PEDB OFFICERS, REPRESENTATIVES, and LIAISONS:

See attached list.

The PEDB representatives to various Town boards and committees will remain the same:

- Community Preservation Committee – Matt Hayes
- Design Review Committee – Tom Gay
- Economic Development Committee – Rich Di Iulio
- Master Plan Committee – Jess Chabot
- Sign Bylaw Committee – Tom Gay
- Town Bylaw Review Committee – Tom Gay

The majority of the liaison jobs will remain with the current members with a few changes resulting from the new composition of the Board without Andy Rodenhiser and with new member Sarah Raposa

- SWAP – Sarah Raposa
- Medway Redevelopment Authority - Sarah Raposa
- Historical Commission – Jessica Chabot
- Finance Committee – Matt Hayes
- Capital Improvements Committee – Sarah Raposa
- Water and Sewer – Matt Hayes
- Board of Health – Sarah Raposa
- Board of Assessors – Sarah Raposa
- Affordable Housing Trust and Committee – Sarah Raposa
- Sign Bylaw – Tom Gay
- Agricultural Commission – Bob Tucker
- Conservation Commission – Bob Tucker
- Energy and Sustainability Committee - Bob Tucker
- Open Space Committee – Rich Di Iulio
- Zoning Board of Appeals – Jess Chabot
- Town Manager/Select Board – Matt Hayes
- Also, Medway Business Council – Jess Chabot

Rocky's Site Plan:

The Board was informed that the Rocky's site plan special permit decision for outdoor storage needs to be re-signed. It was recorded by mistake at the Registry of Deeds, but it needs to be recorded instead at Land Court. The document will be signed at the end of the meeting.

CONSTRUCTION REPORTS:

Medway Mill:

- Monthly Inspection Report from Guerriere & Halnon Inc. dated July 1, 2022

William Wallace Village:

- Construction Inspection Report from Legacy Engineering dated July 6, 2022

Choate Trail:

- Construction Observation Report from Connorstone Engineering, Inc.

Cutler Place:

- June 2022 Progress Report from Rob Tiberi

Evergreen Village:

- June 2022 Progress Report from Ron Tiberi

ADJOURN:

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

The meeting was adjourned at 10:31pm.

Prepared by,
Amy Sutherland
Recording Secretary

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

July 12, 2022, 2022
Medway Planning & Economic Development Board Meeting

Bright Path Child Care Minor Site Plan Public Briefing Continuation

- Revised draft decision dated 7-7-22
- Review letter from Safety Officer Jeff Watson dated 7-6-22
- Email communication dated 7-8-22 from Karen Johnson, Charter Realty with comments on draft decision

TOWN OF MEDWAY

Planning & Economic Development Board

155 Village Street
Medway, Massachusetts 02053

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

Revised Draft – July 8, 2022

Minor Site Plan Decision
BrightPath Child Care Center – 67C Main Street
_____with Waivers and Conditions

Decision Date: July 12, 2022

Name/Address of Applicant (Permittee):
Charter Realty and Development Corporation
309 Greenwich Avenue
Greenwich, CT 06830

Name/Address of Property Owner:
Hidden Acres Realty Trust
c/o Charter Medway II, LLC
309 Greenwich Avenue
Greenwich, CT 06830

Project Location: 67C Main Street, Medway Commons
Assessors' Reference: 41-023
Zoning District: Central Business

Engineer: Tighe & Bond
117 Corporate Drive
Portsmouth, NH 03801

Site Plan: Medway Commons 67C Main Street Medway, Massachusetts
BrightPath Child Care Center Permit Drawings
Dated May 19, 2022, last revised June 22, 2022 to be revised as specified herein.

DRAFT

Telephone: 508-533-3291 *Fax*: 508-321-4987
planningboard@townofmedwa.org

I. PROJECT DESCRIPTION - The Applicant seeks minor site plan approval to modify a section of the existing parking lot in front of a portion of existing retail and restaurant spaces to accommodate construction of an approximately 14,200 sq. ft. outdoor play area for a new 12,700 sq. ft. childcare facility to be located within existing space at the southwestern end of the shopping center. Planned construction includes removal of pavement from 33 parking spaces, removal of an estimated 440 linear feet of curbing, removal or approximately 80 linear feet of driveway space, and removal of an estimated 2,040 sq. ft. of sidewalk, to be replaced with installation of various play area surface materials, fencing, landscaping, and play space equipment and amenities to be directly accessed from the childcare center.

II. VOTE OF THE PLANNING AND ECONOMIC DEVELOPMENT BOARD – After reviewing the application and information gathered during the public review process, the Medway Planning and Economic Development Board, hereafter referred to as the "Board", on July 12, 2022, on a motion made by _____ and seconded by _____, ***voted to _____ with WAIVERS and CONDITIONS*** as specified herein, a site plan for *Medway Commons 67C Main Street Medway, Massachusetts BrightPath Child Care Center Permit Drawings* dated May 19, 2022, last revised June 22, 2022, prepared by Tighe & Bond, to be further revised as specified herein.

The motion was approved by a vote of ___ in favor and ___ opposed.

Planning & Economic Development Board Member Vote

Matthew Hayes
Richard Di Iulio
Jessica Chabot
Sarah Raposa

III. PROCEDURAL HISTORY

A. May 20, 2022 – Minor site plan application and associated materials were filed with the Board and were provided to the Medway Town Clerk.

B. May 24, 2022 – Minor site plan public review notice was filed with the Town Clerk and posted at the Town of Medway web site.

C. May 25, 2022 – Minor site plan public review notice was mailed to abutters by first class mail.

D. May 31, 2022 – Minor site plan information distributed to Town boards, committees and departments for review and comment.

E. June 14, 2022 – The Board commenced its review of the minor site plan. The public briefing was continued to June 28, 2022 and July 12, 2022 when the briefing was concluded, and the Board voted its decision.

IV. INDEX OF SITE PLAN DOCUMENTS

A. The application for the proposed minor site plan project included the following documents, plans, studies and information that were provided to the Board at the time the application was filed:

1. Minor Site Plan Application dated May 20, 2022, with Project Description.
2. Certified abutters' list prepared by Medway Assessor's office.

DRAFT

3. Site plan *Medway Commons 67C Main Street Medway, Massachusetts BrightPath Child Care Center Permit Drawings* dated May 19, 2022, prepared by Tighe & Bond
4. Architectural drawings and landscape plan *BrightPath 67 Main Street Medway, MA 02053* dated February 2, 2022, prepared by Helicon Design Group, Inc.
5. Stormwater memo dated March 19, 2022, prepared by Tighe & Bond.
6. Project Narrative by Charter Realty & Development Corp.
7. Parking information.

B. During the course of the Board's review, a variety of other materials were submitted to the Board:
1. Plan review letter from Tetra Tech dated June 9, 2022
2. Response letter to Tetra Tech, Inc. comments, dated June 14, 2022, from Charter Realty & Development.
3. Site plan *Medway Commons 67C Main Street Medway, Massachusetts BrightPath Child Care Center Permit Drawings* dated May 19, 2022, ***last revised June 22, 2022***, prepared by Tighe & Bond.
4. Plan review letter from Tetra Tech dated June 22, 2022
5. Plan review letter from Tetra Tech dated June 28, 2022
6. Email communication dated June 14, 2022 from Deputy Fire Chief Mike Fasolino
7. Review letter dated July 7, 2022 from Police Sergeant Jeff Watson.
8. Waiver request from *Site Plan Rules and Regulations* dated June 22, 2022
9. Mullin Rule Certifications pursuant to G.L. c. 39, §43D from Jessica Chabot and Robert Tucker

C. All documents and exhibits received during the public review process are contained in the Board's project file.

V. TESTIMONY - In addition to the site plan and special permit application materials as submitted and provided during the course of the Board's review, the Board also received verbal or written testimony from:

- Steve Bouley, P.E. and Courtney Sudak, P.E. of Tetra Tech, Inc., the Town's Consulting Engineer – Site plan review letters dated June 9, June 22, and June 28, 2022 and commentary throughout the public review process.
- Karen Johnson, Charter Realty
- John Lorden, Tighe & Bond
- Harry Freeman, BrightPath Child Care
- Charlie Meyers, 8 Curtis Lane

VI. FINDINGS – In making its findings and reaching the decision described herein, the Board is guided by Board's *Site Plan Rules and Regulations*, and the *Medway Zoning Bylaw*. The Board also considered evidence and testimony presented at the public briefings and comments submitted by Town departments, boards, and committees as well as the Board's peer review consultant and residents placed in the public record during the course of the review.

The Planning and Economic Development Board, at its meeting on July 12, 2022, on a motion made by _____ and seconded by _____, voted to _____

the following ***FINDINGS*** regarding the minor site plan application of Charter Realty and Development Corp. for the BrightPath Child Care Center at 67C Main Street. The motion was _____ by a vote of ___ in favor and ___ opposed.

Site Plan Rules and Regulations Findings – The Planning and Economic Development Board shall determine whether the proposed development is in conformance with the standards and criteria set forth in the *Site Plan Rules and Regulations*, unless specifically waived. Some of the criteria found in the *Regulations* are not applicable to this proposal, and no specific findings are made as to those criteria. In making its decision, the Board shall determine the following:

(1) Has internal circulation, queuing and egress been designed such that traffic safety is protected, access via minor streets servicing residential areas is minimized, and traffic backing up into the public way is minimized?

The proposed parking, circulation and egress have been reviewed by the Board's consulting engineer, and the Applicant has adequately addressed all comments.

(2) Does the site plan show designs that minimize any departure from the character, materials, and scale of buildings in the vicinity as viewed from public ways and places?

The proposed play area and other changes do not change the view of the existing buildings from public ways and places.

(3) Is reasonable use made of building location, grading and vegetation to reduce the visible intrusion of structures, parking areas, outside storage or other outdoor service areas (e.g., waste removal) from public views or from (nearby) premises residentially used and zoned.

The project includes perimeter fencing and landscaping of the proposed play area. No new structures or service areas are proposed.

(4) Is adequate access to each structure for fire and emergency vehicles provided?

The building is readily accessible. The Deputy Fire Chief has stated he had no concerns, and the Police Safety Officer has stated he sees no safety issues with the proposed design and traffic flow.

(5) Will the design and construction minimize, to the extent reasonably possible, the following environmental impacts?
- a) the volume of cut and fill;
- b) the number of trees to be removed with particular care taken with mature trees and root systems;
- c) the visual prominence of man-made elements not necessary for safety;
- d) the removal of existing stone walls;
- e) the visibility of building sites from existing streets;
- f) the impacts on waterways and environmental resource areas;
- g) soil pollution and erosion;
- h) noise.

DRAFT

The changes are proposed to an existing parking lot area; there will not be adverse impacts to the interests listed above.

(6) Are pedestrian ways, access driveways, and vehicular and bicycle parking facilities properly designed?

The entrance and egress to the site and its parking have been designed for safe operation and to minimize conflict. The site design has been reviewed by the Town's Consulting Engineer and found to be acceptable.

(7) Does the design and will the construction incorporate, to the maximum extent possible, the visual prominence of natural and historic features of the site?

The site is presently occupied by a building and parking lot. Accordingly, there are no visually prominent natural or historic features on site.

(8) Does the lighting on the site comply with Section 7.1.2 of the Zoning Bylaw?

Site lighting has been proposed and modified to comply with the bylaw.

(9) Is the proposed limit of work area reasonable and does it protect sensitive environmental and/or cultural resources? The site plan as designed should not cause substantial or irrevocable damage to the environment, which damage could be avoided or ameliorated through an alternative development plan or mitigation measures.

The limit of work is reasonable for the proposed facility. There are no sensitive environmental or cultural resources on or abutting the site.

VII. WAIVERS FROM SITE PLAN RULES AND REGULATIONS

At its July 12, 2022 meeting, the Planning and Economic Development Board, on a motion made by _____ and seconded by _____, voted to approve a waiver from the following provision of the *Site Plan Rules and Regulations*, as amended October 8, 2019. The Board's action and reasons for approving the waiver request are listed below. Waivers are subject to the Special and General Conditions of Approval, which follow this section.

The motion was _____by a vote of ____in favor and ____opposed.

Planning & Economic Development Board Member ***Vote***
Richard Di Iulio
Matthew Hayes
Jessica Chabot
Sarah Raposa

Section 205-4 C. All existing and proposed elevations shall refer to the North American Vertical Datum of 1988 (NAVD88).

The Applicant has requested a waiver from this regulation. The submitted site plan uses NGVD29 instead as the original survey and as-built plans for Medway Commons were completed in HGVD29 in 2003 and 200. There is no benefit to site design, construction, or floodplain by using a different vertical datum than the one originally used for the site.

DRAFT

For the foregoing reason, the Board APPROVES this waiver as being consistent with the purpose and intent of the Site Plan Rules and Regulations which will have no significant detriment to the achievement of any of the purposes of Site Plan Review and Approval.

VIII. CONDITIONS The *Special and General Conditions* included in this Decision shall assure that the Board's approval of this site plan is consistent with the *Site Plan Rules and Regulations*, that the comments of various Town boards and public officials have been adequately addressed, and that concerns of abutters and other town residents which were aired during the public review process have been carefully considered. The Board's approval of the site plan is subject to the following conditions:

SPECIFIC CONDITIONS OF APPROVAL

A. ***Plan Endorsement*** **-** Within sixty days after the Board has filed its *Decision* with the Town Clerk, the site plan shall be further revised to reflect all Conditions and required plan revisions, including those specified as follows, and submitted to the Board to review for compliance with the Board's *Decision*. *(Said plan is hereinafter referred to as the Plan)*. The Permittee shall provide a set of the revised Plan in its final form to the Board for its endorsement. All plan sheets shall be bound together in a complete set.

B. ***Plan Revisions*** **–** Prior to plan endorsement, the following plan revisions shall be made to the June 22, 2022 plan set.
1. Cover sheet shall include a list of approved waivers.
2. Signature box on the cover shall be revised to add a line for endorsement date.
3. Plan title shall be revised to include Minor Site Plan text
4. The lighting photometric plan presented at the June 14, 2022 public briefing shall be incorporated into the plan set and a reference to it shall be added to the List of Drawings on the cover sheet.
5. Fencing detail shall be added to the plan set.
6. xxx
7. yyy
8. zzz

C. ***Signage*** – BrightPath Childcare shall secure sign permits from the Medway Building Department which includes prior review by the Design Review Committee as specified in Section 7.2.6.3 Sign Regulation of the *Zoning Bylaw*.

D. ***Snow Removal*** – Snow accumulation that exceeds the on-site storage capacity shall be collected and transported offsite and disposed of at an approved snow disposal facility.

E. ***Wayfinding Signage*** **-** Prior to plan endorsement, the Permittee shall provide a proposed plan for wayfinding signage within the Medway Commons site to guide vehicles about the changed traffic pattern to the Board by action as a field change. Such plan shall be referred to the Design Review Committee for review and comment. NOTE – Such signage will likely require a variance from the Zoning Board of Appeals.

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GENERAL CONDITIONS OF APPROVAL

A. ***Fees*** - Prior to site plan endorsement by the Board, the Permittee shall pay:

1. the balance of any outstanding plan review fees owed to the Town for review of the site plan by the Town's engineering, planning or other consultants; and
2. any construction inspection fee that may be required by the Board; and
3. any other outstanding expenses or obligations due the Town of Medway pertaining to this property, including real estate and personal property taxes and business licenses.

The Permittee's failure to pay these fees in their entirety shall be reason for the Board to withhold plan endorsement.

B. ***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.

C. ***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.

1. *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 6 p.m. Monday through Saturday. No construction shall take place on Sundays or legal holidays without the advance approval of the Building Commissioner.

2. 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.

3. There shall be no tracking of construction materials onto any public way. Sweeping of roadways adjacent to the site shall be done as needed to ensure that any loose gravel or dirt is removed from the roadways and does not create hazardous or deleterious conditions for vehicles or pedestrians. 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 hours of its occurrence.

4. The Permittee is responsible for having the contractor clean-up the construction site on a daily basis.

5. All erosion and siltation control measures shall be installed prior to the start of construction and observed by the Board's consulting engineer and maintained in good repair throughout the construction period.

6. *Construction Traffic and Parking* – During construction, adequate provisions shall be made on-site for the parking, storing, and stacking of construction

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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 or within the Medway Commons.

7. *Noise* - Construction noise shall not exceed the noise standards as specified in the *Zoning Bylaw*, Section 7.3.C.2. Environmental Standards.

D. ***Landscape Maintenance***

1. The site's landscaping shall be maintained in good condition throughout the life of the facility and to the same extent as shown on the endorsed Plan. Any shrubs, trees, bushes or other landscaping features shown on the Plan that die shall be replaced by the following spring.

2. Within 60 days after two years after the occupancy permit is issued, the Town's Consulting Engineer or the Building Commissioner may 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 Building Commissioner 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 Zoning Enforcement Officer to ensure that the comprehensive landscaping plan is maintained.

E. ***Snow Storage and Removal***

1. On-site snow storage shall not encroach upon nor prohibit the use of any parking spaces required by the *Zoning Bylaw*.

2. The Permittee shall make the fullest possible effort to remove accumulated snow which exceeds the capacity of the designated on-site snow storage areas from the premises within 48 hours after the conclusion of a storm event.

F. ***Construction Oversight***

1. Construction Account

   a) Inspection of infrastructure and utility construction, installation of site amenities including landscaping is required. Prior to plan endorsement, the Permittee shall establish a construction account with the Board. 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, identify what site plan work remains to be completed, 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 a *Certificate of Site Plan Completion*.

   b) Prior to plan endorsement, the Permittee shall pay an advance toward the cost of these services to the Town of Medway. The advance amount shall be determined by the Board based on an estimate provided by the Town's Consulting Engineer.

c) 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.

d) Any funds remaining in the applicant's construction inspection account after the *Certificate of Site Plan Completion* is issued shall be returned to the Permittee.

2. Pre-Construction Meeting - Prior to the commencement of any work on the Property, the Permittee and the site general contractor shall attend a preconstruction conference with the Planning and Economic Development Coordinator, the Building Commissioner, Department of Public Works Director, the Town's Consulting Engineer and other Town staff or Permittee's representatives as may be determined. The general contractor shall request such conference at least one week prior to commencing any work on the property by contacting the Planning and Economic Development office.

3. Board members, its staff, consultants or other designated Town agents and staff shall have the right to inspect the site at any time, for compliance with the endorsed site plan and the provisions of this Decision.

G. ***On-Site Field Changes***

1. 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 site plan.

2. 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. In accordance with Section 3.5.2.C of the Bylaw, 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.

H. ***Modification of Plan and/or Decision***

1. This site plan approval is subject to all subsequent conditions that may be imposed by other Town departments, boards, agencies or commissions. Any

changes to the site plan that may be required by the decisions of other Town boards, agencies or commissions shall be submitted to Board for review as site plan modifications.

2. Any work that deviates from the approved site plan or this Decision may be a violation of the *Medway Zoning Bylaw* unless the Permittee requests approval of a plan modification pursuant to Section 3.5.2.A.3.c. and such approval is provided in writing by the Board.

3. Whenever additional reviews by Board, its staff or consultants are necessary due to proposed site 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 review process including legal notice and abutter notification. If the proposed revisions affect only specific limited aspects of the site, the Board may reduce the scope of the required review and waive part of the filing and review fees.

4. The Board shall issue a modification decision, file such with the Town Clerk, and provide copies to the Building Commissioner and other Town officials and the Permittee. Any modification approved by the Board shall be made a permanent part of the approved site plan project documents and shall be shown on the final as-built plan.

I. ***Compliance with Plan and Decision***

1. The Permittee shall construct all improvements in compliance with the approved and endorsed site plan and this Decision any modifications thereto.

2. The Board or its agent(s) may 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 the foregoing Conditions of Approval.

3. 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 penalty.

J. ***Performance Security***

1. No occupancy permit for the building shall be granted until the Board has provided a written communication to the Building Commissioner/Zoning Enforcement Officer that the project, as constructed, conforms completely and fully to the approved site plan and that any conditions including construction of any required on and off-site improvements, have been satisfactorily completed OR that suitable security or performance guarantee has been provided to the Town of Medway, to the Board's satisfaction, to cover the cost of all remaining work.

2. If performance security is needed, the Permittee shall propose a form of performance security which shall be of a source and in a form acceptable to the Board, the Treasurer/Collector and Town Counsel. The Board requires that the performance guarantee be accompanied by an agreement which shall define the obligations of the developer and the performance guarantee company including:

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a) the date by which the developer shall complete construction
b) a statement that the agreement does not expire until released in full by the Board
c) procedures for collection upon default.

3. 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 site infrastructure including installation of stormwater management facilities, utilities, services, parking, pedestrian facilities and all site amenities as specified in the Site Plan that remain unfinished at the time the performance guarantee estimate is prepared if the developer failed to do so.

4. The security amount shall be approved by the Board based on an estimate provided by the Town's Consulting Engineer based on the latest weighted average bid prices issued by the Mass Highway Department. 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 infrastructure in the event the developer fails to adequately perform such and the cost for the development of as-built plans. 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 twenty-five percent (25%) contingency.

5. Final release of performance security is contingent on project completion.

K. ***Project Completion***

1. Site plan approval shall lapse after two years of the grant thereof if substantial use has not commenced except for good cause per Section 3.5.7 of the Zoning Bylaw. Approved site plans shall be completed by the Permittee or its assignees within three years of the date of plan endorsement. Upon receipt of a written request from the Permittee filed at least thirty days prior to the date of expiration, the Board may grant an extension for good cause. The request shall state the reasons for the extension and also the length of time requested. If no request for extension is filed and approved, the site plan approval shall lapse and may be reestablished only after a new filing, public review process and decision.

2. Prior to issuance of a final occupancy permit, the Permittee shall secure a ***Certificate of Site Plan Completion*** from the Board and provide the ***Certificate*** to the Building Commissioner. The ***Certificate*** serves as the Board's confirmation that the completed work conforms to the approved site plan and any conditions and modifications thereto, including the construction of any required on and off-site improvements. The ***Certificate*** also serves to release any security or performance guarantee that has been provided to the Town of Medway. To secure a ***Certificate*** of Site Plan Completion, the Permittee shall:

DRAFT

a) provide 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 site plan, and any modifications thereto; and

b) submit an electronic version of an As-Built Plan, prepared by a registered Professional Land Surveyor or Engineer registered in the Commonwealth of Massachusetts, to the Board for its review and approval. The As-Built Plan shall show actual as-built locations and conditions of all buildings and site work shown on the original site plan and any modifications thereto. The final As-Built Plan shall also be provided to the Town in CAD/GIS file format per MASS GIS specifications.

L. ***Construction Standards*** **-** All construction shall be completed in full compliance with all applicable local, state and federal laws, including but not limited to the Americans with Disabilities Act and the regulations of the Massachusetts Architectural Access Board for handicap accessibility.

M. ***Conflicts*** – If there is a conflict between the site plan and the Decision's Conditions of Approval, the Decision shall rule. If there is a conflict between this Decision and/or site plan and the Medway Zoning Bylaw, the Bylaw shall apply.

IX. APPEAL – Appeals if any, from this Decision shall be made to the court within twenty days of the date the Decision is filed with the Town Clerk.

After the appeal period has expired, the Permittee must obtain a certified notice from the Town Clerk that no appeals have been made and provide such certification to the Planning and Economic Development Board before plan endorsement.

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Medway Planning and Economic Development Board
SITE PLAN and SPECIAL PERMIT DECISION
Charter Realty and Development Corp., 67C Main Street

APPROVED with Conditions by the Medway Planning & Economic Development Board: July 12, 2022

AYE:

_____

_____

_____

_____

NAY:

_____

_____

COPIES TO: Michael Boynton, Town Manager
Michael Fasolino, Deputy Fire Chief
Bridget Graziano, Conservation Agent
Donna Greenwood, Assessor
Beth Hallal, Health Agent
Bill Kingsbury, Police Chief
Jeff Lynch, Fire Chief
Jack Mee, Building Commissioner
Pete Pelletier, DPW Director
Joanne Russo, Treasurer/Collector
Barbara Saint Andre, Director of Community and Economic Development
Jeff Watson, Police Department Safety Officer
Karen Johnson, Charter Realty & Development
Steven Bouley, Tetra Tech

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Medway Police Department

315 Village Street
Medway, MA 02053

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

Allen M. Tingley
Chief of Police

July 6, 2022

To: Susan Affleck-Childs
Planning & Economic Development
Coordinator

From: Jeffrey W. Watson
Sergeant/Safety Officer
Medway Police Department

Ref: BrightPath Child Care Center

I have looked at the permit drawings dated May 19, 2022; revised June 22, 2022 for the Brightpath Child Care Center located at 67C Main St. Currently, I see no safety issues with the proposed design and traffic flow. I request that if any changes are made, I have an opportunity to review such changes.

All signage must meet the standards of the Medway Department of Public Works.

Susan Affleck-Childs

From: Karen Johnson <karen@charterrealty.com>
Sent: Thursday, July 7, 2022 11:22 AM
To: Susan Affleck-Childs
Subject: [External] RE: BrightPath - draft decision (7-8-22 sac)

Hi Susy,

This is the only section of concern:

> ***Wayfinding Signage*** - Prior to plan endorsement, the Permittee shall provide a proposed plan for wayfinding signage within the Medway Commons site to guide vehicles about the changed traffic pattern to the Board by action as a field change. Such plan shall be referred to the Design Review Committee for review and comment. NOTE – Such signage will likely require a variance from the Zoning Board of Appeals.

This must be written as a suggestion and not a requirement prior to plan endorsement as we will never complete this in time. Alternative is to suggest that this process is initiated after plan endorsement and pursued prior to CO however there clearly is no justification for a variance.

Alternative is to change this to a directory sign – again we can probably get this accomplished prior to CO and not plan endorsement.

> 7.2.5 B. 4. Directory Signs. Freestanding directory signs shall be set back a minimum of seventy-five feet from a public way and shall not exceed sixteen sq. ft. in sign surface area per sign. The design and placement of freestanding directory signs shall be prescribed in the master sign plan developed during the site plan approval process.
>
> Freestanding Directory Sign 16 SF Per Master Signage Plan 6 See 7.2.5.B.4 (Amended 11-16-15) External

I am available to discuss if you want to review.

Karen

From: Susan Affleck-Childs <sachilds@townofmedway.org>
Sent: Thursday, July 7, 2022 10:35 AM
To: Karen Johnson <karen@charterrealty.com>
Cc: Bouley, Steven <steven.bouley@tetratech.com>
Subject: BrightPath - draft decision (7-8-22 sac)

[CAUTION - External Sender]

Hi,

Attached is a revised site plan decision for BrightPath for review, discussion and voting at the July 12th PEDB meeting.

Please advise if there are any concerns. Have I missed anything the Board discussed, particularly any further plan revisions?

Cheers!

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

Susan Affleck-Childs

From: Daniel Merrikin <dan@legacy-ce.com>
Sent: Thursday, July 7, 2022 7:39 AM
To: Susan Affleck-Childs
Subject: [External] Wingate Farm

Susy,

I am writing to request a continuance for Wingate Farm to a meeting in August. We are actively working on the redesign of the stormwater management system and should have preliminary conclusions in a week or two. I will keep you posted. Note that I am out of state for the last two weeks in July.

Dan

Daniel J. Merrikin, P.E.
President

Legacy Engineering LLC
730 Main Street
Suite 2C
Millis, MA 02054

www.legacy-ce.com

dan@legacy-ce.com
508-376-8883(office)
508-868-8353(cell)

July 12, 2022
Medway Planning & Economic Development Board Meeting

Phytopia Public Hearing Continuation Major Site Plan, Reduced Parking Special Permit and Groundwater Protection Special Permit

- Notice to continue public hearing to 7-12-22
- Tetra Tech review letter dated 4-22-22
- Pete Pelletier review letter dated 5-6-22
- Jack Mee review letter dated 5-13-22
- Mike Fasolino review letter dated 5-20-22
- Applicant's Requests for Waivers from *Site Plan Rules and Regulations* from April 2021
- Attorney Ted Cannon email dated 5-17-21 re: outstanding items with attached MDM Transportation Consultants letter dated 7-27-21
- Most recent site plan dated 3-7-22 by Chris Sparges, P.E.

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

RECEIVED TOWN CLERK
MAY 31 '22 PM4:02

MEMORANDUM

May 31, 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 12, 2022

At its May 24, 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 12, 2022 at 8:00 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*, dated March 7, 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: https://www.townofmedway.org/planning-economic-development-board/pages/phytopia-inc-6-industrial-park-road-marijuana-facility.Please review the revised site plan and provide comments to us by June 28th.

Please do not hesitate to contact me if you have any questions at 508-533-3291. Thanks.

June 8, 2021
(revised October 27, 2021)
(revised April 22, 2022)

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

Re: Phytopia Inc.
Major Site Plan Review
6 Industrial Park Road
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 6 Industrial Park Road in Medway, Massachusetts. The Project consists of redeveloping the vacant industrial building along with constructing a two-story addition for the purpose of growing and processing marijuana plants and byproducts. The scope of work also includes improving existing access driveways, curbing, 92 off-street parking spaces, landscaping, lighting, and installation of stormwater drainage facilities.

TT is in receipt of the following materials:

- A cover letter dated May 12, 2021, prepared by Edward V. Cannon, Jr.
- A plan (Plans) set titled "Industrial Park Road, 6 Industrial Park Road, Medway, MA" dated April 1, 2021, prepared by MEM.
- An Application for Major Site Plan Approval, dated April 30, 2021, prepared by Edward V. Cannon, Jr.
- An Application for Reduced Parking Special Permit Approval, dated May 1, 2021, prepared by Edward V. Cannon, Jr.
- An Application for Groundwater Protection District Special Permit Approval, dated May 1, 2021, prepared by Edward V. Cannon, Jr.
- A Marijuana Special Permit Application, dated April 30, 2021, prepared by Edward V. Cannon, Jr.

The Plans and accompanying materials were reviewed for conformance with Chapter 200 of the Town of Medway PEDB Rules and Regulations (Regulations) last amended October 8, 2019, Town of Medway Zoning Bylaw – Groundwater Protection District and good engineering practice. Review of the Project for zoning related matters, other than the Groundwater Protection District, is being conducted by the Town and is excluded from this review.

TT 10/27/21 Update

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

- A Cover Letter dated October 12, 2021, prepared by WSE.
- A Response to Comments Letter dated October 12, 2021, prepared by WSE.
- A letter regarding Groundwater Special Permit, dated September 15, 2021, prepared by Edward V. Cannon, Jr.

Infrastructure Northeast
Marlborough Technology Park 100 Nickerson Road, Marlborough, MA 01752
Tel 508.786.2200 Fax 508.786.2201 tetratech.com

- A plan (Plans) set titled "Industrial Park Road, 6 Industrial Park Road, Medway, MA", dated April 1, 2021, revised October 12, 2021, prepared by WSE.

The revised Plans and supporting information were reviewed against our previous comment letter (June 8, 2021) and comments have been tracked accordingly. Text shown in gray represents information contained in previous correspondence while new information is shown in black text.

TT 4/22/22 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 April 12, 2022, prepared by WSE.
- A plan (Plans) set titled "Industrial Park Road, 6 Industrial Park Road, Medway, MA", dated April 1, 2021, revised March 7, 2022, prepared by WSE.

The revised Plans and supporting information were reviewed against our previous comment letter (October 27, 2021) and comments have been tracked accordingly. Text shown in gray represents information contained in previous correspondence while new information is shown in black text. Comments resolved or Conditions recommended in the previous letter have been removed from this correspondence to consolidate the document for ease of review.

SITE PLAN REVIEW

4. Earthwork Calculations have not been provided. However, the Applicant acknowledged in the cover letter that one will be provided once the final scope of the Project is clearly defined and will file it at a later date. (Ch. 200 §204-3.I&J)
   - *WSE 10/12/21 Response: See attached earthwork calculations.*
     - **TT 10/27/21 Update: Earthwork on the Project is a net fill with approximately 1,685 cubic yards of import material expected. We recommend this information be provided on the Erosion and Sediment Control Plan.**
       - *WSE 4/12/22 Response: This information has been added to the Erosion and Sediment Control Plan.*
         - **TT 4/22/22 Update: In our opinion, this comment is resolved.**

6. Cover sheet has not been provided in the Plans. However, applicable cover sheet information is provided on the Site Context Sheet/Location Plan. A list of requested waivers should be added to the sheet once approved by the Board. (Ch. 200 §204-5.A)
   - *WSE 10/12/21 Response: A cover sheet with a list of waivers has been provided, see sheet 1 of 10.*
     - **TT 10/27/21 Update: The list of requested waivers has not been included on the Cover Sheet.**
       - *WSE 4/12/22 Response: The list of requested waivers has been added to Sheet 1, the Cover Sheet.*
         - **TT 4/22/22 Update: In our opinion, this comment is resolved.**

8. Dimensions of lot lines and easement areas (if applicable) have not been provided on the Site Context Sheet. Additionally, metes and bounds should be included on all plans. (Ch. 200 §204-5.B.3)
   - *WSE 10/12/21 Response: Dimensions of lot lines has been provided, see sheet 2.*
     - **TT 10/27/21 Update: Lot line dimensions have been added to the Site Context Sheet, but metes and bounds have not been added to the remainder of the Plans.**
       - *WSE 4/12/22 Response: No response necessary.*
         - **TT 4/22/22 Update: The Applicant has added the metes and bounds to the Plans. In our opinion, this comment is resolved.**

18. Locations of proposed fire hydrants and emergency access lanes not provided on plans. A hydrant exists on Industrial Park Drive immediately across the street from the Project. We recommend Plans and supporting information be submitted to Medway Fire Department for review and comment. (Ch. 200 §204-5.D.18)
    - *WSE 10/12/21 Response: There are two existing fire hydrants along the industrial Park Road and three existing fire hydrants along Jayar Road within close proximity to the subject property. It is our understanding that members of the development team have met with Police and Fire Department officials.*
        - **TT 10/27/21 Update: We recommend the Applicant provide written correspondence from the Medway Fire Department regarding their review of the Project.**
            - *WSE 4/12/22 Response: It is our understanding that members of the development team have met with Police and Fire Department officials and have reviewed the site plans. We will follow up with the Fire Department and ask them to send along a written correspondence to the PEDB.*
                - **TT 4/22/22 Update: We recommend a Condition requiring the Applicant provide the written correspondence prior to final plan approval by the PEDB.**

19. Sidewalks along the building in the west parking lot are proposed at 5-foot width but abut parking which requires width to be increased to seven feet to accommodate bumper overhang. (Ch. 200 §207-9.B.1)
    - *WSE 10/12/21 Response: Curb stops have been added to the parking spaces directly adjacent to sidewalks. Propose sidewalks to remain five feet in width.*
        - **TT 10/27/21 Update: We do not recommend use of wheel stops as they are a nuisance in winter months and are typically either removed by the tenant or by snowplows. They also effectively reduce the length of parking stalls.**
            - *WSE 4/12/22 Response: We respectfully disagree. The use of wheel stops is a safety measure commonly used to help prevent vehicles from travelling beyond marked parking space. In this case, it will prevent vehicular bumper overhang, which may impede foot traffic.*
                - **TT 4/22/22 Update: We defer action on this item to the PEDB with discussion recommended at the next hearing.**

20. There is a total of four curb cuts proposed for the Project which we believe may be excessive for a Project of this size. We recommend the Applicant explore combining the parking areas along the west property line to help reduce the proposed curb cuts. We understand there are three existing curb cuts, but we believe the site can be designed to reduce this condition. The Regulations favor one curb cut per roadway at corner lots. (Ch. 200 §207-11.A.2)
    - *WSE 10/12/21 Response: The existing condition has three curb cuts and the proposed seeks to retain two while adding one and removing one for a total of three curb cuts as in the existing condition.*
        - **TT 10/27/21 Update: We believe the revised curb cuts are sufficient to serve the proposed parking and emergency access. However, we recommend the PEDB require the Applicant provide written correspondence from the Fire Department regarding their review of the Project.**
            - *WSE 4/12/22 Response: It is our understanding that members of the development team have met with Police and Fire Department officials and have reviewed the site plans. We will follow up with the Fire Department and ask them to send along a written correspondence to the PEDB.*
                - **TT 4/22/22 Update: We recommend a Condition requiring the Applicant provide the written correspondence prior to final plan approval by the PEDB.**

21. Bituminous berm is proposed for the entire curb length for the Project. Typically, curb cut radii are delineated with vertical granite curb which may transition to bituminous berm on the interior of the site is approved by the PEDB. (Ch. 200 §207-11.A.4)
    - *WSE 10/12/21 Response: The existing curbing on Industrial Park Road and Jayar Road is bituminous and the proposed curbing at site entrances are proposed to remain bituminous.*
        - **TT 10/27/21 Update: We recommend the Applicant coordinate with the PEDB regarding this item and provide a formal waiver request. Typically, vertical granite curbing is preferred at entrance radii, particularly within the public right of way.**
            - *WSE 4/12/22 Response: We believe this item does not require a waiver. The proposal is to match the existing curbing within the Industrial Park, which is bituminous berm.*
                - **TT 4/22/22 Update: We defer action on this item to the PEDB with discussion recommended at the next hearing.**

23. Portions of the west and east parking lots are proposed within 15 feet of the property lines which does not comply with the Regulations. (Ch. 200 §207-12.G.3.b)
    - *WSE 10/12/21 Response: The east parking lot essentially follows the existing pavement line and is proposed to remain. The west parking field remains as shown on the civil drawings.*
        - **TT 10/27/21 Update: We recommend the Applicant coordinate with the PEDB regarding this item.**
            - *WSE 4/12/22 Response: The prosed parking spaces located within the setback described in Ch. 200 §207-12.G.3.b do not impede proper traffic flow and follow similar parking layouts on other properties within the existing industrial park.*
                - **TT 4/22/22 Update: We defer action on this item to the PEDB with discussion recommended at the next hearing.**

26. The Applicant has not proposed any screening of the existing dumpster location at the site. (Ch. 200 §207-17.C)
    - *WSE 10/12/21 Response: The proposed trash enclosure is a 40-yard roll-off container that will be accessed via a chute from inside the building. A chain-link security fence with slats and gates are proposed. A detail of the chain-link fencing has been provided, see sheet 10.*
        - **TT 10/27/21 Update: We recommend the Applicant provide written correspondence from the Medway Design Review Committee (DRC) regarding their review of this item.**
            - *WSE 4/12/22 Response: We believe the Design Review Committee has previously submitted a positive recommending for the proposed layout.*
                - **TT 4/22/22 Update: We recommend a Condition requiring the Applicant provide the written correspondence prior to final plan approval by the PEDB.**

27. The Photometric Plan does not show any light levels beyond the property lines. We anticipate light trespass along the northwestern and northeastern and eastern property lines. (Ch. 200 §207-18)
    - *WSE 10/12/21 Response: The Photometric Plan has been revised to show light levels beyond the property line.*
        - **TT 10/27/21 Update: Light trespass occurs along each of the property lines to multiple abutters.**
            - *WSE 4/12/22 Response: The lighting design has been revised to eliminate light trespass on abutting properties. Please see revised Photometric Plan.*
                - **TT 4/22/22 Update: Light trespass has been removed along the abutters to the south and east but remains along the right of way. We defer action on this item to the PEDB with discussion recommended at the next hearing.**

28. The Applicant has not proposed any landscaping along the eastern property line to screen the Project. Existing tree line will remain along the northern and western portions of the site. We recommend the PEDB visit the site to determine if the extent of vegetation to remain conforms with the "spirit" of the Regulation. (Ch. 200 §207-18)
    - *WSE 10/12/21 Response: A six foot high opaque fence is proposed along the eastern property line, see sheet 10.*
        - **TT 10/27/21 Update: We recommend the Applicant provide written correspondence from the Medway Design Review Committee regarding their review of the Project.**
            - *WSE 4/12/22 Response: We believe the Design Review Committee has previously submitted a positive recommending for the proposed layout.*
                - **TT 4/22/22 Update: We recommend a Condition requiring the Applicant provide the written correspondence prior to final plan approval by the PEDB.**
29. The Applicant has not proposed any internal landscape islands to break up the parking areas and provide shade. (Ch. 200 §207-19.C)
    - *WSE 10/12/21 Response: Additional trees and shrubs have been added to the landscape plan.*
        - **TT 10/27/21 Update: We recommend the Applicant coordinate with the PEDB and DRC regarding the scope of plantings for the Project.**
            - *WSE 4/12/22 Response: The Design Review Committee reviewed the landscape plan and provided comments, which were addressed during our meetings with the committee.*
                - **TT 4/22/22 Update: We recommend a Condition requiring the Applicant provide the written correspondence prior to final plan approval by the PEDB.**
30. The Applicant shall provide narrative and note on Plans to describe method for irrigating proposed landscaping at the site. Town water supply shall not be used for irrigation at the property. (Ch. 200 §207-19.K)
    - *WSE 10/12/21 Response: No irrigation system is proposed at the present time.*
        - **TT 10/27/21 Update: We anticipate an irrigation well or other means of irrigation will be required to ensure plantings remain viable at the site after Project completion.**
            - *WSE 4/12/22 Response: No irrigation system is proposed at the present time.*
                - **TT 4/22/22 Update: We defer action on this item to the PEDB with discussion recommended at the next hearing.**

GROUNDWATER PROTECTION DISTRICT REVIEW

31. A generator is proposed for the Project and are prohibited in the Groundwater Protection District unless required by statute. The Applicant shall provide narrative related to the generator and whether it is a statutory requirement of the business. (ZBL §5.6.3.E.2.b)
    - *WSE 10/12/21 Response: Please see application materials submitted to the PEDB in support of an application for a Groundwater Protection District Special Permit dated August 4, 2021 and subsequent letter from attorney Cannon dated September 15, 2021.*
        - **TT 10/27/21 Update: The proposed generator was not referenced in the letter dated September 15, 2021, we do not have the August 4, 2021 letter on file.**
            - *WSE 4/12/22 Response: 935 CMR 500.110(5)(a)8 and 935 CMR 500.110(6)(a)8, require that marijuana establishments maintain the ability to remain open during a power outage in order to ensure security on the premises. A generator will be required to comply with these regulations.*
                - **TT 4/22/22 Update: We defer action on this item to the PEDB with discussion recommended at the next hearing.**

GENERAL COMMENTS

35. The Applicant is proposing two additional water connections to the site for a total of four. We recommend the Applicant coordinate with Medway Department of Public Works (DPW) to determine if these connections should be consolidated as part of this Project.
    - *WSE 10/12/21 Response: The applicant has met with representatives from the DPW. The two existing water service lines will be cut and capped as shown on the site plan set.*
        - **TT 10/27/21 Update: We recommend the Applicant provide written correspondence from the Medway DPW regarding their review of the Project.**
            - *WSE 4/12/22 Response: We have met with the Medway DPW on two separate occasions to review the project and discussed both existing and proposed utility connections. We will follow up with DPW and ask them to send along something in writing.*
                - **TT 4/22/22 Update: We recommend a Condition requiring the Applicant provide the written correspondence prior to final plan approval by the PEDB.**

37. Mulch sock should be depicted in the "Siltfence with Mulch Sock" detail on the Construction Details Plan.
    - *WSE 10/12/21 Response: Mulch sock is depicted on the Construction Details Plan, see sheet 9.*
        - **TT 10/27/21 Update: The detail does not appear to be correct as certain information is missing on the detail or is not showing up correctly when printed from CAD.**
            - *WSE 4/12/22 Response: The detail has been corrected. See sheet 10 of the plan set.*
                - **TT 4/22/22 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 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 M. Bouley, PE
Project Manager

Bradley M. Picard, EIT
Civil Engineer

P:\21583\143-21583-21011 (PEDB 6 INDUSTRIAL PARK RD)\DOCS\6 INDUSTRIAL PARK RD-PEDBREV(2022-04-22).DOCX

TOWN OF MEDWAY
COMMONWEALTH OF MASSACHUSETTS
DEPARTMENT OF PUBLIC WORKS

Medway DPW Office
45B Holliston Street
Medway, MA 02053
Phone (508) 533-3275
Fax (508) 321-4985
dps@townofmedway.org

DPW Director
Peter Pelletier

Deputy Director
Sean Harrington

May 6, 2022

Re: 6 Industrial Park Road Comments

Dear Planning and Economic Development Committee,

The DPW would like to provide comments as requested on 6 Industrial Park Road.

- The existing domestic water service and fire service will be cut and capped at the main and new service pipes for domestic and fire water will be brought into the site as shown on the latest plans dated April 1, 2021. We recommend that the PEDB include the following as a condition of approval: "Back flow preventers will be required on both the fire service line and the domestic water service lines. In addition, a by-pass metering device will be required at the backflow preventer for the fire service line that detects any leakage or unauthorized use of water from the fire/automatic sprinkler system."

- We reviewed existing and proposed utility connections at our meeting on August 17, 2021 and find that an MS4CD permit application is not required.

- We reviewed Town records and the existing utility connections at our meeting on August 17, 2021 and found that there are not existing illicit connections or discharges associated with the 6 Industrial Park Road Property.

Thank you

Peter Pelletier

Susan Affleck-Childs

From: Jack Mee
Sent: Friday, May 13, 2022 8:06 AM
To: Susan Affleck-Childs
Subject: FW: Phytopia, Inc.

Susy,

I have read the Project Description for 6 Industrial Park Road and would like to comment on the request for a Special Permit from the Planning & Economic Development Board to allow fewer parking spaces than the strict calculation of required spaces under the Zoning Bylaw. It is my understanding that the existing building contains approximately 53,128 square feet of finisher floor area on one floor. The proposed redevelopment includes the construction of an attached two-story addition with 33,119 square feet per story, thus 119,366 square feet of building area.

Section 7. Table 3. Requires 1 space per each 2 persons employed or anticipated to be employed on the largest shift and 1 additional space for each 1,000 square feet. The applicant states that the operation will consist of approximately 90 employees on site at any one time.

I believe that using this information that the bylaw would require.

1 space per each 2 persons (90)	45
And 1 additional space for each 1,000 SF	120
	165 spaces required
Proposed parking spaces to be provided	92
	73 spaces short of Medway Zoning Bylaw Section 7, table 3

They are providing 92 which is 73 spaces short of the bylaw requirement. I would like to remind the Board of the ongoing parking issues at a neighboring property, 2 Marc Road at their growing and processing plant. It was fortunate that the owner of 2 Marc Road owned the adjacent property, and she is actively pursuing additional parking. If the owner of 6 Industrial Road does not have enough area, they will be handcuffed to comply with only parking within the approved areas (this does not seem like a good situation). Any additional parking (over the proposed) could cause life safety issues with Fire Departments access

I would just suggest that **IF** the Board allows such a waiver that it be conditioned some how to assure that the parking onsite will always comply and never set up any barriers for the Fire Departments Access.

Jack Mee
Building Commissioner
Town of Medway
(508) 533-3253

Susan Affleck-Childs

From: Mike Fasolino
Sent: Friday, May 20, 2022 7:03 AM
To: Susan Affleck-Childs
Cc: Chris Sparages; Jerry McDermott; Jeff Lynch
Subject: 6 Industrial Park Road

Good Morning Suzy,

We have reviewed the plans submitted for 6 Industrial Park Rd. The Fire Department is ok with the proposed changes for the site plan. We have reviewed the proposed driveway and parking lot reconfiguration at the 6 Industrial Park Road project and the location of the hydrants relative to the property. They have provided us an auto turn analysis plan for our apparatus for the proposed access into and out of the project which shows our apparatus able to make maneuver through the site. In addition, we note that there is an existing fire hydrant in front of the property and across the street from the existing building on Industrial Park Road and three existing hydrants along Jayar Road near the property. We also asked project civil engineer to add an additional hydrant on the east side of the building (in the back). The existing hydrants, in addition to the proposed hydrant in the rear of the building, will be sufficient to support the proposed project as shown on the site plan. If you need anything else from us please feel free to reach out. Thank you.

Michael Fasolino
Deputy Chief
Town of Medway
155 Village Street
Medway, Ma 02053
508-533-3211

Mailing Address:
44 Milford Street
Medway, Ma 02053

Medway Planning and Economic Development Board
Request for Waiver from Subdivision Rules and Regulations
Complete 1 form for each waiver request

Project Name:	6 Industrial Park Road
Property Location:	6 Industrial Park Road
Type of Project/Permit:	Redevelopment & Addition / Special Permits & Site Plan Review
Identify the number and title of the relevant Section of the Subdivision Plan Rules and Regulations from which a waiver is sought.	S.204-4.A - Registered Landscape Architect
Summarize the text of the relevant Section of the Rules and Regulations from which a waiver is requested.	Have a Registered Landscape Architect submit a Landscape Plan
What aspect of the Regulation do you propose be waived?	The requirement of having to retain and utilize a Registered Landscape Architect
What do you propose instead?	Submission of a Landscape Plan by Williams & Sparages, LLC.
Explain/justify the waiver request. Why is the waiver needed? Describe the extenuating circumstances that necessitate the waiver request.	This is an existing industrial site. The addition of a Registered Landscape Architect is not necessary for this project and will add substantially to the development cost.
What is the estimated value/cost savings to the applicant if the waiver is granted?	$5,000.00
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 applicant will supply a comprehensive Landscape Plan prepare by the engineer who has completed many such plans for many other projects.
What is the impact on the development if this waiver is denied?	None.
What are the design alternatives to granting this waiver?	None. A comprehensive Landscape Plan will still be provided.
Why is granting this waiver in the Town's best interest?	The Town will still be provided with a comprehensive Landscape Plan.
If this waiver is granted, what is the estimated cost savings and/or cost avoidance to the Town?	None.
What mitigation measures do you propose to offset not complying with this particular Rule/Regulation?	None.
What is the estimated value of the proposed mitigation measures?	A comprehensive Landscape Plan will still be provided.
Other Information?	
Waiver Request Prepared By:	Edward V. Cannon, Jr. , Esq.
Date:	April 30, 2021
Questions?? - Please contact the Medway PED office at 508-533-3291.	
	Updated 10-23-18

Medway Planning and Economic Development Board
Request for Waiver from Subdivision Rules and Regulations
Complete 1 form for each waiver request

Project Name:	6 Industrial Park Road
Property Location:	6 Industrial Park Road
Type of Project/Permit:	Redevelopment & Addition / Special Permits & Site Plan Review
Identify the number and title of the relevant Section of the Subdivision Plan Rules and Regulations from which a waiver is sought.	S.204-5.C.3 - Landscape Inventory
Summarize the text of the relevant Section of the Rules and Regulations from which a waiver is requested.	Submit a landscape inventory
What aspect of the Regulation do you propose be waived?	There is no notable landscape inventory present on the site
What do you propose instead?	To provide a comprehensive Landscape Plan
Explain/justify the waiver request. Why is the waiver needed? Describe the extenuating circumstances that necessitate the waiver request.	There is no notable landscape inventory present on the site
What is the estimated value/cost savings to the applicant if the waiver is granted?	$1,800.00
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 quality of the design and development will not be impacted if there is no inventory of current landscape features.
What is the impact on the development if this waiver is denied?	None
What are the design alternatives to granting this waiver?	Providing a comprehensive Landscape Plan
Why is granting this waiver in the Town's best interest?	There is no notable landscape inventory present on the site
If this waiver is granted, what is the estimated cost savings and/or cost avoidance to the Town?	None.
What mitigation measures do you propose to offset not complying with this particular Rule/Regulation?	None.
What is the estimated value of the proposed mitigation measures?	None.
Other Information?	
Waiver Request Prepared By:	Edward V. Cannon, Jr. , Esq.
Date:	April 30, 2021

Questions?? - Please contact the Medway PED office at 508-533-3291.

Updated 10-23-18

Medway Planning and Economic Development Board
Request for Waiver from Subdivision Rules and Regulations
Complete 1 form for each waiver request

Project Name:	6 Industrial Park Road
Property Location:	6 Industrial Park Road
Type of Project/Permit:	Redevelopment & Addition / Special Permits & Site Plan Review
Identify the number and title of the relevant Section of the Subdivision Plan Rules and Regulations from which a waiver is sought.	S.204-3.F - Development Impact Statement
Summarize the text of the relevant Section of the Rules and Regulations from which a waiver is requested.	Provide comprehensive traffic, environmental, parking & neighborhood impact assessments
What aspect of the Regulation do you propose be waived?	The strict requirement for a single Development Impact Statement
What do you propose instead?	See explanation below
Explain/justify the waiver request. Why is the waiver needed? Describe the extenuating circumstances that necessitate the waiver request.	This property is subject to intense environmental scrutiny, a traffic professional will address the parking, and detailed odor and noise mitigation will address neighborhood impacts.
What is the estimated value/cost savings to the applicant if the waiver is granted?	$12,000.00
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 information that the town would like to gather will be provided via the environmental work, the parking professional, and the neighborhood concerns will be addressed throughout the hearing.
What is the impact on the development if this waiver is denied?	None
What are the design alternatives to granting this waiver?	None
Why is granting this waiver in the Town's best interest?	Town will be provided will all of the pertinent information as part of the hearing process.
If this waiver is granted, what is the estimated cost savings and/or cost avoidance to the Town?	None
What mitigation measures do you propose to offset not complying with this particular Rule/Regulation?	None.
What is the estimated value of the proposed mitigation measures?	None.
Other Information?	None.
Waiver Request Prepared By:	Edward V. Cannon, Jr. , Esq.
Date:	April 30, 2021
Questions?? - Please contact the Medway PED office at 508-533-3291.	
	Updated 10-23-18

Susan Affleck-Childs

From: Edward V. Cannon <evc@ddcrwlaw.com>
Sent: Tuesday, May 17, 2022 1:50 PM
To: Susan Affleck-Childs; csparages@wsengineers.com
Cc: Brian Anderson
Subject: [External] RE: Phytopia - 5-24-22 hearing
Attachments: MDM Response Memo_Final 7.27.21.pdf

Good Afternoon Susy!

We're hoping to just about cover all of the outstanding issues with the PEDB next Tuesday.

1. We confirmed no letter from MPD is needed
2. A letter from MFD should be submitted anytime
3. Applicant agreed to the same standard applied to CommCan concerning the use of bituminous berm vs. vertical granite for curb cuts – just need to get a visual on what CommCan used. I can go take some pictures if that helps
4. Letter from Design Review – will follow up if that hasn't been provided yet – please let me know how I can contact Mr. Gay for that.
5. DPW letter has been submitted
6. The board inquired about the parking special permit – please see the attached
    a. We covered this pretty extensively last summer – please let us know if our traffic expert should Zoom in next Tuesday for questions
7. The board inquired about final architectural drawings – I've copied Brian Anderson here who tells me all up to date architectural drawings have been submitted
8. 4 EV spaces have been added to the plan & applicant will install conduit along side parking area to expand # of EV spaces in future
9. Chris Sparages will provide an updated plan – just finishing up adding some requests from Con Comm – there aren't many changes so not much to review

We're hopeful we wont' be long next Tuesday. Then we hope to close with Con Comm next Thursday 5/26. Then we hope to have their Order of Conditions in time for our final meeting with PEDB on June 14th.

Thank you

Any concerns just let me know.

Ted

Edward V. Cannon, Jr., Esq.

Doherty, Dugan, Cannon, Raymond & Weil, P.C.

124 Grove Street, Suite 220
Franklin, MA 02038

WEB: www.ddcrwlaw.com
TEL: 508-541-3000 x218
FAX: 508-541-3008
MOB: 508-735-8852
EVC@ddcrwlaw.com

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From: Susan Affleck-Childs <sachilds@townofmedway.org>
Sent: Tuesday, May 17, 2022 12:39 PM
To: Edward V. Cannon <evc@ddcrwlaw.com>; csparages@wsengineers.com
Subject: Phytopia - 5-24-22 hearing

Hi,

I am working on the agenda and board packet for next Tuesday's PEDB meeting. Phytopia is on the agenda for 8:45 p.m.

What do you hope/want to accomplish at that meeting?

Is there any other documentation you intend to provide for the Board's review and consideration?

Also what is your understanding of the status of your application with Conservation?

Please let me know.

Thanks.

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

MDM TRANSPORTATION CONSULTANTS, INC.
Planners & Engineers

PRINCIPALS
Robert J. Michaud, P.E.
Daniel J. Mills, P.E., PTOE

MEMORANDUM

DATE: July 27, 2021

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

FROM: Robert J. Michaud, P.E. – Managing Principal
Daniel A. Dumais, P.E. – Senior Project Manager

RE: **Response to Comments**
Proposed Marijuana Cultivation Facility
6 Industrial Park Road – Medway, MA

MDM Transportation Consultants, Inc. (MDM) has prepared the following responses to transportation-related comments as issued in a letter by Tetra Tech dated July 1, 2021. To facilitate review, specific comments are paraphrased with corresponding responses.

Project Study Area

Comment 1: *"The parking memo states the proposed facility is anticipated to include up to 87 employees operating in two shifts, with the daytime shift including up to 75 employees. The applications prepared for the project state that the facility will include approximately 90 employees on-site at any one time and that the hours of operation will be 8AM to 8PM. The Applicant should confirm the anticipated employee levels, operating times and employees per shift."*

Response: Per discussions with the Applicant, Phase I includes the occupancy of 53,128± sf of floor area as a proposed Marijuana Cultivation facility. Under Phase I, the proposed facility is anticipated to operate 8:00AM to 8:00PM with approximately 53 employees primarily operating under one shift. Phase II of the project assumes up to 66,238± sf of additional floor area within a 33,119± sf footprint addition for a total of 119,366± sf of Marijuana Cultivation use. Under Phase II the employment levels would result in approximately 87 total employees operating over two shifts with approximately 53-65 employees on the first shift and the remaining employees on a later evening shift. As part of Phase II, the hours of operation at the facility will expand to 6:00AM to 11:30PM with shift times staggered by approximately 30-minutes. The resulting shift times would be 6:00AM to 2:30PM and 3:00PM to 11:30PM.

Comment 2: "*If 87 employees (or more depending on the response to comment 1 above) are expected to be on-site at any one time, the parking utilization could be close to capacity if alternative modes of transportation (i.e., carpooling, walk, bike, etc.) at the site are low. Given that employee parking at the site will be provided in two separate parking fields served by three driveways, employees may have to drive around the parking fields to locate vacant parking spaces. It is recommended that the Applicant consider implementing assigned parking to minimize vehicle trips into and out of the site driveways by employees searching for open parking.*"

Response: MDM concurs that if 87 employees were on-site at any one time, the parking utilization would be close to capacity assuming limited use of alternative transportation. The project will include approximate 2-3 company vehicles which will be assigned to park within a designated are of the lot. Given the security at the facility, there will be little to no visitors allowed minimizing any visitor parking requirements. It is also anticipated that the employees will be familiar with the site layout and park in the same areas or spaces on a daily basis, therefore, assigned parking is not anticipated. Furthermore, under Phase I, there will be up to approximately 53 employees on-site during normal business hours resulting in at least 39 vacant spaces (42% surplus) on the Site. Under Phase II, the employees will operate on two shifts with 30-minute staggered shift changes to marginalized parking overlap. There are not expected to be more than 65 employees on-site at any one time resulting in a peak parking surplus of approximately 30% (27 spaces). The project will also provide delivery areas so that delivery uses are not using on-site employee parking spaces.

Comment 3: "*The parking memo references the parking ratio of 1.05 parking spaces/employee approved for a cultivation facility in Freetown, MA. The Medway facility is proposing the same parking ratio assuming 87 employees. It should be noted that peak parking demand observation data was not provided for this development to verify that the 1.05 parking spaces/employee adequately accommodates the facility's parking demand.*"

Response: The cultivation facility in Freetown, MA was approved with a parking ratio of 1.05 parking spaces/employee, however, the facility has not yet been fully constructed to verify the parking demand. Parking regulations for similar facilities provided by the Town (see **Attachments**) were also reviewed. Parking requirements based on employment levels plus additional service spaces are the best comparable to industry standard rates from ITE based on employee levels for general light industrial and manufacturing which are the most closely related land use categories. Furthermore, a comparable requirement based on square footage is the Waltham, MA requirement that requires one space per 2,000 square feet of cultivation area. Based on the parking requirements for other communities with the Commonwealth the parking supply at this facility would vary greatly but would require between 33 and 90 spaces.

Comment 4: "*The parking memo and the site plans exclude the expanded area (which will be limited to growing product) from the zoning parking requirement for registered medical marijuana facilities (RMMF).*"

Response: The expanded area will be limited to product growth and will have minimal impact on the employment levels of the facility. Therefore, no additional parking will be needed beyond the Phase II employment level of approximately 87 employees. Even with all the employees operating under a single shift with no alternative transportation use which is not anticipated the parking supply of 92 on-site spaces will be adequate.

Comment 5: "*The parking memo included estimates of peak parking demand for the facility based on number of employees applied to industry-standard trip rates (average and 95th percent confidence rates) published by the Institute of Transportation Engineers (ITE) Parking Generation, 5th Edition for Land Use 110 (General Light Industrial) and Land Use 140 (Manufacturing) which are the most closely related land use categories. This methodology is generally consistent with industry standards.*"

Response: MDM concurs, no further response required.

Comment 6: "*The parking memo and site plans do not reference any proposed bicycle parking spaces. It is recommended that bicycle parking be provided consistent with the Town's regulations to help reduce auto usage at the site.*"

Response: The Proponent is committed to implementing a TDM program that includes bicycle parking. Exterior bicycle racks will be included in the final plan set by Williams & Sparages.

Comment 7: "The parking memo and site plans do not reference any proposed electric vehicle parking spaces. It is recommended that electric vehicle parking be provided consistent with the Town's regulations. "

Response: Electric vehicle parking will be included in the final plan set by Williams & Sparages.

Comment 8: "AutoTurn analyses were not provided in the site plans. It is recommended that the Applicant conduct AutoTurn analyses for the largest emergency apparatus and delivery vehicle anticipated at the site to ensure safe and efficient access and circulation. "

Response: AutoTurn analysis has been completed for the site plan using the Town's Ladder truck and a single unit (SU) delivery truck. The site access, circulation aisles and parking layout provide adequate maneuvering area for the largest potential responding emergency vehicle (ladder truck) as well as a SU design vehicle. Supporting AutoTurn® analysis and exhibits are provided to confirm this finding (refer to the **Attachments**).

Comment 9: "The first dedicated handicap parking space on the easterly end of the parking aisle does not have adequate room to exit the space without conflicting with vehicles entering the driveway. It is recommended that the Applicant provide a small turnaround in this area. "

Response: The parking spaces will be for employee use and will be low turnover spaces. It is assumed that this vehicle would back out of the parking space and exit via the driveway on the northern side of the Site.

Comment 10: "The two existing site driveways on Industrial Park Road are proposed to remain. These driveways only serve six parking spaces. To minimize vehicle conflict points on Industrial Park Road, it is recommended that the Applicant redesign the site access at this location to only provide one driveway for the existing six parking spaces to remain. "

Response: As part of the project the two curb cuts for serving six parking spaces is proposed to be consolidated into one-curb cut. Williams & Sparages is also reviewing the feasibility of further consolidating access along Industrial Park Road by relocating the six parking spaces to a location adjacent to the handicapped parking spaces.

ATTACHMENTS

- Parking Requirement Data
- AutoTURN® Analysis

- Parking Requirement Data

ATTACHMENT
PARKING ZONING REQUIREMENTS
BY EMPLOYEE

City	Zoning Requirement	Total Spaces
Abington, MA	1 space per 2 employees on largest shift	33 spaces
Becket, MA	1 space per employee plus spaces for service vehicles	90 spaces
Belmont, MA	1 space per 1.5 employees on largest shift	44 spaces
Dartmouth, MA	1 space per employee on largest shift	65 spaces

ATTACHMENT
PARKING ZONING REQUIREMENTS
BY SQUARE FEET OF CULTIVATION AREA

City	Zoning Requirement	Total Spaces
Waltham, MA	1 space per 2,000 sf Cultivation area	60 spaces

SUMMARY OF VARIOUS AGENCY OFF-STREET PARKING REQUIREMENTS
CANNABIS CULTIVATION FACILITIES

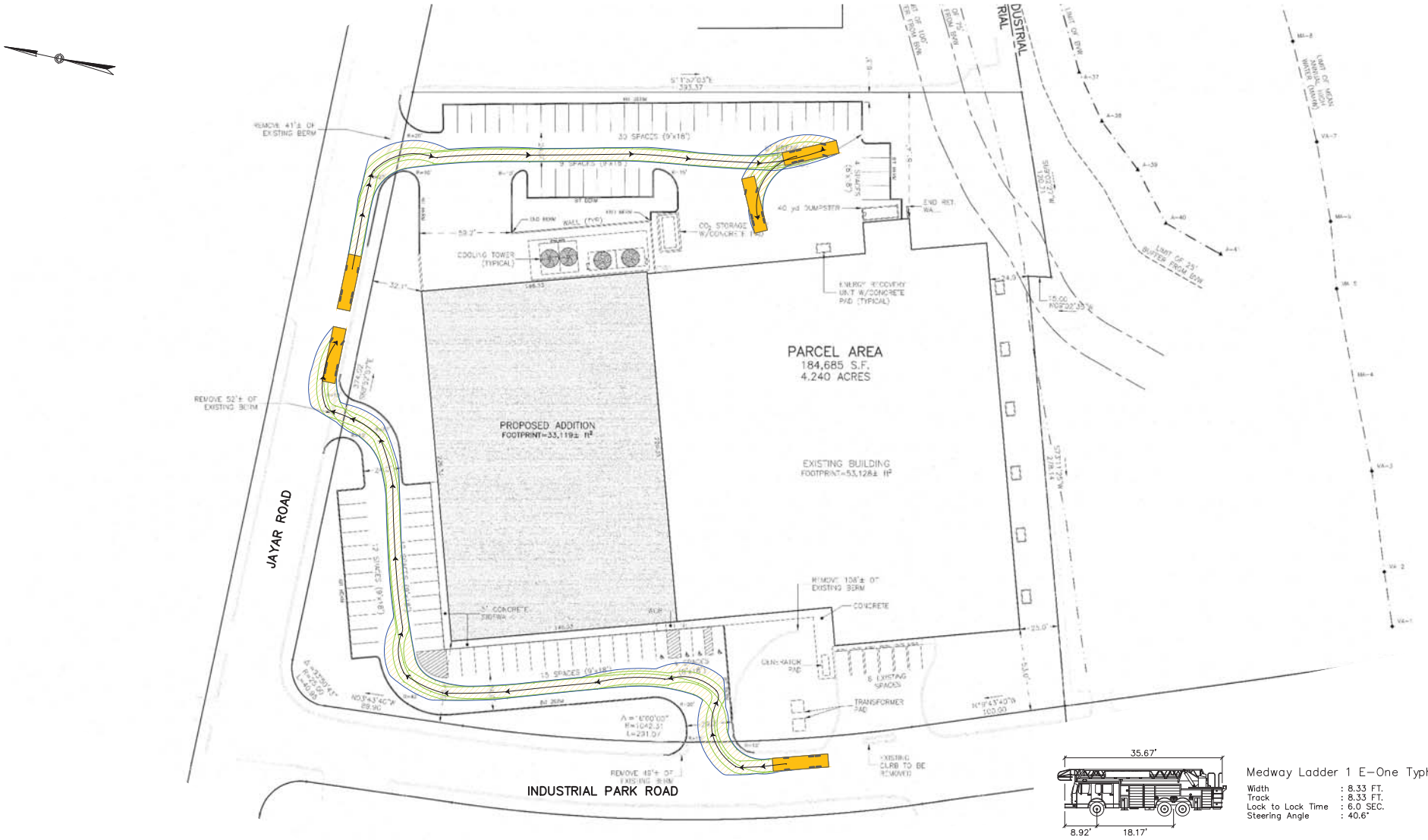
Agency	State	Government Level	Type of Regulation	Regional Population	Regulation Document	Date Approved	Type of Facility	Off-Street Parking Requirement	Notes
Becket	MA	Town/City	Zoning Bylaws	1,700	Section 6.8, Marijuana Establishments & Medical Marijuana Treatment Centers Bylaw	5/12/2018	Marijuana Cultivation	one (1) parking space for each employee plus adequate space for service and supply vehicles or one (1) parking space for each 1,000 square feet (SF) of gross floor area, whichever is greater.	
Summit County	CO	County	Zoning	31,000	Development Code Zoning Regulations	10/8/2013	Optional Premises Marijuana Cultivation Operation	1.25 spaces per 1,000 SF floor area	Parking for an Optional Premises Cultivation Operation, a Retail Marijuana Cultivation Facility, and a Retail Marijuana Testing Facility shall be in accordance with manufacturing/warehousing facilities, per Figure 3-7.
Adelanto	CA	Town/City	Municipal Code	33,500	Cannabis Parking Requirements	n/a	Indoor Agricultural	1 space per 1,000 SF-GFA for the first 20,000 sq. ft; 1 space per 2,000 SF-GFA for that portion between 20,000 and 40,000 sq. ft.; 1 space per 4,000 SF-GFA for that portion over 40,000; Plus 1 space/300 SF-GFA of office use	
Downers Grove	IL	Town/City	Municipal Code	49,500	Ord. Nos. 5804, 5760	12/8/2020	Adult Use Cannabis Graft Grower	6 spaces per 1,000 sq. ft. (where shared parking is available) or 7.5 spaces per 1,000 sq. ft. (where shared parking is not available) for dispensary portion of business plus 1.17 spaces per 1,000 sq. ft. for non-dispensary areas of business	
Santa Rosa	CA	Town/City	Municipal Ordinance	180,000	Ord. No. ORD-2017-025	n/a	Cannabis - Cultivation	1 space for each 1, 000 sf. or as determined by CUP.	Bike Parking = 1 space per 14,000 sf or as determined by CUP.
Santa Rosa	CA	Town/City	Municipal Ordinance	180,000	Ord. No. ORD-2017-025	n/a	Cannabis - Manufacturing (Equal to or greater than 50 ksf)	1 space for each 700 sf or as determined by CUP. The gross floor area may include accessory office space comprising less than 5% of the total gross floor area.	Bike Parking = 1 space per 14,000 sf or as determined by CUP.
Colorado Springs	CO	Town/City	City Council	465,000	Medical Marijuana Land Use Regulations	7/7/2014	Optional Premises Medical Marijuana Cultivation Operation	1 space per 5,000 GSF grow and process, 1 space per 400 GSF office	

NOTE: Table prepared by Tetra Tech on July 13, 2021

Marijuana Facility Parking Regulations

Town	Parking Requirement	Specifically for Cultivation
Barnstable	The required number of parking spaces for marijuana cultivators, research facilities and independent testing laboratories shall be one space for every 700 square feet of gross floor area. The Planning Board shall also rely on the recommendation of site plan review.	yes
Waltham	Any marijuana establishment permitted under this article shall provide one space for each 400 gross square feet of floor area used for sale, dispensing and processing and one space for each 2,000 gross square feet of floor area used for cultivation. All parking areas shall be designed and built according to the standards contained in Sections 5.4 to 5.48.	yes
Belmont	Wholesale and industrial establishments: one parking space per 1.5 employees on the largest shift, but capable of expansion to not less than one space per 400 square feet gross floor area.	no
Abington	One parking space for each two employees during the shift of maximum employment or one space for each 600 square feet of open or enclosed area devoted to the compounding, manufacturing or processing of any goods or articles, whichever is less, plus one space for each vehicle used in conjunction with the business	no
Becket	Marijuana cultivation facilities and marijuana product manufacturers: one (1) parking space for each employee plus adequate space for service and supply vehicles or one (1) parking space for each 1,000 square feet (SF) of gross floor area, whichever is greater. b. Marijuana research facilities and independent testing laboratories: one (1) parking space for each 300 SF of gross floor area.	yes
Dalton	In addition to the requirements listed in Article X, off-street parking must be provided for as follows. For buildings or sites that contain more than one type of marijuana use, each use shall be calculated separately and parking provided for each on site, based on gross floor area of the individual uses. These requirements may be modified or waived by the special permit granting authority. (a) Retail uses: one parking space for every 250 square feet of gross floor area of the building(s). (b) Cultivation, processing, packaging, manufacturing or storage uses: one parking space for every 1,000 square feet of gross floor area of the building(s). (c) Testing or research uses: one parking space for every 350 square feet of gross floor area of the building(s)	yes
Dartmouth	Parking at a Marijuana Establishment shall comply with the requirements of Article 24, Site Plan Review, except that parking spaces shall be provided at the rate of one parking space per employee for the largest shift, plus one parking space for each 250 square feet of building floor space that is devoted to customer service;	yes
7-13-21 prepared by Morgan Harris, Medway CED office		

□ AutoTURN® Analysis



Medway Ladder 1 E–One Typhoon 100' RMA

Width	: 8.33 FT.
Track	: 8.33 FT.
Lock to Lock Time	: 6.0 SEC.
Steering Angle	: 40.6°

Site Plan Source: Williams & Sparages

MDM TRANSPORTATION CONSULTANTS, INC.
Planners & Engineers
28 Lord Road, Suite 280
Marlborough, MA 01752

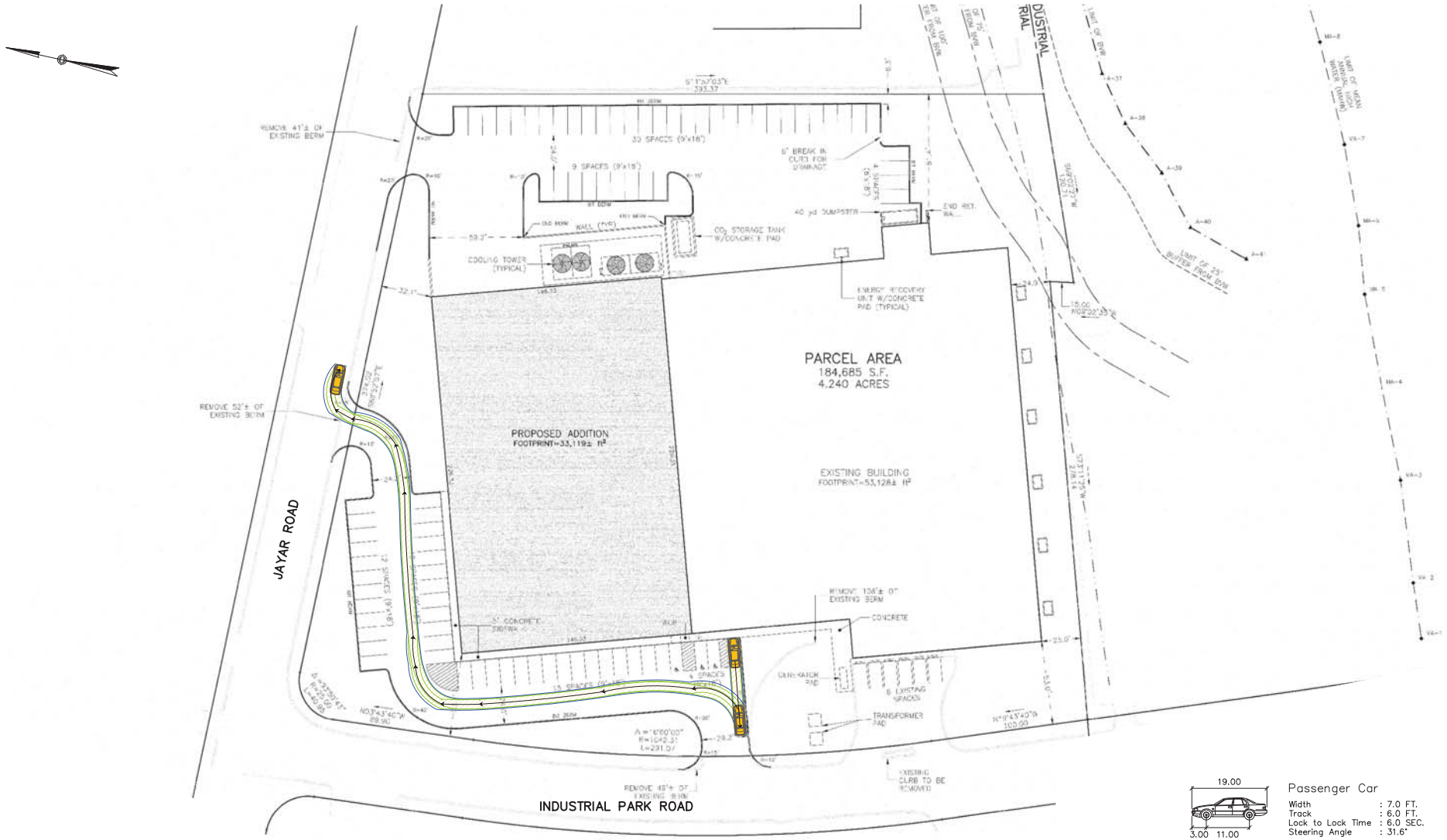
Proposed Development
Medway, Massachusetts

SCALE
0 15 30 60 90 FEET

Exhibit 1
Autoturn Analysis
Medway Fire Truck

Scale: As Noted
DWG No. 1143 Autoturn (2021-07-27).dwg

Date: July 2021
Project No. 1143



Site Plan Source: Williams & Sparages

MDM TRANSPORTATION CONSULTANTS, INC.
Planners & Engineers
28 Lord Road, Suite 280
Marlborough, MA 01752

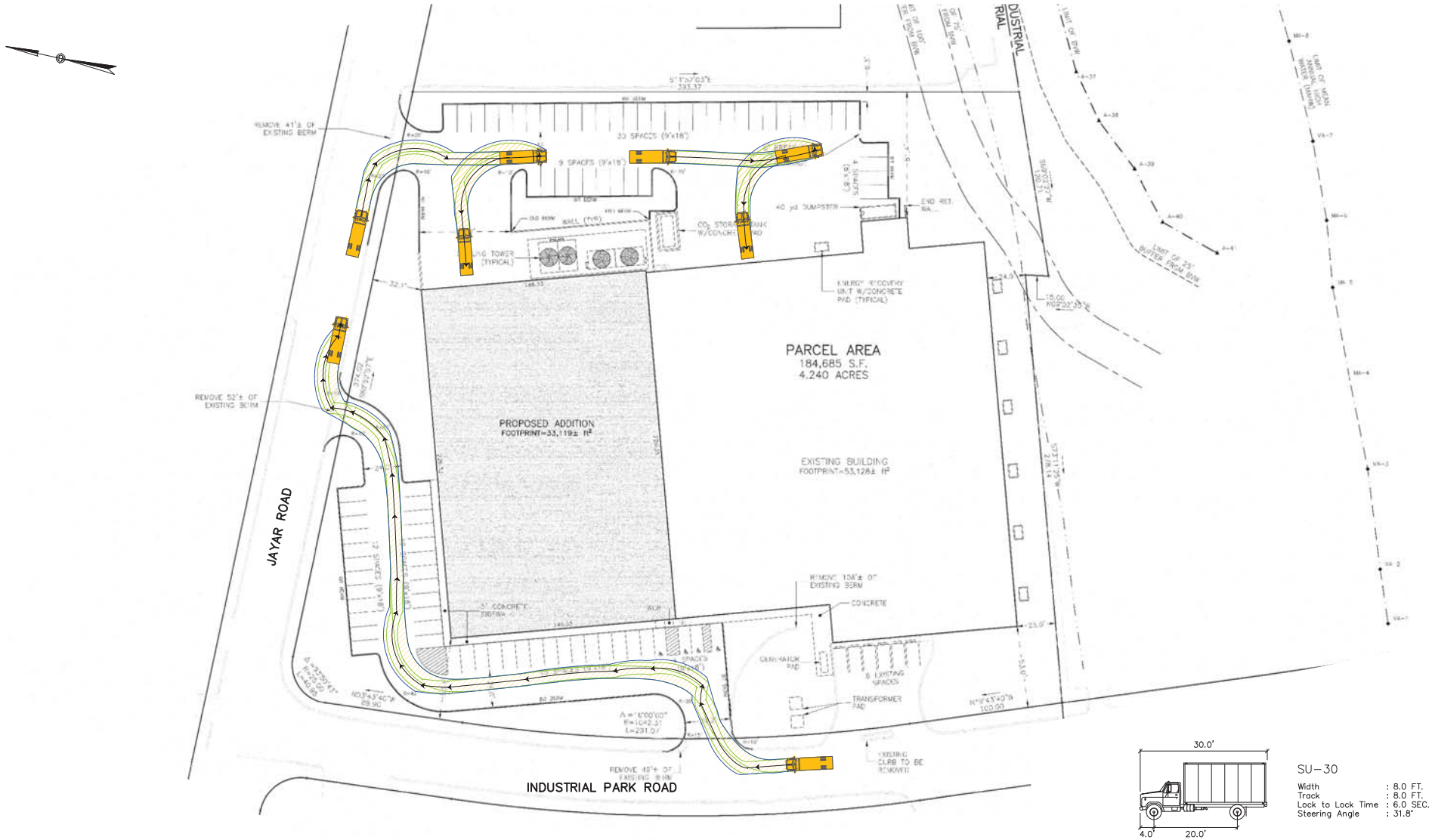
Scale: As Noted
DWG No. 1143 Autoturn (2021-07-27).dwg

Date: July 2021
Project No. 1143

Proposed Development
Medway, Massachusetts

SCALE
0 15 30 60 90 FEET

Exhibit 3
Autoturn Analysis
Passenger Car



Site Plan Source: Williams & Sparages

MDM TRANSPORTATION CONSULTANTS, INC.
Planners & Engineers
28 Lord Road, Suite 280
Marlborough, MA 01752

Proposed Development
Medway, Massachusetts

SCALE
0 15 30 60 90 FEET

Exhibit 2
Autoturn Analysis
SU-30 Truck

Scale: As Noted
DWG No. 1143 Autoturn (2021-07-27).dwg

Date: July 2021
Project No. 1143

SHEET LIST TABLE

SHEET TITLE	DRAWING	SHEET NUMBER
COVER PLAN	C1.1	1
SITE CONTEXT PLAN	C1.2	2
EXISTING CONDITION PLAN	C2.1	3
GRADING & DRAINAGE PLAN	C3.1	4
UTILITY PLAN	C4.1	5
SURVEY & LAYOUT PLAN	C5.1	6
PHOTOMETRIC PLAN	C6.1	7
LANDSCAPE PLAN	C7.1	8
EROSION & SEDIMENT CONTROL PLAN	C8.1	9
CONSTRUCTION DETAILS PLAN	C9.1	10
CONSTRUCTION DETAILS PLAN	C9.2	11
CONSTRUCTION DETAILS PLAN	C9.2	12
CONSTRUCTION DETAILS PLAN	C9.3	13
STOPPING SIGHT DISTANCE PLAN	C10.1	14

ZONING TABLE

ZONE: EAST INDUSTRIAL (EI)

CATEGORY	REQUIRED/ALLOWED	PROVIDED
MINIMUM LOT AREA	20,000 ft^2	184,685 ft^2
MINIMUM LOT FRONTAGE	100 ft.	895.94 ft.
MINIMUM FRONT SETBACK	30 ft.	53.0± ft.
MINIMUM SIDE SETBACK	20 ft.	24.9± ft.
MINIMUM REAR SETBACK	30 ft.	81.4 ft.
MAXIMUM BUILDING HEIGHT	60 ft.	<< 60 ft.
MAXIMUM LOT COVERAGE (BLDGS)	NA	NA
MAXIMUM IMPERVIOUS COVERAGE	80%	76.1%
MINIMUM OPEN SPACE	20%	23.9%

OWNER:
MEDWAY FLOWER, LLC
990 PARADISE ROAD
SWAMPSCOTT, MA 01907

APPLICANT:
PHYTOPIA, INC.
25 NEWBURY STREET
PEABODY, MA 01960

PARCEL INFORMATION:
ADDRESS: 6 INDUSTRIAL PARK ROAD, MEDWAY, MA 02053
PLAN: LOTS 13,14,15,16,17 & 18 ON PLAN NO. 242 OF 1967, PLAN BOOK 222
MEDWAY ASSESSOR'S: MAP 33, PARCEL 004

DEED REFERENCE:
BOOK 36836 PAGE 269

PLAN REFERENCES:
1. PLAN NO. 242 OF 1967, PLAN BOOK 222

PROJECT NOTES:
1. TOPOGRAPHIC INFORMATION SHOWN IS THE RESULT OF AN ACTUAL INSTRUMENT FIELD SURVEY CONDUCTED BY WILLIAMS & SPARAGES, LLC IN JULY 2018 THROUGH FEBRUARY 2021.
2. TOPOGRAPHIC INFORMATION SHOWN IS REFERENCED TO THE NATIONAL GEODETIC VERTICAL DATUM OF 1988 (NAVD88).
3. PROPERTY DOES NOT LIE WITHIN A SPECIAL FLOOD HAZARD AREA (ZONE A OR ZONE AE) AS SHOWN ON FLOOD INSURANCE RATE MAP NUMBER 25021C0142E, EFFECTIVE DATE: JULY 17, 2012.
4. PROPERTY LIES WITHIN THE GROUNDWATER PROTECTION DISTRICT.
5. PROPERTY LIES WITHIN THE MassDEP ZONE II WELLHEAD PROTECTION AREA.

LIST OF WAIVERS:

S.204-4.A PLAN SHALL BE STAMPED BY A REGISTERED LANDSCAPE ARCHITECT. WE REQUEST A WAIVER FROM THE REQUIREMENT OF HAVING A LANDSCAPE ARCHITECT ON THE TEAM. THE ENGINEERING AND SURVEY OFFICE OF WILLIAMS & SPARAGES LLC WILL SUBMIT A COMPREHENSIVE LANDSCAPE PLAN.

S.204-3.F DEVELOPMENT IMPACT STATEMENT. WE REQUEST A WAIVER FROM THE REQUIREMENT OF PROVIDING A DEVELOPMENT IMPACT STATEMENT AS THE INFORMATION REQUESTED WILL BE ADDRESSED THROUGHOUT THE HEARING.

MEDWAY PLANNING & ECONOMIC DEVELOPMENT BOARD

_____

_____

_____

_____

_____

DATE APPROVAL ISSUED:

_____

PLAN ENDORSEMENT DATE:

_____

WILLIAMS & SPARAGES
ENGINEERING · LAND SURVEYING · ENVIRONMENTAL
189 NORTH MAIN STREET
SUITE 110
MANSFIELD, MA 01949
PHONE: (978) 539-8088
FAX: (978) 539-8200
WWW.WNSLLC.COM

Owner:
Medway Flower, LLC
990 Paradise Road
Swapscott, MA 01907

Applicant:
Phytopia, Inc.
25 Newbury Street
Peabody, MA 01960

Designed By: MEM
Drawn By: MEM
Reviewed By: CPS
Project Manager: CPS
Job File Number: MEDW-0017
Drawing File Folder: MEDW17

☒ Drawing Issued for Review
☐ Drawing Issued for Permit
☐ Drawing Issued for Construction

SEAL

COMMONWEALTH OF MASSACHUSETTS
CHRIST P. SPARAGES
CIVIL
No. 40174
REGISTERED PROFESSIONAL ENGINEER
(4/12/22)

12		
11		
10		
9	3/7/2022	Town Comments / Peer Review
8	1/3/2022	Town Comments / Peer Review
7	10/12/2021	Town Comments / Peer Review
6		
5		
4		
3		
2		
1		

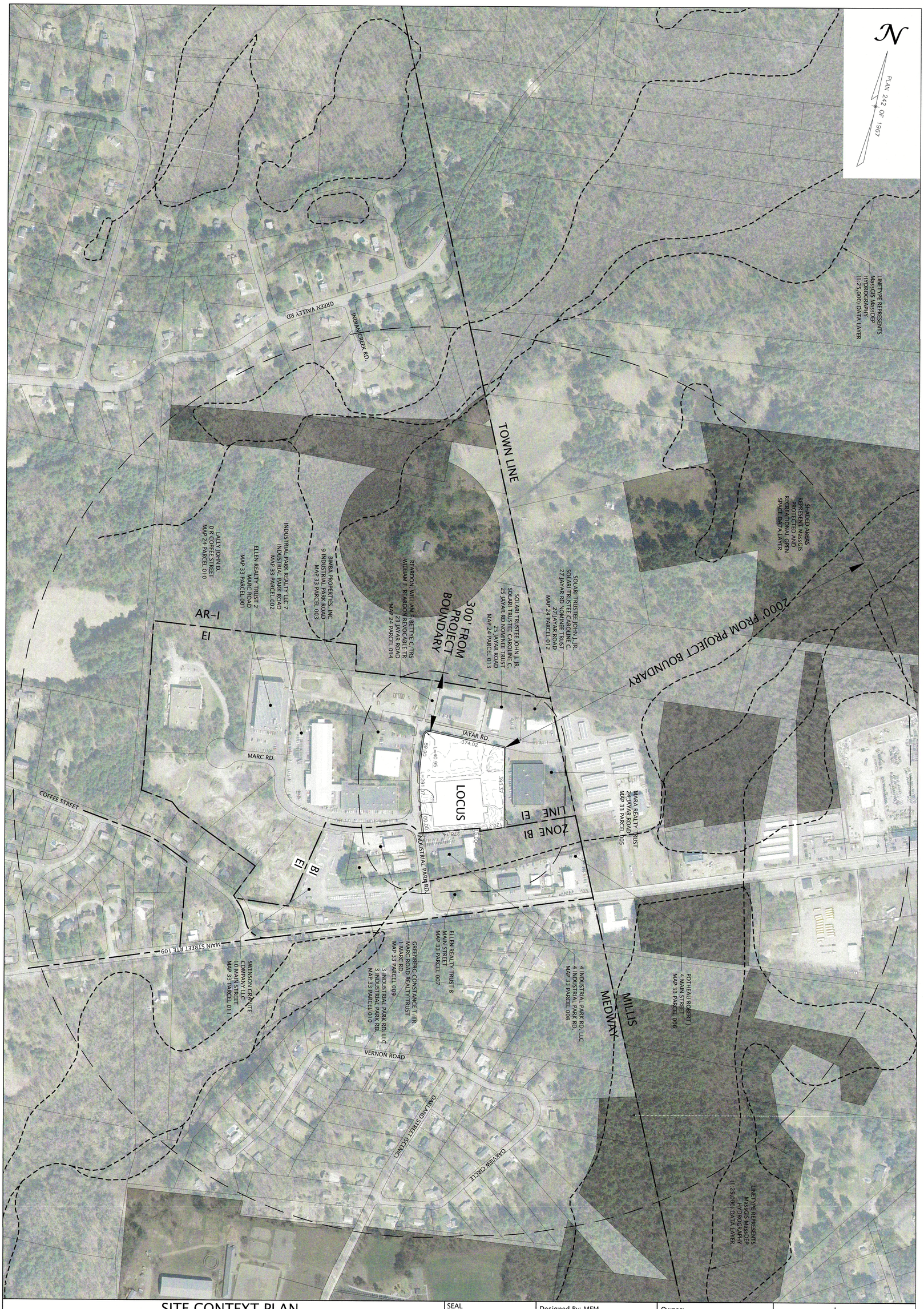
COVER PLAN
INDUSTRIAL PARK ROAD
6 INDUSTRIAL PARK ROAD, MEDWAY, MA

0' 100' 200' 400'
SCALE: 1"=200'

APRIL 1, 2021

DRAWING: C1.1

SHEET 1 OF 14



SITE CONTEXT PLAN
INDUSTRIAL PARK ROAD

6 INDUSTRIAL PARK ROAD, MEDWAY, MA

DRAWING: C1.2

SHEET 2 OF 14

0' 100' 200' 400'

SCALE: 1"=200'

OCTOBER 1, 2021

6				12	
5				11	
4				10	
3	Town Comments / Peer Review	3/7/2022		9	
2	Town Comments / Peer Review	1/3/2022		8	
1	Town Comments / Peer Review	10/12/2021		7	

SEAL

COMMONWEALTH OF MASSACHUSETTS
CHRIST P. SPARAGES
CIVIL
No. 40174

4/12/22

Designed By: MEM
Drawn By: MEM
Reviewed By: CPS
Project Manager: CPS
Job File Number: MEDW-0017
Drawing File Folder: MEDW17

☒ Drawing Issued for Review
☐ Drawing Issued for Permit
☐ Drawing Issued for Construction

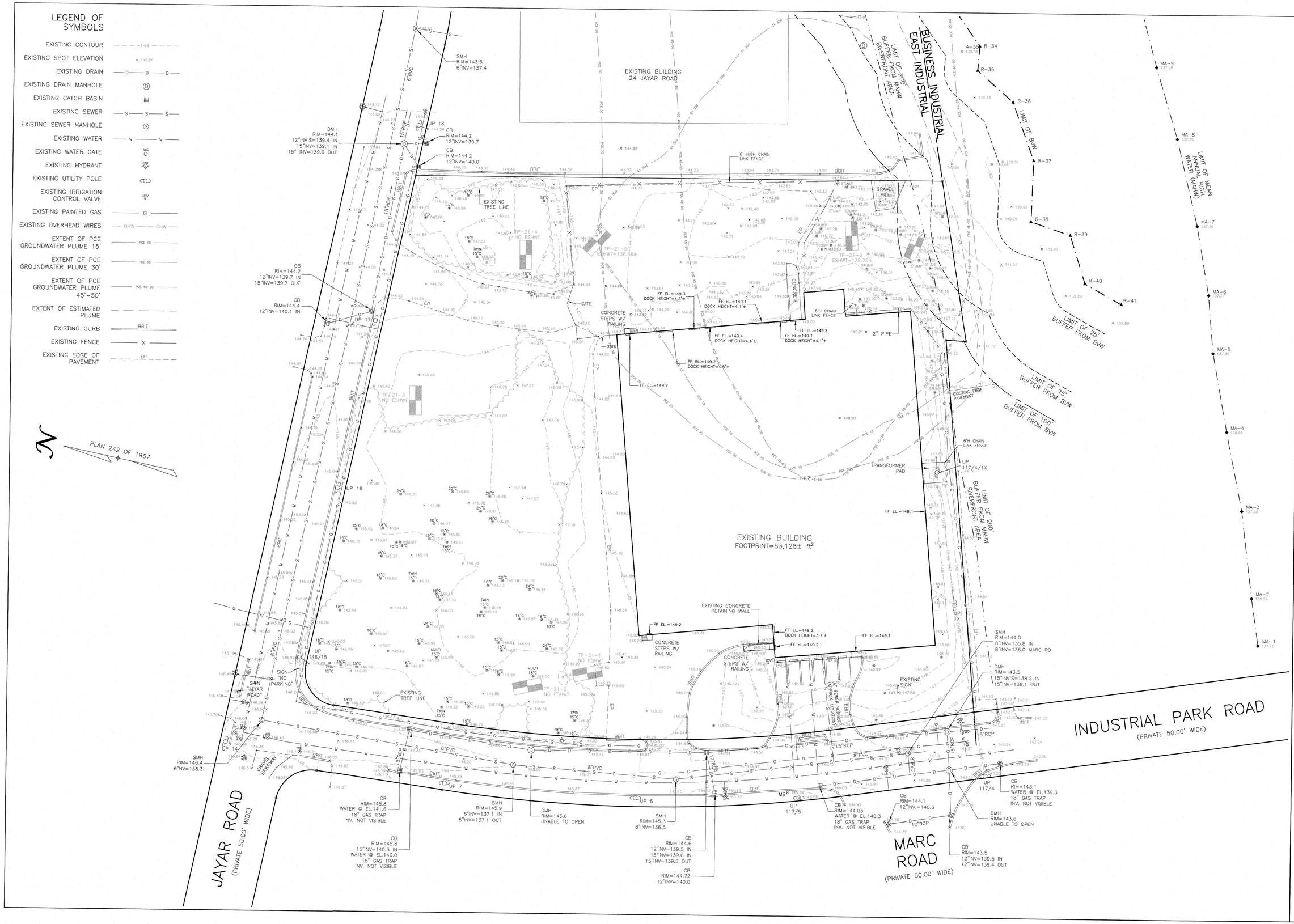
Owner:
Medway Flower, LLC
990 Paradise Road
Swapscott, MA 01907

Applicant:
Phytopia, Inc.
25 Newbury Street
Peabody, MA 01960

WILLIAMS & SPARAGES
ENGINEERS | PLANNERS | SURVEYORS
189 NORTH MAIN STREET
SUITE 101
MIDDLETON, MA 01949
PHONE: (978) 539-8088
FAX: (978) 539-8200
WSENGINEERS.COM

LEGEND OF SYMBOLS

- EXISTING CONTOUR — 144
- EXISTING SPOT ELEVATION × 140.26
- EXISTING DRAIN — D — D — D —
- EXISTING DRAIN MANHOLE
- EXISTING CATCH BASIN
- EXISTING SEWER — S — S — S —
- EXISTING SEWER MANHOLE
- EXISTING WATER — W — W —
- EXISTING WATER GATE
- EXISTING HYDRANT
- EXISTING UTILITY POLE
- EXISTING IRRIGATION CONTROL VALVE — ICV
- EXISTING PAINTED GAS — G —
- EXISTING OVERHEAD WIRES — OHW — OHW —
- EXTENT OF PCE GROUNDWATER PLUME 15' — PCE 15 —
- EXTENT OF PCE GROUNDWATER PLUME 30' — PCE 30 —
- EXTENT OF PCE GROUNDWATER PLUME 45'-50' — PCE 45-50 —
- EXTENT OF ESTIMATED PLUME
- EXISTING CURB — BBIT —
- EXISTING FENCE — X —
- EXISTING EDGE OF PAVEMENT — EP —



WILLIAMS & SPARAGES
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FAX: (978) 539-8200
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Owner:
Medway Flower, LLC
990 Paradise Road
Swapscott, MA 01907

Applicant:
Phytopia, Inc.
25 Newbury Street
Peabody, MA 01960

Designed By: MEM
Drawn By: MEM
Reviewed By: CPS
Project Manager: CPS
Job File Number: MEDW-0017
Drawing File Folder: MEDW17

- ☒ Drawing Issued for Review
- ☐ Drawing Issued for Permit
- ☐ Drawing Issued for Construction

SEAL

COMMONWEALTH OF MASSACHUSETTS
CHRIST P. SPARAGES
CIVIL
No. 34174
(4/12/22)

No.	Description	Date
12		
11		
10		
9		
8		
7		
6		
5		
4	Town Comments / Peer Review	3/7/2022
3	Town Comments / Peer Review	1/3/2022
2	Town Comments / Peer Review	10/12/2021
1		

EXISTING CONDITION PLAN
INDUSTRIAL PARK ROAD

6 INDUSTRIAL PARK ROAD, MEDWAY, MA

0' 15' 30' 60'
SCALE: 1"=30'

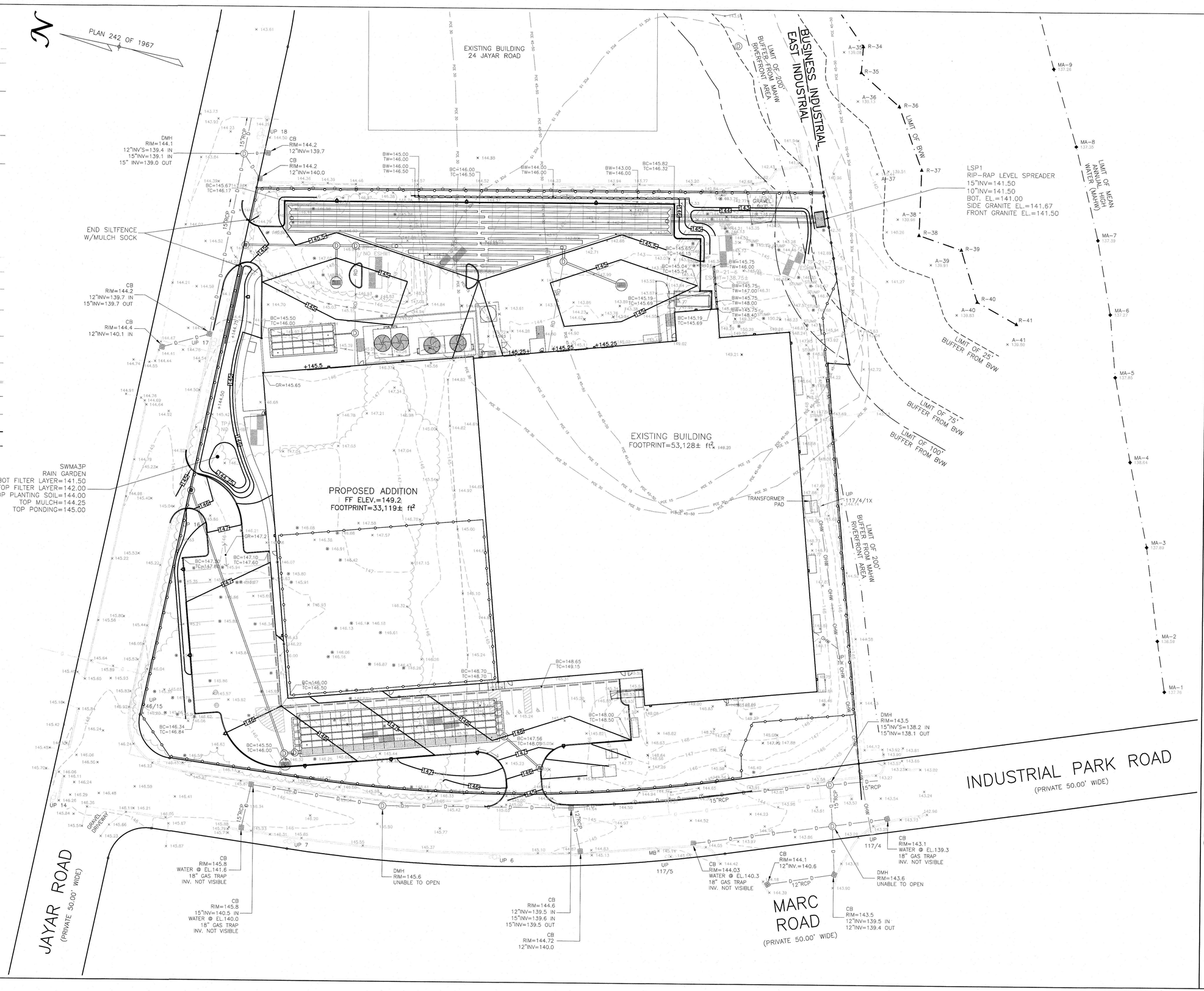
APRIL 1, 2021

DRAWING: C2.1

SHEET 3 OF 14

LEGEND OF SYMBOLS

- EXISTING CONTOUR
- EXISTING INDEX CONTOUR
- EXISTING SPOT ELEVATION
- EXISTING DRAIN
- EXISTING DRAIN MANHOLE
- EXISTING CATCH BASIN
- EXISTING SEWER
- EXISTING SEWER MANHOLE
- EXISTING WATER
- EXISTING WATER GATE
- EXISTING HYDRANT
- EXISTING UTILITY POLE
- EXISTING IRRIGATION CONTROL VALVE
- EXISTING MONITORING WELL
- EXISTING PAINTED GAS
- EXISTING OVERHEAD WIRES
- EXTENT OF PCE GROUNDWATER PLUME 15'
- EXTENT OF PCE GROUNDWATER PLUME 30'
- EXTENT OF PCE GROUNDWATER PLUME 45'-50'
- EXTENT OF ESTIMATED PLUME
- EXISTING CURB
- EXISTING FENCE
- EXISTING EDGE OF PAVEMENT
- PROPOSED CONTOUR
- PROPOSED FILT FENCE



WILLIAMS & SPARAGES
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PHONE: (978) 539-8088
FAX: (978) 539-8200
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Owner:
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990 Paradise Road
Swapscott, MA 01907

Applicant:
Phytopia, Inc.
25 Newbury Street
Peabody, MA 01960

Designed By: MEM
Drawn By: MEM
Reviewed By: CPS
Project Manager: CPS
Job File Number: MEDW-0017
Drawing File Folder: MEDW17

- ☒ Drawing Issued for Review
- ☐ Drawing Issued for Permit
- ☐ Drawing Issued for Construction

SEAL

COMMONWEALTH OF MASSACHUSETTS
CHRIST P. SPARAGES
CIVIL
No. 46704
REGISTERED PROFESSIONAL ENGINEER
(4/12/21)

12		
11		
10		
9	3/7/2022	Town Comments / Peer Review
8	1/3/2022	Town Comments / Peer Review
7	10/12/2021	Town Comments / Peer Review
6		
5		
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3		
2		
1		

GRADING & DRAINAGE PLAN
INDUSTRIAL PARK ROAD

6 INDUSTRIAL PARK ROAD, MEDWAY, MA

0' 15' 30' 60'
SCALE: 1"=30'

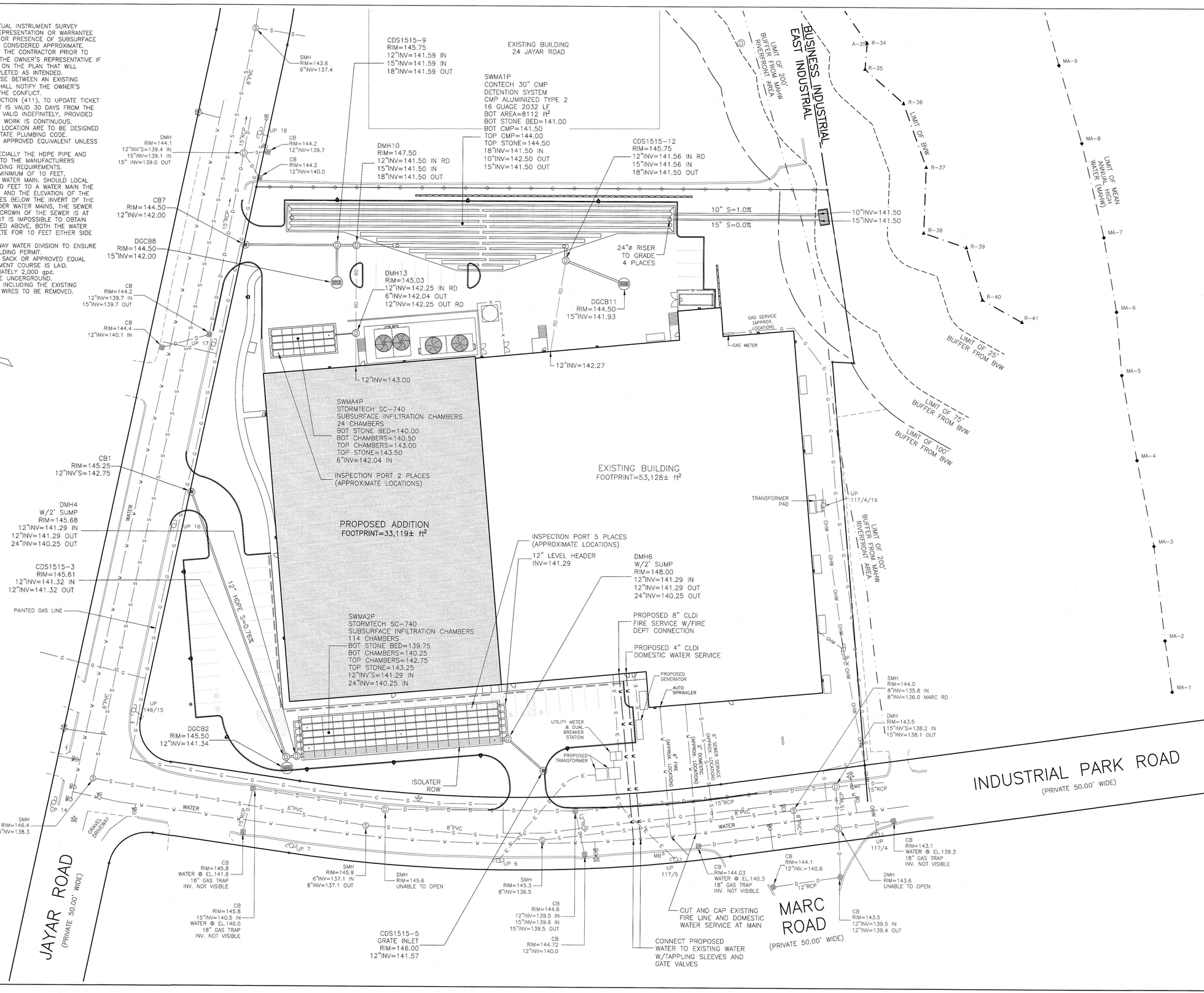
APRIL 1, 2021

DRAWING: C3.1

SHEET 4 OF 14

PROJECT NOTES:

1. THE UTILITIES SHOWN ARE THE RESULT OF AN ACTUAL INSTRUMENT SURVEY PERFORMED BY WILLIAMS & SPARAGES LLC. NO REPRESENTATION OR WARRANTEE IS MADE AS TO THE ACCURACY OF THE LOCATION OR PRESENCE OF SUBSURFACE UTILITIES AND THOSE UTILITIES SHOWN SHOULD BE CONSIDERED APPROXIMATE.
2. ALL UTILITIES SHALL BE VERIFIED IN THE FIELD BY THE CONTRACTOR PRIOR TO THE START OF CONSTRUCTION AND SHALL NOTIFY THE OWNER'S REPRESENTATIVE IF EXISTING CONDITIONS DIFFER FROM THOSE SHOWN ON THE PLAN THAT WILL PREVENT THE PROPOSED WORK FROM BEING COMPLETED AS INTENDED.
3. IF DURING CONSTRUCTION A CONFLICT SHOULD ARISE BETWEEN AN EXISTING UTILITY AND PROPOSED WORK THE CONTRACTOR SHALL NOTIFY THE OWNER'S REPRESENTATIVE IN WRITING FOR RESOLUTION OF THE CONFLICT.
4. CONTRACTOR TO CALL DIGSAFE PRIOR TO CONSTRUCTION (411), TO UPDATE TICKET AND/OR VERIFY TICKET VALIDATION. DIGSAFE TICKET IS VALID 30 DAYS FROM THE DATE OF ISSUE. BEYOND THIS POINT, TICKETS ARE VALID INDEFINITELY, PROVIDED THAT 1) THE MARKS ARE MAINTAINED, AND 2) THE WORK IS CONTINUOUS.
5. THE PROPOSED WATER CONNECTION SIZE, TYPE & LOCATION ARE TO BE DESIGNED IN ACCORDANCE WITH 248 CMR 10.00: UNIFORM STATE PLUMBING CODE.
6. ALL PROPOSED DRAIN PIPES ARE TO BE HDPE OR APPROVED EQUIVALENT UNLESS OTHERWISE SPECIFIED.
7. THE INSTALLATION OF DRAINAGE STRUCTURES, ESPECIALLY THE HDPE PIPE AND SUBSURFACE CHAMBERS, SHALL ADHERE STRICTLY TO THE MANUFACTURERS INSTALLATION REQUIREMENTS TO MEET AASHTO LOADING REQUIREMENTS.
8. WHEREVER FEASIBLE, SEWERS WILL BE LAID AT A MINIMUM OF 10 FEET, HORIZONTALLY, FROM ANY EXISTING OR PROPOSED WATER MAIN. SHOULD LOCAL CONDITIONS PREVENT A LATERAL SEPARATION OF 10 FEET TO A WATER MAIN THE SEWER MAIN WILL BE LAID IN A SEPARATE TRENCH AND THE ELEVATION OF THE CROWN OF THE SEWER PLACED AT LEAST 18 INCHES BELOW THE INVERT OF THE WATER MAIN. WHENEVER SEWERS MUST CROSS UNDER WATER MAINS, THE SEWER SHALL BE LAID AT SUCH AN ELEVATION THAT THE CROWN OF THE SEWER IS AT LEAST 18 INCHES BELOW THE WATER MAIN. WHEN IT IS IMPOSSIBLE TO OBTAIN HORIZONTAL OR VERTICAL SEPARATION AS STIPULATED ABOVE, BOTH THE WATER MAIN AND SEWER SHOULD BE ENCASED IN CONCRETE FOR 10 FEET EITHER SIDE OF THE CROSSING.
9. THE APPLICANT SHALL COORDINATE WITH THE MEDWAY WATER DIVISION TO ENSURE PROPER DOMESTIC AND FIRE FLOWS PRIOR TO BUILDING PERMIT.
10. PROPOSED CATCH BASINS TO BE FITTED WITH SILT SACK OR APPROVED EQUAL WHEN INSTALLED AND REMOVED AFTER FINAL PAVEMENT COURSE IS LAID.
11. DAILY WATER USAGE IS EXPECTED TO BE APPROXIMATELY 2,000 gpd.
12. ALL PROPOSED ELECTRICAL CONNECTIONS SHALL BE UNDERGROUND.
13. EXISTING ON SITE ELECTRIC SERVICE COMPONENTS, INCLUDING THE EXISTING TRANSFORMER PAD, UTILITY POLES AND OVERHEAD WIRES TO BE REMOVED.



WILLIAMS & SPARAGES
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MANSFIELD, MA 02048
PHONE: (978) 339-8388
FAX: (978) 339-8200
WSENGINEERS.COM

Owner:
Medway Flower, LLC
990 Paradise Road
Swapscott, MA 01907

Applicant:
Phytopia, Inc.
25 Newbury Street
Peabody, MA 01960

Designed By: MEM
Drawn By: MEM
Reviewed By: CPS
Project Manager: CPS
Job File Number: MEDW-0017
Drawing File Folder: MEDW17

☒ Drawing Issued for Review
☐ Drawing Issued for Permit
☐ Drawing Issued for Construction

SEAL

COMMONWEALTH OF MASSACHUSETTS
CHRISTOPHER P. SPARAGES
CIVIL
No. 41774
REGISTERED PROFESSIONAL ENGINEER

(4/12/22)

1	Town Comments / Peer Review	10/12/2021
2	Town Comments / Peer Review	1/3/2022
3	Town Comments / Peer Review	3/7/2022
4		
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UTILITY PLAN
INDUSTRIAL PARK ROAD
6 INDUSTRIAL PARK ROAD, MEDWAY, MA

0' 15' 30' 60'
SCALE: 1"=30'

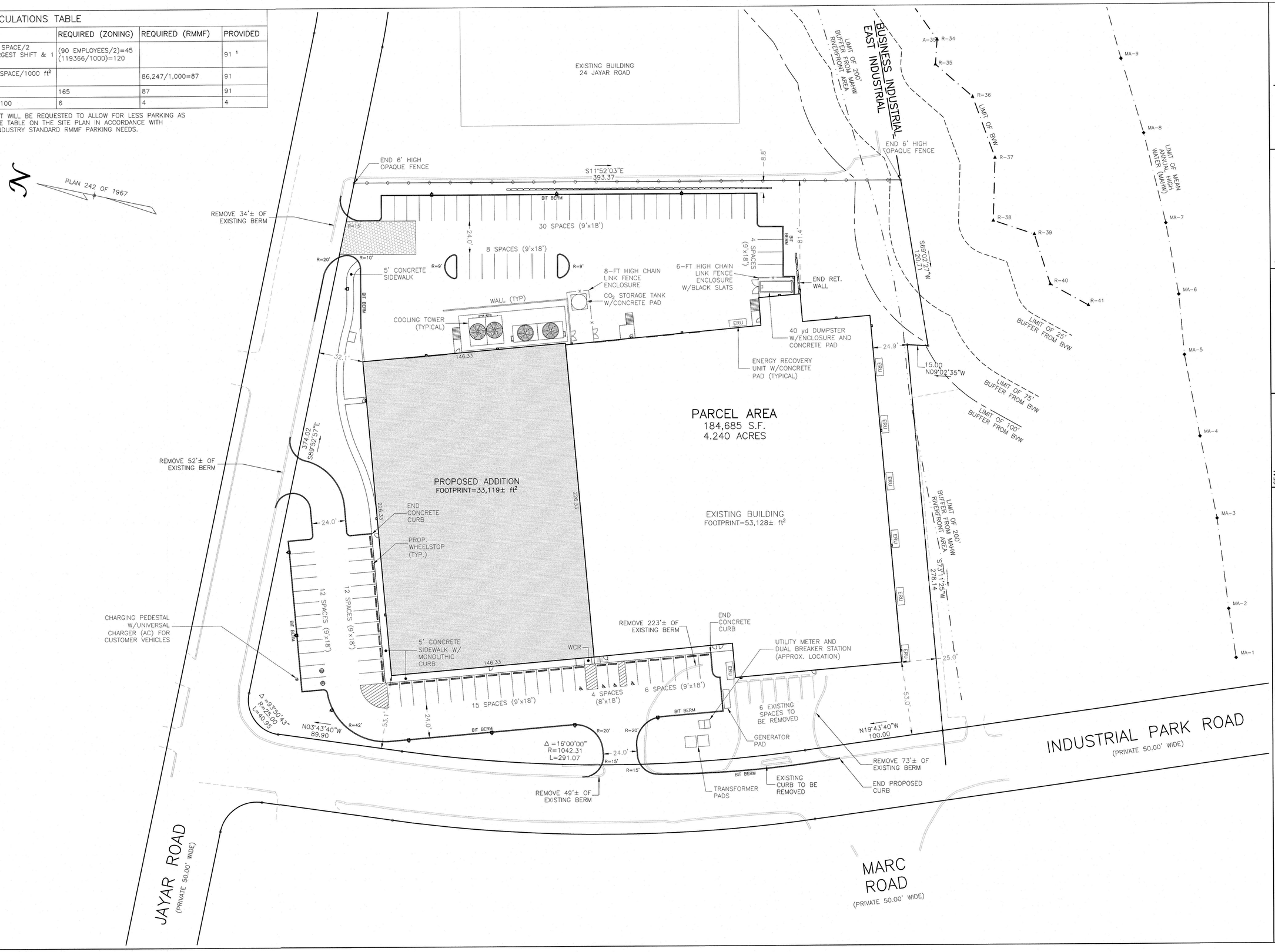
APRIL 1, 2021

DRAWING: C4.1

SHEET 5 OF 14

PARKING CALCULATIONS TABLE			
CATEGORY	REQUIRED (ZONING)	REQUIRED (RMMF)	PROVIDED
MANUFACTURING: 1 SPACE/2 EMPLOYEES ON LARGEST SHIFT & 1 SPACE/1000 ft^2	(90 EMPLOYEES/2)=45 (119366/1000)=120		91 [1]
RMMF PARKING: 1 SPACE/1000 ft^2 OF 86,247 ft^2		86,247/1,000=87	91
TOTAL	165	87	91
ACCESSIBILITY: 76–100	6	4	4

1. SPECIAL PERMIT WILL BE REQUESTED TO ALLOW FOR LESS PARKING AS SHOWN ON THE TABLE ON THE SITE PLAN IN ACCORDANCE WITH ACCEPTABLE INDUSTRY STANDARD RMMF PARKING NEEDS.



WILLIAMS & SPARAGES
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189 NORTH MAIN STREET
SUITE 101
MIDDLETON, MA 01949
PHONE: (978) 539-8088
FAX: (978) 539-8200
WSRCORP.COM

Owner:
Medway Flower, LLC
990 Paradise Road
Swapscott, MA 01907

Applicant:
Phytopia, Inc.
25 Newbury Street
Peabody, MA 01960

Designed By: MEM
Drawn By: MEM
Reviewed By: CPS
Project Manager: CPS
Job File Number: MEDW-0017
Drawing File Folder: MEDW17

☒ Drawing Issued for Review
☐ Drawing Issued for Permit
☐ Drawing Issued for Construction

SEAL

COMMONWEALTH OF MASSACHUSETTS
CHRIST P. SPARAGES
CIVIL
No. 40174
PROFESSIONAL ENGINEER

(4/12/22)

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9	Town Comments / Peer Review	3/7/2022	
8	Town Comments / Peer Review	1/3/2022	
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SURVEY & LAYOUT PLAN
INDUSTRIAL PARK ROAD

6 INDUSTRIAL PARK ROAD, MEDWAY, MA

0' 15' 30' 60'
SCALE: 1"=30'

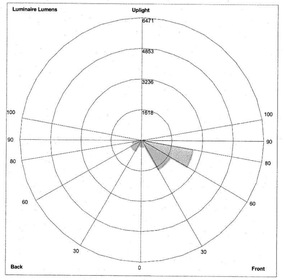
APRIL 1, 2021

DRAWING: C5.1

SHEET 6 OF 14

IES ROAD REPORT
PHOTOMETRIC FILENAME : USSL-P-PA1B-730-U-T4W_6471 LUMENS.IES

LUMINAIRE CLASSIFICATION SYSTEM (LCS) GRAPH



Luminaire Lumens:
Front: Low=246.4, Medium=1758.4, High=2759.8, Very High=158.2
Back: Low=315.2, Medium=488.5, High=471.6, Very High=32.2
Uplight: Low=0.0, High=0.0

BUG Rating : B1-U0-G2

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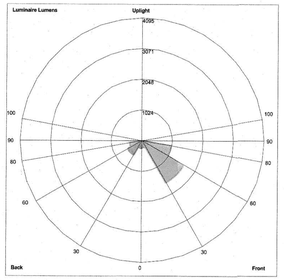
Results derived from content of manufacturers photometric file.
Page 1

IES ROAD REPORT
PHOTOMETRIC FILENAME : USSL-P-PA1A-730-U-T2U_4095 LUMENS.IES

LUMINAIRE CLASSIFICATION SYSTEM (LCS) GRAPH



Luminaire Lumens:
Front: Low=236.6, Medium=1614.9, High=985.1, Very High=39.7
Back: Low=241.2, Medium=542.4, High=417.8, Very High=22.3
Uplight: Low=0.0, High=0.0

BUG Rating : B1-U0-G1

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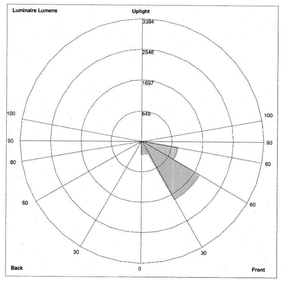
Page 1

IES ROAD REPORT
PHOTOMETRIC FILENAME : USSL-P-PA1A-730-U-T2R-HSS_3394 LUMENS.IES

LUMINAIRE CLASSIFICATION SYSTEM (LCS) GRAPH



Luminaire Lumens:
Front: Low=360.3, Medium=1843.1, High=1006.9, Very High=11.1
Back: Low=97.0, Medium=77.6, High=47.3, Very High=0.7
Uplight: Low=0.0, High=0.0

BUG Rating : B0-U0-G1

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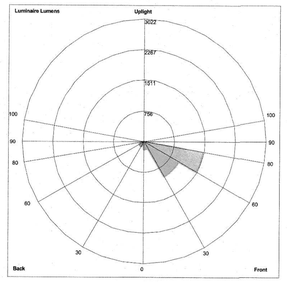
Page 1

IES ROAD REPORT
PHOTOMETRIC FILENAME : USSL-P-PA1A-730-U-T4W-HSS_3022 LUMENS.IES

LUMINAIRE CLASSIFICATION SYSTEM (LCS) GRAPH



Luminaire Lumens:
Front: Low=151.7, Medium=989.9, High=1466.2, Very High=56.7
Back: Low=79.5, Medium=129.7, High=91.6, Very High=0.8
Uplight: Low=0.0, High=0.0

BUG Rating : B0-U0-G1

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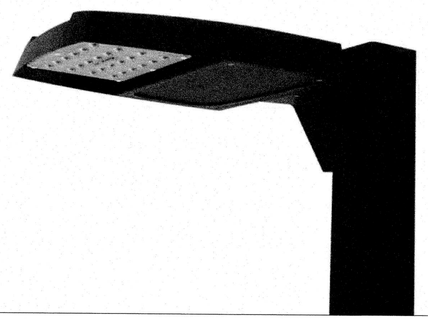
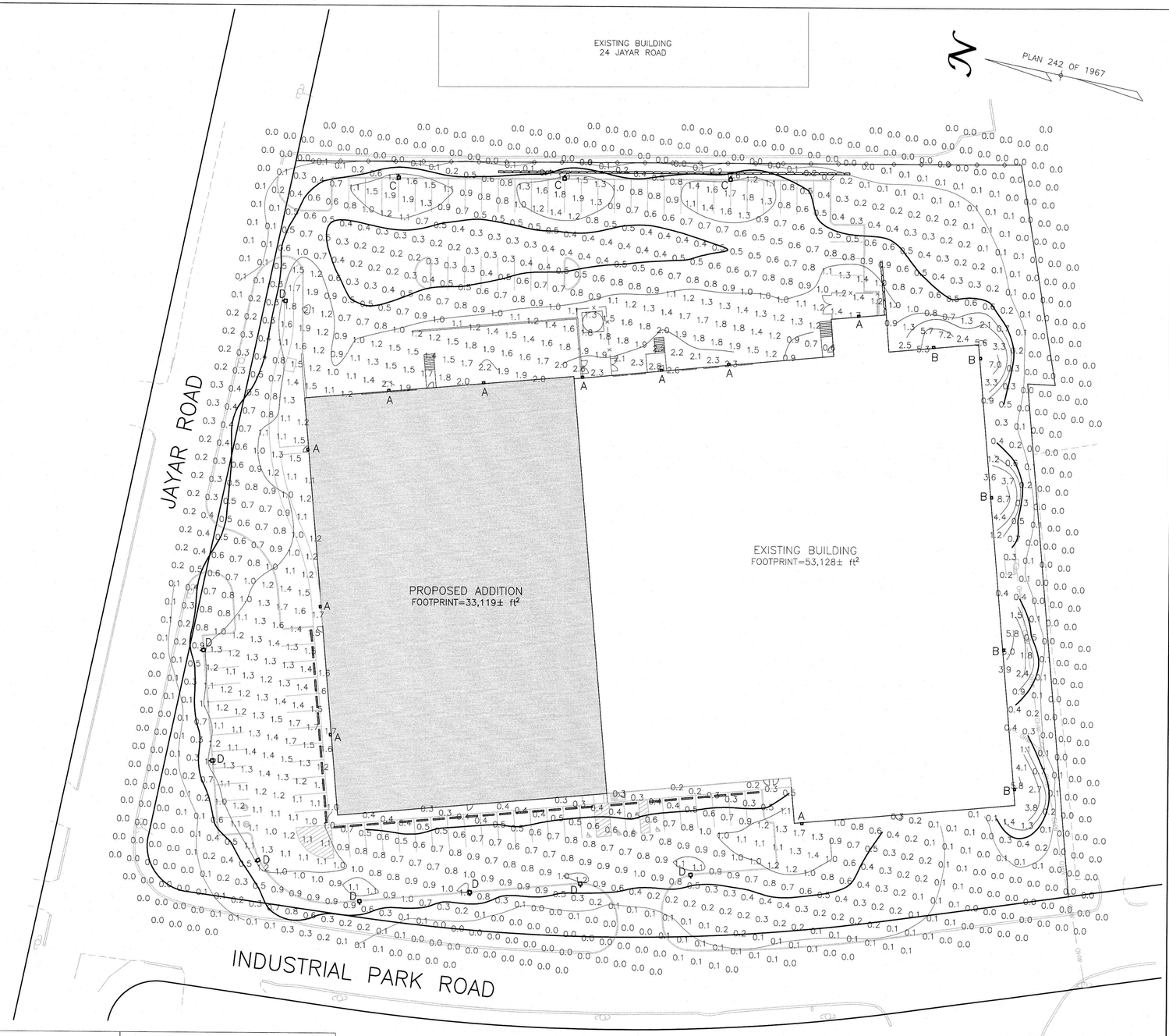
Page 1





LUMINAIRE SCHEDULE

SYMBOL	LABEL	QUANTITY	CATALOG NUMBER COOPER LIGHTING	DESCRIPTION	LAMP	TILT	LLF	CANDELA FILE
	A	10	USSL PETITE LED USSL-P-PA1B-730-U-T4W (FINISH & ELECTRICAL TO BE SPECIFIED BY OTHERS)	TYPE IV WIDE OPTICS 20' MOUNTING HEIGHT (WALL MOUNTED)	3000K 6471 LUMENS PER LAMP	0°	0.85	USSL-P-PA1B-730-U-T4W_6471 LUMENS.IES
	B	5	USSL PETITE LED USSL-P-PA1A-730-U-T2 (FINISH & ELECTRICAL TO BE SPECIFIED BY OTHERS)	TYPE 2 OPTICS 8' MOUNTING HEIGHT (WALL MOUNTED)	3000K 4095 LUMENS PER LAMP	0°	0.85	USSL-P-PA1A-730-U-T2U_4095 LUMENS.IES
	C	3	USSL PETITE LED USSL-P-PA1A-730-U-T2R-HSS (FINISH & ELECTRICAL TO BE SPECIFIED BY OTHERS)	TYPE 2 OPTICS 20' MOUNTING HEIGHT (POLE MOUNTED)	3000K 3394 LUMENS PER LAMP	0°	0.85	USSL-P-PA1A-730-U-T2R-HSS_3394 LUMENS.IES
	D	8	USSL PETITE LED USSL-P-PA1A-730-U-T4W-HSS (FINISH & ELECTRICAL TO BE SPECIFIED BY OTHERS)	TYPE IV WIDE OPTICS 20' MOUNTING HEIGHT (POLE MOUNTED)	3000K 3022 LUMENS PER LAMP	0°	0.85	USSL-P-PA1A-730-U-T4W-HSS_3022 LUMENS.IES

GENERAL PHOTOMETRIC SCHEDULE

AVERAGE FOOT-CANDLES	0.62
MAXIMUM FOOT-CANDLES	8.7
MINIMUM FOOT-CANDLES	0.0
MINIMUM TO MAXIMUM FC RATIO	0.00
MAXIMUM TO MINIMUM FC RATIO	8.65 / 0.00
AVERAGE TO MINIMUM FC RATIO	0.62 / 0.00

NOTES:

1. SECURITY LIGHTING TO BE DETERMINED.
2. ILLUMINANCE VALUES CREATED FROM MANUFACTURERS PHOTOMETRIC DATA.
3. ILLUMINANCE VALUES SHOWN REPRESENT HORIZONTAL FOOTCANDLES AT GROUND LEVEL.
4. FOOT CANDLE VALUES SHOWN DO NOT ACCOUNT FOR LIGHT REFLECTION, EXISTING LIGHT SOURCES, SLOPING GRADE OR EXISTING OR PROPOSED THREE DIMENSIONAL OBJECTS.

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FAX: (978) 539-8200
WSENGINEERS.COM

Owner:
Medway Flower, LLC
990 Paradise Road
Swapscott, MA 01907

Applicant:
Phytopia, Inc.
25 Newbury Street
Peabody, MA 01960

Designed By: MEM
Drawn By: MEM
Reviewed By: CPS
Project Manager: CPS
Job File Number: MEDW-0017
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12		

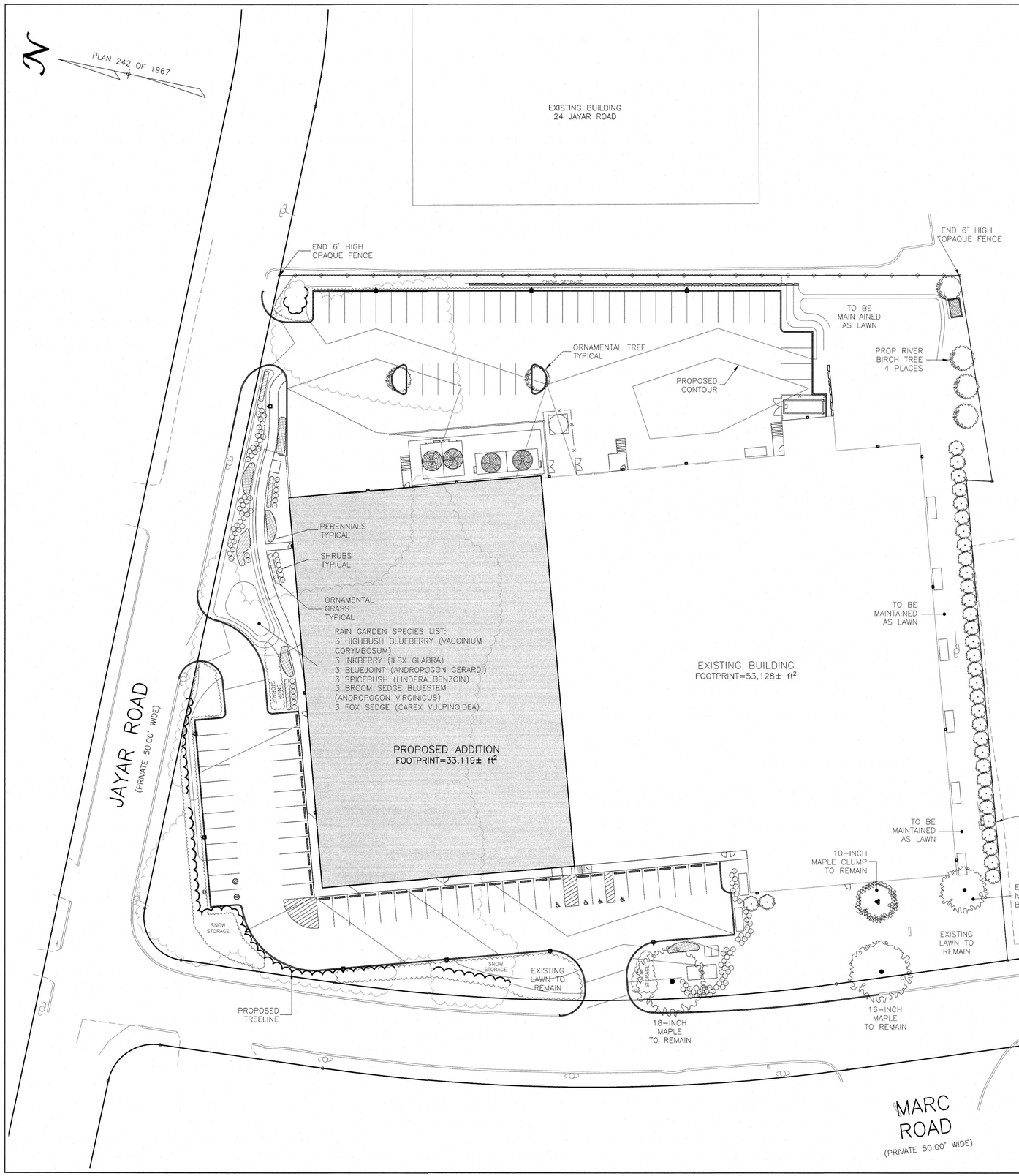
PHOTOMETRIC PLAN
INDUSTRIAL PARK ROAD
6 INDUSTRIAL PARK ROAD, MEDWAY, MA

0' 15' 30' 60'
SCALE: 1"=30'

APRIL 1, 2021

DRAWING: C6.1

SHEET 7 OF 14



PLANT SCHEDULE

SYMBOL	QUANTITY	LATIN NAME	COMMON NAME	PLANTING SIZE	NOTES
ORNAMENTAL TREES					
RBC	TBD	BETULA NIGRA	RIVER BIRCH	10'–12' TALL	B&B, MULTI STEM
SBY	TBD	AMELANCHIER X GRANDIFLORA	SERVICEBERRY	8'–10' TALL	B&B, MULTI STEM
ERB	TBD	CERCIS CANADENSIS	EASTERN REDBUD	8'–10' TALL	B&B, SINGLE/MULTI STEM
SMA	TBD	MAGNOLIA STELLATA	STAR MAGNOLIA	8'–10' TALL	B&B, SPECIMEN
JFC	TBD	PRUNUS KANZAN	JAPANESE FLOWERING CHERRY	8'–10' TALL	B&B, SPECIMEN
SHRUBS					
RTD	TBD	CORNUS SERICEA 'ARTIC FIRE'	RED TWIG DOGWOOD	3.5' TALL	B&B, PLANT 36" O.C.
INK	TBD	ILEX GLABRA	INKBERRY	3' TALL	B&B, PLANT 36" O.C.
DFG	TBD	FOTHERGILLA GARDENII	DWARF FOTHERGILLA	3.5' TALL	B&B, PLANT 36" O.C.
GLS	TBD	RHUS AROMATICA	GRO–LOW SUMAC	3 GALLON	B&B, PLANT 36" O.C.
OHD	TBD	HYDRANGEA QUERCIFOLIA	OAKLEAF HYDRANGEA	3' TALL	B&B, PLANT 36" O.C.
WBY	TBD	ILEX VERTICILLATA	WINTERBERRY	3' TALL	B&B, PLANT 36" O.C.
HYW	TBD	TAXUS X MEDIA 'HICKSII'	HICKS YEW	5 GALLON	B&B, PLANT 36" O.C.
PERENNIALS					
PCF	TBD	ECHINACEA PURPUREA	PURPLE CONEFLOWER	1 GALLON	PLANT 18" O.C.
VHM	TBD	RUDBECKIA FULGIDA 'GOLDSTRUM'	BLACK–EYED SUSAN	1 GALLON	PLANT 18" O.C.
HRD	TBD	PEROVSKIA ATR. 'LITTLE SPIRE'	RUSSIAN SAGE	1 GALLON	PLANT 18" O.C.
ORNAMENTAL GRASS					
SGR	TBD	PANICUM VIRGATUM 'SHENANDOAH'	SWITCH GRASS	2 GALLON	PLANT 36" O.C.
LBS	TBD	SCHIZACHYRIUM SCOPARIUM	LITTLE BLUESTEM	2 GALLON	PLANT 36" O.C.
FGR	TBD	PENNISETUM ALOPECUROIDES	FOUNTAIN GRASS	2 GALLON	PLANT 24" O.C.

PLANTING NOTES

1. DURING CONSTRUCTION CONTRACTOR SHALL PROTECT AND SAVE ALL VEGETATION BEYOND THE LIMIT OF GRADING ACTIVITIES.
2. ALL PROPOSED PLANTINGS SHALL BE ADJUSTED TO ACCOMMODATE UNDERGROUND UTILITIES.
3. ALL PLANTING METHODS SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE AMERICAN ASSOCIATION OF NURSERYMEN.
4. IN THE EVENT OF DISCREPANCIES BETWEEN THE QUANTITIES OF PLANTS IN THE PLANT LIST AND THE DRAWINGS, THE DEPICTION OF THE PLANTS ON THE DRAWINGS SHALL GOVERN.
5. ALL TREES AND SHRUBS SHALL BE NURSERY GROWN WITHIN A U.S.D.A. PLANT HARDINESS ZONE WHICH IS THE SAME AS, OR COLDER THAN, THE ZONE IN WHICH THE PROJECT IS LOCATED.
6. ALL PLANTS 3' OR GREATER IN HEIGHT OR SPREAD TO BE BALLED AND BURLAPED.
7. ALL LOAM AREAS FOR PLANT BEDS SHALL BE UNIFORM IN COMPOSITION AND FREE FROM SUBSOIL, STONES LARGER THAN 1" AND NOXIOUS MATERIALS.
8. ALL PLANT SHALL BE WATERED IMMEDIATELY AFTER PLANTING.
9. ALL DISTURBED AREAS SHALL BE STABILIZED WITH LOAM AND SEED AND/OR BARK MULCH. BEGINNING AND ENDING POINTS OF GRASS AND MULCH TO BE DETERMINED IN FIELD WITH OWNER AUTHORIZATION.
10. POSITIVE DRAINAGE SHALL BE MAINTAINED AWAY FROM AND AROUND BUILDING PER BUILDING CODE.
11. ALL WORK TO COMPLY TO ORDER OF CONDITIONS ISSUED FOR PROJECT. SEE CONDITIONS PRIOR TO LANDSCAPE WORK.
12. CONTRACTOR TO PROVIDE TWO YEAR GUARANTEE ON ALL PLANTING MATERIAL.
13. NO PLANTING PRIOR TO APPROVAL OF FINISHED GRADE.
14. PROVIDE SOIL DEPTH ACCORDING TO CONSTRUCTION DETAILS FOR TREES.
15. PROVIDE 18" SOIL DEPTH FOR ALL SHRUBS AND PERENNIALS.
16. PROVIDE 6" SOIL DEPTH FOR ALL GROUNDCOVER.
17. PROVIDE 6" SOIL DEPTH FOR ALL SOD/SEED.
18. ALL SPECIES WITHIN THE RAIN GARDEN SHALL BE PURCHASED FROM A NURSERY SPECIALIZING IN THE PROPOGATION OF PLANTS NATIVE TO MASSACHUSETTS. SPECIES SHALL BE SELECTED FROM THE PROPOSED SPECIES LIST FOR EACH AREA.
19. CONTRACTOR SHALL REMOVE DEAD SCRUB BRUSH AND SHALL REMOVE SMALL DEAD TREES IN THE PROPOSED TREE SAVE AREAS. EXISTING TREES TO REMAIN SHALL ALSO BE PRUNED WITH THE ADVICE OF A LANDSCAPE CONTRACTOR TO REMOVE DEAD LIMBS TO IMPROVE THE HEALTH OF THE REMAINING TREES.

PROJECT NOTES

1. STOCKPILING OF SNOW AT DRIVEWAY/DRIVEWAY AND DRIVEWAY/STREET INTERSECTIONS SHALL NOT EXCEED 3 FEET IN HEIGHT.

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FAX: (978) 539-8200
WSENGINEERS.COM

Owner:
Medway Flower, LLC
990 Paradise Road
Swapscott, MA 01907

Applicant:
Phytopia, Inc.
25 Newbury Street
Peabody, MA 01960

Designed By: MEM
Drawn By: MEM
Reviewed By: CPS
Project Manager: CPS
Job File Number: MEDW-0017
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LANDSCAPE PLAN
INDUSTRIAL PARK ROAD

6 INDUSTRIAL PARK ROAD, MEDWAY, MA

0' 15' 30' 60'
SCALE: 1"=30'

APRIL 1, 2021

DRAWING: C7.1

SHEET 8 OF 14

EARTHWORK CALCULATIONS

PROPOSED ADDITION:
Volumes calculated to one foot below finished floor grade
Volumes by Triangulation (Prisms)
Existing Surface: P:\MEDW-0017(6 Industrial Park Road)\Drawings\EXISTING(210930).tin
Final Surface: P:\MEDW-0017(6 Industrial Park Road)\Drawings\PROPOSED_ADDITION(210930).tin

Cut volume: 0.0 C.F., 0.00 C.Y.
Fill volume: 65,678.5 C.F., 2,432.54 C.Y.

Area in Cut : 0.0 S.F., 0.00 Acres
Area in Fill: 33,118.9 S.F., 0.76 Acres
Total inclusion area: 33,118.9 S.F., 0.76 Acres

Average Fill Depth: 1.98 feet
Cut to Fill ratio: 0.00
Import Volume: 2,432.5 C.Y.
Elevation Change To Reach Balance: −1.983
Volume Change Per .1 ft: 122.7 C.Y.

Cut (C.Y.) / Area (acres): 0.00
Fill (C.Y.) / Area (acres): 3199.43

Max Fill: 3.761 at 5031.208,5798.474

PROPOSED PARKING AREAS:
Volumes calculated to one foot below finished pavement grade
Volumes by Triangulation (Prisms)
Existing Surface: P:\MEDW-0017(6 Industrial Park Road)\Drawings\EXISTING(210930).tin
Final Surface: P:\MEDW-0017(6 Industrial Park Road)\Drawings\PROPOSED_PARKING_BASE(211001).tin

Cut volume: 32,363.5 C.F., 1,198.65 C.Y.
Fill volume: 14,770.0 C.F., 547.04 C.Y.

Area in Cut : 31,791.1 S.F., 0.73 Acres
Area in Fill: 19,995.0 S.F., 0.46 Acres
Total inclusion area: 51,855.3 S.F., 1.19 Acres

Average Cut Depth: 1.02 feet
Average Fill Depth: 0.74 feet
Cut to Fill ratio: 2.19
Export Volume: 651.6 C.Y.
Elevation Change To Reach Balance: 0.339
Volume Change Per .1 ft: 192.1 C.Y.

Cut (C.Y.) / Area (acres): 1006.90
Fill (C.Y.) / Area (acres): 459.53

Max Cut: 5.609 at 5071.852,5663.121
Max Fill: 2.761 at 5031.208,5798.474

PROPOSED GRASS AREAS:
Volumes by Triangulation (Prisms)
Existing Surface: P:\MEDW-0017(6 Industrial Park Road)\Drawings\EXISTING(210930).tin
Final Surface: P:\MEDW-0017(6 Industrial Park Road)\Drawings\PROPOSED_GRASS(210930).tin

Cut volume: 16,703.8 C.F., 618.66 C.Y.
Fill volume: 14,113.6 C.F., 522.72 C.Y.

Area in Cut : 13,714.2 S.F., 0.31 Acres
Area in Fill: 20,144.6 S.F., 0.46 Acres
Area exactly in daylight: 7,595.5 S.F., 0.17 Acres
Total inclusion area: 41,454.3 S.F., 0.95 Acres
Total exclusion area: 138,102.4 S.F., 3.17 Acres

Average Cut Depth: 1.22 feet
Average Fill Depth: 0.70 feet
Cut to Fill ratio: 1.18
Export Volume: 95.9 C.Y.
Elevation Change To Reach Balance: 0.062
Volume Change Per .1 ft: 153.5 C.Y.

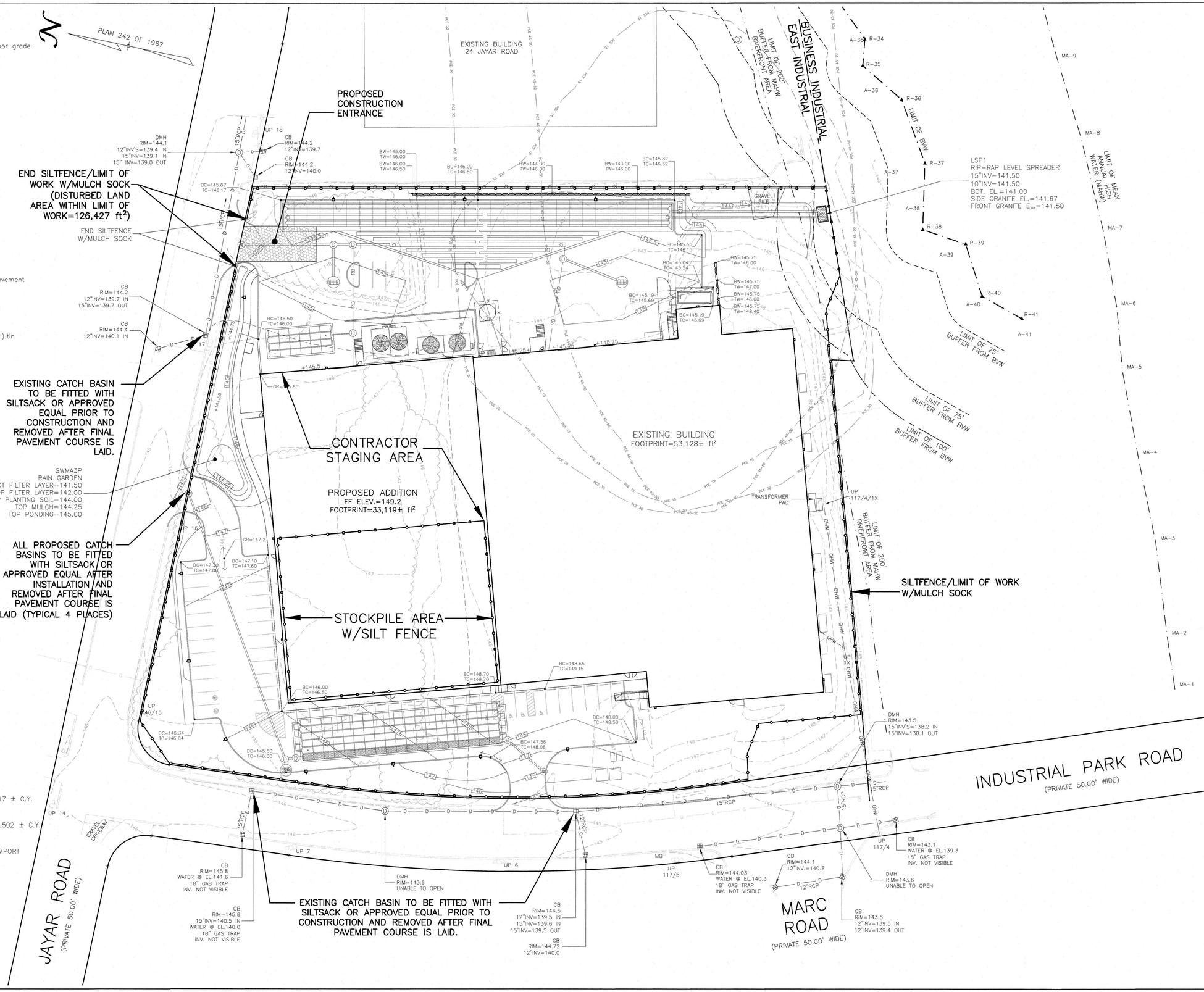
Cut (C.Y.) / Area (acres): 650.09
Fill (C.Y.) / Area (acres): 549.28

Max Cut: 5.424 at 5120.687,5593.986
Max Fill: 4.012 at 4815.741,5729.176

TOTAL EXPORT VOLUME:
0.00 C.Y. + 1,198.65 C.Y. + 618.66 C.Y. = 1,817 ± C.Y.

TOTAL IMPORT VOLUME:
2,432.54 C.Y. + 547.04 C.Y. + 522.72 C.Y. = 3,502 ± C.Y.

NET VOLUME:
3,502 C.Y. ± − 1,817 C.Y. ± = 1,685 C.Y. ± IMPORT



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EROSION & SEDIMENT CONTROL PLAN
INDUSTRIAL PARK ROAD

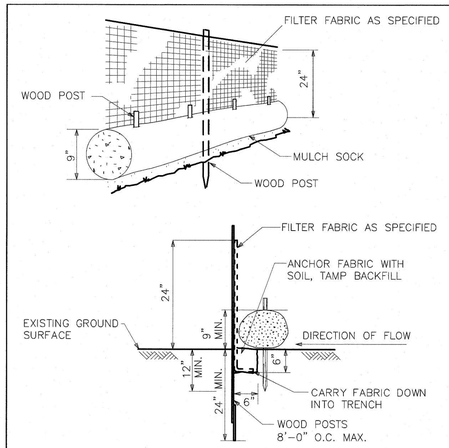
6 INDUSTRIAL PARK ROAD, MEDWAY, MA

0' 15' 30' 60'
SCALE: 1"=30'

APRIL 1, 2021

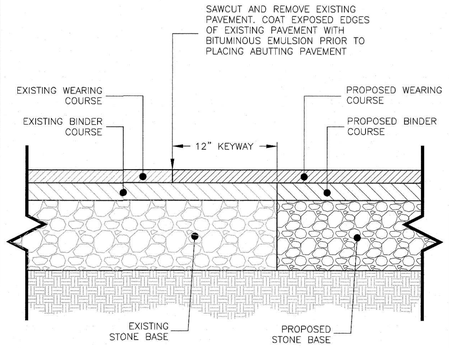
DRAWING: C8.1

SHEET 9 OF 14



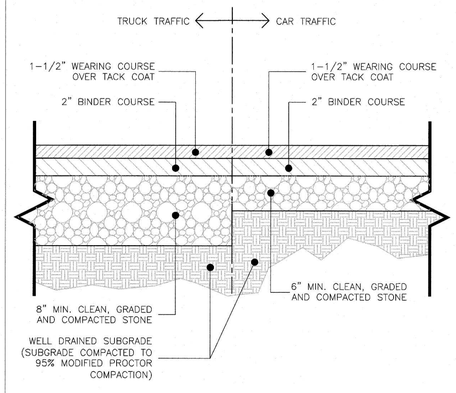
SILTFENCE WITH MULCH SOCK

(NOT TO SCALE)



PAVEMENT KEYWAY

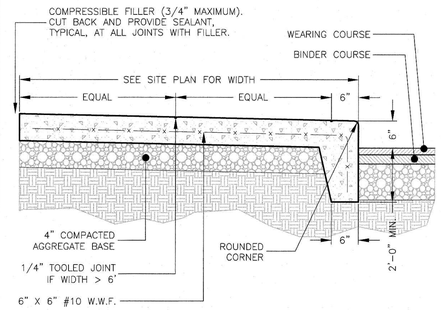
NOT TO SCALE



PAVEMENT SECTION

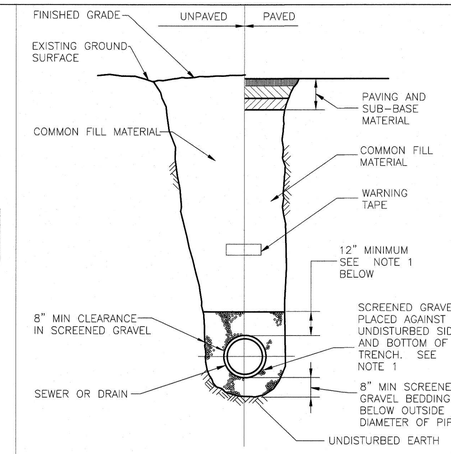
(NOT TO SCALE)

NOTE:
THIS PAVEMENT SECTION DETAIL REFLECTS MINIMUM REQUIREMENTS. ENGINEER TO DETERMINE DESIGN BASED ON GEOTECHNICAL DATA.



CONCRETE SIDEWALK (BUILDING PERIMETER)

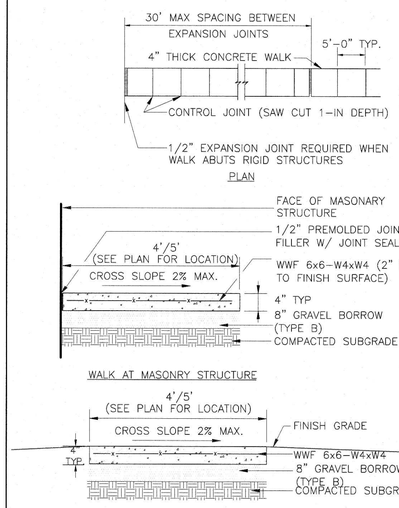
NOT TO SCALE

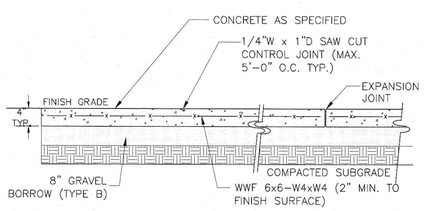


1. FOR PIPES OTHER THAN PVC, SELECTED COMMON FILL MAY BE USED FROM MID-DIAMETER OF PIPE TO 12" ABOVE TOP OF PIPE

TRENCH FOR GRAVITY PIPE

(NOT TO SCALE)



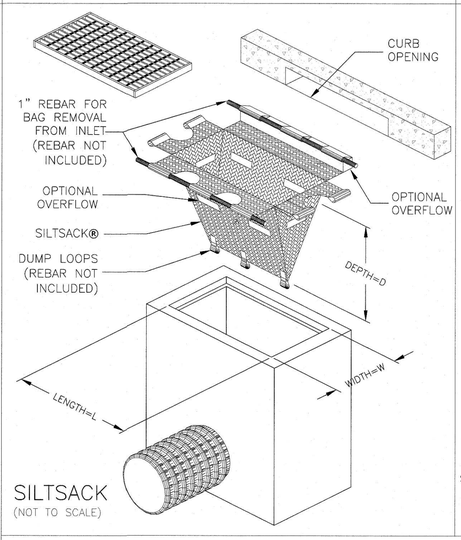


NOTES

1. SURFACE SHALL BE BROOM FINISH UNLESS OTHERWISE NOTED. FINISH SURFACE SHALL BE SLOPED FOR POSITIVE DRAINAGE AND SHALL SLOPE AWAY FROM STRUCTURES.
2. EXPANSION JOINTS SHALL NOT EXCEED 30' O.C. AND SHALL BE PLACED AT ALL BUILDING ABUTMENTS.
3. CONTROL JOINTS SHALL NOT EXCEED 5' O.C. UNLESS OTHERWISE NOTED.

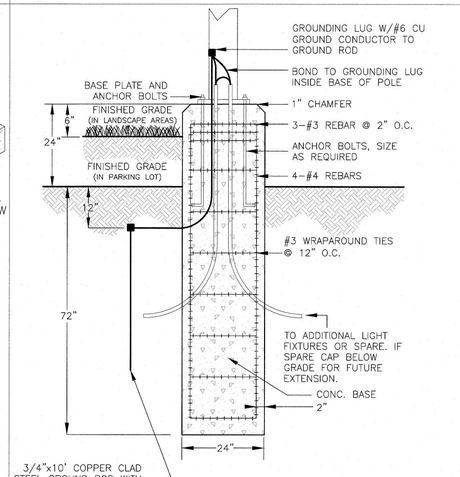
CONCRETE WALKWAY

(NOT TO SCALE)



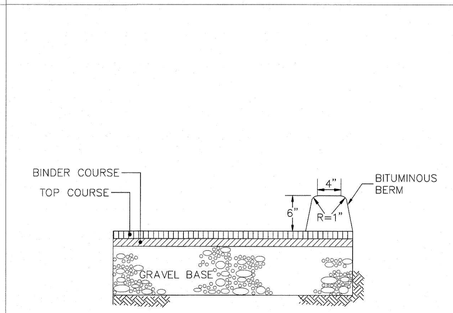
SILTSACK

(NOT TO SCALE)



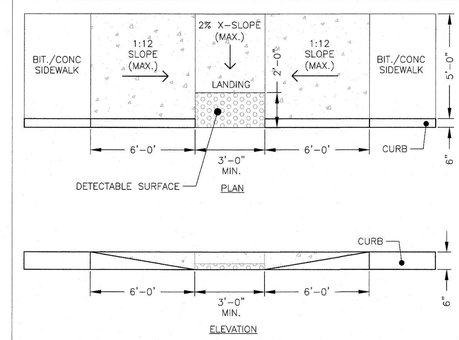
LIGHT POLE BASE

(NOT TO SCALE)



BITUMINOUS BERM

(NOT TO SCALE)



NOTE:
WHEELCHAIR RAMP SHALL COMPLY WITH ALL STATE AND FEDERAL RULES AND REGULATIONS.

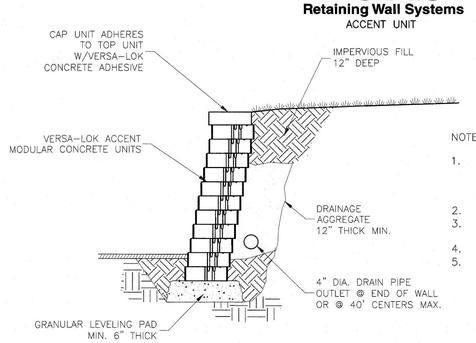
WHEELCHAIR RAMP

NOT TO SCALE

VERSA-LOK®

Retaining Wall Systems

ACCENT UNIT

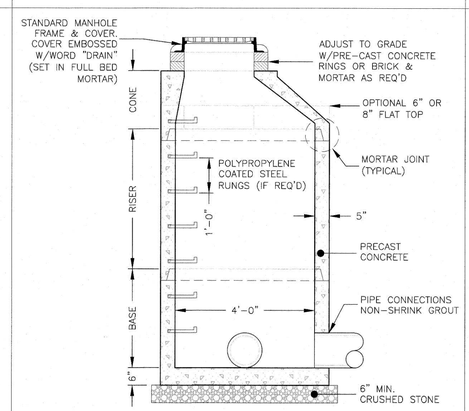


NOTES:

1. MAXIMUM HEIGHT NON REINFORCED WALLS IN SILTY CLAY (SOIL FRICTION ANGLE = 28°) IS 10'8", 9'4", AND 5'5" FOR 45", 39", AND 24" BLOCKS. TALLER WALLS BUILT WITH GOE-GRID OR SET-BACK EFFECT.
2. CONCRETE: 3,000 PSI MINIMUM AFTER 28 DAYS.
3. 1" SETBACK PER ROW ON A STRAIGHT WALL (ANGLE OF BATTER 3.6°) CURVED WALL 1-2.7° PER ROW.
4. CORNER BLOCK CUT FOR USE ON LEFT AND RIGHT SIDE.
5. WALLS ABOVE 4' IN HEIGHT REQUIRE A BUILDING PERMIT.

TYPICAL SECTION-UNREINFORCED RETAINING WALL

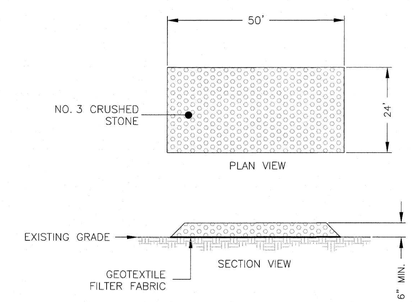
(NOT TO SCALE)



PRE-CAST DRAIN MANHOLE

NOT TO SCALE

NOTES:
1. CONCRETE: 4,000 PSI MINIMUM AFTER 28 DAYS.
2. REINFORCED STEEL CONFORMS TO LATEST ASTM A185 SPEC. 0.12 SQ. IN./LINEAL FT. AND 0.12 SQ. IN. (BOTH WAYS) BASE BOTTOM.
3. H-20 DESIGN LOADING PER AASHTO HS-20-44; ASTM C478 SPEC FOR "PRECAST REINFORCED CONCRETE MANHOLE SECTIONS."



TRACKING PAD

(NOT TO SCALE)

WILLIAMS & SPARAGES
ENGINEERING CONSULTANTS
189 NORTH MAIN STREET
SUITE 101
MIDDLEBORO, MA 01949
PHONE: (978) 539-8088
FAX: (978) 539-8200
WSENGINEERS.COM

Owner:
Medway Flower, LLC
990 Paradise Road
Swapscott, MA 01907

Applicant:
Phytopia, Inc.
25 Newbury Street
Peabody, MA 01960

Designed By: MEM
Drawn By: MEM
Reviewed By: CPS
Project Manager: CPS
Job File Number: MEDW-0017
Drawing File Folder: MEDW17

☒ Drawing Issued for Review
☐ Drawing Issued for Permit
☐ Drawing Issued for Construction

SEAL

COMMONWEALTH OF MASSACHUSETTS
CHRIST P. SPARAGES
CIVIL
No. 40174
PROFESSIONAL ENGINEER

(4/1/22)

12			
11			
10			
9	3/7/2022	Town Comments / Peer Review	3
8	1/3/2022	Town Comments / Peer Review	2
7	10/12/2021	Town Comments / Peer Review	1
6			
5			
4			
3			
2			
1			

CONSTRUCTION DETAILS PLAN
INDUSTRIAL PARK ROAD

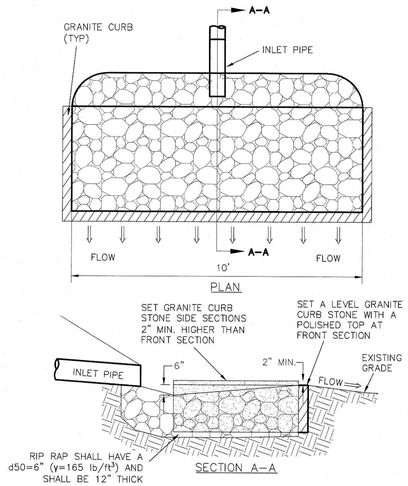
6 INDUSTRIAL PARK ROAD, MEDWAY, MA

SCALE: NONE

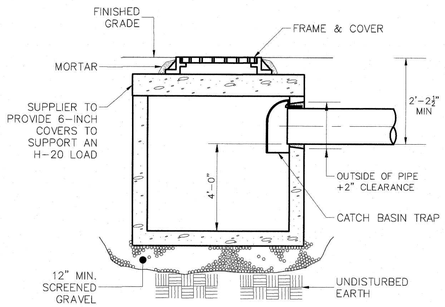
APRIL 1, 2021

DRAWING: C9.1

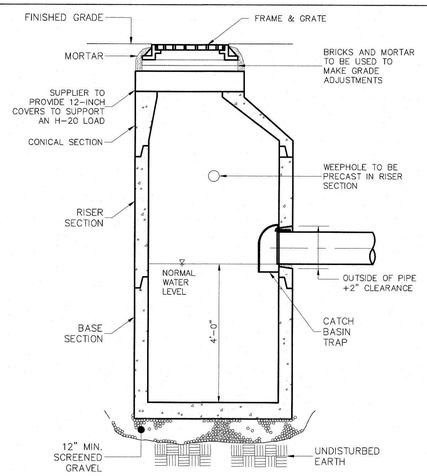
SHEET 10 OF 14



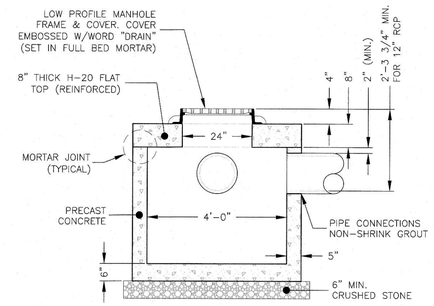
LEVEL SPREADER
(NOT TO SCALE)



PRECAST SHALLOW CATCH BASIN
(NOT TO SCALE)

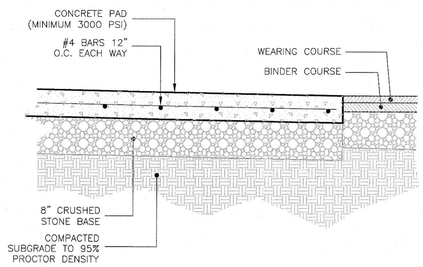


PRECAST CATCH BASIN
(NOT TO SCALE)



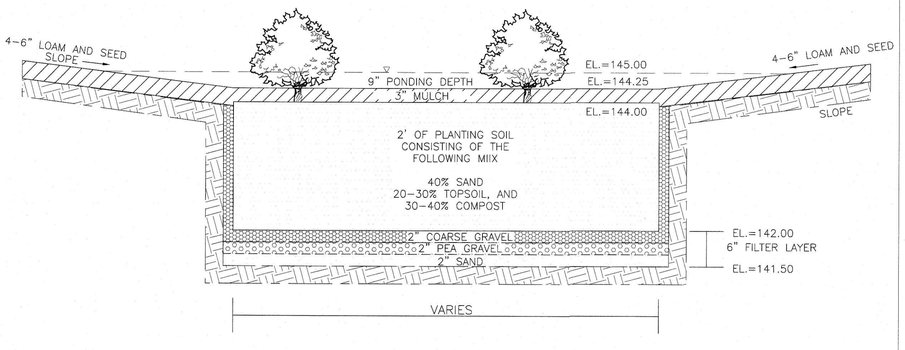
NOTES:
1. CONCRETE: 4,000 PSI MINIMUM AFTER 28 DAYS.
2. REINFORCED STEEL CONFORMS TO LATEST ASTM A185 SPEC. 0.12 SQ. IN./LINEAL FT. AND 0.12 SQ. IN. (BOTH WAYS) BASE BOTTOM.
3. H–20 DESIGN LOADING PER AASHTO HS–20–44; ASTM C478 SPEC FOR "PRECAST REINFORCED CONCRETE MANHOLE SECTIONS."

REDUCED COVER DRAIN MANHOLE
(NOT TO SCALE)

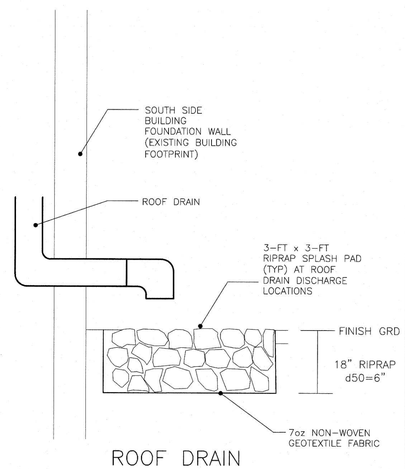


NOTE:
1. REFER ALSO TO MECHANICAL AND STRUCTURAL DRAWINGS.

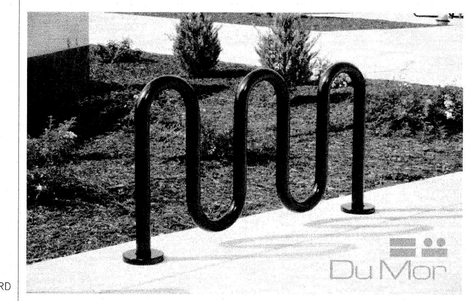
DUMPSTER PAD
(NOT TO SCALE)



RAIN GARDEN/BIORETENTION CELL
(NOT TO SCALE)

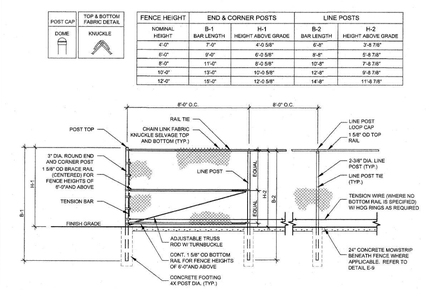


ROOF DRAIN SPLASH PAD
(NOT TO SCALE)



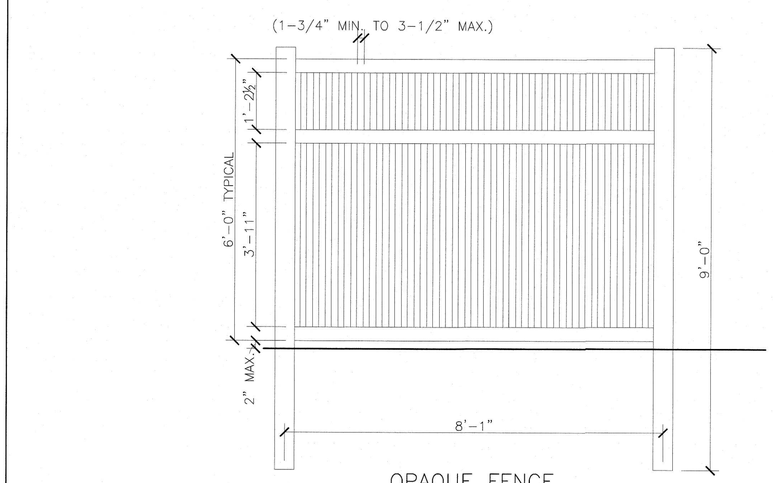
NOTE:
1. MODEL NUMBER 125–30, AS MANUFACTURED BY DUMOR, INC, OR APPROVED EQUAL.
2. 7 BIKE CAPACITY.

BIKE RACK
(NOT TO SCALE)



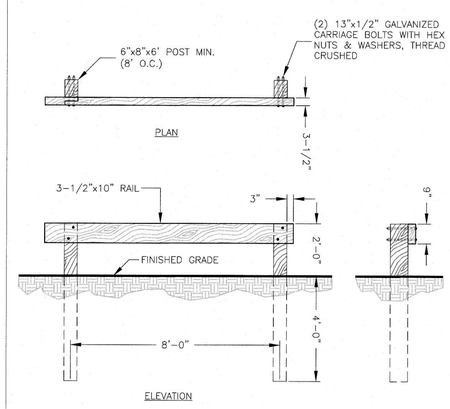
FENCE HEIGHT	END & CORNER POSTS		LINE POSTS	
NOMINAL HEIGHT	B-1 BAR LENGTH	H-1 HEIGHT ABOVE GRADE	B-2 BAR LENGTH	H-2 HEIGHT ABOVE GRADE
4'-0"	7'-0"	4'-0 5/8"	6'-6"	3'-6 7/8"
6'-0"	9'-0"	6'-0 5/8"	8'-6"	5'-6 7/8"
8'-0"	11'-0"	8'-0 5/8"	10'-8"	7'-8 7/8"
10'-0"	13'-0"	10'-0 5/8"	12'-8"	9'-8 7/8"
12'-0"	15'-0"	12'-0 5/8"	14'-8"	11'-8 7/8"

CHAIN LINK FENCE
(NOT TO SCALE)



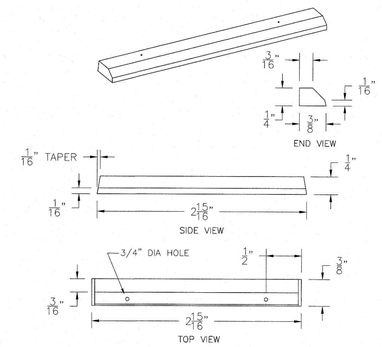
NOTE:
1. CONTRACTOR TO USE VINYL FENCING. COORDINATE COLOR SELECTION WITH OWNER.

OPAQUE FENCE
(NOT TO SCALE)



NOTE:
1. ALL SPLICES TO BE AT POSTS.
2. USE PRESSURE TREATED WOOD.

WOOD GUARDRAIL–WOOD POSTS
NOT TO SCALE



NOTES:
1. CONCRETE: 4,000 PSI MINIMUM AFTER 28 DAYS.
2. PINS AVAILABLE.
3. APPROXIMATE WEIGHT: 265 LBS.

ITEM NO.	B-BBSF	WT=270#

SHEA
OR APPROVED EQUAL

CURB STOP DETAIL
(NOT TO SCALE)

WILLIAMS & SPARAGES
ENGINEERS · PLANNERS · SURVEYORS
1500 NORTH MAIN STREET
SUITE 101
MIDDLETON, MA 01949
PHONE: (978) 539-8988
FAX: (978) 539-8200
WSENGINEERS.COM

Owner:
Medway Flower, LLC
990 Paradise Road
Swapscott, MA 01907

Applicant:
Phytopia, Inc.
25 Newbury Street
Peabody, MA 01960

Designed By: MEM
Drawn By: MEM
Reviewed By: CPS
Project Manager: CPS
Job File Number: MEDW-0017
Drawing File Folder: MEDW17

☒ Drawing Issued for Review
☐ Drawing Issued for Permit
☐ Drawing Issued for Construction

SEAL

COMMONWEALTH OF MASSACHUSETTS
CHRIST P. SPARAGES
No. 40174
PROFESSIONAL ENGINEER
4/12/22

12			
11			
10			
9	3/7/2022	Town Comments / Peer Review	3
8	1/3/2022	Town Comments / Peer Review	2
7	10/12/2021	Town Comments / Peer Review	1
6			
5			
4			

CONSTRUCTION DETAILS PLAN
INDUSTRIAL PARK ROAD
6 INDUSTRIAL PARK ROAD, MEDWAY, MA

SCALE: NONE

APRIL 1, 2021

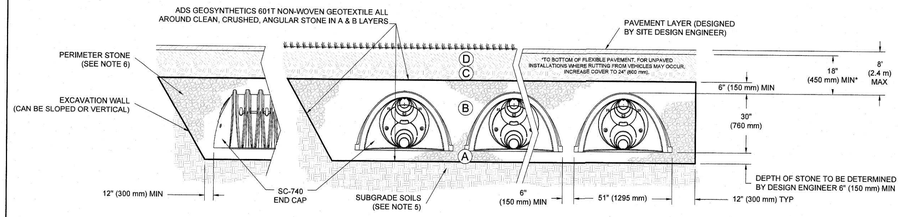
DRAWING: C9.2

SHEET 11 OF 14

ACCEPTABLE FILL MATERIALS: STORMTECH SC-740 CHAMBER SYSTEMS

MATERIAL LOCATION		DESCRIPTION	AASHTO MATERIAL CLASSIFICATIONS	COMPACTION / DESIGN REQUIREMENT
D	**FINAL FILL:** FILL MATERIAL FOR LAYER 'D' STARTS FROM THE TOP OF THE 'C' LAYER TO THE BOTTOM OF FLEXIBLE PAVEMENT OR UNPAVED FINISHED GRADE ABOVE. NOTE THAT PAVEMENT SUBBASE MAY BE PART OF THE 'D' LAYER	ANY SOIL/ROCK MATERIALS, NATIVE SOILS, OR PER ENGINEER'S PLANS. CHECK PLANS FOR PAVEMENT SUBGRADE REQUIREMENTS.	N/A	PREPARE PER SITE DESIGN ENGINEER'S PLANS. PAVED INSTALLATIONS MAY HAVE STRINGENT MATERIAL AND PREPARATION REQUIREMENTS.
C	**INITIAL FILL:** FILL MATERIAL FOR LAYER 'C' STARTS FROM THE TOP OF THE EMBEDMENT STONE ('B' LAYER) TO 18" (450 mm) ABOVE THE TOP OF THE CHAMBER. NOTE THAT PAVEMENT SUBBASE MAY BE A PART OF THE 'C' LAYER.	GRANULAR WELL-GRADED SOIL/AGGREGATE MIXTURES, <35% FINES OR PROCESSED AGGREGATE. MOST PAVEMENT SUBBASE MATERIALS CAN BE USED IN LIEU OF THIS LAYER.	AASHTO M145* A-1, A-2-4, A-3 OR AASHTO M43* 3, 357, 4, 467, 5, 56, 57, 6, 67, 68, 7, 78, 8, 89, 9, 10	BEGIN COMPACTIONS AFTER 12" (300 mm) OF MATERIAL OVER THE CHAMBERS IS REACHED. COMPACT ADDITIONAL LAYERS IN 6" (150 mm) MAX LIFTS TO A MIN. 95% PROCTOR DENSITY FOR WELL GRADED MATERIAL AND 95% RELATIVE DENSITY FOR PROCESSED AGGREGATE MATERIALS. ROLLER GROSS VEHICLE WEIGHT NOT TO EXCEED 12,000 lbs (53 kN). DYNAMIC FORCE NOT TO EXCEED 20,000 lbs (89 kN).
B	**EMBEDMENT STONE:** FILL SURROUNDING THE CHAMBERS FROM THE FOUNDATION STONE ('A' LAYER) TO THE 'C' LAYER ABOVE.	CLEAN, CRUSHED, ANGULAR STONE, NOMINAL SIZE DISTRIBUTION BETWEEN 3/4-2 INCH (20-50 mm)	AASHTO M43* 3, 357, 4, 467, 5, 56, 57	NO COMPACTION REQUIRED.
A	**FOUNDATION STONE:** FILL BELOW CHAMBERS FROM THE SUBGRADE UP TO THE FOOT (BOTTOM) OF THE CHAMBER.	CLEAN, CRUSHED, ANGULAR STONE, NOMINAL SIZE DISTRIBUTION BETWEEN 3/4-2 INCH (20-50 mm)	AASHTO M43* 3, 357, 4, 467, 5, 56, 57	PLATE COMPACT OR ROLL TO ACHIEVE A FLAT SURFACE. * *

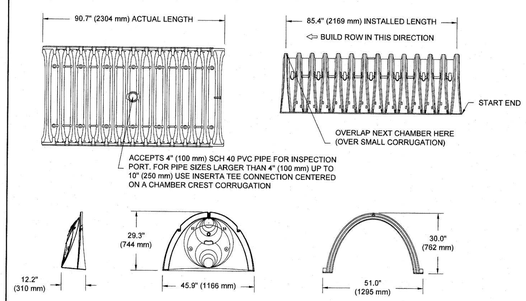
PLEASE NOTE:
1. THE LISTED AASHTO DESIGNATIONS ARE FOR GRADATIONS ONLY. THE STONE MUST ALSO BE CLEAN, CRUSHED, ANGULAR. FOR EXAMPLE, A SPECIFICATION FOR #4 STONE WOULD STATE: "CLEAN, CRUSHED, ANGULAR NO. 4 (AASHTO M43) STONE".
2. STORMTECH COMPACTION REQUIREMENTS ARE MET FOR 'A' LOCATION MATERIALS WHEN PLACED AND COMPACTED IN 6" (150 mm) (MAX) LIFTS USING TWO FULL COVERAGES WITH A VIBRATORY COMPACTOR.
3. WHERE INFILTRATION SURFACES MAY BE COMPROMISED BY COMPACTION, FOR STANDARD DESIGN LOAD CONDITIONS, A FLAT SURFACE MAY BE ACHIEVED BY RAKING OR DRAGGING WITHOUT COMPACTION EQUIPMENT. FOR SPECIAL LOAD DESIGNS, CONTACT STORMTECH FOR COMPACTION REQUIREMENTS.



NOTES:

1. SC-740 CHAMBERS SHALL CONFORM TO THE REQUIREMENTS OF ASTM F2418 "STANDARD SPECIFICATION FOR POLYPROPYLENE (PP) CORRUGATED WALL STORMWATER COLLECTION CHAMBERS", OR ASTM F2922 "STANDARD SPECIFICATION FOR POLYETHYLENE (PE) CORRUGATED WALL STORMWATER COLLECTION CHAMBERS".
2. SC-740 CHAMBERS SHALL BE DESIGNED IN ACCORDANCE WITH ASTM F2787 "STANDARD PRACTICE FOR STRUCTURAL DESIGN OF THERMOPLASTIC CORRUGATED WALL STORMWATER COLLECTION CHAMBERS".
3. "ACCEPTABLE FILL MATERIALS" TABLE ABOVE PROVIDES MATERIAL LOCATIONS, DESCRIPTIONS, GRADATIONS, AND COMPACTION REQUIREMENTS FOR FOUNDATION, EMBEDMENT, AND FILL MATERIALS.
4. THE "SITE DESIGN ENGINEER" REFERS TO THE ENGINEER RESPONSIBLE FOR THE DESIGN AND LAYOUT OF THE STORMTECH CHAMBERS FOR THIS PROJECT.
5. THE SITE DESIGN ENGINEER IS RESPONSIBLE FOR ASSESSING THE BEARING RESISTANCE (ALLOWABLE BEARING CAPACITY) OF THE SUBGRADE SOILS AND THE DEPTH OF FOUNDATION STONE WITH CONSIDERATION FOR THE RANGE OF EXPECTED SOIL MOISTURE CONDITIONS.
6. PERIMETER STONE MUST BE EXTENDED HORIZONTALLY TO THE EXCAVATION WALL FOR BOTH VERTICAL AND SLOPED EXCAVATION WALLS.
7. ONCE LAYER 'C' IS PLACED, ANY SOIL/MATERIAL CAN BE PLACED IN LAYER 'D' UP TO THE FINISHED GRADE. MOST PAVEMENT SUBBASE SOILS CAN BE USED TO REPLACE THE MATERIAL REQUIREMENTS OF LAYER 'C' OR 'D' AT THE SITE DESIGN ENGINEER'S DISCRETION.

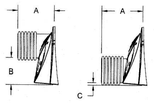
STORMTECH SC-740 CROSS SECTION
NOT TO SCALE



NOMINAL CHAMBER SPECIFICATIONS

SIZE (W X H X INSTALLED LENGTH)	51.0" X 30.0" X 85.4"	(1295 mm X 762 mm X 2169 mm)
CHAMBER STORAGE	45.9 CUBIC FEET	(1.30 m³)
MINIMUM INSTALLED STORAGE*	74.9 CUBIC FEET	(2.12 m³)
WEIGHT	75.0 lbs.	(33.6 kg)

*ASSUMES 6" (152 mm) STONE ABOVE, BELOW, AND BETWEEN CHAMBERS



STUBS AT BOTTOM OF END CAP FOR PART NUMBERS ENDING WITH "B"
STUBS AT TOP OF END CAP FOR PART NUMBERS ENDING WITH "T"

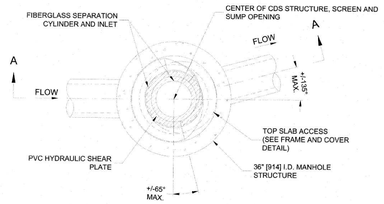
PART #	STUB	A	B	C
SC740EPE06T / SC740EPE06TPC	6" (150 mm)	10.9" (277 mm)	18.5" (470 mm)	---
SC740EPE06B / SC740EPE06BPC			---	0.5" (13 mm)
SC740EPE08T / SC740EPE08TPC	8" (200 mm)	12.2" (310 mm)	16.5" (419 mm)	---
SC740EPE08B / SC740EPE08BPC			---	0.6" (15 mm)
SC740EPE10T / SC740EPE10TPC	10" (250 mm)	13.4" (340 mm)	14.5" (368 mm)	---
SC740EPE10B / SC740EPE10BPC			---	0.7" (18 mm)
SC740EPE12T / SC740EPE12TPC	12" (300 mm)	14.7" (373 mm)	12.5" (318 mm)	---
SC740EPE12B / SC740EPE12BPC			---	1.2" (30 mm)
SC740EPE15T / SC740EPE15TPC	15" (375 mm)	18.4" (467 mm)	9.0" (229 mm)	---
SC740EPE15B / SC740EPE15BPC			---	1.3" (33 mm)
SC740EPE18T / SC740EPE18TPC	18" (450 mm)	19.7" (500 mm)	5.0" (127 mm)	---
SC740EPE18B / SC740EPE18BPC			---	1.6" (41 mm)
SC740EPE24B*	24" (600 mm)	18.5" (470 mm)	---	0.1" (3 mm)

ALL STUBS, EXCEPT FOR THE SC740EPE24B ARE PLACED AT BOTTOM OF END CAP SUCH THAT THE OUTSIDE DIAMETER OF THE STUB IS FLUSH WITH THE BOTTOM OF THE END CAP. FOR ADDITIONAL INFORMATION CONTACT STORMTECH AT 1-888-892-2694.

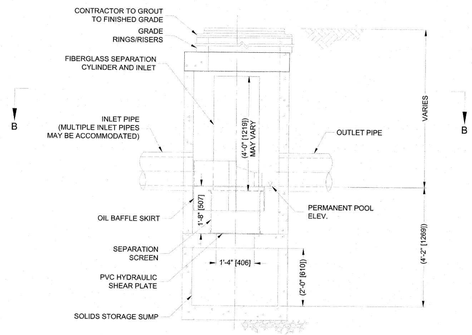
* FOR THE SC740EPE24B THE 24" (600 mm) STUB LIES BELOW THE BOTTOM OF THE END CAP APPROXIMATELY 1.75" (44 mm). BACKFILL MATERIAL SHOULD BE REMOVED FROM BELOW THE N-12 STUB SO THAT THE FITTING SITS LEVEL.

NOTE: ALL DIMENSIONS ARE NOMINAL

STORMTECH SC-740 TECHNICAL SPECIFICATIONS
NOT TO SCALE



PLAN VIEW B-B
N.T.S.



ELEVATION A-A
N.T.S.

CDS1515-3-C DESIGN NOTES

CDS1515-3-C RATED TREATMENT CAPACITY IS 1.0 CFS, OR PER LOCAL REGULATIONS.

THE STANDARD CDS1515-3-C CONFIGURATION IS SHOWN.

FRAME AND COVER
(DIAMETER VARIES)
N.T.S.

SITE SPECIFIC DATA REQUIREMENTS

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)		*	
PIPE DATA:	I.E.	MATERIAL	DIAMETER
INLET PIPE 1	*	*	*
INLET PIPE 2	*	*	*
OUTLET PIPE	*	*	*
RIM ELEVATION			*
ANTI-FLOTATION BALLAST		WIDTH	HEIGHT
		*	*
NOTES/SPECIAL REQUIREMENTS:			

* PER ENGINEER OF RECORD

GENERAL NOTES
1. CONTECH TO PROVIDE ALL MATERIALS UNLESS NOTED OTHERWISE.
2. FOR SITE SPECIFIC DRAWINGS WITH DETAILED STRUCTURE DIMENSIONS AND WEIGHT, PLEASE CONTACT YOUR CONTECH ENGINEERED SOLUTIONS LLC REPRESENTATIVE. www.ContechES.com
3. CDS WATER QUALITY STRUCTURE SHALL BE IN ACCORDANCE WITH ALL DESIGN DATA AND INFORMATION CONTAINED IN THIS DRAWING. CONTRACTOR TO CONFIRM STRUCTURE MEETS REQUIREMENTS OF PROJECT.
4. STRUCTURE SHALL MEET AASHTO HS20 LOAD RATING, ASSUMING EARTH COVER OF 0' - 2', AND GROUNDWATER ELEVATION AT, OR BELOW, THE OUTLET PIPE INVERT ELEVATION. ENGINEER OF RECORD TO CONFIRM ACTUAL GROUNDWATER ELEVATION. CASTINGS SHALL MEET AASHTO M306 AND BE CAST WITH THE CONTECH LOGO.
5. IF REQUIRED, PVC HYDRAULIC SHEAR PLATE IS PLACED ON SHELF AT BOTTOM OF SCREEN CYLINDER. REMOVE AND REPLACE AS NECESSARY DURING MAINTENANCE CLEANING.
6. CDS STRUCTURE SHALL BE PRECAST CONCRETE CONFORMING TO ASTM C-478 AND AASHTO LOAD FACTOR DESIGN METHOD.

INSTALLATION NOTES
A. ANY SUB-BASE, BACKFILL DEPTH, AND/OR ANTI-FLOTATION PROVISIONS ARE SITE-SPECIFIC DESIGN CONSIDERATIONS AND SHALL BE SPECIFIED BY ENGINEER OF RECORD.
B. CONTRACTOR TO PROVIDE EQUIPMENT WITH SUFFICIENT LIFTING AND REACH CAPACITY TO LIFT AND SET THE CDS MANHOLE STRUCTURE.
C. CONTRACTOR TO INSTALL JOINT SEALANT BETWEEN ALL STRUCTURE SECTIONS AND ASSEMBLE STRUCTURE.
D. CONTRACTOR TO PROVIDE, INSTALL, AND GROUT INLET AND OUTLET PIPE(S). MATCH PIPE INVERTS WITH ELEVATIONS SHOWN. ALL PIPE CENTERLINES TO MATCH PIPE OPENING CENTERLINES.
E. CONTRACTOR TO TAKE APPROPRIATE MEASURES TO ASSURE UNIT IS WATER TIGHT, HOLDING WATER TO FLOWLINE INVERT MINIMUM. IT IS SUGGESTED THAT ALL JOINTS BELOW PIPE INVERTS ARE GROUTED.

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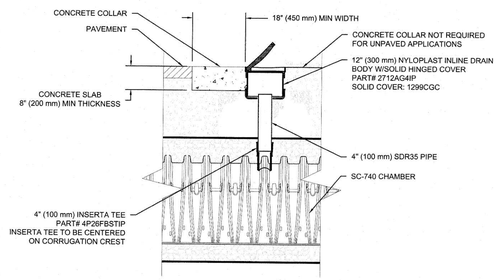
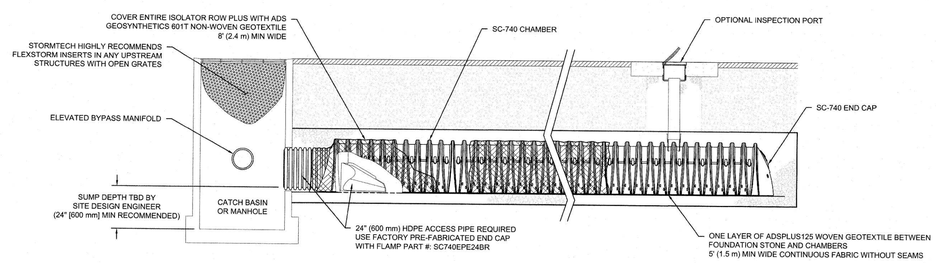
CDS1515-3-C
ONLINE CDS
STANDARD DETAIL



STORMTECH SC-740 INSPECTION PORT
NOT TO SCALE



STORMTECH SC-740 ISOLATER ROW
NOT TO SCALE

INSPECTION & MAINTENANCE

STEP 1) INSPECT ISOLATOR ROW PLUS FOR SEDIMENT
- A. INSPECTION PORTS (IF PRESENT)
  - A.1. REMOVE/OPEN LID ON NYLOPLAST INLINE DRAIN
  - A.2. REMOVE AND CLEAN FLEXSTORM FILTER IF INSTALLED
  - A.3. USING A FLASHLIGHT AND STADIA ROD, MEASURE DEPTH OF SEDIMENT AND RECORD ON MAINTENANCE LOG
  - A.4. LOWER A CAMERA INTO ISOLATOR ROW PLUS FOR VISUAL INSPECTION OF SEDIMENT LEVELS (OPTIONAL)
  - A.5. IF SEDIMENT IS AT, OR ABOVE, 3" (80 mm) PROCEED TO STEP 2. IF NOT, PROCEED TO STEP 3.
- B. ALL ISOLATOR PLUS ROWS
  - B.1. REMOVE COVER FROM STRUCTURE AT UPSTREAM END OF ISOLATOR ROW PLUS
  - B.2. USING A FLASHLIGHT, INSPECT DOWN THE ISOLATOR ROW PLUS THROUGH OUTLET PIPE
    - i) MIRRORS ON POLES OR CAMERAS MAY BE USED TO AVOID A CONFINED SPACE ENTRY
    - ii) FOLLOW OSHA REGULATIONS FOR CONFINED SPACE ENTRY IF ENTERING MANHOLE
  - B.3. IF SEDIMENT IS AT, OR ABOVE, 3" (80 mm) PROCEED TO STEP 2. IF NOT, PROCEED TO STEP 3.

STEP 2) CLEAN OUT ISOLATOR ROW PLUS USING THE JETVAC PROCESS
- A. A FIXED CULVERT CLEANING NOZZLE WITH REAR FACING SPREAD OF 45" (1.1 m) OR MORE IS PREFERRED
- B. APPLY MULTIPLE PASSES OF JETVAC UNTIL BACKFLUSH WATER IS CLEAN
- C. VACUUM STRUCTURE SUMP AS REQUIRED

STEP 3) REPLACE ALL COVERS, GRATES, FILTERS, AND LIDS; RECORD OBSERVATIONS AND ACTIONS.

STEP 4) INSPECT AND CLEAN BASINS AND MANHOLES UPSTREAM OF THE STORMTECH SYSTEM.

NOTES

1. INSPECT EVERY 6 MONTHS DURING THE FIRST YEAR OF OPERATION. ADJUST THE INSPECTION INTERVAL BASED ON PREVIOUS OBSERVATIONS OF SEDIMENT ACCUMULATION AND HIGH WATER ELEVATIONS.
2. CONDUCT JETTING AND VACTORING ANNUALLY OR WHEN INSPECTION SHOWS THAT MAINTENANCE IS NECESSARY.

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Applicant:
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25 Newbury Street
Peabody, MA 01960

Designed By: MEM
Drawn By: MEM
Reviewed By: CPS
Project Manager: CPS
Job File Number: MEDW-0017
Drawing File Folder: MEDW17

☒ Drawing Issued for Review
☐ Drawing Issued for Permit
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SEAL

COMMONWEALTH OF MASSACHUSETTS
CHRIST P. SPARAGES
CIVIL
No. 40724
REGISTERED PROFESSIONAL ENGINEER
(4/12/21)

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11		
10		
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8	1/3/2022	Town Comments / Peer Review
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6		
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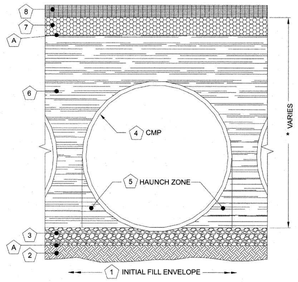
CONSTRUCTION DETAILS PLAN
INDUSTRIAL PARK ROAD
6 INDUSTRIAL PARK ROAD, MEDWAY, MA

SCALE: NONE

APRIL 1, 2021

DRAWING: C9.3

SHEET 12 OF 14



		DETENTION SYSTEMS - CMP DETENTION / CMP DRAINAGE		
Material Location	Description	Material Designation	Designation	
8	Rigid or Flexible Pavement (if applicable)			
7	Road Base (if applicable)			
A	Geotextile Layer	Non-Woven Geotextile	CONTECH C-40 or C-45	Engineer Decision for consideration to prevent soil migration into varying soil types
6	Backfill	Well graded granular material which may contain small amounts of silt or clay.	AASHTO M 145- A-1, A-2, A-3	Placed in 8" +/- loose lifts and compacted to 90% Standard Proctor Per AASHTO T 99
3	Bedding Stone	Well graded granular bedding material w/maximum particle size of 3"	AASHTO M43 - 3,357,4,467, 5, 56, 57	Engineer to determine if bedding is required. Pipe may be placed on the trench bottom of a relatively loose, native suitable well graded & granular material. For Arch pipes it is recommended to be shaped to a relatively flat bottom or fine-grade the foundation to a slight v-shape. Unsuitable material should be over-excavated and re-placed with a 4"-8" layer of well graded & granular stone per the material designation. See AASHTO 26.3.8.1 / 26.5.3 Bedding info.
A	Geotextile Layer	Non-Woven Geotextile	CONTECH C-40 or C-45	Engineer Decision for consideration to prevent soil migration into varying soil types
*	*Note: Backfill using controlled low-strength material (CLSM, "flash fill" or "flowable fill") when the spacing between the pipes will not allow for placement and adequate compaction of the backfill.*			

(1) MINIMUM WIDTH DEPENDS ON SITE CONDITIONS AND ENGINEERING JUDGEMENT

FOUNDATION/BEDDING PREPARATION

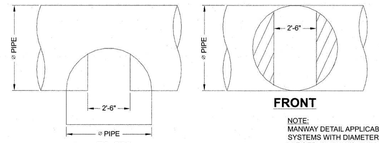
(2) PRIOR TO PLACING THE BEDDING, THE FOUNDATION MUST BE CONSTRUCTED TO A UNIFORM AND STABLE GRADE. IN THE EVENT THAT UNSUITABLE FOUNDATION MATERIALS ARE ENCOUNTERED DURING EXCAVATION, THEY SHALL BE REMOVED AND BROUGHT BACK TO THE GRADE WITH A FILL MATERIAL AS APPROVED BY THE ENGINEER.

(5) HAUNCH ZONE MATERIAL SHALL BE PLACED AND UNIFORMALLY COMPACTED WITHOUT SOFT SPOTS.

BACKFILL

WHEN PLACING THE FIRST LIFTS OF BACKFILL IT IS IMPORTANT TO MAKE SURE THAT THE BACKFILL IS PROPERLY COMPACTED UNDER AND AROUND THE PIPE HAUNCHES. BACKFILL SHALL BE PLACED SUCH THAT THERE IS NO MORE THAN A TWO LIFT (16") DIFFERENTIAL BETWEEN ANY OF THE PIPES AT ANY TIME DURING THE BACKFILL PROCESS. THE BACKFILL SHALL BE ADVANCED ALONG THE LENGTH OF THE DETENTION SYSTEM AT THE SAME RATE TO AVOID DIFFERENTIAL LOADING ON THE PIPE.

OTHER ALTERNATE BACKFILL MATERIAL MAY BE ALLOWED DEPENDING ON SITE SPECIFIC CONDITIONS, AS APPROVED BY SITE ENGINEER.



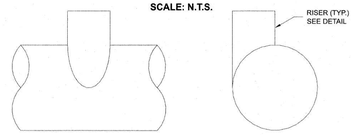
PLAN

FRONT

TYPICAL MANWAY DETAIL

SCALE: N.T.S.

NOTE:
MANWAY DETAIL APPLICABLE FOR CMP SYSTEMS WITH DIAMETERS 48" AND LARGER. MANWAYS MAY BE REQUIRED ON SMALLER SYSTEMS DEPENDING ON ACTUAL SITE SPECIFIC CONDITIONS.



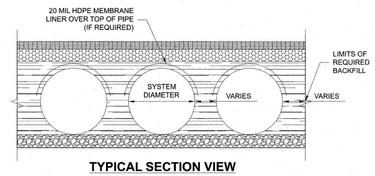
ELEVATION

END

TYPICAL RISER DETAIL

SCALE: N.T.S.

NOTE:
LADDERS ARE OPTIONAL AND ARE NOT REQUIRED FOR ALL SYSTEMS.



TYPICAL SECTION VIEW

LINER OVER ROWS
SCALE: N.T.S.

NOTE: IF SALTING AGENTS FOR SNOW AND ICE REMOVAL ARE USED ON OR NEAR THE PROJECT, AN HDPE MEMBRANE LINER IS RECOMMENDED WITH THE SYSTEM. THE IMPERMEABLE LINER IS INTENDED TO HELP PROTECT THE SYSTEM FROM THE POTENTIAL ADVERSE EFFECTS THAT MAY RESULT FROM A CHANGE IN THE SURROUNDING ENVIRONMENT OVER A PERIOD OF TIME. PLEASE REFER TO THE CORRUGATED METAL PIPE DETENTION DESIGN GUIDE FOR ADDITIONAL INFORMATION.

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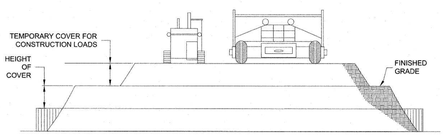
CONTECH® CMP DETENTION SYSTEMS

CONTECH DYODS DRAWING

DYO4174 MEDW-0017
30" CMP Detention -
DETENTION SYSTEM

PROJECT No.: 2699	SEQ. No.: 4174	DATE: 1/3/2022
DESIGNED: DYO	DRAWN: DYO	
CHECKED: DYO	APPROVED: DYO	
SHEET NO.: D2		



CONSTRUCTION LOADS

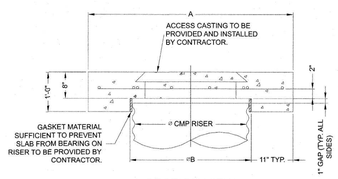
FOR TEMPORARY CONSTRUCTION VEHICLE LOADS, AN EXTRA AMOUNT OF COMPACTED COVER MAY BE REQUIRED OVER THE TOP OF THE PIPE. THE HEIGHT-OF-COVER SHALL MEET THE MINIMUM REQUIREMENTS SHOWN IN THE TABLE BELOW. THE USE OF HEAVY CONSTRUCTION EQUIPMENT NECESSITATES GREATER PROTECTION FOR THE PIPE THAN FINISHED GRADE COVER MINIMUMS FOR NORMAL HIGHWAY TRAFFIC.

PIPE SPAN, INCHES	AXLE LOADS (kips)			
	18-50	50-75	75-110	110-150
	MINIMUM COVER (FT)			
12-42	2.0	2.5	3.0	3.0
48-72	3.0	3.0	3.5	4.0
78-120	3.0	3.5	4.0	4.0
126-144	3.5	4.0	4.5	4.5

*MINIMUM COVER MAY VARY, DEPENDING ON LOCAL CONDITIONS. THE CONTRACTOR MUST PROVIDE THE ADDITIONAL COVER REQUIRED TO AVOID DAMAGE TO THE PIPE. MINIMUM COVER IS MEASURED FROM THE TOP OF THE PIPE TO THE TOP OF THE MAINTAINED CONSTRUCTION ROADWAY SURFACE.

CONSTRUCTION LOADING DIAGRAM

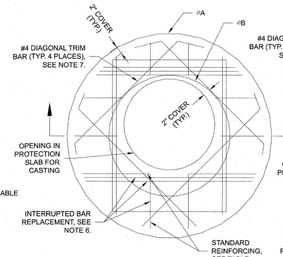
SCALE: N.T.S.



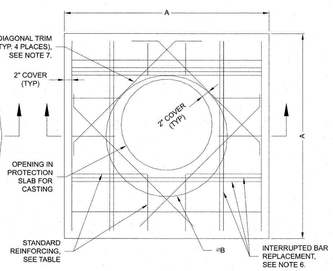
SECTION VIEW

REINFORCING TABLE				
ø CMP RISER	A	ø B	REINFORCING	**BEARING PRESSURE (PSF)
24"	ø 4' 4'X4'	26"	#5 @ 12" OCEW #5 @ 12" OCEW	2,410 1,780
30"	ø 4'-6" 4'-6" X 4'-6"	32"	#5 @ 12" OCEW #5 @ 12" OCEW	2,120 1,530
36"	ø 5' 5' X 5'	38"	#5 @ 10" OCEW #5 @ 10" OCEW	1,890 1,350
42"	ø 5'-6" 5'-6" X 5'-6"	44"	#5 @ 10" OCEW #5 @ 9" OCEW	1,720 1,210
48"	ø 6' 6' X 6'	50"	#5 @ 9" OCEW #5 @ 8" OCEW	1,600 1,100

** ASSUMED SOIL BEARING CAPACITY



ROUND OPTION PLAN VIEW



SQUARE OPTION PLAN VIEW

SPECIFICATION FOR DESIGNED DETENTION SYSTEM:

SCOPE
THIS SPECIFICATION COVERS THE MANUFACTURE AND INSTALLATION OF THE DESIGNED DETENTION SYSTEM DETAILED IN THE PROJECT PLANS.

MATERIAL
THE MATERIAL SHALL CONFORM TO THE APPLICABLE REQUIREMENTS LISTED BELOW:

ALUMINIZED TYPE 2 STEEL COILS SHALL CONFORM TO THE APPLICABLE REQUIREMENTS OF AASHTO M-274 OR ASTM A-92.

THE GALVANIZED STEEL COILS SHALL CONFORM TO THE APPLICABLE REQUIREMENTS OF AASHTO M-218 OR ASTM A-929.

THE POLYMER COATED STEEL COILS SHALL CONFORM TO THE APPLICABLE REQUIREMENTS OF AASHTO M-246 OR ASTM A-742.

THE ALUMINUM COILS SHALL CONFORM TO THE APPLICABLE REQUIREMENTS OF AASHTO M-197 OR ASTM B-744.

CONSTRUCTION LOADS
CONSTRUCTION LOADS MAY BE HIGHER THAN FINAL LOADS. FOLLOW THE MANUFACTURER'S OR NCSPA GUIDELINES.

PIPE
THE PIPE SHALL BE MANUFACTURED IN ACCORDANCE TO THE APPLICABLE REQUIREMENTS LISTED BELOW:

ALUMINIZED TYPE 2: AASHTO M-36 OR ASTM A-760

GALVANIZED: AASHTO M-36 OR ASTM A-760

POLYMER COATED: AASHTO M-245 OR ASTM A-762

ALUMINUM: AASHTO M-196 OR ASTM B-745

HANDLING AND ASSEMBLY
SHALL BE IN ACCORDANCE WITH NCSP'S (NATIONAL CORRUGATED STEEL PIPE ASSOCIATION) FOR ALUMINIZED TYPE 2, GALVANIZED OR POLYMER COATED STEEL. SHALL BE IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS FOR ALUMINUM PIPE.

INSTALLATION
SHALL BE IN ACCORDANCE WITH AASHTO STANDARD SPECIFICATIONS FOR HIGHWAY BRIDGES, SECTION 26, DIVISION I/ DIVISION II OR ASTM A-798 (FOR ALUMINIZED TYPE 2, GALVANIZED OR POLYMER COATED STEEL) OR ASTM B-788 (FOR ALUMINUM PIPE) AND IN CONFORMANCE WITH THE PROJECT PLANS AND SPECIFICATIONS. IF THERE ARE ANY INCONSISTENCIES OR CONFLICTS THE CONTRACTOR SHOULD DISCUSS AND RESOLVE WITH THE SITE ENGINEER.

IT IS ALWAYS THE RESPONSIBILITY OF THE CONTRACTOR TO FOLLOW OSHA GUIDELINES FOR SAFE PRACTICES.

NOTES:

1. DESIGN IN ACCORDANCE WITH AASHTO, 17th EDITION.
2. DESIGN LOAD HS25.
3. EARTH COVER = 1' MAX.
4. CONCRETE STRENGTH = 3,500 psi
5. REINFORCING STEEL = ASTM A615, GRADE 60.
6. PROVIDE ADDITIONAL REINFORCING AROUND OPENINGS EQUAL TO THE BARS INTERRUPTED, HALF EACH SIDE. ADDITIONAL BARS TO BE IN THE SAME PLANE.
7. TRIM OPENING WITH DIAGONAL #4 BARS, EXTEND BARS A MINIMUM OF 12" BEYOND OPENING, BEND BARS AS REQUIRED TO MAINTAIN BAR COVER.
8. PROTECTION SLAB AND ALL MATERIALS TO BE PROVIDED AND INSTALLED BY CONTRACTOR.
9. DETAIL DESIGN BY DELTA ENGINEERING, BINGHAMTON, NY.

MANHOLE CAP DETAIL

SCALE: N.T.S.

NOTE:
THESE DRAWINGS ARE FOR CONCEPTUAL PURPOSES AND DO NOT REFLECT ANY LOCAL PREFERENCES OR REGULATIONS. PLEASE CONTACT YOUR LOCAL CONTECH REP FOR MODIFICATIONS.

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CONTECH® CMP DETENTION SYSTEMS

CONTECH DYODS DRAWING

DYO4174 MEDW-0017
30" CMP Detention -
DETENTION SYSTEM

PROJECT No.: 2699	SEQ. No.: 4174	DATE: 1/3/2022
DESIGNED: DYO	DRAWN: DYO	
CHECKED: DYO	APPROVED: DYO	
SHEET NO.: D3		

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Designed By: MEM
Drawn By: MEM
Reviewed By: CPS
Project Manager: CPS
Job File Number: MEDW-0017
Drawing File Folder: MEDW17

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6			
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CONSTRUCTION DETAILS PLAN
INDUSTRIAL PARK ROAD

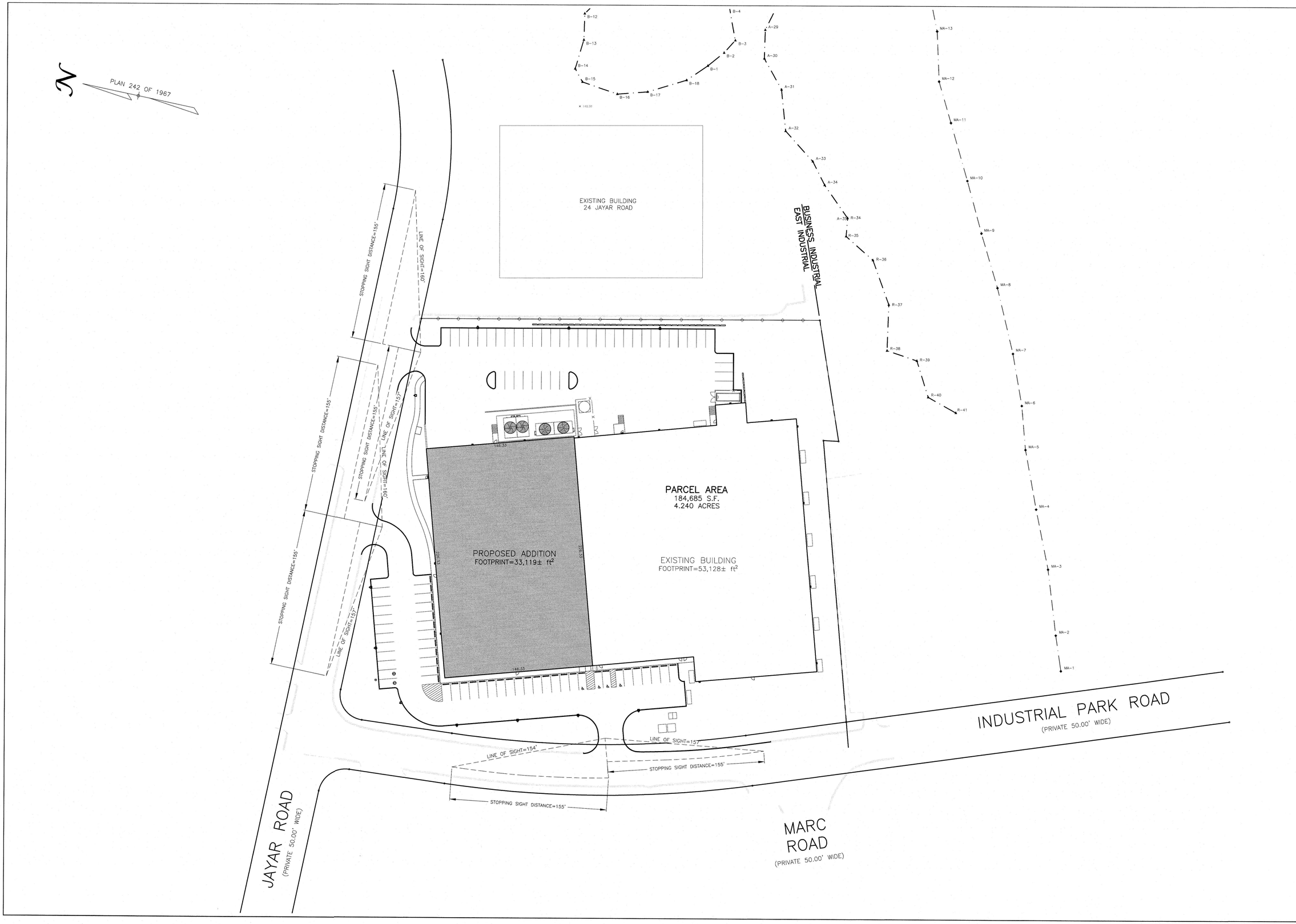
6 INDUSTRIAL PARK ROAD, MEDWAY, MA

SCALE: NONE

APRIL 1, 2021

DRAWING: C9.4

SHEET 13 OF 14



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Applicant:
Phytopia, Inc.
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No. 40174
REGISTERED PROFESSIONAL ENGINEER
(4/12/22)

STOPPING SIGHT DISTANCE PLAN
INDUSTRIAL PARK ROAD

6 INDUSTRIAL PARK ROAD, MEDWAY, MA

12			
11			
10			
9	3/7/2022	Town Comments / Peer Review	3
8	1/3/2022	Town Comments / Peer Review	2
7	10/12/2021	Town Comments / Peer Review	1
6			
5			
4			

0' 15' 30' 60'
SCALE: 1"=30'

OCTOBER 1, 2021

DRAWING: C10.1

SHEET 14 OF 14

SHEET LIST TABLE

SHEET TITLE	DRAWING	SHEET NUMBER
COVER PLAN	C1.1	1
SITE CONTEXT PLAN	C1.2	2
EXISTING CONDITION PLAN	C2.1	3
GRADING & DRAINAGE PLAN	C3.1	4
UTILITY PLAN	C4.1	5
SURVEY & LAYOUT PLAN	C5.1	6
PHOTOMETRIC PLAN	C6.1	7
LANDSCAPE PLAN	C7.1	8
EROSION & SEDIMENT CONTROL PLAN	C8.1	9
CONSTRUCTION DETAILS PLAN	C9.1	10
CONSTRUCTION DETAILS PLAN	C9.2	11
CONSTRUCTION DETAILS PLAN	C9.2	12
CONSTRUCTION DETAILS PLAN	C9.3	13
STOPPING SIGHT DISTANCE PLAN	C10.1	14

ZONING TABLE

ZONE: EAST INDUSTRIAL (EI)

CATEGORY	REQUIRED/ALLOWED	PROVIDED
MINIMUM LOT AREA	20,000 ft^2	184,685 ft^2
MINIMUM LOT FRONTAGE	100 ft.	895.94 ft.
MINIMUM FRONT SETBACK	30 ft.	53.0± ft.
MINIMUM SIDE SETBACK	20 ft.	24.9± ft.
MINIMUM REAR SETBACK	30 ft.	81.4 ft.
MAXIMUM BUILDING HEIGHT	60 ft.	<< 60 ft.
MAXIMUM LOT COVERAGE (BLDGS)	NA	NA
MAXIMUM IMPERVIOUS COVERAGE	80%	76.1%
MINIMUM OPEN SPACE	20%	23.9%

OWNER:
MEDWAY FLOWER, LLC
990 PARADISE ROAD
SWAMPSCOTT, MA 01907

APPLICANT:
PHYTOPIA, INC.
25 NEWBURY STREET
PEABODY, MA 01960

PARCEL INFORMATION:
ADDRESS: 6 INDUSTRIAL PARK ROAD, MEDWAY, MA 02053
PLAN: LOTS 13,14,15,16,17 & 18 ON PLAN NO. 242 OF 1967, PLAN BOOK 222
MEDWAY ASSESSOR'S: MAP 33, PARCEL 004

DEED REFERENCE:
BOOK 36836 PAGE 269

PLAN REFERENCES:
1. PLAN NO. 242 OF 1967, PLAN BOOK 222

PROJECT NOTES:
1. TOPOGRAPHIC INFORMATION SHOWN IS THE RESULT OF AN ACTUAL INSTRUMENT FIELD SURVEY CONDUCTED BY WILLIAMS & SPARAGES, LLC IN JULY 2018 THROUGH FEBRUARY 2021.
2. TOPOGRAPHIC INFORMATION SHOWN IS REFERENCED TO THE NATIONAL GEODETIC VERTICAL DATUM OF 1988 (NAVD88).
3. PROPERTY DOES NOT LIE WITHIN A SPECIAL FLOOD HAZARD AREA (ZONE A OR ZONE AE) AS SHOWN ON FLOOD INSURANCE RATE MAP NUMBER 25021C0142E, EFFECTIVE DATE: JULY 17, 2012.
4. PROPERTY LIES WITHIN THE GROUNDWATER PROTECTION DISTRICT.
5. PROPERTY LIES WITHIN THE MassDEP ZONE II WELLHEAD PROTECTION AREA.

LIST OF WAIVERS:

S.204-4.A PLAN SHALL BE STAMPED BY A REGISTERED LANDSCAPE ARCHITECT. WE REQUEST A WAIVER FROM THE REQUIREMENT OF HAVING A LANDSCAPE ARCHITECT ON THE TEAM. THE ENGINEERING AND SURVEY OFFICE OF WILLIAMS & SPARAGES LLC WILL SUBMIT A COMPREHENSIVE LANDSCAPE PLAN.

S.204-3.F DEVELOPMENT IMPACT STATEMENT. WE REQUEST A WAIVER FROM THE REQUIREMENT OF PROVIDING A DEVELOPMENT IMPACT STATEMENT AS THE INFORMATION REQUESTED WILL BE ADDRESSED THROUGHOUT THE HEARING.

MEDWAY PLANNING & ECONOMIC DEVELOPMENT BOARD

_____

_____

_____

_____

_____

DATE APPROVAL ISSUED:

_____

PLAN ENDORSEMENT DATE:

_____

WILLIAMS & SPARAGES
ENGINEERS LAND SURVEYORS
ISO NORTH MAIN STREET
SUITE 101
ATTLEBORO, MA 02703
PHONE: (978) 539-8088
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Owner:
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990 Paradise Road
Swapscott, MA 01907

Applicant:
Phytopia, Inc.
25 Newbury Street
Peabody, MA 01960

Designed By: MEM
Drawn By: MEM
Reviewed By: CPS
Project Manager: CPS
Job File Number: MEDW-0017
Drawing File Folder: MEDW17

☒ Drawing Issued for Review
☐ Drawing Issued for Permit
☐ Drawing Issued for Construction

SEAL

COMMONWEALTH OF MASSACHUSETTS
CHRIST P. SPYROPOULOS
No. 40174
PROFESSIONAL ENGINEER
(5/4/22)

6			
5	Town Comments / Phosphorus	5/13/2022	11
4	Fire Department Comments	4/25/2022	10
3	Town Comments / Peer Review	3/7/2022	9
2	Town Comments / Peer Review	1/3/2022	8
1	Town Comments / Peer Review	10/12/2021	7

COVER PLAN
INDUSTRIAL PARK ROAD
6 INDUSTRIAL PARK ROAD, MEDWAY, MA

0' 100' 200' 400'
SCALE: 1"=200'

APRIL 1, 2021

DRAWING: C1.1

SHEET 1 OF 14

WILLIAMS & SPARAGES
ENGINEERS · PLANNERS · SURVEYORS
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FAX: (978) 539-8200
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Designed By: MEM
Drawn By: MEM
Reviewed By: CPS
Project Manager: CPS
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SEAL

COMMONWEALTH OF MASSACHUSETTS
CHRIST P. SPARAGES
CIVIL
No. 40774
PROFESSIONAL ENGINEER
(5/24/22)

SITE CONTEXT PLAN
INDUSTRIAL PARK ROAD
6 INDUSTRIAL PARK ROAD, MEDWAY, MA

12			
11			
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0' 100' 200' 400'
SCALE: 1"=200'

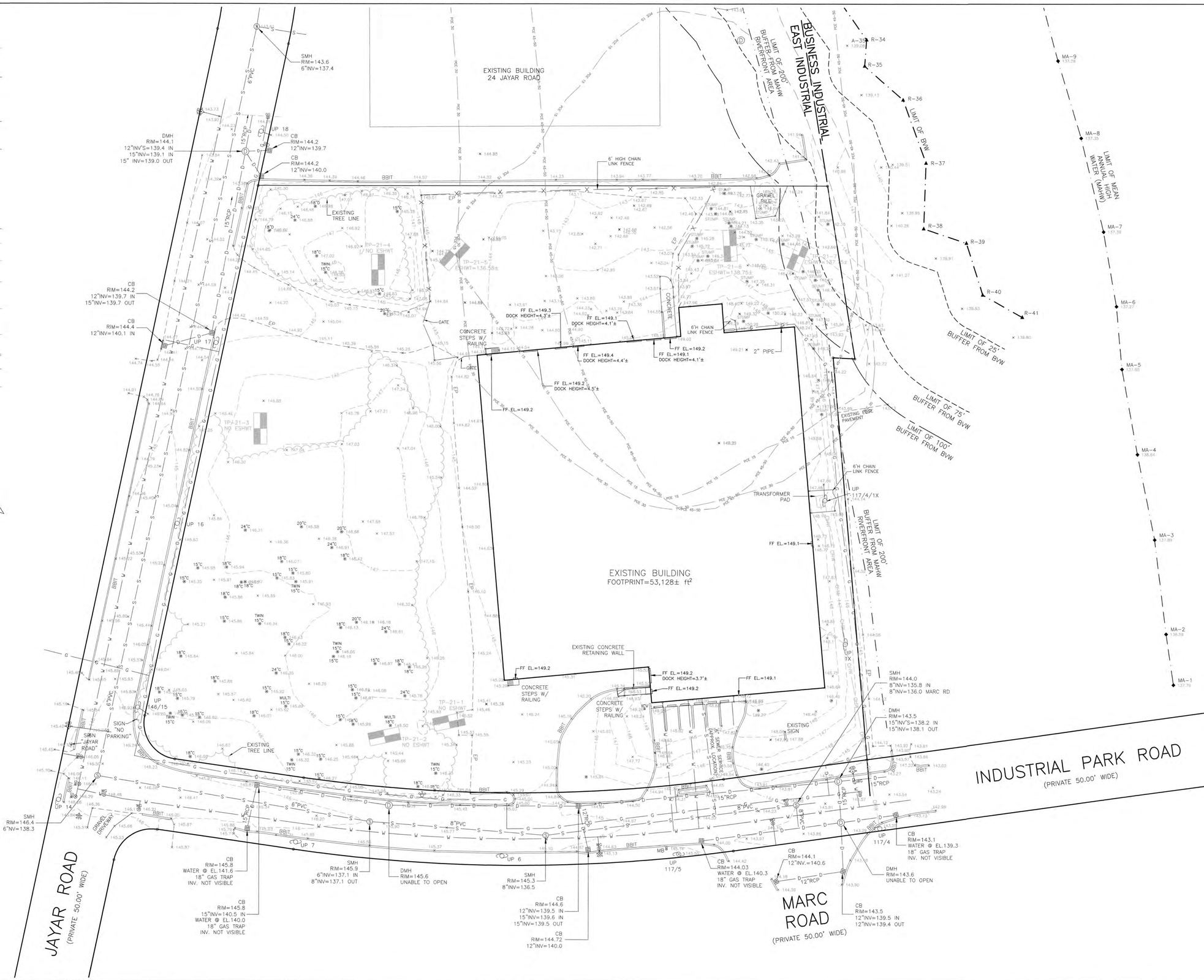
OCTOBER 1, 2021

DRAWING: C1.2

SHEET 2 OF 14

LEGEND OF SYMBOLS

- EXISTING CONTOUR
- EXISTING SPOT ELEVATION
- EXISTING DRAIN
- EXISTING DRAIN MANHOLE
- EXISTING CATCH BASIN
- EXISTING SEWER
- EXISTING SEWER MANHOLE
- EXISTING WATER
- EXISTING WATER GATE
- EXISTING HYDRANT
- EXISTING UTILITY POLE
- EXISTING IRRIGATION CONTROL VALVE
- EXISTING PAINTED GAS
- EXISTING OVERHEAD WIRES
- EXTENT OF PCE GROUNDWATER PLUME 15'
- EXTENT OF PCE GROUNDWATER PLUME 30'
- EXTENT OF PCE GROUNDWATER PLUME 45'-50'
- EXTENT OF ESTIMATED PLUME
- EXISTING CURB
- EXISTING FENCE
- EXISTING EDGE OF PAVEMENT



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COMMONWEALTH OF MASSACHUSETTS
CHRIST P. SPARAGES
CIVIL
No. 40174
REGISTERED PROFESSIONAL ENGINEER
(5/24/22)

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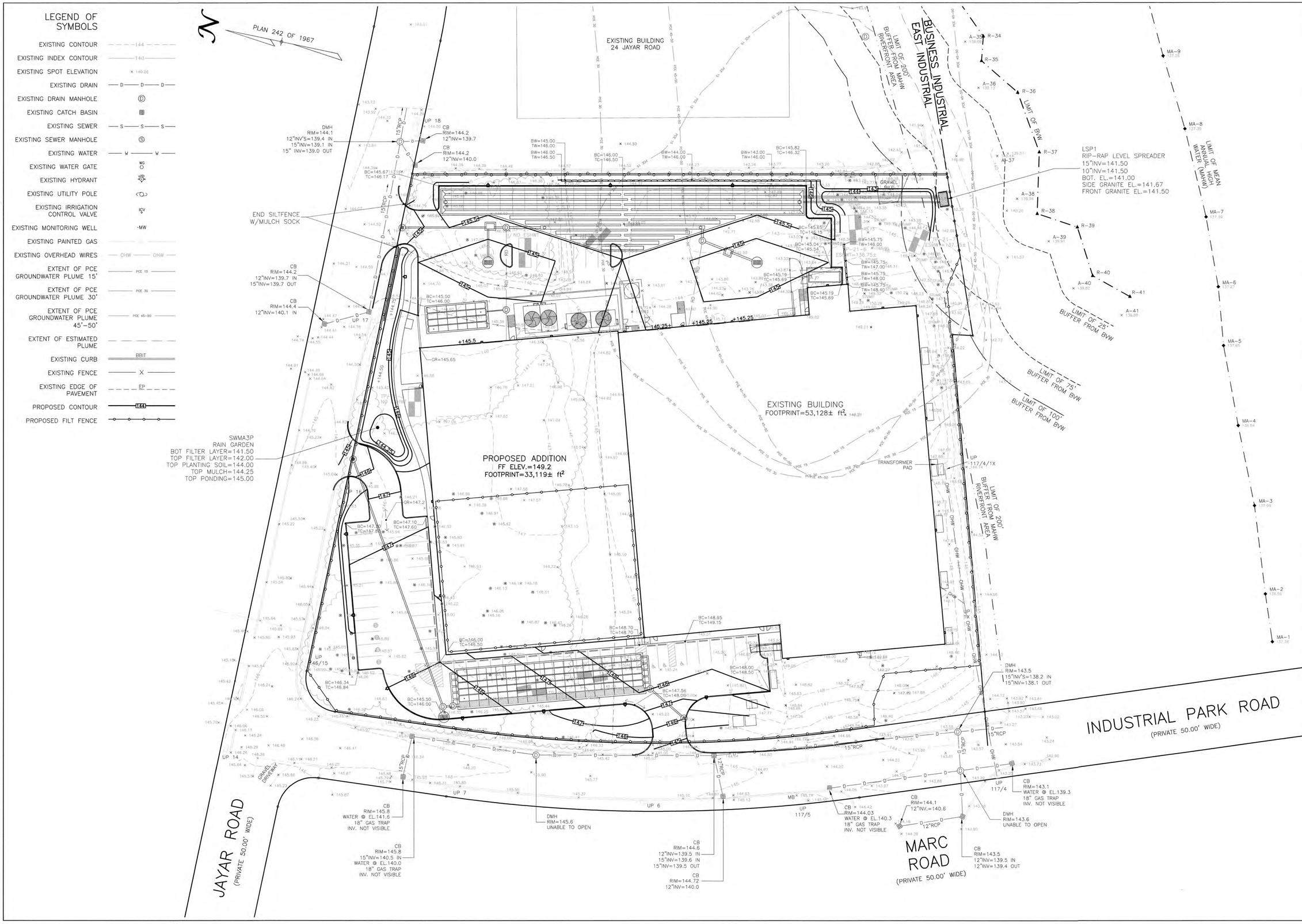
EXISTING CONDITION PLAN
INDUSTRIAL PARK ROAD
6 INDUSTRIAL PARK ROAD, MEDWAY, MA

0' 15' 30' 60'
SCALE: 1"=30'

APRIL 1, 2021

DRAWING: C2.1

SHEET 3 OF 14



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CHRIST P. SPARAGES
CIVIL
No. 40174
(5/13/22)

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GRADING & DRAINAGE PLAN
INDUSTRIAL PARK ROAD

6 INDUSTRIAL PARK ROAD, MEDWAY, MA

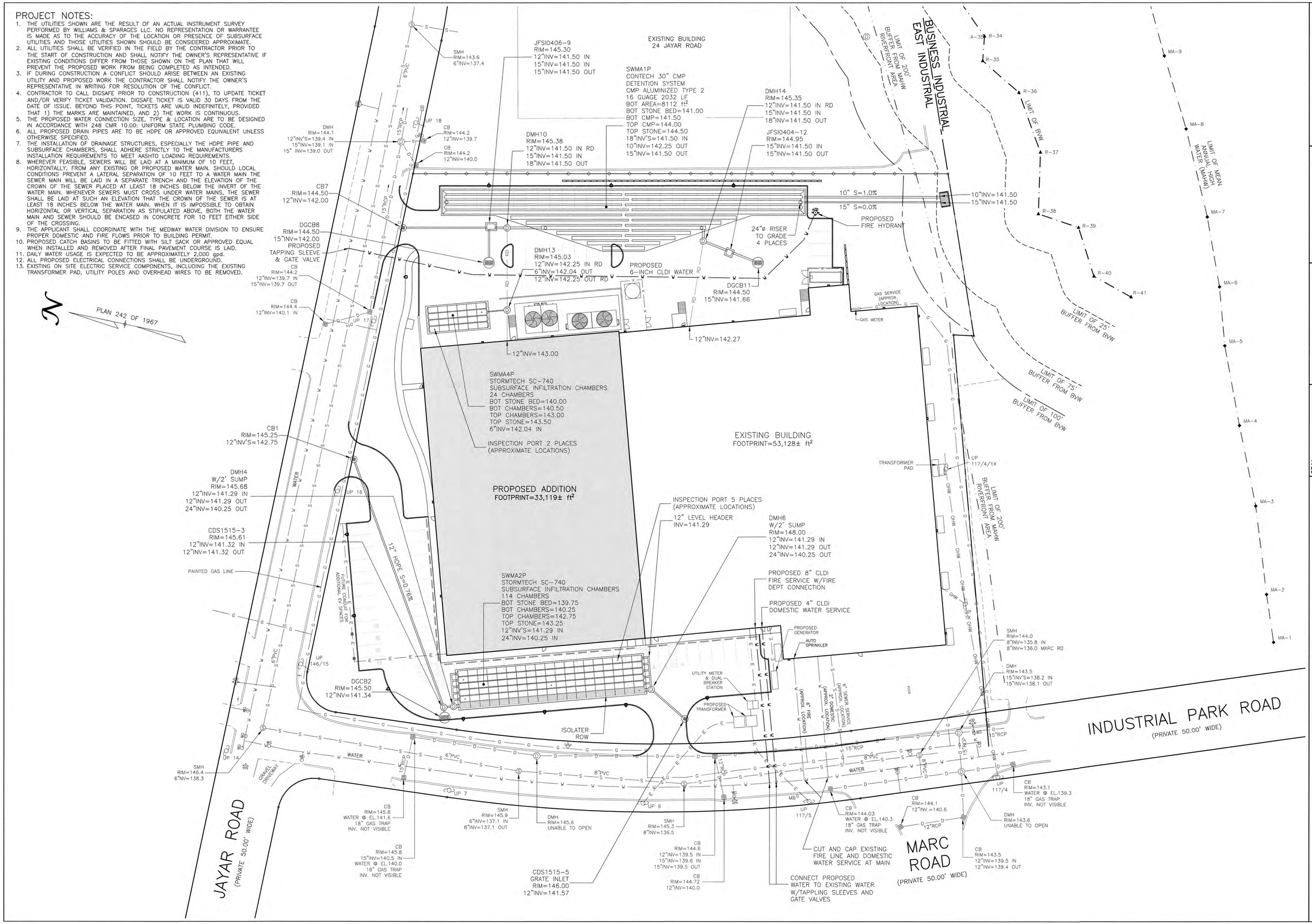
APRIL 1, 2021

DRAWING: C3.1

SHEET 4 OF 14

PROJECT NOTES:

1. THE UTILITIES SHOWN ARE THE RESULT OF AN ACTUAL INSTRUMENT SURVEY PERFORMED BY WILLIAMS & SPARAGES LLC. NO REPRESENTATION OR WARRANTEE IS MADE AS TO THE ACCURACY OF THE LOCATION OR PRESENCE OF SUBSURFACE UTILITIES AND THOSE UTILITIES SHOWN SHOULD BE CONSIDERED APPROXIMATE.
2. ALL UTILITIES SHALL BE VERIFIED IN THE FIELD BY THE CONTRACTOR PRIOR TO THE START OF CONSTRUCTION AND SHALL NOTIFY THE OWNER'S REPRESENTATIVE IF EXISTING CONDITIONS DIFFER FROM THOSE SHOWN ON THE PLAN THAT WILL PREVENT THE PROPOSED WORK FROM BEING COMPLETED AS INTENDED.
3. IF DURING CONSTRUCTION A CONFLICT SHOULD ARISE BETWEEN AN EXISTING UTILITY AND PROPOSED WORK THE CONTRACTOR SHALL NOTIFY THE OWNER'S REPRESENTATIVE IN WRITING FOR RESOLUTION OF THE CONFLICT.
4. CONTRACTOR TO CALL DIGSAFE PRIOR TO CONSTRUCTION (411). TO UPDATE TICKET AND/OR VERIFY TICKET VALIDATION. DIGSAFE TICKET IS VALID 30 DAYS FROM THE DATE OF ISSUE. BEYOND THIS POINT, TICKETS ARE VALID INDEFINITELY, PROVIDED THAT 1) THE MARKS ARE MAINTAINED, AND 2) THE WORK IS CONTINUOUS.
5. THE PROPOSED WATER CONNECTION SIZE, TYPE & LOCATION ARE TO BE DESIGNED IN ACCORDANCE WITH 248 CMR 10.00: UNIFORM STATE PLUMBING CODE.
6. ALL PROPOSED DRAIN PIPES ARE TO BE HDPE OR APPROVED EQUIVALENT UNLESS OTHERWISE SPECIFIED.
7. THE INSTALLATION OF DRAINAGE STRUCTURES, ESPECIALLY THE HDPE PIPE AND SUBSURFACE CHAMBERS, SHALL ADHERE STRICTLY TO THE MANUFACTURERS INSTALLATION REQUIREMENTS TO MEET AASHTO LOADING REQUIREMENTS.
8. WHEREVER FEASIBLE, SEWERS WILL BE LAID AT A MINIMUM OF 10 FEET, HORIZONTALLY, FROM ANY EXISTING OR PROPOSED WATER MAIN. SHOULD LOCAL CONDITIONS PREVENT A LATERAL SEPARATION OF 10 FEET TO A WATER MAIN THE SEWER MAIN WILL BE LAID IN A SEPARATE TRENCH AND THE ELEVATION OF THE CROWN OF THE SEWER PLACED AT LEAST 18 INCHES BELOW THE INVERT OF THE WATER MAIN. WHENEVER SEWERS MUST CROSS UNDER WATER MAINS, THE SEWER SHALL BE LAID AT SUCH AN ELEVATION THAT THE CROWN OF THE SEWER IS AT LEAST 18 INCHES BELOW THE WATER MAIN. WHEN IT IS IMPOSSIBLE TO OBTAIN HORIZONTAL OR VERTICAL SEPARATION AS STIPULATED ABOVE, BOTH THE WATER MAIN AND SEWER SHOULD BE ENCASED IN CONCRETE FOR 10 FEET EITHER SIDE OF THE CROSSING.
9. THE APPLICANT SHALL COORDINATE WITH THE MEDWAY WATER DIVISION TO ENSURE PROPER DOMESTIC AND FIRE FLOWS PRIOR TO BUILDING PERMIT.
10. PROPOSED CATCH BASINS TO BE FITTED WITH SILT SACK OR APPROVED EQUAL WHEN INSTALLED AND REMOVED AFTER FINAL PAVEMENT COURSE IS LAID.
11. DAILY WATER USAGE IS EXPECTED TO BE APPROXIMATELY 2,000 gpd.
12. ALL PROPOSED ELECTRICAL CONNECTIONS SHALL BE UNDERGROUND.
13. EXISTING ON SITE ELECTRIC SERVICE COMPONENTS, INCLUDING THE EXISTING TRANSFORMER PAD, UTILITY POLES AND OVERHEAD WIRES TO BE REMOVED.



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Peabody, MA 01960

Designed By: MEM
Drawn By: MEM
Reviewed By: CPS
Project Manager: CPS
Job File Number: MEDW-0017
Drawing File Folder: MEDW17

☒ Drawing Issued for Review
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SEAL

COMMONWEALTH OF MASSACHUSETTS
CHRISTOPHER P. SPARAGES
CIVIL
No. 40174

5/13/22

12			
11			
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UTILITY PLAN
INDUSTRIAL PARK ROAD
6 INDUSTRIAL PARK ROAD, MEDWAY, MA

0' 15' 30' 60'
SCALE: 1"=30'

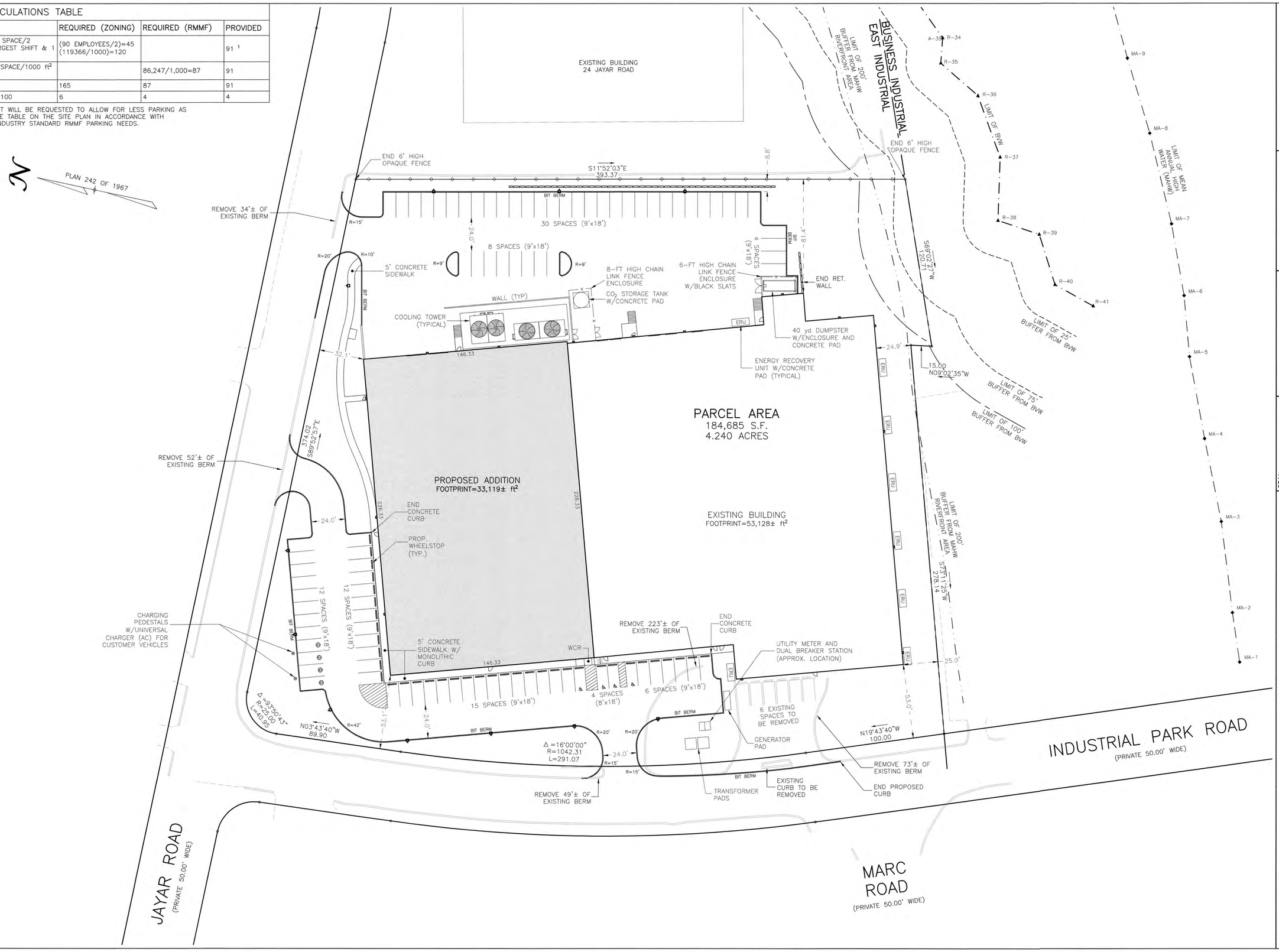
APRIL 1, 2021

DRAWING: C4.1

SHEET 5 OF 14

PARKING CALCULATIONS TABLE			
CATEGORY	REQUIRED (ZONING)	REQUIRED (RMMF)	PROVIDED
MANUFACTURING: 1 SPACE/2 EMPLOYEES ON LARGEST SHIFT & 1 SPACE/1000 ft^2	(90 EMPLOYEES/2)=45 (119366/1000)=120		91 [1]
RMMF PARKING: 1 SPACE/1000 ft^2 OF 86,247 ft^2		86,247/1,000=87	91
TOTAL	165	87	91
ACCESSIBILITY: 76–100	6	4	4

1. SPECIAL PERMIT WILL BE REQUESTED TO ALLOW FOR LESS PARKING AS SHOWN ON THE TABLE ON THE SITE PLAN IN ACCORDANCE WITH ACCEPTABLE INDUSTRY STANDARD RMMF PARKING NEEDS.



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Job File Number: MEDW-0017
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SEAL

COMMONWEALTH OF MASSACHUSETTS
CHRIST P. SPARAGES
CIVIL
No. 40174
PROFESSIONAL ENGINEER
(5/24/22)

6			
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1	Town Comments / Peer Review	10/12/2021	7

SURVEY & LAYOUT PLAN
INDUSTRIAL PARK ROAD

6 INDUSTRIAL PARK ROAD, MEDWAY, MA

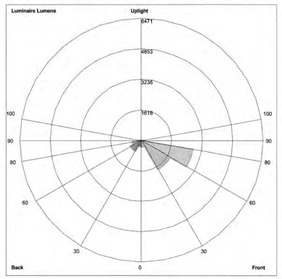
0' 15' 30' 60'
SCALE: 1"=30'

APRIL 1, 2021

DRAWING: C5.1

SHEET 6 OF 14

IES ROAD REPORT
PHOTOMETRIC FILENAME : USSL-P-PA1B-730-U-T4W_6471 LUMENS.IES
LUMINAIRE CLASSIFICATION SYSTEM (LCS) GRAPH



Luminaire Lumens:
Front: Low=345.4, Medium=1758.4, High=2759.8, Very High=158.2
Back: Low=310.2, Medium=635.5, High=471.6, Very High=32.0
Uplight: Low=0.0, High=0.0

BUG Rating : B1-U0-G2

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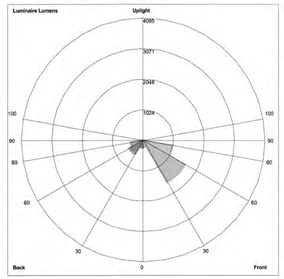
Page 1

IES ROAD REPORT
PHOTOMETRIC FILENAME : USSL-P-PA1A-730-U-T2U_4095 LUMENS.IES
LUMINAIRE CLASSIFICATION SYSTEM (LCS) GRAPH



Luminaire Lumens:
Front: Low=236.6, Medium=1614.9, High=980.1, Very High=39.7
Back: Low=241.2, Medium=542.4, High=417.8, Very High=22.3
Uplight: Low=0.0, High=0.0

BUG Rating : B1-U0-G1

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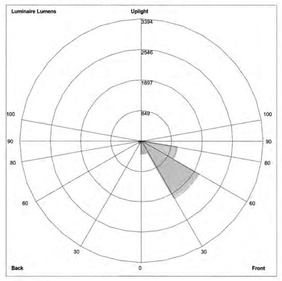
Page 1

IES ROAD REPORT
PHOTOMETRIC FILENAME : USSL-P-PA1A-730-U-T2R-HSS_3394 LUMENS.IES
LUMINAIRE CLASSIFICATION SYSTEM (LCS) GRAPH



Luminaire Lumens:
Front: Low=360.3, Medium=1643.1, High=1008.9, Very High=11.1
Back: Low=47.0, Medium=77.6, High=47.3, Very High=2.7
Uplight: Low=0.0, High=0.0

BUG Rating : B0-U0-G1

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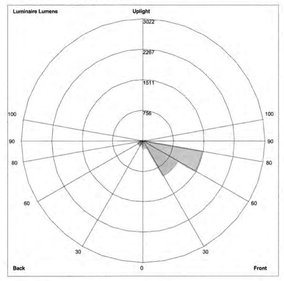
Page 1

IES ROAD REPORT
PHOTOMETRIC FILENAME : USSL-P-PA1A-730-U-T4W-HSS_3022 LUMENS.IES
LUMINAIRE CLASSIFICATION SYSTEM (LCS) GRAPH



Luminaire Lumens:
Front: Low=191.7, Medium=989.9, High=1480.2, Very High=56.7
Back: Low=75.3, Medium=129.7, High=91.6, Very High=0.8
Uplight: Low=0.0, High=0.0

BUG Rating : B0-U0-G1

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Page 1

LUMINAIRE SCHEDULE

SYMBOL	LABEL	QUANTITY	CATALOG NUMBER COOPER LIGHTING	DESCRIPTION	LAMP	TILT	LLF	CANDELA FILE
	A	10	USSL PETITE LED USSL-P-PA1B-730-U-T4W (FINISH & ELECTRICAL TO BE SPECIFIED BY OTHERS)	TYPE IV WIDE OPTICS 20' MOUNTING HEIGHT (WALL MOUNTED)	3000K 6471 LUMENS PER LAMP	0°	0.85	USSL-P-PA1B-730-U-T4W_6471 LUMENS.IES
	B	5	USSL PETITE LED USSL-P-PA1A-730-U-T2 (FINISH & ELECTRICAL TO BE SPECIFIED BY OTHERS)	TYPE 2 OPTICS 8' MOUNTING HEIGHT (WALL MOUNTED)	3000K 4095 LUMENS PER LAMP	0°	0.85	USSL-P-PA1A-730-U-T2U_4095 LUMENS.IES
	C	3	USSL PETITE LED USSL-P-PA1A-730-U-T2R-HSS (FINISH & ELECTRICAL TO BE SPECIFIED BY OTHERS)	TYPE 2 OPTICS 20' MOUNTING HEIGHT (POLE MOUNTED)	3000K 3394 LUMENS PER LAMP	0°	0.85	USSL-P-PA1A-730-U-T2R-HSS_3394 LUMENS.IES
	D	8	USSL PETITE LED USSL-P-PA1A-730-U-T4W-HSS (FINISH & ELECTRICAL TO BE SPECIFIED BY OTHERS)	TYPE IV WIDE OPTICS 20' MOUNTING HEIGHT (POLE MOUNTED)	3000K 3022 LUMENS PER LAMP	0°	0.85	USSL-P-PA1A-730-U-T4W-HSS_3022 LUMENS.IES

GENERAL PHOTOMETRIC SCHEDULE

AVERAGE FOOT-CANDLES	0.62
MAXIMUM FOOT-CANDLES	8.7
MINIMUM FOOT-CANDLES	0.0
MINIMUM TO MAXIMUM FC RATIO	0.00
MAXIMUM TO MINIMUM FC RATIO	8.65 / 0.00
AVERAGE TO MINIMUM FC RATIO	0.62 / 0.00

NOTES:

1. SECURITY LIGHTING TO BE DETERMINED.
2. ILLUMINANCE VALUES CREATED FROM MANUFACTURERS PHOTOMETRIC DATA.
3. ILLUMINANCE VALUES SHOWN REPRESENT HORIZONTAL FOOTCANDLES AT GROUND LEVEL.
4. FOOT CANDLE VALUES SHOWN DO NOT ACCOUNT FOR LIGHT REFLECTION, EXISTING LIGHT SOURCES, SLOPING GRADE OR EXISTING OR PROPOSED THREE DIMENSIONAL OBJECTS.

WILLIAMS & SPARAGES
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MIDDLETON, MA 01949
PHONE: (978) 539-8088
FAX: (978) 539-8200
WSENGINEERS.COM

Owner:
Medway Flower, LLC
990 Paradise Road
Swapscott, MA 01907

Applicant:
Phytopia, Inc.
25 Newbury Street
Peabody, MA 01960

Designed By: MEM
Drawn By: MEM
Reviewed By: CPS
Project Manager: CPS
Job File Number: MEDW-0017
Drawing File Folder: MEDW17

☒ Drawing Issued for Review
☐ Drawing Issued for Permit
☐ Drawing Issued for Construction

SEAL

COMMONWEALTH OF MASSACHUSETTS
CHRIST R. SPARAGES
CIVIL
No. 40174
PROFESSIONAL ENGINEER

(5/24/22)

6		
5	Town Comments / Phosphorus	5/13/2022
4	Fire Department Comments	4/25/2022
3	Town Comments / Peer Review	3/7/2022
2	Town Comments / Peer Review	1/3/2022
1	Town Comments / Peer Review	10/12/2021

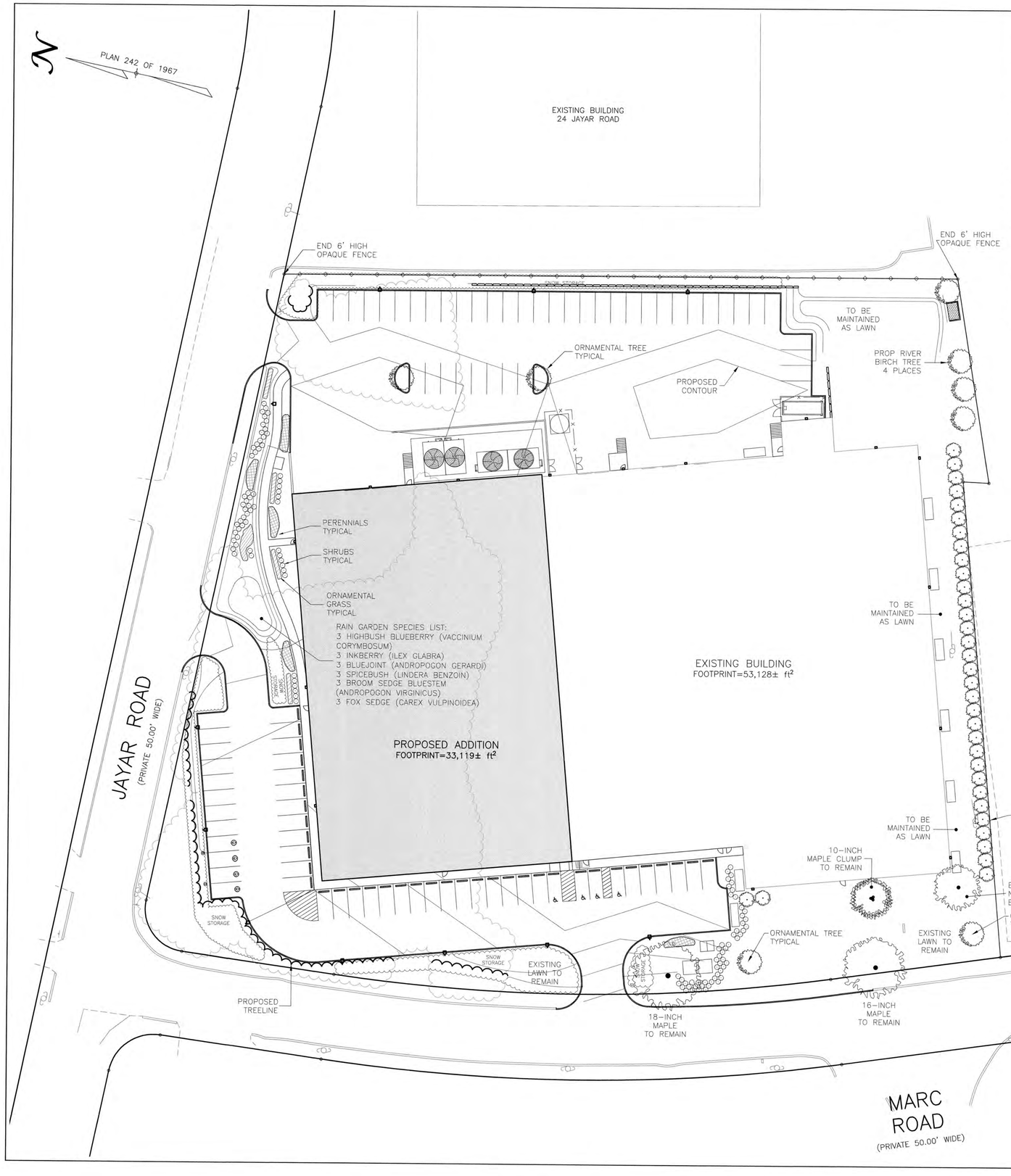
PHOTOMETRIC PLAN
INDUSTRIAL PARK ROAD
6 INDUSTRIAL PARK ROAD, MEDWAY, MA

0' 15' 30' 60'
SCALE: 1"=30'

APRIL 1, 2021

DRAWING: C6.1

SHEET 7 OF 14



PLANT SCHEDULE

SYMBOL	QUANTITY	LATIN NAME	COMMON NAME	PLANTING SIZE	NOTES
ORNAMENTAL TREES					
RBC	TBD	BETULA NIGRA	RIVER BIRCH	10'–12' TALL	B&B, MULTI STEM
SBY	TBD	AMELANCHIER X GRANDIFLORA	SERVICEBERRY	8'–10' TALL	B&B, MULTI STEM
ERB	TBD	CERCIS CANADENSIS	EASTERN REDBUD	8'–10' TALL	B&B, SINGLE/MULTI STEM
SMA	TBD	MAGNOLIA STELLATA	STAR MAGNOLIA	8'–10' TALL	B&B, SPECIMEN
JFC	TBD	PRUNUS KANZAN	JAPANESE FLOWERING CHERRY	8'–10' TALL	B&B, SPECIMEN
SHRUBS					
RTD	TBD	CORNUS SERICEA 'ARTIC FIRE'	RED TWIG DOGWOOD	3.5' TALL	B&B, PLANT 36" O.C.
INK	TBD	ILEX GLABRA	INKBERRY	3' TALL	B&B, PLANT 36" O.C.
DFG	TBD	FOTHERGILLA GARDENII	DWARF FOTHERGILLA	3.5' TALL	B&B, PLANT 36" O.C.
GLS	TBD	RHUS AROMATICA	GRO–LOW SUMAC	3 GALLON	B&B, PLANT 36" O.C.
OHD	TBD	HYDRANGEA QUERCIFOLIA	OAKLEAF HYDRANGEA	3' TALL	B&B, PLANT 36" O.C.
WBY	TBD	ILEX VERTICILLATA	WINTERBERRY	3' TALL	B&B, PLANT 36" O.C.
HYW	TBD	TAXUS X MEDIA 'HICKSII'	HICKS YEW	5 GALLON	B&B, PLANT 36" O.C.
PERENNIALS					
PCF	TBD	ECHINACEA PURPUREA	PURPLE CONEFLOWER	1 GALLON	PLANT 18" O.C.
VHM	TBD	RUDBECKIA FULGIDA 'GOLDSTRUM'	BLACK–EYED SUSAN	1 GALLON	PLANT 18" O.C.
HRD	TBD	PEROVSKIA ATR. 'LITTLE SPIRE'	RUSSIAN SAGE	1 GALLON	PLANT 18" O.C.
ORNAMENTAL GRASS					
SGR	TBD	PANICUM VIRGATUM 'SHENANDOAH'	SWITCH GRASS	2 GALLON	PLANT 36" O.C.
LBS	TBD	SCHIZACHYRIUM SCOPARIUM	LITTLE BLUESTEM	2 GALLON	PLANT 36" O.C.
FGR	TBD	PENNISETUM ALOPECUROIDES	FOUNTAIN GRASS	2 GALLON	PLANT 24" O.C.

PLANTING NOTES

1. DURING CONSTRUCTION CONTRACTOR SHALL PROTECT AND SAVE ALL VEGETATION BEYOND THE LIMIT OF GRADING ACTIVITIES.
2. ALL PROPOSED PLANTINGS SHALL BE ADJUSTED TO ACCOMMODATE UNDERGROUND UTILITIES.
3. ALL PLANTING METHODS SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE AMERICAN ASSOCIATION OF NURSERYMEN.
4. IN THE EVENT OF DISCREPANCIES BETWEEN THE QUANTITIES OF PLANTS IN THE PLANT LIST AND THE DRAWINGS, THE DEPICTION OF THE PLANTS ON THE DRAWINGS SHALL GOVERN.
5. ALL TREES AND SHRUBS SHALL BE NURSERY GROWN WITHIN A U.S.D.A. PLANT HARDINESS ZONE WHICH IS THE SAME AS, OR COLDER THAN, THE ZONE IN WHICH THE PROJECT IS LOCATED.
6. ALL PLANTS 3' OR GREATER IN HEIGHT OR SPREAD TO BE BALLED AND BURLAPED.
7. ALL LOAM AREAS FOR PLANT BEDS SHALL BE UNIFORM IN COMPOSITION AND FREE FROM SUBSOIL, STONES LARGER THAN 1" AND NOXIOUS MATERIALS.
8. ALL PLANT SHALL BE WATERED IMMEDIATELY AFTER PLANTING.
9. ALL DISTURBED AREAS SHALL BE STABILIZED WITH LOAM AND SEED AND/OR BARK MULCH. BEGINNING AND ENDING POINTS OF GRASS AND MULCH TO BE DETERMINED IN FIELD WITH OWNER AUTHORIZATION.
10. POSITIVE DRAINAGE SHALL BE MAINTAINED AWAY FROM AND AROUND BUILDING PER BUILDING CODE.
11. ALL WORK TO COMPLY TO ORDER OF CONDITIONS ISSUED FOR PROJECT. SEE CONDITIONS PRIOR TO LANDSCAPE WORK.
12. CONTRACTOR TO PROVIDE TWO YEAR GUARANTEE ON ALL PLANTING MATERIAL.
13. NO PLANTING PRIOR TO APPROVAL OF FINISHED GRADE.
14. PROVIDE SOIL DEPTH ACCORDING TO CONSTRUCTION DETAILS FOR TREES.
15. PROVIDE 18" SOIL DEPTH FOR ALL SHRUBS AND PERENNIALS.
16. PROVIDE 6" SOIL DEPTH FOR ALL GROUNDCOVER.
17. PROVIDE 6" SOIL DEPTH FOR ALL SOD/SEED.
18. ALL SPECIES WITHIN THE RAIN GARDEN SHALL BE PURCHASED FROM A NURSERY SPECIALIZING IN THE PROPOGATION OF PLANTS NATIVE TO MASSACHUSETTS. SPECIES SHALL BE SELECTED FROM THE PROPOSED SPECIES LIST FOR EACH AREA.
19. CONTRACTOR SHALL REMOVE DEAD SCRUB BRUSH AND SHALL REMOVE SMALL DEAD TREES IN THE PROPOSED TREE SAVE AREAS. EXISTING TREES TO REMAIN SHALL ALSO BE PRUNED WITH THE ADVICE OF A LANDSCAPE CONTRACTOR TO REMOVE DEAD LIMBS TO IMPROVE THE HEALTH OF THE REMAINING TREES.

PROJECT NOTES

1. STOCKPILING OF SNOW AT DRIVEWAY/DRIVEWAY AND DRIVEWAY/STREET INTERSECTIONS SHALL NOT EXCEED 3 FEET IN HEIGHT.

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COMMONWEALTH OF MASSACHUSETTS
CHRIST T. SPARAGES
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No. 47124
(5/24/21)

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LANDSCAPE PLAN
INDUSTRIAL PARK ROAD

6 INDUSTRIAL PARK ROAD, MEDWAY, MA

0' 15' 30' 60'
SCALE: 1"=30'

APRIL 1, 2021

DRAWING: C7.1

SHEET 8 OF 14

EARTHWORK CALCULATIONS

PROPOSED ADDITION:
Volumes calculated to one foot below finished floor grade
Volumes by Triangulation (Prisms)
Existing Surface: P:\MEDW-0017(6 Industrial Park Road)\Drawings\EXISTING(210930).tin
Final Surface: P:\MEDW-0017(6 Industrial Park Road)\Drawings\PROPOSED_ADDITION(210930).tin

Cut volume: 0.0 C.F., 0.00 C.Y.
Fill volume: 65,678.5 C.F., 2,432.54 C.Y.

Area in Cut : 0.0 S.F., 0.00 Acres
Area in Fill: 33,118.9 S.F., 0.76 Acres
Total inclusion area: 33,118.9 S.F., 0.76 Acres

Average Fill Depth: 1.98 feet
Cut to Fill ratio: 0.00
Import Volume: 2,432.5 C.Y.
Elevation Change To Reach Balance: −1.983
Volume Change Per .1 ft: 122.7 C.Y.

Cut (C.Y.) / Area (acres): 0.00
Fill (C.Y.) / Area (acres): 3199.43

Max Fill: 3.761 at 5031.208,5798.474

PROPOSED PARKING AREAS:
Volumes calculated to one foot below finished pavement grade
Volumes by Triangulation (Prisms)
Existing Surface: P:\MEDW-0017(6 Industrial Park Road)\Drawings\EXISTING(210930).tin
Final Surface: P:\MEDW-0017(6 Industrial Park Road)\Drawings\PROPOSED_PARKING_BASE(211001).tin

Cut volume: 32,363.5 C.F., 1,198.65 C.Y.
Fill volume: 14,770.0 C.F., 547.04 C.Y.

Area in Cut : 31,791.1 S.F., 0.73 Acres
Area in Fill: 19,995.0 S.F., 0.46 Acres
Total inclusion area: 51,855.3 S.F., 1.19 Acres

Average Cut Depth: 1.02 feet
Average Fill Depth: 0.74 feet
Cut to Fill ratio: 2.19
Export Volume: 651.6 C.Y.
Elevation Change To Reach Balance: 0.339
Volume Change Per .1 ft: 192.1 C.Y.

Cut (C.Y.) / Area (acres): 1006.90
Fill (C.Y.) / Area (acres): 459.53

Max Cut: 5.609 at 5071.852,5663.121
Max Fill: 2.761 at 5031.208,5798.474

PROPOSED GRASS AREAS:
Volumes by Triangulation (Prisms)
Existing Surface: P:\MEDW-0017(6 Industrial Park Road)\Drawings\EXISTING(210930).tin
Final Surface: P:\MEDW-0017(6 Industrial Park Road)\Drawings\PROPOSED_GRASS(210930).tin

Cut volume: 16,703.8 C.F., 618.66 C.Y.
Fill volume: 14,113.6 C.F., 522.72 C.Y.

Area in Cut : 13,714.2 S.F., 0.31 Acres
Area in Fill: 20,144.6 S.F., 0.46 Acres
Area exactly in daylight: 7,595.5 S.F., 0.17 Acres
Total inclusion area: 41,454.3 S.F., 0.95 Acres
Total exclusion area: 138,102.4 S.F., 3.17 Acres

Average Cut Depth: 1.22 feet
Average Fill Depth: 0.70 feet
Cut to Fill ratio: 1.18
Export Volume: 95.9 C.Y.
Elevation Change To Reach Balance: 0.062
Volume Change Per .1 ft: 153.5 C.Y.

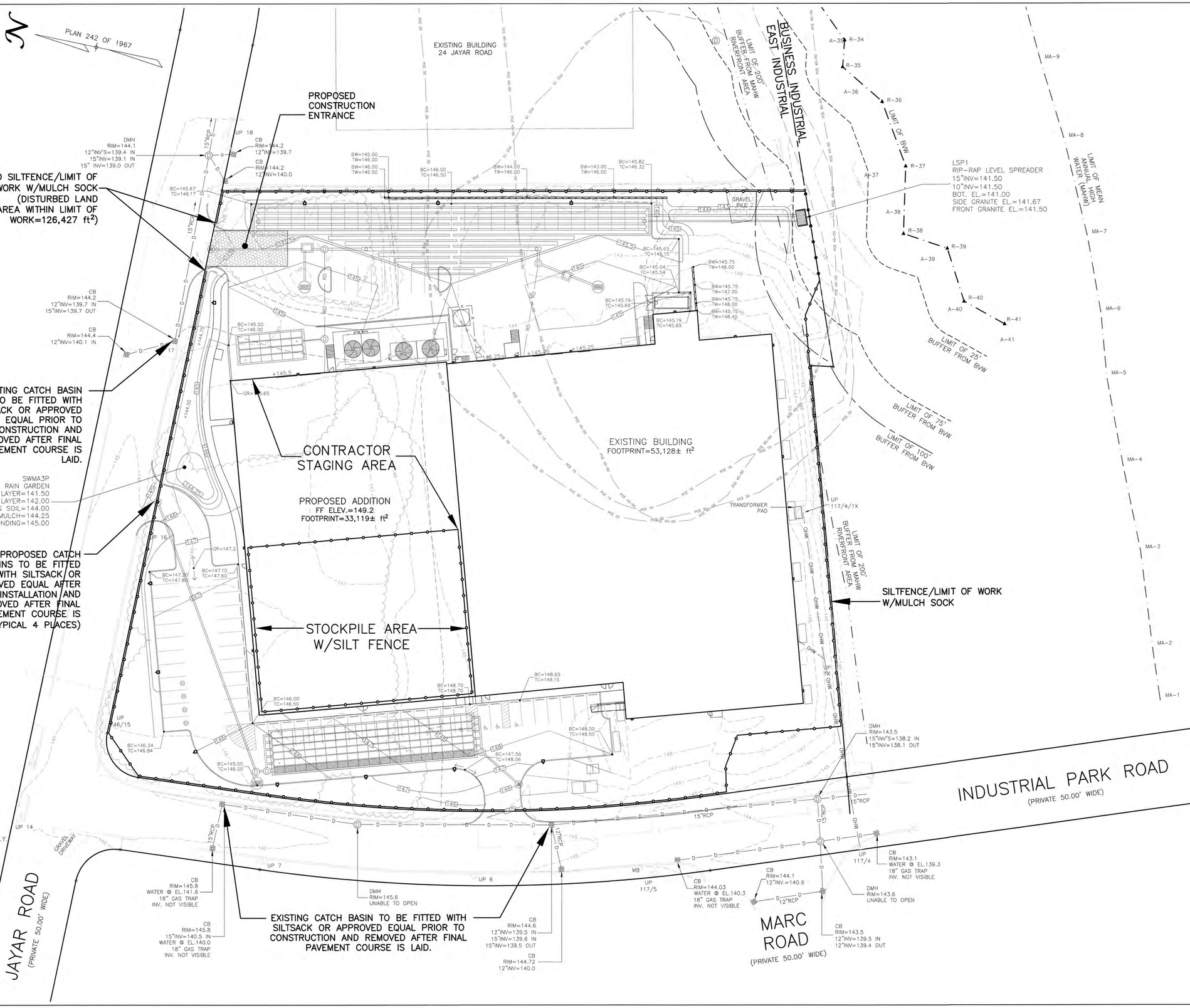
Cut (C.Y.) / Area (acres): 650.09
Fill (C.Y.) / Area (acres): 549.28

Max Cut: 5.424 at 5120.687,5593.986
Max Fill: 4.012 at 4815.741,5729.176

TOTAL EXPORT VOLUME:
0.00 C.Y. + 1,198.65 C.Y. + 618.66 C.Y. = 1,817 ± C.Y.

TOTAL IMPORT VOLUME:
2,432.54 C.Y. + 547.04 C.Y. + 522.72 C.Y. = 3,502 ± C.Y.

NET VOLUME:
3,502 C.Y. ± − 1,817 C.Y. ± = 1,685 C.Y. ± IMPORT



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COMMONWEALTH OF MASSACHUSETTS
CHRISTOPHER P. SPARAGES
CIVIL
No. 40174
5/29/22

12		
11		
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1		

EROSION & SEDIMENT CONTROL PLAN
INDUSTRIAL PARK ROAD

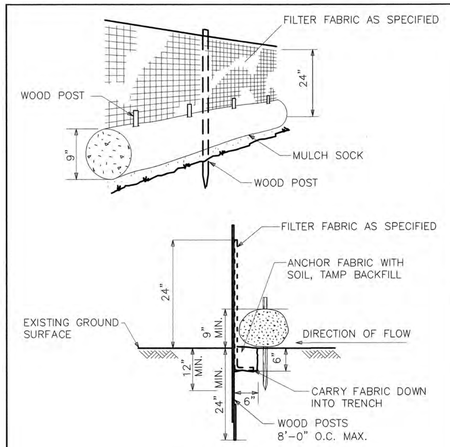
6 INDUSTRIAL PARK ROAD, MEDWAY, MA

0' 15' 30' 60'
SCALE: 1"=30'

APRIL 1, 2021

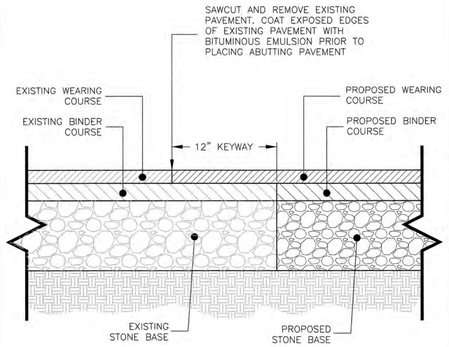
DRAWING: C8.1

SHEET 9 OF 14



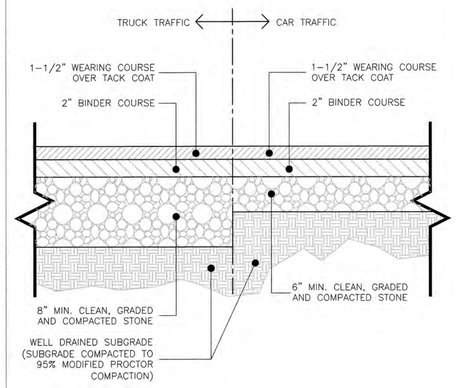
SILTFENCE WITH MULCH SOCK

(NOT TO SCALE)



PAVEMENT KEYWAY

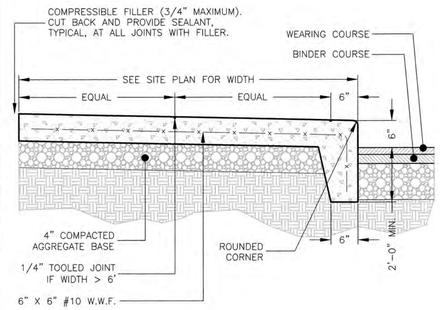
NOT TO SCALE



PAVEMENT SECTION

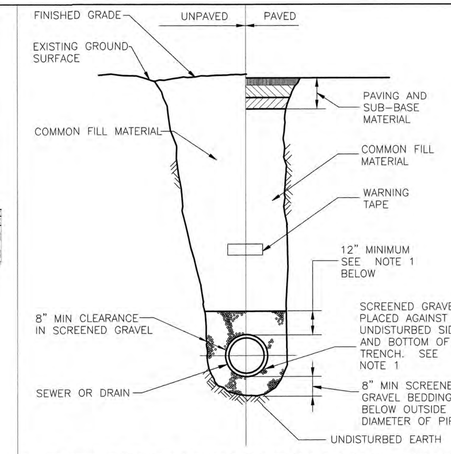
(NOT TO SCALE)

NOTE:
THIS PAVEMENT SECTION DETAIL REFLECTS MINIMUM REQUIREMENTS. ENGINEER TO DETERMINE DESIGN BASED ON GEOTECHNICAL DATA.



CONCRETE SIDEWALK (BUILDING PERIMETER)

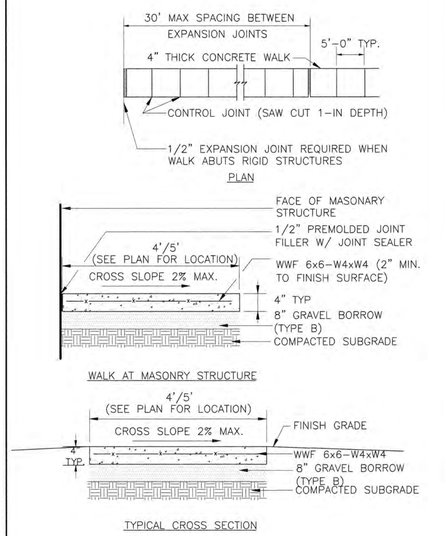
NOT TO SCALE

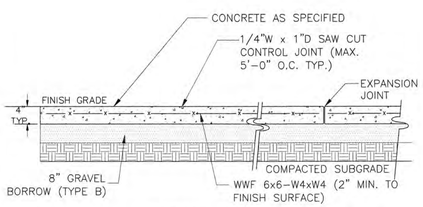


1. FOR PIPES OTHER THAN PVC, SELECTED COMMON FILL MAY BE USED FROM MID-DIAMETER OF PIPE TO 12" ABOVE TOP OF PIPE

TRENCH FOR GRAVITY PIPE

(NOT TO SCALE)



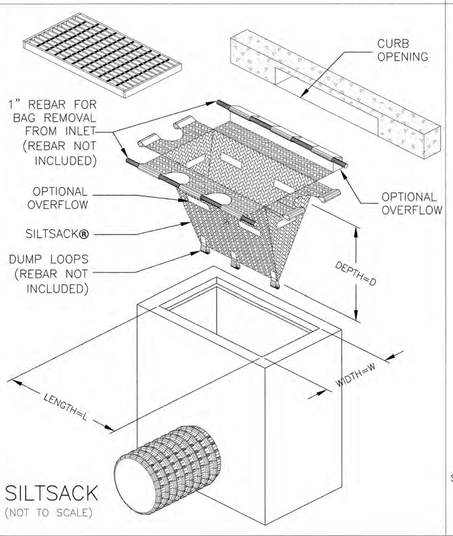


NOTES

1. SURFACE SHALL BE BROOM FINISH UNLESS OTHERWISE NOTED. FINISH SURFACE SHALL BE SLOPED FOR POSITIVE DRAINAGE AND SHALL SLOPE AWAY FROM STRUCTURES.
2. EXPANSION JOINTS SHALL NOT EXCEED 30' O.C. AND SHALL BE PLACED AT ALL BUILDING ABUTMENTS.
3. CONTROL JOINTS SHALL NOT EXCEED 5' O.C. UNLESS OTHERWISE NOTED.

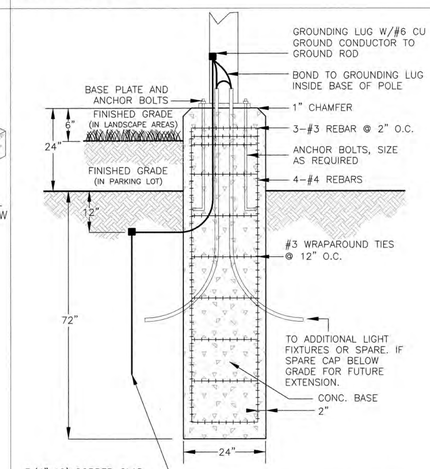
CONCRETE WALKWAY

(NOT TO SCALE)



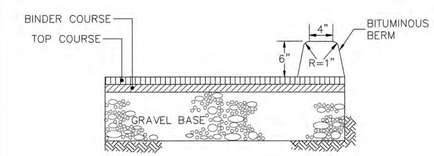
SILTSACK

(NOT TO SCALE)



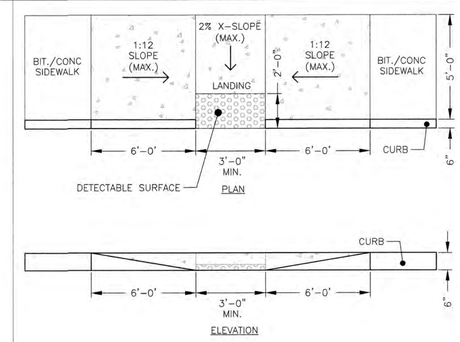
LIGHT POLE BASE

(NOT TO SCALE)



BITUMINOUS BERM

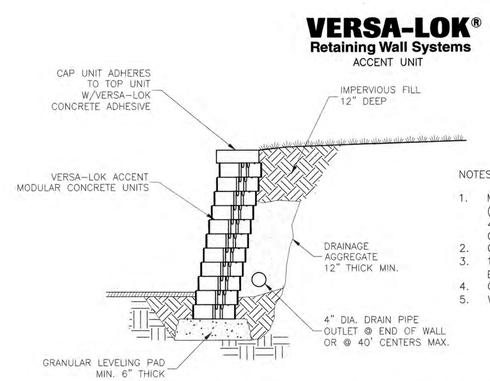
(NOT TO SCALE)



NOTE:
WHEELCHAIR RAMP SHALL COMPLY WITH ALL STATE AND FEDERAL RULES AND REGULATIONS.

WHEELCHAIR RAMP

NOT TO SCALE

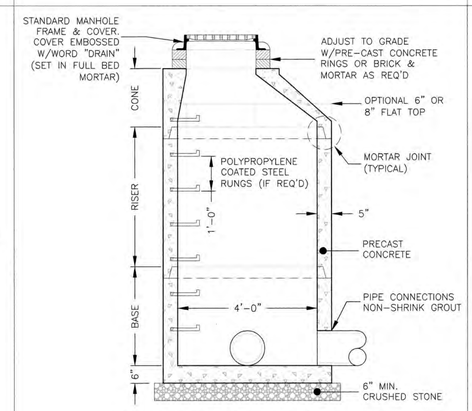


NOTES:

1. MAXIMUM HEIGHT NON REINFORCED WALLS IN SILTY CLAY (SOIL FRICTION ANGLE = 28') IS 10'8", 9'4", AND 5'5" FOR 45", 39", AND 24" BLOCKS. TALLER WALLS BUILT WITH GOE-GRID OR SET-BACK EFFECT.
2. CONCRETE: 3,000 PSI MINIMUM AFTER 28 DAYS.
3. 1" SETBACK PER ROW ON A STRAIGHT WALL (ANGLE OF BATTER 3.6°) CURVED WALL 1-2.7" PER ROW.
4. CORNER BLOCK CUT FOR USE ON LEFT AND RIGHT SIDE.
5. WALLS ABOVE 4' IN HEIGHT REQUIRE A BUILDING PERMIT.

TYPICAL SECTION-UNREINFORCED RETAINING WALL

(NOT TO SCALE)

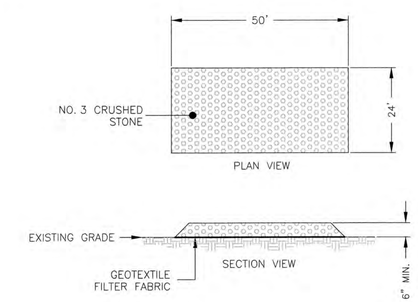


PRE-CAST DRAIN MANHOLE

NOT TO SCALE

NOTES:

1. CONCRETE: 4,000 PSI MINIMUM AFTER 28 DAYS.
2. REINFORCED STEEL CONFORMS TO LATEST ASTM A185 SPEC. 0.12 SQ. IN./LINEAL FT. AND 0.12 SQ. IN. (BOTH WAYS) BASE BOTTOM.
3. H-20 DESIGN LOADING PER AASHTO HS-20-44; ASTM C478 SPEC FOR "PRECAST REINFORCED CONCRETE MANHOLE SECTIONS."



TRACKING PAD

(NOT TO SCALE)

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CONSTRUCTION DETAILS PLAN
INDUSTRIAL PARK ROAD

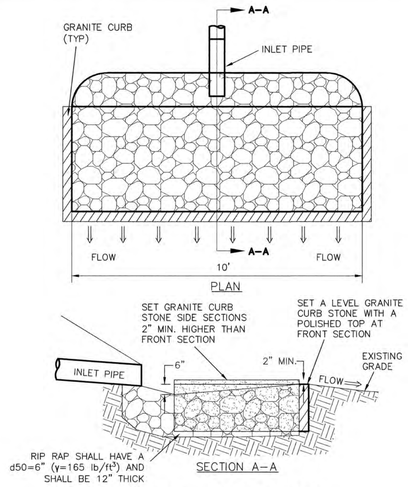
6 INDUSTRIAL PARK ROAD, MEDWAY, MA

SCALE: NONE

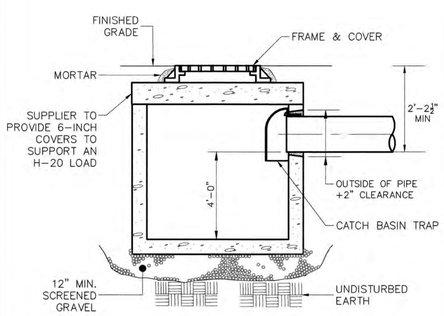
APRIL 1, 2021

DRAWING: C9.1

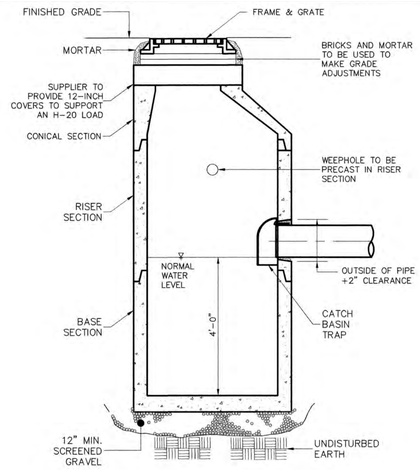
SHEET 10 OF 14



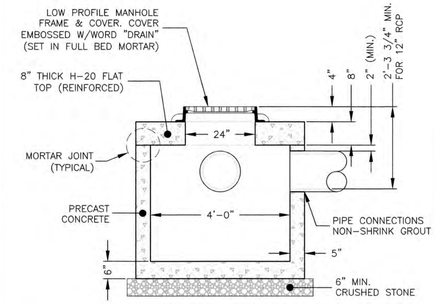
LEVEL SPREADER
(NOT TO SCALE)



PRECAST SHALLOW CATCH BASIN
(NOT TO SCALE)

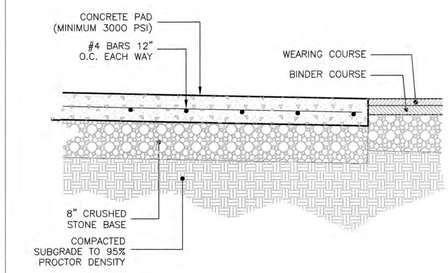


PRECAST CATCH BASIN
(NOT TO SCALE)



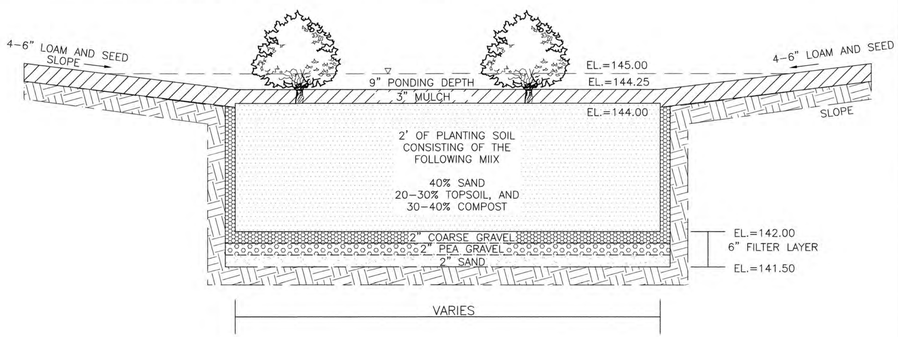
NOTES:
1. CONCRETE: 4,000 PSI MINIMUM AFTER 28 DAYS.
2. REINFORCED STEEL CONFORMS TO LATEST ASTM A185 SPEC. 0.12 SQ. IN./LINEAL FT. AND 0.12 SQ. IN. (BOTH WAYS) BASE BOTTOM.
3. H–20 DESIGN LOADING PER AASHTO HS–20–44; ASTM C478 SPEC FOR "PRECAST REINFORCED CONCRETE MANHOLE SECTIONS."

REDUCED COVER DRAIN MANHOLE
(NOT TO SCALE)

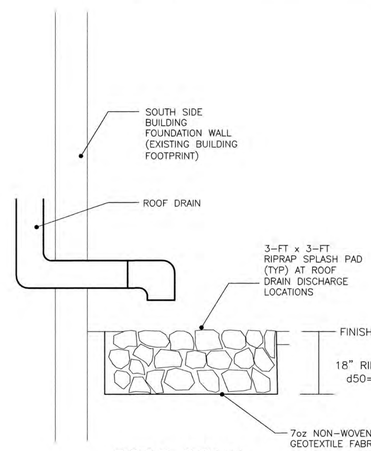


NOTE:
1. REFER ALSO TO MECHANICAL AND STRUCTURAL DRAWINGS.

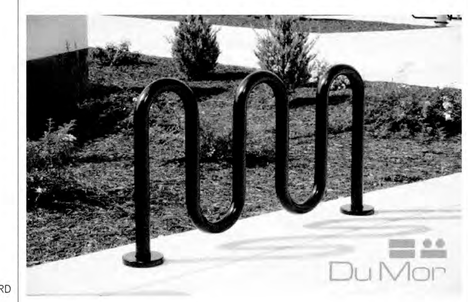
DUMPSTER PAD



RAIN GARDEN/BIORETENTION CELL
(NOT TO SCALE)

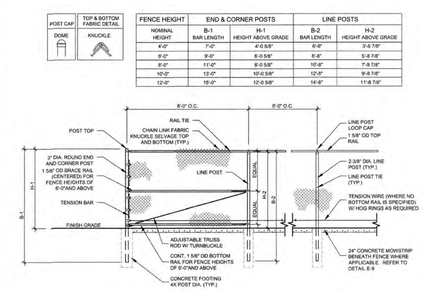


ROOF DRAIN SPLASH PAD
(NOT TO SCALE)



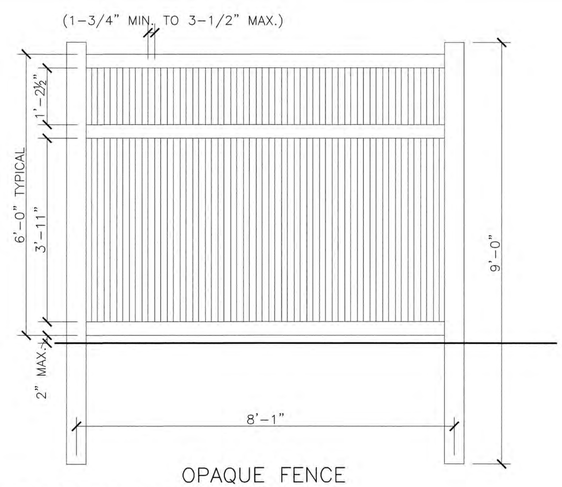
NOTE:
1. MODEL NUMBER 125–30, AS MANUFACTURED BY DUMOR, INC, OR APPROVED EQUAL.
2. 7 BIKE CAPACITY.

BIKE RACK
(NOT TO SCALE)



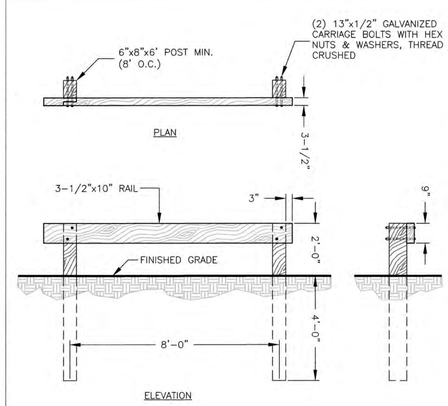
FENCE HEIGHT	END & CORNER POSTS		LINE POSTS	
NOMINAL HEIGHT	B-1 BAR LENGTH	H-1 HEIGHT ABOVE GRADE	B-2 BAR LENGTH	H-2 HEIGHT ABOVE GRADE
4'-0"	7'-0"	4'-0.58"	6'-8"	3'-8 7/8"
6'-0"	9'-0"	6'-0.58"	8'-8"	5'-8 7/8"
8'-0"	11'-0"	8'-0.58"	10'-8"	7'-8 7/8"
10'-0"	13'-0"	10'-0.58"	12'-8"	9'-8 7/8"
12'-0"	15'-0"	12'-0.58"	14'-8"	11'-8 7/8"

CHAIN LINK FENCE
(NOT TO SCALE)



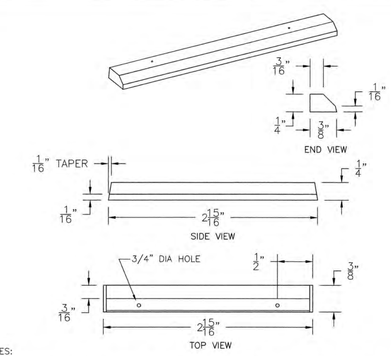
NOTE:
1. CONTRACTOR TO USE VINYL FENCING. COORDINATE COLOR SELECTION WITH OWNER.

OPAQUE FENCE
(NOT TO SCALE)



NOTE:
1. ALL SPLICES TO BE AT POSTS.
2. USE PRESSURE TREATED WOOD.

WOOD GUARDRAIL–WOOD POSTS
NOT TO SCALE



NOTES:
1. CONCRETE: 4,000 PSI MINIMUM AFTER 28 DAYS.
2. PINS AVAILABLE.
3. APPROXIMATE WEIGHT: 265 LBS.

ITEM NO.	B–BBSF	WT=270#

SHEA
OR APPROVED EQUAL

CURB STOP DETAIL
(NOT TO SCALE)

WILLIAMS & SPARAGES
ENGINEERING · LAND SURVEYING
189 NORTH MAIN STREET
SUITE 101
MIDDLEBORO, MA 01949
PHONE: (978) 539-8088
FAX: (978) 539-8200
WSENGINEERS.COM

Owner:
Medway Flower, LLC
990 Paradise Road
Swapscott, MA 01907

Applicant:
Phytopia, Inc.
25 Newbury Street
Peabody, MA 01960

Designed By: MEM
Drawn By: MEM
Reviewed By: CPS
Project Manager: CPS
Job File Number: MEDW-0017
Drawing File Folder: MEDW17

☒ Drawing Issued for Review
☐ Drawing Issued for Permit
☐ Drawing Issued for Construction

SEAL

COMMONWEALTH OF MASSACHUSETTS
CHRISTOPHER P. SPARAGES
CIVIL
No. 49724
(5/24/22)

12			
11			
10			
9			
8			
7			
6			
5	Town Comments / Phosphorus	5/13/2022	
4	Fire Department Comments	4/25/2022	
3	Town Comments / Peer Review	3/7/2022	
2	Town Comments / Peer Review	1/3/2022	
1	Town Comments / Peer Review	10/12/2021	

CONSTRUCTION DETAILS PLAN
INDUSTRIAL PARK ROAD
6 INDUSTRIAL PARK ROAD, MEDWAY, MA

SCALE: NONE

DRAWING: C9.2

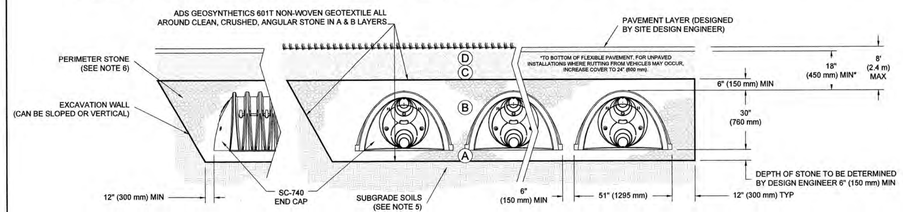
APRIL 1, 2021

SHEET 11 OF 14

ACCEPTABLE FILL MATERIALS: STORMTECH SC-740 CHAMBER SYSTEMS

	MATERIAL LOCATION	DESCRIPTION	AASHTO MATERIAL CLASSIFICATIONS	COMPACTION / DENSITY REQUIREMENT
D	**FINAL FILL:** FILL MATERIAL FOR LAYER 'D' STARTS FROM THE TOP OF THE 'C' LAYER TO THE BOTTOM OF FLEXIBLE PAVEMENT OR UNPAVED FINISHED GRADE ABOVE. NOTE THAT PAVEMENT SUBBASE MAY BE PART OF THE 'D' LAYER	ANY SOIL/ROCK MATERIALS, NATIVE SOILS, OR PER ENGINEER'S PLANS. CHECK PLANS FOR PAVEMENT SUBGRADE REQUIREMENTS.	N/A	PREPARE PER SITE DESIGN ENGINEER'S PLANS. PAVED INSTALLATIONS MAY HAVE STRINGENT MATERIAL AND PREPARATION REQUIREMENTS.
C	**INITIAL FILL:** FILL MATERIAL FOR LAYER 'C' STARTS FROM THE TOP OF THE EMBEDMENT STONE ('B' LAYER) TO 18" (450 mm) ABOVE THE TOP OF THE CHAMBER. NOTE THAT PAVEMENT SUBBASE MAY BE A PART OF THE 'C' LAYER.	GRANULAR WELL-GRADED SOIL/AGGREGATE MIXTURES, <35% FINES OR PROCESSED AGGREGATE. MOST PAVEMENT SUBBASE MATERIALS CAN BE USED IN LIEU OF THIS LAYER.	AASHTO M145[1] A-1, A-2-4, A-3 OR AASHTO M43[1] 3, 357, 4, 467, 5, 56, 57, 6, 67, 68, 7, 78, 8, 89, 9, 10	BEGIN COMPACTIONS AFTER 12" (300 mm) OF MATERIAL OVER THE CHAMBERS IS REACHED. COMPACT ADDITIONAL LAYERS IN 6" (150 mm) MAX LIFTS TO A MIN. 95% PROCTOR DENSITY FOR WELL GRADED MATERIAL AND 95% RELATIVE DENSITY FOR PROCESSED AGGREGATE MATERIALS. ROLLER GROSS VEHICLE WEIGHT NOT TO EXCEED 12,000 lbs (53 kN). DYNAMIC FORCE NOT TO EXCEED 20,000 lbs (89 kN).
B	**EMBEDMENT STONE:** FILL SURROUNDING THE CHAMBERS FROM THE FOUNDATION STONE ('A' LAYER) TO THE 'C' LAYER ABOVE.	CLEAN, CRUSHED, ANGULAR STONE, NOMINAL SIZE DISTRIBUTION BETWEEN 3/4-2 INCH (20-50 mm)	AASHTO M43[1] 3, 357, 4, 467, 5, 56, 57	NO COMPACTION REQUIRED.
A	**FOUNDATION STONE:** FILL BELOW CHAMBERS FROM THE SUBGRADE UP TO THE FOOT (BOTTOM) OF THE CHAMBER.	CLEAN, CRUSHED, ANGULAR STONE, NOMINAL SIZE DISTRIBUTION BETWEEN 3/4-2 INCH (20-50 mm)	AASHTO M43[1] 3, 357, 4, 467, 5, 56, 57	PLATE COMPACT OR ROLL TO ACHIEVE A FLAT SURFACE. [2 *]

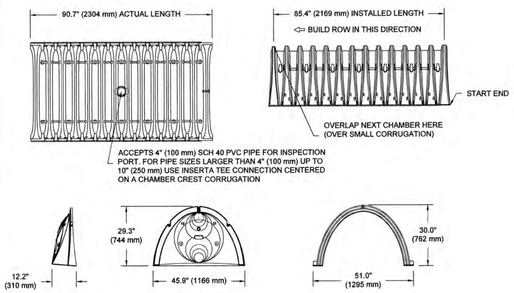
PLEASE NOTE:
1. THE LISTED AASHTO DESIGNATIONS ARE FOR GRADATIONS ONLY. THE STONE MUST ALSO BE CLEAN, CRUSHED, ANGULAR. FOR EXAMPLE, A SPECIFICATION FOR #4 STONE WOULD STATE: "CLEAN, CRUSHED, ANGULAR NO. 4 (AASHTO M43) STONE".
2. STORMTECH COMPACTION REQUIREMENTS ARE MET FOR 'A' LOCATION MATERIALS WHEN PLACED AND COMPACTED IN 6" (150 mm) (MAX) LIFTS USING TWO FULL COVERAGES WITH A VIBRATORY COMPACTOR.
3. WHERE INFILTRATION SURFACES MAY BE COMPROMISED BY COMPACTION, FOR STANDARD DESIGN LOAD CONDITIONS, A FLAT SURFACE MAY BE ACHIEVED BY RAKING OR DRAGGING WITHOUT COMPACTION EQUIPMENT. FOR SPECIAL LOAD DESIGNS, CONTACT STORMTECH FOR COMPACTION REQUIREMENTS.



NOTES:

1. SC-740 CHAMBERS SHALL CONFORM TO THE REQUIREMENTS OF ASTM F2418 "STANDARD SPECIFICATION FOR POLYPROPYLENE (PP) CORRUGATED WALL STORMWATER COLLECTION CHAMBERS", OR ASTM F2922 "STANDARD SPECIFICATION FOR POLYETHYLENE (PE) CORRUGATED WALL STORMWATER COLLECTION CHAMBERS".
2. SC-740 CHAMBERS SHALL BE DESIGNED IN ACCORDANCE WITH ASTM F2787 "STANDARD PRACTICE FOR STRUCTURAL DESIGN OF THERMOPLASTIC CORRUGATED WALL STORMWATER COLLECTION CHAMBERS".
3. "ACCEPTABLE FILL MATERIALS" TABLE ABOVE PROVIDES MATERIAL LOCATIONS, DESCRIPTIONS, GRADATIONS, AND COMPACTION REQUIREMENTS FOR FOUNDATION, EMBEDMENT, AND FILL MATERIALS.
4. THE "SITE DESIGN ENGINEER" REFERS TO THE ENGINEER RESPONSIBLE FOR THE DESIGN AND LAYOUT OF THE STORMTECH CHAMBERS FOR THIS PROJECT.
5. THE SITE DESIGN ENGINEER IS RESPONSIBLE FOR ASSESSING THE BEARING RESISTANCE (ALLOWABLE BEARING CAPACITY) OF THE SUBGRADE SOILS AND THE DEPTH OF FOUNDATION STONE WITH CONSIDERATION FOR THE RANGE OF EXPECTED SOIL MOISTURE CONDITIONS.
6. PERIMETER STONE MUST BE EXTENDED HORIZONTALLY TO THE EXCAVATION WALL FOR BOTH VERTICAL AND SLOPED EXCAVATION WALLS.
7. ONCE LAYER 'C' IS PLACED, ANY SOIL/MATERIAL CAN BE PLACED IN LAYER 'D' UP TO THE FINISHED GRADE. MOST PAVEMENT SUBBASE SOILS CAN BE USED TO REPLACE THE MATERIAL REQUIREMENTS OF LAYER 'C' OR 'D' AT THE SITE DESIGN ENGINEER'S DISCRETION.

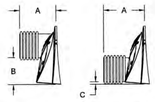
STORMTECH SC-740 CROSS SECTION
NOT TO SCALE



NOMINAL CHAMBER SPECIFICATIONS

SIZE (W X H X INSTALLED LENGTH)	51.0" X 30.0" X 85.4"	(1295 mm X 762 mm X 2169 mm)
CHAMBER STORAGE	45.9 CUBIC FEET	(1.30 m^3)
MINIMUM INSTALLED STORAGE*	74.9 CUBIC FEET	(2.12 m^3)
WEIGHT	75.0 lbs.	(33.6 kg)

*ASSUMES 6" (152 mm) STONE ABOVE, BELOW, AND BETWEEN CHAMBERS



STUBS AT BOTTOM OF END CAP FOR PART NUMBERS ENDING WITH "B"
STUBS AT TOP OF END CAP FOR PART NUMBERS ENDING WITH "T"

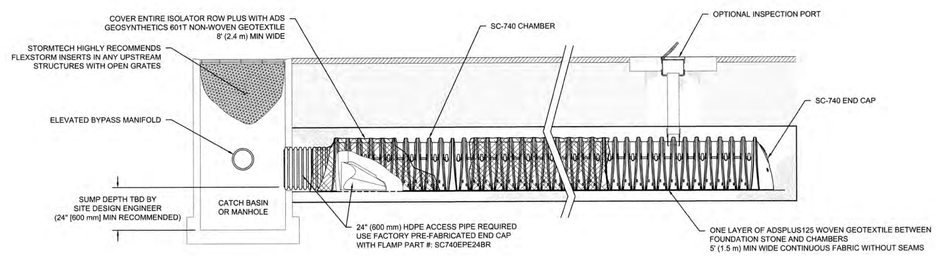
PART #	STUB	A	B	C
SC740EPE06T / SC740EPE06TPC	6" (150 mm)	10.9" (277 mm)	18.5" (470 mm)	—
SC740EPE06B / SC740EPE06BPC			—	0.5" (13 mm)
SC740EPE08T / SC740EPE08TPC	8" (200 mm)	12.2" (310 mm)	16.5" (419 mm)	—
SC740EPE08B / SC740EPE08BPC			—	0.6" (15 mm)
SC740EPE10T / SC740EPE10TPC	10" (250 mm)	13.4" (340 mm)	14.5" (368 mm)	—
SC740EPE10B / SC740EPE10BPC			—	0.7" (18 mm)
SC740EPE12T / SC740EPE12TPC	12" (300 mm)	14.7" (373 mm)	12.5" (318 mm)	—
SC740EPE12B / SC740EPE12BPC			—	1.2" (30 mm)
SC740EPE15T / SC740EPE15TPC	15" (375 mm)	18.4" (467 mm)	9.0" (229 mm)	—
SC740EPE15B / SC740EPE15BPC			—	1.3" (33 mm)
SC740EPE18T / SC740EPE18TPC	18" (450 mm)	19.7" (500 mm)	5.0" (127 mm)	—
SC740EPE18B / SC740EPE18BPC			—	1.6" (41 mm)
SC740EPE24B*	24" (600 mm)	18.5" (470 mm)	—	0.1" (3 mm)

ALL STUBS, EXCEPT FOR THE SC740EPE24B ARE PLACED AT BOTTOM OF END CAP SUCH THAT THE OUTSIDE DIAMETER OF THE STUB IS FLUSH WITH THE BOTTOM OF THE END CAP. FOR ADDITIONAL INFORMATION CONTACT STORMTECH AT 1-888-892-2694.

* FOR THE SC740EPE24B THE 24" (600 mm) STUB LIES BELOW THE BOTTOM OF THE END CAP APPROXIMATELY 1.75" (44 mm). BACKFILL MATERIAL SHOULD BE REMOVED FROM BELOW THE N-12 STUB SO THAT THE FITTING SITS LEVEL.

NOTE: ALL DIMENSIONS ARE NOMINAL

STORMTECH SC-740 TECHNICAL SPECIFICATIONS
NOT TO SCALE



STORMTECH SC-740 ISOLATER ROW
NOT TO SCALE

INSPECTION & MAINTENANCE

STEP 1) INSPECT ISOLATOR ROW PLUS FOR SEDIMENT
- A. INSPECTION PORTS (IF PRESENT)
  - A.1. REMOVE/OPEN LID ON NYLOPLAST INLINE DRAIN
  - A.2. REMOVE AND CLEAN FLEXSTORM FILTER IF INSTALLED
  - A.3. USING A FLASHLIGHT AND STADIA ROD, MEASURE DEPTH OF SEDIMENT AND RECORD ON MAINTENANCE LOG
  - A.4. LOWER A CAMERA INTO ISOLATOR ROW PLUS FOR VISUAL INSPECTION OF SEDIMENT LEVELS (OPTIONAL)
  - A.5. IF SEDIMENT IS AT, OR ABOVE, 3" (80 mm) PROCEED TO STEP 2. IF NOT, PROCEED TO STEP 3.
- B. ALL ISOLATOR PLUS ROWS
  - B.1. REMOVE COVER FROM STRUCTURE AT UPSTREAM END OF ISOLATOR ROW PLUS
  - B.2. USING A FLASHLIGHT, INSPECT DOWN THE ISOLATOR ROW PLUS THROUGH OUTLET PIPE
    - i) MIRRORS ON POLES OR CAMERAS MAY BE USED TO AVOID A CONFINED SPACE ENTRY
    - ii) FOLLOW OSHA REGULATIONS FOR CONFINED SPACE ENTRY IF ENTERING MANHOLE
  - B.3. IF SEDIMENT IS AT, OR ABOVE, 3" (80 mm) PROCEED TO STEP 2. IF NOT, PROCEED TO STEP 3.

STEP 2) CLEAN OUT ISOLATOR ROW PLUS USING THE JETVAC PROCESS
- A. A FIXED CULVERT CLEANING NOZZLE WITH REAR FACING SPREAD OF 45" (1.1 m) OR MORE IS PREFERRED
- B. APPLY MULTIPLE PASSES OF JETVAC UNTIL BACKFLUSH WATER IS CLEAN
- C. VACUUM STRUCTURE SUMP AS REQUIRED

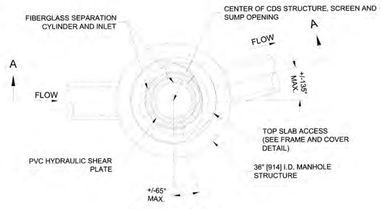
STEP 3) REPLACE ALL COVERS, GRATES, FILTERS, AND LIDS; RECORD OBSERVATIONS AND ACTIONS.

STEP 4) INSPECT AND CLEAN BASINS AND MANHOLES UPSTREAM OF THE STORMTECH SYSTEM.

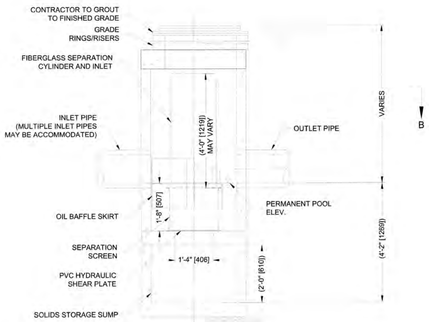
NOTES

1. INSPECT EVERY 6 MONTHS DURING THE FIRST YEAR OF OPERATION. ADJUST THE INSPECTION INTERVAL BASED ON PREVIOUS OBSERVATIONS OF SEDIMENT ACCUMULATION AND HIGH WATER ELEVATIONS.
2. CONDUCT JETTING AND VACTORING ANNUALLY OR WHEN INSPECTION SHOWS THAT MAINTENANCE IS NECESSARY.

U:\0_CONTECH-CPI CDM\ROOT\STORMWATER\JURISDICTION\SUMMA_SDE DESIGN TOOLS_STANDARD DETAILS\CDS1515-3-C-DTL.DWG 8/5/2016 4:18 PM



PLAN VIEW B-B
N.T.S.



ELEVATION A-A
N.T.S.

CDS

THIS PRODUCT MAY BE PROTECTED BY ONE OR MORE OF THE FOLLOWING: U.S. PATENT NOS. 5,788,847; 5,849,174; 6,027,642; 6,082,390; 6,176,392 B1; 6,312,601; 6,315,127; 6,405,496; 6,516,954; 6,605,195; 6,723,233 AND OTHER PATENTS PENDING. SEE WWW.CDSTECH.COM FOR ADDITIONAL INFORMATION.

CDS1515-3-C DESIGN NOTES

CDS1515-3-C RATED TREATMENT CAPACITY IS 1.0 CFS, OR PER LOCAL REGULATIONS.

THE STANDARD CDS1515-3-C CONFIGURATION IS SHOWN.

FRAME AND COVER
(DIAMETER VARIES)
N.T.S.

SITE SPECIFIC DATA REQUIREMENTS

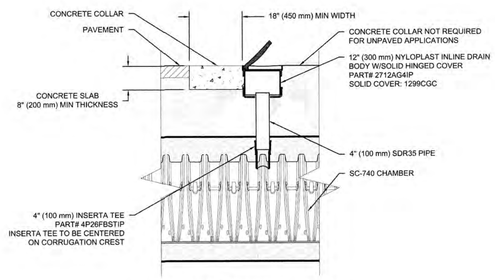
STRUCTURE ID			
WATER QUALITY FLOW RATE (CFS OR L/s)			*
PEAK FLOW RATE (CFS OR L/s)			*
RETURN PERIOD OF PEAK FLOW (YRS)			*
SCREEN APERTURE (2400 OR 4700)			*
PIPE DATA:	I.E.	MATERIAL	DIAMETER
INLET PIPE 1	*	*	*
INLET PIPE 2	*	*	*
OUTLET PIPE	*	*	*
RIM ELEVATION			*
ANTI-FLOTATION BALLAST		WIDTH	HEIGHT
		*	*
NOTES/SPECIAL REQUIREMENTS:			
* PER ENGINEER OF RECORD			

GENERAL NOTES
1. CONTECH TO PROVIDE ALL MATERIALS UNLESS NOTED OTHERWISE.
2. FOR SITE SPECIFIC DRAWINGS WITH DETAILED STRUCTURE DIMENSIONS AND WEIGHT, PLEASE CONTACT YOUR CONTECH ENGINEERED SOLUTIONS LLC REPRESENTATIVE. www.ContechES.com
3. CDS WATER QUALITY STRUCTURE SHALL BE IN ACCORDANCE WITH ALL DESIGN DATA AND INFORMATION CONTAINED IN THIS DRAWING. CONTRACTOR TO CONFIRM STRUCTURE MEETS REQUIREMENTS OF PROJECT.
4. STRUCTURE SHALL MEET AASHTO HS20 LOAD RATING, ASSUMING EARTH COVER OF 0' - 2', AND GROUNDWATER ELEVATION AT, OR BELOW, THE OUTLET PIPE INVERT ELEVATION. ENGINEER OF RECORD TO CONFIRM ACTUAL GROUNDWATER ELEVATION. CASTINGS SHALL MEET AASHTO M306 AND BE CAST WITH THE CONTECH LOGO.
5. IF REQUIRED, PVC HYDRAULIC SHEAR PLATE IS PLACED ON SHELF AT BOTTOM OF SCREEN CYLINDER. REMOVE AND REPLACE AS NECESSARY DURING MAINTENANCE CLEANING.
6. CDS STRUCTURE SHALL BE PRECAST CONCRETE CONFORMING TO ASTM C-478 AND AASHTO LOAD FACTOR DESIGN METHOD.

INSTALLATION NOTES
- A. ANY SUB-BASE, BACKFILL DEPTH, AND/OR ANTI-FLOTATION PROVISIONS ARE SITE-SPECIFIC DESIGN CONSIDERATIONS AND SHALL BE SPECIFIED BY ENGINEER OF RECORD.
- B. CONTRACTOR TO PROVIDE EQUIPMENT WITH SUFFICIENT LIFTING AND REACH CAPACITY TO LIFT AND SET THE CDS MANHOLE STRUCTURE.
- C. CONTRACTOR TO INSTALL JOINT SEALANT BETWEEN ALL STRUCTURE SECTIONS AND ASSEMBLE STRUCTURE.
- D. CONTRACTOR TO PROVIDE, INSTALL, AND GROUT INLET AND OUTLET PIPE(S). MATCH PIPE INVERTS WITH ELEVATIONS SHOWN. ALL PIPE CENTERLINES TO MATCH PIPE OPENING CENTERLINES.
- E. CONTRACTOR TO TAKE APPROPRIATE MEASURES TO ASSURE UNIT IS WATER TIGHT, HOLDING WATER TO FLOWLINE INVERT MINIMUM. IT IS SUGGESTED THAT ALL JOINTS BELOW PIPE INVERTS ARE GROUTED.

CONTECH ENGINEERED SOLUTIONS LLC
www.contechES.com
9025 Centre Pointe Dr., Suite 400, West Chester, OH 45069
800-338-1122 513-645-7000 513-645-7993 FAX

CDS1515-3-C
ONLINE CDS
STANDARD DETAIL



STORMTECH SC-740 INSPECTION PORT
NOT TO SCALE

WILLIAMS & SPARAGES
ENGINEERING CONSULTANTS
199 NORTH MAIN STREET
SUITE 101
MEDFIELD, MA 02052
PHONE: (978) 539-8588
FAX: (978) 539-8200
WSENGINEERS.COM

Owner:
Medway Flower, LLC
990 Paradise Road
Swapscott, MA 01907

Applicant:
Phytopia, Inc.
25 Newbury Street
Peabody, MA 01960

Designed By: MEM
Drawn By: MEM
Reviewed By: CPS
Project Manager: CPS
Job File Number: MEDW-0017
Drawing File Folder: MEDW17

☒ Drawing Issued for Review
☐ Drawing Issued for Permit
☐ Drawing Issued for Construction

SEAL

COMMONWEALTH OF MASSACHUSETTS CHRISTOPHER P. SPARAGES No. 40774 PROFESSIONAL ENGINEER
5/24/22

6			
5	Town Comments / Phosphorus	5/13/2022	11
4	Fire Department Comments	4/25/2022	10
3	Town Comments / Peer Review	3/7/2022	9
2	Town Comments / Peer Review	1/3/2022	8
1	Town Comments / Peer Review	10/12/2021	7

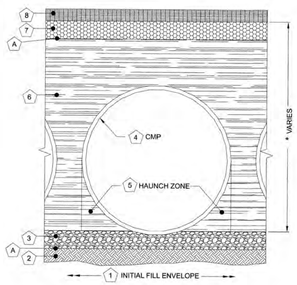
CONSTRUCTION DETAILS PLAN
INDUSTRIAL PARK ROAD
6 INDUSTRIAL PARK ROAD, MEDWAY, MA

SCALE: NONE

APRIL 1, 2021

DRAWING: C9.3

SHEET 12 OF 14



	Material Location	Description	Material Designation	Designation
8	Rigid or Flexible Pavement (if applicable)			
7	Road Base (if applicable)			
A	Geotextile Layer	Non-Woven Geotextile	CONTECH C-40 or C-45	Engineer Decision for consideration to prevent soil migration into varying soil types
6	Backfill	Well graded granular material which may contain small amounts of silt or clay	AASHTO M 145- A-1, A-2, A-3	Placed in 8" +/- loose lifts and compacted to 90% Standard Proctor Per AASHTO T 99
3	Bedding Stone	Well graded granular bedding material w/maximum particle size of 3"	AASHTO M43 - 3,357,4,467, 5, 56, 57	Engineer to determine if bedding is required. Pipe may be placed on the trench bottom of a relatively loose, native suitable well graded & granular material. For Arch pipes it is recommended to be shaped to a relatively flat bottom or fine-grade the foundation to a slight v-shape. Unsuitable material should be over-excavated and re-placed with a 4"-6" layer of well graded & granular stone per the material designation. See AASHTO 26.3.8.1 / 26.5.3 Bedding info.
A	Geotextile Layer	Non-Woven Geotextile	CONTECH C-40 or C-45	Engineer Decision for consideration to prevent soil migration into varying soil types

* *Note: Backfill using controlled low-strength material (CLSM, "flash fill" or "flowable fill") when the spacing between the pipes will not allow for placement and adequate compaction of the backfill.*

(1) MINIMUM WIDTH DEPENDS ON SITE CONDITIONS AND ENGINEERING JUDGEMENT

FOUNDATION/BEDDING PREPARATION

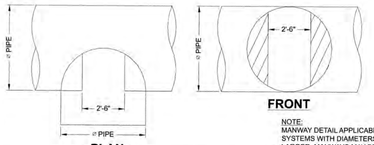
(2) PRIOR TO PLACING THE BEDDING, THE FOUNDATION MUST BE CONSTRUCTED TO A UNIFORM AND STABLE GRADE. IN THE EVENT THAT UNSUITABLE FOUNDATION MATERIALS ARE ENCOUNTERED DURING EXCAVATION, THEY SHALL BE REMOVED AND BROUGHT BACK TO THE GRADE WITH A FILL MATERIAL AS APPROVED BY THE ENGINEER.

(5) HAUNCH ZONE MATERIAL SHALL BE PLACED AND UNIFORMALLY COMPACTED WITHOUT SOFT SPOTS.

BACKFILL

WHEN PLACING THE FIRST LIFTS OF BACKFILL IT IS IMPORTANT TO MAKE SURE THAT THE BACKFILL IS PROPERLY COMPACTED UNDER AND AROUND THE PIPE HAUNCHES. BACKFILL SHALL BE PLACED SUCH THAT THERE IS NO MORE THAN A TWO LIFT (16") DIFFERENTIAL BETWEEN ANY OF THE PIPES AT ANY TIME DURING THE BACKFILL PROCESS. THE BACKFILL SHALL BE ADVANCED ALONG THE LENGTH OF THE DETENTION SYSTEM AT THE SAME RATE TO AVOID DIFFERENTIAL LOADING ON THE PIPE.

OTHER ALTERNATE BACKFILL MATERIAL MAY BE ALLOWED DEPENDING ON SITE SPECIFIC CONDITIONS, AS APPROVED BY SITE ENGINEER.



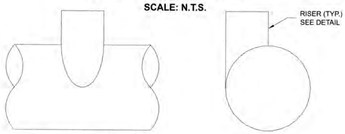
PLAN

TYPICAL MANWAY DETAIL

SCALE: N.T.S.

FRONT

NOTE:
MANWAY DETAIL APPLICABLE FOR CMP SYSTEMS WITH DIAMETERS 48" AND LARGER. MANWAYS MAY BE REQUIRED ON SMALLER SYSTEMS DEPENDING ON ACTUAL SITE SPECIFIC CONDITIONS.



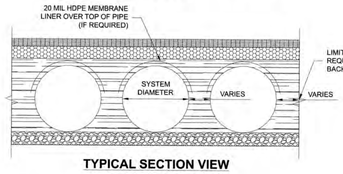
ELEVATION

TYPICAL RISER DETAIL

SCALE: N.T.S.

END

NOTE:
LADDERS ARE OPTIONAL AND ARE NOT REQUIRED FOR ALL SYSTEMS.



TYPICAL SECTION VIEW

LINER OVER ROWS
SCALE: N.T.S.

NOTE: IF SALTING AGENTS FOR SNOW AND ICE REMOVAL ARE USED ON OR NEAR THE PROJECT, AN HDPE MEMBRANE LINER IS RECOMMENDED WITH THE SYSTEM. THE IMPERMEABLE LINER IS INTENDED TO HELP PROTECT THE SYSTEM FROM THE POTENTIAL ADVERSE EFFECTS THAT MAY RESULT FROM A CHANGE IN THE SURROUNDING ENVIRONMENT OVER A PERIOD OF TIME. PLEASE REFER TO THE CORRUGATED METAL PIPE DETENTION DESIGN GUIDE FOR ADDITIONAL INFORMATION.

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DATE	REVISION DESCRIPTION	BY

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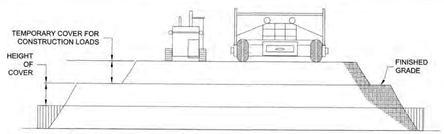
9025 Centre Pointe Dr., Suite 400, West Chester, OH 45069
800-338-1122 513-645-7000 513-645-7993 FAX

CONTECH CMP DETENTION SYSTEMS

CONTECH DYODS DRAWING

DYO4174 MEDW-0017
30" CMP Detention -
DETENTION SYSTEM

PROJECT No.: 2899	SEQ. No.: 4174	DATE: 1/3/2022
DESIGNED: DYO	DRAWN: DYO	
CHECKED: DYO	APPROVED: DYO	
SHEET NO.: D2		



CONSTRUCTION LOADS

FOR TEMPORARY CONSTRUCTION VEHICLE LOADS, AN EXTRA AMOUNT OF COMPACTED COVER MAY BE REQUIRED OVER THE TOP OF THE PIPE. THE HEIGHT-OF-COVER SHALL MEET THE MINIMUM REQUIREMENTS SHOWN IN THE TABLE BELOW. THE USE OF HEAVY CONSTRUCTION EQUIPMENT NECESSITATES GREATER PROTECTION FOR THE PIPE THAN FINISHED GRADE COVER MINIMUMS FOR NORMAL HIGHWAY TRAFFIC.

PIPE SPAN, INCHES	AXLE LOADS (kips)			
	18-50	50-75	75-110	110-150
	MINIMUM COVER (FT)			
12-42	2.0	2.5	3.0	3.0
48-72	3.0	3.0	3.5	4.0
78-120	3.0	3.5	4.0	4.0
126-144	3.5	4.0	4.5	4.5

*MINIMUM COVER MAY VARY, DEPENDING ON LOCAL CONDITIONS. THE CONTRACTOR MUST PROVIDE THE ADDITIONAL COVER REQUIRED TO AVOID DAMAGE TO THE PIPE. MINIMUM COVER IS MEASURED FROM THE TOP OF THE PIPE TO THE TOP OF THE MAINTAINED CONSTRUCTION ROADWAY SURFACE.

CONSTRUCTION LOADING DIAGRAM

SCALE: N.T.S.

SPECIFICATION FOR DESIGNED DETENTION SYSTEM:

SCOPE
THIS SPECIFICATION COVERS THE MANUFACTURE AND INSTALLATION OF THE DESIGNED DETENTION SYSTEM DETAILED IN THE PROJECT PLANS.

MATERIAL
THE MATERIAL SHALL CONFORM TO THE APPLICABLE REQUIREMENTS LISTED BELOW:

ALUMINIZED TYPE 2 STEEL COILS SHALL CONFORM TO THE APPLICABLE REQUIREMENTS OF AASHTO M-274 OR ASTM A-92.

THE GALVANIZED STEEL COILS SHALL CONFORM TO THE APPLICABLE REQUIREMENTS OF AASHTO M-218 OR ASTM A-929.

THE POLYMER COATED STEEL COILS SHALL CONFORM TO THE APPLICABLE REQUIREMENTS OF AASHTO M-246 OR ASTM A-742.

THE ALUMINUM COILS SHALL CONFORM TO THE APPLICABLE REQUIREMENTS OF AASHTO M-197 OR ASTM B-744.

CONSTRUCTION LOADS
CONSTRUCTION LOADS MAY BE HIGHER THAN FINAL LOADS. FOLLOW THE MANUFACTURER'S OR NCSPA GUIDELINES.

NOTE:
THESE DRAWINGS ARE FOR CONCEPTUAL PURPOSES AND DO NOT REFLECT ANY LOCAL PREFERENCES OR REGULATIONS. PLEASE CONTACT YOUR LOCAL CONTECH REP FOR MODIFICATIONS.

PIPE
THE PIPE SHALL BE MANUFACTURED IN ACCORDANCE TO THE APPLICABLE REQUIREMENTS LISTED BELOW:

ALUMINIZED TYPE 2: AASHTO M-36 OR ASTM A-760

GALVANIZED: AASHTO M-36 OR ASTM A-760

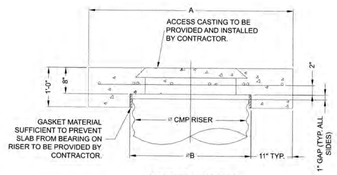
POLYMER COATED: AASHTO M-245 OR ASTM A-762

ALUMINUM: AASHTO M-196 OR ASTM B-745

HANDLING AND ASSEMBLY
SHALL BE IN ACCORDANCE WITH NCSPS (NATIONAL CORRUGATED STEEL PIPE ASSOCIATION) FOR ALUMINIZED TYPE 2, GALVANIZED OR POLYMER COATED STEEL. SHALL BE IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS FOR ALUMINUM PIPE.

INSTALLATION
SHALL BE IN ACCORDANCE WITH AASHTO STANDARD SPECIFICATIONS FOR HIGHWAY BRIDGES, SECTION 26, DIVISION II DIVISION I OR ASTM A-798 (FOR ALUMINIZED TYPE 2, GALVANIZED OR POLYMER COATED STEEL) OR ASTM B-788 (FOR ALUMINUM PIPE) AND IN CONFORMANCE WITH THE PROJECT PLANS AND SPECIFICATIONS. IF THERE ARE ANY INCONSISTENCIES OR CONFLICTS THE CONTRACTOR SHOULD DISCUSS AND RESOLVE WITH THE SITE ENGINEER.

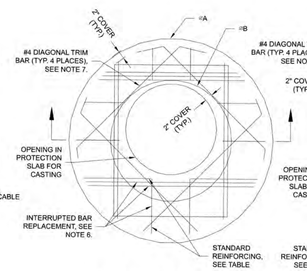
IT IS ALWAYS THE RESPONSIBILITY OF THE CONTRACTOR TO FOLLOW OSHA GUIDELINES FOR SAFE PRACTICES.



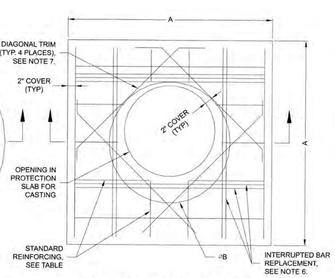
SECTION VIEW

REINFORCING TABLE				
⌀ CMP RISER	A	⌀ B	REINFORCING	**BEARING PRESSURE (PSF)
24"	⌀ 4' 4'X4'	26"	#5 @ 12" OCEW #5 @ 12" OCEW	2,410 1,780
30"	⌀ 4'-6" 4'-6" X 4'-6"	32"	#5 @ 12" OCEW #5 @ 12" OCEW	2,120 1,530
36"	⌀ 5' 5' X 5'	38"	#5 @ 10" OCEW #5 @ 10" OCEW	1,890 1,350
42"	⌀ 5'-6" 5'-6" X 5'-6"	44"	#5 @ 10" OCEW #5 @ 9" OCEW	1,720 1,210
48"	⌀ 6' 6' X 6'	50"	#5 @ 9" OCEW #5 @ 8" OCEW	1,600 1,100

** ASSUMED SOIL BEARING CAPACITY



ROUND OPTION PLAN VIEW



SQUARE OPTION PLAN VIEW

NOTES:

1. DESIGN IN ACCORDANCE WITH AASHTO, 17th EDITION.
2. DESIGN LOAD HS25.
3. EARTH COVER = 1' MAX.
4. CONCRETE STRENGTH = 3,500 psi
5. REINFORCING STEEL = ASTM A615, GRADE 60.
6. PROVIDE ADDITIONAL REINFORCING AROUND OPENINGS EQUAL TO THE BARS INTERRUPTED, HALF EACH SIDE. ADDITIONAL BARS TO BE IN THE SAME PLANE.
7. TRIM OPENING WITH DIAGONAL #4 BARS, EXTEND BARS A MINIMUM OF 12" BEYOND OPENING, BEND BARS AS REQUIRED TO MAINTAIN BAR COVER.
8. PROTECTION SLAB AND ALL MATERIALS TO BE PROVIDED AND INSTALLED BY CONTRACTOR.
9. DETAIL DESIGN BY DELTA ENGINEERING, BINGHAMTON, NY.

MANHOLE CAP DETAIL

SCALE: N.T.S.

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CONTECH CMP DETENTION SYSTEMS

CONTECH DYODS DRAWING

DYO4174 MEDW-0017
30" CMP Detention -
DETENTION SYSTEM

PROJECT No.: 2899	SEQ. No.: 4174	DATE: 1/3/2022
DESIGNED: DYO	DRAWN: DYO	
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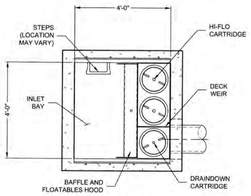
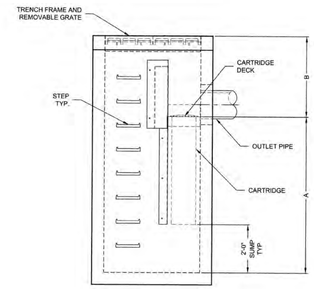


PLAN VIEW
(TOP SLAB NOT SHOWN FOR CLARITY)



ELEVATION VIEW

Jellyfish Filter
THIS PRODUCT MAY BE PROTECTED BY ONE OR MORE OF THE FOLLOWING: U.S. PATENT NO. 8,287,729; 8,231,245; US 8,123,935; OTHER INTERNATIONAL PATENTS PENDING

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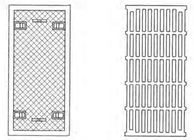
JELLYFISH JFSI0404
STANDARD DETAIL
SURFACE INLET CONFIGURATION

JELLYFISH DESIGN NOTES

JELLYFISH TREATMENT CAPACITY IS A FUNCTION OF THE CARTRIDGE LENGTH AND THE NUMBER OF CARTRIDGES. THE STANDARD SURFACE INLET STYLE WITH TRENCH GRATE AND COVER IS SHOWN. ALTERNATE CURB INLET OR PIPE INLET OPTIONS ARE AVAILABLE. PEAK CONVEYANCE CAPACITY TO BE DETERMINED BY ENGINEER OF RECORD.

CARTRIDGE SELECTION

CARTRIDGE LENGTH	54"	40"	27"	15"
OUTLET INVERT TO STRUCTURE INVERT (A)	6'-6"	5'-4"	4'-3"	3'-3"
FLOW RATE HIGH-FLO / DRAINDOWN (CFS) (PER CART)	0.178 / 0.089	0.133 / 0.067	0.089 / 0.045	0.049 / 0.025
MAX. TREATMENT (CFS)	0.45	0.33	0.22	0.12
OUTLET INVERT TO RIM (MIN) (B)	3'-4"	3'-4"	3'-4"	3'-4"



24" TRENCH COVER
N.T.S.

24" TRENCH GRATE
N.T.S.

SITE SPECIFIC DATA REQUIREMENTS

STRUCTURE ID	*
WATER QUALITY FLOW RATE (cfs)	*
PEAK FLOW RATE (cfs)	*
RETURN PERIOD OF PEAK FLOW (yrs)	*
# OF CARTRIDGES REQUIRED (HF / DD)	*
CARTRIDGE LENGTH	*

PIPE DATA:	I.E.	MAT'L	DIA	SLOPE %	HGL
INLET #1	*	*	*	*	*
INLET #2	*	*	*	*	*
OUTLET	*	*	*	*	*

SEE GENERAL NOTES 6-7 FOR INLET AND OUTLET HYDRAULIC AND SIZING REQUIREMENTS.

RIM ELEVATION	*

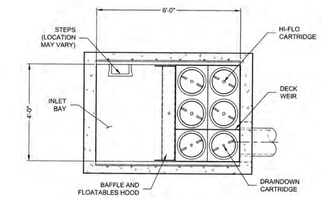
ANTI-FLOTATION BALLAST	WIDTH	HEIGHT
	*	*

NOTES/SPECIAL REQUIREMENTS:

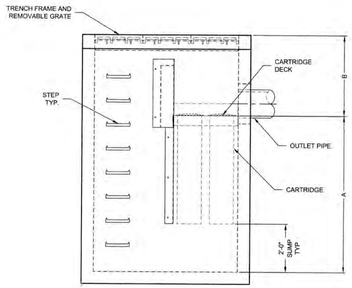
* PER ENGINEER OF RECORD

GENERAL NOTES:
1. CONTECH TO PROVIDE ALL MATERIALS UNLESS NOTED OTHERWISE.
2. FOR SITE SPECIFIC DRAWINGS WITH DETAILED STRUCTURE DIMENSIONS AND WEIGHT, PLEASE CONTACT YOUR CONTECH ENGINEERED SOLUTIONS REPRESENTATIVE. www.ContechES.com
3. JELLYFISH WATER QUALITY STRUCTURE SHALL BE IN ACCORDANCE WITH ALL DESIGN DATA AND INFORMATION CONTAINED IN THIS DRAWING. CONTRACTOR TO CONFIRM STRUCTURE MEETS REQUIREMENTS OF PROJECT.
4. STRUCTURE SHALL MEET AASHTO HS-20 OR PER APPROVING JURISDICTION REQUIREMENTS, WHICHEVER IS MORE STRINGENT, ASSUMING EARTH COVER OF 0', AND GROUNDWATER ELEVATION AT, OR BELOW, THE OUTLET PIPE INVERT ELEVATION. ENGINEER OF RECORD TO CONFIRM ACTUAL GROUNDWATER ELEVATION. CASTINGS SHALL MEET AASHTO M306 LOAD RATING AND BE CAST WITH THE CONTECH LOGO.
5. STRUCTURE SHALL BE PRECAST CONCRETE CONFORMING TO ASTM C-857, ASTM C-858, AND AASHTO LOAD FACTOR DESIGN METHOD.
6. OUTLET PIPE INVERT IS EQUAL TO THE CARTRIDGE DECK ELEVATION.
7. THE OUTLET PIPE DIAMETER FOR NEW INSTALLATIONS IS RECOMMENDED TO BE ONE PIPE SIZE LARGER THAN THE INLET PIPE (WHERE APPLICABLE) AT EQUAL OR GREATER SLOPE.
8. NO PRODUCT SUBSTITUTIONS SHALL BE ACCEPTED UNLESS SUBMITTED 10 DAYS PRIOR TO PROJECT BID DATE, OR AS DIRECTED BY THE ENGINEER OF RECORD.

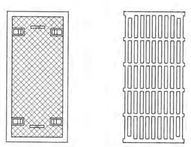
INSTALLATION NOTES
A. ANY SUB-BASE, BACKFILL DEPTH, AND/OR ANTI-FLOTATION PROVISIONS ARE SITE-SPECIFIC DESIGN CONSIDERATIONS AND SHALL BE SPECIFIED BY ENGINEER OF RECORD.
B. CONTRACTOR TO PROVIDE EQUIPMENT WITH SUFFICIENT LIFTING AND REACH CAPACITY TO LIFT AND SET THE STRUCTURE.
C. CONTRACTOR WILL INSTALL AND LEVEL THE STRUCTURE, SEALING THE JOINTS, LINE ENTRY AND EXIT POINTS (NON-SHRINK GROUT WITH APPROVED WATERSTOP OR FLEXIBLE BOOT).
D. CARTRIDGE INSTALLATION, BY CONTECH, SHALL OCCUR ONLY AFTER SITE HAS BEEN STABILIZED AND THE JELLYFISH UNIT IS CLEAN AND FREE OF DEBRIS. CONTACT CONTECH TO COORDINATE CARTRIDGE INSTALLATION WITH SITE STABILIZATION.



PLAN VIEW
(TOP SLAB NOT SHOWN FOR CLARITY)



ELEVATION VIEW



24" TRENCH COVER
N.T.S.

24" TRENCH GRATE
N.T.S.

SITE SPECIFIC DATA REQUIREMENTS

STRUCTURE ID	*
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PEAK FLOW RATE (cfs)	*
RETURN PERIOD OF PEAK FLOW (yrs)	*
# OF CARTRIDGES REQUIRED (HF / DD)	*
CARTRIDGE LENGTH	*

PIPE DATA:	I.E.	MAT'L	DIA	SLOPE %	HGL
INLET #1	*	*	*	*	*
INLET #2	*	*	*	*	*
OUTLET	*	*	*	*	*

SEE GENERAL NOTES 6-7 FOR INLET AND OUTLET HYDRAULIC AND SIZING REQUIREMENTS.

RIM ELEVATION	*

ANTI-FLOTATION BALLAST	WIDTH	HEIGHT
	*	*

NOTES/SPECIAL REQUIREMENTS:

* PER ENGINEER OF RECORD

GENERAL NOTES:
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Jellyfish Filter
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JELLYFISH JFSI0406
STANDARD DETAIL
SURFACE INLET CONFIGURATION

WILLIAMS & SPARAGES
ENGINEERING PLANNING ENVIRONMENTAL & LAND SURVEYORS
1639 WORCESTER ROAD, 3 TRIBUNE STREET
SUITE 101
FRAMINGHAM, MA 01701
PHONE: (978) 539-8000
FAX: (978) 539-8208
WSENGINEERS.COM

Owner:
Medway Flower, LLC
990 Paradise Road
Swapscott, MA 01907

Applicant:
Phytopia, Inc.
25 Newbury Street
Peabody, MA 01960

Designed By: MEM
Drawn By: MEM
Reviewed By: CPS
Project Manager: CPS
Job File Number: MEDW-0017
Drawing File Folder: MEDW17

☒ Drawing Issued for Review
☐ Drawing Issued for Permit
☐ Drawing Issued for Construction

SEAL

COMMONWEALTH OF MASSACHUSETTS
CHRIST P. SPARAGES
CIVIL
No. 34724
REGISTERED PROFESSIONAL ENGINEER
(5/24/22)

6	Town Comments / Phosphorus	5/13/2022	11
5	Fire Department Comments	4/25/2022	10
4	Town Comments / Peer Review	3/7/2022	9
3	Town Comments / Peer Review	1/3/2022	8
2	Town Comments / Peer Review	10/12/2021	7
1			

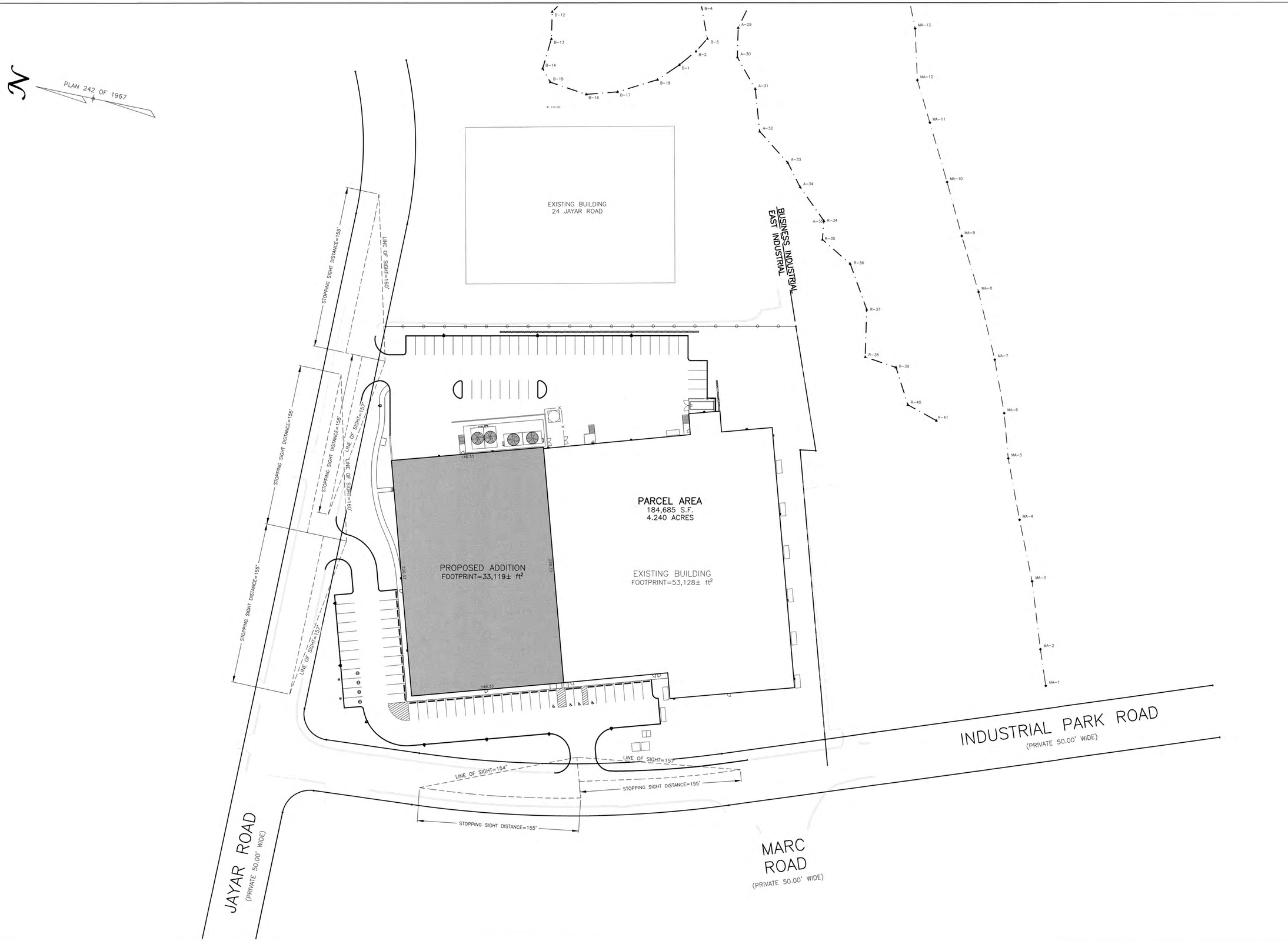
CONSTRUCTION DETAILS PLAN
INDUSTRIAL PARK ROAD
6 INDUSTRIAL PARK ROAD, MEDWAY, MA

SCALE: NONE

DRAWING: C9.4

SHEET 13 OF 14

APRIL 1, 2021



WILLIAMS & SPARAGES
CIVIL ENGINEERS • LAND SURVEYORS
189 NORTH MAIN STREET
SUITE 101
MIDDLETON, MA 01949
PHONE: (978) 539-8200
FAX: (978) 539-8088
WSENGINEERS.COM

Owner:
Medway Flower, LLC
990 Paradise Road
Swapscott, MA 01907

Applicant:
Phytopia, Inc.
25 Newbury Street
Peabody, MA 01960

Designed By: MEM
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☐ Drawing Issued for Permit
☐ Drawing Issued for Construction

SEAL

COMMONWEALTH OF MASSACHUSETTS
CHRIST P. SPARAGES
No. 40174
PROFESSIONAL ENGINEER
(5/24/22)

STOPPING SIGHT DISTANCE PLAN
INDUSTRIAL PARK ROAD
6 INDUSTRIAL PARK ROAD, MEDWAY, MA

12		
11	Town Comments / Phosphorus	5/13/2022
10	Fire Department Comments	4/25/2022
9	Town Comments / Peer Review	3/7/2022
8	Town Comments / Peer Review	1/3/2022
7	Town Comments / Peer Review	10/12/2021
6		
5	Town Comments / Phosphorus	5/13/2022
4	Fire Department Comments	4/25/2022
3	Town Comments / Peer Review	3/7/2022
2	Town Comments / Peer Review	1/3/2022
1	Town Comments / Peer Review	10/12/2021

0' 15' 30' 60'
SCALE: 1"=30'

OCTOBER 1, 2021

DRAWING: C10.1

SHEET 14 OF 14

July 12, 2022, 2022
Medway Planning & Economic Development Board Meeting

288 Village Street Public Hearing Continuation

- Public Hearing Continuation Notice to July 12, 2022
- Revised site plan dated June 30, 2022 by Land Planning Inc.
- Tetra Tech review letter dated July 7, 2022
- Front elevation planting plan
- Additional waiver requests
- Review comments dated July 11, 2022 from Conservation Agent Bridget Graziano
- DRAFT decision dated July 11, 2022

RECEIVED TOWN CLERK
JUL 1 '22 AM10:23

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*

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 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 288 Village Street Multi-Family Special Permit, Site Plan, and Land Disturbance Permit***
Continuation Date – Tuesday, July 12, 2022 at 8:30 p.m.

At its June 28, 2022 meeting, the Planning and Economic Development Board voted to continue the public hearing on the application of Tony and Dawn Leland of Medway, MA for approval of a special permit, land disturbance permit, and site plan for the proposed, 3-unit multi-family development at 288 Village Street to Tuesday, July 12, 2022 at 8:30 p.m.

The proposed project includes construction of a three-family, townhouse style building and includes a driveway, parking, utilities, grading, lighting, landscaping, and stormwater management facilities. Nine parking spaces are proposed. The planned improvements are shown *on Site Development Plan, Multi-Family Building located at 288 Village Street, Medway, MA*, dated April 1, 2022, ***last revised May 25, 2022***, prepared by Land Planning Inc. of Bellingham, MA.

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 posted at Board's page at: https://www.townofmedway.org/planning-economic-development-board/pages/288-village-street-multi-family-housing-development

Please review the revised site plan and forward any comments to me by July 7th. The Board plans to vote its decision on the project at the July 12th meeting.

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

Site Development Plan

MULTI-FAMILY BUILDING

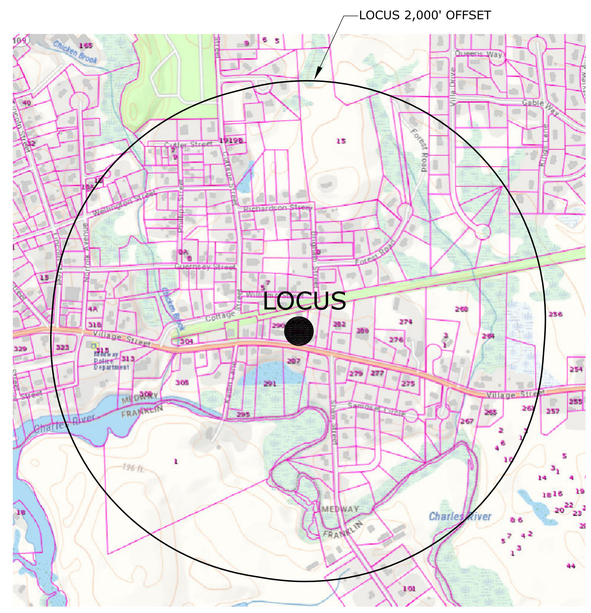
300' ABUTTERS SCHEDULE		
MAP PARCEL ID	SITE ADDRESS	OWNER*
58-094	6 WILLIAMS ST	LUZIETTI RICARDO A JR
58-074	4 BRIGHAM ST	HOPKINS STEPHEN E
58-100	295 VILLAGE ST	RYAN KEVIN
68-010	4 SHAW ST	MANHNKS DANIEL F
58-105	2 SHAW ST	BRANIGAN MARK E
58-081	284 VILLAGE ST	BARRIOS BLANCA ROSA
58-103	287 VILLAGE ST	POWER MICHAEL F
58-082	286 VILLAGE ST	BOUTLER MEGHAN
58-075	2 BRIGHAM ST	GRAY ROBERT A
58-065	11 WILLIAMS ST	MAHONEY CHRISTOPHER J
58-092	41 COTTAGE ST	GALLIHER PETER F
58-101	293 VILLAGE ST	KAIRIT VIRGINIA B LIFE ESTATE
58-079	282 A VILLAGE ST	HUGHES JANE D
58-095	281 VILLAGE ST	HANDVERGER LIFE ESTATE RICHARD A
58-087	294 VILLAGE ST	KELLEY LIFE ESTATE BRENDA J
58-104	283 VILLAGE ST	JOHNSON CYNTHIA DENISE
58-086	292 VILLAGE ST	NEW ENGLAND TELEPHONE COMPANY
58-102	291 VILLAGE ST	PRATT KEVIN C
51-026	0 VILLAGE ST	MEDWAY TOWN OF
58-085	292 VILLAGE ST	NEW ENGLAND TELEPHONE COMPANY
58-093	4 WILLIAMS ST	SKELTON LEE S
58-066	9 WILLIAMS ST	GOLDEN JOHN R
58-067	7 WILLIAMS ST	HEAVEY MICHAEL J.
58-080	282 VILLAGE ST	MACSWAIN DAVID A
58-084	290 VILLAGE ST	LELAND TONY J SR
58-083	288 VILLAGE ST	LELAND TONY J SR

* NOW OR FORMERLY

ABUTTERS LOCUS MAP

1" = 200'

N



LOCUS MAP

GRAPHIC SCALE

600 0 300 600 1200

(IN FEET)

1 inch = 600 ft.

WAIVER REQUESTS INVENTORY

TITLE & NUMBER	REQUIREMENT	REQUEST
Site Plan Rules & Regulations Chapter 200 Section 204-3 F. 1	Full Traffic Impact Assessment	Limit assessment to provided sight distance and trip generation
Site Plan Rules & Regulations Chapter 200 Section 204-3 F. 2	Full Environmental Impact Assessment	Limit to stormwater report
Site Plan Rules & Regulations Chapter 200 Section 204-3 F. 3	Neighborhood Impact Assessment	Eliminate (development is consistent with neighborhood)
Site Plan Rules & Regulations Chapter 200 Section 204-5 D. 15	Lighting Plan per Section 7.1.2 of the Zoning Bylaws	Eliminate (limit to building mounted lighting)
Site Plan Rules & Regulations Chapter 200 Section 204-3 F. 4	Parking Impact Assessment (greater than 30 spaces required)	Eliminate (under threshold)
Site Plan Rules & Regulations Chapter 200 Section 204-5 D. 8	Landscape Architect Plan	Eliminate (use typical residential plantings)
Site Plan Rules & Regulations Chapter 200 Section 207-11 A. 3	Site Entrance Width of 20 feet	Reduce to 16 feet
Site Plan Rules & Regulations Chapter 200 Section 207-11 A. 4	Vertical Granite Curbing at entrance	Eliminated curbing requirement
Site Plan Rules & Regulations Chapter 200 Section 207-11 A. 13	Driveway 15 feet from residential use side lot line	Reduce to 11 feet
Site Plan Rules & Regulations Chapter 200 Section 207-12 H. 1	Parking area perimeter granite curbing	Eliminated curbing requirement
Zoning Bylaw Section 6.1 Table 2. Dimensional And Density Regulations	35' Front Yard Setback	Reduce to 30 feet (minimize impervious area on-site)
Site Plan Rules & Regulations Chapter 200 Section 204-3. K	Determination of applicability from conservation Commission	Eliminate
Site Plan Rules & Regulations Chapter 200 Section 204-5. D.14	Master signage plan	Eliminate
Site Plan Rules & Regulations Chapter 200 Section 207-11. B.2	Perimeter driveway aisle granite curbing	Eliminate
Site Plan Rules & Regulations Chapter 200 Section 207-12. G.3.b	Parking space 15 feet from property line	Reduce to 9 feet
Site Plan Rules & Regulations Chapter 200 Section 207-12. H.2	3-foot curb radii at driveway apron	Eliminate (slope granite curbing to match driveway)
Site Plan Rules & Regulations Chapter 200 Section 207-12. G.3.d	Two-way drive aisle 24' width	Reduce to 16 feet
Site Plan Rules & Regulations Chapter 200 Section 204-3.H	Construction Project Management Plan	Eliminate (use general residential sequencing and discuss at preconstruction meeting)
Site Plan Rules & Regulations Chapter 200 Section 207-16.A	Underground utility connection	Overhead wires (existing utility poles are across Village Street)

Located at
288 Village Street
Medway, MA

SHEET INDEX

SHEET NO.	TITLE
1	COVER SHEET
2	EXISTING CONDITIONS PLAN
3	PROPOSED SITE & UTILITIES PLAN
4	PROPOSED DRAINAGE & GRADING PLAN
5	SEDIMENT & EROSION CONTROL PLAN
6	DETAILS & NOTES
7	DETAILS & NOTES

OWNER/ APPLICANT (S):

TONY J. LELAND, SR. & DAWN M. LELAND
290 VILLAGE STREET
MEDWAY, MA

ARCHITECT:

CME ARCHITECTS, INC.
6 WILKINS DRIVE, SUITE 210
PLAINVILLE, MA 02762
(508) 809-2509

ZONING DISTRICT: AGRICULTURAL-RESIDENTIAL II

	REQUIRED	EXISTING	PROPOSED
AREA:	22,500 S.F.	22,600 S.F.	22,600 S.F.
FRONTAGE:	150 FT.	133.22 FT.	133.22 FT.
FRONT YARD:	35 FT.	24.7 FT.	30 FT.
SIDE YARD:	15 FT.	25.6 FT.	17 FT.
REAR YARD:	15 FT.	75.0 FT.	73 FT.
LOT COVERAGE	30% MAX.	8.5%	15%
BLDG. HEIGHT	35 FT.	-	30 FT.
IMPERVIOUS COVERAGE	40% MAX.	21%	39.5%
PARKING	1.5 SPC./UNIT	N/A	9 SPC

THIS PROPERTY IS IN THE MULTI-FAMILY HOUSING OVERLAY DISTRICT

ZONING DISTRICT: MULTI-FAMILY HOUSING OVERLAY DISTRICT

	REQUIRED	PROPOSED
LOT FRONTAGE:	50 FT.	133.22 FT.
BLDG. HEIGHT:	40 FT.	30 FT.
OPEN SPACE:	15%	60.5%
PARKING SPACES:	6	9

PLANNING AND ECONOMIC DEVELOPMENT BOARD ENDORSEMENT

SIGNATURE DATE

APPROVED BY PLANNING

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

SIGNATURE:_____

DATE:_____

THIS PROJECT IS SUBJECT TO A PERFORMANCE SECURITY COVENANT TO BE RECORDED HEREWITH.

COVER SHEET

Located at
288 Village Street
Medway, MA

Owned By
Tony J. Leland, Sr.
&
Dawn M. Leland
290 Village Street
Medway, MA

Prepared For
Tony J. Leland, Sr.
290 Village Street
Medway, MA

Scale: As Noted

LOCUS REFERENCES

Deed (Book / Page):	36356 / 499
Plan (Plan Book / Plan):	676 / 87
Assessors:	58 - 083

COMMONWEALTH OF MASSACHUSETTS
NORMAN G. HILL
CIVIL
No. 31887
REGISTERED PROFESSIONAL ENGINEER

Norman G. Hill, PE
Date: 6-30-2022

Norman G. Hill, PE #31887

REVISIONS

Date	Description
5/25/22	Revised per Tetra Tech review
6/21/22	Revised per Tetra Tech review
6/30/22	Revised per PEDB mtg

Field By:	SB/DL	1/26/2022
Designed By:	SB	2/10/2022
Drawn By:	SB	2/10/2022
Checked By:	NGH	2/18/2022

Land Planning, Inc.
Civil Engineers • Land Surveyors
Environmental Consultants

Bellingham
167 Hartord Ave.
Bellingham, MA 02019
508-966-4130

North Grafton
214 Worcester St.
N. Grafton, MA 01536
508-839-9526

Hanson
1115 Main Street
Hanson, MA 02341
781-294-4144

www.landplanninginc.com

Date April 1, 2022	Sheet No. 1
Job No. B1483	

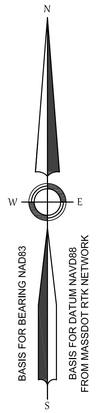
EXISTING CONDITIONS PLAN

Located at
288 Village Street
Medway, MA

Owned By
Tony J. Leland, Sr.
&
Dawn M. Leland
290 Village Street
Medway, MA

Prepared For
Tony J. Leland, Sr.
290 Village Street
Medway, MA

Scale: As Noted



TEST PIT RESULTS- TP

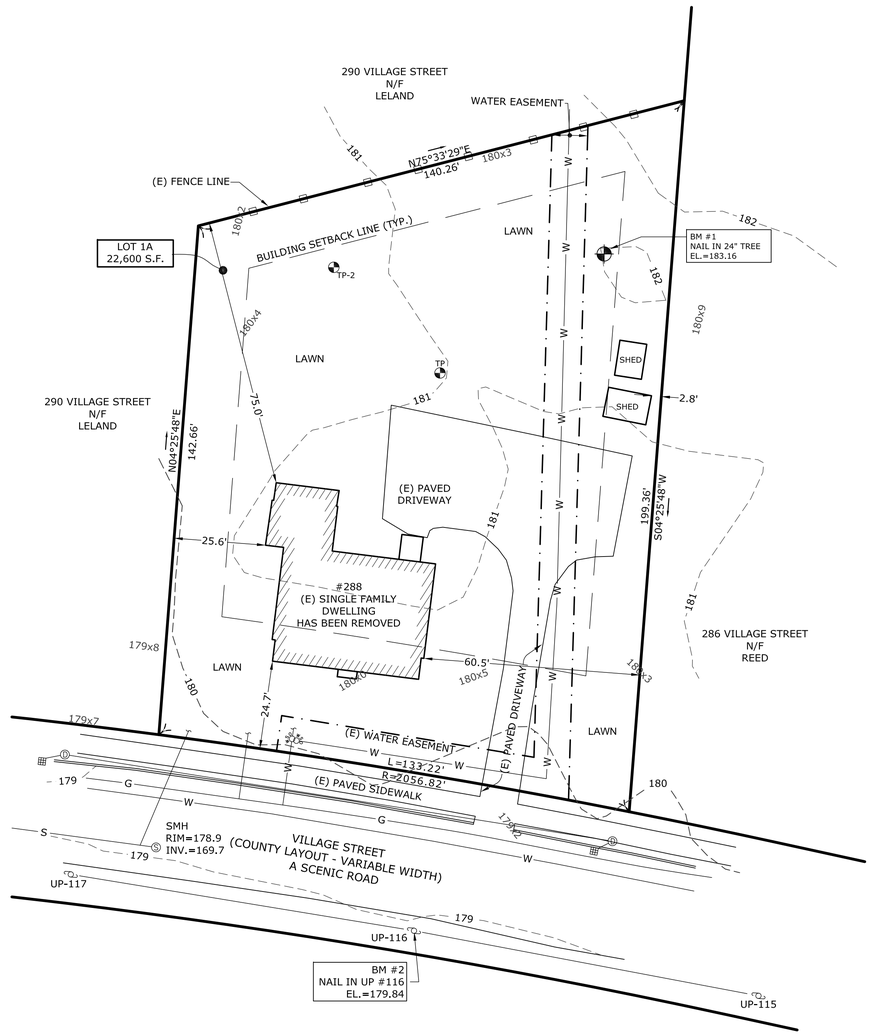
DEPTH (IN.)	HORIZON	TEXTURE	COLOR
0 - 4	FILL	-	-
4 - 28	B	LOAMY SAND	10YR 6/8
28 - 112	C	SAND	7.5YR 7/2

MOTTLES:N/A STANDING:N/A WEEPING: 100"

TEST PIT RESULTS- TP-2

DEPTH (IN.)	HORIZON	TEXTURE	COLOR
0 - 4	FILL	-	-
4 - 24	B	LOAMY SAND	10YR 6/8
24 - 108	C	SAND	7.5YR 7/2

MOTTLES:N/A STANDING:N/A WEEPING: N/A



IMPERVIOUS COVERAGE

EXISTING AREA:	4,784 S.F.
EXISTING COVERAGE	21% (40% ALLOWABLE)

GRAPHIC SCALE
20 0 10 20 20 80
(IN FEET)
1 inch =20ft.

GENERAL NOTES

1. TOPOGRAPHY DETERMINED BY AN ON-THE-GROUND SURVEY BY LAND PLANNING, INC. ALL ELEVATIONS REFER TO NAVD 1988 DATUM.
2. THE ENTIRE SITE IS NOT LOCATED WITHIN THE LIMITS OF THE 100 YEAR FLOOD ZONE AS SHOWN ON THE FIRM MAP #25021C0143E DATED JULY 17, 2012.
3. CONSERVATION COMMISSION APPROVAL IS NOT REQUIRED.
4. ALL UNDERGROUND UTILITY LOCATIONS SHOWN ARE BASED ON FIELD EVIDENCE AND RECORDS PROVIDED TO LAND PLANNING, INC.. THESE LOCATIONS SHOULD BE CONSIDERED APPROXIMATE. OTHER UTILITIES MAY EXIST WHICH ARE NOT EVIDENT OR FOR WHICH RECORD INFORMATION WAS NOT FOUND. THE CONTRACTOR MUST CONTACT ALL UTILITY COMPANIES AND "DIG SAFE" (888-DIG-SAFE) BEFORE EXCAVATION BEGINS. WE ASSUME NO RESPONSIBILITY FOR DAMAGES INCURRED AS A RESULT OF UTILITIES OMITTED OR INACCURATELY SHOWN.

LEGEND

	BENCHMARK
(E)	EXISTING
(P)	PROPOSED
(F)	FOUND
(S)	SET
	BOUND (BND)
	IRON ROD (IR)
	IRON PIPE (IP)
	DRILL HOLE (DH)
000	EXISTING CONTOUR
000x0	EXISTING SPOT GRADE
	ZONING SETBACK

COMMONWEALTH OF MASSACHUSETTS
NORMAN G. HILL
CIVIL
No. 31887
REGISTERED PROFESSIONAL ENGINEER

Norman G. Hill, P.E. 6-30-2022
Date:
Norman G. Hill, PE #31887

REVISIONS

Date	Description
5/25/22	Revised per Tetra Tech review
6/21/22	Revised per Tetra Tech review
6/30/22	Revised per PEDB mtg

Field By:	SB/DL	1/26/2022
Designed By:	SB	2/10/2022
Drawn By:	SB	2/10/2022
Checked By:	NGH	2/18/2022

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Bellingham, MA 02019
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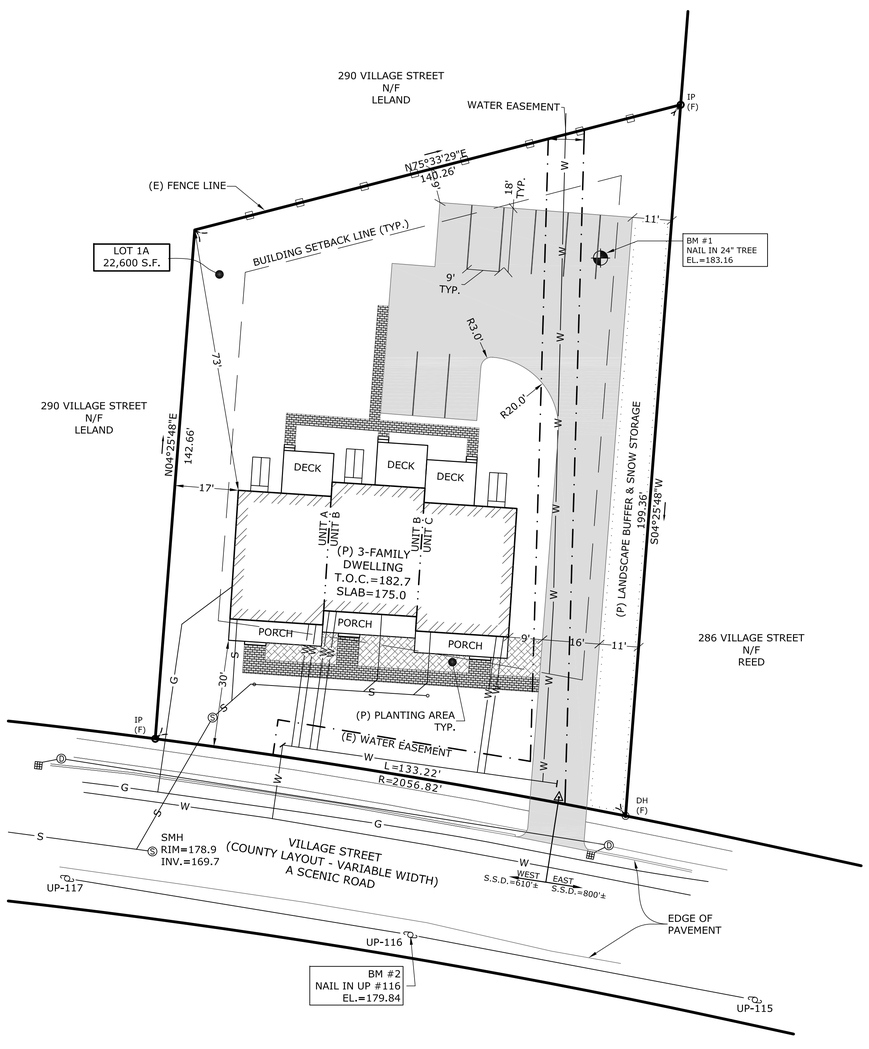
www.landplanninginc.com

Date April 1, 2022	Sheet No. 2
Job No. B1483	



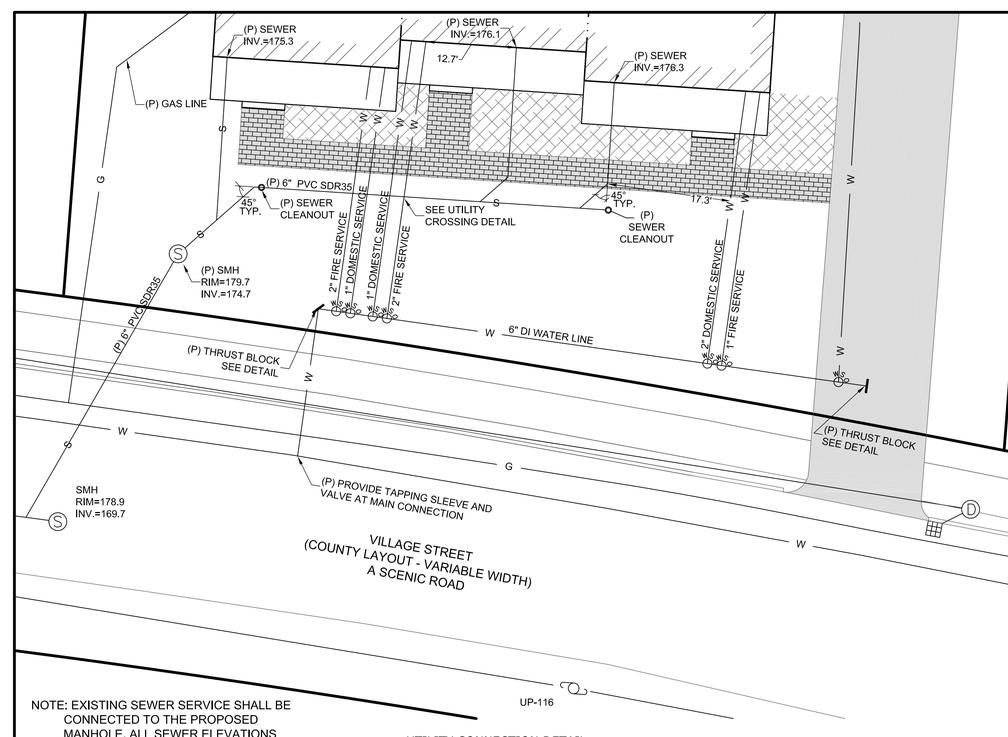
IMPERVIOUS COVERAGE

EXISTING AREA:	4,784 S.F.
PROPOSED AREA:	8,510 S.F.
PROPOSED COVERAGE	38% (40% ALLOWABLE)

GRAPHIC SCALE

20 0 10 20 20 80

(IN FEET)
1 inch = 20 ft.



NOTE: EXISTING SEWER SERVICE SHALL BE CONNECTED TO THE PROPOSED MANHOLE. ALL SEWER ELEVATIONS SHALL BE VERIFIED AND SET DURING CONSTRUCTION.

UTILITY CONNECTION DETAIL
1"=10'

PROPOSED SITE & UTILITIES PLAN

Located at
288 Village Street
Medway, MA

Owned By
Tony J. Leland, Sr.
&
Dawn M. Leland
290 Village Street
Medway, MA

Prepared For
Tony J. Leland, Sr.
290 Village Street
Medway, MA

Scale: As Noted

LEGEND

	BENCHMARK
(E)	EXISTING
(P)	PROPOSED
(F)	FOUND
(S)	SET
	BOUND (BND)
	IRON ROD (IR)
	IRON PIPE (IP)
	DRILL HOLE (DH)
000	EXISTING CONTOUR
000x0	EXISTING SPOT GRADE
000	PROPOSED CONTOUR
000x0	PROPOSED SPOT GRADE
	PROPOSED TREE
	SEDIMENT BARRIER
	ZONING SETBACK

COMMONWEALTH OF MASSACHUSETTS
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Norman G. Hill, P.E.
Date: 6-30-2022
Norman G. Hill, PE #31887

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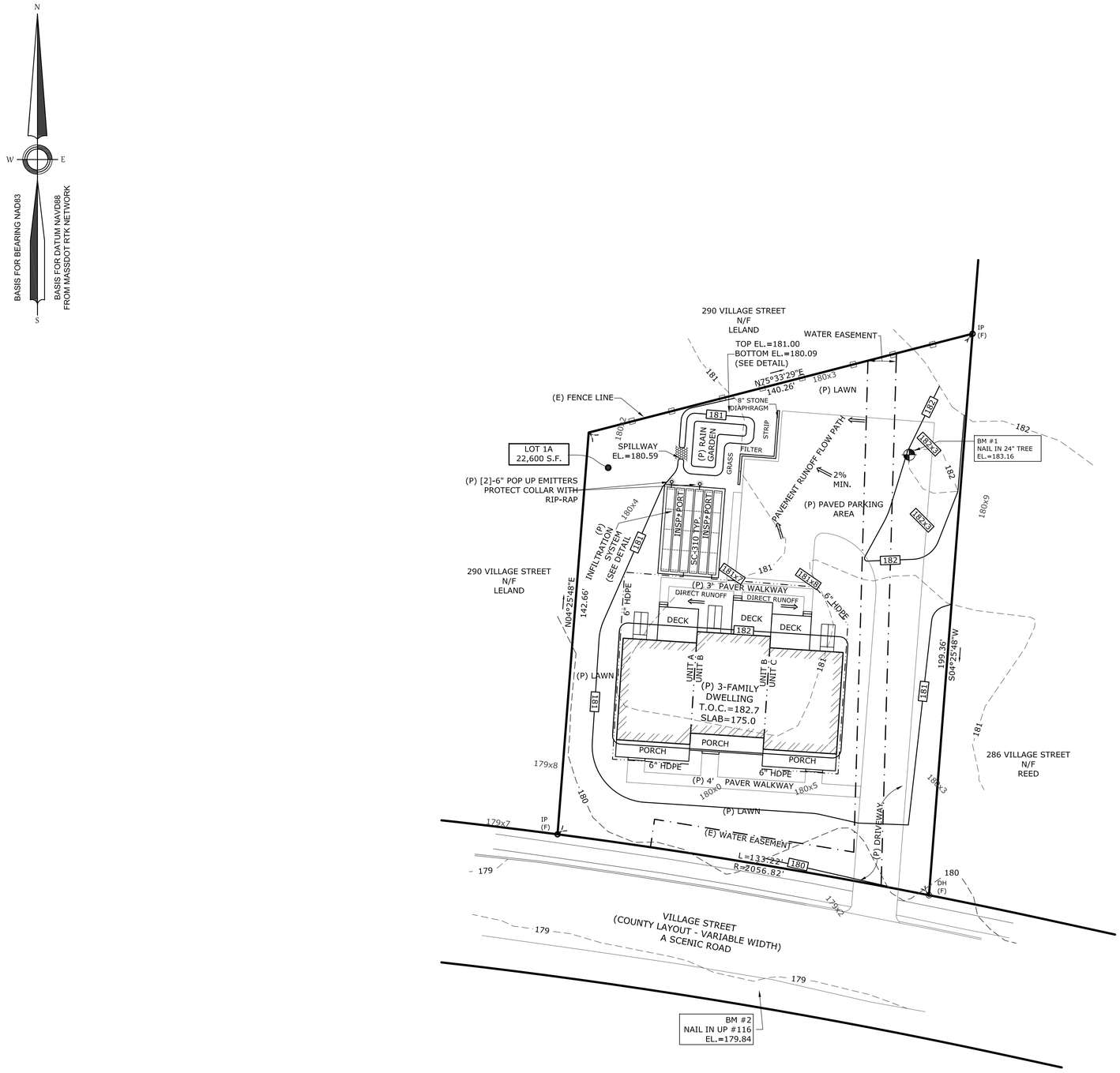
Date: April 1, 2022	Sheet No. 3
Job No. B1483	



EARTHWORKS CALCULATIONS (CUBIC YARDS)

CUT (C): ±745 CYS
FILL (F): ±200 CYS

TOTAL: (C) 545 CYS

GRAPHIC SCALE

20 0 10 20 20 80

(IN FEET)
1 inch = 20 ft.

PROPOSED DRAINAGE & GRADING PLAN

Located at
288 Village Street
Medway, MA

Owned By
Tony J. Leland, Sr.
&
Dawn M. Leland
290 Village Street
Medway, MA

Prepared For
Tony J. Leland, Sr.
290 Village Street
Medway, MA

Scale: As Noted

LEGEND

	BENCHMARK
(E)	EXISTING
(P)	PROPOSED
(F)	FOUND
(S)	SET
	BOUND (BND)
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	IRON PIPE (IP)
	DRILL HOLE (DH)
000	EXISTING CONTOUR
000x0	EXISTING SPOT GRADE
000	PROPOSED CONTOUR
000x0	PROPOSED SPOT GRADE
	PROPOSED TREE
	SEDIMENT BARRIER
	ZONING SETBACK

COMMONWEALTH OF MASSACHUSETTS
NORMAN G. HILL
CIVIL
No. 31887
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Norman G. Hill, P.E.
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781-294-4144

www.landplanninginc.com

Date: April 1, 2022
Job No. B1483
Sheet No. 4

SEDIMENT & EROSION CONTROL PLAN

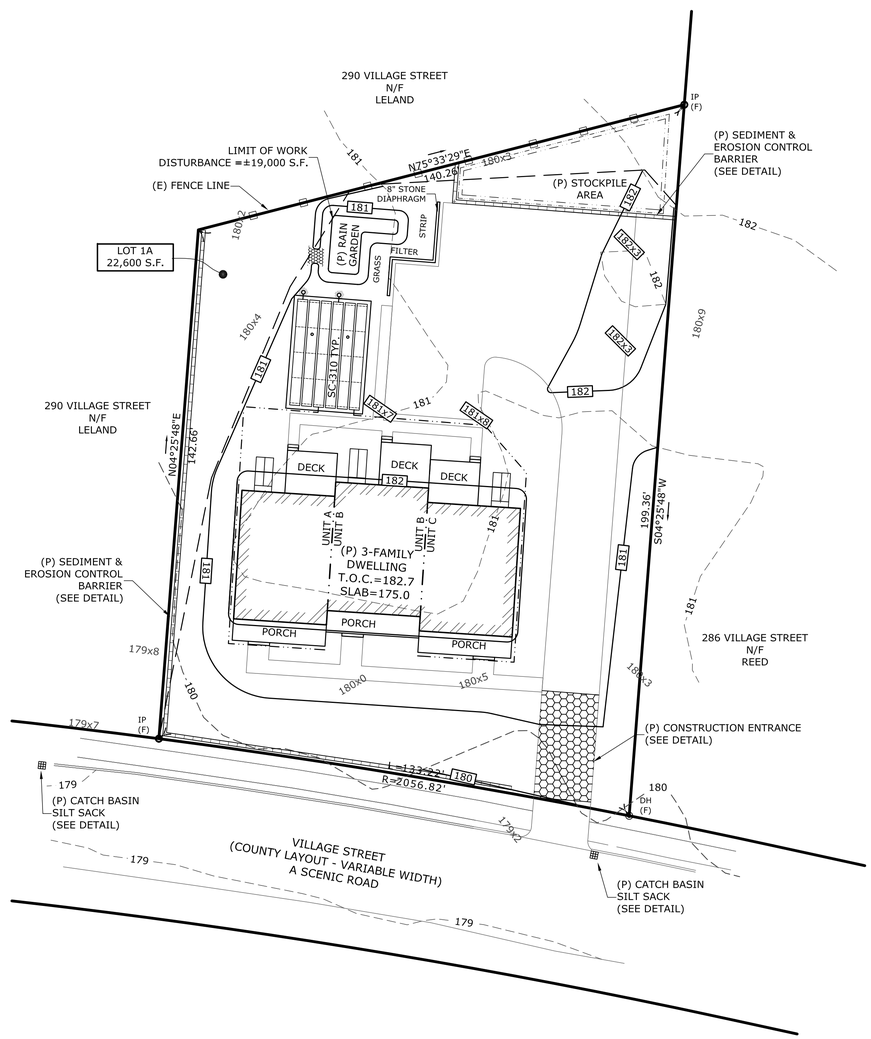
Located at
288 Village Street
Medway, MA

Owned By
Tony J. Leland, Sr.
&
Dawn M. Leland
290 Village Street
Medway, MA

Prepared For
Tony J. Leland, Sr.
290 Village Street
Medway, MA

Scale: As Noted

N
W E
S
BASIS FOR BEARING NAD83
BASIS FOR DATUM NAVD88
FROM MASSDOT RTK NETWORK



APPROXIMATE CONSTRUCTION SEQUENCING

1. INSTALL ALL SEDIMENT AND EROSION CONTROL MEASURES
2. CONSTRUCT TEMPOARY CONSTRUCTION ENTRANCE
3. SET UP TEMPORARY CONSTRUCTION UTILITY SERVICES
4. CONSTRUCT/ INSTALL ALL UTILITIES WITHIN R.O.W. UP TO PROJECT SITE
5. GENERAL SITE WORK
6. ERECT MULTI-FAMILY DWELLING UNITS AND CONNECT UTILITIES
7. INSTALL ALL STORMWATER MANAGEMENT FACILITIES
8. CONSTRUCT DRIVEWAY AND PARKING AREA
9. COMPLETE ALL REMAINING SITEWORK, LANDSCAPING, ETC.
10. REMOVE ALL MEANS OF EROSION AND SEDIMENT CONTROL ONCE SITE IS STABILIZED

CONSTRUCTION ACTIVITIES AND DELIVERIES SHALL BE CONDUCTED AS PERMITTED BY THE TOWN OF MEDWAY BUILDING DEPARTMENT.

GRAPHIC SCALE
20 0 10 20 20 80
(IN FEET)
1 inch = 20 ft.

LEGEND

	BENCHMARK
(E)	EXISTING
(P)	PROPOSED
(F)	FOUND
(S)	SET
	BOUND (BND)
	IRON ROD (IR)
	IRON PIPE (IP)
	DRILL HOLE (DH)
000	EXISTING CONTOUR
000x0	EXISTING SPOT GRADE
000	PROPOSED CONTOUR
000x0	PROPOSED SPOT GRADE
	PROPOSED TREE
	SEDIMENT BARRIER
	ZONING SETBACK

COMMONWEALTH OF MASSACHUSETTS
NORMAN G. HILL
CIVIL
No. 31887
REGISTERED PROFESSIONAL ENGINEER

Norman G. Hill, P.E. 6-30-2022
Date:
Norman G. Hill, PE #31887

REVISIONS

Date	Description
5/25/22	Revised per Tetra Tech review
6/21/22	Revised per Tetra Tech review
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Field By:	SB/DL	1/26/2022
Designed By:	SB	2/10/2022
Drawn By:	SB	2/10/2022
Checked By:	NGH	2/18/2022

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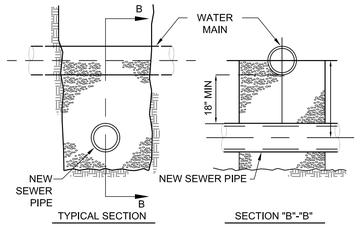
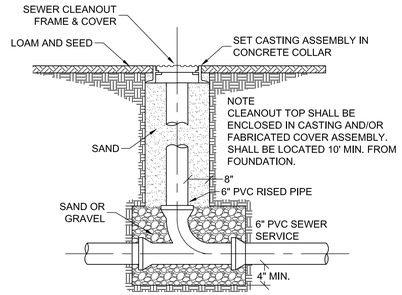
Date: April 1, 2022	Sheet No. 5
Job No. B1483	

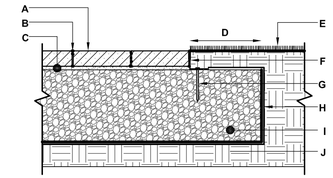


NOTE: IN THE EVENT OF A SEWER MAIN OR SEWER SERVICE CROSSING A WATER MAIN OR WATER SERVICE CLOSER THAN 10', THE SEWER MAIN OR SERVICE SHALL BE COMPLETELY ENCASED IN 6" OF 3,000 P.S.I. CONCRETE FOR A DISTANCE OF 10' ON EACH SIDE OF THE CROSSING.

UTILITY CROSSING DETAIL
not to scale

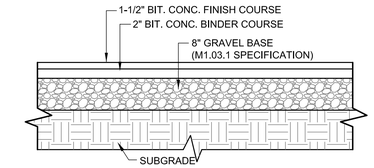


SEWER CLEANOUT
not to scale

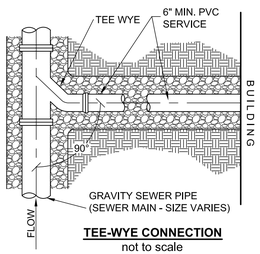


GRANULAR BASE PAVERS
NOT TO SCALE

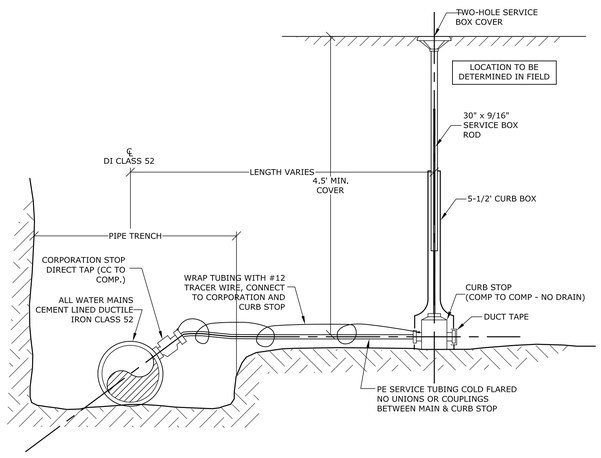
A. TECHO-BLOC OR EQUIVALENT PRECAST CONCRETE PAVER 2 3/8 '' THICK MIN.
B. SAND JOINT FILL
C. SAND SETTING BED (CONCRETE SAND) 1''
D. EXTRA WIDTH EQUAL TO FOUNDATION THICKNESS
E. LAWN
F. ALUMINIUM / STEEL / PLASTIC EDGE RESTRAIN
G. SPIKE
H. GEOTEXTILE
I. COMPACTED GRANULAR BASE 0-3/4"
J. SUBGRADE



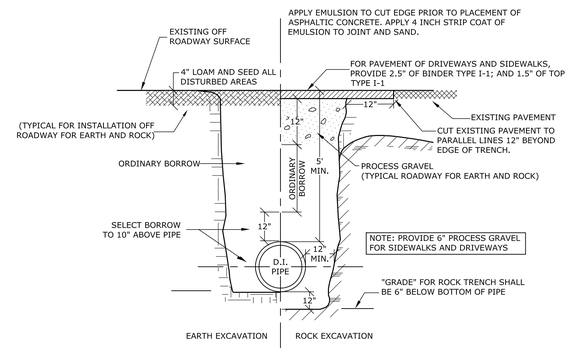
BITUMINOUS CONCRETE PAVEMENT CROSS SECTION
not to scale



TEE-WYE CONNECTION
not to scale

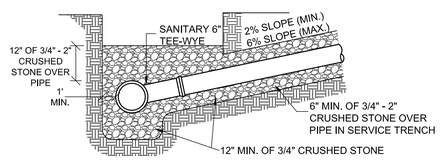


TYPICAL SERVICE CONNECTION
NOT TO SCALE



NOTE:
ALL PIPES INSTALLED UNDER BROOKS, CULVERTS OR WITHIN 6" OF ANY STRUCTURES (CB, MH, PITS, VAULTS) MUST BE DUCTILE IRON.

DUCTILE IRON WATER MAINS TRENCH SECTION
NOT TO SCALE



TEE-WYE CROSS SECTION
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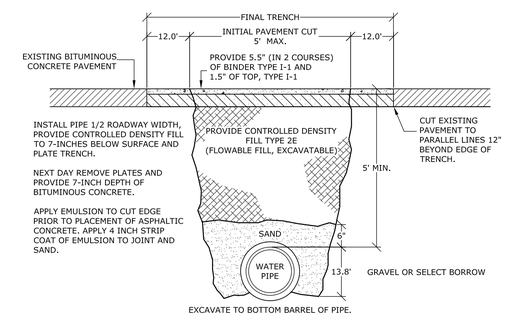
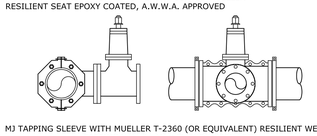


TRENCH RESURFACING IN STATE HIGHWAY & ON MAIN ROADS
NOT TO SCALE

UTILITY CONSTRUCTION NOTES

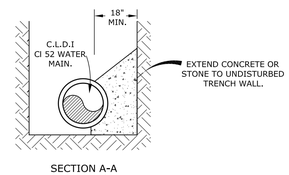
1. ALL BACKFILL SHALL BE PLACED AND COMPACTED IN 6" LIFTS OR 12" LIFTS WHEN MACHANICAL MEANS ARE UTILIZED.
2. MEASURES SHALL BE TAKEN TO PREVENT THE MIGRATION OF NATIVE FINES INTO BACKFILL MATERIAL.
3. FOUNDATION- WHERE THE TRENCH BOTTOM IS UNSTABLE, THE CONTRACTOR SHALL EXCAVATE TO A DEPTH REQUIRED BY THE DESIGN ENGINEERAND AND REPLACEMENT WITH SUITABLE MATERIAL AS SPECIFIED BY THE ENGINEEER. AS AN ALTERNATIVE AND AT THE DESCRETION OF THE DESIGN ENGINEER, THE TRENCH BOTTOM MAY BE STABALIZED USING GEOTEXTILE MATERIAL.
4. BEDDING- PIPE BEDDING FOR WATER UTILITIES SHALL BE SAND. PIPE BEDDING FOR SANITARY SEWER AND STORMWATER UTILITIES SHALL BE 3/4" DIAMETER CRUSHED STONE.
5. BACKFILL- SUITABLE MATERIAL SHALL BE CLASS I, II, OR III IN THE PIPE ZONE NOT LESS THAN 6"ABOVE THE CROWN OF THE PIPE. THE CONTRACTOR SHALL PROVIDE DOCUMENTATION FOR MATERIAL SPECIFICATIONS TO THE DESIGN ENGINEER. MATERIAL SHALL BE INSTALLED AS REQUIRED IN THE LATEST EDITION OF ASTM D2321.
6. WHERE FEASIBLE, SEWERS SHALL BE SEPARATED A MINIMUM OF 10 FEET, HORIZONTALLY, FROM ANY EXISTING WATER MAIN OR IT SHALL BE ENCASED IN CONCRETE.
7. WHERE A 10 FOOT LATERAL SEPARATION BETWEEN SEWER AND WATER CAN NOT BE MAINTAINED, THE WATER MAIN SHALL BE LOCATED WITHIN A SEPARATE TRENCH AND THE CROWN OF THE SEWER SHALL BE PLACED A MINIMUM OF 18" BELOW THE INVERT OF THE WATER MAIN.
8. WHERE SEWERS CROSS WATER MAINS, THE CROWN OF THE SEWER SHALL BE LAID 18" BELOW THE INVERT OF THE WATER MAIN. WHERE THIS REQUIREMENT CAN NOT BE MEET, THE WATER LINE SHALL BE CONSTRUCTED OF MECHANICAL-JOINT PIPE FOR A DISTANCE OF 10 FEET OF EITHER SIDE OF THE CROSSING. ONE FULL LENGTH OF WATER MAIN SHALL BE CENTERED OVER THE SEWER SO THAT BOTH JOINTS WILL BE AS FAR AS POSSIBLE FROM THE SEWER. BOTH THE WATER AND SEWER LINES SHALL BE ENCASED IN CONCRETE FOR 10 FEET EITHER SIDE OF THE CROSSING WHERE THE REQUIRED VERTICAL SEPARATION CAN NOT BE PROVIDED.
9. THE CONTRACTOR MUST CONTACT ALL UTILITY COMPANIES AND "DIG SAFE" BEFORE EXCAVATION BEGINS. WE ASSUME NO RESPONSIBILITY FOR DAMAGES INCURRED AS A RESULT OF UTILITIES OMITTED OR INACCURACIES SHOWN.
10. IN THE EVENT THAT UTILITY INSTALLATION DETAIL CONFLICTS WITH THE TOWN OF MEDWAY DEPARTMENT OF PUBLIC WORKS STANDARDS FOR UTILITY MATERIALS AND INSTALLATION, THE TOWN STANDARDS SHALL GOVERN.

NOTE:
ALL MAIN LINE VALVES - (OPEN LEFT, NON RISING STEM)
SIZES 3" TO 12" - (GATE VALVES)
SIZES GREATER THAN 12" - (BUTTERFLY VALVES)
MUELLER - KENNEDY - DARLING - EPOXY COATED MUELLER RESILIENT SEAT EPOXY COATED, A.W.W.A. APPROVED

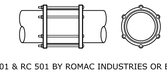


MJ TAPPING SLEEVE WITH MUELLER T-2360 (OR EQUIVALENT) RESILIENT WEDGE TAPPING VALVE - MJ x FL ENDS OPEN LEFT

TAPPING SLEEVE & VALVE
NOT TO SCALE



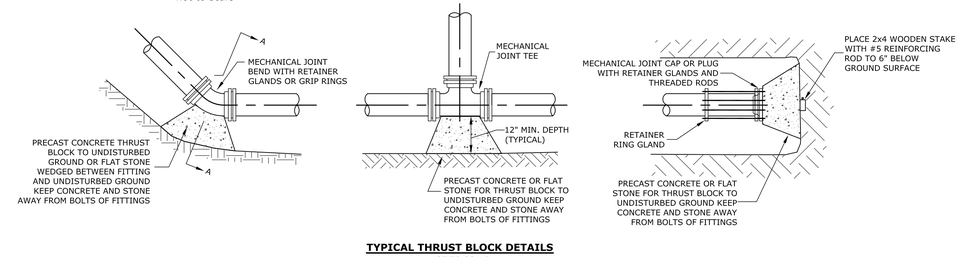
SECTION A-A
not to scale



STYLE 501 & RC 501 BY ROMAC INDUSTRIES OR EQUIVALENT

TO BE USED FOR PIPE REPAIRS, "CUT-INS", COUPLING DIFFERENT TYPES OF PIPE, & CORRECTING MISSALIGNED PIPE (DI TO C-900; DI TO AC; C-900 TO AC)

DUCTILE IRON PIPE COUPLING
NOT TO SCALE



TYPICAL THRUST BLOCK DETAILS
NOT TO SCALE

DETAILS & NOTES

Located at
288 Village Street
Medway, MA

Owned By
Tony J. Leland, Sr.
&
Dawn M. Leland
290 Village Street
Medway, MA

Prepared For
Tony J. Leland, Sr.
290 Village Street
Medway, MA

Scale: As Noted

COMMONWEALTH OF MASSACHUSETTS
NORMAN G. HILL
CIVIL
No. 31887
REGISTERED PROFESSIONAL ENGINEER

Norman G. Hill, P.E. 6-30-2022
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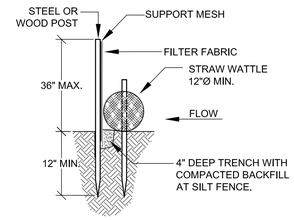
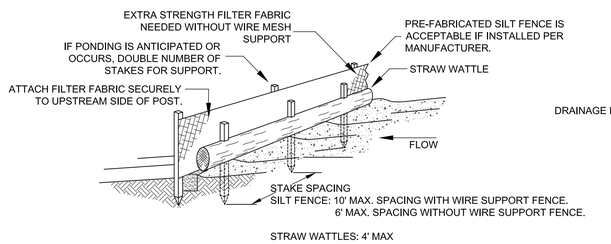
Date: April 1, 2022
Job No.: B1483
Sheet No.: 6

EROSION & SEDIMENT CONTROL NOTES

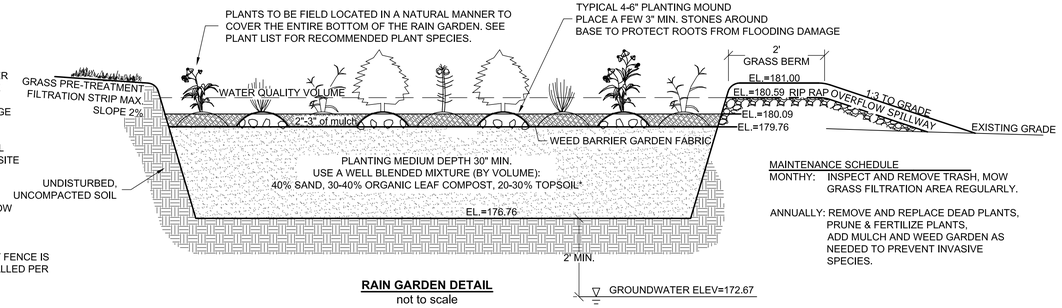
1. THE CONTRACTOR AND ALL SUB-CONTRACTORS ARE TO BE MADE AWARE THAT THIS PROJECT IS SUBJECT TO AN ORDER OF CONDITIONS FROM THE CONSERVATION COMMISSION AND ITS REGULATIONS ARE APPLICABLE TO THIS PROJECT. A COPY OF THIS ORDER IS TO BE READILY AVAILABLE ON SITE AT ALL TIMES.
2. SEDIMENT BARRIERS ARE TO BE INSTALLED WHERE SHOWN ON THIS PLAN. THE CONTRACTOR AND THE OWNER ARE RESPONSIBLE FOR THE PROPER MAINTENANCE OF THE SEDIMENT BARRIERS AND TO IDENTIFY AND CORRECT ALL SOURCES OF EROSION. EXTRA SEDIMENT BARRIER MATERIALS ARE TO BE STORED ON SITE IN ORDER TO QUICKLY REPAIR EROSION PRONE AREAS. PERIODIC MAINTENANCE OF THE EROSION CONTROL STRUCTURES IS REQUIRED IN ORDER TO INSURE THE PROPER PROTECTION OF THE RESOURCE AREAS.
3. STOCKPILED MATERIAL THAT IS SUBJECT TO EROSION SHALL BE PROTECTED AT ITS BASE ON THE DOWN-SLOPE SIDE WITH A SILT FENCE.
4. TEMPORARY STABILIZATION OF DISTURBED AREAS IS REQUIRED TO LIMIT EROSION TOWARD ABUTTING PROPERTIES AND PUBLIC WAYS. ALL GRADED SLOPES ARE TO BE STABILIZED ON A DAILY BASIS WITH SPECIAL CARE TAKEN TO AVOID ROUTING RAINFALL THROUGH GULLIES TOWARD THE RESOURCE AREAS. AREAS OF EROSION ARE TO BE REPAIRED ON A DAILY BASIS.
5. THE CONTRACTOR IS TO USE PROPER JUDGMENT RELATIVE TO CONSTRUCTION PRACTICES DURING ADVERSE WEATHER CONDITIONS OR PERIODS OF HIGH GROUNDWATER. NO WORK IS TO BE PERFORMED NEAR THE WETLAND AREAS DURING PERIODS OF HEAVY RAINFALL. INSPECTION IS REQUIRED AFTER MORE THAN 1/2" OF RAINFALL IN 24 HOURS.
6. ALL GRADED AREAS ARE TO BE LOAMED AND SEEDED AS SOON AS POSSIBLE IN ORDER TO INSURE THE RAPID STABILIZATION OF THE EROSION PRONE AREAS. A GRASS SEED MIXTURE OF 20 % RED TOP, 60% CHEWINGS FESCUE AND 20% KENTUCKY BLUEGRASS IS RECOMMENDED. "HYDROSEED" WITH HIGH FIBER CONTENT.
7. THE SEDIMENT BARRIERS SHALL REMAIN IN PLACE UNTIL ALL UPGRADIENT AREAS HAVE BEEN STABILIZED.
8. DURING PERIODS OF HEAVY RAINFALL, IT WILL BE EXPECTED TO EXPERIENCE EROSION OF THE UNSTABILIZED SLOPES. IMMEDIATE ATTENTION TO THE MAINTENANCE OF THESE ERODED AREAS WILL FURTHER INSURE THE SUCCESSFUL STABILIZATION OF THE EXPOSED SLOPES WHILE LIMITING THE IMPACTS TO NEARBY RESOURCE AREAS.
9. PERIODIC INSPECTIONS OF THE ENTIRE CONSTRUCTION SITE ARE TO BE PERFORMED BY A COMPETENT REPRESENTATIVE WHO WILL INSURE THE ADHERENCE TO THE REGULATIONS AS SET FORTH IN 310 CMR 10.00. NO UNAUTHORIZED INDIVIDUALS ARE TO ENTER THE CONSTRUCTION AREA WITHOUT THE EXPRESSED CONSENT OF THE OWNER.
10. THE APPLICANT IS TO NOTIFY THE CONSERVATION COMMISSION ONCE THE JURISDICTIONAL WORK HAS BEEN COMPLETED AND THE ENTIRE SITE HAS BEEN PROPERLY STABILIZED. UPON APPROVAL OF THE WORK SUBJECT TO THE ORDER OF CONDITIONS, THE APPLICANT IS TO RECEIVE A CERTIFICATE OF COMPLIANCE.



NOTES:
1. SILT FENCE SHALL BE PLACED ON SLOPE CONTOURS TO MAXIMIZE PONDING EFFICIENCY.
2. INSPECT AND REPAIR FENCE AFTER EACH STORM EVENT AND REMOVE SEDIMENT WHEN NECESSARY. 9" MAXIMUM RECOMMENDED STORAGE HEIGHT.
3. REMOVED SEDIMENT SHALL BE DEPOSITED TO AN AREA THAT WILL NOT CONTRIBUTE SEDIMENT OFF-SITE AND CAN BE PERMANENTLY STABILIZED.
4. DO NOT PLACE SILT FENCE IN STREAMS OR CONCENTRATED FLOW CONDITIONS.



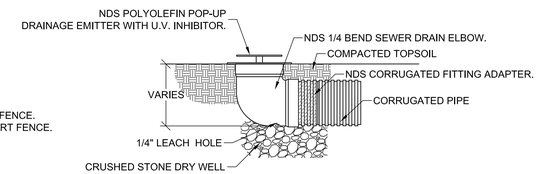
SEDIMENT & EROSION CONTROL BARRIER
not to scale



MAINTENANCE SCHEDULE
MONTHY: INSPECT AND REMOVE TRASH, MOW GRASS FILTRATION AREA REGULARLY.

ANNUALLY: REMOVE AND REPLACE DEAD PLANTS, PRUNE & FERTILIZE PLANTS, ADD MULCH AND WEED GARDEN AS NEEDED TO PREVENT INVASIVE SPECIES.

RAIN GARDEN DETAIL
not to scale



DRAINAGE POP-UP EMITTER DETAIL
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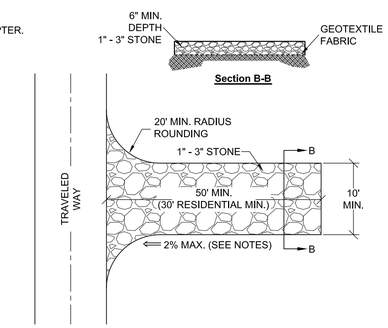


CONSTRUCTION ENTRANCE ANTI-TRACKING PAD
not to scale

CONSTRUCTION ENTRANCE NOTES

REMOVE ALL VEGETATION AND OTHER OBJECTIONABLE MATERIAL FROM THE FOUNDATION AREA. GRADE AND CROWN FOUNDATION FOR POSITIVE DRAINAGE.

STONE FOR A STABILIZED CONSTRUCTION ENTRANCE SHALL BE 1 TO 3-INCH STONE, RECLAIMED STONE, OR RECYCLED CONCRETE EQUIVALENT PLACED ON A STABLE FOUNDATION AS SPECIFIED IN THE PLAN.

PAD DIMENSIONS: THE MINIMUM LENGTH OF THE GRAVEL PAD SHOULD BE 50 FEET, EXCEPT FOR A SINGLE RESIDENTIAL LOT WHERE A 30 FOOT MINIMUM LENGTH MAY BE USED. LONGER ENTRANCES WILL PROVIDE BETTER CLEANING ACTION. THE PAD SHOULD EXTEND THE FULL WIDTH OF THE CONSTRUCTION ACCESS ROAD OR 10 FEET WHICHEVER IS GREATER. THE AGGREGATE SHOULD BE PLACED AT LEAST SIX INCHES THICK.

A GEOTEXTILE FILTER FABRIC SHALL BE PLACED BETWEEN THE STONE FILL AND THE EARTH SURFACE BELOW THE PAD TO REDUCE THE MIGRATION OF SOIL PARTICLES FROM THE UNDERLYING SOIL INTO THE STONE AND VICE VERSA. FILTER CLOTH IS NOT REQUIRED FOR A SINGLE FAMILY RESIDENCE LOT.

IF THE SLOPE TOWARD THE ROAD EXCEEDS 2%, CONSTRUCT A RIDGE, 6 TO 8 INCHES HIGH WITH 3:1 SIDE SLOPES, ACROSS THE FOUNDATION APPROXIMATELY 15 FT FROM THE ENTRANCE TO DIVERT RUNOFF AWAY FROM THE PUBLIC ROAD.

ALL SURFACE WATER THAT IS FLOWING TO OR DIVERTED TOWARD THE CONSTRUCTION ENTRANCE SHOULD BE PIPED BENEATH THE ENTRANCE. IF PIPING IS IMPRACTICAL, A BERM WITH 5:1 SLOPES THAT CAN BE CROSSED BY VEHICLES MAY BE SUBSTITUTED FOR THE PIPE.

WASHING: IF THE SITE CONDITIONS ARE SUCH THAT THE MAJORITY OF MUD IS NOT REMOVED FROM THE VEHICLE TIRES BY THE GRAVEL PAD, THEN THE TIRES SHOULD BE WASHED BEFORE THE VEHICLE ENTERS THE ROAD OR STREET. THE WASH AREA SHOULD BE A LEVEL AREA WITH 3-INCH WASHED STONE MINIMUM, OR A COMMERCIAL RACK. WASH WATER SHOULD BE DIRECTED INTO A SEDIMENT TRAP, A VEGETATED FILTER STRIP, OR OTHER APPROVED SEDIMENT TRAPPING DEVICE. SEDIMENT SHOULD BE PREVENTED FROM ENTERING ANY WATERCOURSES.

A FILTER FABRIC FENCE SHOULD BE INSTALLED DOWN-GRADIENT FROM THE CONSTRUCTION ENTRANCE IN ORDER TO CONTAIN ANY SEDIMENT-LADEN RUNOFF FROM THE ENTRANCE.

CONSTRUCTION ENTRANCE MAINTENANCE

THE ENTRANCE SHOULD BE MAINTAINED IN A CONDITION THAT WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHTS-OF-WAY. THIS MAY REQUIRE PERIODIC TOPDRESSING WITH ADDITIONAL STONE.

INSPECT ENTRANCE/EXIT PAD AND SEDIMENT DISPOSAL AREA WEEKLY AND AFTER HEAVY RAINS OR HEAVY USE.

REMOVE MUD AND SEDIMENT TRACKED OR WASHED ONTO PUBLIC ROAD IMMEDIATELY.

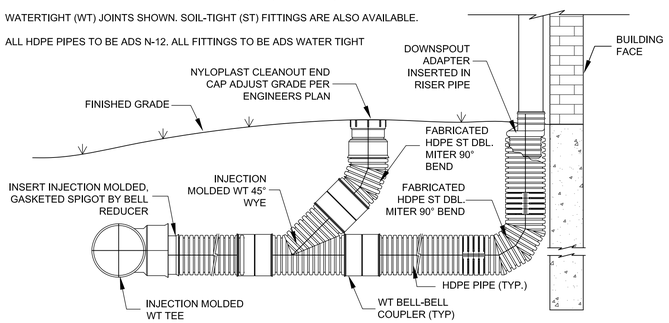
MUD AND SOIL PARTICLES WILL EVENTUALLY CLOG THE VOIDS IN THE GRAVEL AND THE EFFECTIVENESS OF THE GRAVEL PAD WILL NOT BE SATISFACTORY. WHEN THIS OCCURS, THE PAD SHOULD BE TOPDRESSED WITH NEW STONE. COMPLETE REPLACEMENT OF THE PAD MAY BE NECESSARY WHEN THE PAD BECOMES COMPLETELY CLOGGED.

IF WASHING FACILITIES ARE USED, THE SEDIMENT TRAPS SHOULD BE CLEANED OUT AS OFTEN AS NECESSARY TO ASSURE THAT ADEQUATE TRAPPING EFFICIENCY AND STORAGE VOLUME IS AVAILABLE. VEGETATIVE FILTER STRIPS SHOULD BE MAINTAINED TO INSURE A VIGOROUS STAND OF VEGETATION AT ALL TIMES.

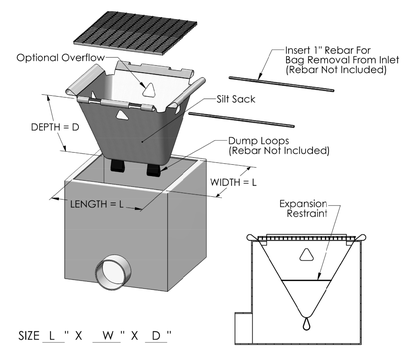
RESHAPE PAD AS NEEDED FOR DRAINAGE AND RUNOFF CONTROL.

REPAIR ANY BROKEN ROAD PAVEMENT IMMEDIATELY.

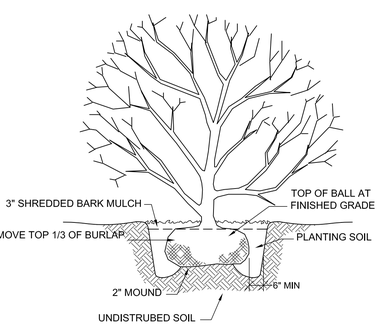
ALL TEMPORARY EROSION AND SEDIMENT CONTROL MEASURES SHALL BE REMOVED WITHIN 30 DAYS AFTER FINAL SITE STABILIZATION IS ACHIEVED OR AFTER THE TEMPORARY PRACTICES ARE NO LONGER NEEDED. TRAPPED SEDIMENT SHALL BE REMOVED OR STABILIZED ON SITE. DISTURBED SOIL AREAS RESULTING FROM REMOVAL SHALL BE PERMANENTLY STABILIZED.



DOWNSPOUT & CLEANOUT DETAIL
not to scale



TYPICAL CATCH BASIN SILT SACK
not to scale



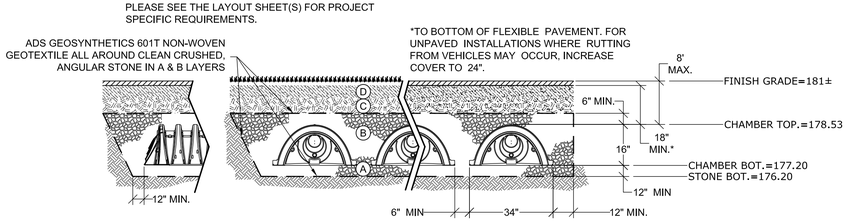
SHRUB PLANTING DETAIL
not to scale

NOTES:
1. CHAMBERS SHALL MEET THE REQUIREMENTS OF ASTM F2922 (POLETHYLENE) OR ASTM F2418-16A (POLYPROPYLENE), "STANDARD SPECIFICATION FOR CORRUGATED WALL STORMWATER COLLECTION CHAMBERS".
2. SC-310 CHAMBERS SHALL BE DESIGNED IN ACCORDANCE WITH ASTM F2787 "STANDARD PRACTICE FOR STRUCTURAL DESIGN OF THERMOPLASTIC CORRUGATED WALL STORMWATER COLLECTION CHAMBERS".
3. THE SITE DESIGN ENGINEER IS RESPONSIBLE FOR ASSESSING THE BEARING RESISTANCE (ALLOWABLE BEARING CAPACITY) OF THE SUBGRADE SOILS AND THE DEPTH OF FOUNDATION STONE WITH CONSIDERATION FOR THE RANGE OF EXPECTED SOIL MOISTURE CONDITIONS.
4. PERIMETER STONE MUST BE EXTENDED HORIZONTALLY TO THE EXCAVATION WALL FOR BOTH VERTICAL AND SLOPED EXCAVATION WALLS.
5. REQUIREMENTS FOR HANDLING AND INSTALLATION:
   - TO MAINTAIN THE WIDTH OF CHAMBERS DURING SHIPPING AND HANDLING, CHAMBERS SHALL HAVE INTEGRAL, INTERLOCKING STACKING LUGS.
   - TO ENSURE A SECURE JOINT DURING INSTALLATION AND BACKFILL, THE HEIGHT OF THE CHAMBER JOINT SHALL NOT BE LESS THAN 2".
   - TO ENSURE THE INTEGRITY OF THE ARCH SHAPE DURING INSTALLATION, A) THE ARCH STIFFNESS CONSTANT AS DEFINED IN SECTION 6.2.8 OF ASTM F2922 SHALL BE GREATER THAN OR EQUAL TO 400 LBS/IN/IN. AND B) TO RESIST CHAMBER DEFORMATION DURING INSTALLATION AT ELEVATED TEMPERATURES (ABOVE 73° F / 23° C), CHAMBERS SHALL BE PRODUCED FROM REFLECTIVE GOLD OR YELLOW COLORS.

NOTE: INSPECTION PORTS MAY BE CONNECTED THROUGH ANY CHAMBER CORRUGATION CREST.

4" PVC INSPECTION PORT DETAIL (SC SERIES CHAMBER)
not to scale

TREE PLANTING DETAIL
not to scale



ADS STORMTECH FIELD DETAIL SC-310
not to scale

CHAMBER TYPE:	STORMTECH SC-310
DESIGN:	24 CHAMBERS TOTAL 12 END CAPS (2 PER ROW)
ROW SPACING:	3.33' O.C.
OVERALL LENGTH:	4 CHAMBERS + 2 END CAPS + 2' OF STONE = 31.68'
OVERALL WIDTH:	6 ROWS + 5"(6" STONE SPACING) + 2' OF STONE = 21.50'

PLEASE NOTE:
1. THE LISTED AASHTO DESIGNATIONS ARE FOR GRADATIONS ONLY. THE STONE MUST ALSO BE CLEAN, CRUSHED, ANGULAR. FOR EXAMPLE, A SPECIFICATION FOR #4 STONE WOULD STATE: "CLEAN, CRUSHED, ANGULAR NO. 4 (AASHTO M43) STONE".
2. STORMTECH COMPACTION REQUIREMENTS ARE MET FOR 'A' LOCATION MATERIALS WHEN PLACED AND COMPACTED IN 6" (MAX) LIFTS USING TWO FULL COVERAGES WITH A VIBRATORY COMPACTOR.
3. WHERE INFILTRATION SURFACES MAY BE COMPROMISED BY COMPACTION, FOR STANDARD DESIGN LOAD CONDITIONS, A FLAT SURFACE MAY BE ACHIEVED BY RAKING OR DRAGGING WITHOUT COMPACTION EQUIPMENT. FOR SPECIAL LOAD DESIGNS, CONTACT STORMTECH FOR COMPACTION REQUIREMENTS.
4. ONCE LAYER 'C' IS PLACED, ANY SOIL/MATERIAL CAN BE PLACED IN LAYER 'D' UP TO THE FINISHED GRADE. MOST PAVEMENT SUBBASE SOILS CAN BE USED TO REPLACE THE MATERIAL REQUIREMENTS OF LAYER 'C' OR 'D' AT THE SITE DESIGN ENGINEER'S DISCRETION.

DETAILS & NOTES

Located at
288 Village Street
Medway, MA

Owned By
Tony J. Leland, Sr.
&
Dawn M. Leland
290 Village Street
Medway, MA

Prepared For
Tony J. Leland, Sr.
290 Village Street
Medway, MA

Scale: As Noted

COMMONWEALTH OF MASSACHUSETTS
NORMAN G. HILL
CIVIL
No. 31887
REGISTERED PROFESSIONAL ENGINEER

Norman G. Hill, P.E. 6-30-2022
Date:
Norman G. Hill, PE #31887

REVISIONS

Date	Description
5/25/22	Revised per Tetra Tech review
6/21/22	Revised per Tetra Tech review
6/30/22	Revised per PEDB mtg

Field By:	SB/DL	1/26/2022
Designed By:	SB	2/10/2022
Drawn By:	SB	2/10/2022
Checked By:	NGH	2/18/2022

Land Planning, Inc.
Civil Engineers • Land Surveyors
Environmental Consultants

Bellingham
167 Hartord Ave.
Bellingham, MA 02019
508-966-4130

North Grafton
214 Worcester St.
N. Grafton, MA 01536
508-839-9526

Hanson
1115 Main Street
Hanson, MA 02341
781-294-4144

www.landplanninginc.com

Date: April 1, 2022
Sheet No. 7
Job No. B1483

May 17, 2022
(revised June 13, 2022)
(revised July 7, 2022)

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

Re: Multi-Family Development
Major Site Plan Review
288 Village St.
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 288 Village Street in Medway, Massachusetts. The Project consists of construction of a three-unit multifamily dwelling, paved parking lot, and stormwater management system to mitigate runoff on-site.

TT is in receipt of the following materials:

- A plan (Plans) set titled "Site Development Plan, Multi-Family Building" dated April 1, 2022, prepared by Land Planning, Inc. (LPI).
- A stormwater report (Report) titled "Stormwater Report, Multi-Family Site Development, 288 Village St., Medway, MA" dated April 5, 2022, prepared by LPI.
- An Application for Major Site Plan Approval, dated April 27, 2022, prepared by Tony Leland (Applicant).
- An Application for Land Disturbance Permit, dated April 11, 2022, prepared by the Applicant.
- A Multifamily Housing Special Permit Application, dated April 12, 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)
- 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.

TT 6/13/22 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 May 25, 2022, prepared by LPI.

Infrastructure Northeast
Marlborough Technology Park 100 Nickerson Road, Marlborough, MA 01752
Tel 508.786.2200 Fax 508.786.2201 tetratech.com

- A plan (Plans) set titled "Site Development Plan, Multi-Family Building" dated April 1, 2022, prepared by Land Planning, Inc. (LPI).
- Waiver request forms dated June 1, 2022, prepared by LPI.

The revised Plans and supporting information were reviewed against our previous comment letter (May 17, 2022) and comments have been tracked accordingly. Text shown in gray represents information contained in previous correspondence while new information is shown in black text.

TT 7/7/22 Update

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

- A plan (Plans) set titled "Site Development Plan, Multi-Family Building" dated April 1, 2022, prepared by Land Planning, Inc. (LPI).
- An architectural elevation drawing titled "Front and Left Exterior Elevations" dated February 3, 2022, prepared by CME Architects, Inc. (CME)
- Waiver request forms dated June 30, 2022, prepared by LPI.

The revised Plans and supporting information were reviewed against our previous comment letter (June 13, 2022) and comments have been tracked accordingly. Text shown in gray represents information contained in previous correspondence while new information is shown in black text. **Comments resolved or Conditions recommended in the previous letter have been removed from this correspondence to consolidate the document for ease of review.**

SITE PLAN REVIEW

Site Plan Rules and Regulations (Chapter 200)

5. A construction sequence has been provided in the Project Description. However, a full Construction Management Plan (CMP) that includes a timetable, methods for managing the construction process and minimizing the impacts of construction on public ways and abutters, and hours of construction and deliveries associated with construction has not been provided. (Ch. 200 §204-3.H)
   - *LPI 5/25/22 Response: Construction activities will take place within the requirements of the building department. All deliveries shall occur Monday through Saturday 7am – 5pm.*
     - TT 6/13/22 Update: The CMP is required to provide details about the overall site construction of the proposed development, not only construction of the building. We recommend the PEDB discuss this item at the next hearing.
     - **TT 7/7/22 Update: The Applicant has submitted a waiver request for this requirement. No action necessary until PEDB decision on Waivers.**
6. Earth removal calculations have not been provided. (Ch. 200 §204-3.I)
   - *LPI 5/25/22 Response: The proposed total cut volume is ± 745 cys. The proposed total fill volume is ± 200 cys.*
     - TT 6/13/22 Update: These items should be provided on the Plans since these estimates shall be stamped by a Massachusetts PE.
     - **TT 7/7/22 Update: In our opinion, this comment is resolved.**
7. Earth fill estimates have not been provided. (Ch. 200 §204-3.J)
   - *LPI 5/25/22 Response: The net site earthwork is ± 545 cys cut.*
     - TT 6/13/22 Update: This item should be provided on the Plans since this estimate shall be stamped by a Massachusetts PE.
     - **TT 7/7/22 Update: In our opinion, this comment is resolved.**

8. A copy of a Determination of Applicability with a finding from the Conservation Commission that the proposed Project is not within its jurisdiction has not been provided. (Ch. 200 §204-3.K)
   - *LPI 5/25/22 Response: A waiver will be requested for this item.*
     - TT 6/13/22 Update: No action necessary until PEDB decision on Waiver requests.
     - **TT 7/7/22 Update: This comment was discussed during the June 28, 2022 PEDB meeting and it appeared the PEDB had confirmed with Medway Conservation Commission that there were no jurisdictional areas that were being affected by the Project. In our opinion, this comment is resolved.**

12. An overall site Landscape Plan has not been provided. A waiver has been requested from this Regulation. (Ch. 200 §204-5.D.8)
   - *LPI 5/25/22 Response: No comment.*
     - TT 6/13/22 Update: No action necessary until PEDB decision on Waiver requests.
     - **TT 7/7/22 Update: The Applicant has provided a building Landscape Plan. However, this sheet was not noted on the Cover Sheet of the Plans. We recommend a Condition requiring the Applicant add the Landscape Plan to the Index of the Plans.**

13. Color renderings of the Project and buildings from at least four different directions have not been provided. (Ch. 200 §204-5.D.10)
   - *LPI 5/25/22 Response: No comment – request from project Architect.*
     - TT 6/13/22 Update: The Applicant shall provide these documents or request a waiver. We recommend the PEDB discuss this item at the next hearing.
     - **TT 7/7/22 Update: The Applicant stated these were submitted to the PEDB which was reflected in the June 28, 2022 PEDB Meeting Minutes. In our opinion, this comment is resolved.**

14. Floor plans with the use of all interior areas have not been provided. (Ch. 200 §204-5.D.11)
   - *LPI 5/25/22 Response: No comment – request from project Architect.*
     - TT 6/13/22 Update: The Applicant shall provide these documents or request a waiver. We recommend the PEDB discuss this item at the next hearing.
     - **TT 7/7/22 Update: The Applicant stated these were submitted to the PEDB which was reflected in the June 28, 2022 PEDB Meeting Minutes. In our opinion, this comment is resolved.**

26. Provisions for the installation of underground electric, telephone, and cable TV have not been provided on the Plans. (Ch. 200 §207-16.A)
   - *LPI 5/25/22 Response: Overhead unless otherwise determined by utility company.*
     - TT 6/13/22 Update: The Applicant shall provide the required underground utilities in the design or request a waiver. We recommend the PEDB discuss this item at the next hearing.
     - **TT 7/7/22 Update: The Applicant has submitted a waiver request for this requirement. No action necessary until PEDB decision on Waivers.**

General Site Plan Comments

28. The proposed water main dead ends under the proposed driveway. We recommend the main be continued to a hydrant to maintain sufficient water quality. Additionally, the town typically requires cut-in with valves for water main connections. We recommend the Applicant coordinate this design with the Medway DPW.
   - *LPI 5/25/22 Response: See letter from Municipal DPW regarding MS4CD permitting.*
     - TT 6/13/22 Update: This item is not related to the MS4CD permitting process and we have not been provided with a letter to review this item against. The Applicant should provide all confirmatory documentation in future submissions.

- **TT 7/7/22 Update: The Applicant confirmed with Medway DPW that an MS4CD permit is not required. In our opinion, this comment is resolved.**

29. We anticipate right turns into the property from village street may be difficult for larger vehicles which may require them to mount the curb when turning. We recommend a larger radius at the driveway intersection.
    - *LPI 5/25/22 Response: A larger radii will encroach into the sidewalk. A waiver will be requested for this item.*
        - TT 6/13/22 Update: We recommend the PEDB discuss this item at the next hearing.
        - **TT 7/7/22 Update: This comment was discussed during the June 28, 2022 PEDB meeting. The PEDB requested the Applicant provide a 6' straight transition curb at each side of the driveway opening to match existing driveways in the area. We recommend a Condition requiring the Applicant show this on the Final Plans.**
30. Values for calculated area of limit of disturbance varies between the Land Disturbance Permit application and the Stormwater Report (see Storm Water Pollution Prevention Plan). Please update with the correct value.
    - *LPI 5/25/22 Response: Land Disturbance permit shall be updated to reflect the 19,000 s.f. reported in the stormwater pollution prevention plan.*
        - TT 6/13/22 Update: We have not received a copy of the revised Land Disturbance Permit application.
        - **TT 7/7/22 Update: In our opinion, this comment is resolved.**

STORMWATER REVIEW

MA DEP Stormwater Standards/Handbook

34. The proposed rain garden is designed with an exfiltration rate of 2.41 inches per hour. Therefore, at least 44% TSS pretreatment is required prior to discharge to the rain garden. (Standard 3)
    - *LPI 5/25/22 Response: Pretreatment is required at rates "greater than 2.41 in/hr". 44% pretreatment is not required prior to discharge to the rain garden.*
        - TT 6/13/22 Update: The handbook states "At least 44% of the TSS must be removed prior to discharge to the infiltration structure if the discharge is within an area with a rapid infiltration rate (greater than 2.4 inches per hour)". The soils below the rain garden exceed the 2.4 in/hr rate and therefore 44% pre-treatment must be achieved prior to discharge to the rain garden.
        - **TT 7/7/22 Update: The Applicant added a stone diaphragm and vegetated filter strip to the design scope. However, we recommend a Condition requiring the Applicant include the calculations in a final Stormwater Report.**

Town Stormwater Management and Land Disturbance Bylaw (Article 26)

39. A description of provisions for phasing the Project shall be provided on the Sediment and Erosion Control Plan. (§26.5.6.3.n)
    - *LPI 5/25/22 Response: Project shall be in sequence and follow typical residential construction.*
        - TT 6/13/22 Update: Project sequencing has not been added to the Plans.
        - **TT 7/7/22 Update: In our opinion, this comment is resolved.**
40. The Applicant has not supplied information related to Phosphorus removal for the Project. The Town of Medway is tributary to the Charles River which has a TMDL listed for nutrients, of which Phosphorus is the primary nutrient of concern. However, it is unclear if this section of the Bylaw is required since the stormwater system is retaining the one-inch storm event and we defer action on this item to the PEDB. (§26.5.8.3.b.7)
    - *LPI 5/25/22 Response: The phosphorus removal efficiency for the proposed BMPs are as follows:*

      Rain Garden 30% - 90%

Infiltration chambers not applicable (roof runoff only)

- TT 6/13/22 Update: The Applicant shall provide calculations showing the Projects' compliance with this section of the Bylaw. The Applicant is directly discharging 29% of the impervious coverage to the MS4 so the percentages listed above apply only to tributary area to the treatment. Calculations shall be provided based on the EPA Region 1 BMP Performance Extrapolation Tool, or other references listed in the Bylaw if BMPs proposed on the Project are not addressed in the EPA tool.
- **TT 7/7/22 Update: This comment was discussed during the June 28, 2022 PEDB meeting. It appears the Applicant's design meets the requirements based on statement made during the hearing. However, we recommend a Condition requiring the Applicant include the calculations in a final Stormwater Report.**

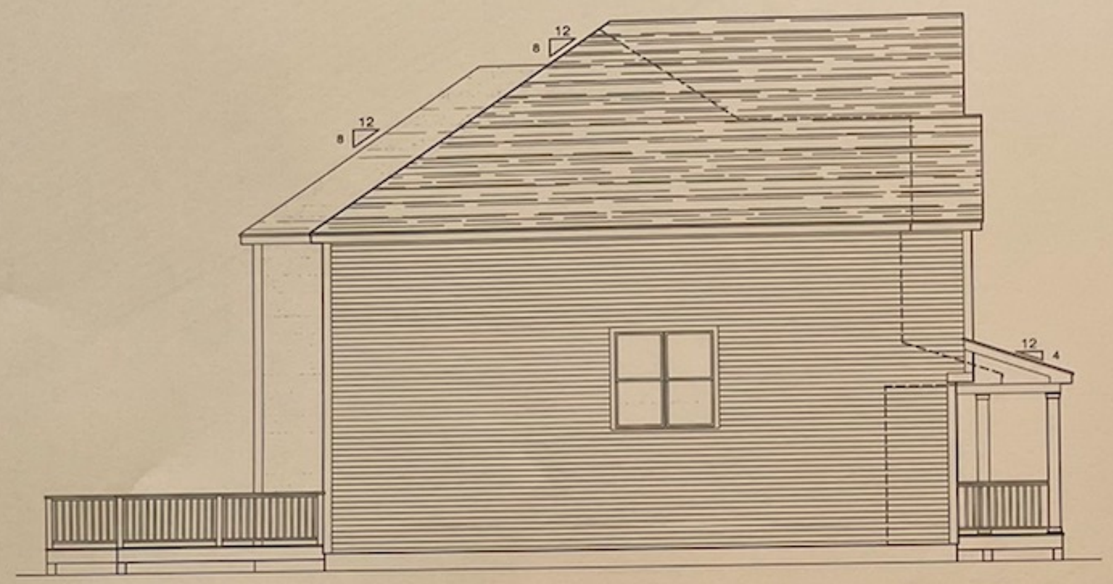
These comments are offered as guides for use during the Town's review and additional comments may be generated during the course of review. The Applicant shall be advised that any absence of comment shall not relieve them of the responsibility to comply with all applicable local, state and federal regulations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

Very truly yours,

Steven M. Bouley, PE
Project Manager

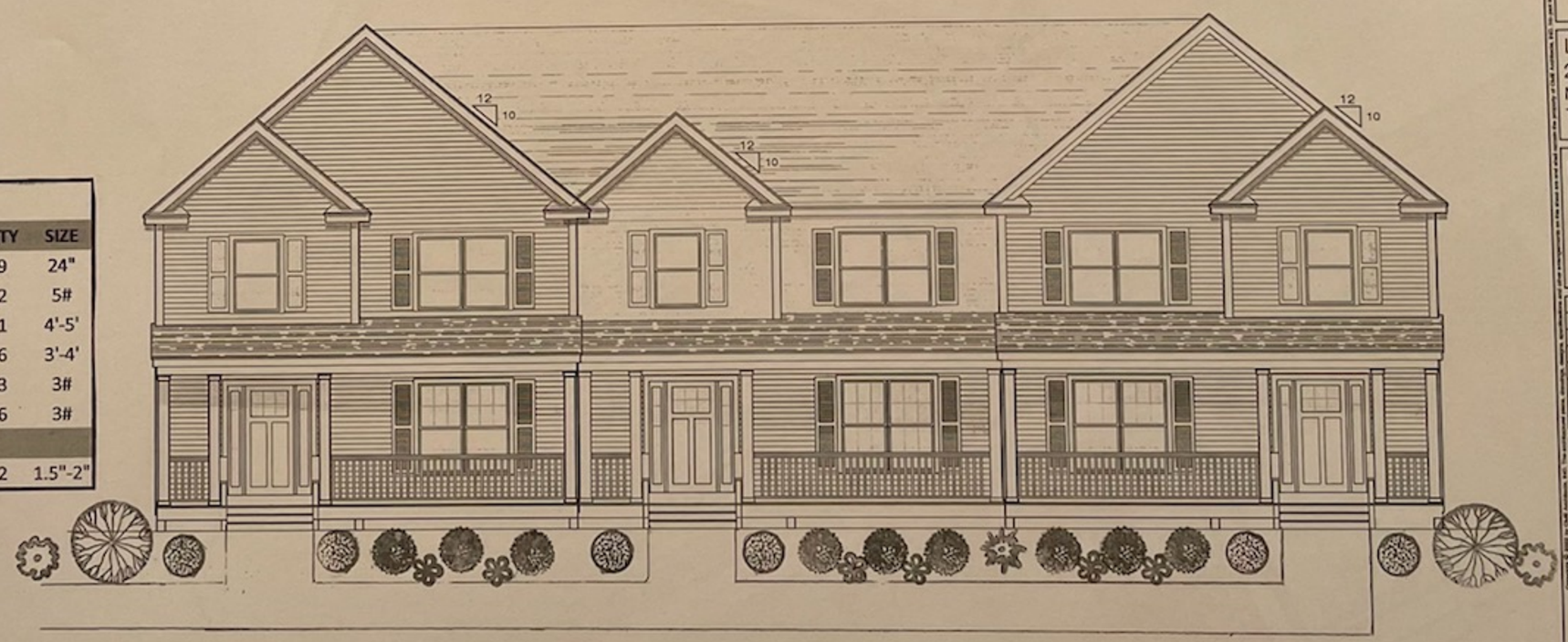
Bradley M. Picard, EIT
Civil Engineer

P:\21583\143-21583-22012 (PEDB 288 VILLAGE ST)\DOCS\288 VILLAGE ST-PEDBREV(2022-07-07).DOCX



LEFT ELEVATION

SCALE: 1/4" = 1'-0"



Plant List

Code	Shrubs	QTY	SIZE
	Buxus 'Green Velvet'	9	24"
	Chamaecyparis 'Gold mop'	2	5#
	Juniperus communis 'Gold cone'	1	4'-5'
	Ilex Crenata 'Sky pencil'	6	3'-4'
	Rosa 'Knockout rose light pink'	3	3#
	Rosa 'Knockout rose hot pink'	6	3#
	Trees		
	Cornus Kousa 'Venus'	2	1.5"-2"

CME
ARCHITECTS, INC.
6 WILKINS DRIVE; SUITE 210
PLAINVILLE, MA 02762 508-809-3509

ALL CONSTRUCTION SHALL COMPLY WITH THE FOLLOWING:

1. 2015 INTERNATIONAL RESIDENTIAL CODE FOR ONE AND TWO FAMILY DWELLINGS.
2. 780 CMR 51.00 - MASS. AMENDMENTS TO THE INTERNATIONAL RESIDENTIAL CODE.
3. WFCM: WOOD FRAME CONSTRUCTION MANUAL FOR ONE AND TWO FAMILY DWELLINGS. 2001 EDITION.
4. WFCM: WOOD FRAME CONSTRUCTION MANUAL: GUIDE TO WOOD CONSTRUCTION IN HIGH WIND AREAS FOR ONE AND TWO FAMILY DWELLINGS. —
5. PRESCRIPTIVE RESIDENTIAL WOOD DECK CONSTRUCTION GUIDE (BASED ON THE 2015 INTERNATIONAL RESIDENTIAL CODE)

LELAND TRIPLEX
288 VILLAGE ST
MEDWAY, MA
TONY LELAND

FRONT AND LEFT EXTERIOR ELEVATIONS

△	Date	Revisions
1	—	—
2	—	—
3	—	—
4	—	—
5	—	—
6	—	—
7	—	—

REVIEW SET

Scale:	1/4" = 1'-0"
Date:	2/3/2022
Drawn By:	T.WALLACE
Checked By:	
Job Number:	21253

Drawing:

A1

Susan Affleck-Childs

From: Bridget Graziano
Sent: Monday, July 11, 2022 11:30 AM
To: Susan Affleck-Childs
Subject: RE: 288 Village Street - CC jurisdiction - Email needed from you asap!

Susy,

The proposed work on the plan attached, titled, "Site Development Plan Multi-Family Building" by Land Planning, dated June 30, 2022 is not within the Commission's jurisdiction. However, the Commission is confident that the applicant needed to file a Land Disturbance Permit and has done such. The Commission respectfully requests that the PEDB require the following;

- bottom excavation oversight (review of the excavation for subsurface infiltrator and site visit or evidence that the subsurface infiltrator was wrapped properly prior to covering of the system. CONSERVATION CONDITION - The applicant shall install sub surface infiltrators per the approved site. The Towns Consulting Engineer shall approve all phases of installation prior to moving to the next. The applicant shall contact the Towns Consulting Engineer for an inspection of the bottom of excavation, then once the system is installed and wrapped the applicant shall contact the Agent and/or the Commission for an inspection of the placement of the system prior to backfill. After the Agent and/or Commissioner approves the excavation maybe backfilled.
- Rain Garden elevations/grades and plantings are confirmed as designed on the approved site plans by the Town Consulting Engineer.

Thank you!
Bridget

From: Susan Affleck-Childs <sachilds@townofmedway.org>
Sent: Wednesday, July 6, 2022 8:50 AM
To: Bridget Graziano <bgraziano@townofmedway.org>
Subject: 288 Village Street - CC jurisdiction - Email needed from you asap!
Importance: High

HI,

The PEDB asked me to secure a communication from you (separate document) indicating that 288 Village Street is not within ConCom's jurisdiction. Please send to me on Monday! The PEDB is reviewing a draft decision Tuesday night. Thanks.

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

Medway Planning and Economic Development Board
Request for Waiver from Site Plan Rules and Regulations
Complete 1 form for each waiver request

Project Name	Multi-Family Site Developement
Property Location	288 Village Street
Type of Permit	Multi-Family Special Permit
Identify the number and title of the relevant section of the *Site Plan Rules and Regulations* from which a waiver is sought.	Site Plan Rules & Regulations Chapter 200 Section 207-12.H.2
Summarize the text of the relevant section of the *Rules and Regulations* from which a waiver is requested.	Driveway apron radii
What aspect of the *Rule and Regulation* do you propose be waived?	3' radius requirement
What do you propose as an alternative to the standard?	Slope ends of granite curbing to match proposed driveway apron
Explanation/justification for the waiver request. How does the particular rule/regulation not apply to the site or situation under review?	3' radii will encroach into the existing sidewalk
Explanation/justification. How would approval of this waiver request not be significantly detrimental to achieving the purposes of site plan review?	Will not be detrimental to 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?	Will be consistent with surrounding curb cuts
What is the impact on the development if this waiver request is denied?	Would be difficult for large vehicle to enter the site from Village Street
What mitigation measures do you propose to offset not complying with the particular Rule/Regulation?	None
Waiver Request Prepared By:	Norman G. Hill P.E.
Date:	6/30/22

Questions?? - Please contact the Medway PEDB office at 508-533-3291.

2/7/2022

Medway Planning and Economic Development Board
Request for Waiver from Site Plan Rules and Regulations
Complete 1 form for each waiver request

Project Name	Multi-Family Site Developement
Property Location	288 Village Street
Type of Permit	Multi-Family Special Permit
Identify the number and title of the relevant section of the *Site Plan Rules and Regulations* from which a waiver is sought.	Site Plan Rules & Regulations Chapter 200 Section 204-3.H
Summarize the text of the relevant section of the *Rules and Regulations* from which a waiver is requested.	Construction Project Management requirement
What aspect of the *Rule and Regulation* do you propose be waived?	Eliminate
What do you propose as an alternative to the standard?	Limit to general residential sequencing
Explanation/justification for the waiver request. How does the particular rule/regulation not apply to the site or situation under review?	General residential sequencing is sufficient for the proposed project scope and size.
Explanation/justification. How would approval of this waiver request not be significantly detrimental to achieving the purposes of site plan review?	Will not be detrimental to the site plan review process
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?	Will not effect the quality of the development
What is the impact on the development if this waiver request is denied?	Not applicable
What mitigation measures do you propose to offset not complying with the particular Rule/Regulation?	Overall project management shall be discussed at preconstruction meeting
Waiver Request Prepared By:	Norman G. Hill P.E.
Date:	6/30/22

Questions?? - Please contact the Medway PEDB office at 508-533-3291.

Medway Planning and Economic Development Board
Request for Waiver from Site Plan Rules and Regulations
Complete 1 form for each waiver request

Project Name	Multi-Family Site Developement
Property Location	288 Village Street
Type of Permit	Multi-Family Special Permit
Identify the number and title of the relevant section of the *Site Plan Rules and Regulations* from which a waiver is sought.	Site Plan Rules & Regulations Chapter 200 Section 207-16.A
Summarize the text of the relevant section of the *Rules and Regulations* from which a waiver is requested.	Underground utility requirement
What aspect of the *Rule and Regulation* do you propose be waived?	Elliminate
What do you propose as an alternative to the standard?	Overhead wires
Explanation/justification for the waiver request. How does the particular rule/regulation not apply to the site or situation under review?	Consistent with surrounding utility connections The connection poles are located across Village Street
Explanation/justification. How would approval of this waiver request not be significantly detrimental to achieving the purposes of site plan review?	Not detrimental to the purpose 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?	Would require less utility work within the right of way.
What is the impact on the development if this waiver request is denied?	Utility will have to cross under the road prior to site connection or a pole will have to be added on the Locus side of the road before underground connection
What mitigation measures do you propose to offset not complying with the particular Rule/Regulation?	None
Waiver Request Prepared By:	Norman G. Hill P.E.
Date:	6/30/22

Questions?? - Please contact the Medway PEDB office at 508-533-3291.

2/7/2022

Medway Planning and Economic Development Board
Request for Waiver from Site Plan Rules and Regulations
Complete 1 form for each waiver request

Project Name	Multi-Family Site Developement
Property Location	288 Village Street
Type of Permit	Multi-Family Special Permit
Identify the number and title of the relevant section of the *Site Plan Rules and Regulations* from which a waiver is sought.	Site Plan Rules & Regulations Chapter 200 Section 204-5-D10
Summarize the text of the relevant section of the *Rules and Regulations* from which a waiver is requested.	Color renderings of each side of building
What aspect of the *Rule and Regulation* do you propose be waived?	Require color renderings of each side of building
What do you propose as an alternative to the standard?	Allow the color rendering submitted showing the front of the building
Explanation/justification for the waiver request. How does the particular rule/regulation not apply to the site or situation under review?	All sides of the building will be the same color.
Explanation/justification. How would approval of this waiver request not be significantly detrimental to achieving the purposes of site plan review?	The color rendering submitted accurately depicts the color for the entire building
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?	Not applicable
What is the impact on the development if this waiver request is denied?	None
What mitigation measures do you propose to offset not complying with the particular Rule/Regulation?	None
Waiver Request Prepared By:	Norman G. Hill P.E.
Date:	7/11/2022

Questions?? - Please contact the Medway PEDB office at 508-533-3291.

2/7/2022

Medway Planning and Economic Development Board
Request for Waiver from Site Plan Rules and Regulations
Complete 1 form for each waiver request

Project Name	Multi-Family Site Developement
Property Location	288 Village Street
Type of Permit	Multi-Family Special Permit
Identify the number and title of the relevant section of the *Site Plan Rules and Regulations* from which a waiver is sought.	Site Plan Rules & Regulations Chapter 200 Section 204-5D15
Summarize the text of the relevant section of the *Rules and Regulations* from which a waiver is requested.	Sight Lighting Plan
What aspect of the *Rule and Regulation* do you propose be waived?	Eliminate requirement for lighting plan
What do you propose as an alternative to the standard?	none
Explanation/justification for the waiver request. How does the particular rule/regulation not apply to the site or situation under review?	The sight will only have exterior lighting consistent with residential use. No pole lights are proposed.
Explanation/justification. How would approval of this waiver request not be significantly detrimental to achieving the purposes of site plan review?	The proposal is consistent with neighborhood
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?	Not applicable
What is the impact on the development if this waiver request is denied?	None
What mitigation measures do you propose to offset not complying with the particular Rule/Regulation?	None
Waiver Request Prepared By:	Norman G. Hill P.E.
Date:	7/11/2022

Questions?? - Please contact the Medway PEDB office at 508-533-3291.

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 A. 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

MULTI-FAMILY HOUSING SPECIAL PERMIT, MAJOR SITE PLAN, and LAND DISTURBANCE PERMIT DECISION
288 Village Street
_____with Waivers and Conditions

Decision Date:

Name of Applicant/Permittee: Tony J. Leland, Sr. and Dawn M. Leland

Address of Applicant: 290 Village Street
Medway, MA 02053

Name/Address of Property Owners: Tony J. Leland, Sr. and Dawn M. Leland
290 Village Street
Medway, MA 02053

Project Location: 288 Village Street

Assessors' Reference: Map 58, Parcel 83

Zoning District: Agricultural Residential II
Multi-Family Housing Overlay District

Engineer: Norman, G. Hill, P.E.
Land Planning Inc.
Bellingham, MA 02019

Site Plan: *Site Development Plan, Multi-Family Building Located at 288 Village Street, Medway, MA* by Land Planning, Inc. of Bellingham, MA, dated April 1, 2022, last revised June 30, 2022, to be further revised as specified herein

I. PROJECT DESCRIPTION – The Applicant proposes to construct a 3-unit residential condominium building at 288 Village Street. The site is .52 acres in area and is located in the Agricultural-Residential II zoning district and the multi-family housing overlay district. The project includes construction of one 3-family, townhouse style building; each unit will have a front porch and a rear deck. Site improvements include a 16' driveway, parking, utilities, grading, landscaping, and stormwater management facilities. Access to the development will be from Village Street in the location where the current driveway is located. A total of 6 off-street parking spaces will be provided at the rear of the site. Connections will be made to existing Town sewer and water services on Village Street.

The proposed use requires a multi-family housing special permit pursuant to Sections 5.6.4 and 3.4 of the Town of Medway *Zoning Bylaw* (the "*Bylaw*"), site plan review and approval pursuant to Section 3.5 of the *Bylaw*, and a land disturbance permit pursuant to Article XXVII of the *Medway General Bylaws*, Stormwater Management and Land Disturbance.

II. VOTES OF THE BOARD

A. **Multi-Family Housing Special Permit -** After reviewing the application and information gathered during the public hearing and review process, the Medway Planning and Economic Development Board (the "Board"), on _____, on a motion made by _____and seconded by _____, *voted to* _____*with CONDITIONS a Multi-Family Housing Special Permit for a 3-unit residential development at 288 Village Street to Tony J. Leland, Sr. and Dawn L. Leland of Medway, MA (hereafter referred to as the Applicant or the Permittee)*

The motion was _____ by a vote of ___in favor and ___opposed.

Planning & Economic Development Board Member	***Vote***
Jessica Chabot	
Richard Di Iulio	
Matthew Hayes	
Sarah Raposa	
Robert Tucker	

B. **Site Plan -** After reviewing the application and information gathered during the public hearing and review process, the Board, on _____, on a motion made by _____and seconded by _____, voted to approve with WAIVERS and CONDITIONS a site plan for the development of a three unit, multi-family development and associated site improvements at 288 Village Street as shown on a plan titled *Site Development Plan, Multi-Family Building located at 288 Village Street, Medway, MA,* dated April 1, 2022, last revised June 30, 2022, prepared by Land Planning, Inc. of Bellingham, MA, to be further revised as specified herein before endorsement and recording.

The motion was _____ by a vote of ___in favor and ___opposed.

Planning & Economic Development Board Member	***Vote***
Jessica Chabot	
Richard Di Iulio	
Matthew Hayes	
Sarah Raposa	
Robert Tucker	

C. **Land Disturbance Permit -** After reviewing the application and information gathered during the public hearing and review process, the Board, on _____, on a motion made by _____and seconded by _____, voted to _____ with CONDITIONS a Land Disturbance Permit for 288 Village Street, Medway, MA as shown on a plan titled *Site Development Plan, Multi-Family Building located at 288 Village Street, Medway, MA*, dated April 1, 2022, last revised June 30, 2022, prepared by Land Planning, Inc. of Bellingham, MA, to be further revised as specified herein before endorsement and recording.

The motion was _____by a vote of ____in favor and ___opposed.

Planning & Economic Development Board Member Vote

Jessica Chabot
Richard Di Iulio
Matthew Hayes
Sarah Raposa
Robert Tucker

III. PROCEDURAL HISTORY

A. April 19 and 27, 2022 – Special permit, site plan, and land disturbance applications and associated materials filed with the Board

B. April 27, 2022 – Special permit and site plan applications and associated materials filed with the Medway Town Clerk

C. April 26, 2022 – Public hearing notice filed with the Town Clerk and posted at the Town of Medway web site.

D. April 26, 2022 - Public hearing notice mailed to abutters by certified sent mail.

E. May 9 and May 17, 2022 - Public hearing notice advertised in *Milford Daily News.*

F. May 23, 2022 – Site plan information distributed to Town boards, committees and departments for review and comment.

G. May 24, 2022 - Public hearing commenced. The public hearing was continued to June 28 and July 12, 2022 when the hearing was closed, and a decision rendered.

IV. INDEX OF SITE PLAN/SPECIAL PERMIT DOCUMENTS

A. The special permit, site plan, and land disturbance application submittal for the proposed 288 Village Street condominium development included the following documents, plans, studies and information that were provided to the Board at the time the application was filed:

1. Multifamily Housing Special Permit, site plan approval, and land disturbance permit applications received April 19 and 27, 2022 with Project Narrative prepared by William Halsing, P.L.S, of Land Planning, Inc. of Bellingham, MA.
2. *Site Development Plan, Multi-Family Building Located at 288 Village Street, Medway, MA* by Land Planning, Inc. of Bellingham, MA, dated April 1, 2022

3. Building elevation and landscaping plan *Leland Triplex – Front and Left Exterior Elevations*, dated February 3, 2022 by CME Architects, Inc. of Plainville, MA
4. Certified abutters list from Medway Assessor's office dated April 12, 2022 9
5. *Development Impact Statement* prepared by Land Planning Inc.
6. Requests for Waivers from *Site Plan Rules and Regulations* dated April 26, 2022 prepared by Land Planning, Inc.
7. Quit Claim deed dated October 9, 2018 conveying 288 Village Street from Donald and Susan Lloyd to Tony J. Leland, Sr. and Dawn M. Leland, recorded at the Norfolk County Registry of Deeds.
8. *Stormwater Report – Multi-Family Site Development, 288 Village Street, Medway, MA,* dated April 5, 2022 prepared by Land Planning, Inc.

B. During the course of the Board's review, revised plans and a variety of other materials were submitted to the Board by the Applicant and its representatives:
1. Updated Land Disturbance Permit application – received June 24, 2022.
2. *Site Development Plan, Multi-Family Building Located at 288 Village Street, Medway, MA* prepared by Land Planning, Inc. of Bellingham, MA, dated April 1, 2022, REVISED May 25, 2022, June 23, 2022, and June 30, 2022,
3. *Stormwater Report – Multi-Family Site Development, 288 Village Street, Medway, MA,* prepared by Land Planning, Inc., prepared by Land Planning, Inc. dated April 5, 2022, REVISED June 23, 2022
4. Response letters dated May 25, 2022 and June 23, 2022 from William Halsing, Land Planning, Inc. to various Tetra Tech plan review letters.
5. Resubmission email dated June 24, 2022 from Stephen Balcewicz, Land Planning, Inc. with revised site plan, additional waiver requests, and other revised documents.
6. Additional Requests for Waivers from *Site Plan Rules and Regulations* dated June 1, 2022, June 30, 2022 and July 11, 2022 prepared by Land Planning, Inc.
7. Architectural plans *New Construction for Leland Triplex, 288 Village ST. Medway, MA* by CME Architects, dated April 14, 2022

C. Other documentation submitted to the Board during the course of the public hearing:
1. Tetra Tech plan review letters dated May 17, June 13, and July 7, 2022.
2. Email from DPW Compliance Officer Stephanie Carlisle dated June 3, 2022 re: compliance with Town's MS4CD requirements.
3. Email from Deputy Fire Chief Mike Fasolino dated May 23, 2022 authorizing a 16' driveway width.
4. Email from DPW Water and Sewer Superintendent Barry Smith dated June 13, 2022 re: water and sewer connections and fire hydrant.
5. *Mullin Rule Certification* from Robert Tucker for absence from the June 28, 2022 public hearing.
6. Email communication dated May 23, 2022 from abutter Rick Luzetti, 6 Williams Street.
7. Email communication from Conservation Agent Bridget Graziano dated July 11, 2022.

V. TESTIMONY - In addition to the special permit and site plan review application materials as submitted and provided during the course of its review, the Board heard and received verbal testimony from:

- Steve Bouley, P.E. of Tetra Tech, Inc., the Town's Consulting Engineer
- William Halsing, P.L.S, Land Planning, Inc. for the Applicant
- Stephen Balcewicz, E.I. T., Land Planning Inc. for the Applicant
- Tony Leland, Applicant

VI. FINDINGS - The Board, at its meeting on July 12, 2022, on a motion made by _____and seconded by _____, voted to approve the following ***FINDINGS*** regarding the site plan, special permit, and land disturbance applications for the proposed 288 Village Street condominium development. The motion was _____by a vote of ___ in favor and ___ opposed.

A. ***MULTIFAMILY HOUSING SPECIAL PERMIT*** - The Board makes the following findings in relation to this development's compliance with Section 5.6.4 Multifamily Housing of the *Bylaw*.

Applicability

1) Location - *The site is within the Multifamily Housing Overlay District (Section 5.6.4) and thus eligible for the multifamily housing proposal.*

2) Traffic capacity - *Village Street is a major artery within the town and has sufficient capacity to handle the traffic from the 3 additional proposed dwelling units. The 3 units do not rise to the level of triggering the requirement for a traffic study.*

3) Parcel size & frontage –The site consists of 0.52 acres, *which exceeds the minimum lot area requirement of 22,500 square feet. The site has 133 linear ft. of frontage on Village Street so it meets the minimum 50' frontage requirement of Section 5.6.4.B. 1. of the Bylaw.*

Dimensional

4) Dimensional Adjustments – *The other dimensional requirements of the underling AR-II zoning district apply to this project, as set forth in Table 2 of Section 6 of the Bylaw. As shown on the site plan dated 6-30-22, the proposed front setback is 30'; the required minimum front setback is 35'. Section 5.6.4.C.2. of the Bylaw authorizes the Board, by a four-fifths vote, to adjust dimensional requirements. The Board finds that such adjustment is suitable for the site as the reduced front setback allows for the required parking to be located at the back of the site, out of public view.*

   The minimum rear setback requirement is 15'; the site plan shows a rear setback of 73'. The minimum side setback requirement is 15'; the site plan shows 17' on the west and 36' on the east. The project complies with maximum lot (building) coverage (15% provided vs. 30% maximum allowed) and the maximum impervious surface standard (39.5% provided vs. 40% allowed).

5) Building Height - *As noted on the plans, the height of the 3-unit building will be 30' feet, less than the maximum 40' allowed.*

Density

6) Density - *The maximum density for a multifamily development on a lot less than one acre shall not exceed its relative portion of an acres. With 0.52 acres, the maximum number of*

Commented [SAC1]:
In its vote on the Findings, the Board will need an affirmative vote of 4 in favor to allow for the reduced front setback.

possible dwelling units would be 4. With 3 units as proposed, the project is under the maximum possible density.

Special Regulations

7) Affordable housing - *At only 3 dwelling units, the affordable housing requirement of Section 8.6.C. of the Bylaw does not apply.*

8) Open Space - *A minimum of 15% of the parcel must be open space or yard area. This requirement is met with 60.5% open space provided. However, see Condition ____ requiring that open space areas on the site be specifically designated as such.*

9) Parking spaces - *Two off-street spaces per unit (6 spaces) are the minimum required per Section 5.6.4 E. 3 of the Bylaw and 6 off-street parking spaces are provided (1.5 spaces per unit plus 1 visitor space per every 2 units.)*

10) Town water and sewer service - *The project will be served by Town water and sewer.*

11) Number of units - *The number of units proposed (3) is less than the 4 unit maximum possible allowable for a site of this size under the Bylaw.*

12) Historic Properties – *The former vintage residential structure building on the site was razed in January 2022 after the Medway Historical Commission determined it was not a "historically significant building".*

Decision Criteria

13) **Meets purposes of Multi-family Housing section of the *Bylaw* (Section 5.6.4) and the *Site Plan Rules and Regulations*** - *The project meets the following purpose of the Multifamily Housing section of the Bylaw: (1) It provides a diversity of housing types in the form of townhouse style units. The project, as reviewed and revised, also meets the purpose of the Site Plan Rules and Regulations. The plans have been reviewed by Town officials and the Board's Consulting Engineer to ensure that the health, safety and welfare of Town residents is protected. Impacts on traffic, parking, drainage, environmental quality, community economics and community character were reviewed, considered and plan revisions have been incorporated.*

14) **Consistent with the Medway *Housing Production Plan*** - *The project is consistent with Medway's Housing Production Plan in that it fulfills the implementation strategy of encouraging the use of the Multifamily Housing special permit provision of the Bylaw and providing additional options for multifamily housing.*

15) **Impact on abutting properties and adjacent neighborhoods** - *The impact on abutting properties and adjacent neighborhoods has been suitably addressed. The northern boundary of the site includes fencing to screen the properties of the addressed through vegetative screening, and the aesthetics of the buildings.*

16) **Variety of housing stock** - *The development increases the variety of housing stock in the community by providing four duplex buildings, and one 3-unit building.*

17) **Designed to be reflective of or compatible with the character of the surrounding neighborhood** - *The surrounding neighborhood includes a mix of housing types including single family, multi-family, and a complex of independent living cottages and assisted*

living units currently under construction. Therefore, the proposed development is compatible with the surrounding neighborhood.

B. ***SPECIAL PERMIT DECISION CRITERIA*** – Unless otherwise specified herein, special permits shall be granted by the special permit granting authority only upon its written determination that the adverse effects of the proposed multifamily housing use will not outweigh its beneficial impacts to the town or the neighborhood, in view of the particular characteristics of the site, and of the proposal in relation to that site. The Board makes the following findings in accordance with Section 3.4 of the *Bylaw*. In making its determination, the special permit granting authority, in addition to any to any specific factors that may be set forth in other sections of the *Bylaw*, shall make findings on all of the applicable criteria specified below:

1) **The proposed site is an appropriate location for the proposed use.** *The site has direct access from Village Street and traffic will not impact abutting residential neighborhoods. The previous building on the property was a 2-family structure. The site is nearby to Anderson Village, a multi-family condominium development in a former school building at 280 Village Street. A 12-unit multi-family development is under construction at 274-276 Village Street and the Salmon Willows multi-family senior living community is operational and under construction at 257-261 Village Street.*

2) **Adequate and appropriate facilities will be provided for the operation of the proposed use.** *As documented in the plans and associated materials, and conditioned herein, adequate and appropriate facilities will be provided for the operation of the proposed multi-family use. Town officials and the Town's Consulting Engineer have all reviewed the proposed facilities. The project will be serviced by Town water and sewer systems. Private electric and gas utilities will be provided. And the stormwater management system has been designed in accordance with the applicable State and local regulations.*

3) **The proposed use as developed will not create a hazard to abutters, vehicles, pedestrians or the environment.** *The proposed use adds 3 residential dwelling units off a major east/west through street. The driveway entrance from Village Street to the site has more than adequate sight distance in both directions and does not create a hazard to abutters, vehicles, or pedestrians. Suitable sidewalk facilities exist in front of the property on Village Street and within the new development. The proposed stormwater management system has been reviewed by the Town's Consulting Engineer and will not present a hazard to the environment.*

4) **The proposed use will not cause undue traffic congestion or conflicts in the immediate area.** *Village Street has the capacity to handle the traffic from the additional 3 residential units. The entrance has been designed for maximum sight distance so the development will not cause undue traffic congestion or conflicts.*

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.** *The Applicant has provided documentation reviewed by the Town's Consulting Engineer that its stormwater management plan is adequate to prevent flooding. Household refuse will be disposed of by curb-side pickup as is standard along Village Street. There will be no detrimental impact*

on abutters due to odors, dust, noise, vibration, refuse materials or other undesirable impacts.

6) **The proposed use as developed will not adversely affect the surrounding neighborhood or significantly alter the character of the zoning district**. *The proposed use is within the Multi-Family Housing Overlay District. It is near a multi-family condominium development (Anderson Village) and an independent and assisted living development currently under construction (Salmon Willows) and thus will not alter the character of the neighborhood.*

7) **The proposed use is in harmony with the general purpose and intent of the *Zoning Bylaw.*** *The Multi-Family Housing Overlay District was established to accommodate this type of use subject to certain conditions to limit adverse impacts. The proposed use is in harmony with the general purpose and intent of the Bylaw.*

8) **The proposed use is consistent with the goals of the Medway Master Plan**. *The proposed use is consistent with the Master Plan goals of identifying housing needs and implementing projects to meet those needs such as increasing housing diversity.*

9) **The proposed use will not be detrimental to the public good**. *As documented in the plans and application, and the findings and conditions of this decision, the proposed use is in accordance with the goals of the Master Plan while protecting against potential adverse impact. The proposed development has reasonable and appropriate density in a suitable location.*

For all the above reasons, the Board finds that the beneficial impacts of the proposed 288 Village Street tri-plex residential building outweigh the effects of the proposed use on the Town and neighborhood.

C. ***SITE PLAN RULES AND REGULATIONS FINDINGS*** – The Board shall determine whether the proposed development is in conformance with the standards and criteria set forth in the *Site Plan Rules and Regulations*, unless specifically waived. In making its decision, the Board makes the following findings in accordance with Section 204-8 of the *Site Plan Rules and Regulations*, as amended October 8, 2019. and Section 3.5 of the *Bylaw*:

1) **Has internal circulation, queuing and egress been designed such that traffic safety is protected, access via minor streets servicing residential areas is minimized, and traffic backing up into the public way is minimized?** *The plan has been thoroughly reviewed by Town officials and the Board's Consulting Engineer. No access from minor streets is necessary or available, there is no backing onto a public way, and Village Street is adequate to safely handle the additional traffic from the 3 new housing units.*

2) **Does the site plan show designs that minimize any departure from the character, materials, and scale of buildings in the vicinity as viewed from public ways and places?** *The proposed building is residential, and its scale and materials are suitable for the site and use. There are no distinguishing buildings in the vicinity with which the proposed buildings would conflict in terms of character, materials and scale.*

3) **Is reasonable use made of building location, grading and vegetation to reduce the visible intrusion of structures, parking areas, outside storage or other outdoor service areas *(e.g., waste removal*) from public views or from (nearby) premises**

residentially used and zoned. *Parking for the dwellings is located at the rear of the site. The abutting property to the north includes a fence so abutter screening is already in place. As conditioned here (Specific Condition #___) the landscaping plan will be revised to include landscape installation along the eastern side of the site to screen the development from the abutting property.*

4) **Is adequate access to each structure for fire and service equipment provided?** *The proposed structure is accessible from the driveway and is located relatively close to Village Street. The Deputy Fire Chief has reviewed the plan, has not identified any access issues, and has authorized the use of a 16' wide driveway. A sprinkler system will be installed in the building.*

5) **Will the design and construction minimize, to the extent reasonably possible, the following environmental impacts?**
   a) the volume of cut and fill;
   b) the number of trees to be removed with particular care taken with mature trees and root systems;
   c) the visual prominence of man-made elements not necessary for safety;
   d) the removal of existing stone walls;
   e) the visibility of building sites from existing streets;
   f) the impacts on waterways and environmental resource areas;
   g) soil pollution and erosion;
   h) noise.

   The proposed stormwater drainage system has been reviewed by the Town's Consulting Engineer and recommended modifications have been incorporated into the plan set. Appropriate soil pollution and erosion controls are included. The plan does not show any waterways or environmental resource areas. No extraordinary noise will be generated by a tri-plex building. No stone walls are being removed. The subject site was previously disturbed so the impact on the environment is minimal.

6) **Is pedestrian and vehicular safety both on the site and egressing from it maximized?** *The proposed use is for 3 residential units off a major street. The entrance to the site has adequate sight distance and does not create a hazard to abutters, vehicle, or pedestrians. There is sidewalk along the north side of Village Street adjacent to the subject property. Within the site, sidewalks will be constructed to connect parking areas to unit entrances.*

7) **Does the design and will the construction incorporate, to the maximum extent possible, the visual prominence of natural and historic features of the site?** *There are no visually prominent natural or historic features on site.*

8) **Does the lighting of structures and parking area avoid glare on adjoining properties and minimize light pollution within the town?**
   NOTE – No information has been provided to make a finding about lighting. A lighting plan has not been provided. The applicant has requested a waiver from this requirement.

9) **Is the proposed limit of work area reasonable and does it protect sensitive environmental and/or cultural resources? The site plan as designed should not cause substantial or irrevocable damage to the environment, which damage could be avoided or ameliorated through an alternative development plan or mitigation measures.** *The limit of work is reasonable and there are no sensitive environmental*

resources on the property. The Conservation Agent has indicated that the proposed scope of work is not within the Commission's jurisdiction.

D. ***LAND DISTURBANCE FINDINGS -*** The Board finds that the work proposed for construction of a 3-unit residential development with the associated stormwater management system, utilities, parking and access 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 Stormwater Management and Land Disturbance.

VII. WAIVERS – At its July 12, 2022 meeting, the Board, on a motion made by _____ and seconded by _____, voted to grant waivers from the following provisions of the *Rules and Regulations for the Submission and Approval of Site Plans, as amended _____ 2019.* The Board's action and reasons for granting each waiver request are listed below. All waivers are subject to the *Special and General Conditions of Approval*, which follow this section. The motion was _____by a vote of ___in favor and __ opposed.

SITE PLAN SUBMITTAL REQUIREMENTS – Section 204-3

1) **Section 204 – 3. F. 1 Traffic Impact Assessment -** A full *Traffic Impact Assessment* is needed if the project involves one or more of the following characteristics:
   (a) proposes an additional twenty or more parking spaces;
   (b) contains frontage or proposes access on a public way.
   (c) includes uses expected to generate an additional one hundred trips to or from the site on an adjacent roadway during a peak hour.

   The Applicant has requested a waiver from the requirement for a full traffic impact analysis due to the relatively small size of this proposed development (3 units). Instead, the Applicant has provided a brief traffic overview. The development's proposed access and egress is on a straight portion of Village Street that offers more than 610' feet of sight distance to the west and more than 800' to the east. The estimated traffic generation from the proposed development (1 trip during the AM peak hour and 4 trips during the PM peak hour) produces little impact. It is noted that the site previously housed a 2-family structure, so the new development will have a minimal traffic impact. The location is served by a sidewalk on the north side of Village Street, the same side as the proposed development, and provides safe pedestrian access to and from the site. ***For the foregoing reasons, the Board approves this waiver request as being consistent with the purpose and intent of the Site Plan Rules and Regulations which will have no significant detriment to the achievement of any of the purposes of Site Plan Review and Approval.***

2) **Section 204 – 3. F.2. Environmental Impact Assessment -** An *Environmental Impact Assessment* is needed if the project involves one or more of the following characteristics:
   (a) proposes an additional thirty or more parking spaces;
   (b) proposes a building footprint of fifteen thousand (15,000) square feet or greater;
   (c) proposes to disturb twenty thousand square feet of land or greater;
   (d) proposes a project that is subject to the Town's Stormwater and Land Disturbance Bylaw.

The Applicant has requested a waiver from the requirement for a full environmental impact assessment and has asked that the scope of environmental review be limited to stormwater evaluation. The Applicant has provided a stormwater drainage report which has been thoroughly reviewed by the Board's consulting engineer. The Town's Conservation Agent has commented that the proposed scope of work is not within the Conservation Commission's jurisdiction. The site is already disturbed due to its most recent past use with a 2-family structure. Given the previously disturbed nature of the site, it does not contain substantive undisturbed animal habitats nor are there any endangered species on the site. Movement of wildlife will not be impeded by the development as there are no large parking areas and the landscaping will include native trees, grasses and bushes. ***For the foregoing reasons, the Board approves this waiver request as being consistent with the purpose and intent of the Site Plan Rules and Regulations which will have no significant detriment to the achievement of any of the purposes of Site Plan Review and Approval.***

3) **Section 204 – 3 F. 3 Neighborhood Impact Assessment**

The Applicant has requested a waiver from this requirement indicating that the project is consistent with the surrounding neighborhood. The proposed project is quite modest in size and is only slightly larger than the previous two-family building on the property. The site is nearby to Anderson Village, a multi-family condominium development in a former school building at 280 Village Street. A 12-unit multi-family development is under construction at 274-276 Village Street and the Salmon Willows multi-family senior living community is operational and under construction at 257-261 Village Street. ***For the foregoing reasons, the Board approves this waiver request as being consistent with the purpose and intent of the Site Plan Rules and Regulations which will have no significant detriment to the achievement of any of the purposes of Site Plan Review and Approval.***

****

NOTE – The applicant has requested a waiver from Section 204 F. 4 Parking Impact Assessment. However, a waiver is not needed as the project's parking is well under the threshold of adding thirty parking spaces to trigger the preparation of a parking impact assessment.

****

4) **Section 203 – 3 H. Construction Management Plan**

The Applicant has requested a waiver from the requirement to prepare a full construction management plan. Instead, a general construction sequencing was included in the project narrative. This seems sufficient considering the small scale of this residential project. During the pre-construction meeting, the Applicant will be required to provide an updated construction sequencing plan. ***For the foregoing reasons, the Board approves this waiver request as being consistent with the purpose and intent of the Site Plan Rules and Regulations which will have no significant detriment to the achievement of any of the purposes of Site Plan Review and Approval.***

5) **Section 204 – 3 K. Order of Resource Area Determination, Order of Conditions, or a Determination of Applicability from the Conservation Commission**

The Applicant has requested a waiver from this requirement indicating that the nearest resource area is more than 150' away from the property boundaries. The Conservation Agent has provided an email indicating that the proposed work depicted on the 288 Village Street site plan is not within the Conservation Commission's jurisdiction. In light of that communication, there is no added value in requiring the Applicant to go through the Conservation permitting process. ***For the foregoing reasons, the Board approves this waiver request as being consistent with the purpose and intent of the Site Plan Rules and Regulations which will have no significant detriment to the achievement of any of the purposes of Site Plan Review and Approval.***

SITE PLAN CONTENTS REQUIREMENTS – Section 204-5

6) **Section 204-5 D. 8. Landscape Plan -** A Landscape Plan shall be prepared by a Professional Landscape Architect licensed in the Commonwealth of Massachusetts . . . (details on what is to be included in a landscape plan.)

The Applicant has requested a waiver from this requirement because of the small size of the proposed residential development. A modest landscaping plan prepared by CME Architects of Plainville, MA. has been provided which includes typical residential plantings along the front of the new building.

NOTE – The Board needs to discuss this. The landscape plan is incomplete. No details are provided for the 11' wide "proposed landscaped area" indicated on the site plan along the eastern side of the property. Further, nothing is shown for foundation plantings on the east, north and west faces of the building. Also, there is no specific tree-planting proposed as mitigation for the removal of a 24" tree located in the proposed parking area as is required by Section 207-19 H. Tree Replacement.

7) **Section 204-5 D. 10) Color Renderings** – Color renderings of the project and buildings shall be provided from at least four directions depicting proposed structures, signage, landscaping, site amenities, and common views of the completed project as viewed from a public way and adjacent property.

The Applicant has requested a waiver from this requirement asking that the colored elevation of the building front be considered as sufficient. MORE NEEDED HERE

8) **Section 204-5 D. 14. Master Signage Plan**

The Applicant has requested a waiver from this requirement and has indicated that signage is not consistent with the neighborhood. As this is a very small development, there is no plan for a building specific sign at the driveway entranceway and there are no commercial tenants who need signage. Accordingly, there is no need for a master signage plan. ***For the foregoing reasons, the Board approves this waiver request as being consistent with the purpose and intent of the Site Plan Rules and Regulations which will have no significant detriment to the achievement of any of the purposes of Site Plan Review and Approval.***

9) **Section 204-5 D. 15 Lighting Plan** in conformance with Section 7.1.2 D. of the Zoning Bylaw.

The Applicant has requested a waiver from this requirement indicating that no light poles are proposed in the parking lot area. The only planed lighting is that consistent with typical residential use.

NOTE – The Board needs to discuss this.

SITE PLAN DEVELOPMENT STANDARDS

10) **Section 207-11 A. 3. Site entrance and exit driveways shall have an obstructed paved width of at least twenty feet.**

The Applicant has requested a waiver from this requirement to reduce the driveway width from the required 20' to 16'. The Applicant indicates this is more characteristic of the residential neighborhood as compared to a commercial development and will also reduce the amount of impervious surface needing stormwater management. The Deputy Fire Chief has reviewed the request and approved the reduced driveway width to 16'. Further the new building will be sprinklered. ***For the foregoing reasons, the Board approves this waiver request as being consistent with the purpose and intent of the Site Plan Rules and Regulations which will have no significant detriment to the achievement of any of the purposes of Site Plan Review and Approval.***

11) **Section 207-11 A. 4. Site entrances shall be clearly delineated by vertical granite curbing or other approved material along the entire radius of the opening, shall extend at least twelve feet beyond each side along the gutter line of the road and at least the first twenty-five feet of a driveway, and shall be sloped at the end to prevent a vertical obstruction to exist.**

The Applicant has requested a waiver from this requirement and has asked that the entire requirement be waived such that there is no curbing at the driveway entrance. The Applicant notes this approach will be more consistent with the Village Street aesthetic.

NOTE – The Board needs to review this to finalize what was discussed at the June 28th hearing. I believe that idea was to require the Applicant to match the type of curbing that is done along the rest of Main Street but to include granite curbing at the radius and for 6' deep into the driveway from the entrance point at Village Street.

12) **Section 207-11 A. 13. No part of any driveway shall be located within 15' of a side property line when the property abuts a residential use or zone.**

The Applicant has requested a waiver from this requirement to allow the driveway to be located within 11' of the adjacent property to the east. The Applicant indicates this is consistent with the neighborhood.

NOTE – More explanation and justification needed here.

13) **Section 207-11 B. 2 - The perimeter of drive aisles shall be bounded with vertical granite curbing**

The Applicant has requested a waiver from this requirement as it pertains to the location of the driveway into the site from Village Street and has asked that no curbing

be required at all on the driveway. The Applicant indicates this is consistent with the surrounding neighborhood.

NOTE – The Board needs to discuss this.

14) **Section 207-12 G. 3. B) Parking spaces shall not be located within fifteen feet of the front, side and rear property lines.**

The Applicant has requested a waiver from this requirement to reduce the rear setback distance for the parking area from 15' to 9'. This adjustment allows for the placement of the required number of parking spaces and provides suitable vehicular maneuverability. The Applicant indicates that there is already a 6' high fence along the full length of the northern (back property line) so there will be sufficient buffering for the adjacent property. Further, the use of the adjacent property is for a garage for 290 Village Street. ***For the foregoing reasons, the Board approves this waiver request as being consistent with the purpose and intent of the Site Plan Rules and Regulations which will have no significant detriment to the achievement of any of the purposes of Site Plan Review and Approval.***

15) **Section 207-12 H. 1. – The perimeter of the parking area shall be bounded with vertical granite curb, bituminous concrete curb, or cement curb to delineate the parking lot and collect and direct stormwater runoff.**

The Applicant has requested a waiver from this requirement and proposes to have any curbing in the parking area. The Applicant indicates this is consistent with the neighborhood.

NOTE – The Board needs to discuss this.

16) **Section 207-12 H. 2. – All curbing (in parking areas) shall have a minimum radius of three feet and shall transition tangentially. No protruding angle points shall be allowed.**

The Applicant has requested a waiver from the three-foot radius requirement to allow for curb radii measuring two feet.

NOTE – The Board needs to discuss this some more.

17) **Section 207-16 A. All electric, telephone, cable TV, and other utilities shall be located underground.**

The Applicant has requested a waiver from the requirement that all utilities be located underground and has asked that they be allowed to use the existing utility pole located on the south side of Village Street across from the subject property and to run overhead electrical service from that pole to the new building. Doing so will avoid the disruption that would be occur from working within Village Street to install underground service or to adding a new utility pole on the north side of Village Street.

NOTE – Does the Board want to discuss this some more?

****

OTHER WAIVERS THAT MAY BE NEEDED

a) **Section 207-19. H. Landscaping - Tree Replacement** – All hardwood trees twenty-four inches or more in diameter as measured four feet above grade that are to be removed from the site shall be replaced with new trees on the site.

III. CONDITIONS The *Special and General Conditions* included in this Decision shall assure that the Board's approval of this site plan complies with the *Bylaw*, Section 3.4 (Special Permits) and Section 5.6.4 (Multi-Family Housing), is consistent with *Site Plan Rules and Regulations*, and complies with ARTICLE XXVII Stormwater Management and Land Disturbance of the Medway General Bylaws, that the comments of various Town boards and public officials have been adequately addressed, and that concerns of abutters and other town residents which were aired during the public hearing process have been carefully considered. The Board's issuance of a special permit, site plan approval, and land disturbance permit is subject to the following conditions:

SPECIFIC CONDITIONS OF APPROVAL

A. Notwithstanding any future amendment of the *Bylaw*, G.L. c.40A, or any other legislative act:

1. The maximum number of dwelling units to be developed under this special permit shall be three.

2. The tract(s) of land on which this multi-family development will be located shall not be altered or used except:
   a) as granted by this special permit;
   b) substantially as shown on the site plan entitled *Site Development Plan, Multi-Family Building Located at 288 Village Street, Medway, MA* by Land Planning, Inc. of Bellingham, MA, dated April 1, 2022, last revised June 30, 2022, to be further revised as specified herein; and
   c) in accordance with subsequent approved plans or amendments to this special permit and site plan.

3. The tract of land for 288 Village Street shall not be used, sold, transferred, or leased except in conformity with this special permit and shall not be further divided.

B. ***Plan Endorsement*** **-** Within sixty (60) days after the Board has filed its *Decision* with the Town Clerk, the site plan set for 288 Village Street prepared by Land Planning Inc. dated April 1, 2022, last revised June 30, 2022, including a landscaping plan, building elevations, and floor plans by CME Architects, shall be further revised to reflect all Conditions and required revisions as specified herein, and shall be submitted to the Board to review for compliance with the Board's *Decision*. *(Said plan is hereinafter referred to as the Plan).* Upon approval, the Applicant shall provide the revised Plan in its final form to the Board for its endorsement prior to recording at the Norfolk County Registry of Deeds along with this decision. All Plan sheets shall be bound together in a complete set.

C. ***Cover Sheet Revisions*** – Prior to plan endorsement, the cover sheet of the June 30, 2022 site plan shall be revised as follows:

1. Include the full list of APPROVED Requests for Waivers
2. Add reference to the architectural elevations with landscaping and floor plans to the Legend
3. Include a new plan revision date
4. Add language that the development is subject to a performance security Covenant to be executed by the Board and recorded with the special permit and plan.
5. Add a reference to the Long-Term Stormwater Operations and Maintenance Plan to the Legend

D. ***Other Plan Revisions*** **–** Prior to plan endorsement, the following plan revisions shall be made to the June 39, 2022 site plan:

1. Designate open space areas to fulfill the minimum 15% open space requirement.
2. A sheet shall be added to the plan set to document the property's Long Term Stormwater Operations and Maintenance Plan.
3. The curb detail for the driveway opening from Village Street shall be revised to include a 6' straight transition curb at each side of the driveway opening to match existing driveways in the immediate area.
4. TBD – Something about revisions to the landscaping plan, presently included on the building elevations by CME Architects.
5. TBD – Something about a lighting plan.

D. ***Other Documentation*** **-** Prior to plan endorsement, the Applicant shall provide the following additional documentation to the Board:

1. *Stormwater Report – Multi-Family Site Development, 288 Village Street, Medway, MA*, prepared by Land Planning, Inc., prepared by Land Planning, Inc. dated April 5, 2022, last revised June 23, 2022 shall be further revised to include:
   - calculations pertaining to a stone diaphragm and vegetated filter strip
   - calculations pertaining to phosphorus removal

2. Copy of a sample deed to be used to convey each dwelling unit for review, comment, revision and approval by Town Counsel. The deed shall clearly state that the 288 Village Street Condominium Trust (or whatever name will be used) shall own and be responsible for the maintenance and upkeep of development's driveway, the stormwater management system, and all other infrastructure.

3. Copy of the Performance Security Covenant to be executed by the Permittee and the Board in a form acceptable to the Board and suitable for recording at the Registry of Deeds or Land Court, as may be applicable, for review, comment, revision and approval by Town Counsel.

F. ***Recording of Plans and Documents***

1. The Plan of Record associated with this special permit is titled: *Site Development Plan, Multi-Family Building Located at 288 Village Street, Medway, MA* by Land Planning, Inc. of Bellingham, MA, dated April 1, 2022, last revised June 30, 2022, to be further revised as specified herein.

2. No construction shall begin on the site and no building permit for any of the new units shall be issued before the following documents are recorded at the Norfolk County Registry of Deeds.
   a) This special permit, site plan, and land disturbance permit decision
   b) Plan of Record endorsed by the Board
   c) Performance Security Covenant with the Board

3. The following documents which shall be in compliance with the conditions of this decision shall be recorded at the Norfolk County Registry of Deeds prior to the issuance of the first occupancy permit for the development.
   a) 288 Village Street Condominium Master Deed
   b) Declaration of Trust of the 288 Village Street Condominium Association

4. Within thirty days of recording, the Permittee or its assigns or successors shall provide the Board with a receipt from the Norfolk County Registry of Deeds indicating that the specified documents have been duly recorded or supply another alternative verification that such recording has occurred.

G. ***Open Space/Yard Area*** **-** At least 15% of the site shall be permanently retained as open space and/or yard area in perpetuity. This is an ongoing obligation of the 288 Village Street Condominium Association. This area shall be unpaved but may be landscaped or left natural, with the balance being trees, shrubs and grass suitable for the site. This area may include a play area or other communal recreational space, subject to field change or plan modification requirements. The landscaped area along the eastern edge of the site shall not be included in the minimum required 15$ open space area.

H. ***Ownership/Maintenance of Common Areas***

1. The driveway, stormwater drainage facilities, commons areas, and all other infrastructure shall be owned and maintained by the 288 Village Street Condominium Trust. It is the intent of the Board that these facilities will not be accepted by the Town of Medway.

2. The Board requires that the following aspects of the development shall be and shall remain forever private, and that the Town of Medway shall not have, now or ever, any legal responsibility for operation or maintenance of same:
   a) Driveway and parking areas
   b) Stormwater management facilities
   c) Internal site sidewalks
   d) Snowplowing/sanding
   e) Landscaping

I. ***Occupancy Permit*** **-** No occupancy permit may be issued for any unit until the following items, at a minimum, are installed in compliance with this Decision, the Plan of Record, and applicable by-laws and regulations and approved by the Board's consulting engineer.

1) Driveway and parking area gravel sub-base
2) Driveway area and parking area binder course

3) Drainage system completed to the proposed outfall with frame and grates set to binder grade, as well as stormwater basins, swales, infiltrations systems or any other stormwater management facilities.
4) As-built plan of each stormwater facility with all critical elevations and details.
5) Stop line pavement markings and stop sign if required.
6) Provisions for fire prevention and protection. Private water main/service to be constructed, installed and functional.

See General Condition ___for performance security requirements.

L. ***Sidewalk*** – Any damage to the sidewalk on the north side of Village 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 the 2nd condominium unit.

N. ***The Master Deed for the 288 Village Street Condominium shall include the following language:*** *"The construction and operation of the condominium is authorized by a Multi-family Housing Special Permit and Site Plan approval granted by the Medway Planning and Economic Development Board on July 12, 2022, a copy of which is available for inspection at the Town Clerk's office and which is recorded at the Norfolk County Registry of Deeds.*

R. ***Water Conservation*** – The development is relying on the Town's public water system and the Town is being held to its Water Management Act Permit with the MA Department of Environmental Protection. The Permittee shall incorporate the following water conservation measures for construction of the development:
1. Any landscape irrigation system may not be connected to municipal water supply
2. rain-gauge controlled irrigation systems
3. low flow household fixtures
4. water efficient appliances (dishwashers, washer/dryers, toilets, etc.)

S. ***Addresses*** – The addresses for the 288 Village Street condominium shall be as determined by the Medway Assessor's office upon consultation with the Medway Fire and Police Departments.

T. ***Development Signage*** – Any future development signage for this project shall comply with the sign regulations of the *Bylaw* and is subject to review by the Design Review Committee.

U. ***Parking*** – The plan includes two off-street parking spaces per unit (6) spaces. The Permittee shall specify in the condominium deeds and association documents that parking shall occur only on the 288 Village Street premises.

V. ***Stormwater Management and Land Disturbance – Pre-Construction***

1. See General Condition ____regarding the required Pre-Construction Meeting.

2. No clearing of vegetation, including tree cutting or disturbance of soil, shall occur prior to the Permittee's Pre-Construction Meeting with Town staff and the Board's consulting engineer.

3. Prior to the Pre-Construction Meeting and commencement of any work on the site, the erosion control plan included in the Plan of Record shall be set and the limit of work lines shall be staked. The Permittee shall notify the Board's consulting engineer to schedule an inspection to ensure that erosion controls and limits of work have been properly located and installed. The location of erosion controls and limits of work lines shall be adjusted, if necessary, during this inspection. No site work shall be conducted until the Board's consulting engineer has inspected and approved the installation of the erosion controls and limits of works.

4. Immediately after the Pre-Construction meeting, all erosion controls and limits of work lines shall be installed along the approved and staked lines. Such installation shall occur with the least possible disturbance to vegetation. Erosion controls should be placed around trees, shrubs and other vegetation, on the uphill side. The installed erosion control measures shall be inspected, adjusted if needed, and approved by the Board's consulting engineer to ensure they have been properly installed.

5. At least 5 business days prior to the commencement of construction activity, the Permittee shall advise the Board of the name(s) and contact information of the person(s) responsible on site for compliance with this Permit. This person shall serve as Clerk of the Works and shall supervise the contractor and inspect the site regularly. The Permittee shall be responsible for immediately notifying the Board of any change in the identify or contact information for the on-site person responsible for compliance.

6. Prior to construction, the general contractor shall designate a construction staging area 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 located 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.

7. Prior to construction, an area for cleanup and/or maintenance of construction equipment shall be designated. Prior to commencement of work, the Permittee shall designate a location for a concrete washout and other washout areas which shall be surrounded by siltation controls. The locations and form of siltation controls shall be approved by the Board's consulting engineer.

8. Prior to commencing any work on site, the Permittee 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".

W. **Stormwater Management and Land Disturbance During Construction –** Until transferred to the 288 Village Street Condominium Trust, the Permittee shall be responsible for keeping the constructed stormwater drainage system in a clean and well-functioning condition in accordance with the stormwater management plan and shall do nothing which would alter the drainage patterns or characteristics as indicated on the Plan approved herein without the express written approval of the Board. Construction is subject to the Stormwater Operations and Maintenance Plan

within the Storm Water Report for 288 Village Street, prepared by Land Planning, Inc. dated April 5, 2022, last revised _____, to be further revised specified herein.

1. The Permittee shall ensure that all contractors, subcontractors and other personnel performing the authorized work are fully aware of the Permit's terms and Conditions and the stormwater operations and maintenance plan for construction. This decision document shall be included in all construction contracts, subcontracts, and specifications dealing with the planned work.

2. Copies of this decision, the Plan of Record, the stormwater report including the stormwater operations and maintenance plan shall be kept on site at all times while the site is under construction.

3. Erosion Control - It is the Permittee's responsibility to conduct monitoring, maintenance, reporting, and repair of erosion control measures, and to take any additional measures necessary to control erosion from the site. The erosion control measures specified in the Plan of Record shall be the minimum standard for compliance.

   a) The Permittee shall designate an Erosion Control Inspector who shall be responsible for these duties.

   b) Erosion Control Measures shall be placed to ensure that no sedimentation will reach the Town's right-of-way (Village Street) or abutting properties. Choice of suitable silt fence materials shall be in accordance with the approved plan and details.

   c) Maintenance of Erosion Control Measures - Appropriate erosion control devices shall be maintained during construction. 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 Board. These will be maintained until the Permittee's Erosion Control Inspector and the Board's consulting engineer agree that they are no longer needed, at which time they will be removed, using removal procedures that the Board's consulting engineer finds satisfactory. All sedimentation barriers shall be maintained in good repair until all disturbed areas have been fully stabilized with vegetation or other means. During construction, the Permittee or its designee shall inspect the erosion controls daily and shall remove all sediment when accumulated to a depth of two inches or greater. The Permittee shall immediately control all erosion on the site and shall immediately notify the Board of any breaches of the erosion control barriers by sediment or silt-laden water.

   d) Any runoff resulting from the washing of trucks or construction equipment shall neither be directed to, nor dumped into, any on-site drainage system. Any such washing shall occur only in the designated washout areas. All construction vehicles exiting the property shall be cleaned of soil prior to traveling on public streets within the Town of Medway.

   e) All construction equipment shall be inspected regularly and properly maintained and precautions shall be taken to prevent any leakage or spilling

of oil, gasoline, hydraulic fluid, and other pollutants. Any leakages shall be repaired immediately. Any such leakage or spilling must be cleaned up immediately and disposed of off-site. The Board's consulting engineer shall be notified immediately in the event of any leakage or spillage.

5. Reporting – The Permittee's Erosion Control Inspector shall conduct, and document inspections of all erosion control measures no less than bi-weekly during construction and immediately after any storm event resulting in 0.25 inches of precipitation or more within twenty-four hours and provide such reports to the Board and the Board's consulting engineer. The purpose of such inspections will be to determine the overall effectiveness of the erosion control plan and the need for maintenance or additional control measures.

6. Throughout construction and until the development is transferred to the Cutler Place Condominium Association, the Permittee shall be responsible for keeping the constructed stormwater drainage system in a clean and well-functioning condition, and shall do nothing which would alter the drainage patterns or characteristics as indicated on the Plan approved herein without the express written approval of a field change by the Board.

7. Throughout construction, the Board's consulting engineer shall regularly inspect the site to determine if the site and erosion controls are being maintained and shall provide corrective guidance to the Permittee for actions needed to address any stormwater management and erosion control deficiencies. Failure to adequately maintain the site shall be grounds for the Town to withhold building and/or occupancy permits.

8. 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.

9. All stockpiles shall be positioned within the limit of work area as depicted on the approved plan or as authorized by the Board's consulting engineer.

10. Fill – Any fill being brought onto the site from any off-property sources shall be free of trash, invasive species, deleterious material, and chemical contaminants in excess of the Massachusetts Contingency Plan (MCP 310 CMR 40.0000) RCS-1 Reportable Concentrations. Prior to delivering fill to the project site, the soil shall be sampled at its source and a certification provided to the Board and. The certification shall include a letter signed by a Licensed Site Professional (LSP) 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. 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.

Washed stone materials are exempt from testing.

The Board may consider alternative sampling plans or soil materials at its discretion. Approval of the Board is required for alternative plans. These may include management of soils consistent with MASSDEP WSC#-13-500, Similar Soils Provision Guidance.

11. If unforeseen problems occur during construction which may affect abutting properties, Town roadways and/or the Town's stormwater infrastructure, upon discovery by either the Board, its consulting engineer, or the Permittee, the Board shall be notified immediately, and an immediate meeting shall be held with the Permittee and its agents and the Board's consulting engineer and other concerned parties to determine the corrective measures to be employed. The Permittee shall then act to correct the problems using the corrective measures agreed upon and in accordance with General Condition I. Field Changes, if necessary. Subsequent to resolution, the activity and resulting actions shall be documented in writing.

X. ***Stormwater Management and Land Disturbance – Post Construction***

1. The stormwater drainage system, water and sewer systems shall be maintained by the Permittee, its successors and assigns, and the 288 Village Street Condominium Trust and shall not be dedicated to the Town. It is the intent of the Board and the Applicant that these systems shall not be accepted by the Town.

2. The Permittee and its successors and assigns shall maintain the stormwater management system in accordance with the long-term stormwater operation and maintenance plan included with the stormwater/drainage report submitted with the application, as revised, and as included in the Plan of Record.

3. Ongoing enforcement of compliance with the long-term *Stormwater Operations and Maintenance Plan* is the responsibility of the Medway Department of Public Works (DPW). The plan may be amended by mutual agreement of the DPW and the 288 Village Street Condominium Association.

4. In the event a management company is engaged by the condominium association, the stormwater maintenance and operation plan shall be incorporated by reference in the management contract.

5. The Permittee and its successors shall submit an annual report of inspections and maintenance of all stormwater management structures as prescribed in *Stormwater Operations and Maintenance Plan* to the Board and the Medway Department of Public Works starting one year after the Certificate of Site Plan Completion is issued. The annual report shall be submitted no later than December 1st of every year. The inspections shall be conducted in accordance with the approved *Stormwater Operations and Maintenance Plan.*

6. In the event that the Permittee, its successors and assigns, its agent, and the 288 Village Street Condominium Trust fail to maintain the stormwater management system in accordance with the applicable guidelines for operation and maintenance, the Town may conduct such maintenance or repairs as the Town determines in its sole discretion are reasonably necessary, and the Applicant hereby consents to allow the Town and its agents, employees and contractors entry onto the Property to implement the measures set forth in such guidelines. In the event the Town conducts such maintenance or repairs, the Permittee shall promptly reimburse the Town for all reasonable expenses associated therewith; if the Permittee fails to so reimburse the Town, the Town may place a lien on the site or any unit therein to secure such payment.

GENERAL CONDITIONS OF APPROVAL

A. Applicability – This permit shall apply to any successor in control or successor in interest of the subject property.

B. ***Fees*** **-** Prior to plan endorsement by the Board, the Permittee shall pay:

1. the balance of any outstanding plan review fees owed to the Town for review of the site plan by the Town's engineering, planning or other consultants; and

2. any construction inspection fee that may be required by the Board; and

3. any other outstanding expenses or obligations due the Town of Medway pertaining to this property, including real estate and personal property taxes and business licenses.

The Permittee's failure to pay these fees in their entirety shall be reason for the Board to withhold plan endorsement.

C. ***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 for, and comply with all other required Town permits.

C. ***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.

1. *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 and construction deliveries 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 and federal holidays or state legal holidays without the advance approval of the Building Commissioner. These rules do not apply to interior construction work such as painting, installation of drywall, flooring, etc.

2. 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.

3. 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.

4. 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. All waste products, refuse, debris, and construction materials shall be contained and deposited post construction to an appropriate off-site facility.

5. All erosion and siltation control measures shall be installed by the Permittee prior to the start of construction and observed by the Board's consulting engineer and maintained in good repair throughout the construction period.

6. *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.

7. *Noise* - Construction noise shall not exceed the noise standards as specified in the Medway General Bylaws and the *Bylaw*, SECTION V. USE REGULATIONS, Sub-Section B. Area Standards, Paragraph 2. b). as may be amended.

D. ***Landscape Maintenance***

1. The site's landscaping shall be maintained in good condition throughout the life of the facility and to the same extent as shown on the endorsed Plan. Any

shrubs, trees, bushes or other landscaping features shown on the Plan that die shall be replaced by the following spring.

2. Within 60 days after two years after the last occupancy permit is issued, the Town's Consulting Engineer or the Building Commissioner may 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 Building Commissioner 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 Building Commissioner/Zoning Enforcement Officer to ensure that the comprehensive landscaping plan is maintained.

E. ***Snow Storage and Removal***

1. On-site snow storage shall not encroach upon nor prohibit the use of any parking spaces required by the *Bylaw*.
2. Accumulated snow which exceeds the capacity of the designated snow storage areas on–site shall be removed from the premises within ____hours after the conclusion of the storm event.

F. ***Right to Enter Property*** **–** Board members, its staff, consultants, or other designated agents of the Town shall have the right to enter upon the common areas of the William Wallace Village Condominium to inspect the site, to ensure continued compliance with the terms and conditions of this special permit and the endorsed plan.

G. ***Construction Oversight***

1. Construction Account

   a) Inspection of infrastructure and utility construction, installation of site amenities including landscaping, and the review of legal documents by Town Counsel is required. Prior to plan endorsement, the Permittee shall establish a construction account with the Board. 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 plan 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 a *Certificate of Site Plan Completion*).
   b) Prior to plan endorsement, the Permittee shall pay an advance toward the cost of these services to the Town of Medway. The advance amount shall be determined by the Board based on an estimate provided by the Town's Consulting Engineer.
   c) 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.

d) Any funds remaining in the Permittee's construction inspection account after the *Certificate of Site Plan Completion* is issued shall be returned to the Permittee.

2. ***Pre-Construction Meeting*** – At least seven days prior to the start of any site preparation or construction, the Permittee shall meet with the Town's consulting engineer, the Planning and Economic Development Coordinator, the Medway Department of Public Works, other Town staff as appropriate, the site contractors, and the Permittee's project engineer for a pre-construction meeting. At or before the pre-construction meeting, the Permittee shall provide the following information:
   - An updated construction sequencing plan and schedule
   - Revised earth removal calculations
   - Revised earth fill estimates
   - Copies of its National Pollutant Discharge Elimination System (NPDES) permit and its Stormwater Pollution Prevention Plan (SWPPP) for this project as filed with the U.S. EPA.
   - list of contacts with contact information for contractors, those responsible for compliance with this permit (Clerk of the Works), on-site management, and erosion control inspector.

3. 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 the sewer and water connection permits.

4. The Permittee shall retain its own professional engineer licensed in the Commonwealth of Massachusetts to conduct progress inspections of the construction of the approved site improvements. Inspections shall occur at least on a monthly basis and shall start immediately once any site work begins on the property. The engineer shall prepare a written report of each inspection, including photographs, 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.

H. ***On-Site Field Changes***

1. 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 site plan.

2. 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. In accordance with Section 3.5.2.C of the *Bylaw*, 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.

I. ***Plan Modification***

1. Proposed modifications (not including on-site field changes) to the endorsed plan shall be subject to review by the Board.

2. This Approval is subject to all subsequent conditions that may be imposed by other Town departments, boards, agencies or commissions. Any changes to the site plan that may be required by the decisions of other Town boards, agencies or commissions shall be submitted to the Board for review as site plan modifications.

3. Any work that deviates from an approved site plan shall be a violation of the *Bylaw*, unless the Permittee requests approval of a plan modification and such approval is provided in writing by the Board.

4. The request for a *Modification* to a previously approved plan shall be subject to the same application and review process including a public hearing including the payment of plan modification filing fee and plan review fee and all costs associated with another public hearing including legal notice advertising. 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 site plan project documents and shall be shown on the final as-built plan.

J. ***Plan Compliance***

1. The Permittee shall construct all improvements in compliance with the approved and endorsed plan and any modifications thereto.

2. The 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 the foregoing Conditions of Approval.

3. The Conditions of Approval are enforceable under Section 3.1. F. of the *Bylaw* (non-criminal disposition) and violations or non-compliance are subject to the appropriate fine.

K. **Performance Security**

1. *Covenant* - Prior to plan endorsement, the Permittee shall sign a *Covenant*, on a form provided by the Board, to be reviewed and approved by Town Counsel, to secure construction of the driveway and all related infrastructure and installation of utilities and services, sidewalks and site amenities as specified in the approved Plan. Reference to the *Covenant* shall be noted on the cover

sheet of the Approved Plan. The *Covenant* shall specify that no unit except may be occupied or conveyed until such services are completed or an alternative form of security is provided. The *Covenant* shall specify that the driveway, parking area, and all infrastructure including the stormwater management system shall be constructed and all utilities and services shall be installed to the satisfaction of the Board within three years of the date of plan endorsement. The Covenant shall be recorded at the Norfolk County Registry of Deeds at the same time the Decision and Plan are recorded.

2. *Alternative Performance Security*

   a) At such time as the Permittee wishes to secure an occupancy permit for any dwelling unit, the security provided by the *Covenant* shall be replaced by one of the types of performance guarantees set forth in M.G.L. Ch. 41, Section 81U, 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 performance guarantee shall be accompanied by an agreement which shall define the obligations of the Permittee and the performance guarantee company including:
      1) the date by which the Permittee shall complete construction
      2) a statement that the agreement does not expire until released in full by the Board
      3) procedures for collection upon default.

   b) *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 driveway 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 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. A performance security agreement shall be executed by the Permittee, the Board and the selected surety.

3. *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.

4. *Final Release of Performance Security* - Final release of performance security is contingent on project completion.

L. ***Project Completion***

1. Special permit approval shall lapse after two years of the grant thereof if substantial use has not commenced except for good cause. The approved site plan shall be completed by the Permittee or its assignees within three years of the date of plan endorsement. Upon receipt of a written request by the Permittee filed at least thirty (30) days prior to the date of expiration, the Board may grant an extension for good cause. The request shall state the reasons for the extension and also the length of time requested. If no request for extension is filed and approved, the site plan approval shall lapse and may be reestablished only after a new filing, hearing and decision.

2. Prior to issuance of the occupancy permit for the third dwelling unit, the Permittee shall request a ***Certificate of Site Plan Completion*** from the Board. The ***Certificate*** serves as the Board's confirmation that the completed work conforms to the approved site plan and any conditions and modifications thereto, including the construction of any required on and off-site improvements. The ***Certificate*** also serves to release any security/performance guarantee that has been provided to the Town of Medway. To secure a ***Certificate*** of Site Plan Completion, the Permittee shall:

   a) provide the Board with written certification from a Professional Engineer registered in the Commonwealth of Massachusetts that all building and site work has been completed in substantial compliance with the approved and endorsed site plan, and any modifications thereto; and

   b) submit an electronic version of an As-Built Plan, prepared by a registered Professional Land Surveyor or Engineer registered in the Commonwealth of Massachusetts, to the Board for its review and approval. The As-Built Plan shall show actual as-built locations and

conditions of all buildings and site work shown on the original site plan and any modifications thereto. The final As-Built Plan shall also be provided to the Town in CAD/GIS file format per MASS GIS specifications.

M. ***Construction Standards*** **-** All construction shall be completed in full compliance with all applicable local, state and federal laws, including but not limited to the Americans with Disabilities Act and the regulations of the Massachusetts Architectural Access Board for handicap accessibility.

N. ***Conflicts*** – If there is a conflict between the site plan and the Decision's Conditions of Approval, the Decision shall rule. If there is a conflict between this Decision and/or site plan and the *Bylaw*, the *Bylaw* shall apply.

IX. APPEAL

The Board and the Applicant 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 Applicant, and notice will be mailed to all parties in interest as provided in G.L. c. 40A §15.

Any person aggrieved by the decision of the Board may appeal to the appropriate court pursuant to Massachusetts General Laws, Chapter 40A, §17, which shall be filed within twenty days after the filing of this decision in the office of the Medway Town Clerk.

In accordance with G.L c. 40A, §11, no special permit shall take effect until a copy of the Decision is recorded in the Norfolk County Registry of Deeds, and indexed in the grantor index under the name of the owner of record, or is recorded and noted on the owner's certificate of title, bearing the certification of the Town Clerk that twenty days have elapsed after the Decision has been filed in the office of the Town Clerk and no appeal has been filed within said twenty day period, or that an appeal has been filed. The person exercising rights under a duly appealed special permit does so at risk that a court will reverse the permit and that any construction performed under the permit may be ordered undone. The fee for recording or registering shall be paid by the Applicant. A copy of the recorded Decision, and notification by the Applicant of the recording, shall be furnished to the Board.

###

Medway Planning and Economic Development Board
SITE PLAN and SPECIAL PERMIT DECISION
288 Village Street

Approved by the Medway Planning & Economic Development Board: _____

AYE:

_____

_____

_____

_____

_____

NAY:

_____

_____

ATTEST: _____ _____
Susan E. Affleck-Childs Date
Planning & Economic Development Coordinator

COPIES TO: Michael Boynton, Town Administrator
Stephanie Carlisle, DPW Compliance Officer
Michael Fasolino, Deputy Fire Chief
Bridget Graziano, Conservation Agent
Donna Greenwood, Assessor
Beth Hallal, Health Agent
Jeff Lynch, Fire Chief
Jack Mee, Building Commissioner and Zoning Enforcement Officer
Chris Park, Deputy Assessor
Pete Pelletier, Medway DPW Director
Joanne Russo, Treasurer/Collector
Barbara Saint Andre, Director of Community and Economic Development
Jeff Watson, Police Department
Tony Leland, Sr.
Bill Halsing, Land Planning, Inc.
Steven Bouley, Tetra Tech

July 12, 2022, 2022
Medway Planning & Economic Development Board Meeting

Zoning for Fall Town Meeting

- DRAFT of BESS Zoning dated 7-7-22 prepared by Barbara Saint Andre

DRAFT – BESS Bylaw
July 7, 2022 bjs

Article ____ To see if the Town will vote to amend the Zoning Bylaw by:

(1) deleting the definition of Battery Energy Storage Facility;

(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 (as principal use)	2 spaces for Tier 1 3 spaces for Tier 3

(4) 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;
2. To ensure compatible land uses in the vicinity of the areas affected by battery energy storage systems; 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.

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.

Commented [BSA1]: This is from Arup, need to check if definitions from the NY model bylaw (below) are different than NFPA 855

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.
    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.

Commented [CMM2]: I don't see a specific listing for BESS. Factory and Industrial Use Category F-1 includes electronics. See 780 CMR 306(19).

Storage Use Category S-2 includes dry cell batteries, electrical coils and motors. See 780 CMR 311.3.

I recommend consulting with the Building Commissioner for input.

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.

UL: Underwriters Laboratory

C. Applicability

The requirements of this zoning 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

Commented [BSA3]:
These thresholds are from Arup materials.

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:

A. 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.

B. 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 shall be permitted 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 require the issuance of a special permit in those zoning districts identified in Table 1, Schedule of Uses, and shall be subject to Major Site Plan Review pursuant to Section 3.5. Tier 1 and Tier 2 BESS shall comply with the 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 comply with the setback requirements of the underlying zoning district for principal structures. In addition, a minimum of 10 feet must be maintained between BESS and all buildings, stored combustible materials, hazardous materials,

Commented [BSA4]: Should there be increased setbacks?

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 six 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. Decommissioning Plan. The applicant shall submit a decommissioning plan for Tier 2 BESS to be implemented upon abandonment and/or in conjunction with removal from 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.

11. 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.

Commented [BSA5]: Per comment of AG on the Athol bylaw, can we incorporate the required elements from G.L. c. 44 §53G ½ here, or should we enact a General bylaw that would apply generally to surety funds?

Commented [CMM6]: Either is acceptable, but I imagine the Town has other bylaw license/fee requirements, so a general bylaw would have broader impact. Also, consider requiring applicant to provide a cost estimate for decommissioning prepared by a professional engineer so the Town has a basis for setting the amount of the fund.

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 a capacity of greater than 50kWh
- 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.

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 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 Zoning Enforcement Officer 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 Zoning Enforcement Officer in writing. The special permit

and all other local approvals for the battery energy storage system will be void if a new owner or operator fails to provide written notification 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 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.

Commented [CMM7]: 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.

(5) Need to check if any other ZBL provisions need to be amended.

July 12, 2022, 2022
Medway Planning & Economic Development Board Meeting

Housing Production Plan
Further Revisions

In mid-March, the Town submitted its updated Housing Production Plan (HPP) to the MA Department of Housing and Community Development (DHCD) for review and approval. This was following the review and approval of the Affordable Housing Trust, PEDB, and Select Board.

DHCD has advised the Town that it needs to designate "two or more sites" as possible future comprehensive development (40B) sites, even though the Town is currently over the 10% Subsidized Housing Inventory (SHI) threshold. After some internal review and discussions, it is thought that a few parcels in the Medway Village area would be good candidates for this type of development. They are as follows:

- 150 Village Street (Assessors' parcel 60-228)
- 8 Broad Street (Assessors' parcel 60-229)
- 155 Village Street (Assessors' parcel 60-121) (Note: this is currently Town Hall, but may become available if a new Town Hall is built elsewhere)

Attached is a copy of the Assessors' map showing the parcels outlined in green.

On June 1, 2022, the Affordable Housing Trust approved the three noted sites to be designated for potential future 40B development. On June 22, 2022 the Select Board approved these sites as well.

The Planning and Economic Development Board is now asked to also approve these sites for submittal of the Medway HPP to DHCD for final plan approval.

CHURCH STREET
BROAD STREET
BARBER STREET
PEACH STREET
JOHN STREET
VILLAGE ST
POLLISTON ST
60-204
60-197 0.592 ac
60-192 2 0.35 ac
60-203 6 0.214 ac
60-210 0.16 ac 17
60-211 0.417 ac 15
60-212 0.24 ac 11
60-202 4 0.13 ac
60-198 3 0.6 ac
60-201 1 0.23 ac
60-199 5 0.19 ac
60-215 0.065 ac 7
60-213 9 0.3 ac
60-178-0001 3 0.408 ac
60-178 180 0.517 ac
60-200 0 0.1 ac
60-215 170 0.35 ac
60-214
20 0.5 ac 60-232
60-220 11 0.391 ac
60-076 10 0.19 ac
8 0.09 ac 60-075
6 0.1 ac 60-074
60-231 18 0.24 ac
60-221 0.24 ac 9
60-230 16 0.43 ac
60-222 0.23 ac 7
60-073 0.25 ac 4
60-229 0.25 ac 8
60-223 0.25 ac 5
3 60-224 0.41 ac
150 0.55 ac 60-228
146 0.14 ac 60-227
60-226 0.26 ac 144
136 0.39 ac 60-225
260-072
60-110 0.22 ac 187
185 0.12 ac 60-111
60-112 0.09 ac 181
179 0.221 ac 60-113
177 0.19 ac 60-114
175 0.27 ac 60-115
60-116 0.22 ac 173
60-117 0.22 ac 171
169 0.34 ac 60-118
60-119 0.17 ac 167
165 0.14 ac 60-120
155 1.533 ac
60-121
60-122 0.047 ac 156A
60-123
151 0.13 ac 60-091
60-092
60-090 151 0.61 ac
60-093 0.19 ac 4
6 0.326 ac 60-094
139 0.15 ac 60-081
131 0.2 ac 60-082
60-083 125 0.62 ac
60-088 7 0.53 ac
60-087 1 0.09 ac
60-086 0.2
60-096 0.34 ac
60-089 9 0.045 ac

July 12, 2022, 2022
Medway Planning & Economic Development Board Meeting

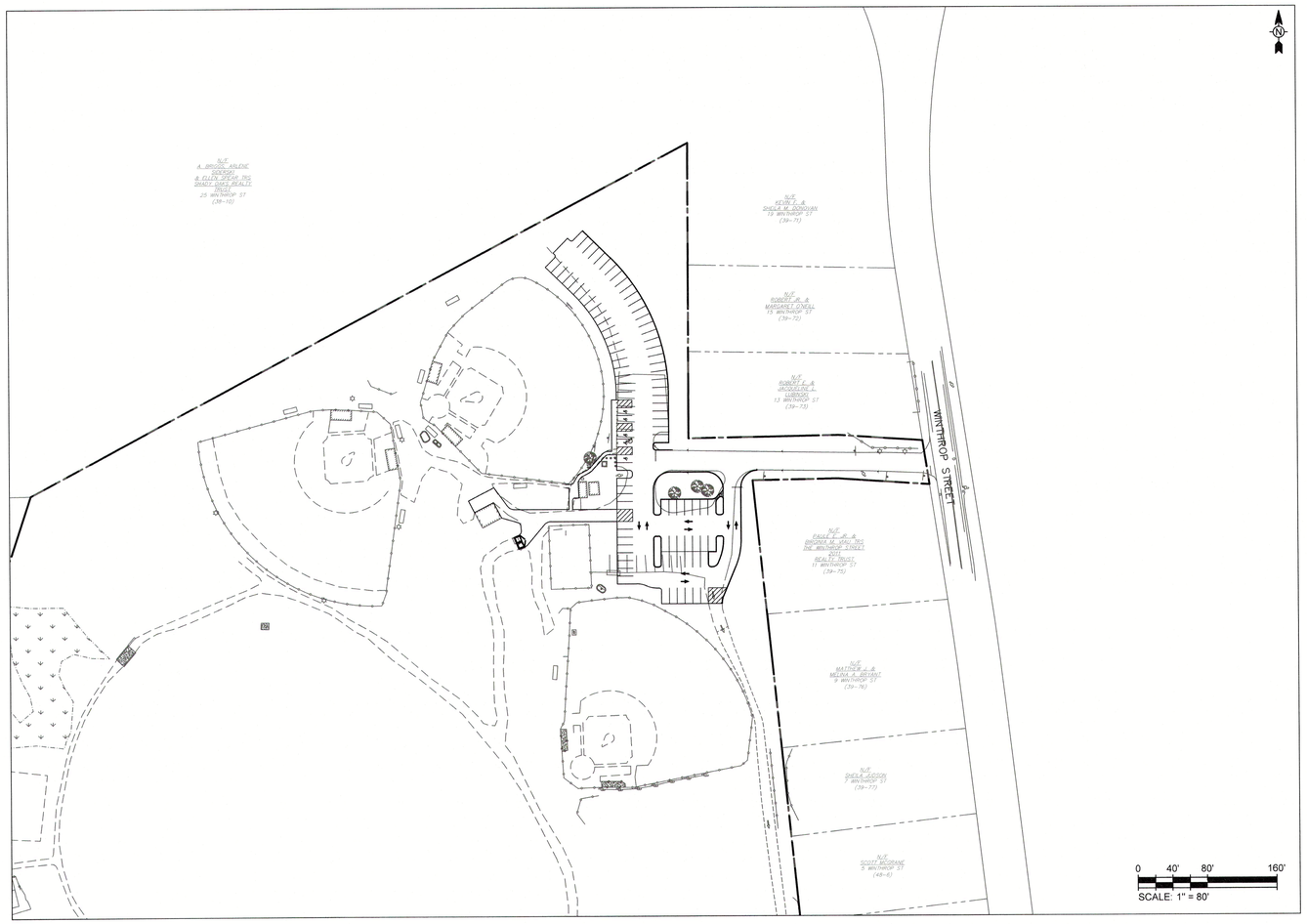
Cassidy Field Site Plan Endorsement

- Revised Cassidy Field Site Plan dated July 11, 2022 b Tetra Tech

NOTE – DPW has asked that the Board endorse the Cassidy Field site plan. The revised plan is attached. The 20-day appeal period expired June 20, 2022. I will secure a Certificate of No Appeal from the Town Clerk's office before the meeting.

Medway Department of Public Works
Cassidy Fields Parking Improvements
Winthrop Street, Medway, MA

100 Nickerson Road
Marlborough, MA 01752
Phone: (508) 786-2200 Fax: (508) 786-2201
www.tetratech.com
TETRA TECH



PROJECT LOCATION:
Winthrop Street,
Medway, MA 02053

CLIENT INFORMATION:
Medway Department of Public Works
45B Holliston Street,
Medway, MA 02053

Tt PROJECT No.:
143-21583-21012

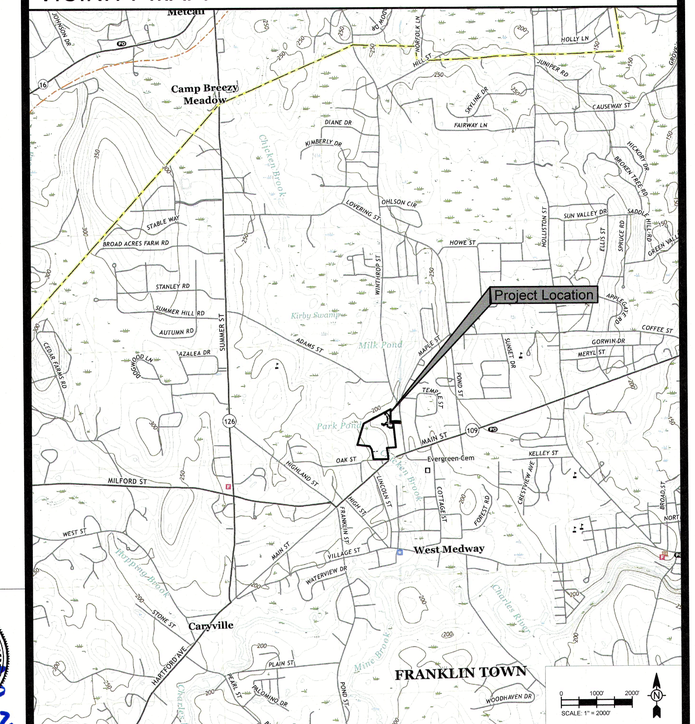
CLIENT PROJECT No.:

PROJECT DESCRIPTION / NOTES:
Assessor's Map & Parcel number: 39-074; 39-078
Zoning District: AR-1

ISSUED:
APRIL 7, 2022: MINOR SITE PLAN
JULY 11, 2022: REVISED PER PEDB COMMENTS

APPROVED WAIVERS:
207-12.H.1: PERIMETER OF PARKING LOT BOUNDED BY CURB/BERM
207-19.C.1: INTERMEDIARY LANDSCAPED ISLANDS

VICINITY MAP:



ZONING SUMMARY TABLE

ZONING DISTRICT: AR-1

DIMENSIONAL REGULATIONS	REQUIRED	PROPOSED
MINIMUM LOT SIZE	44,000	949,074
MINIMUM FRONTAGE	180	51
MINIMUM SETBACKS		
FRONT	35	NA
SIDE	15	NA
REAR	15	NA
MAXIMUM BUILDING HEIGHT COVERAGE	35	NA
MAXIMUM LOT COVERAGE	25%	<25%
MAXIMUM IMPERVIOUS COVERAGE	35%	<35%
MINIMUM OPEN SPACE	NA	NA

PARKING SUMMARY TABLE

SPACE TYPE	TOWN REQUIREMENT	REQUIRED	PROPOSED
STANDARD SPACES	N/A	N/A	76
ACCESSIBLE SPACES	1 / 25 STANDARD SPACES	4	5
ELECTRIC VEHICLE SPACES	1 / 25 STANDARD SPACES	4	12
TOTAL SPACES	N/A	N/A	93

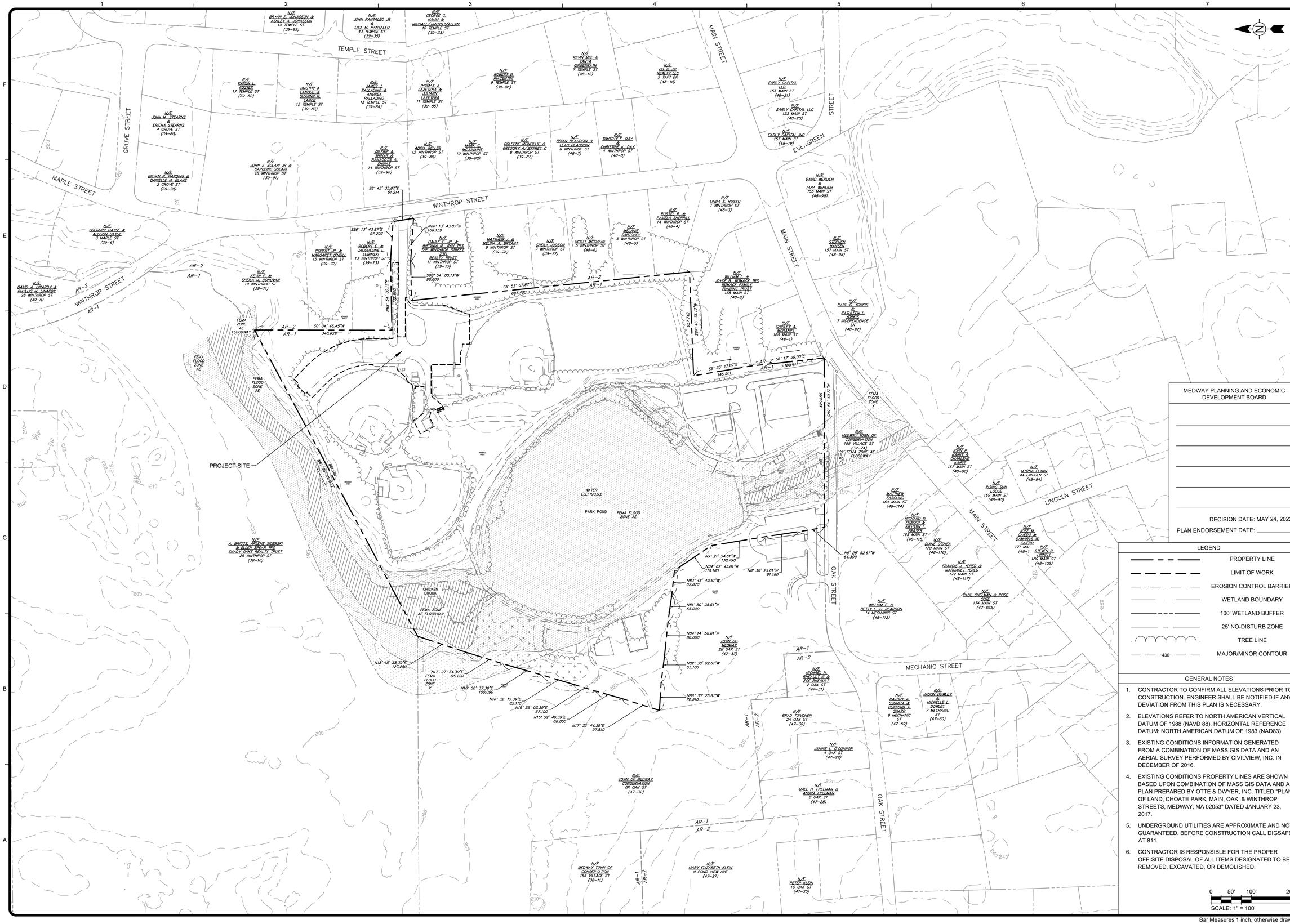
SHEET NO.	SHEET TITLE
C-000	COVER SHEET
C-001	SITE CONTEXT SHEET
C-100	EXISTING CONDITIONS AND DEMOLITION PLAN
C-101	EROSION AND SEDIMENT CONTROL PLAN
C-102	LAYOUT AND MATERIALS PLAN
C-103	GRADING, DRAINAGE, AND UTILITIES PLAN
C-201	CONSTRUCTION DETAILS
C-202	CONSTRUCTION DETAILS
C-203	CONSTRUCTION DETAILS
L-100	LANDSCAPE PLAN
EC-1	EXISTING STAMPED SURVEY

MEDWAY PLANNING AND ECONOMIC DEVELOPMENT BOARD

DECISION DATE: MAY 24, 2022

PLAN ENDORSEMENT DATE: _____

COMMONWEALTH OF MASSACHUSETTS
STEVEN M. BOULEY
CIVIL
No. 53571
REGISTERED PROFESSIONAL ENGINEER
7/11/22



MEDWAY PLANNING AND ECONOMIC DEVELOPMENT BOARD

DECISION DATE: MAY 24, 2022

PLAN ENDORSEMENT DATE: _____

LEGEND

- PROPERTY LINE
- LIMIT OF WORK
- EROSION CONTROL BARRIER
- WETLAND BOUNDARY
- 100' WETLAND BUFFER
- 25' NO-DISTURB ZONE
- TREE LINE
- -430- MAJOR/MINOR CONTOUR

GENERAL NOTES

1. CONTRACTOR TO CONFIRM ALL ELEVATIONS PRIOR TO CONSTRUCTION. ENGINEER SHALL BE NOTIFIED IF ANY DEVIATION FROM THIS PLAN IS NECESSARY.
2. ELEVATIONS REFER TO NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 88). HORIZONTAL REFERENCE DATUM: NORTH AMERICAN DATUM OF 1983 (NAD83).
3. EXISTING CONDITIONS INFORMATION GENERATED FROM A COMBINATION OF MASS GIS DATA AND AN AERIAL SURVEY PERFORMED BY CIVILVIEW, INC. IN DECEMBER OF 2016.
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5. UNDERGROUND UTILITIES ARE APPROXIMATE AND NOT GUARANTEED. BEFORE CONSTRUCTION CALL DIGSAFE AT 811.
6. CONTRACTOR IS RESPONSIBLE FOR THE PROPER OFF-SITE DISPOSAL OF ALL ITEMS DESIGNATED TO BE REMOVED, EXCAVATED, OR DEMOLISHED.

0 50' 100' 200'
SCALE: 1" = 100'

TETRA TECH
www.tetratech.com
100 Nickerson Road
Marlborough, MA 01752
Phone: (508) 786-2200 Fax: (508) 786-2201

MARK	DATE	DESCRIPTION	BY
0	4/7/22	MINOR SITE PLAN	SMB
1	7/11/22	REVISED PER PEDB COMMENTS	SMB

Medway Department of Public Works
Cassidy Field Parking Improvements
Winthrop Street, Medway, MA

Site Context Sheet

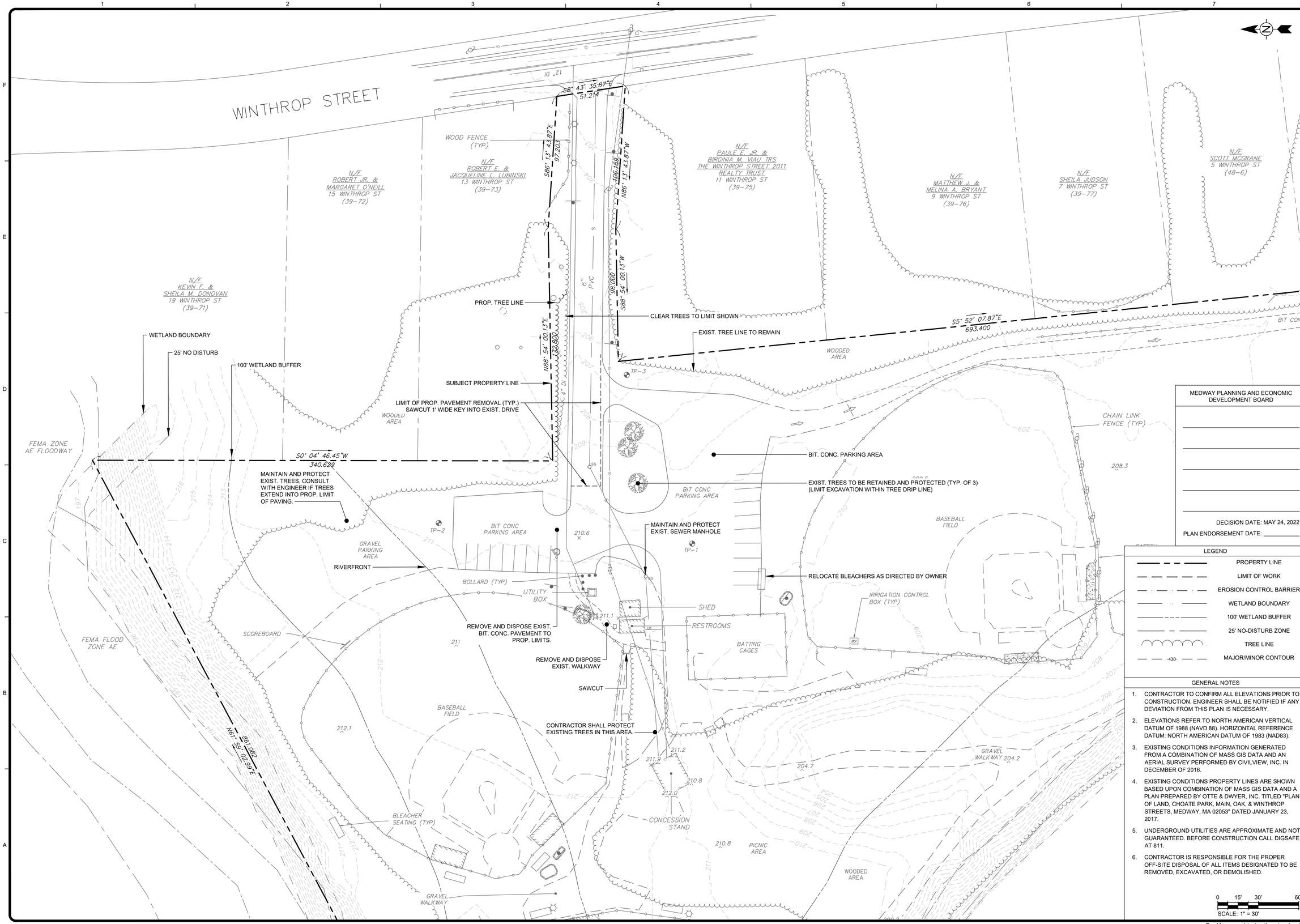
PROJ:	143-21583-21012
DESN:	BMP
DRWN:	TDP
CHKD:	SMB

C-001

Copyright: Tetra Tech

Bar Measures 1 inch, otherwise drawing not to scale

7/11/2022 2:02:54 PM - P:\21583\143-21583-21012 (DPW CASSIDY FIELD)\CAD\SHEETFILES\MINOR SITE PLAN\C-001 CONTEXT SHEET.DWG - BOULEY, STEVEN



MEDWAY PLANNING AND ECONOMIC DEVELOPMENT BOARD

DECISION DATE: MAY 24, 2022

PLAN ENDORSEMENT DATE: _____

LEGEND

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0 15' 30' 60'
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MARK	DATE	DESCRIPTION	BY
0	4/7/22	MINOR SITE PLAN	SMB
1	7/1/22	REVISED PER PEDB COMMENTS	SMB

Medway Department of Public Works
Cassidy Field Parking Improvements
Winthrop Street, Medway, MA

Existing Conditions and Demolition Plan

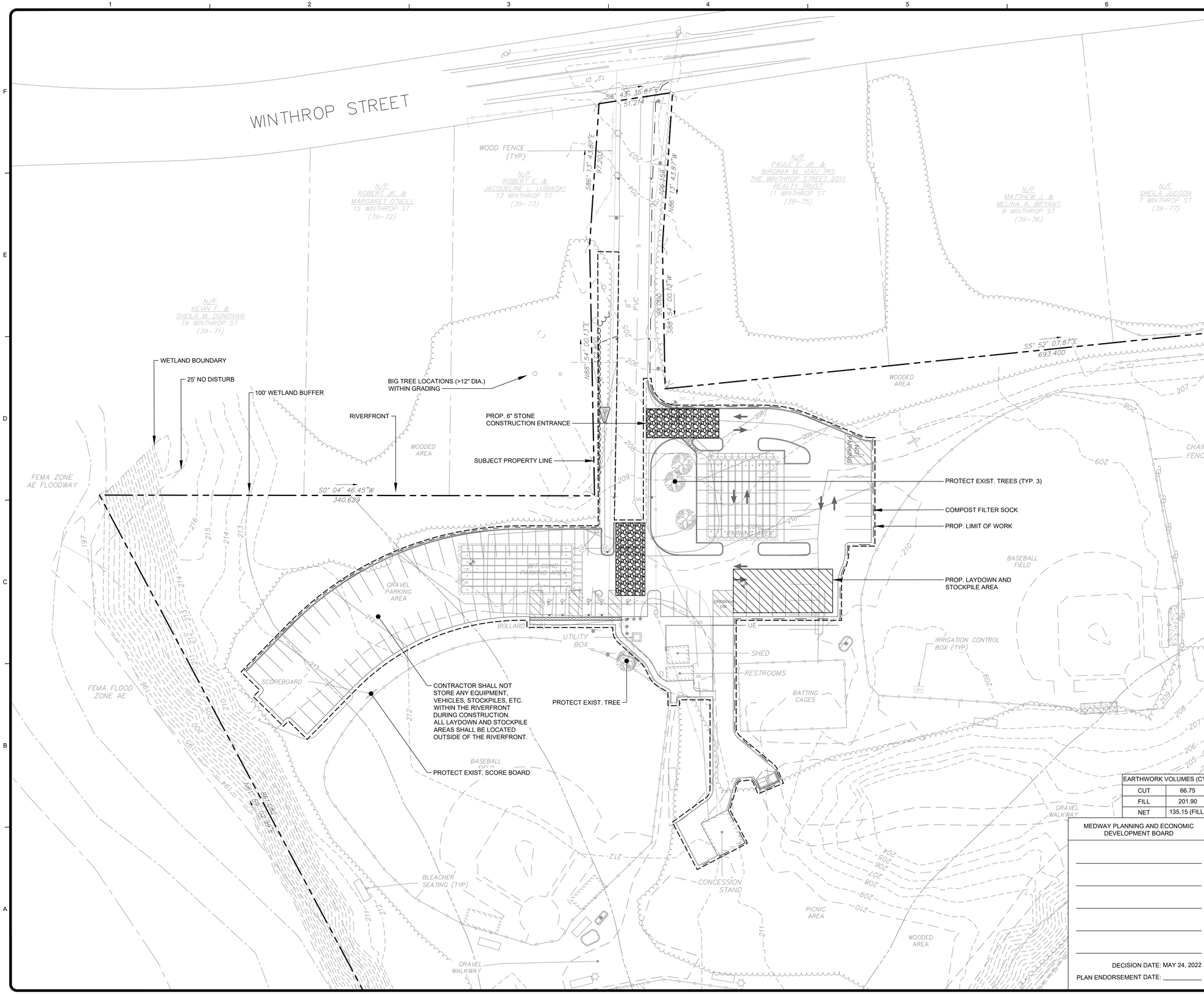
PROJ:	143-21583-21012
DESN:	BMP
DRWN:	TDP
CHKD:	SMB

C-100

Copyright: Tetra Tech

Bar Measures 1 inch, otherwise drawing not to scale

7/11/2022 2:03:24 PM - P:\21583\143-21583-21012 (DPW CASSIDY FIELD)\CAD\SHEETFILES\MINOR SITE PLAN\C-100 EXISTING CONDITIONS.DWG - BOULEY, STEVEN



EARTHWORK VOLUMES (CY)	
CUT	66.75
FILL	201.90
NET	135.15 (FILL)

MEDWAY PLANNING AND ECONOMIC DEVELOPMENT BOARD

DECISION DATE: MAY 24, 2022

PLAN ENDORSEMENT DATE: _____

CONSTRUCTION SEQUENCE

1. INSTALL PERIMETER EROSION CONTROLS AS INDICATED ON THE PLANS.
2. DEMOLISH EXISTING PAVEMENT AND GRAVEL SURFACES WITHIN THE PROJECT'S LIMIT OF WORK.
3. INSTALL CATCH BASINS, DRAIN MANHOLES, AND SUBSURFACE INFILTRATION SYSTEMS AS SHOWN ON THE GRADING AND DRAINAGE PLAN. SET RIMS OF CATCH BASINS, MANHOLES AND INSPECTION PORTS TO PROPOSED FINISH GRADE.
4. PLACE AND COMPACT PROCESSED GRAVEL MATERIAL TO PROPOSED SUBBASE ELEVATIONS WITHIN THE PARKING AREA.
5. INSTALL BINDER COURSE PAVEMENT THROUGHOUT THE PROPOSED PARKING LOT TO THE PROPOSED BACK OF BERM/EDGE OF PAVEMENT.
6. INSTALL CAPE COD BERM AS INDICATED ON THE PLANS. BINDER COURSE SHALL BE CLEANED AND TACK ASPHALT EMULSION SHALL BE PLACED PRIOR TO BERM INSTALLATION.
7. INSTALL TOP COURSE PAVEMENT. BINDER COURSE SHALL BE CLEANED AND TACK ASPHALT EMULSION SHALL BE PLACED PRIOR TO TOP COURSE INSTALLATION.
8. INSTALL PROPOSED LANDSCAPING AND LOAM AND SEED AS INDICATED ON THE PLANS.
9. REMOVE PERIMETER EROSION CONTROLS AT THE DIRECTION OF MEDWAY PEDB AND CONSERVATION COMMISSION.

EROSION CONTROL NOTES

1. OFF-SITE SEDIMENT TRACKING MUST BE MINIMIZED. SEDIMENT TRACKED ON ADJACENT PROPERTY OR PUBLIC WAYS MUST BE SWEPT BY THE END OF THE SAME WORK DAY.
2. MAINTAIN EROSION AND SEDIMENTATION CONTROL MEASURES FOR THE DURATION OF THE PROJECT AND UNTIL PERMANENT STABILIZATION OF THE SITE IS ESTABLISHED.

LEGEND

- PROPERTY LINE
- LIMIT OF WORK
- EROSION CONTROL BARRIER
- WETLAND BOUNDARY
- 100' WETLAND BUFFER
- 25' NO-DISTURB ZONE
- TREE LINE
- -430- MAJOR/MINOR CONTOUR

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0 15' 30' 60'
SCALE: 1" = 30'

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Marlborough, MA 01752
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MARK	DATE	DESCRIPTION	BY
0	4/7/22	MINOR SITE PLAN	SMB
1	7/1/22	REVISED PER PEDB COMMENTS	SMB

Medway Department of Public Works
Cassidy Field Parking Improvements
Winthrop Street, Medway, MA

Erosion and Sediment Control Plan

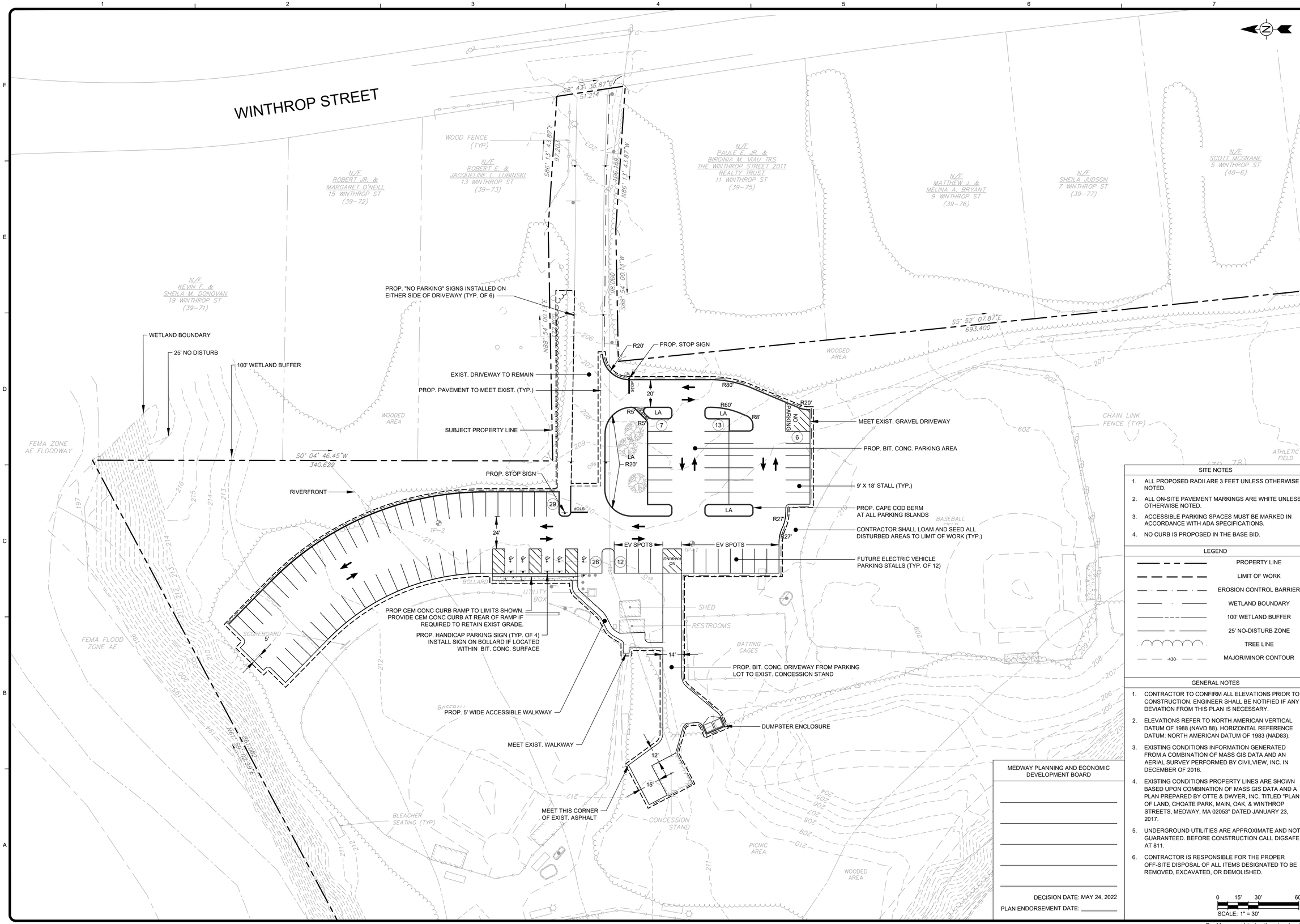
PROJ:	143-21583-21012
DESN:	BMP
DRWN:	TDP
CHKD:	SMB

C-101

Copyright: Tetra Tech

Bar Measures 1 inch, otherwise drawing not to scale

7/11/2022 2:06:55 PM - P:\21583\143-21583-21012 (DPW CASSIDY FIELD)\CAD\SHEETFILES\MINOR SITE PLAN\C-101 EROSION CONTROLS.DWG - BOULEY, STEVEN



SITE NOTES

1. ALL PROPOSED RADII ARE 3 FEET UNLESS OTHERWISE NOTED.
2. ALL ON-SITE PAVEMENT MARKINGS ARE WHITE UNLESS OTHERWISE NOTED.
3. ACCESSIBLE PARKING SPACES MUST BE MARKED IN ACCORDANCE WITH ADA SPECIFICATIONS.
4. NO CURB IS PROPOSED IN THE BASE BID.

LEGEND

- PROPERTY LINE
- LIMIT OF WORK
- EROSION CONTROL BARRIER
- WETLAND BOUNDARY
- 100' WETLAND BUFFER
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MEDWAY PLANNING AND ECONOMIC DEVELOPMENT BOARD

DECISION DATE: MAY 24, 2022

PLAN ENDORSEMENT DATE: _____

0 15' 30' 60'
SCALE: 1" = 30'

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MARK	DATE	DESCRIPTION	BY
0	4/1/22	MINOR SITE PLAN	SMB
1	7/11/22	REVISED PER FEDB COMMENTS	SMB

Medway Department of Public Works
Cassidy Field Parking Improvements
Winthrop Street, Medway, MA

Layout and Materials Plan

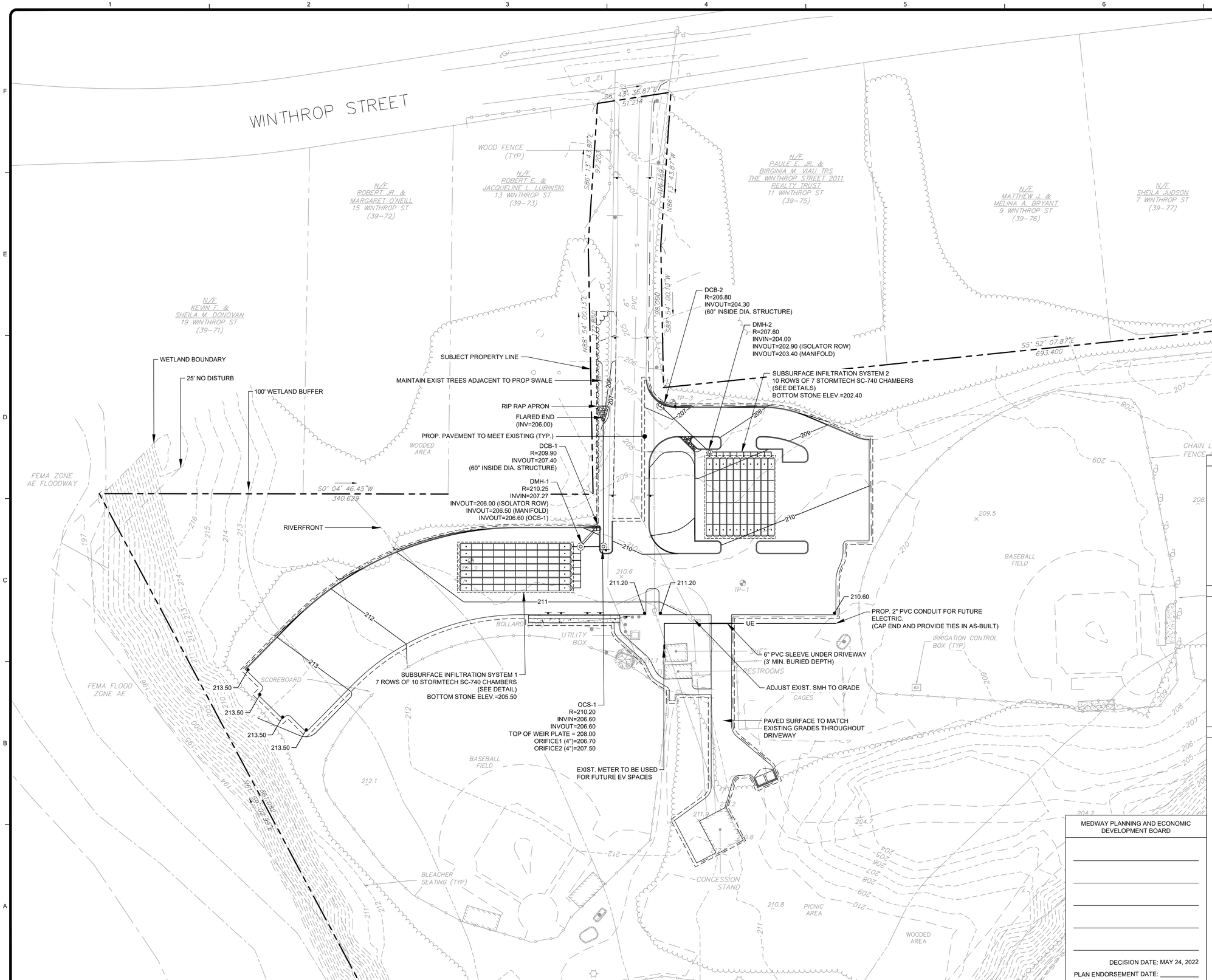
PROJ:	143-21583-21012
DESN:	BMP
DRWN:	TDP
CHKD:	SMB

C-102

Copyright: Tetra Tech

Bar Measures 1 inch, otherwise drawing not to scale

7/11/2022 3:19:03 PM - P:\21583\143-21583-21012 (DPW CASSIDY FIELD)\CAD\SHEETFILES\MINOR SITE PLAN\C-102 LAYOUT AND MATERIALS.DWG - BOULEY, STEVEN



GRADING NOTES

1. GRADING OUTSIDE OF THE TIE IN LOCATIONS TO EXISTING GRADE SHOWN ON THE PLAN MUST BE MINIMIZED TO MAINTAIN EXISTING DRAINAGE PATTERNS.
2. GRADING MUST TIE INTO EXISTING GRADES AND NOT CONCENTRATE RUNOFF ONTO STEEP SLOPES, CREATE EROSIVE CONDITIONS, OR NUISANCE PONDING.
3. GRADING MUST SLOPE UNIFORMLY BETWEEN CONTOURS AND SPOT ELEVATIONS SHOWN.
4. SPOT ELEVATIONS ARE TO TOP OF PAVEMENT UNLESS OTHERWISE NOTED.

LEGEND

- PROPERTY LINE
- LIMIT OF WORK
- EROSION CONTROL BARRIER
- WETLAND BOUNDARY
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MEDWAY PLANNING AND ECONOMIC DEVELOPMENT BOARD

DECISION DATE: MAY 24, 2022

PLAN ENDORSEMENT DATE: _____

0 15' 30' 60'
SCALE: 1" = 30'

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MARK	DATE	DESCRIPTION	BY
0	4/1/22	MINOR SITE PLAN	SMB
1	7/11/22	REVISED PER FEDB COMMENTS	SMB

Medway Department of Public Works
Cassidy Field Parking Improvements
Winthrop Street, Medway, MA

Grading, Drainage, and Utilities Plan

PROJ:	143-21583-21012
DESN:	BMP
DRWN:	TDP
CHKD:	SMB

C-103

Copyright: Tetra Tech

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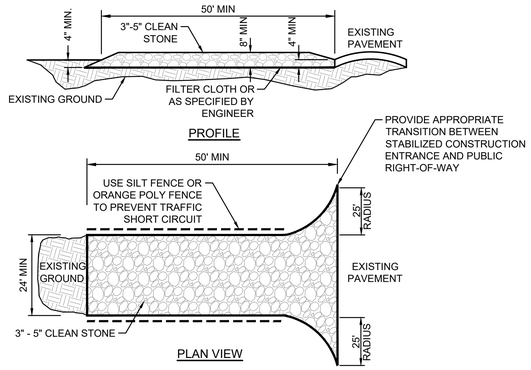
7/11/2022 3:20:54 PM - P:\21583\143-21583-21012 (DPW CASSIDY FIELD)\CAD\SHEETFILES\MINOR SITE PLAN\C-103 GRADING, DRAINAGE, UTILITIES.DWG - BOULEY, STEVEN



NOTES:

1. STONE - USE COARSE AGGREGATE (3"-5" STONE).
2. LENGTH - AS EFFECTIVE, BUT NOT LESS THAN 50 FEET.
3. THICKNESS - NOT LESS THAN EIGHT (8) INCHES.
4. WIDTH - NOT LESS THAN FULL WIDTH OF ALL POINTS OF INGRESS OR EGRESS.
5. WASHING - WHEN NECESSARY, WHEELS SHALL BE CLEANED TO REMOVE SEDIMENT PRIOR TO ENTRANCE ONTO PUBLIC RIGHT-OF-WAY. WHEN WASHING IS REQUIRED, IT SHALL BE DONE ON AN AREA STABILIZED WITH CRUSHED STONE WHICH DRAINS INTO AN APPROVED SEDIMENT TRAP OR SEDIMENT BASIN. ALL SEDIMENT SHALL BE PREVENTED FROM ENTERING ANY STORM DRAIN, DITCH, OR WATERCOURSE THROUGH USE OF SAND BAGS, GRAVEL, BOARDS OR OTHER APPROVED METHODS.
6. MAINTENANCE - THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHT-OF-WAY. THIS MAY REQUIRE PERIODIC TOP DRESSING WITH ADDITIONAL STONE AS CONDITIONS DEMAND AND REPAIR AND/OR CLEANOUT OF ANY MEASURES USED TO TRAP SEDIMENT. ALL SEDIMENT SPILLED, DROPPED, WASHED OR TRACKED ONTO ADJACENT PAVED ROAD SURFACES MUST BE REMOVED IMMEDIATELY.

PRACTICE: STABILIZED CONSTRUCTION EXIT POINTS. IN ORDER TO MINIMIZE TRACK OUT FROM VEHICLES, STABILIZED CONSTRUCTION EXIT(S) MUST BE INSTALLED AT THE LOCATIONS WHERE VEHICLES WILL EXIT THE SITE. THE CONTRACTOR MUST RESTRICT VEHICLE USE TO THE PROPOSED DESIGN EXIT LOCATIONS. ADDITIONAL CONTROLS TO REMOVE SEDIMENT FROM TIRES MAY BE REQUIRED IF TRACKING OCCURS; SUCH METHODS MAY INCLUDE WHEEL WASH STATIONS, RUMBLE STRIPS OR RUMBLE PLATES. NO VISIBLE SIGNS OF SOIL TRACKING FROM VEHICLES SHOULD BE PRESENT ON PUBLIC ROADWAYS EXITING THE SITE.

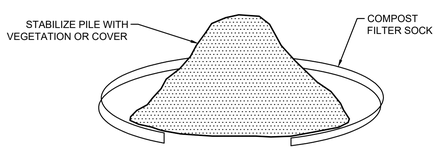
INSTALLATION. THE STABILIZED CONSTRUCTION EXIT(S) WILL CONSIST OF AN 8 INCH LAYER OF THREE TO FIVE INCH (3"-5") STONE, PLACED OVER A LAYER OF GEOTEXTILE FABRIC (IN ORDER TO PROVIDE SEPARATION FROM THE UNDERLYING SOIL AND PREVENT THE STONE FROM BEING GROUND DOWN INTO THE SOIL). THE STABILIZED CONSTRUCTION EXIT MUST BE WIDE ENOUGH TO COVER THE ENTIRE WIDTH OF THE EXIT AND IT SHOULD BE FLARED WHERE IT MEETS THE ROADWAY TO ACCOMMODATE LONGER CONSTRUCTION VEHICLES. THE STABILIZED CONSTRUCTION EXIT MUST BE LONG ENOUGH TO ALLOW MUD AND SEDIMENT TO BECOME DISLODGED FROM VEHICLE TIRES, AND/OR A MINIMUM OF FIFTY FEET (50') IN LENGTH.

MAINTENANCE. DURING THE COURSE OF CONSTRUCTION THE STABILIZED CONSTRUCTION EXIT WILL BECOME FILLED WITH ACCUMULATED SEDIMENT AND/OR THE STONE WILL BECOME COMPACTED. THE CONTRACTOR MUST REPAIR THE EXIT AS NECESSARY BY REMOVING ACCUMULATED SEDIMENT, REPLACING THE STONE OR BACK-BLADING THE STONE TO REFRESH IT. IF TRACKING OF SEDIMENT OCCURS, THE CONTRACTOR MUST REMOVE DEPOSITED SEDIMENT BY COMPLYING WITH THE FOLLOWING REQUIREMENTS:

- WHERE TRACK-OUT OF SEDIMENT OCCURS FROM THE SITE ONTO OFF-SITE STREETS, SIDEWALKS, AND OTHER PAVED AREAS, DEPOSITS MUST BE SWEPT, SHOVELED, OR VACUUMED TO REMOVE TRACK-OUT MATERIAL OR OTHER SEDIMENT DEPOSITS BY THE END OF THE SAME WORK DAY IN WHICH THE TRACK OUT IS DISCOVERED.
- HOSING OR SWEEPING TRACKED-OUT SEDIMENT INTO ANY STORMWATER CONVEYANCE, (UNLESS IT IS CONNECTED TO A SEDIMENT BASIN, SEDIMENT TRAP, OR SIMILARLY EFFECTIVE CONTROL), STORM DRAIN INLET, OR SURFACE WATER IS PROHIBITED.

STABILIZED CONSTRUCTION EXIT

NOT TO SCALE



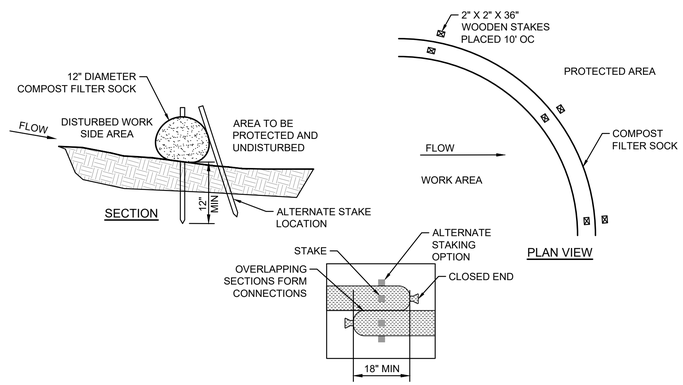
NOTE:
STOCKPILES MUST BE PHYSICALLY SEPARATED FROM OTHER STORMWATER CONTROLS.

NOTE:

1. FOR ANY STOCKPILED OR LAND CLEARING DEBRIS COMPOSED, IN WHOLE OR IN PART, OF SEDIMENT OR SOIL, THE FOLLOWING MEASURES MUST BE FOLLOWED:
   - LOCATE THE PILES 50' OUTSIDE OF ANY RESOURCE AREAS AND PHYSICALLY SEPARATED FROM OTHER STORMWATER CONTROLS;
   - PROTECT FROM CONTACT WITH STORMWATER (INCLUDING RUN-ON) USING A TEMPORARY PERIMETER SEDIMENT BARRIER;
   - PROVIDE COVER OR APPROPRIATE TEMPORARY STABILIZATION TO AVOID DIRECT CONTACT WITH PRECIPITATION OR TO MINIMIZE SEDIMENT DISCHARGE;
   - DO NOT HOSE DOWN OR SWEEP SOIL OR SEDIMENT ACCUMULATED ON PAVEMENT OR OTHER IMPERVIOUS SURFACES INTO ANY STORMWATER CONVEYANCE (UNLESS CONNECTED TO A SEDIMENT BASIN, SEDIMENT TRAP, OR SIMILARLY EFFECTIVE CONTROL), STORM DRAIN INLET, OR SURFACE WATER; AND
   - UNLESS INFEASIBLE, CONTAIN AND SECURELY PROTECT FROM WIND.

SOIL STOCKPILE CONTROL

NOT TO SCALE



CONNECTION/ATTACHMENT DETAIL

NOTES:

1. PREFABRICATED COMPOST FILTER SOCK SHALL BE FILTREXX SOXX OR APPROVED EQUAL.
2. MATERIAL FOR SOCKS SHALL CONSIST OF SANITIZED MATURE COMPOST, FREE OF VIABLE WEED SEEDS AND FOREIGN DEBRIS SUCH AS GLASS AND PLASTIC. COMPOST SHALL BE IN SHREDDED OR GRANULAR FORM AND FREE FROM HARD LUMPS. IN ADDITION, NO KILN-DRIED WOOD OR CONSTRUCTION DEBRIS SHALL BE ALLOWED. CONTRACTOR SHALL REFER TO MASSDOT SPECIFICATIONS M1.06.0 FOR MATERIAL SPECIFICATIONS.
3. SOCK SHALL CONSIST OF JUTE MESH OR OTHER APPROVED BIODEGRADABLE MATERIAL.

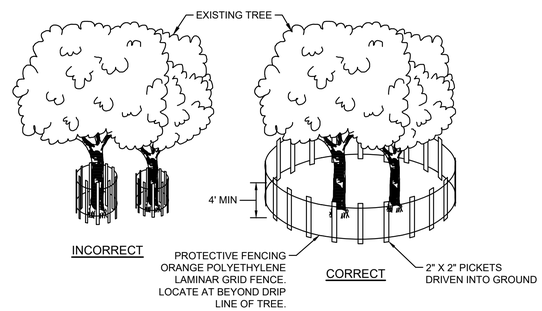
PRACTICE: COMPOST FILTER SOCK. A COMPOST FILTER SOCK IS A TYPE OF CONTAINED COMPOST FILTER BERM CONSISTING OF A MESH TUBE FILLED WITH COMPOSTED MATERIAL THAT IS PLACED PERPENDICULAR TO SHEET-FLOW RUNOFF TO RETAIN SEDIMENT FROM DISTURBED AREAS. THE COMPOST FILTER SOCK ACTS AS A FILTER TO RETAIN SEDIMENT AND OTHER POLLUTANTS (E.G., SUSPENDED SOLIDS, NUTRIENTS) WHILE ALLOWING THE WATER TO FLOW THROUGH IT. COMPOST QUALITY MUST MEET AASHTO 2010 SPECIFICATIONS.

INSTALLATION: ONCE THE FILTER SOCK IS FILLED AND PUT IN PLACE, IT SHOULD BE ANCHORED TO THE SLOPE BY STAKES THROUGH THE CENTER OR OUTER EDGE OF THE SOCK AT REGULAR INTERVALS; ALTERNATIVELY, STAKES CAN BE PLACED ON THE DOWNSTREAM SIDE OF THE SOCK. THE ENDS OF THE FILTER SOCK SHOULD BE DIRECTED UPSLOPE, TO PREVENT STORMWATER FROM RUNNING AROUND THE END OF THE TUBE. THERE SHOULD BE NO GAPS BETWEEN SEGMENTS AND THE SOCK ENDS MUST OVERLAP A MINIMUM OF 6 INCHES.

MAINTENANCE: SOCKS MUST BE INSPECTED FOR SEDIMENT ACCUMULATION. IF THERE IS EXCESSIVE PONDING BEHIND THE FILTER SOCK OR ACCUMULATED SEDIMENT REACHES THE TOP OF THE SOCK, AN ADDITIONAL SOCK SHOULD BE ADDED ON TOP OR IN FRONT OF THE EXISTING FILTER SOCK IN THESE AREAS. AN ADEQUATE RESERVE OF SOCKS MUST BE KEPT ON SITE AT ALL TIMES FOR EMERGENCY AND/OR ROUTINE REPLACEMENT. SOCKS SHALL BE REMOVED ONLY AFTER EXPOSED SOILS IN THE CONTRIBUTING DRAINAGE AREA ACHIEVE FINAL STABILIZATION. SEDIMENT ACCUMULATION MUST BE REMOVED ONCE IT HAS REACHED ½ OF THE EXPOSED HEIGHT OF THE SOCK.

COMPOST FILTER SOCK

NOT TO SCALE

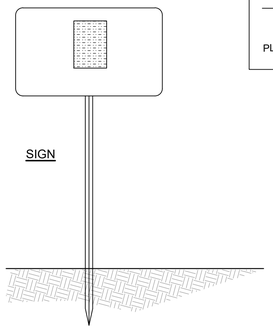


NOTES:

1. TREE PROTECTION BARRIERS MUST BE PLACED AROUND TREES TO BE RETAINED WITHIN AN AREA WHERE LAND ALTERATION AND CONSTRUCTION ACTIVITIES WILL OCCUR.
2. TREE PROTECTION BARRIER MUST REMAIN IN PLACE UNTIL GRADING AND CONSTRUCTION ACTIVITY IS COMPLETE OR UNTIL COMMENCEMENT OF FINISH GRADING AND SODDING.
3. BARRIERS SHALL BE PLACED AROUND TREES AT THE DRIPLINE EXCEPT WHERE LAND ALTERATION OR CONSTRUCTION ACTIVITIES ARE APPROVED WITHIN THE DRIPLINE.
4. THE DRIPLINE OF A TREE IS THE IMAGINARY VERTICAL LINE THAT EXTENDS DOWNWARD FROM THE OUTERMOST TIPS OF THE TREE'S BRANCHES TO THE GROUND.
5. AREAS SURROUNDED BY THE TREE PROTECTION BARRIERS SHALL BE PROTECTED FROM VEGETATION REMOVAL, PLACEMENT OF SOIL, DEBRIS, SOLVENTS, CONSTRUCTION MATERIAL, MACHINERY OR OTHER EQUIPMENT OF ANY KIND.
6. ALL TREE ROOTS WITHIN AREA TO BE GRADED AND ORIGINATING FROM A PROTECTED TREE SHALL BE SEVERED CLEANLY AT THE LIMITS OF THE PROTECTED AREA.
7. ALL TREE PRUNING AND TRIMMING ON ANY TREE TO BE RETAINED SHALL BE PERFORMED BY AN ARBORIST CERTIFIED BY THE AMERICAN SOCIETY OF ARBORICULTURE (ASA).
8. 2'x2' TREE PROTECTION SIGNS SPACED A MINIMUM OF ONE SIGN EVERY 300' SHALL CONTAIN THE WORDING "TREE PROTECTION ZONE - KEEP OUT".

TREE PROTECTION BARRIER / ORANGE CONSTRUCTION FENCE

NOT TO SCALE



NOTES:

1. CONSTRUCTION SITE NOTICES MUST BE POSTED.
2. POSTING IS TO BE AT JOB SITE ENTRANCE WHERE IT WILL BE VISIBLE AND LEGIBLE FROM THE PUBLIC WAY.
3. POSTING IS REQUIRED FROM THE DAY CONSTRUCTION ACTIVITIES START UNTIL THE NOTICE OF TERMINATION (NOT) IS FILED.

JOB SITE PERMIT POSTING DETAIL

NOT TO SCALE

SEEDING

SEEDING RATES			
SPECIES	LBS/1000 S.F.	LBS/ACRE	RECOMMENDED SEEDING DATES
ANNUAL RYEGRASS	1	40	APRIL 1 TO JUNE 1 AUG 1 TO SEPT 15
FOXTAIL MILLET	0.7	30	MAY 1 TO JUNE 30
OATS	2	80	APRIL 1 TO JULY 1 AUG 15 TO SEPT 15
WINTER RYE	3	120	AUG 15 TO OCT 15

MULCHING

MULCH APPLICATION RATES:
HAY OR STRAW MULCH SHALL BE AIR-DRIED, FREE OF UNDESIRABLE SEEDS AND COARSE MATERIALS. APPLICATION RATE MUST BE 2 BALES (70-90 LBS) PER 1,000 SQUARE FEET OR 1.5 TO 2 TONS PER ACRE. NO BARE SPOTS SHOWING AND SHALL ONLY BE APPLIED TO SLOPES 3:1 OR FLATTER. ANCHORING METHODS INCLUDING NETTING WITH JUTE, WOOD FIBER OR PLASTIC; OR APPLY MULCH AND TRACK SURFACE UP AND DOWN THE SLOPE SO CLEAT MARKS ARE PARALLEL TO THE CONTOURS. FOR OVERWINTER APPLICATION, THE RATE SHALL BE 150 LBS PER 1,000 SQUARE FEET OR 3 TONS/ACRE. MULCH SHALL NOT BE SPREAD ON TOP OF SNOW; SNOW MUST BE REMOVED DOWN TO A ONE-INCH DEPTH OR LESS PRIOR TO APPLICATION.

PRACTICE MULCHING: MULCHING IS AN EROSION CONTROL PRACTICE THAT INVOLVES USING MATERIALS SUCH AS STRAW MULCH DERIVED FROM WHEAT, RICE OR BARLEY OR WOOD MULCH CONSISTING OF SHREDDED OR CHIPPED WOOD, BARK OR COMPOST. MULCHING IS HIGHLY EFFECTIVE, AND WHEN APPLIED CORRECTLY PROVIDES A LEVEL OF PROTECTION COMPARABLE TO DENSE VEGETATIVE COVER. MULCH IS ALSO VERY BENEFICIAL FOR RECENTLY PLANTED AREAS HOLDING SEEDS, FERTILIZERS, AND TOPSOIL IN PLACE, RETAINING MOISTURE, AND INSULATING PLANT ROOTS AGAINST EXTREME TEMPERATURES.

INSTALLATION: MULCH MUST BE APPLIED UNIFORMLY TO THE SOIL AND PROPERLY ANCHORED (USING STUDDED ROLLERS, TACKIFIERS OR AN ANCHORING TOOL). MULCH SHOULD NOT BE APPLIED ON SLOPES STEEPER THAN 3:1 AND SHOULD NOT BE USED IN AREAS OF CONCENTRATED FLOWS. AREA SHOULD BE ROUGHENED OR TRACKED PRIOR TO APPLICATION. AVOID APPLYING MULCH DURING OR IMMEDIATELY BEFORE RAINFALL. THERE SHOULD BE NO BARE SPOTS SHOWING EXPOSED SOILS.

** HYDRAULICALLY APPLIED MULCHES SHALL BE INSTALLED IN ACCORDANCE WITH MANUFACTURERS RECOMMENDATIONS.

MAINTENANCE: MULCH SHALL BE REAPPLIED TO ANY BARE SPOTS. MAINTAIN AN UNBROKEN GROUND COVER AND REPAIR ANY DAMAGED GROUND COVER AND RE-MULCH EXPOSED AREAS. INSPECT AFTER EACH RAINFALL EVENT TO MAKE SURE THE MULCH IS NOT DISLODGED OR CAUSING EROSION.

TEMPORARY STABILIZATION MULCHING & SEEDING

MEDWAY PLANNING AND ECONOMIC DEVELOPMENT BOARD

DECISION DATE: MAY 24, 2022

PLAN ENDORSEMENT DATE: _____

TETRA TECH
www.tetratech.com
100 Nickerson Road
Marlborough, MA 01752
Phone: (508) 786-2200 Fax: (508) 786-2201

MARK	DATE	DESCRIPTION	BY
0	4/1/22	MINOR SITE PLAN	SMB
1	7/11/22	REVISED PER FEDB COMMENTS	SMB

Medway Department of Public Works
Cassidy Field Parking Improvements
Winthrop Street, Medway, MA

Construction Details

PROJ:	143-21583-21012
DESN:	BMP
DRWN:	BMP
CHKD:	SMB

C-201

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Bar Measures 1 inch, otherwise drawing not to scale

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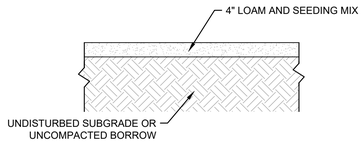
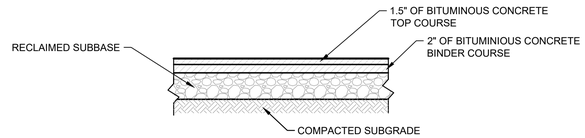
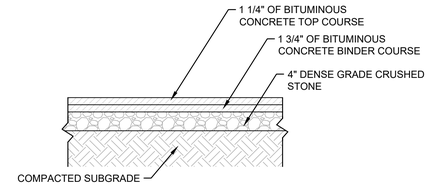


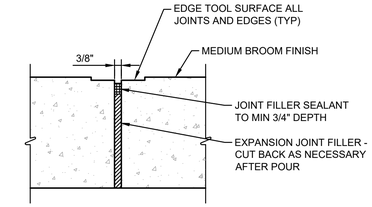
LOAM AND SEED
NOT TO SCALE



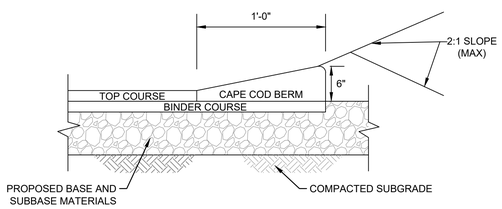
BITUMINOUS CONCRETE PAVEMENT SECTION
NOT TO SCALE



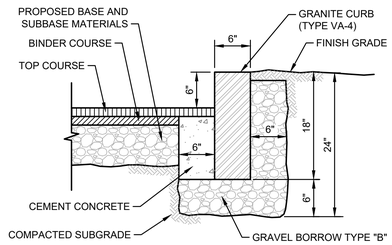
BITUMINOUS CONCRETE WALKWAY
NOT TO SCALE



CONCRETE WALK EXPANSION JOINT
NOT TO SCALE



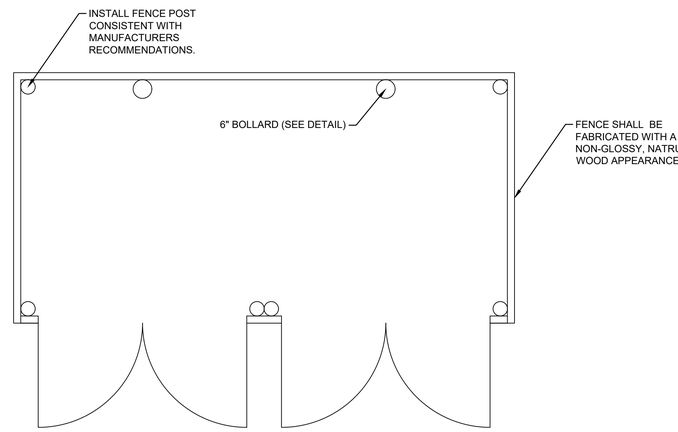
CAPE COD BERM
NOT TO SCALE



NOTE:

CEMENT CONCRETE BACKING TO BE PROVIDED AT ALL JOINTS AND AT CURB MID SECTION FOR SPANS GREATER THAN 3 FEET. CONCRETE BACKING TO BE PLACED FROM BASE TO WITHIN 9 INCHES OF GRADE AND SPAN 1 FOOT AT JOINTS AND 1.5 FEET AT MID SECTION.

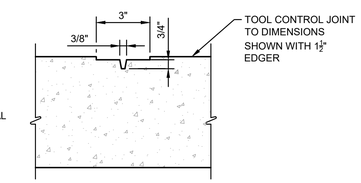
VERTICAL GRANITE CURB
NOT TO SCALE



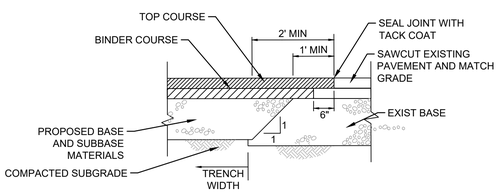
NOTE:

1. DUMPSTER ENCLOSURE SHALL BE INSTALLED IN PROP PAVEMENT AS SHOWN ON THE LAYHOUT AND MATERIALS PLAN. CEMENT CONCRETE PAD NOT REQUIRED UNLESS OTHERWISE DIRECTED BY THE OWNER.
2. FENCE SHALL BE TALL ENOUGH TO SCREEN THE EXIST DUMPSTERS.

DUMPSTER ENCLOSURE
NOT TO SCALE



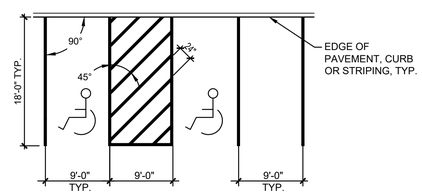
CONCRETE WALK CONTROL JOINT
NOT TO SCALE



NOTES:

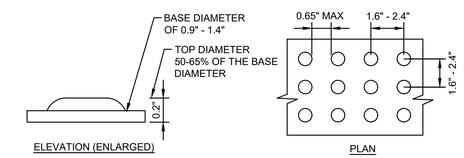
1. SAWCUTS MUST BE MADE PRIOR TO ANY TRENCH EXCAVATION.
2. SUBGRADE PREPARATION MUST BE IN ACCORDANCE WITH GEOTECHNICAL ENGINEER'S RECOMMENDATIONS.

PERMANENT BITUMINOUS CONCRETE MATCHING TO EXISTING
NOT TO SCALE

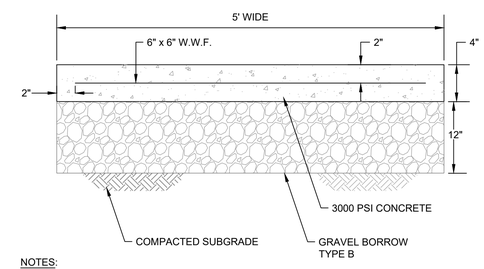


NOTES:
1. LINE WIDTHS SHALL BE 4" UNLESS OTHERWISE INDICATED..

PARKING STALL STRIPING
NOT TO SCALE



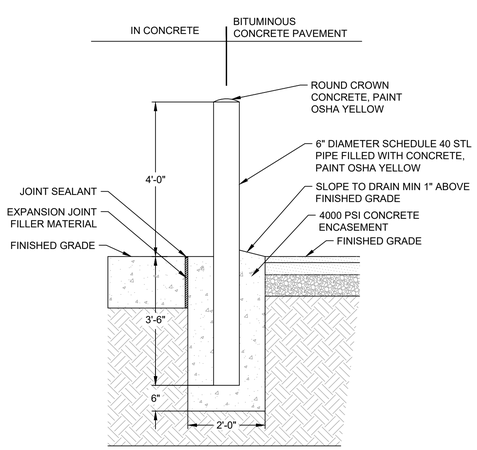
DETECTABLE WARNING STRIP
NOT TO SCALE



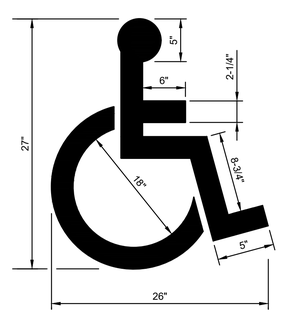
NOTES:

1. CONSTRUCTION JOINTS ARE TO BE AT 5' INTERVALS.
2. EXPANSION JOINTS TO BE INSTALLED AT 30' INTERVALS. INSTALL EXPANSION JOINTS AT LOCATIONS WHERE CONCRETE MEETS PAVEMENT, STEPS, WALLS, OR CURB.

CEMENT CONCRETE WALKWAY
NOT TO SCALE



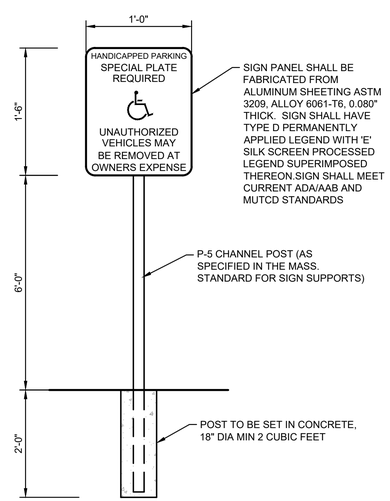
BOLLARD
NOT TO SCALE



NOTE:

WHITE PAVEMENT MARKING

ACCESSIBLE PARKING PAVEMENT MARKING
NOT TO SCALE



HANDICAP PARKING SIGN
NOT TO SCALE

MEDWAY PLANNING AND ECONOMIC DEVELOPMENT BOARD

DECISION DATE: MAY 24, 2022

PLAN ENDORSEMENT DATE: _____

TETRA TECH
www.tetratech.com
100 Nickerson Road
Marlborough, MA 01752
Phone: (508) 786-2200 Fax: (508) 786-2201

MARK	DATE	DESCRIPTION	BY
0	4/7/22	MINOR SITE PLAN	SMB
1	7/11/22	REVISED PER PEDB COMMENTS	SMB

Medway Department of Public Works
Cassidy Field Parking Improvements
Winthrop Street, Medway, MA

Construction Details

PROJ:	143-21583-21012
DESN:	BMP
DRWN:	BMP
CHKD:	SMB

C-202

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Bar Measures 1 inch, otherwise drawing not to scale

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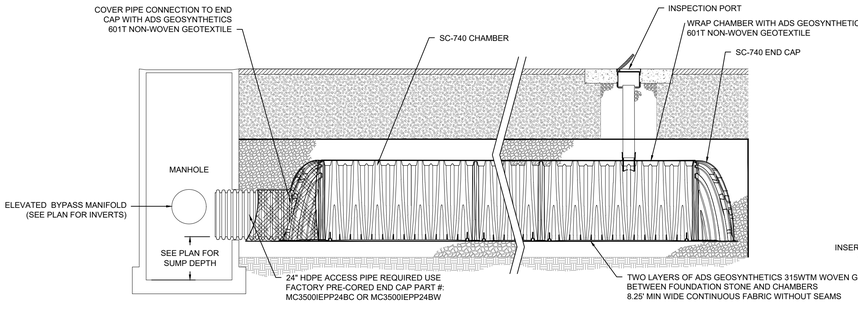
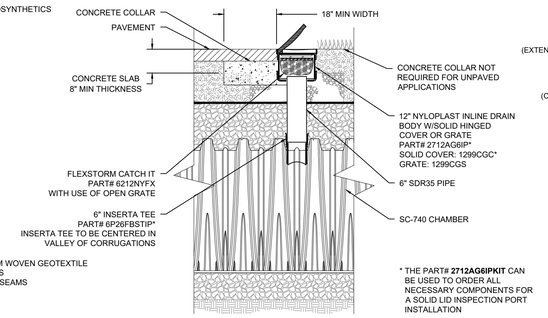
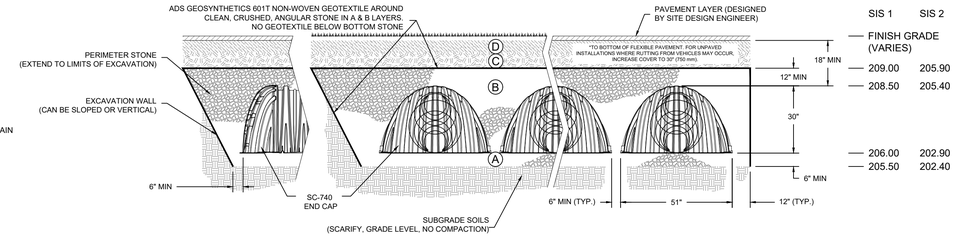


SC-740 ISOLATOR ROW DETAIL
NTS



* THE PART# **2712AG6IPKIT** CAN BE USED TO ORDER ALL NECESSARY COMPONENTS FOR A SOLID LID INSPECTION PORT INSTALLATION

SC-740 6" INSPECTION PORT DETAIL
NTS



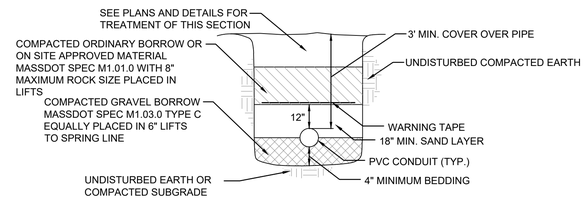
PAVEMENT LAYER (MATCH EXISTING)
(D) DENSE GRADED CRUSHED STONE FOR BASE COUSE
(C) DENSE GRADED CRUSHED STONE FOR BASE COURSE
(B) CLEAN CRUSHED ANGULAR STONE (DOUBLE WASHED)
(A) CLEAN CRUSHED ANGULAR STONE (DOUBLE WASHED)

SC-740 CROSS SECTION DETAIL
NTS

SUBSURFACE INFILTRATION SYSTEM (SIS)
NOT TO SCALE

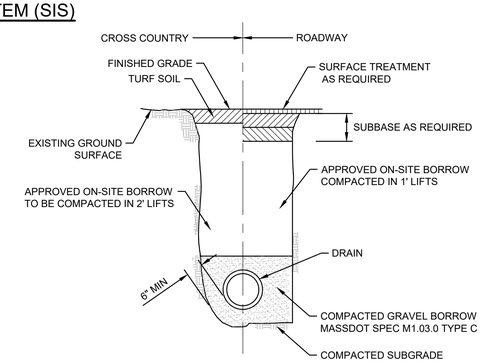
MEDWAY PLANNING AND ECONOMIC DEVELOPMENT BOARD

DECISION DATE: MAY 24, 2022
PLAN ENDORSEMENT DATE: _____

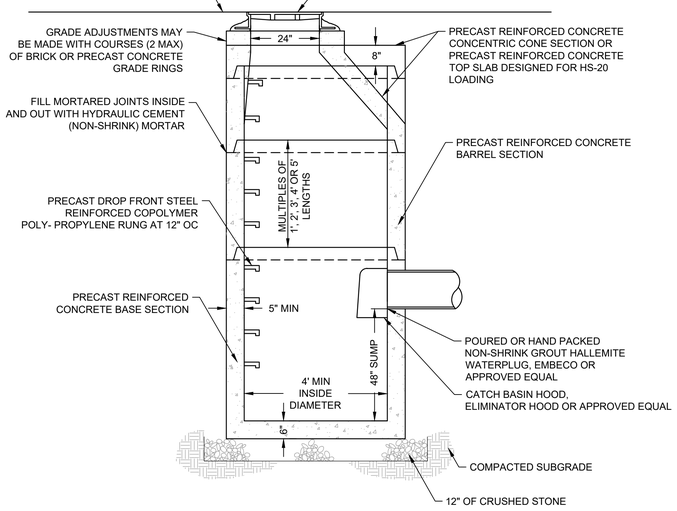


NOTES:
1. TRENCH EXCAVATION WIDTH TO ALLOW FOR FREE TRAVEL OF COMPACTION EQUIPMENT.
2. ALL COMPACTION TO A MINIMUM 95 PERCENT DRY DENSITY DETERMINED BY ASTM D1557 SEE SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS.
3. AVOID HEAVY EQUIPMENT LOADS OVER PIPE DURING CONSTRUCTION.

ELECTRIC TRENCH
NOT TO SCALE

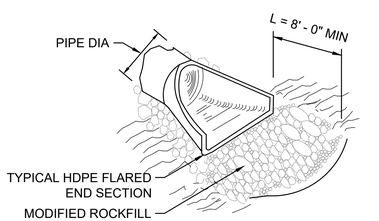


DRAIN TRENCH SECTION
NOT TO SCALE

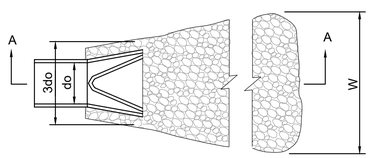


NOTES:
1. CATCH BASINS SHALL BE 48" INSIDE DIAMETER (ID) UNLESS OTHERWISE INDICATED ON PLANS.
2. EXCAVATION TO ALLOW FOR FREE TRAVEL OF COMPACTION EQUIPMENT.
3. ALL COMPACTION TO A MINIMUM 95 PERCENT DRY DENSITY DETERMINED BY ASTM D1557.
4. ALL PRECAST TO MEET OR EXCEED ASTM C-478 AND AASHTO M 199 SPECIFICATIONS.
5. REINFORCED STEEL TO MEET OR EXCEED ASTM A185 AND H-20 LOADING REQUIREMENTS.
6. ALL PRECAST CONCRETE TO BE 4,000 PSI MINIMUM AND MEET ASTM C-478 (6.1).
7. FILL ALL INTERNAL AND EXTERNAL HOLES WITH NON-SHRINK GROUT.

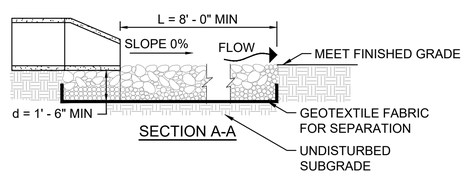
PRECAST CONCRETE CATCH BASIN
NOT TO SCALE



ISOMETRIC VIEW



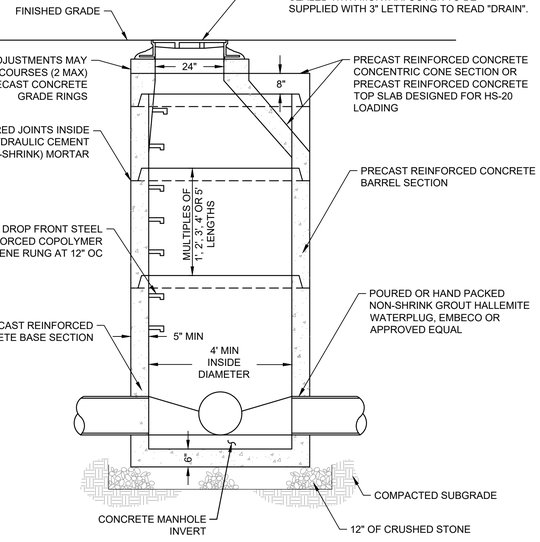
PLAN



SECTION A-A

do = PIPE DIA
L = APRON LENGTH
W = 3do + 2/3L
d = APRON DEPTH

FLARED END SECTION (FES) OUTLET PROTECTION
NOT TO SCALE



NOTES:
1. MANHOLES SHALL BE 48" INSIDE DIAMETER (ID) UNLESS OTHERWISE INDICATED ON PLANS.
2. EXCAVATION TO ALLOW FOR FREE TRAVEL OF COMPACTION EQUIPMENT.
3. ALL COMPACTION TO A MINIMUM 95 PERCENT DRY DENSITY DETERMINED BY ASTM D1557.
4. ALL PRECAST TO MEET OR EXCEED ASTM C-478 AND AASHTO M 199 SPECIFICATIONS.
5. REINFORCED STEEL TO MEET OR EXCEED ASTM A185 AND H-20 LOADING REQUIREMENTS.
6. ALL PRECAST CONCRETE TO BE 4,000 PSI MINIMUM AND MEET ASTM C-478 (6.1).
7. FILL ALL INTERNAL AND EXTERNAL HOLES WITH NON-SHRINK GROUT.

PRECAST CONCRETE DRAIN MANHOLE
NOT TO SCALE

TETRA TECH
www.tetratech.com
100 Nickerson Road
Marlborough, MA 01752
Phone: (508) 786-2200 Fax: (508) 786-2201

MARK	DATE	DESCRIPTION	BY
0	4/7/22	MINOR SITE PLAN	SMB
1	7/11/22	REVISED PER PEDB COMMENTS	SMB

Medway Department of Public Works
Cassidy Field Parking Improvements
Winthrop Street, Medway, MA

Construction Details

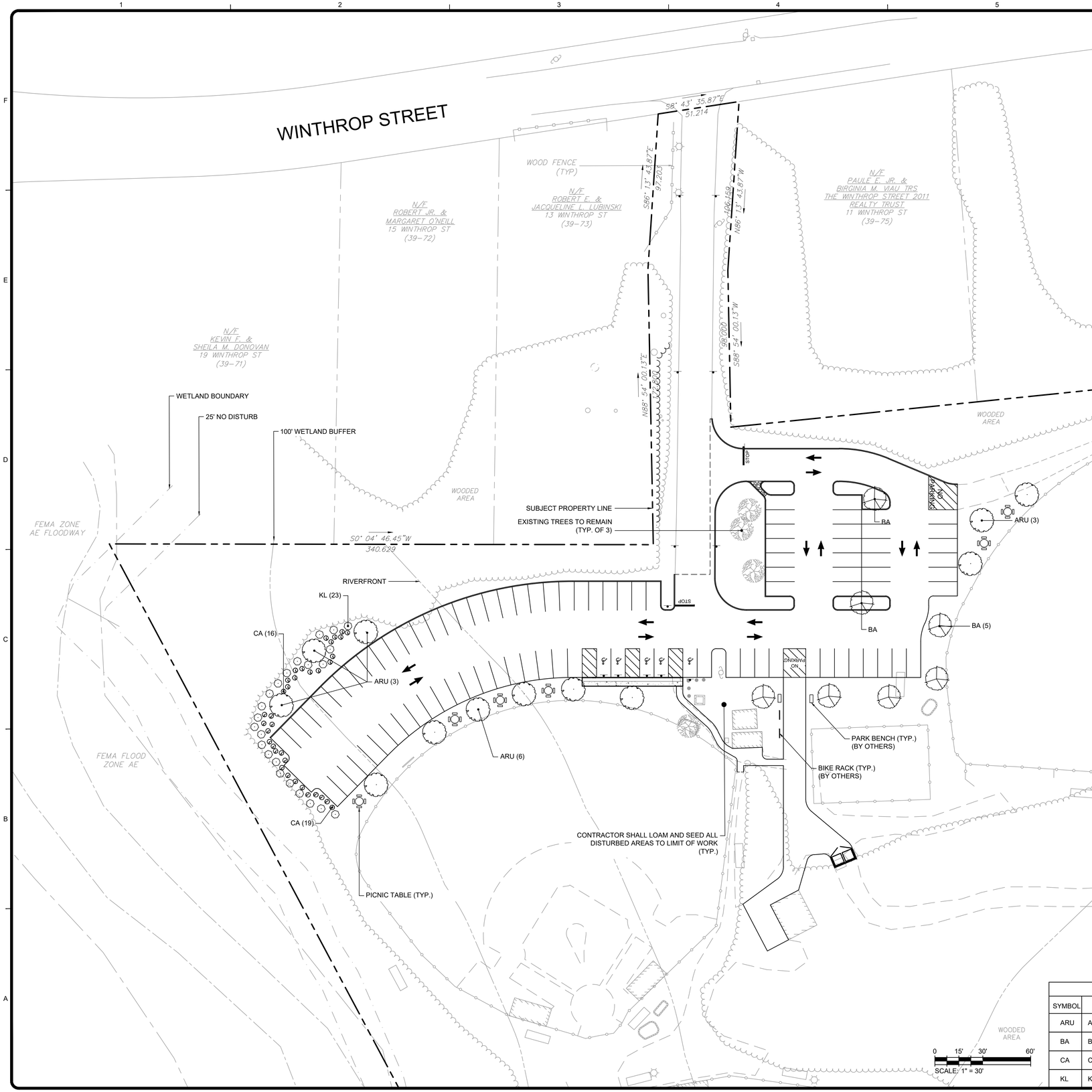
PROJ:	143-21583-21012
DESN:	BMP
DRWN:	BMP
CHKD:	SMB

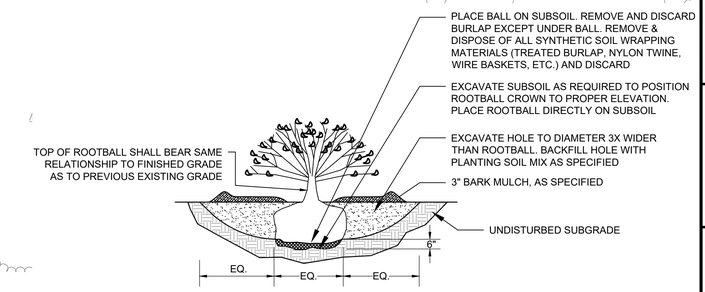
C-203

Copyright: Tetra Tech

7/11/2022 3:54:11 PM - P:\21583\143-21583-21012 (DPW CASSIDY FIELD)\CAD\SHEETFILES\MINOR SITE PLAN\C-201 CONSTRUCTION DETAILS.DWG - BOULEY, STEVEN

Bar Measures 1 inch, otherwise drawing not to scale

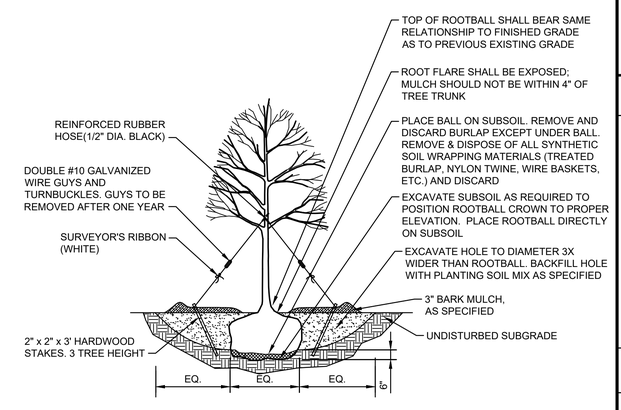




NOTES:
1. NO SOIL OR MULCH SHALL BE PLACED AGAINST ROOT COLLAR OF PLANT.
2. PLANTING DEPTH SHALL BE THE SAME OR HIGHER AS GROWN IN NURSERY.

SHRUB PLANTING

N.T.S.



DECIDUOUS TREE PLANTING FOR 2.5" CAL. AND ABOVE

NOTES:
1. NO SOIL OR MULCH SHALL BE PLACED AGAINST ROOT COLLAR OF PLANT.
2. PLANTING DEPTH SHALL BE THE SAME OR HIGHER AS GROWN IN NURSERY.
3. INSTALL TREE PLUMB.

MEDWAY PLANNING AND ECONOMIC DEVELOPMENT BOARD

DECISION DATE: MAY 24, 2022

PLAN ENDORSEMENT DATE: _____

PLANT LIST

SYMBOL	SCIENTIFIC NAME	COMMON NAME	SIZE	REMARKS	QUANTITY
ARU	ACER RUBRUM	RED MAPLE	2.5"-3" CAL.	B & B	12
BA	BETULA ALLEGHANIENSIS	YELLOW BIRCH	2.5"-3" CAL.	B & B	7
CA	CLETHRA ALNIFOLIA	SWEET PEPPERBUSH	24-30" HEIGHT	B & B	35
KL	KALMIA LATIFOLIA	MOUNTAIN LAUREL	24-30" HEIGHT	B & B	23

TETRA TECH
www.tetratech.com
100 Nickerson Road
Marlborough, MA 01752
Phone: (508) 786-2200 Fax: (508) 786-2201

MARK	DATE	DESCRIPTION	BY
0	4/1/22	MINOR SITE PLAN	SMB
1	7/11/22	REVISED PER PEDB COMMENTS	SMB

Medway Department of Public Works
Cassidy Field Parking Improvements
Winthrop Street, Medway, MA

Landscape Plan

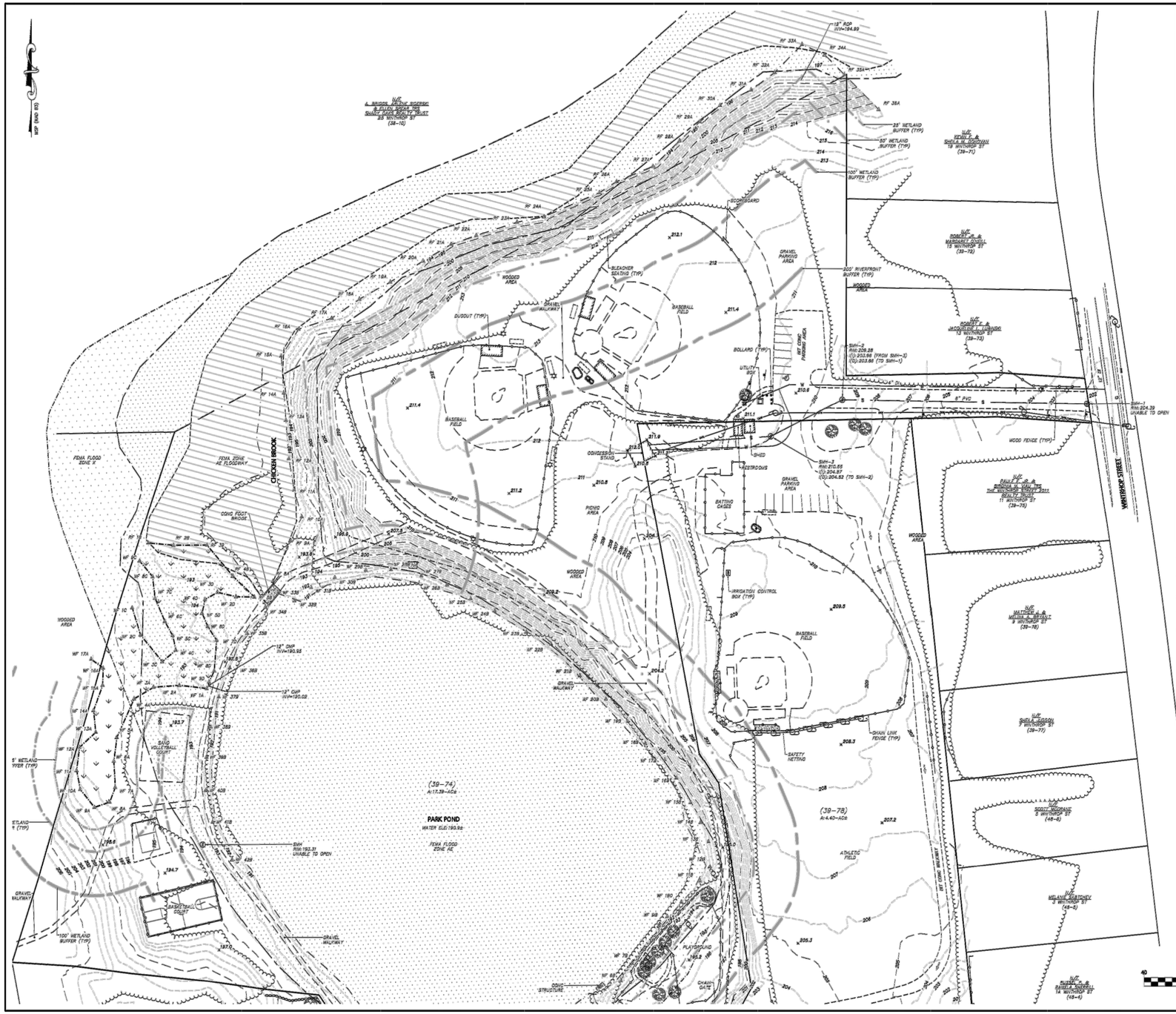
PROJ:	143-21583-21012
DESN:	BMP
DRWN:	BMP
CHKD:	SMB

L-100

Copyright: Tetra Tech

Bar Measures 1 inch, otherwise drawing not to scale

7/11/2022 4:34:16 PM - P:\21583\143-21583-21012 (DPW CASSIDY FIELD)\CAD\SHEETFILES\MINOR SITE PLAN\L-100 LANDSCAPE.DWG - BOULEY, STEVEN



LOCUS MAP

(SCALE: 1:1,000)

LEGEND

PROPERTY LINE	
ABUTTERS PROPERTY LINE	
EDGE OF PAVEMENT	
CURB	
EDGE OF GRAVEL	
CONTOUR	100
OVER HEAD WIRES	
UNDERGROUND DRAINAGE	
UNDERGROUND SEWER	
CHAIN LINK FENCE	
WOOD FENCE	
STEEL FENCE	
EDGE OF WATER	
TREE LINE	
RETAINING WALL	
STONE WALL	
DRAIN MANHOLE	
CATCH BASIN	
FLARED END STRUCTURE	
SEWER MANHOLE	
UTILITY POLE	
SITE LIGHTING	
IRRIGATION CONTROL BOX	
SIGN	
BOLLARD	
DECIDUOUS TREE	
CONIFEROUS TREE	
CONCRETE	
BRICK	
SAND	
BUILDING	
FEMA ZONE AE	
FEMA ZONE AE FLOODWAY	
FEMA ZONE X	

NOTES:

1. EXISTING CONDITIONS INFORMATION GENERATED FROM AN AERIAL SURVEY PERFORMED BY CIVILVIEW, INC. IN DECEMBER OF 2016.
2. PLAN BEARINGS ARE BASED UPON THE MASSACHUSETTS STATE PLANE COORDINATE SYSTEM (NAD83), MAINLAND ZONE PER GPS OBSERVATIONS.
3. ELEVATIONS ARE BASED UPON THE NORTH AMERICAN VERTICAL DATUM (NAVD88) PER GPS OBSERVATIONS.
4. SUBJECT PARCEL IS NOT LOCATED WITHIN A DESIGNATED FLOOD ZONE PER FEMA FLOOD INSURANCE RATE MAP 25025C0418E DATED JULY 17, 2012.
5. PROPERTY LINES ARE SHOWN BASED UPON A PLAN PREPARED BY OTTE & DWYER, INC. TITLED "PLAN OF LAND, CHOATE PARK, MAIN, OAK & WINTHROP STREETS, MEDWAY, MA 02053" DATED JANUARY 23, 2017.

DATE	DESCRIPTION
REVISIONS	

CLIENT:

CBA LANDSCAPE ARCHITECTS, LLC
24 THORNDIKE STREET
CAMBRIDGE, MA 02141

PROJECT:

CHOATE PARK
MEDWAY, MA 02053

DATE ISSUED:	JULY 12, 2017
PROJECT #:	16-09001
PREPARED BY:	AKG

COMMONWEALTH OF MASSACHUSETTS
ANDREW B. STREET
No. 48154
REGISTERED PROFESSIONAL ENGINEER

PROFESSIONAL ENGINEER FOR CIVILVIEW, INC.

CIVILVIEW
30 West Street
Nashua, MA 03064
TEL (978) 470-0020
www.CIVILVIEW.com

DRAWING TITLE:

EXISTING CONDITIONS PLAN

DRAWING #:

EC-1

0 30' 60' 120'
SCALE: 1" = 60'

MEDWAY PLANNING AND ECONOMIC DEVELOPMENT BOARD

DECISION DATE: MAY 24, 2022

PLAN ENDORSEMENT DATE: _____

TETRA TECH
www.tetratech.com
100 Nickerson Road
Marlborough, MA 01752
Phone: (508) 786-2200 Fax: (508) 786-2201

MARK	DATE	DESCRIPTION	BY
0	4/7/22	MINOR SITE PLAN	SMB
1	7/11/22	REVISED PER FELDB COMMENTS	SMB

Medway Department of Public Works
Cassidy Field Parking Improvements
Winthrop Street, Medway, MA

Existing Stamped Survey

PROJ:	143-21583-21012
DESN:	BMP
DRWN:	BMP
CHKD:	SMB

EC-1

Copyright: Tetra Tech

Bar Measures 1 inch, otherwise drawing not to scale

7/11/2022 4:30:26 PM - P:\21583\143-21583-21012 (DPW CASSIDY FIELD)\CAD\SHEETFILES\MINOR SITE PLAN\EC-1.DWG - BOULEY, STEVEN

July 12, 2022, 2022
Medway Planning & Economic Development Board Meeting

Master's Touch Minor Site Plan Public Briefing – 83 Main Street

UPDATED

- Public Briefing Notice dated 6-8-22
- Minor Site Plan application received 6-6-22
- Project Narrative dated 2-7-22 by Spruhan Engineering, P.C.
- *83 Main Street* (site plan) dated 2-14-22, prepared by Spruhan Engineering, P.C. Newton, MA
- Building elevations for storage building by SAH Design, LLC, dated 6-15-22
- Landscape plan dated 6-17-22 by Collins Landscaping including a collection of photos of planned landscape installation materials
- Susy Affleck-Childs email dated 6-8-22 requesting review comments from Town staff, boards and committees
- Review comments dated 6-9-22 from DPW Compliance Officer Stephanie Carlisle
- Review comments dated 6-9-22 from Fire Chief Jeff Lynch
- Email communication dated 6-27-22 from abutter Ed Skou, 14 Malloy Street
- **Tetra Tech review letter dated 7-8-22**

NOTE - The project is scheduled for review by the Design Review Committee at its July 18th meeting.

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 A. 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

June 8, 2022

NOTICE OF PUBLIC BRIEFING
Masters Touch – 83 Main Street
Minor Site Plan

The Medway Planning and Economic Development Board will commence a public briefing on Tuesday, July 12, 2022 at 9:00 p.m. in Sanford Hall at Medway Town Hall, 155 Village Street to consider the application of Masters Touch of Holliston, MA for approval of a minor site plan for its facility at 83 Main Street.

The applicant seeks minor site plan approval and possibly a land disturbance permit to improve and expand the existing building, construct a new building for storage, and add a series of site improvements to the property at 83 Main Street. The property will be used by Masters Touch, a custom home design build construction and remodeling firm, for its offices, showroom, and storage. Planned site work includes construction of a paved parking area, driveway extension, stormwater management facilities, and a second curb cut on Main Street.

The subject property (Map 40, Parcel 79) is owned by DEM Realty Enterprises, LLC of Holliston, MA. It is located in the Central Business zoning district on the south side of Main ST (Route 109).

The application documents are on file with the Medway Town Clerk and at the office of the Planning and Economic Development Board at Medway Town Hall, 155 Village Street and may be reviewed during regular business hours. The documents are also posted at the Board's web page at: **https://www.townofmedway.org/planning-economic-development-board/pages/current-applications-pedb-0** Interested persons are invited to review the application documents, attend the public briefing, and express their views at the designated time and place. Written comments may be forwarded to: **planningboard@townofmedway.org.** Questions should be directed to the Planning and Economic Development office at 508-533-3291.

Pursuant to Chapter 22 of the Acts of 2022, this hearing will be conducted in person and, as a courtesy, via remote means in accordance with applicable law. Please note that while an option for remote attendance and/or participation is being provided as a courtesy to the public and board members, the hearing will not be suspended or terminated if technological problems interrupt the virtual broadcast, unless required by law. Information for participating in the meeting via Zoom will be included on the agenda for Board's July 12, 2022 meeting which will be posted to the Town's master calendar of events at: https://www.townofmedway.org/calendar/month/2022-07 and at the Board's web page at: https://www.townofmedway.org/node/926/agenda/2022

Matthew J. Hayes, P.E., Chair

Spruhan Engineering, P.C.

Civil Engineering Consultants
80 Jewett St, Suite 2, Newton, MA 02458 Phone: 617-816-0722

February 7, 2022

From: Edmond Spruhan, P.E.

To: Planning & Economic Development Board

Re: Project Narrative.
83, Main Street, Medway, MA

On behalf of DEM Realty Enterprises, we are providing this Land Disturbance Narrative as he wishes to construct an addition to the existing building and a warehouse at 83 Main St, Medway, MA.

Existing Conditions:

The lot is located at 83 Main St, Medway, MA. It is surrounded by a bank and a commercial building. The lot is 22,536 S.F. and currently has a 1-Story building with an area of, a paved driveway with an area of 1,314 S.F., the remaining landscaped area has a footprint of 19,886 S.F.

Proposed Work:

The applicant is proposing to construct an addition to the existing building and a warehouse on the rear of the lot. The project also includes a driveway extension and a proposed paved parking. The total existing and proposed roof area will be 3,968 S.F., the proposed paved areas will be 6,080 S.F. and the remaining landscaped areas will have a footprint of 12,486 S.F.

The total proposed lot coverage will be 3,968.9 S.F. which represents the 17.6% of the lot.

All impervious areas will be captured by three infiltration systems with downspouts and catch basins.

The existing building will be used as an office and it will have two full time employees, the proposed warehouse will be used as storage and will have one full time employee.

The operation hours are expected to be Monday to Wednesday 7:00 AM to 5:00 PM, Thursday 7:00 AM to 7:00 PM, Friday 7:00 AM to 2:00 PM, and Saturday 8:00 AM to 1:00 PM

Based on this information the minimum parking spaces were calculated according to the Medway zoning bylaws as it follows:

MINIMUM REQUIRED PARKING SPACES CALCULATIONS.

OFFICE

1 SPACES PER 300 S.F. = 1,608 S.F./300 S.F.= 5.36 SPACES

WAREHOUSE

*1 SPACE PER 2 EMPLOYEES AND 1 ADDITIONAL FOR EACH 1,000 S.F.
TOTAL EMPLOYEES= 1 = 1 SPACE
AREA = 2,360 S.F./1000 S.F. = 2.36 SPACES

TOTAL MINIMUM SPACES REQUIRED = 2.36+1+5.36 = 7.72

.
The lot will have access for both, vehicles and pedestrian from Main Street with two curb cuts.

Utilities:

The existing utilities for the 1 story building will remain and the proposed warehouse will have new 6" PVC sewer line and a 1" k Copper water line.

The sewer flow was calculated 310 CMR 15.000: Title 5 of the State Environmental Code.
Since there will be only one employee the sewer flow will be 15 G.P.D.

Proposed Erosion Control:

Fiber rolls will be used to control site erosion and prevent sediment leaving the site during construction, further information is shown on the erosion control plan.

Mitigation:

The project includes the infiltration of stormwater from the surface of the proposed roof and driveway. Stormwater will be collected with gutters, downspouts and catch basins and conveyed to three StormTech drainage systems with 1ft of crushed stone beneath, two of the systems will be located under the driveway/parking and one in the rear yard bellow landscaped area. The drainage system has been sized to contain a 100-Year storm event over the surface of the proposed roof and driveway.

This is projected to start summer or fall 2022 and take approximately five to six months. warehouse is for approval now and will be a second phase of construction in one or two years projected to start summer or fall.

I hope that this information is helpful to you. Please do not hesitate to call with any questions.

Respectfully submitted,

Edmond Spruhan

Edmond T Spruhan

83 MAIN ST, MEDWAY, MASSACHUSETTS

ASSESSOR'S MAP #40

ZONING DISTRICT: CB (CENTRAL BUSINESS)

OWNERS INFORMATION
NAME: DEM REALTY ENTERPRISES
ADDRESS: 83 MAIN ST,
MEDWAY, MA 02053

ENGINEER INFORMATION
NAME: EDMOND SPRUHAN
ADDRESS: 80 JEWETT ST (SUIT 2),
NEWTON, MA. 02458

INDEX OF SHEETS

SHEET NO.	DESCRIPTION
C1.0	COVER SHEET
C2.0	SITE CONTEXT SHEET
C3.0	EXISTING CONDITIONS PLAN
C4.0	PROPOSED PLOT PLAN
C5.0	CIVIL PLAN
C6.0	DETAILS
C7.0	EROSION CONTROL & DEMOLITION PLAN

Spruhan Engineering, P.C.
80 JEWETT ST, (SUITE 1)
NEWTON, MA 02458

Tel: 617-816-0722
Email:espruhan@gmail.com

83 MAIN ST,
MEDWAY,
MASSACHUSETTS

CIVIL PLAN

REVISION BLOCK

BY	DESCRIPTION	DATE

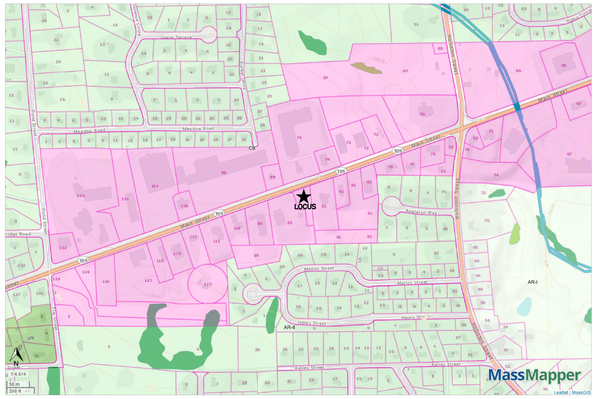
All legal rights including, but not limited to, copyright and design patent rights, in the designs, arrangements and plans shown on this document are the property of Spruhan Engineering, P.C. They may not be used or reused in whole or in part, except in connection with this project, without the prior written consent of Spruhan Engineering, P.C.. Written dimensions on these drawings shall have precedence over scaled dimensions. Contractors shall verify and be responsible for all dimensions and conditions on this project, and Spruhan Engineering, P.C., must be notified of any variation from the dimensions and conditions shown by these drawings.

COMMONWEALTH OF MASSACHUSETTS
EDMOND J. SPRUHAN
CIVIL
No. 33318
REGISTERED PROFESSIONAL ENGINEER

DATE:	2/14/2022
DRAWN BY:	G.P
CHECKED BY:	E.S
APPROVED BY:	E.S

COVER SHEET

C1.0



Contours 30ft Labels

Contours 30ft Lines
150 FT INTERVAL

Medway Zoning
- Agricultural Residential 1
- Agricultural Residential 2
- Village Residential
- Central Business
- Village Commercial
- Neighborhood Commercial
- Business Industrial
- East Industrial
- Energy Resources
- West Industrial
- Oak Grove Neighborhood
- Oak Grove Business Park
- Oak Grove Village Center

DEP Water Bodies
- LAKE, POND, OCEAN
- RESERVOIR
- WETLAND
- SALT WETLAND
- SUBMERGED WETLAND
- CRANBERRY BOG
- TIDAL FLAT
- INUNDATED AREA

DEP 2014 Integrated List Lakes
- 2 - Attainment some uses; other uses not assessed
- 3 - No uses assessed
- 4A - TMDL is completed
- 4C - Impairment not caused by a pollutant
- 5 - Waters requiring a TMDL

NWI Wetlands Solid
- Estuarine and Marine Deepwater
- Estuarine and Marine Wetland
- Freshwater Emergent Wetland
- Freshwater Forested/Shrub Wetland
- Freshwater Pond
- Lake
- Riverine
- Other

Property Tax Parcels

LOCUS MAP

1": 500'

ASSESSOR'S MAP #40

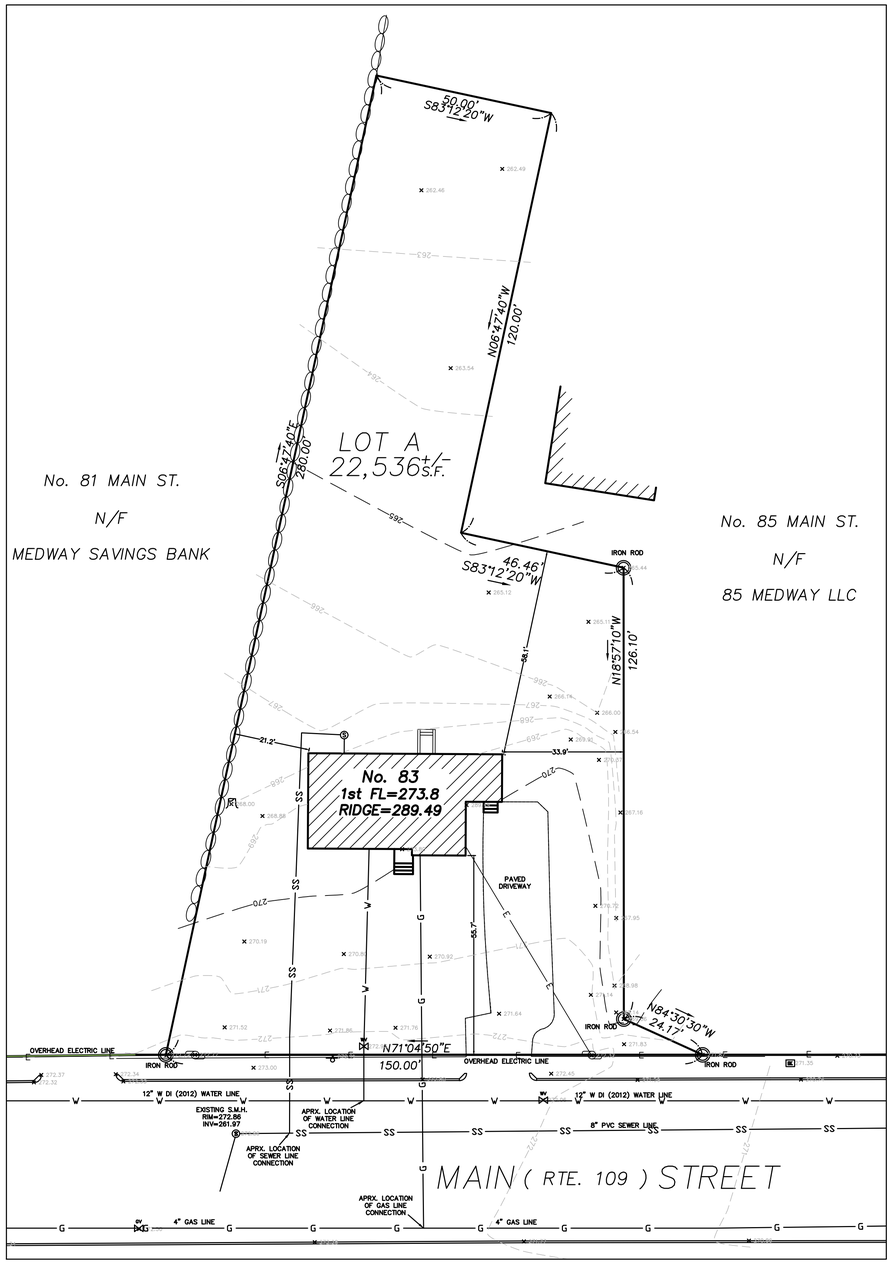
ZONING DISTRICT: CB (CENTRAL BUSINESS)

300' ABUTTERS INFORMATION

PARCEL ID	OWNERS	ADDRESS	CITY/ ZIP
40-113	LECLAIR FILIPA	4 ORCHARD ST.	MEDWAY, MA 02053
49-023	SHIPOS JEFFREY E /SHIPOS KATHLEEN A	13 MALLOY ST.	MEDWAY, MA 02053
49-024	WHITE JAMES/CENTOLA ELIZABETH A	11 MALLOY ST.	MEDWAY, MA 02053
49-022	MCDERMOTT MICHAEL S/MCDERMOTT JESSICA M	15 MALLOY ST.	MEDWAY , MA 02053
40-078	85 MEDWAY LLC	408 WASHINGTON ST	WOBURN , MA 01801
40-105	RTE 85 REALTY TRUST	PO BOX 444	MENDON , MA 01756
40-052	MUNJAL TRUSTEE PRETTI N/MUNJAL TRUSTEE MANOJ	P.O. BOX 502	ANDOVER, MA 01810
40-075	RTE 85 REALTY CORP	8 UXBRIDGE ROAD	MENDON , MA 01756
40-082	MAIN STREET NOMINEE TRUST/HERBERT HEINSTEIN, TR.	PO BOX 1486	FRAMINGHAM , MA 01702
49-003	OSTASZEWSKI LEE/OSTASZEWSKI BETH	2 ORCHARD ST.	MEDWAY, MA 02053
40-055	MEDWAY REALTY LLC	63 ATLANTIC AVENUE	BOSTON , MA 02110
40-077	REARDON MAIN STREET LIMITED/PARTNERSHIP	89 MAIN ST SUITE 105	MEDWAY , MA 02053
40-076	RTE 85 REALTY CORP/ C/O GLOBAL COMPANIES INC	15 NORTHEAST INDUSTRIAL RD	BRANFORD, CT 06405
40-111	REARDON MAIN STREET LIMITED PARTNERSHIP	89 MAIN ST SUITE 105	MEDWAY, MA 02053
40-081	MA REALTY ACQUISITION LLC	141 FAIRWAY DRIVE	ATTLEBORO , MA 02703
40-054	COLBEA ENTERPRISES LLC	2050 PLAINFIELD PIKE	CRANSTON , RI 02921
40-107	SKOU EDWARD J / SKOU KATHLEEN M	14 MALLOY ST.	MEDWAY , MA 02053
40-080	MIDDLESEX SAVINGS BANK C/O ACCOUNTING	P O BOX 5210	WESTBOROUGH , MA 01581
49-021	RAFFERTY GERALD / RAFFERTY EILEEN	17 MALLOY ST.	MEDWAY, MA 02053
40-110	MONAGHAN MICHAEL P / MONAGHAN LAURA S	20 MALLOY ST.	MEDWAY, MA 02053
40-108	BARRY JAMES P / BARRY ELIZABETH L	16 MALLOY ST.	MEDWAY , MA 02053
40-109	HINTHORNE DANA / HINTHORNE RITA K	18 MALLOY ST.	MEDWAY, MA 02053
40-053	MUNJAL TRUSTEE PREETI N / MUNJAL TRUSTEE MANOJ	P.O. BOX 502	ANDOVER, MA 01810

DEVELOPMENT SITE

1": 20'



Spruhan Engineering, P.C.
80 JEWETT ST, (SUITE 1)
NEWTON, MA 02458
Tel: 617-816-0722
Email:espruhan@gmail.com

83 MAIN ST,
MEDWAY,
MASSACHUSETTS

CIVIL PLAN

REVISION BLOCK

BY	DESCRIPTION	DATE

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COMMONWEALTH OF MASSACHUSETTS
EDMOND SPRUHAN
No. 33316
REGISTERED PROFESSIONAL ENGINEER

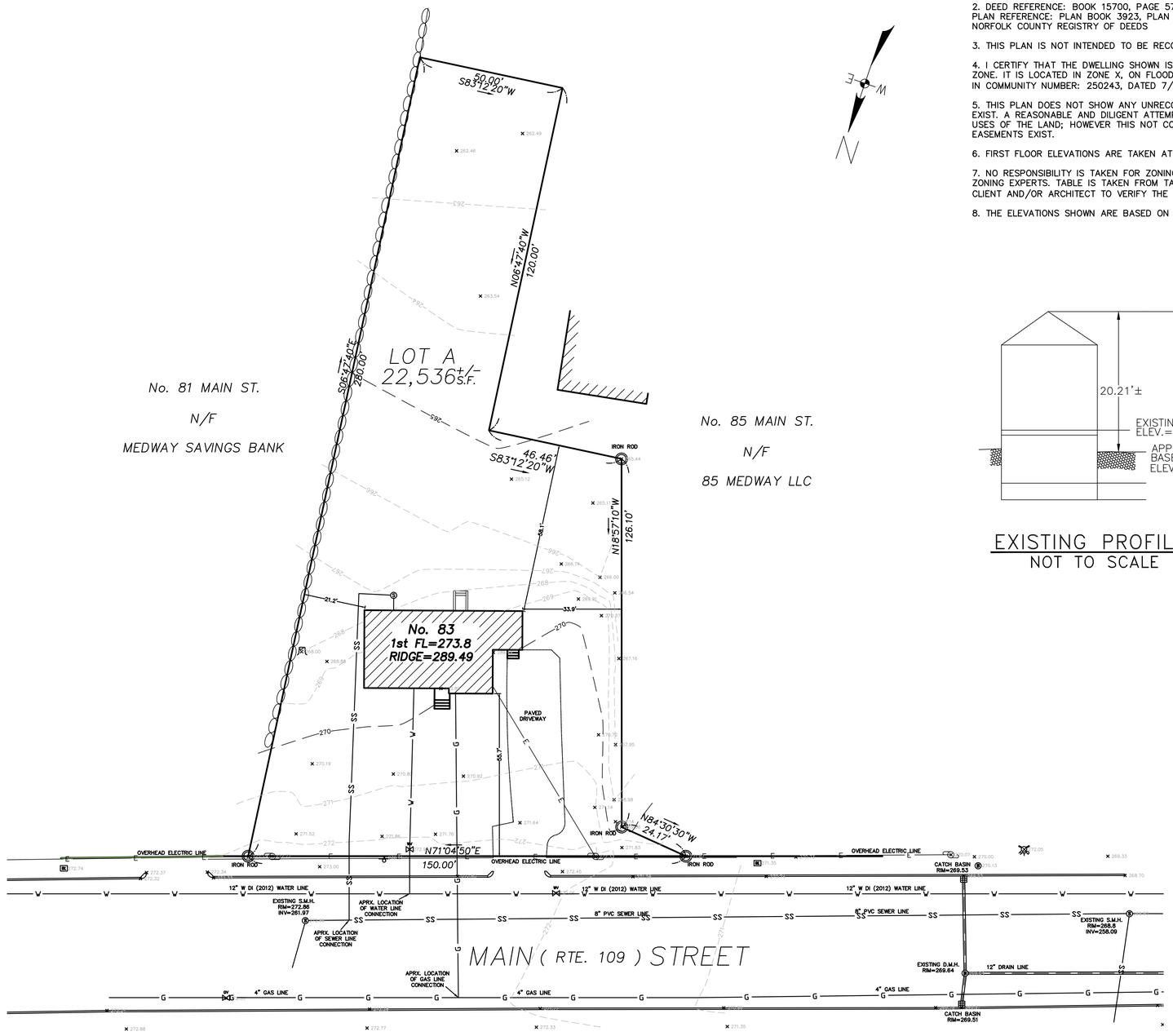
DATE:	2/14/2022
DRAWN BY:	G.P
CHECKED BY:	E.S
APPROVED BY:	E.S

SITE CONTEXT SHEET

C2.0

LEGEND

	BOUND
	IRON PIN/PIPE
	STONE POST
	TREE
	TREE STUMP
	SHRUBS/FLOWERS
	SIGN
	BOLLARD
	SEWER MANHOLE
	DRAIN MANHOLE
	CATCH BASIN
	WATER MANHOLE
	WATER VALVE
	HYDRANT
	GAS VALVE
	ELECTRIC MANHOLE
	ELECTRIC HANDHOLE
	UTILITY POLE
	LIGHT POLE
	MANHOLE
148.00	SPOT GRADE
TW	TOP OF WALL
BW	BOTTOM OF WALL
	EXISTING BUILDING
	RETAINING WALL
	STONE WALL
	FENCE
	TREE LINE
S	SEWER LINE
D	DRAIN LINE
	WATER LINE
	GAS LINE
	UNDERGROUND ELECTRIC LINE
OHW	OVERHEAD WIRES
145	CONTOUR LINE (MJR)
146	CONTOUR LINE (MNR)



NOTES:

1. INFORMATION SHOWN ON THIS PLAN IS THE RESULT OF A FIELD SURVEY PERFORMED BY SPRUHAN ENGINEERING, P.C. AS OF 12/6/2021.

2. DEED REFERENCE: BOOK 15700, PAGE 574
PLAN REFERENCE: PLAN BOOK 3923, PLAN 60
NORFOLK COUNTY REGISTRY OF DEEDS

3. THIS PLAN IS NOT INTENDED TO BE RECORDED.

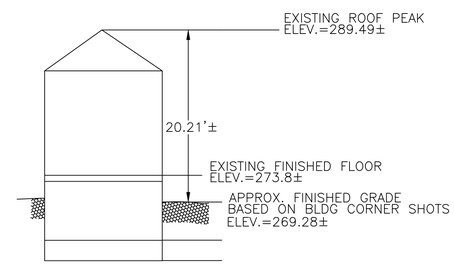
4. I CERTIFY THAT THE DWELLING SHOWN IS NOT LOCATED WITHIN A SPECIAL FLOOD HAZARD ZONE. IT IS LOCATED IN ZONE X, ON FLOOD HAZARD BOUNDARY MAP NUMBER 25021C0143E, IN COMMUNITY NUMBER: 250243, DATED 7/17/2012.

5. THIS PLAN DOES NOT SHOW ANY UNRECORDED OR UNWRITTEN EASEMENTS WHICH MAY EXIST. A REASONABLE AND DILIGENT ATTEMPT HAS BEEN MADE TO OBSERVE ANY APPARENT USES OF THE LAND; HOWEVER THIS NOT CONSTITUTE A GUARANTEE THAT NO SUCH EASEMENTS EXIST.

6. FIRST FLOOR ELEVATIONS ARE TAKEN AT THRESHOLD.

7. NO RESPONSIBILITY IS TAKEN FOR ZONING TABLE AS SPRUHAN ENGINEERING, P.C. ARE NOT ZONING EXPERTS. TABLE IS TAKEN FROM TABLE PROVIDED BY LOCAL ZONING ORDINANCE. CLIENT AND/OR ARCHITECT TO VERIFY THE ACCURACY OF ZONING ANALYSIS.

8. THE ELEVATIONS SHOWN ARE BASED ON CITY OF MEDWAY DATUM.



EXISTING PROFILE
NOT TO SCALE

GRAPHIC SCALE

20 0 10 20 40 80

(IN FEET)
1 inch = 20 ft.

Spruhan Engineering, P.C.
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83 MAIN STREET
MEDWAY
MASSACHUSETTS

SURVEY PLAN

REVISION BLOCK

DESCRIPTION	DATE

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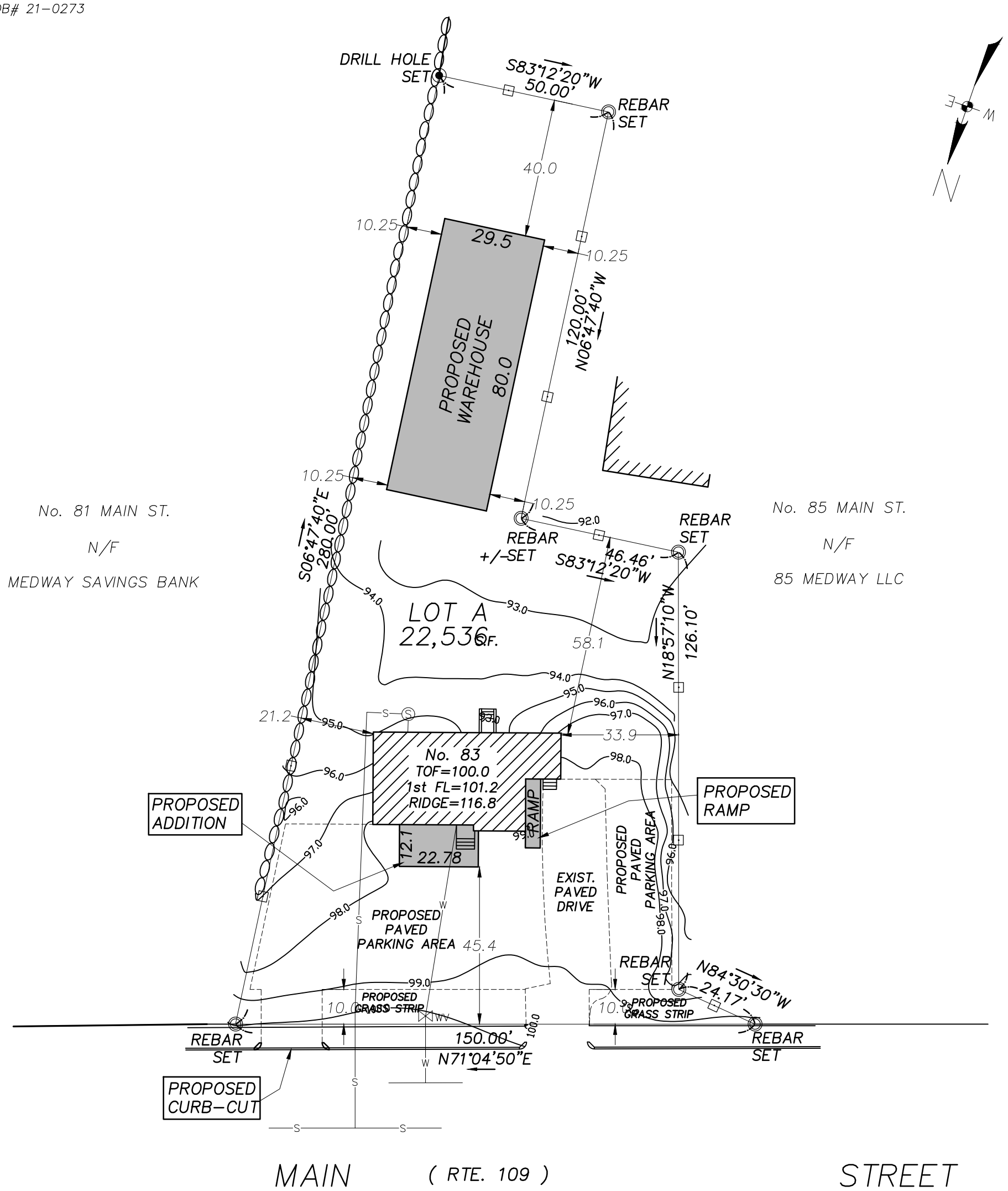
COMMONWEALTH OF MASSACHUSETTS
CHRISTOPHER C. CHARLTON
NO. 48649
PROFESSIONAL LAND SURVEYOR

DATE:	12/8/2021
DRAWN BY:	K.K
CHECKED BY:	E.S
APPROVED BY:	C.C

EXISTING CONDITIONS

C3.0

JOB# 21-0273



ZONING DISTRICT: CB (CENTRAL BUSINESS)

REFERENCES:
DEED: BOOK 32179, PAGE 490
PLAN: BOOK 3923, PAGE 60

ASSUMED DATUM: TOF = 100.0

I CERTIFY THAT THIS PLAN WAS CREATED BY AN INSTRUMENT SURVEY ON THE GROUND AND THAT ALL STRUCTURES ARE LOCATED AS SHOWN HEREON.

COMMONWEALTH OF MASSACHUSETTS
CHRISTOPHER C. CHARLTON
NO. 48649
PROFESSIONAL LAND SURVEYOR

CHRISTOPHER C. CHARLTON, PLS

CERTIFIED PLOT PLAN

LOCATED AT

83 MAIN STREET

ASSESSORS PARCEL # 40-079

MEDWAY, MA

NORFOLK COUNTY

CONTINENTAL LAND SURVEY, LLC
105 BEAVER STREET, FRANKLIN, MA
(508) 528 - 2528

SCALE: 1"=30' NOVEMBER 9, 2021

30 15 0 30 60

LEGEND

D	PROPOSED DRAIN LINE
S	SEWER MANHOLE
W	EXISTING WATER LINE
G	EXISTING GAS LINE
	UTILITY POLE
GV	GAS VALVE
E	OVERHEAD ELECTRIC SERVICE
WV	WATER VALVE
	CATCH BASIN
	FENCE
205	CONTOUR LINE (MJR)
195	CONTOUR LINE (MNR)
X	SPOT GRADE
D	DRAIN MANHOLE
	HYDRANT
	TREE

REFER TO ARCHITECTURAL PLANS FOR ALL ZONING RELATED INFORMATION

CONTRACTOR TO ENSURE NO INCREASE IN RUNOFF FROM ANY AREA OF THE LOT TO ABUTTING PROPERTIES.

PROPOSED FIRST FLOOR ELEVATION TO BE VERIFIED BY ARCHITECT PRIOR TO ANY CONCRETE BEING POURED.

PER TITLE V, SEWER FLOW =

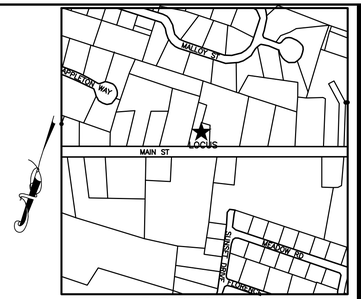
OFFICE= 75 G.P.D. PER 1,000 S.F.
1,609 S.F./1,000 S.F.=1.609
75 G.P.D. X 1.609. = 120.7 G.P.D.

WAREHOUSE= 15 G.P.D. PER PERSON
1 PERSON X 15 G.P.D. = 15 G.P.D

ZONING LEGEND

ZONING DISTRICT: COMMERCIAL II

	REQUIRED	PROPOSED (WAREHOUSE)	PROPOSED (ADDITION)
MIN. AREA	10,000 S.F.	22,536 S.F.±	22,536 S.F.±
MIN. FRONTAGE	150'	150'	150'
MIN. YARD FRONT	10'	148.0'	45.4'
SIDE	10'	10.3'	36.7'
REAR	25'	40.1'	89.4'
MAX HEIGHT	40'	–	–
MAX LOT COVERAGE	80%	17.61%	17.61%
MAX IMPERVIOUS COVERAGE	NA	–	–
MIN OPEN SPACE	15%	55.4%	55.4%



LOCUS MAP

DRAINAGE AREA SUMMARY

EXISTING ROOF (HOUSE) = 1,335.5 S.F.
EXISTING PAVED DRIVEWAY = 1,314.3 S.F.
EXISTING LANDSCAPED AREA = 19,886.2 S.F.

PROPOSED ROOF (HOUSE+WAREHOUSE)= 3,968.9 S.F.
PROPOSED PAVED AREA (PARKING+DRIVEWAY) = 6,080.2 S.F.
PROPOSED GRAVEL AREA = 8,710 S.F.
PROPOSED LANDSCAPE AREA = 3,776.9 S.F.

TOTAL EXISTING IMPERVIOUS AREA = 2,649.8 S.F.
TOTAL PROPOSED IMPERVIOUS AREA = 10,049.1 S.F.

TOTAL INCREASE IN IMPERVIOUS AREA = 7,399.3 S.F.

LOT COVERAGE = 3,968.9 S.F./22,536 S.F. = 17.61%

MINIMUM REQUIRED PARKING SPACES CALCULATIONS.

OFFICE

1 SPACES PER 300 S.F. = (1,608 S.F. X 2 FLOORS)/300 S.F. = 10.7 SPACES

WAREHOUSE

*1 SPACE PER 2 EMPLOYEES AND 1 ADDITIONAL FOR EACH 1,000 S.F.
TOTAL EMPLOYEES= 1 = 1 SPACE
AREA = 2,360 S.F./1000 S.F. = 2.3 SPACES

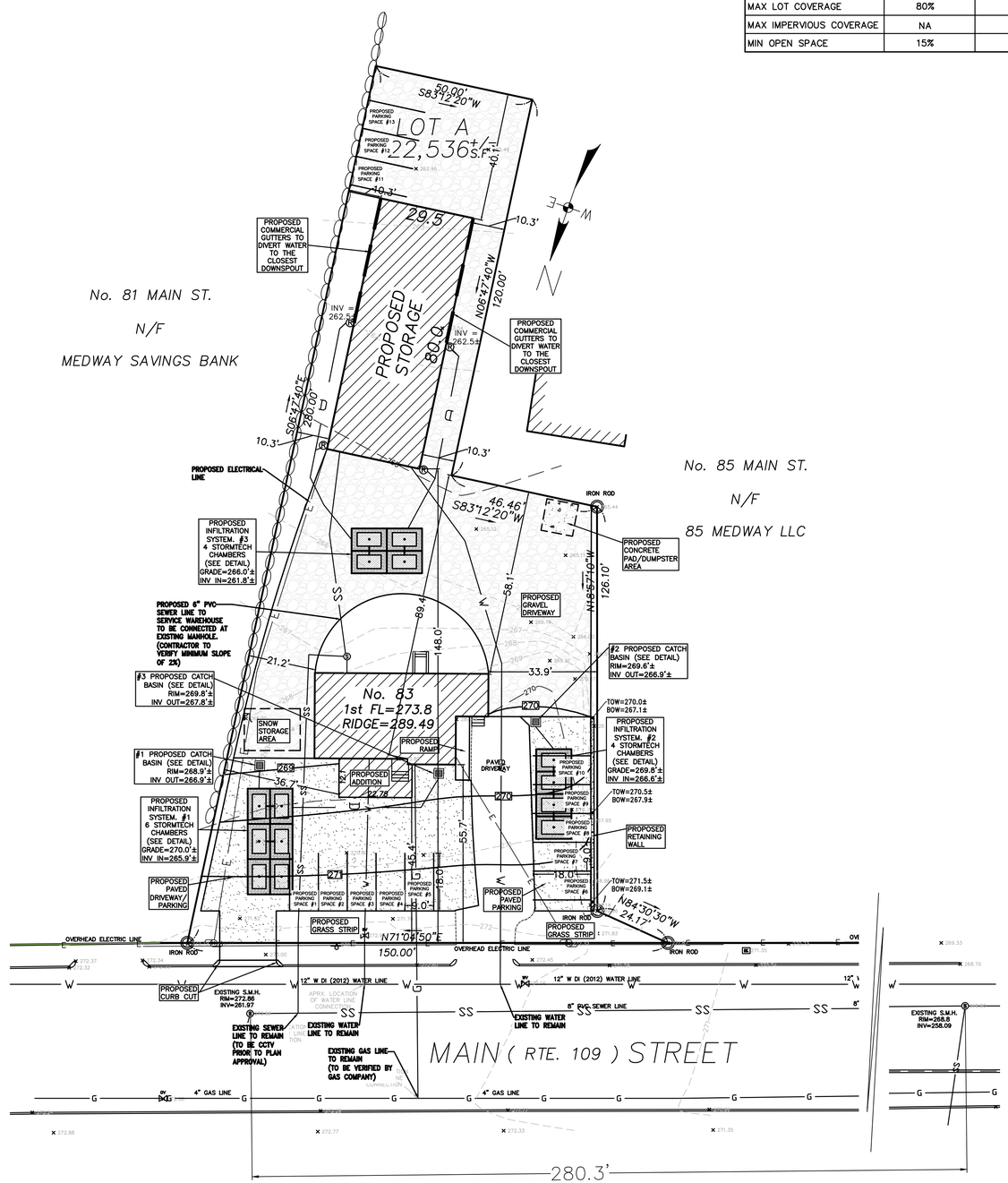
TOTAL MINIMUM SPACES REQUIRED = 2.3+1+10.7 = 13.0

SIGHT DISTANCE

SITE DRIVEWAY AND MAIN ST.

STOP SIGHT DISTANCE	REQUIRED *	SCALED
MAIN ST. APPROACHING FROM WEST	200 FT	+400± FT
MAIN ST. APPROACHING FROM EAST	200 FT	355± FT
INTERSECTION SIGHT DISTANCE		
SITE DRIVEWAY EXITING TO MAIN ST	290 FT**/335 FT***	+355 ± FT

* Recommended minimum values obtained from "Massachusetts Department of Transportation in its 2006 Project Development and Design Guide".
** Recommended minimum value for vehicles turning right exiting a roadway under STOP sign control.
*** Recommended minimum value for vehicles turning left exiting a roadway under STOP sign control.



GRAPHIC SCALE

20 0 10 20 40 80

(IN FEET)
1 inch = 20 ft.

GENERAL NOTES

1. THE CONTRACTOR SHALL REPORT TO THE OWNER AND ENGINEER OF ANY SIGNIFICANT VARIATIONS IN EXISTING SITE CONDITIONS FROM THOSE SHOWN ON THESE PLANS. ANY PROPOSED REVISIONS TO THE WORK, IF REQUIRED BY THESE SITE CONDITIONS, SHALL NOT BE UNDERTAKEN UNTIL REVIEWED AND APPROVED BY THE OWNER AND THE ENGINEER.
2. IN ORDER TO PROTECT THE PUBLIC SAFETY DURING CONSTRUCTION, THE CONTRACTOR IS RESPONSIBLE FOR INSTALLING AND MAINTAINING AT ALL TIMES ALL NECESSARY SAFETY DEVICES AND PERSONNEL, WARNING LIGHTS, BARRICADES, AND POLICE OFFICERS.
3. ALL WORK SHALL CONFORM TO TOWN OF MEDWAY GENERAL CONSTRUCTION STANDARDS.
4. THE CONTRACTOR SHALL REGULARLY INSPECT THE PERIMETER OF THE PROPERTY TO CLEAN UP AND REMOVE LOOSE CONSTRUCTION DEBRIS BEFORE IT LEAVES THE SITE. ALL DEMOLITION DEBRIS SHALL BE PROMPTLY REMOVED FROM THE SITE TO A LEGAL DUMP SITE. ALL TRUCKS LEAVING THE SITE SHALL BE COVERED.
5. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO INSTITUTE EROSION CONTROL MEASURES ON AN AS NECESSARY BASIS, SUCH THAT EXCESSIVE SOIL EROSION DOES NOT OCCUR.
6. THE LOCATION OF UNDERGROUND UTILITIES AS REPRESENTED ON THESE PLANS IS BASED UPON PLANS AND INFORMATION PROVIDED BY THE RESPECTIVE UTILITY COMPANIES OR MUNICIPAL DEPARTMENTS SUPPLEMENTED BY FIELD IDENTIFICATION WHEREVER POSSIBLE. NO WARRANTY IS MADE AS TO THE ACCURACY OF THESE LOCATIONS OR THAT ALL UNDERGROUND UTILITIES ARE SHOWN. THE CONTRACTOR SHALL CONTRACT DIG SAFE AT LEAST 72 HOURS PRIOR TO THE START OF CONSTRUCTION. DIG SAFE TELEPHONE NUMBER IS 1-800-322-4844.
7. THE CONTRACTOR SHALL VERIFY THE LOCATION, SIZE AND DEPTH OF EXISTING UTILITIES PRIOR TO TAPPING INTO, CROSSING OR EXTENDING THEM. IF THE NEW WORK POSES A CONFLICT WITH EXISTING UTILITIES, THE ENGINEER SHALL BE NOTIFIED PRIOR TO THE CONTRACTOR CONTINUING.
8. NO LEDGE, BOULDERS, OR OTHER UNYIELDING MATERIALS ARE TO BE LEFT WITHIN 6" OF THE WATER IN THE TRENCH, NOR ARE THEY TO BE USED FOR BACKFILL FOR THE FIRST 12" ABOVE THE PIPES.
9. PAVEMENT AREA SHALL BE PAVED TO A THICKNESS AS SHOWN ON THE PLANS MEASURED AFTER COMPACTION, WITH A BINDER COURSE AND TOP COURSE OF CLASS I BITUMINOUS CONCRETE PAVEMENT, TYPE I-1.
10. BASE MATERIAL SHALL BE CLEAN BANK RUN GRAVEL, CONFORMING TO M.D.P.W. M1.03.1, WITH NO STONES LARGER THAN THREE (3) INCHES IN DIAMETER AND SHALL BE PLACED AND ROLLED WITH AT LEAST A TEN TON ROLLER. THE SURFACES SHALL BE WET DURING ROLLING TO BIND THE MATERIAL. ALL STONES OF 4" DIAMETER OR LARGER SHALL BE REMOVED FROM THE SUB-BASE PRIOR TO PLACING BASE MATERIAL.
11. ALL EXISTING PAVING TO BE DISTURBED SHALL BE CUT ALONG A STRAIGHT LINE THROUGH ITS ENTIRE THICKNESS. BUTT THE NEW PAVING INTO THE EXISTING PAVEMENT TO REMAIN.
12. ANY PAVEMENT REMOVED FOR UTILITY TRENCH EXCAVATION OR OTHERWISE DAMAGED DURING CONSTRUCTION SHALL BE REPLACED WITH A PAVEMENT SECTION CONSISTING OF TWO-2" LIFTS OF BINDER BELOW A 2" TOP COURSE OF ASPHALT "SEE DETAIL".
13. THE CONTRACTOR SHALL APPLY FOR A STREET OPENING AND UTILITY CONNECTION PERMITS AND SIDEWALK CROSSING PERMIT WITH THE TOWN OF MEDWAY DPW.
14. CONTRACTOR TO ENSURE THAT ALL SURFACE WATER IS DIVERTED AWAY FROM BUILDING FOUNDATION DURING FINAL GRADING.

NOTES:

1. INFORMATION SHOWN ON THIS PLAN IS THE RESULT OF A FIELD SURVEY PERFORMED BY SPRUHAN ENGINEERING, P.C. AS OF 12/6/2021.

2. DEED REFERENCE: BOOK 15700, PAGE 574
PLAN REFERENCE: PLAN BOOK 3923, PLAN 60
NORFOLK COUNTY REGISTRY OF DEEDS

3. THIS PLAN IS NOT INTENDED TO BE RECORDED.

4. I CERTIFY THAT THE DWELLING SHOWN IS NOT LOCATED WITHIN A SPECIAL FLOOD HAZARD ZONE. IT IS LOCATED IN ZONE X, ON FLOOD HAZARD BOUNDARY MAP NUMBER 25021C0143E, IN COMMUNITY NUMBER: 250243, DATED 7/17/2012.

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8. THE ELEVATIONS SHOWN ARE BASED ON CITY OF MEDWAY DATUM.

ZONING DISTRICT: CB (CENTRAL BUSINESS)

Spruhan Engineering, P.C.
80 JEWETT ST, (SUITE 1)
NEWTON, MA 02458
Tel: 617-816-0722
Email:espruhan@gmail.com

83 MAIN ST,
MEDWAY,
MASSACHUSETTS

CIVIL PLAN

REVISION BLOCK

BY	DESCRIPTION	DATE
GP	REVISED AS PER TOWN COMMENTS	4/15/22

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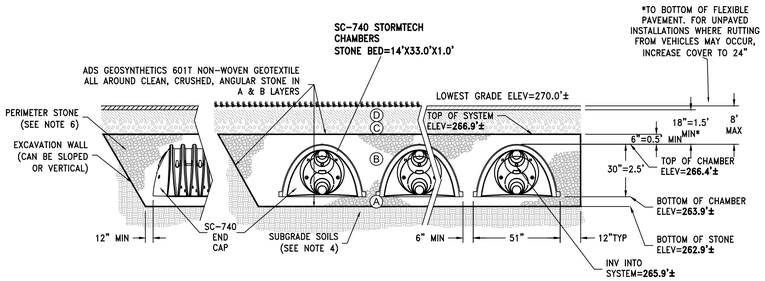
DRAFT

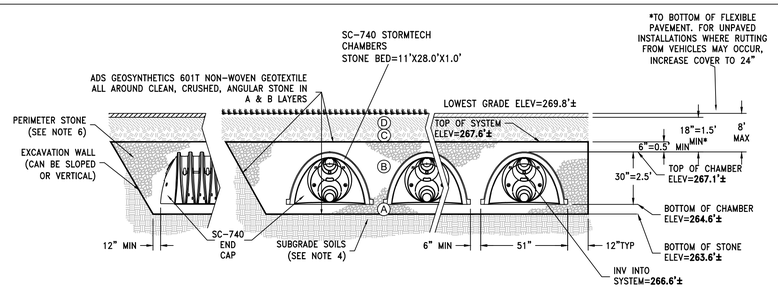
DATE:	2/14/2022
DRAWN BY:	G.P
CHECKED BY:	E.S
APPROVED BY:	E.S

CIVIL PLAN

C5.0



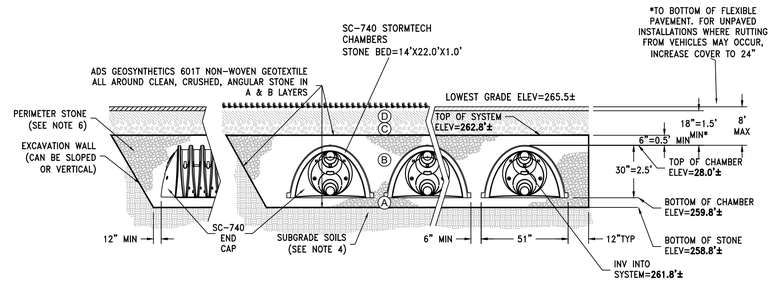
INFILTRATION SYSTEM #1



INFILTRATION SYSTEM #2

NOTES:

1. SC-740 CHAMBERS SHALL CONFORM TO THE REQUIREMENTS OF ASTM F2418 "STANDARD SPECIFICATION FOR POLYPROPYLENE (PP) CORRUGATED WALL STORMWATER COLLECTION CHAMBERS", OR ASTM F2922 "STANDARD SPECIFICATION FOR POLYETHYLENE (PE) CORRUGATED WALL STORMWATER COLLECTION CHAMBERS".
2. SC-740 CHAMBERS SHALL BE DESIGNED IN ACCORDANCE WITH ASTM F2787 "STANDARD PRACTICE FOR STRUCTURAL DESIGN OF THERMOPLASTIC CORRUGATED WALL STORMWATER COLLECTION CHAMBERS".
3. "ACCEPTABLE FILL MATERIALS" TABLE ABOVE PROVIDES MATERIAL LOCATIONS, DESCRIPTIONS, GRADATIONS, AND COMPACTION REQUIREMENTS FOR FOUNDATION, EMBEDMENT, AND FILL MATERIALS.
4. THE SITE DESIGN ENGINEER IS RESPONSIBLE FOR ASSESSING THE BEARING RESISTANCE (ALLOWABLE BEARING CAPACITY) OF THE SUBGRADE SOILS AND THE DEPTH OF FOUNDATION STONE WITH CONSIDERATION FOR THE RANGE OF EXPECTED SOIL MOISTURE CONDITIONS.
5. PERIMETER STONE MUST BE EXTENDED HORIZONTALLY TO THE EXCAVATION WALL FOR BOTH VERTICAL AND SLOPED EXCAVATION WALLS.
6. ONCE LAYER 'C' IS PLACED, ANY SOIL/MATERIAL CAN BE PLACED IN LAYER 'D' UP TO THE FINISHED GRADE. MOST PAVEMENT SUBBASE SOILS CAN BE USED TO REPLACE THE MATERIAL REQUIREMENTS OF LAYER 'C' OR 'D' AT THE SITE DESIGN ENGINEER'S DISCRETION.



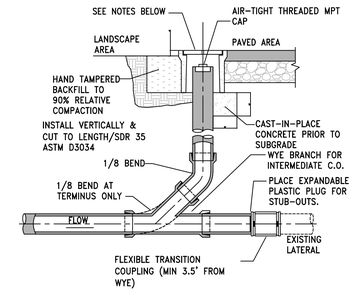
INFILTRATION SYSTEM #3

ACCEPTABLE FILL MATERIALS: STORMTECH SC-740 CHAMBER SYSTEMS

	MATERIAL LOCATION	DESCRIPTION	AASHTO MATERIAL CLASSIFICATIONS	COMPACTION / DENSITY REQUIREMENT
D	FINAL FILL: FILL MATERIAL FOR LAYER 'D' STARTS FROM THE TOP OF THE 'C' LAYER TO THE BOTTOM OF FLEXIBLE PAVEMENT OR UNPAVED FINISHED GRADE ABOVE. NOTE THAT PAVEMENT SUBBASE MAY BE PART OF THE 'D' LAYER	ANY SOIL/ROCK MATERIALS, NATIVE SOILS, OR PER ENGINEER'S PLANS. CHECK PLANS FOR PAVEMENT SUBGRADE REQUIREMENTS.	N/A	PREPARE PER SITE DESIGN ENGINEER'S PLANS. PAVED INSTALLATIONS MAY HAVE STRINGENT MATERIAL AND PREPARATION REQUIREMENTS.
C	INITIAL FILL: FILL MATERIAL FOR LAYER 'C' STARTS FROM THE TOP OF THE EMBEDMENT STONE ('B' LAYER) TO 18" (450 mm) ABOVE THE TOP OF THE CHAMBER. NOTE THAT PAVEMENT SUBBASE MAY BE A PART OF THE 'C' LAYER.	GRANULAR WELL-GRADED SOIL/AGGREGATE MIXTURES, <35% FINES OR PROCESSED AGGREGATE. MOST PAVEMENT SUBBASE MATERIALS CAN BE USED IN LIEU OF THIS LAYER.	AASHTO M145[1] A-1, A-2-4, A-3 OR AASHTO M43[1] 3, 357, 4, 467, 5, 56, 57, 6, 67, 68, 7, 78, 8, 89, 9, 10	BEGIN COMPACTIONS AFTER 12" (300 mm) OF MATERIAL OVER THE CHAMBERS IS REACHED. COMPACT ADDITIONAL LAYERS IN 6" (150 mm) MAX LIFTS TO A MIN. 95% PROCTOR DENSITY FOR WELL GRADED MATERIAL AND 95% RELATIVE DENSITY FOR PROCESSED AGGREGATE MATERIALS. ROLLER GROSS VEHICLE WEIGHT NOT TO EXCEED 12,000 lbs (53 kN). DYNAMIC FORCE NOT TO EXCEED 20,000 lbs (89 kN).
B	EMBEDMENT STONE: FILL SURROUNDING THE CHAMBERS FROM THE FOUNDATION STONE ('A' LAYER) TO THE 'C' LAYER ABOVE.	CLEAN, CRUSHED, ANGULAR STONE	AASHTO M43[1] 3, 357, 4, 467, 5, 56, 57	NO COMPACTION REQUIRED.
A	FOUNDATION STONE: FILL BELOW CHAMBERS FROM THE SUBGRADE UP TO THE FOOT (BOTTOM) OF THE CHAMBER.	CLEAN, CRUSHED, ANGULAR STONE	AASHTO M43[1] 3, 357, 4, 467, 5, 56, 57	PLATE COMPACT OR ROLL TO ACHIEVE A FLAT SURFACE. [2, 3]

PLEASE NOTE:

1. THE LISTED AASHTO DESIGNATIONS ARE FOR GRADATIONS ONLY. THE STONE MUST ALSO BE CLEAN, CRUSHED, ANGULAR. FOR EXAMPLE, A SPECIFICATION FOR #4 STONE WOULD STATE: "CLEAN, CRUSHED, ANGULAR NO. 4 (AASHTO M43) STONE".
2. STORMTECH COMPACTION REQUIREMENTS ARE MET FOR 'A' LOCATION MATERIALS WHEN PLACED AND COMPACTED IN 6" (150 mm) (MAX) LIFTS USING TWO FULL COVERAGES WITH A VIBRATORY COMPACTOR.
3. WHERE INFILTRATION SURFACES MAY BE COMPROMISED BY COMPACTION, FOR STANDARD DESIGN LOAD CONDITIONS, A FLAT SURFACE MAY BE ACHIEVED BY RAKING OR DRAGGING WITHOUT COMPACTION EQUIPMENT. FOR SPECIAL LOAD DESIGNS, CONTACT STORMTECH FOR COMPACTION REQUIREMENTS.

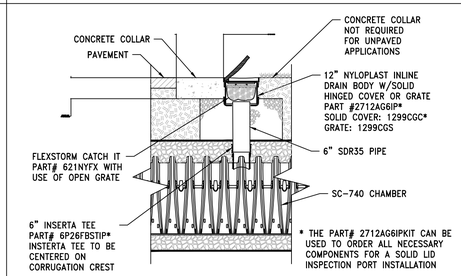


NOTES:

1. RECTANGULAR OR CIRCULAR BOXES ARE PERMITTED.
2. CONCRETE/FIBERLYTE LIDS ARE ACCEPTABLE IN NON-VEHICULAR AREAS. H-20 CAST IRON TRAFFIC LIDS AND BOXES IN VEHICULAR AREAS.
3. ALL CLEANOUT LIDS SHALL BE MARKED WITH AN "S" OR THE WORD "SEWER" FOR SANITARY SEWER CLEANOUTS
4. CLEANOUT PIPE SHALL BE THE SAME DIAMETER AS THE CONNECTED SITE PIPE.
5. TERMINATE C.O. AT CLOSEST JOINT TO SURFACE WITH TEMPORARY PLUG. AFTER ALL BACKFILL IS COMPLETE AND SUB-GRADE MADE IN AREAS TO BE PAVED, THE FINAL RISER PIPE AND BOX SHALL BE INSTALLED AS SHOWN.

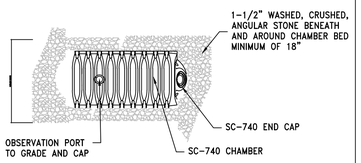
CLEANOUT TO GRADE

NTS



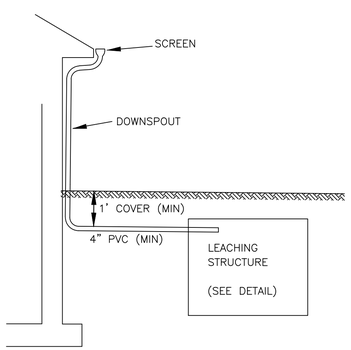
SC-740 6" INSPECTION PORT DETAIL

N.T.S.



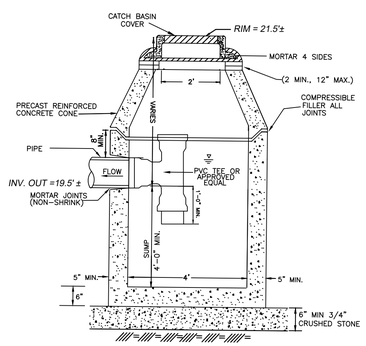
STORMTECH SC-740 CHAMBER SYSTEM PLAN VIEW DETAIL

N.T.S.



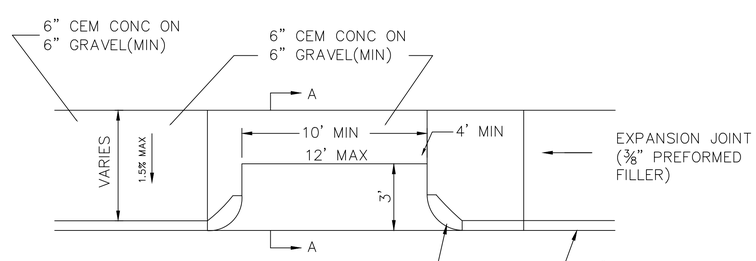
TYPICAL DOWNSPOUT DETAIL

N.T.S.



STANDARD CATCH BASIN

Scale: Not To Scale



PLAN VIEW

NOT TO SCALE

TYPICAL DRIVEWAY APRON.

Spruhan Engineering, P.C.

80 JEWETT ST, (SUITE 1)
NEWTON, MA 02458

Tel: 617-816-0722
Email:espruhan@gmail.com

83 MAIN ST,
MEDWAY,
MASSACHUSETTS

CIVIL PLAN

REVISION BLOCK

BY	DESCRIPTION	DATE

All legal rights including, but not limited to, copyright and design patent rights, in the designs, arrangements and plans shown on this document are the property of Spruhan Engineering, P.C. They may not be used or reused in whole or in part, except in connection with this project, without the prior written consent of Spruhan Engineering, P.C.. Written dimensions on these drawings shall have precedence over scaled dimensions. Contractors shall verify and be responsible for all dimensions and conditions on this project, and Spruhan Engineering, P.C., must be notified of any variation from the dimensions and conditions shown by these drawings.

COMMONWEALTH OF MASSACHUSETTS
EDMOND SPRUHAN
No. 53318
REGISTERED PROFESSIONAL ENGINEER

DATE:	2/14/2022
DRAWN BY:	G.P
CHECKED BY:	E.S
APPROVED BY:	E.S

DETAILS

C6.0

EROSION CONTROL NOTES

1. THE EROSION CONTROL PLANS IN THIS SET SHALL BE REVIEWED AND IMPLEMENTED BY THE CONTRACTOR PRIOR TO COMMENCEMENT OF WORK. CONTRACTOR SHALL WORK WITH THE PROJECT'S ENGINEER THROUGHOUT CONSTRUCTION TO ENSURE THE SITE IS PROPERLY PROTECTED FROM POSSIBLE POLLUTANTS. THE ENGINEER HAS AUTHORIZATION TO ADD OR REMOVE BMP MEASURES THROUGHOUT CONSTRUCTION.
2. THE CONTRACTOR SHALL BE RESPONSIBLE FOR IMPLEMENTING AND MAINTAINING SITE EROSION CONTROL AT ALL TIMES.
3. IT SHALL BE THE RESPONSIBILITY OF THE OWNER AND THE PERMITTEE TO ENSURE THAT EROSION DOES NOT OCCUR FROM ANY ACTIVITY DURING OR AFTER PROJECT CONSTRUCTION. ADDITIONAL MEASURES, BEYOND THOSE SPECIFIED, MAY BE REQUIRED BY THE PLANNING DIRECTOR AS DEEMED NECESSARY TO CONTROL ACCELERATED EROSION.
4. AT THE END OF EACH WORKDAY, AT THE END OF EACH WORKWEEK, THE CONTRACTOR SHALL IMPLEMENT ALL TEMPORARY MEASURES NECESSARY TO PREVENT EROSION AND SILTATION, UNTIL THE PROJECT HAS BEEN FINALIZED. THESE MEASURES SHALL INCLUDE, BUT NOT BE LIMITED TO, DIRECT SEEDING OF THE AFFECTED AREAS, STRAW MULCHING, AND/OR INSTALLATION OF STRAW BALES DAMS/SILT FENCES.
5. DURING CONSTRUCTION, NO TURBID WATER SHALL BE PERMITTED TO LEAVE THE SITE. USE OF SILT AND GREASE TRAPS, FILTER BERMS, HAY BALES OR SILT FENCES SHALL BE USED TO PREVENT SUCH DISCHARGE.
6. ALL AREAS ON- AND OFF-SITE EXPOSED DURING CONSTRUCTION ACTIVITIES, IF NOT PERMANENTLY LANDSCAPED PER PLAN, SHALL BE PROTECTED BY MULCHING AND/OR SEEDING.
7. ALL EXCAVATED MATERIAL SHALL BE REMOVED TO AN APPROVED DISPOSAL SITE OR DISPOSED OF ON-SITE IN A MANNER THAT WILL NOT CAUSE EROSION.
8. ANY MATERIAL STOCKPILED, FOR LONGER THAN 14 DAYS, DURING CONSTRUCTION SHALL BE COVERED WITH PLASTIC.
9. UPON COMPLETION OF CONSTRUCTION, ALL REMAINING EXPOSED SOILS SHALL BE PERMANENTLY REVEGETATED.
10. IT IS THE CONTRACTOR'S RESPONSIBILITY TO SEE THAT ADDITIONAL MEASURES NECESSARY TO CONTROL SITE EROSION AND PREVENT SEDIMENT TRANSPORT OFF-SITE ARE IMPLEMENTED.
11. ALL SPILLS AND/OR LEAKS SHALL BE IMMEDIATELY CLEANED UP AND MITIGATED.

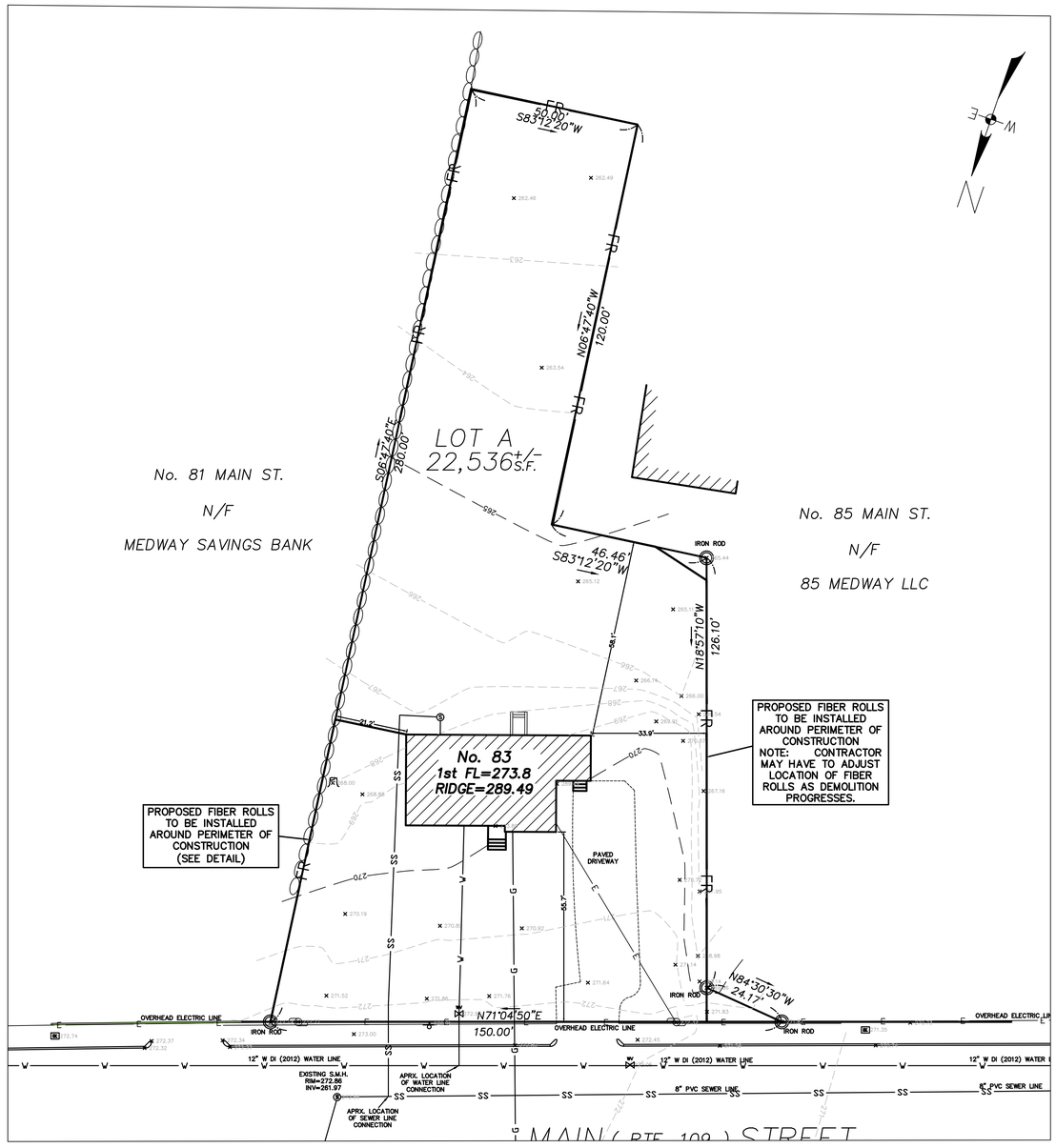
CONSTRUCTION MATERIALS

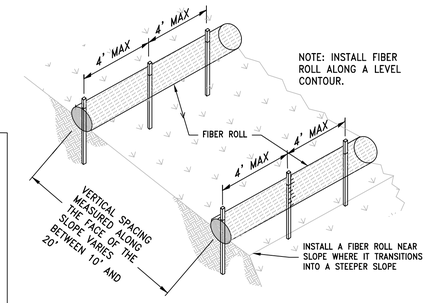
- ALL LOOSE STOCKPILED CONSTRUCTION MATERIALS THAT ARE NOT ACTIVELY BEING USED (I.E. SOIL, SPOILS, AGGREGATE, FLY-ASH, STUCCO, HYDRATED LIME, ETC.) SHALL BE COVERED AND BERMED.
- ALL CHEMICALS SHALL BE STORED IN WATERTIGHT CONTAINERS (WITH APPROPRIATE SECONDARY CONTAINMENT TO PREVENT ANY SPILLAGE OR LEAKAGE) OR IN A STORAGE SHED (COMPLETELY ENCLOSED).
- EXPOSURE OF CONSTRUCTION MATERIALS TO PRECIPITATION SHALL BE MINIMIZED. THIS DOES NOT INCLUDE MATERIALS AND EQUIPMENT THAT ARE DESIGNED TO BE OUTDOORS AND EXPOSED TO ENVIRONMENTAL CONDITIONS (I.E. POLES, EQUIPMENT PADS, CABINETS, CONDUCTORS, INSULATORS, BRICKS, ETC.).
- BEST MANAGEMENT PRACTICES TO PREVENT THE OFF-SITE TRACKING OF LOOSE CONSTRUCTION AND LANDSCAPE MATERIALS SHALL BE IMPLEMENTED.

WASTE MANAGEMENT

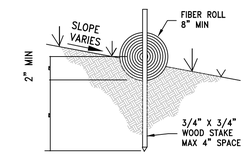
- DISPOSAL OF ANY RINSE OR WASH WATERS OR MATERIALS ON IMPERVIOUS OR PERVIOUS SITE SURFACES OR INTO THE STORM DRAIN SYSTEM SHALL BE PREVENTED.
- SANITATION FACILITIES SHALL BE CONTAINED (E.G. PORTABLE TOILETS) TO PREVENT DISCHARGES OF POLLUTANTS TO THE STORM WATER DRAINAGE SYSTEM OR RECEIVING WATER, AND SHALL BE LOCATED A MINIMUM 20 FEET AWAY FROM AN INLET, STREET OR DRIVEWAY, STREAM, RIPARIAN AREA OR OTHER DRAINAGE FACILITY.
- SANITATION FACILITIES SHALL BE INSPECTED REGULARLY FOR LEAKS AND SPILLS AND CLEANED OR REPLACED AS NECESSARY.
- COVER WASTE DISPOSAL CONTAINERS AT THE END OF EVERY BUSINESS DAY AND DURING A RAIN EVENT.
- DISCHARGES FROM WASTE DISPOSAL CONTAINERS TO THE STORM WATER DRAINAGE SYSTEM OR RECEIVING WATER SHALL BE PREVENTED.
- STOCKPILED WASTE MATERIAL SHALL BE CONTAINED AND SECURELY PROTECTED FROM WIND AND RAIN AT ALL TIMES UNLESS ACTIVELY BEING USED.

  PROCEDURES THAT EFFECTIVELY ADDRESS HAZARDOUS AND NON-HAZARDOUS SPILLS SHALL BE IMPLEMENTED.EQUIPMENT AND MATERIALS FOR CLEANUP OF SPILLS SHALL BE AVAILABLE ON SITE AND THAT SPILLS AND LEAKS SHALL BE CLEANED UP IMMEDIATELY AND DISPOSED OF PROPERLY; AND
- CONCRETE WASHOUT AREAS AND OTHER WASHOUT AREAS THAT MAY CONTAIN ADDITIONAL POLLUTANTS SHALL BE CONTAINED SO THERE IS NO DISCHARGE INTO THE UNDERLYING SOIL AND ONTO THE SURROUNDING AREAS.





TYPICAL INSTALLATION



ENTRENCHMENT DETAIL

FIBER ROLLS

NTS

FIBER ROLL CONSTRUCTION SPECIFICATIONS

1. PREPARE SLOPE BEFORE THE WATTLING PROCEDURE IS STARTED. SHALLOW GULLIES SHOULD BE SMOOTHED AS WORK PROGRESSES.
2. DIG SMALL TRENCHES ACROSS SLOPE ON CONTOUR, TO PLACE WATTLES IN. THE TRENCH SHOULD BE DEEP ENOUGH TO ACCOMMODATE HALF THE THICKNESS OF THE WATTLE. WHEN THE SOIL IS LOOSE AND UNCOMPACTED, THE TRENCH SHOULD BE DEEP ENOUGH TO BURY THE WATTLE 2/3 OF ITS THICKNESS BECAUSE THE GROUND WILL SETTLE. IT IS CRITICAL THAT WATTLES ARE INSTALLED PERPENDICULAR TO WATER MOVEMENT, PARALLEL TO THE SLOPE CONTOUR.
3. START BUILDING TRENCHES AND INSTALL WATTLES FROM THE BOTTOM OF THE SLOPE AND WORK UP.
4. CONSTRUCT TRENCHES AT CONTOUR INTERVALS OF THREE TO EIGHT FEET APART DEPENDING ON STEEPNESS OF SLOPE. THE STEEPER THE SLOPE, THE CLOSER TOGETHER THE TRENCHES.
5. LAY THE WATTLE ALONG THE TRENCHES FITTING IT SNUGLY AGAINST THE SOIL. MAKE SURE NO GAPS EXIST BETWEEN THE SOIL AND THE STRAW WATTLE. USE A STRAIGHT BAR TO DRIVE HOLES THROUGH THE WATTLE AND INTO THE SOIL FOR THE WOODEN STAKES.
6. DRIVE THE STAKE THROUGH THE PREPARED HOLE INTO THE SOIL. LEAVE ONLY ONE OR TWO INCHES OF STAKE EXPOSED ABOVE WATTLE. IF USING WILLOW STAKES REFER TO USDA SOIL CONSERVATION SERVICE TECHNICAL GUIDE, BIOENGINEERING, FOR GUIDELINES TO PREPARING LIVE WILLOW MATERIAL.
7. INSTALL STAKES AT LEAST EVERY FOUR FEET APART THROUGH WATTLE. ADDITIONAL STAKES MAY BE DRIVEN ON THE DOWNSLOPE SIDE OF THE TRENCHES ON HIGHLY EROSIVE OR VERY STEEP SLOPES.

FIBER ROLL INSTALLATION AND MAINTENANCE

8. INSPECT THE STRAW WATTLE AND THE SLOPES AFTER SIGNIFICANT STORMS. MAKE SURE THE WATTLES ARE IN CONTACT WITH THE SOIL.
9. REPAIR ANY RILLS OR GULLIES PROMPTLY.
10. RESEED OR REPLANT VEGETATION IF NECESSARY UNTIL THE SLOPE IS STABILIZED.

FR — FIBER ROLLS

GRAPHIC SCALE

10 0 5 10 20 40

(IN FEET)
1 inch = 10 ft.

VEHICLE STORAGE AND MAINTENANCE

- MEASURES SHALL BE TAKEN TO PREVENT OIL, GREASE, OR FUEL TO LEAK IN TO THE GROUND, STORM DRAINS OR SURFACE WATERS.
- ALL EQUIPMENT OR VEHICLES, WHICH ARE TO BE FUELED, MAINTAINED AND STORED ONSITE SHALL BE IN A DESIGNATED AREA FITTED WITH APPROPRIATE BMPs.
- LEAKS SHALL BE IMMEDIATELY CLEANED AND LEAKED MATERIALS SHALL BE DISPOSED OF PROPERLY.

LANDSCAPE MATERIALS

- CONTAIN STOCKPILED MATERIALS SUCH AS MULCHES AND TOPSOIL WHEN THEY ARE NOT ACTIVELY BEING USED
- CONTAIN FERTILIZERS AND OTHER LANDSCAPE MATERIALS WHEN THEY ARE NOT ACTIVELY BEING USED.
- DISCONTINUE THE APPLICATION OF ANY ERODIBLE LANDSCAPE MATERIAL WITHIN 2 DAYS BEFORE A FORECASTED RAIN EVENT OR DURING PERIODS OF PRECIPITATION.
- APPLY ERODIBLE LANDSCAPE MATERIAL AT QUANTITIES AND APPLICATION RATES ACCORDING TO MANUFACTURE RECOMMENDATIONS OR BASED ON WRITTEN SPECIFICATIONS BY KNOWLEDGEABLE AND EXPERIENCED FIELD PERSONNEL.
- STACK ERODIBLE LANDSCAPE MATERIAL ON PALLETS AND COVERING OR STORING SUCH MATERIALS WHEN NOT BEING USED OR APPLIED.

Spruhan Engineering, P.C.
80 JEWETT ST, (SUITE 1)
NEWTON, MA 02458
Tel: 617-816-0722
Email:espruhan@gmail.com

83 MAIN ST,
MEDWAY,
MASSACHUSETTS

CIVIL PLAN

REVISION BLOCK

BY	DESCRIPTION	DATE

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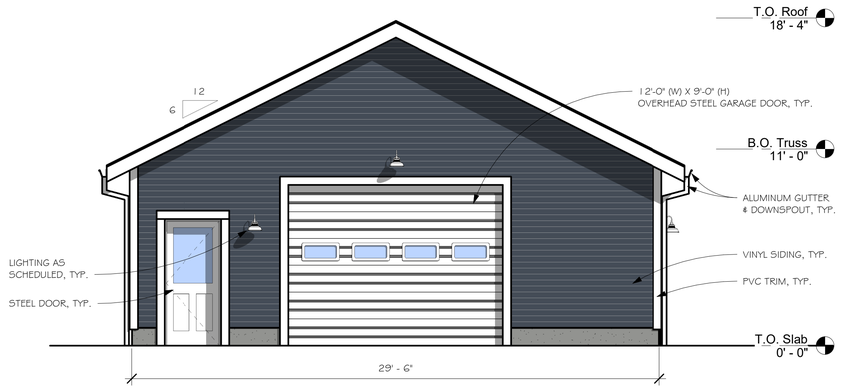
COMMONWEALTH OF MASSACHUSETTS
EDMOND SPRUHAN
No. 33316
REGISTERED PROFESSIONAL ENGINEER

DATE:	2/14/2022
DRAWN BY:	G.P
CHECKED BY:	E.S
APPROVED BY:	E.S

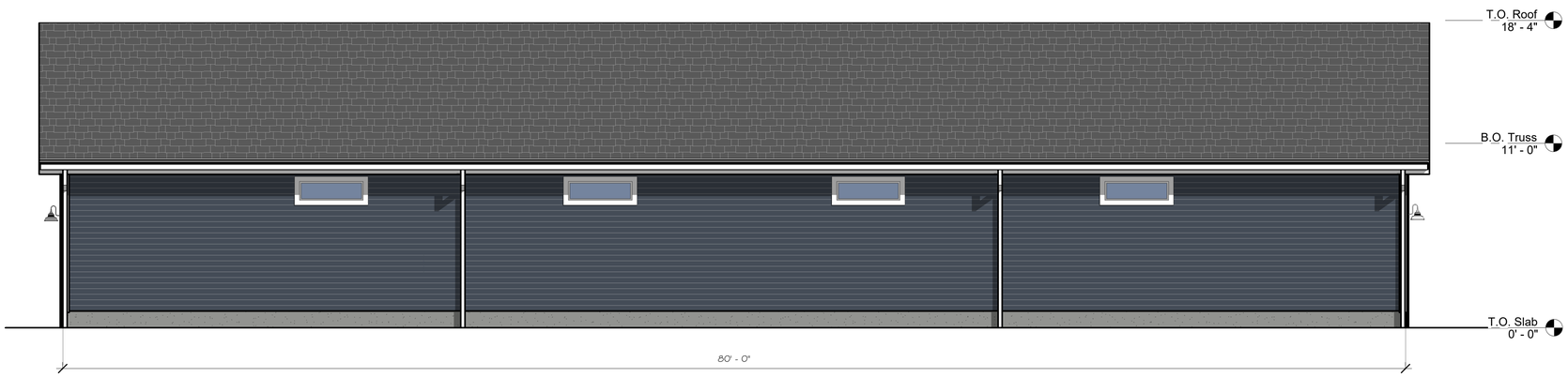
EROSION CONTROL & DEMOLITION PLAN

C7.0

EAST ELEVATION



SOUTH ELEVATION



WEST ELEVATION

NORTH ELEVATION

SAH DESIGN, LLC
ARCHITECTURE
DESIGN
DRAFTING
EXISTING CONDITIONS

PROPOSED STORAGE ELEVATIONS
83 MAIN ST
MEDWAY, MA

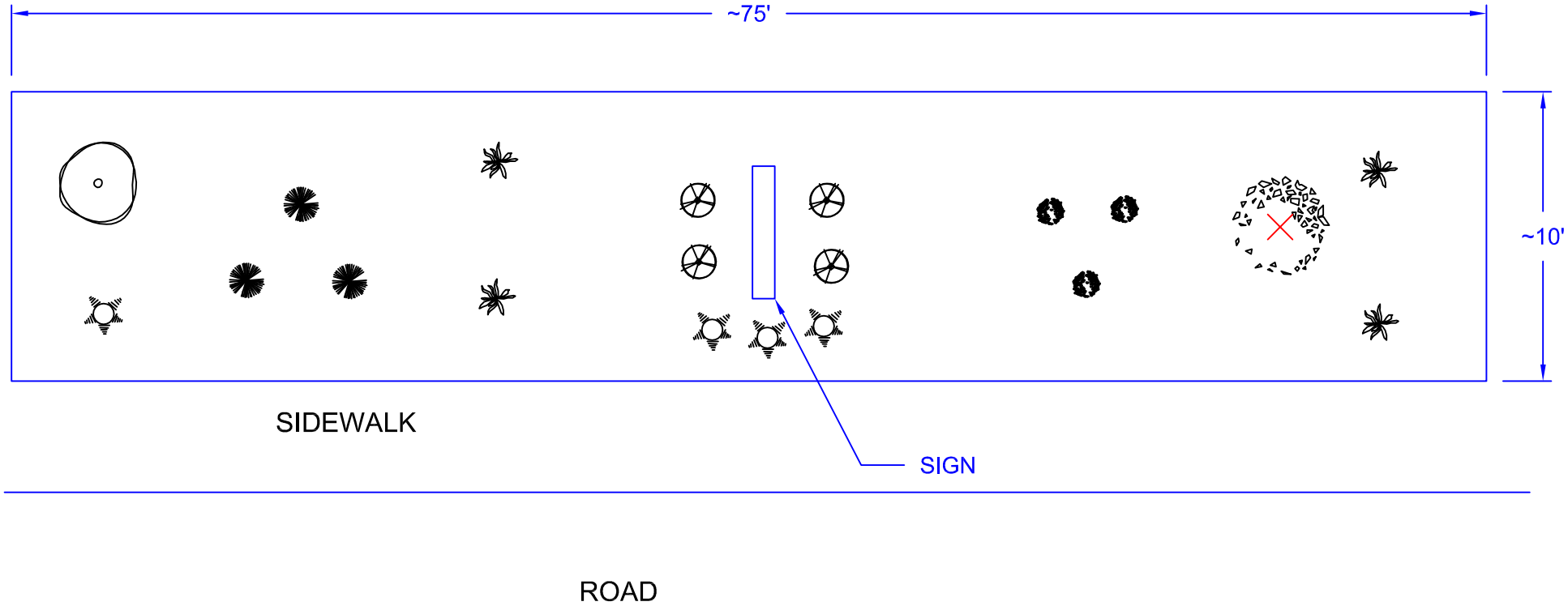
0' 2' 4' 8' 16'

Date: 6/15/22

MASTERS TOUCH
DESIGN • BUILD

LOCATION
83 MAIN ST. MEDWAY, MA

REV.
A



ORNAMENTAL GRASS
WHITE PINE
TAXUS
AZALEA
RHODODENDRON
PLUM TREE
CHAMEACYPARIS

ITEM	QTY	COST
TOTAL COST		

CJC	17	6	22	XXX	
DRAWN	DAY	MO.	YR.	RELEASED	SHEET NO.

Collins Landscaping
Year Round Lawn & Yard Services

PART OR DWG. NO.
FRONT

TITLE
FRONT ROAD
PARKING AREA BED

REV.
A

Plum Tree – Prunus Americana

Pine Tree – Pinus Strobus

Azalea – Variety

Taxus - Yew

Golden Cypress – Chamaecyparis

Rhododendron - Roseum

Ornamental Grass Variety

Susan Affleck-Childs

From: Susan Affleck-Childs
Sent: Wednesday, June 8, 2022 6:43 PM
To: Michael Boynton; Barbara Saint Andre; Joanne Russo; Jack Mee; Peter Pelletier; Stephanie Carlisle; Sean Harrington; Barry Smith; Jeff Lynch; Mike Fasolino; Bridget Graziano; Beth Hallal; jwatson@medwaypolice.com; Donna Greenwood
Cc: Matthew Buckley
Subject: Site Plan Application - Masters Touch, 83 Main Street

HI,

The Planning and Economic Development Board has received an application for minor site plan review for Masters Touch for 83 Main Street and will begin its review of the project on July 12th.

Project information is posted at the Board's web page: https://www.townofmedway.org/planning-economic-development-board/pages/masters-touch-site-plan-83-main-street

Please review the proposed development and forward any comments to me by June 30th.

Thanks for your help.

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

Susan Affleck-Childs

From: Stephanie Carlisle
Sent: Thursday, June 9, 2022 9:11 AM
To: Susan Affleck-Childs
Cc: Peter Pelletier; Sean Harrington; Nolan Lynch
Subject: RE: Site Plan Application - Masters Touch, 83 Main Street

Hi Susy,
Here are my comments and questions:

1. Where is the drainage plan? They propose three infiltration systems but do not show where they'll be.
2. Is there an existing connection to the MS4? Is there a proposed connection to the MS4? Do they anticipate runoff into the street?
3. Can they implement any nature based solutions for stormwater? i.e. rain gardens? Tree trenches?
4. What is the drainage area contributing to each infiltration system and how much of it is impervious?
5. What is the storage capacity for each infiltration system?
6. What are the TSS removal and phosphorus removal calculations?
7. Where is the Operations and Maintenance Plan? They will need to provide DPW annual reports documenting continued maintenance on their stormwater management system.

Also, I think Nolan may want to be added to these emails so he can review for curb cuts and other road impacts, stormwater, etc.

Thanks! 😊

From: Susan Affleck-Childs <sachilds@townofmedway.org>
Sent: Wednesday, June 8, 2022 6:43 PM
To: Michael Boynton <mboynton@townofmedway.org>; Barbara Saint Andre <bsaintandre@townofmedway.org>; Joanne Russo <jrusso@townofmedway.org>; Jack Mee <jmee@townofmedway.org>; Peter Pelletier <ppelletier@townofmedway.org>; Stephanie Carlisle <scarlisle@townofmedway.org>; Sean Harrington <sharrington@townofmedway.org>; Barry Smith <bsmith@townofmedway.org>; Jeff Lynch <ChiefLynch@townofmedway.org>; Mike Fasolino <mfasolino@townofmedway.org>; Bridget Graziano <bgraziano@townofmedway.org>; Beth Hallal <bhallal@townofmedway.org>; jwatson@medwaypolice.com; Donna Greenwood <dgreenwood@townofmedway.org>
Cc: Matthew Buckley <matt@matthewbuckley.com>
Subject: Site Plan Application - Masters Touch, 83 Main Street

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Thanks for your help.

Susan E. Affleck-Childs
Planning and Economic Development Coordinator
Town of Medway
155 Village Street

Susan Affleck-Childs

From: Jeff Lynch
Sent: Thursday, June 9, 2022 12:52 PM
To: Susan Affleck-Childs
Cc: Mike Fasolino; Anna Rice
Subject: RE: Site Plan Application - Masters Touch, 83 Main Street

Susy, The plans look like they are putting in a gravel driveway to the building in the rear. When we met with the owner we discussed the fact that there was access only from his property and a single access would require a hard surface. It would not have to be the entire back area as it appears the gravel driveway is showing. We had also discussed the possibility of sprinklering the building and putting a fire alarm and radio box in. I would also need to have some sort of letter stating with the filtration systems we could drive a 75,000 pound truck over it without it collapsing. From what I can see on the plans it looks like we would have to drive over them to gain access to the back building.

Thanks.

Jeffrey P. Lynch
Chief of Department
Medway Fire Department
155 Village Street
Medway, MA 02053
508-533-3211

Mailing address;
44 Milford Street
Medway, MA 02053

From: Susan Affleck-Childs <sachilds@townofmedway.org>
Sent: Thursday, June 9, 2022 12:38 PM
To: Jeff Lynch <ChiefLynch@townofmedway.org>
Cc: Mike Fasolino <mfasolino@townofmedway.org>; Anna Rice <arice@townofmedway.org>
Subject: RE: Site Plan Application - Masters Touch, 83 Main Street

Hi Jeff,

See attached complete version of the plan set. In particular, look at Sheet C5 Civil Plan.

Thanks.

Susy

From: Susan Affleck-Childs
Sent: Thursday, June 9, 2022 11:43 AM
To: Jeff Lynch <ChiefLynch@townofmedway.org>
Cc: Mike Fasolino <mfasolino@townofmedway.org>; Anna Rice <arice@townofmedway.org>
Subject: RE: Site Plan Application - Masters Touch, 83 Main Street

Hi Jeff.

Thanks for your note.

I reviewed the pdf pf the plan set provided to us by the applicant. It is missing Sheets C4 and C5. I have emailed the applicant and requested those additional pages. Upon receipt, we will reload the full set to our web page.

In the meantime, you can get a general idea of what they want to do from the 4th sheet in the plan set. It is a free-standing building at the back of the site, 80' x 30',, to be used for storage.

My apologies for the difficulty.

Thanks.

Susy

From: Jeff Lynch <ChiefLynch@townofmedway.org>
Sent: Thursday, June 9, 2022 11:20 AM
To: Susan Affleck-Childs <sachilds@townofmedway.org>
Cc: Mike Fasolino <mfasolino@townofmedway.org>
Subject: RE: Site Plan Application - Masters Touch, 83 Main Street

Susy, I don't see anything indicating they are putting a building in the back of the property, am I missing something?

Thanks.

Jeffrey P. Lynch
Chief of Department
Medway Fire Department
155 Village Street
Medway, MA 02053
508-533-3211

Mailing address;
44 Milford Street
Medway, MA 02053

From: Susan Affleck-Childs <sachilds@townofmedway.org>
Sent: Wednesday, June 8, 2022 6:43 PM
To: Michael Boynton <mboynton@townofmedway.org>; Barbara Saint Andre <bsaintandre@townofmedway.org>; Joanne Russo <jrusso@townofmedway.org>; Jack Mee <jmee@townofmedway.org>; Peter Pelletier <ppelletier@townofmedway.org>; Stephanie Carlisle <scarlisle@townofmedway.org>; Sean Harrington <sharrington@townofmedway.org>; Barry Smith <bsmith@townofmedway.org>; Jeff Lynch <ChiefLynch@townofmedway.org>; Mike Fasolino <mfasolino@townofmedway.org>; Bridget Graziano <bgraziano@townofmedway.org>; Beth Hallal <bhallal@townofmedway.org>; jwatson@medwaypolice.com; Donna Greenwood <dgreenwood@townofmedway.org>
Cc: Matthew Buckley <matt@matthewbuckley.com>
Subject: Site Plan Application - Masters Touch, 83 Main Street

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Please review the proposed development and forward any comments to me by June 30th.

Thanks for your help.

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

Susan Affleck-Childs

From: Ed Skou <ejivskou@gmail.com>
Sent: Monday, June 27, 2022 5:25 PM
To: Planning Board
Subject: [External] 83 Main Street (Masters Touch) proposal

Good Evening
I have a few questions related to the storage building and water drainage.
I live at 14 Malloy Street and have 3 pumps in my basement managing the runoff from rain water and snow banks From the bank's parking lot.

1. I did not see plans for the storage building. Will plans be available for the hearing?
2. I see the storm water management system for the runoff from the roof of the storage building but I don't see any recommendation in the plans to address the run off from the parking lot behind the current building and surrounding the storage building.
How will this be addressed?
Thank you
Edward Skou
14 Malloy Street
Medway Ma
617-875-5483

Sent from my iPad

TETRA TECH

July 8, 2022

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

Re: Master's Touch
Minor Site Plan Review
83 Main 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 83 Main Street in Medway, Massachusetts. The Project consists of an addition to the existing building and a warehouse on the rear of the lot. The Project also includes a driveway extension and a proposed paved parking area with appurtenant utilities, stormwater and landscaping improvements. All impervious areas will be captured by three infiltration systems with downspouts and catch basins.

TT is in receipt of the following materials:

- An Application for Minor Site Plan Approval, dated May 19, 2022, prepared by the Applicant.
- A plan (Plans) set titled "83 Main Street, Medway, Massachusetts," dated February 14, 2022, prepared by Spruhan Engineering, P.C. (PEP)
- A stormwater management report (Stormwater Report) titled "Stormwater Report, 83 Main St, Medway, MA," dated January 19, 2022, prepared by PEP.
- A Project narrative (Narrative) titled "Project Narrative: 83, Main Street, Medway, MA," dated February 7, 2022, prepared by PEP.

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 provided a note on the Civil Sheet that the datum is the "City of Medway" datum and noted an assumed datum on the Certified Plot Plan. The Applicant shall provide consistent datums across the plans to ensure there are no issues during construction. Elevations shall reference the North American Vertical Datum of 1988 (NAVD88). (Ch. 200 §205-4 [§204-4.C])

Infrastructure Northeast
Marlborough Technology Park 100 Nickerson Road, Marlborough, MA 01752
Tel 508.786.2200 Fax 508.786.2201 tetratech.com

2. The Plans do not include the building elevations as required. Regulations require all plans to be bound in one set. (Ch. 200 §205-4 [§204-4.D])
3. The Civil Plan (Sheet C5.0) has not been stamped. Additionally, there are no PEDB signature blocks or Town Clerk no appeal certification language on any of the sheets. (Ch. 200 §205-4 [§204-4.E])
4. The Cover Sheet does not include the parcel number, list of requested waivers (if any) or PEDB signature block. (Ch. 200 §205-5.A)
5. The total square footage of the proposed warehouse has not been included on the Civil Plan. (Ch. 200 §205-5.E.4)
6. Site grading has not been provided at the southern end of the site adjacent to the proposed Warehouse building. Finish floor elevation of the warehouse has also not been included. (Ch. 200 §205-5.E.5)
7. The Zoning Table does not include gross floor area. (Ch. 200 §205-5.E.12)
8. The Applicant is proposing an additional curb cut for the property. We believe the site design could be similar maintaining the existing curb cut only. (Ch. 200 §207-11.A.2.a)
9. The proposed driveways are less than the required twenty feet. (Ch. 200 §207-11.A.3)
10. The Applicant is proposing to maintain the existing curb cut style for the Project. This does not meet the regulations (curb along entire radius of opening and into the site) but we recommend the proposed condition be maintained as it is consistent with the remainder of the driveways in the area. (Ch. 200 §207-11.A.4)
11. The proposed additional curb cut is within approximately 25 feet of the existing curb cut of the east abutter. The Regulations require maximum practicable distance from existing access to adjacent properties. (Ch. 200 §207-11.A.7)
12. The proposed warehouse has 10.25 feet of clearance from the building face to the property line on the east and west side of the proposed building. We recommend the Applicant coordinate with the Medway Fire Department to ensure proper emergency access to the building. (Ch. 200 §207-11.A.17)
13. It does not appear the Applicant is proposing vertical granite curb along the site drive aisles. (Ch. 200 §207-11.B.2)
14. Portions of both drive aisles are less than the required 24 feet. (Ch. 200 §207-11.B.3)
15. Access to the rear portion of the site is through a gravel driveway. We recommend the PEDB discuss this item during its next hearing to determine if the gravel is considered a "durable material" as noted in the Regulation. (Ch. 200 §207-11.B.4)
16. The Applicant shall provide a truck turning plan to show that Medway fire apparatus can safely maneuver around the proposed site. (Ch. 200 §207-11.B.8)
17. The Applicant is proposing parking along the frontage of the property. Landscaping has been proposed along the frontage for screening which we believe is consistent with the requirement and adjacent properties. (Ch. 200 §207-12.B)
18. The Applicant has not included a standard detail of the proposed paving section. (Ch. 200 §207-12.E)
19. The Applicant has not included any accessible spaces in their site design. We recommend this be confirmed with the PEDB or building commissions to ensure proposed parking meets all applicable standards. (Ch. 200 §207-12.G.2.a)
20. Parking spaces are proposed within 50 feet of the existing entrance. Vehicles reversing from these spaces may block ingress traffic. (Ch. 200 §207-12.G.3.c)
21. It does not appear the Applicant is proposing any curb treatment along the proposed parking areas. (Ch. Required recharge calculations were not provided in the Stormwater Report. (Standard 3)
22. 200 §207-12.H.1)

23. It is unclear whether the Applicant intends to install new water service connections for the Project. The Civil Plan notes that both connections are existing but only one connection is shown on the Existing Conditions Plan. The Applicant shall confirm the proposed water service connections and coordinate all work with the Medway DPW. (Ch. 200 §207-15.A)
24. No hydrants are proposed on the Project. We recommend the Applicant coordinate the plan with the Medway Fire Department to determine if hydrants are warranted or if internal fire suppression is required for the proposed buildings. (Ch. 200 §207-15.C)
25. There are no utility details provided on the Plans to confirm if all proposed utilities, mainly electric, telephone and cable is to be installed underground. (Ch. 200 §207-16.A)
26. The Applicant noted a proposed dumpster pad location but has not provided any details on the Plans. (Ch. 200 §207-17.C)
27. The Applicant has not provided any detail on proposed site lighting. (Ch. 200 §207-18)
28. A Landscaping Plan has been provided but appears to limit landscaping scope to the frontage while providing no screening from the site and its other abutters. We recommend the PEDB discuss the proposed landscaping scope at its next meeting. (Ch. 200 §207-19)
29. Snow removal areas are minimal at the site. Paved areas are nearly coincident with the east property line which may cause plowed snow to be directed onto the abutters' property and a proposed snow storage area on that side of the property is located within the driveway which would limit access to the rear of the site. The proposed warehouse building and the gravel driveway to the west are also close to the abutting property and we anticipate plowed snow will be pushed onto the abutting property during storms. We recommend the Applicant provide additional buffer between the paved areas and the property lines and also provide additional areas for snow storage on-site or means for removal and legal disposal in the Operation and Maintenance Plan (O&M Plan). (Ch. 200 §207-21)

General Site Plan Comments

30. The Applicant should confirm with the Medway PEDB whether the parking space calculations are correct or if each subsection required rounding prior to final calculation. Coordinate this with the Project Narrative which shows a different calculation.
31. The Civil Plan is busy with information. We recommend the Applicant provide a Layout and Materials Plan and a separate Grading, Drainage & Utilities Plan.
32. The Plans show inconsistent measurements from the proposed warehouse to the property lines (i.e. 10.25' on Plot Plan and 10.3' on the Civil Plan). The dimensioning should be coordinated between the different plans.
33. The Applicant is proposing to pave nearly up to the east side property line which does not appear to serve any purpose in the design. We recommend the Applicant adjust the paving limits at the east entrance to provide additional green space.
34. We believe landscape islands may be prudent at the ends of the parking stalls along the frontage of the property. This would provide for additional green space at the site and also deter patrons of the site from parking at the open ends of the aisle and potentially blocking the driveway entrances.
35. The Applicant should confirm on the Plans whether the existing driveway is to be removed and repaved as part of the scope of the Project.
36. The Applicant shall confirm method for maintaining proposed parking space striping on the gravel surface.
37. Standard details should be included in the Plans for all proposed scope items such as the proposed retaining wall, pipe trench, pavement section, gravel section, loam and seed section, dumpster enclosure, etc.

STORMWATER REVIEW

MA DEP Stormwater Standards/Handbook

38. Pre- and post-development watershed maps were not included in the Stormwater Report. The existing HydroCAD analysis includes one point of analysis, but it appears small areas of the site may discharge to the abutting properties and should be included in the analysis. We recommend the Applicant include the requested figures as well as any available topographic information on the abutting properties to ensure runoff is properly accounted for in the analysis. (Standard 2)
39. Recharge calculations were not provided in the Stormwater Report. (Standard 3)
40. The Applicant is proposing to use infiltration best management practices (BMP's) to mitigate the increase in stormwater runoff as a result of the proposed development of the site. The Applicant has not provided any test pit information to confirm soil texture and estimated seasonal high groundwater (ESHGW) elevation at the location of the proposed infiltration BMP's. (Standard 3)
41. Water quality volume calculations were not provided in the Stormwater Report. (Standard 4)
42. A Long-Term Pollution Prevention Plan (LTPPP) was not provided in the Stormwater Report. (Standard 4)
43. It does not appear the Project is covered by the United States Environmental Protection Agency (US EPA) National Pollutant Discharge Elimination System (NPDES) General Permit for Discharges from Construction Activities (CGP). However, the Project does appear to meet the applicability requirements of the Town of Medway Stormwater Management and Land Disturbance Bylaw. Refer to the next section for comments related to site erosion controls. (Standard 8)
44. The Applicant has not provided an O&M Plan in the Stormwater Report. We recommend the O&M Plan be included as a stand-alone document and appended to the Stormwater Report. Additionally, we recommend the Applicant combine the O&M and LTPPP into one document for ease of use by site management. (Standard 9)
45. The Applicant has not provided an Illicit Discharge Compliance Statement. (Standard 10)

Town Stormwater Management and Land Disturbance Bylaw (Article 26)

46. It appears the Project generates approximately 10,000 square feet (s.f.) of impervious surface and meets the applicability requirements of the Bylaw. (§26.5.1.b)
47. The Applicant has not provided a Land Disturbance Permit application as part of their submission. (§26.5.4)
48. NOAA Atlas-14 rates were not used in the HydroCAD analysis. (§26.5.4.c)
49. The Applicant has provided an Erosion Control & Demolition Plan. However, additional information is required consistent with the Bylaw such as earthwork volumes, drainage patterns, limit of work area calculation, sequence of development operations and construction term maintenance schedule. (§26.5.6.3)
50. The Applicant has not provided a Stormwater O&M Plan describing inspection requirements and maintenance procedures for BMP's during construction as well as inspection interval requirements and required reporting (bi-weekly and post 0.25 inch storm). (§26.5.7)
51. Phosphorus removal calculations have not been provided. (§26.5.8.3.c.2.b)

Town Site Plan Review Stormwater Regulations (Ch. 200 §207-14)

52. The Applicant has not used any Low Impact Development (LID) techniques in the stormwater design scope. (Ch. 200 §207-14.B)
53. There are no proposed access manholes for the proposed SIS systems. The current layout does not allow for the systems to be accessed and maintained as required. Additionally, Stormtech Isolator Row's are required to ensure first flush flow is always routed through the row to help protect the viability of the remainder of the system. (Ch. 200 §207-14.D)

General Stormwater Comments

54. We do not recommend placing fabric under the proposed Stormtech Systems as it may inhibit infiltration as sediment builds in the system.
55. The Applicant used "Wetted Area" to model exfiltration in the HydroCAD model. "Surface Area" shall be used in the model as all infiltration is considered to be vertical in the analysis.
56. The layout of the proposed Stormtech Systems does not appear to show typical installation method. Rows of chambers are typically connected to each other and then stone placed around the entire row(s).
57. Overflow devices should be added to the downspouts to ensure free flow of discharge from the roof drains in the event the SIS becomes over filled.
58. The Applicant proposed a bend in the pipe connection from Catch Basin #3. We recommend a manhole be placed at the proposed bend.

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 M. Bouley, P.E.
Project Manager

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July 12, 2022
Medway Planning & Economic Development Board Meeting

PEDB Officers, Representatives and Liaisons

- Memo dated June 8, 2022 from Susy Affleck-Childs
- *What is the job of a Committee Liaison*?

Susan E. Affleck-Childs
Planning and Economic
Development Coordinator

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TOWN OF MEDWAY
COMMONWEALTH OF MASSACHUSETTS

PLANNING AND ECONOMIC DEVELOPMENT OFFICE

June 8, 2022

TO: Planning & Economic Development Board Members
FROM: Susy Affleck-Childs
RE: Board Reorganization - Board/Committee Officers, Representatives and Liaisons

It is that time of year for the PEDB to select PEDB officers and members to serve on or function as liaisons to other Town boards and committees for Fiscal Year 23 (July 1, 2022 – June 30, 2023). Please review the lists below and be prepared to discuss your interests at the June 14, 2022 meeting.

PEDB Officers

- Chair _____
- Vice-Chair _____
- Clerk _____

PEDB Associate Member _____

PEDB Representatives and Liaisons

	Presently Assigned	***FY 23***
The PEDB has official representation on the following committees. *This involves regular attendance at committee meetings.*		
Community Preservation Committee	Matt Hayes	_____
Design Review Committee	Tom Gay	_____
	(Jess Chabot alt.)	_____
Economic Development Committee	Rich Di Iulio	_____
Open Space & Recreation Plan Update Task Force	Matt Hayes	_____
Sign Bylaw Review Task Force	Tom Gay	_____
Town Bylaw Review Committee	Tom Gay	_____
Master Plan Committee	Jess Chabot	_____

Board/Committee Liaisons – *Regular meeting attendance is NOT required.*

	Presently Assigned	***FY 23***
Affordable Housing Committee & Trust	Andy Rodenhiser	_____
Agricultural Commission	Bob Tucker	_____
Board of Assessors	Andy Rodenhiser	_____
Board of Health	Andy Rodenhiser	_____
Board of Water/Sewer Commissioners	Andy Rodenhiser	_____
Capital Improvements Planning Committee	Matt Hayes	_____
Conservation Commission	Bob Tucker	_____
Energy & Sustainability Committee	Bob Tucker	_____
Finance Committee	Andy Rodenhiser	_____
Historical Commission	Matt Hayes	_____
Open Space Committee	Rich Di Iulio	_____
Redevelopment Authority	Andy Rodenhiser	_____
SWAP	Rich Di Iulio	_____
Town Manager/Select Board	Andy Rodenhiser	_____
Zoning Board of Appeals	Jess Chabot	_____
_____		_____
_____		_____

Other Groups

Medway Business Council	Andy Rodenhiser	_____

What is the job of a Committee Liaison?

To review the meeting agendas and minutes of the committee/board with which you will "liaise".

To periodically attend a meeting of the committee/board when there is an agenda item of interest to the PEDB.

To periodically report to the PEDB re: matters/issues of mutual concern.

To build a relationship between the PEDB and the respective committee/board.

To identify opportunities for collaboration, if any, between the PEDB and the respective committee/board.

To be an advocate for PEDB interests, programs, budget, etc. with the respective committee/ board.

To serve as a source of communication/information exchange between the PEDB and the assigned committee/board.

6-17-2014

July 12, 2022
Medway Planning & Economic Development Board Meeting

Construction Reports

Medway Mill – 165 Main Street

- Monthly Inspection Report from Guerriere & Halnon, Inc. dated July 1, 2022

William Wallace Village – 274 Village Street

- Construction Inspection Report from Legacy Engineering dated July 6, 2022

Choate Trail

- Construction Observation Report from Connorstone Engineering, Inc. dated July 1, 2022

Cutler Place – 6 Cutler Street

- June 2022 Progress Report from Ron Tiberi

Evergreen Village – 22 Evergreen Road

- June 2022 Progress Report from Ron Tiberi

Guerriere & Halnon, Inc.
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F3519

July 1, 2022

Town of Medway
Planning and Economic Development Board
155 Village Street
Medway, MA. 02053
Attn: Susan Affleck-Childs

RE: Medway Mills – Monthly Inspection Report: 165 Main Street, Medway, MA 02053.

On behalf of the Applicant, 165 Main Street Realty Trust, and in accordance with Major Site Plan Decision dated June 22, 2021 General Conditions of Approval Paragraph (G)(4), Guerriere & Halnon, Inc. conducted the monthly site inspection on June 24, 2022 and observed the following construction activities:

- Construction of the paver walkway has been completed;
- Erosion control measures appear to be in satisfactory condition;
- Inactive portions of the site have been hydroseeded;
- Planting of trees and shrubs is ongoing around the site;
- Construction of the swale on east side of the project is ongoing;
- Construction of the infiltration basin has largely been completed and the area loamed, and
- Work on restoration areas A & B is continuing.

Should you have any questions or require additional information, please contact our office.

Sincerely,
Guerriere & Halnon, Inc.

Amanda Cavaliere

Amanda Cavaliere
Franklin Office Manager

COMMONWEALTH OF MASSACHUSETTS
ELIZABETH A. MAININI-SANCHIONI
No. 48096
REGISTERED PROFESSIONAL ENGINEER
7/5/22

cc: Mr. John Greene, Applicant

dan@legacy-ce.com
508-376-8883(o)
508-868-8353(c)
730 Main Street
Suite 2C
Millis, MA 02054

CONSTRUCTION INSPECTION REPORT

Date of Inspection: 7/6/2022 **Time On-Site:** 10:30 am **Weather:** 75F, P. Cloudy

Location: William Wallace Village, 274 Village Street, Medway, MA

Inspection By: Daniel J. Merrikin, P.E.

Date of Report: 7/6/2022

Observation Requested by: DTRT LLC
Medway Planning & Economic Development Board

Activity Summary:

At the time of inspection work on the following structures was ongoing:

- Unit 2/4 is substantially complete and occupied.
- Unit 18 (old house) is substantially complete and occupied.
- Aside from garage doors, unit 6/8 is weather tight and interior construction continues.
- Aside from garage doors, unit 20/22/24 is weather tight and interior construction continues.
- Unit 10/12 is framed, roofed with doors and windows, and is awaiting siding installation.
- Unit 14/16 building foundations is partially excavated.
- The mail kiosk is substantially complete.

Note the following site construction activities since our last inspection.

- Site work on the site is still minimal as the primary focus is currently building construction. Utility service installation to buildings under construction but otherwise, there has been little site work since our last inspection.

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730 Main Street
Suite 2C
Millis, MA 02054

Erosion Controls:

Note the following:

- Perimeter erosion controls were inspected and found to be in adequate condition.
- While the construction of the foundation for unit 14/16 has commenced, given the stage of construction, we do not believe that temporary sediment basins are needed. Many areas of the site are stabilized with impervious surfaces and vegetation. The remaining disturbed areas are small and decentralized. Perimeter erosion controls should be adequate for the small remaining areas.

Recommended Improvements:

1. None.

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CONNORSTONE ENGINEERING, INC.

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

Construction Observation Report

Project Information

Project Name:	Choate Trail
Location:	Copper Drive (off Highland Street) Medway, MA
Report Number:	11
Inspection Date:	7/1/2022
Inspection Time:	10:00 am

On Friday, July 1, 2022, Connorstone Engineering, Inc. (CSEI) performed a progress inspection in accordance with the Definitive Subdivision Approval Condition VII.B.5.c. The following report summarizes the observations made during the site visit.

Recent Precipitation Events:

Based upon available data, since the last inspection the site received the following precipitation.

- Previous 72 hours: 0.3 inches (raining at the time of inspection)

Completed / On-Going Work

Time Period: 6/3/2022 to 7/1/2022

- No Roadway or Infrastructure work performed during this period.
- Contractor is preparing to start individual lot development.

Site Conditions / Recommendations:

1. The entrance showed no signs of tracking onto Highland Street.
2. The internal Roadway (Copper Drive) had only minor tracking/sediment on the paved areas. Construction entrances were in place at Lot 2 and 4. The entrance to Lot 3 to be installed prior to future lot development. As construction recommences, the entrances shall be maintained as required to reduce tracking.
3. The overall site condition was generally stable, and the perimeter erosion barriers (compost filter sock & silt fence) appeared in good condition and functioning as intended. No sediment or erosion was observed beyond the barriers or limit of work.
4. Catch basins were equipped with silt sacks that appeared to be in good condition, and the gutter mouths had been blocked off as recommended.
5. Stockpiles of loam were placed on each of the lots for future development.

Vito Colonna, PE
Connorstone Engineering, Inc.

Progress Report

Project Details

Project name	Cutler Place	
Location	6 Cutler Street	Medway MA
Owner	Cutler Place LLC	Medway MA
Reporting period	5-31-2022 thru 6-29-2022	
Report compiled by	Ron Tiberi P.E.	9 Mass Ave Natick MA
Date inspected/ submitted	6/29/22	

Summary

Erosion controls partially installed & maintained. Limited Site Activity.

Activities

Activity 1 Construction Controls

Status	**Achieved**
Objective	*Foundation set, interior plumbing set in addition*
Activity dates	
Progress	
Comments	*Sanitary Facilities on-site, No construction trailers*

Activity 2 Erosion Controls

Status	**Achieved**
Objective	*Erosion controls implemented & maintained*
Activity dates	
Progress	*Completed & maintained*
Comments	

Activity 3 Water & Sewer Utilities

Status	**In process**
Objective	*Within week*
Activity dates	Week of 6-26
Progress	*Piping installed through Cutler Street*
Comments	

Activity 4 Parking Area

Status	
Objective	
Activity dates	
Progress	
Comments	

Activity 5 Building

Status	**IN Progress**
Objective	Selective demolition & Interior framing original building,
Activity dates	Thru Month
Progress	
Comments	

Activity 6 Site Features

Status	
Objective	
Activity dates	
Progress	
Comments	

Photographs

#1

Building addition piping

#2

Erosion control maintained

#3

Left side enclosed and roofed

#4

Water amin extension through Cutler Street

Progress Report

Project Details

Project name	Evergreen	
Location	22 Evergreen Road	Medway MA
Owner	Broken Tree LLC	Medway MA
Reporting period	5-31-2022 thru 6-29-2022	
Report compiled by	Ron Tiberi P.E.	9 Mass Ave Natick MA
Date inspected/ submitted	6/29/22	

Summary

Erosion controls installed & maintained. Road set to binder level & site rough graded to subgrade. Phase 2 Structure framed & enclosed. Drainage system 90% installed. Limited Site Activity.

Activities

Activity 1 Construction Controls

Status	**Achieved**
Objective	*Layout & Construction controls set and provided by Cheney Engineering*
Activity dates	
Progress	*Asbuilt information surveyed*
Comments	*Sanitary Facilities on-site, No construction trailers*

Activity 2 Erosion Controls

Status	**Achieved**
Objective	*Erosion controls implemented and approved on site* *Temporary sedimentation basins installed & maintained*
Activity dates	*During Month*
Progress	*Completed & maintained*
Comments	

Activity 3 Access Road

Status	**In progress**
Objective	*Paved to binder coarse*
Activity dates	
Progress	*Partially completed 85%,*
Comments	*3 Infiltration system installed*

Activity 4 Water & Sewer Utilities

Status	**Achieved**
Objective	*Sewer line and water lines connected to units, Water lines charged.* *GAS Services Installed; Underground installed*
Activity dates	
Progress	*Completed*
Comments	

Activity 5 Building

Status	**In Progress**
Objective	*Building 2 enclosed, water & sewer connections completed*
Activity dates	*Current*
Progress	*Exterior & interior finishes under way*
Comments	

Activity 6 Site Features

Status	**Achieved**
Objective	*Segmented retaining wall being constructed behind building 1 approved and backfilled*
Activity dates	
Progress	*100%*
Comments	

Photographs

#1

Building 2 Enclosed

#2

Rear Building 2 – Enclosed