

Town of Arlington, MA Redevelopment Board

Agenda & Meeting Notice March 28, 2022

This meeting is being held remotely in accordance with the Governor's March 12, 2020 Order Suspending Certain Provisions of the Open Meeting Law G.L. c. 30A, Section 20. Per Board Rules and Regulations, public comments will be accepted during the public comment periods designated on the agenda. Written comments may be provided by email to jraitt@town.arlington.ma.us by March 28, 2022 at 4:00 p.m. The Board requests that correspondence that includes visual information should be provided by March 25, 2022 at 12:00 p.m.

The Arlington Redevelopment Board will meet Monday, March 28, 2022 at 7:30 PM in the Join Zoom Meeting with audio and video by connecting using this link: https://town-arlington-ma-us.zoom.us/j/86753219003, Meeting ID: 867 5321 9003. To call in, dial 1-646-876-9923, 86753219003, followed by "#".

1. Warrant Article Public Hearings for 2022 Annual Town Meeting

7:30 p.m.

- A brief introductory presentation by petitioners will be provided for each
- Board members and members of the public will be provided time to ask questions and comment on each article
- The public will be provided opportunity to comment on each Article

ARTICLE 32

ZONING BYLAW AMENDMENT / ZONING BOARD OF APPEALS RULES AND REGULATIONS

To see if the Town will vote to amend the Zoning Bylaw to update Section 3.2.3 Rules and Regulations to

allow the Zoning Board of Appeals to amend its own rules and regulations; or take any action related thereto.

(Inserted at the request of the Redevelopment Board)

ARTICLE 33

ZONING BYLAW AMENDMENT / HALF STORY

To see if the Town will vote to amend the Zoning Bylaw to update Section 2 DEFINITIONS and add a new

subsection under Section 5.3 to clarify how the area of a half story is to be calculated; or take any action related thereto.

(Inserted at the request of the Redevelopment Board)

ARTICLE 37

ZONING BYLAW AMENDMENT / UNSAFE STRUCTURE

To see if the Town will vote to amend the Zoning Bylaw to update Section 8.1.5 Unsafe Structure to define who may make the determination that a structure is unsafe; or take any action related thereto.

(Inserted at the request of the Redevelopment Board)

2. Environmental Design Review Special Permit Public Hearing

9:15 p.m. Docket #3690, 34 Dudley Street

Notice is herewith given that an application has been filed on February 22, 2022 by 34 Dudley Street, LLC, 34 Dudley Street, Arlington, MA for PSI Atlantic Holdings VII, LLC, 530 Oak Court Drive, Memphis, TN to open Special Permit Docket #3690 in accordance with the provisions of MGL Chapter 40A § 11, and the Town of Arlington Zoning Bylaw Section 3.4, Environmental Design Review. The applicant proposes to construct a five-story self-storage facility containing between 740 and 780 storage units and make other site improvements at 34 Dudley Street, Arlington, MA in the I Industrial District. The opening of the Special Permit is to allow the Board to review and approve the development under Section 3.4, Environmental Design Review.

- Applicant will be provided 10 minutes for an introductory presentation.
- DPCD staff will be provided 5 minutes for an overview of their Public Hearing Memorandum.
- Members of the public will be provided time to comment.
- Board members will discuss docket and may vote.

3. Request for Waiver of Special Permit Filing Fee

10:00 p.m. Board members will review and may vote on request

4. Meeting Minutes (2/28/2022)

10:10 p.m. Board members will review and may vote on 2/28/22 meeting minutes

5. Open Forum

10:15 p.m.

Except in unusual circumstances, any matter presented for consideration of the Board shall neither be acted upon, nor a decision made the night of the presentation. There is a three-minute time limit to present a concern or request.

6. Adjourn

10:35 p.m. Estimated time for adjournment

7. Correspondence Received:

Correspondence received from:

M. Rizkallah 2-25-2022

L. Maida, Maida Pharmacy 3-2-2022

N. Mann 3-5-2022

P. Parise 3-6-2022

E. Pyle 3-6-2022

D. Seltzer 3-6-2022

S. Blagden 3-7-2022

- E. Cahill 3-7-2022
- C. Carney 3-7-2022
- C. Cunningham 3-7-2022
- B. Kun 3-7-2022
- L. Vivenzio 3-7-2022
- J. Weber 3-7-2022
- A. Hollman 3-8-2022
- R. Peterson 3-8-2022
- J. Weber 3-8-2022
- T. Allor 3-11-2022
- E. Fischer 3-11-2022
- R. Lemp 3-12-2022
- X. Pretzer 3-12-2022
- S. Berczuk 3-13-2022
- L. Curtis 3-13-2022
- J. Susse 3-13-2022
- S. Blagden 3-14-2022 (two letters)
- J. Brodman 3-14-2022
- C. Gibson 3-14-2022
- R. Jacob 3-14-2022
- B. Lowe 3-14-2022
- S. Smith 3-14-2022 (two letters)
- A. Bala 3-15-2022
- B. Eastwood 3-16-2022
- J. Fleming 3-16-2022
- M. Fudala 3-16-2022
- S. Hansel 3-16-2022
- N. Angus 3-17-2022
- J. Fleming 3-17-2022
- P. Parise 3-18-2022
- T. Allor 3-19-2022
- D. Bradley 3-19-2022
- D. Seltzer 3-19-2022
- S. Blagden 3-20-2022
- A. Hollett 3-20-2022
- B. Borgia 3-21-2022
- K. Doherty 3-21-2022
- L. Curtis Hayes 3-21-2022
- E. Maynard 3-21-2022
- C. Noah 3-21-2022
- C. Pedersen 3-21-2022
- L. Wiener 3-21-2022
- W. Evans 3-24-2022
- G. Sinnott 3-25-2022
- M. Polking 3-27-2022



Town of Arlington, Massachusetts

Warrant Article Public Hearings for 2022 Annual Town Meeting

Summary:

7:30 p.m.

- A brief introductory presentation by petitioners will be provided for each article
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(Inserted at the request of the Redevelopment Board)

ATTACHMENTS:

	Туре	File Name	Description
В	Reference	Agenda_Item_1	20220324 DPCD Memo to
ш.	Material	_20220324_DPCD_Memo_to_ARB_Articles_32_33_37.pd	f ARB Articles 32, 33, and 37



TOWN OF ARLINGTON

DEPARTMENT OF PLANNING and COMMUNITY DEVELOPMENT

TOWN HALL, 730 MASSACHUSETTS AVENUE ARLINGTON, MASSACHUSETTS 02476 TELEPHONE 781-316-3090

MEMORANDUM

To: Arlington Redevelopment Board

From: Jennifer Raitt, Director, Planning and Community Development

Kelly Lynema, AICP, Assistant Director, Planning and Community Development

Date: March 24, 2022

RE: Review of Warrant Articles 32, 33, and 37 for 2022 Annual Town Meeting

Staff reviewed the following Warrant Articles to provide the Board with information for further consideration as part of the public hearing and review process. There are six articles with public hearings for the evening of March 14th. This memo provides information about each article being reviewed, including any additional information provided by the petitioner, and additional factors for the Board's consideration.

ARTICLE 32

ZONING BYLAW AMENDMENT / ZONING BOARD OF APPEALS RULES AND REGULATIONS

To see if the Town will vote to amend the Zoning Bylaw to update Section 3.2.3 Rules and Regulations to allow the Zoning Board of Appeals to amend its own rules and regulations; or take any action related thereto.

(Inserted at the request of the Redevelopment Board)

Background

During the 2018 recodification of the Zoning Bylaw, the Redevelopment Board's (ARB) administrative rules and processes were moved from the Zoning Bylaw into the ARB's Rules and Regulations. The amendment was made under a recommendation in the Zoning Audit that it is a best practice to allow boards to establish and update their rules as statute allows. This amendment to administrative rules and processes allowed the ARB to be more responsive and to improve the special permit review process. The Redevelopment Board voted to adopt administrative rules pursuant to the Board as outlined in the existing Zoning Bylaw at their February 5, 2018 meeting.

This same amendment was recommended for the Zoning Board of Appeals (ZBA) rules and regulations, however amendments to the ZBA section were postponed for a later date and not completed under recodification. Since recodification, the ZBA has adopted its own rules and regulations: general Rules

¹ Arlington Zoning Review and Reorganization Framework, RKG Associates, February 28, 2017: https://www.arlingtonma.gov/home/showpublisheddocument/34006/636253397250700000

and Regulations were adopted in January, 2020,² and the ZBA revised its Comprehensive Permit Regulations in April of that same year.³

Section 3.3 in the current Zoning Bylaw outlines procedures, decision criteria, special permit conditions, and recording of decisions with specific reference to Massachusetts General Law chapter 40A. These policies and procedures apply to both Special Permit Granting Authorities—the ARB and the ZBA. The amendment proposed by this article completes the recommendation from recodification of the Zoning Bylaw by taking a consistent approach to both Special Permit Granting Authorities and drawing a distinction between the Zoning Bylaw and each board's Rules and Regulations.

Amend Section 3.2.3:

3.2.3 Rules and Regulations

The Board of Appeals shall adopt rules and regulations for the administration of its powers and shall file a copy of such regulations with the Town Clerk. The Board's regulations shall include rules for hiring outside consultants.

A. The Chair of the Board of Appeals, or in their absence the Acting Chair, may administer oaths, but must do so for hearings involving G.L. c. 40B, summon witnesses and call for the production of papers. All hearings shall be open to the public. The Board of Appeals and all permit and special permit granting authorities shall hold hearings and render decisions in accordance with the applicable time limitations as set forth in G.L. c. 40A §§ 9 and 15. The Board of Appeals shall cause to be made a detailed record of its proceedings which in the case of G.L. c. 40B hearings shall require that all testimony be electronically recorded, showing the vote of each member upon each question, or if absent or failing to vote, indicating such fact, and setting forth clearly the reasons for its decisions, and of its other official actions, copies of all of which shall be filed within 14 days in the office of the Town Clerk and the office of the Arlington Redevelopment Board and shall be a public record, and notice or decisions shall be mailed immediately to the petitioner and to the owners of all property deemed by the Board of Appeals to be affected thereby, including the abutters and the owners of land next adjoining the land of the abutters, notwithstanding that the abutting land or the next adjoining land is located in another city or town, as they appear on the most recent local tax list, and to every person present at the hearing who requests that notice be sent to them and states the address to which such notice is to be sent. Upon the granting of a limited or conditional zoning variance or special permit, the Board of Appeals shall issue to the land owner a notice, certified by the chair or clerk, containing the name and address of the land owner, identifying the land affected, and stating that a limited or conditional variance or special permit has been granted which is set forth in the decision of the Board on file in the office of the Town Clerk. No such variance or permit shall take effect until such notice is recorded in the Middlesex County Registry of Deeds.

The fee for recording such notice shall be paid by the owner and the notice shall be indexed in the grantor index under the name of the owner of record.

The concurring vote of all members of the Board shall be necessary to reverse any order or decision of any administrative official, or to decide in favor of the applicant on any matter upon which it is required to pass under this Bylaw, or to effect any variance in the application of this Bylaw.

² Town of Arlington Zoning Board of Appeals Rules and Regulations, Adopted January 28, 2020: https://www.arlingtonma.gov/home/showpublisheddocument/52709/637344700191330000

³ Zoning Board of Appeals of the Town of Arlington Comprehensive Permit Regulations, Revised April 14, 2020: https://www.arlingtonma.gov/home/showpublisheddocument/52707/637685100218330000

ARTICLE 33

ZONING BYLAW AMENDMENT / HALF STORY

To see if the Town will vote to amend the Zoning Bylaw to update Section 2 DEFINITIONS and add a new subsection under Section 5.3 to clarify how the area of a half story is to be calculated; or take any action related thereto.

(Inserted at the request of the Redevelopment Board)

Background

Staff note that the definition of a half story has been amended several times in recent years. During recodification, the definition was updated to align the method of measurement with the calculation of gross floor area (GFA). In 2019, Town Meeting voted to amend the definition of half story to reduce the defined height from seven feet three inches to seven feet. This amendment clarifies that the area comprising a half story is calculated based on the finished floor below, but does not include porches or decks, to ensure a consistent reading of the Zoning Bylaw for staff, ZBA, and the public.

Amend Section 2:

Story, Half: A story which is under a gable, hipped, gambrel roof, or other sloped roof with a minimum slope of 2:12, where less than one half the floor area measured from the underside of the roof framing to the finished floor below has a clear height of 7 feet 0 inches or more as regulated under Section 5.3.23.

Illustration of Story, Half (See Section 2, Definition of Story, Half) d Vertical height, measured from the finished floor to the underside of the roof framing,

This diagram is included for illustrative purposes only. It is not part of the Arlington Zoning Bylaw

Floor area where $d \ge 7$ ft. For a half-story, this must be less than one-half of the gross floor area of the story next below excluding porches and decks.

Amend Section 5.3:

5.3.23 Half Story

A. To be considered a half story, the proposed area must be under a gable, hipped, gambrel, or other sloped roof with a minimum slope of 2:12. The proposed clear height is to be taken from the underside of the roof structural framing to the top of the finished floor below. The proposed area is to be measured relative to the gross floor area of the story next below excluding porches and decks.

Review of Warrant Articles 32, 33, and 37 for 2022 Annual Town Meeting March 24, 2022

ARTICLE 37

ZONING BYLAW AMENDMENT / UNSAFE STRUCTURE

To see if the Town will vote to amend the Zoning Bylaw to update Section 8.1.5 Unsafe Structure to define who may make the determination that a structure is unsafe; or take any action related thereto.

(Inserted at the request of the Redevelopment Board)

This amendment emerged from the ZBA and their review of special permits, variances, and appeals of the decision of the Building Inspector. The purpose of the amendment is to establish who may determine whether a structure is unsafe. The ZBA has reported occasionally cases where a contractor has removed a portion of a building after determining on their own that the structure was unsafe, which then allows that portion of the structure to be rebuilt when it would not ordinarily be allowed. This amendment clarifies that the determination must be made by the Director of Inspectional Services to be certain that a building or portion thereof is unsafe prior to its demolition.

Amend Section 8.1.5:

8.1.5 Unsafe Structure

Except as covered under Section 8.1.7, any structure determined to be unsafe by the Director of Inspectional Services may be restored to a safe condition, provided such work on any nonconforming structure shall be completed within one year of the determination that the structure is unsafe, and it shall not place the structure in greater nonconformity. A structure may be exempted from this provision by a special permit granted by the Board of Appeals or, in cases subject to Environmental Design Review, Section 3.4., the Arlington Redevelopment Board.



Town of Arlington, Massachusetts

Environmental Design Review Special Permit Public Hearing

Summary:

9:15 p.m.

Docket #3690, 34 Dudley Street

Notice is herewith given that an application has been filed on February 22, 2022 by 34 Dudley Street, LLC, 34 Dudley Street, Arlington, MA for PSI Atlantic Holdings VII, LLC, 530 Oak Court Drive, Memphis, TN to open Special Permit Docket #3690 in accordance with the provisions of MGL Chapter 40A § 11, and the Town of Arlington Zoning Bylaw Section 3.4, Environmental Design Review. The applicant proposes to construct a five-story self-storage facility containing between 740 and 780 storage units and make other site improvements at 34 Dudley Street, Arlington, MA in the I Industrial District. The opening of the Special Permit is to allow the Board to review and approve the development under Section 3.4, Environmental Design Review.

- Applicant will be provided 10 minutes for an introductory presentation.
- DPCD staff will be provided 5 minutes for an overview of their Public Hearing Memorandum.
- Members of the public will be provided time to comment.
- · Board members will discuss docket and may vote.

ATTACHMENTS:

	Туре	File Name	Description
ם	Reference Material	EDR_Public_Hearing_Memo_Docket_3690_34_Dudley.pdf	EDR Public Hearing Memo Docket 3690 34 Dudley Street
D	Reference Material	34_Dudley_Street_Combined_Application_materials_received_2-23-2022_web.pdf	34 Dudley Street Docket #3690 Combined Application Materials
ם	Reference Material	Presentation_34_Dudley_Street_Docket_#3690_2022-03-28.pdf	Presentation 34 Dudley Street Docket #3690 03282022
D		Correspondence_from_WEvans_re_Docket_#369034_Dudley_Streceived_3-24-2022.pdf	Correspondence from W. Evans regarding 34 Dudley St. received 03242022
D	Reference Material	Memo_from_Attorney_TFalwell_on_behalf_of_Santini_Realty_Trust_03282022.pdf	Memo from Attorney T. Falwell re Santini Realty Trust Docket #3690 03282022



Town of Arlington, Massachusetts

Department of Planning & Community Development 730 Massachusetts Avenue, Arlington, Massachusetts 02476

Public Hearing Memorandum

The purpose of this memorandum is to provide the Arlington Redevelopment Board and public with technical information and a planning analysis to assist with the regulatory decision-making process.

To: Arlington Redevelopment Board

From: Jennifer Raitt, Secretary Ex Officio

Subject: Environmental Design Review, 34 Dudley Street, Arlington, MA, Docket #3690

Date: March 24, 2022

I. Docket Summary

This is an application by PSI Atlantic Holdings VII, LLC, 530 Oak Court Drive, Memphis, TN, 38177 for 34 Dudley Street, LLC, 34 Dudley Street, Arlington, MA to open Special Permit Docket #3690 for the construction of a self-service storage facility containing between 740 and 780 storage units at 34 Dudley Street, Arlington, MA in the I Industrial District. The opening of the hearing is to allow the Board to review and approve the development under Section 3.4, Environmental Design Review Special Permit of the Arlington Zoning Bylaw.

The proposed building is a five-story, 58-foot tall, 95,706 square foot self-service storage structure. The facility would be staffed from 8:30am to 6:00pm Monday through Friday, with customer access between 6:00am and 10:00pm seven days per week. The facility would have four loading spaces, and 11 parking spaces provided in a surface parking lot. The Applicant is requesting relief from the number of required vehicular and bicycle parking spaces.

Materials submitted for consideration of this application:

- Application for EDR Special Permit, including an Environmental Impact Statement;
- Site photograph documenting existing conditions;
- Renderings of the proposed project, prepared by Premier Storage Investors and michael parker studios, dated February 9, 2022;

- Site Plans, prepared by VHB, dated February 9, 2022;
- Architectural plans and elevations, prepared by illuminate, dated February 9, 2022;
- Sign package, prepared by elro signs, dated December 20, 2021;
- Stormwater Report, prepared by VHB, dated February 2022;
- Stormwater Management System Operations and Maintenance Manual, prepared by VHB, dated February 2022;
- Stormwater Erosion and Sediment Control Plan, prepared by VHB, dated February 2022;
- LEED Scorecard and considerations, prepared by michael parker studios, dated February 15, 2022; and
- Trip generation and parking study, prepared by VHB, dated February 10, 2022.

II. Application of Special Permit Criteria (Arlington Zoning Bylaw, Section 3.3)

1. Section 3.3.3.A.

The use requested is listed as a Special Permit in the use regulations for the applicable district or is so designated elsewhere in this Bylaw.

A self-service storage facility is allowed by Special Permit in the I Industrial District. The Zoning Bylaw, in Section 5.6.1.B, indicates that the district allows uses requiring the manufacture, assembly, processing, or handling of materials which because of their traffic, noise, appearance, odor, or hazards would be disruptive to residential and other business uses. Other uses are allowed if they support the continuation of industrial uses in Arlington.

The Dudley Street industrial area, between Grove and Brattle Streets, is one of the larger industrial areas in Arlington. The I District spans from Grove Street at the Department of Public Works site to just northwest of Brattle Street. Directly south of the site are the Mill Brook and Wellington Park; to the north are the other industrial parcels with two-story buildings along Dudley Street, beyond which is the Minuteman Bikeway. To the east is a three-story commercial/office/warehouse building in the I District, and two three-story apartment buildings in the R5 District. Beyond Wellington Park to the south are the R5, B4, and R6 zoning districts.

The Board can find that this condition is met.

2. Section 3.3.3.B.

The requested use is essential or desirable to the public convenience or welfare.

The requested use is essential and desirable. The second goal in the Master Plan section on economic development is to "Maximize the buildout potential of commercial and industrial properties" (p. 10, 95). This proposal will 740 to 780 units of self-service storage to Arlington. The town has one other self-service storage facility, which is located on Brattle Court. The next nearest self-service storage facilities are in Medford on Route 16

and Cambridge on Concord Avenue. The use would replace an auto body and auto repair facility.

The Board can find that this condition is met.

3. Section 3.3.3.C.

The requested use will not create undue traffic congestion or unduly impair pedestrian safety.

As discussed in more detail under the EDR Circulation Criteria, the Traffic Impact Analysis shows a net reduction in trips to the site. The site presently has two curb cuts. The Applicant is proposing to close one and replace it with a sidewalk as part of the redevelopment of the site and to meet site standards requirements in Section 5.2.6(D). The Applicant proposes replacing the sidewalk along the frontage of the parcel, and installing a stop sign and "STOP" lettering at the parking lot exit. Ingress and particularly egress to the site from Massachusetts Avenue via Grove Street may be challenging for larger vehicles, such as moving trucks, as that intersection lacks a traffic light. This is a current condition for the existing self-service storage facility on Brattle Court as well.

It is not expected that the proposed project will unduly impair pedestrian safety.

4. Section 3.3.3.D.

The requested use will not overload any public water, drainage or sewer system or any other municipal system to such an extent that the requested use or any developed use in the immediate area or in any other area of the Town will be unduly subjected to hazards affecting health, safety, or the general welfare.

The site is developed and currently predominantly impervious. The Applicant proposes to reduce the impervious area on the site from 31,460 square feet to 26,291 square feet (-5,169 square feet). The Stormwater Report by VHB indicates that standards have been met with the proposed stormwater design, which includes a bioretention basin and deep sump hooded catch basin to collect stormwater prior to discharging it into a subsurface infiltration basin with an isolator row to treat stormwater before it is released. In addition, a modest number of landscaped areas will be added to the site resulting in a reduction of impervious area and quantity of stormwater flowing from the site, and an erosion control seed mix and erosion control mat will be installed on sloped areas leading down to Mill Brook.

On March 3, 2022, the Applicant presented a Notice of Intent for the project to the Arlington Conservation Commission. The Commission noted the impacts within the Riverfront Area to Mill Brook, 100-foot Adjacent Upland Resource Area, and buffer zone to the bank of the brook. The Applicant agreed to comply with any operation and maintenance conditions imposed by the Commission, add retainment trenches or berm at the limit of work to add to erosion controls during construction, and calculate the stormwater impacts using the NOAA+ standard. The Commission noted that the project

would improve existing conditions on the site. The proposed project will improve, not overload, public utilities. The Board can find that this condition is met.

5. Section 3.3.3.E.

Any special regulations for the use as may be provided in the Bylaw are fulfilled.

As a condition of any decision for the requested size of the proposed development and the request to exceed the maximum height regulations, the Applicant will need to fulfill the requirements Section 5.6.2.D, which outlines development standards for new development or additions over 50% of the existing footprint. The Applicant proposes to address the standards as described below:

- Renewable Energy Installations: As shown on Sheet A-106, the roof structure will be solar ready, and will be coated with a white roofing membrane to reduce energy and reduce heat buildup.
- Yards: The principal façade is set back 10 feet from the front lot line. As described above, a stormwater management system will be introduced to the site.
- Transparency and Access: At least 50% of the Dudley Street façade is transparent
 at the ground floor, however the Applicant should consider improvements to the
 design treatment of the storefront to clearly define it as a principal entrance.
 Façades along the sides of the building have been articulated through variation in
 color and material. A connection to the sidewalk along Dudley Street from the
 primary entrance has been provided.
- Lighting: Site and building lighting is downcast and provides minimal light overspill
 onto the adjacent site. The Applicant has provided only one light along the front
 façade but should consider an additional light to illuminate the entire sidewalk for
 safety purposes.
- Pedestrian Amenities: Three shade trees (Pyramidal European Hornbeam) are proposed to line the front façade of the building, along with three 4-foot square planters and two benches. The second curb cut will be closed, and the sidewalk along Dudley Street will be reconstructed.
- Erosion and Sedimentation Control: An erosion control plan for all construction activity has been provided on sheets C1.01 and C2.01. Erosion control measures will be inspected weekly throughout construction activity and will remain in place until disturbed earth has been stabilized.
- Exceptions to Maximum Height Regulations: As the proposed building exceeds 39 feet or three stories, the Applicant must meet additional development standards. The residential buffer requirement does not apply to the Industrial District. Regarding sustainable roof infrastructure, the entire roof membrane is white and highly reflective. The Applicant has adequately described their plan to retain and treat 100% of stormwater on site.

Overall, the relationship between the primary entrance and the street insofar as design and lighting treatments could be improved. The Board can find that all other conditions are met.

6. Section 3.3.3.F.

The requested use will not impair the integrity or character of the district or adjoining districts, nor be detrimental to the health or welfare.

Although most of Dudley Street is in the Industrial District, many properties along the street present as single- or two-family buildings, with the exception of the three, three-story buildings to the east of 34 Dudley St. The proposed building departs from the typical residential-style architecture, presenting as a large warehouse with windows only on the front façade. Residential buildings in this district are preexisting nonconforming uses, as no residential uses are allowed by right or by Special Permit except for artist live/workspace, which requires a Special Permit. Compared to the four-story bank of windows, the front entry recedes into the surrounding white E.I.F.S. Attention should be given to drawing more attention to the principal entry through potentially an awning or other projection to protect the entry from inclement weather.

The building features wide, tall panels of pre-finished metal pencil rib panels along the front, side, and rear façades. The Applicant could consider additional architectural detailing along the left front façade and upper stories on the east and rear façades to break up the overall mass of the structure. Additionally, the rear façade will be visible from the adjacent Mill Book and Wellington Park. The Applicant could consider introducing windows or other architectural detailing along the rear façade to minimize the massing of the building. The Applicant could also consider moving from pre-finished metal to prefabricated masonry.

The Applicant is proposing a floor area ratio (FAR) of 2.81 and a height of five stories. The existing building's FAR is 0.32 and is one story in height. The Zoning Bylaw allows a maximum FAR of 3.0 and a height of five stories in this zoning district if the proposal meets the additional requirements outlined in Section 5.6.2.D(7). A highly reflective sustainable roof infrastructure element is proposed, and the Stormwater Report demonstrates the Applicant's plans to retain and treat 100% of stormwater on site.

While the proposed building is larger than most of the other buildings in the Industrial District along Dudley Street, it is also the first proposal received since 2021 Town Meeting voted to amend zoning in the Industrial District to allow increased heights, uses, and FAR, subject to development standards. The proposed building use is in keeping with other uses in the Industrial District and will not impair the integrity or character of the district or the adjoining districts and it will not be detrimental to health or welfare.

7. Section 3.3.3.G.

The requested use will not, by its addition to a neighborhood, cause an excess of the use that could be detrimental to the character of said neighborhood.

As described above, there is only one other self-service storage facility in Arlington, and very few located in adjacent communities. The use will not be in excess or detrimental to the character of the neighborhood. The Board can find this condition is met.

III. Environmental Design Review Standards (Arlington Zoning Bylaw, Section 3.4)

1. EDR-1 Preservation of Landscape

The landscape shall be preserved in its natural state, insofar as practicable, by minimizing tree and soil removal, and any grade changes shall be in keeping with the general appearance of neighboring developed areas.

The existing property is entirely impervious and there is no natural landscape to preserve with the building and impervious paving fully saturating the building lot. The Applicant proposes to replace approximately 5,169 square feet of impervious material with landscaped areas along the property lines. Along the street, three new shade trees will be planted, and three planter boxes will be introduced along the building perimeter. The Board can find that this condition is met.

2. EDR-2 Relation of the Building to the Environment

Proposed development shall be related harmoniously to the terrain and to the use, scale, and architecture of the existing buildings in the vicinity that have functional or visible relationship to the proposed buildings. The Arlington Redevelopment Board may require a modification in massing so as to reduce the effect of shadows on the abutting property in an R0, R1 or R2 district or on public open space.

There are a range of architectural styles in the vicinity. The proposed development is in the I Industrial District which is the dominant zoning district on Dudley Street. Building heights in the vicinity range from single-story to three-story. As the Town's Design Standards indicate, greater height in certain locations can be beneficial, however monolithic façade treatments and flat, blank façades are not permitted. While the "face" of the building visible from Wellington Park is actually the back of the building, additional treatments to diminish the impact of overall building height and appearance should be considered. Further, while the ground floor storefront and front façade meets transparency requirements, its relationship to Dudley Street could be improved. An overall improved building façade treatment addresses and minimizes the building massing would improve the relationship of the building to the environment.

3. EDR-3 Open Space

All open space (landscaped and usable) shall be so designed as to add to the visual amenities of the vicinity by maximizing its visibility for persons passing by the site or

overlooking it from nearby properties. The location and configuration of usable open space shall be so designed as to encourage social interaction, maximize its utility and facilitate maintenance.

As noted above, while there is no landscaped or usable open space requirement in the Industrial District, because this Applicant is requesting to exceed the maximum height regulations, they are subject to Section 5.2.6(D). The proposal includes approximately 5,169 square feet of landscaped open space along property lines, which also provides a buffer between the site and the adjacent Mill Brook. Buffers are not required for Industrial District parcels that do not abut a residential district; however, they are included in this proposal to meet the site development standards. The Board can find that this condition is met.

4. EDR-4 Circulation

With respect to vehicular and pedestrian and bicycle circulation, including entrances, ramps, walkways, drives, and parking, special attention shall be given to location and number of access points to the public streets (especially in relation to existing traffic controls and mass transit facilities), width of interior drives and access points, general interior circulation, separation of pedestrian and vehicular traffic, access to community facilities, and arrangement of vehicle parking and bicycle parking areas, including bicycle parking spaces required by Section 6.1.12 that are safe and convenient and, insofar as practicable, do not detract from the use and enjoyment of proposed buildings and structures and the neighboring properties.

The proposed project includes 11 spaces for vehicles located in a surface parking lot, including one HP van space. An additional four loading bays are provided, bringing the vehicular parking total to 15. Three loading bays are required under Section 6.1.6. Short-term and long-term bicycle parking is provided. Improved sidewalks, curb cuts, and curb treatments are also proposed. Any such proposed improvements in the public right-of-way will require additional review and approval by the Engineering Division.

The parking requirement is for light manufacturing, which requires one space per 1,000 square feet of floor area. The parking required for this use totals 96 vehicular parking spaces. The business will employ two workers, with no more than two being on site at a given time; customers visit the site throughout the day and weekend but generate fewer trips overall than they do for other uses. As such, the Applicant is requesting a reduction in the number of parking spaces provided to 15 spaces per Section 6.1.5 of the Zoning Bylaw and proposes to implement the following three Transportation Demand Management (TDM) strategies to reduce demand for parking: pay a stipend to workers without cars; provide preferential parking for carpooling vehicles; and provide covered bicycle parking and storage. The Applicant should clarify how preferential parking for carpooling vehicles would be identified in the parking lot, and how they envision this being used at a self-service storage facility. The parking reduction, if granted, would require 24 parking spaces total rather than the 24 proposed by the Applicant.

Regarding meeting the long-term bicycle parking requirements, one interior employee bicycle parking space is provided, along with covered bicycle racks for six bikes inside the loading bay area. Four covered short-term bicycle parking spaces are provided at the rear of the parking lot. In comparison, the use requires 96 long term and 77 short-term bicycle parking spaces, therefore the Applicant has requested a reduction in the number of parking spaces provided as the characteristics of the use make the need for additional bicycle parking unlikely. The Board may wish to modify this requirement per Section 6.1.12(A).

Vehicle Parking Requirements				
Light Manufacturing	Square footage	Total Parking Required		
1 space per 1,000 sq. ft.	95,706	96		
Loading spaces	95,706	3		
	Vehicle Parking	Loading Spaces		
Total Required Parking	96	3		
Total Required Parking after Section 6.1.5 Reduction	24	3		
Total Proposed Parking	11	4		
Bicycle Parking Requirements Use Short-Term Parking Long-Term Parking				
Light Manufacturing	77	96		
Total Required Bicycle Parking	77	96		
Total Proposed Bicycle Parking	4	7		

The proposed project has few employees and a low frequency of visitors; therefore, it is likely that the aggregate number of trips to this location will be reduced compared to the property's current use as the Traffic Impact Analysis claims. The Applicant's analysis of trip generation rates for similar sized self-service storage facilities in the region verifies that the average trips generated is fewer than the number of parking spaces provided on-site.

Additional safety measures are provided where the parking lot meets the sidewalk along Dudley Street: "STOP" lettering will be painted on the drive and a stop sign will be installed.

The Traffic Impact Analysis does not address the various ways to access Dudley Street. Access to the site from Massachusetts Avenue and Summer Street is provided via Grove and Brattle Streets. Due to a lack of signaling at the Massachusetts Avenue and Grove Street intersection, egress via Grove Street may be challenging, especially for larger trucks and vans. It may be appropriate for the ARB to request a trip distribution analysis to assess how people will access this site.

Overall, the ARB may want more detailed information regarding circulation around the site to adequately assess the proposal.

5. EDR-5 Surface Water Drainage

Special attention shall be given to proper site surface drainage so that removal of surface waters will not adversely affect neighboring properties or the public storm drainage system. Available Best Management Practices for the site should be employed, and include site planning to minimize impervious surface and reduce clearing and re-grading. Best Management Practices may include erosion control and stormwater treatment by means of swales, filters, plantings, roof gardens, native vegetation, and leaching catch basins. Stormwater should be treated at least minimally on the development site; that which cannot be handled on site shall be removed from all roofs, canopies, paved and pooling areas and carried away in an underground drainage system. Surface water in all paved areas shall be collected in intervals so that it will not obstruct the flow of vehicular or pedestrian traffic and will not create puddles in the paved areas. In accordance with Section 3.3.4., the Board may require from any Applicant, after consultation with the Director of Public Works, security satisfactory to the Board to ensure the maintenance of all stormwater facilities such as catch basins, leaching catch basins, detention basins, swales, etc. within the site. The Board may use funds provided by such security to conduct maintenance that the Applicant fails to do. The Board may adjust in its sole discretion the amount and type of financial security such that it is satisfied that the amount is sufficient to provide for any future maintenance needs.

The site development plan, Stormwater Report, Stormwater Management System Operations and Maintenance Manual, and Stormwater Erosion and Sediment Control Plan show a clear strategy to address, store, and treat stormwater from the site before releasing it Mill Brook and Dudley Street. This is an improvement over the existing conditions. The proposed design complies with the Town's current stormwater bylaw. Final design materials must be submitted for review and approval by the Town Engineer.

6. EDR-6 Utilities Service

Electric, telephone, cable TV, and other such lines of equipment shall be underground. The proposed method of sanitary sewage disposal and solid waste disposal from all buildings shall be indicated.

All new utility service will be underground. The Board can find that this condition is met.

7. EDR-7 Advertising Features

The size, location, design, color, texture, lighting and materials of all permanent signs and outdoor advertising structures or features shall not detract from the use and enjoyment of proposed buildings and structures and the surrounding properties.

The project site is in the Industrial Sign District. The proposal exceeds the total number of signs allowable by right. The Applicant submitted a sign package with a number of primary and incidental signs proposed:

- Sign 1: One wall sign with LED illuminated channel lettering located over the main entrance measuring 180 square feet;
- Sign 2: One wall sign with LED illuminated channel lettering located over the front side façade measuring 180 square feet;
- Sign 3: One non-illuminated wayfinding sign measuring 1.22 square feet pinmounted over the primary entrance;
- Sign 4: One non-illuminated wayfinding sign measuring 3.97 square feet indicating the loading area;
- Sign 5: One illuminated freestanding monument sign measuring 23.8 square feet installed at the northeast corner of the site near the intersection of Dudley Street and the driveway. One ADA entrance plaque measuring 0.25 square feet; and
- Signs 6-8: Additional parking lot signage to indicate carpool and HP parking spots, and a stop sign at the egress to Dudley Street.

Per Section 6.2.1(E), non-illuminated signs providing incidental information regarding directions to services and facilities are allowed, provided they do not exceed an aggregate of six square feet in sign area, therefore signs three and four are allowed by right. Per the same section, signs intended to be readable from within a parking area but not readable beyond the boundaries of the lot or parcel upon which they are located are allowed, therefore signs six through eight are permitted. Per Section 6.2.2(C), the ARB may grant a Special Permit to allow more than the number of signs or signs exceeding the dimensional maximums allowed, "provided the architecture of the building, the location of the building relative to the street, or the nature of the use being made of the building is such that an additional sign or signs of a larger size should be allowed in the public interest."

In terms of sign area, the two wall signs total 360 square feet, exceeding the maximum 40 square feet per business allowed in the Industrial Sign District. The height of both wall signs is higher than 25 feet above grade, exceeding the maximum wall sign height allowed in Section 6.2.5(D)(10). Sign 5, the freestanding monument sign, complies with the maximum dimensional sign area of 24 square feet and height, however monument signs must be non-illuminated or externally illuminated, therefore the proposed illumination is not permitted. Sign 5 is set back to the required setback of 5 feet from the property line.

Overall, the aggregate square footage of signage exceeds what is allowed per Section 6.2.5(D)(10) by 320 square feet. The Applicant has not proposed any window signage, however any intended signage including hours of operation and logos on entryways needs to be included in the sign package. Any additional window signage or incidental signage would add to the excess of the six feet of allowed incidental signage.

8. EDR-8 Special Features

Exposed storage areas, exposed machinery installations, service areas, truck loading areas, utility buildings and structures, and similar accessory areas and structures shall be subject to such setbacks, screen plantings or other screening methods as shall reasonably be required to prevent their being incongruous with the existing or contemplated environment and the surrounding properties.

The roofing plan provided indicates that roof structures are appropriately set back and that a parapet will provide screening of said structures. The site plan shows an enclosed dumpster area located in the surface parking. The location of recycling areas has not been provided. An excess of loading areas has been provided due to the nature of the use.

9. EDR-9 Safety

With respect to personal safety, all open and enclosed spaces shall be designed to facilitate building evacuation and maximize accessibility by fire, police and other emergency personnel and equipment. Insofar as practicable, all exterior spaces and interior public and semi-public spaces shall be so designed to minimize the fear and probability of personal harm or injury by increasing the potential surveillance by neighboring residents and passersby of any accident or attempted criminal act.

The proposed building has been designed to meet all relevant health and safety codes. A lighting plan was provided as part of the plan set; however, the Applicant should consider providing additional lighting along the sidewalk in front of the building. Additionally, as customer access hours extend beyond the hours during which the building will be staffed, the Applicant should provide additional details regarding site security measures to assess safety criteria.

10. EDR-10 Heritage

With respect to Arlington's heritage, removal or disruption of historic, traditional or significant uses, structures or architectural elements shall be minimized insofar as practical whether these exist on the site or on adjacent properties.

The existing structure is not listed on the *Inventory of Historically or Architecturally Significant Properties in the Town of Arlington* nor is it under the jurisdiction of the Arlington Historical Commission. As such, the site contains no historic, traditional, or significant uses, structures, or architectural elements. The Board can find that this condition is met.

11. EDR-11 Microclimate

With respect to the localized climatic characteristics of a given area, any development which proposes new structures, new hard surface, ground coverage or the installation of machinery which emits heat, vapor or fumes shall endeavor to minimize insofar as practicable, any adverse impacts on light, air and water resources or on noise and temperature levels of the immediate environment.

Based upon materials provided in the application, there will be no adverse impacts on air and water resources or on temperature levels of the immediate environment. The Board can find that this condition is met.

12. EDR-12 Sustainable Building and Site Design

Projects are encouraged to incorporate best practices related to sustainable sites, water efficiency, energy and atmosphere, materials and resources, and indoor environmental quality. Applicants must submit a current Green Building Council Leadership in Energy and Environmental Design (LEED) checklist, appropriate to the type of development, annotated with narrative description that indicates how the LEED performance objectives will be incorporated into the project.

The proposed building generates a LEED score that demonstrates the building could be LEED platinum certified. The Board can find that this condition is met.

IV. Findings

The following findings are for the Board's consideration:

- 1. The ARB finds that the project is consistent with Environmental Design Review per Section 3.4 of the Zoning Bylaw.
- 2. The ARB finds that the project is consistent with the development standards for exceeding the maximum height regulations per Section 5.6.2.D(7).
- 3. The ARB finds that the parking reduction and TDM measures justify the parking reduction per Section 6.1.5.

V. Conditions

A. General

- The final design, sign, exterior material, landscaping, and lighting plans shall be subject to the approval of the Arlington Redevelopment Board or administratively approved by the Department of Planning and Community Development. Any substantial or material deviation during construction from the approved plans and specifications is subject to the written approval of the Arlington Redevelopment Board.
- Any substantial or material deviation during construction from the approved plans and specifications is subject to the written approval of the Arlington Redevelopment Board.

Docket #: 3690 34 Dudley Street Page 13 of 13

- 3. The Board maintains continuing jurisdiction over this permit and may, after a duly advertised public hearing, attach other conditions or modify these conditions as it deems appropriate in order to protect the public interest and welfare.
- 4. Snow removal from all parts of the site, as well as from any abutting public sidewalks, shall be the responsibility of the owner and shall be accomplished in accordance with Town Bylaws.
- 5. Trash shall be picked up only on Monday through Friday between the hours of 7:00 am and 6:00 pm. All exterior trash and storage areas on the property, if any, shall be properly screened and maintained in accordance with Article 30 of Town Bylaws.
- 6. The Applicant shall provide a statement from the Town Engineer that all proposed utility services have adequate capacity to serve the development. The Applicant shall provide evidence that a final plan for drainage and surface water removal has been reviewed and approved by the Town Engineer.
- 7. Upon installation of landscaping materials and other site improvements, the Applicant shall remain responsible for such materials and improvement and shall replace and repair as necessary to remain in compliance with the approved site plan.
- 8. All utilities serving or traversing the site (including electric, telephone, cable, and other such lines and equipment) shall be underground.
- 9. Upon the issuance of the building permit the Applicant shall file with the Building Inspector and the Department of Community Safety the names and telephone numbers of contact personnel who may be reached 24 hours each day during the construction period.
- 10. Building signage will be filed with and reviewed and approved by the Department of Planning and Community Development and Inspectional Services.

B. Special Conditions

ROBERT J. ANNESE

ATTORNEY AT LAW

February 22, 2022

VIA HAND DELIVERED and E-MAIL: jraitt@town.arlington.ma.us

Jennifer Raitt, Director Planning & Community development 730 Mass Ave Annex Arlington, MA 02476

RE: 34 Dudley Street, LLC

Property Address: 34 Dudley Street, Arlington, MA

Dear Ms. Raitt:

I am sending along an application filed under Environmental Design Review for real estate located at 34 Dudley Street.

I am also sending along my client's filing fee in the amount of \$19,641.20.

I will have the original documents delivered to your office with the filing fee this morning.

I am given to understand based upon my last conversation with you that the ARB hearing in connection with this matter will occur on March 28, 2022.

If you have any questions or matters that you believe have not been addressed in the filing, would you please let me know.

Thank you for your cooperation.

Very truly yours,

RJA:lm

Enclosures

TOWN CLERK'S PLANNING & COMMUNITY



TOWN OF ARLINGTON

REDEVELOPMENT BOARD

APPLICATION OF Special Permit in Accordance with Environmental Design Review Procedures (Section 3.4 of the Zoning Bylaw)

			RECEIVED Docket No. 3690
	Property Address 34 Dudley Street		F & Rose O Face F V Son Rol
	Name of Record Owner(s) 34 Dudley Street Address of Owner 34 Dudley Street	Street, LLC	Phone <u>c/o Robert Annese 781-6</u> 46-4911 Arlington, MA 02476
	Street		City, State, Zip
	Name of Applicant(s) (if different than ab Address _530 Oak Court Drive, Men	ove) PSI Atlar	ntic Holdings VII, LLC Phone c/o Robert Annese 781-646-4
	Status Relative to Property (occupant, pur	chaser, etc.) _ Pure	chaser under agreement
		eet - 055.0 000	
		ssor's Block Plan, I	Block, Lot No.
	Deed recorded in the Registry of deeds, B ★ registered in Land Registration Office	ook <u>68658</u> , Pa e, Cert. No. <u>26402</u>	nge 160 , and 26 , in Book 1502 , Page 160
	Present Use of Property (include # of dwe	elling units, if any)	Automobile Repair
	Proposed Use of Property (include # of dv 740 and 780 storage units	welling units, if any	Self-storage facility containing between
	Permit applied for in accordance with	Sec. 3.4	Environmental design review
	the following Zoning Bylaw section(s)	Sec. 6.1.5 Sec. 6.1.12	Parking reduction Bicycle parking reduction
		section(s)	title(s)
		your project and p	provide any additional information that may aid the ARB in that you feel you should be granted the requested permission.
			is that do not apply) e owner(xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx
			-or- no unfavorable action has been taken by the Zoning Board
f Ap	opeals on a similar application regarding th	is property within	the last two years. The applicant expressly agrees to comply
Board	any and all conditions and qualifications imp I, should the permit be granted.) SI Atlanylic/Holdings V/II, LL.	osed upon this per	rmission, either by the Zoning Bylaw or by the Redevelopment
	its attorney,		
	ert J. Annese, Esquire		
	1 Massachusetts Avenue, Arlington, N	ЛА 02476	781-646-4911
ddre			Phone



Town of Arlington Redevelopment Board Application for Special Permit in accordance with Environmental Design Review (Section 3.4)

Required Submittals Checklist

Two full sets of materials and one electronic copy are required. A model may be requested. Review the ARB's Rules and Regulations, which can be found at <u>arlingtonma.gov/arb</u>, for the full list of required submittals.

X	Dimensional and Parking Information Form (see attached)		
<u>x</u>	Site plan of proposal		
	Model, if required		
X	Drawing of existing conditions		
X	Drawing of proposed structure		
<u>x</u>	Proposed landscaping. May be incorporated into site plan	ו	
<u>X</u>	Photographs		
<u>x</u>	Impact statement		
<u>×</u>	Application and plans for sign permits		
<u>x</u>	Stormwater management plan (for stormwater management with new construction	ent during construction for projects	
FOR (OFFICE USE ONLY		
***************************************	_ Special Permit Granted	Date:	
	Received evidence of filing with Registry of Deeds	Date:	
	Notified Building Inspector of Special Permit filing	Date:	

34 Dudley Street Arlington, MA

Environmental Impact Statement

The Applicant, PSI Atlantic Holdings VII, LLC proposes to construct a self-storage facility at 34 Dudley Street.

The property which is in the Industrial Zone has been used as an automobile repair and related automobile facility for many years.

The existing property contains 10,921 square feet and 1,152 square feet of detached garage space for a total of 12,073 square feet.

The project involves the construction of a five story, 95,706 square feet self-storage warehouse building along with eleven (11) surface parking spaces (one of which will be accessible) on the site and four (4) loading bays for a total of fifteen (15) spaces for the facility.

The exterior building materials will be comprised of metal paneling, brick, and glass. (See LEED Considerations dated February 15, 2022, of Michael Parker Studios.)

Access to the site would be provided by a single curb cut on Dudley Street on the ease side of the site and the existing curb cut on the west side of the site will be closed.

The office hours for the self-storage facility would be 8:30 a.m. to 6:00 p.m. Monday through Friday and customer access hours would be 6:00 a.m. to 10:00 p.m. each day of the week.

There would be one full-time employee and one part-time employee.

The traffic report of VHB dated February 10, 2022, submitted as part of the Applicant's proposal indicates on Page 1 that the existing use of the property would be classed as an Automobile Care Center and that the proposed use would be classified as a mini warehouse.

Table 1 of the traffic study indicates that the proposed self-storage facility is expected to generate fewer peak hour trips to and from the site when compared to the current automotive use at the site. For example, daytime, weekday traffic to the site currently would consist of a total of 27 vehicle trips while the proposed self-storage use

would generate 9. Weekday p.m. vehicle trips currently to and from the site total 38 vehicle trips and the proposed self-storage use would total 15.

Similar self-storage facilities exist at 490 Eastern Avenue and 650 Eastern Avenue in Malden and 171 Bear Hill Road in Waltham, and as Table 2 shows the traffic volumes counted at those three comparable sites are substantially lower than the traffic volume generated by the present automotive use at the 34 Dudley Street property.

With respect to parking, the project includes eleven (11) parking spaces and four (4) loading bays for a total of fifteen (15) spaces.

The Zoning Bylaw provides for one parking space per 1,000 square feet of building aera. The Applicant will not be able to satisfy that provision of the Bylaw as the property will contain 95,694 square feet of building space which would equate to approximately ninety-six (96) required parking spaces, however both the limited number of employees on site and the traffic study report indicate that there will not be significant traffic at the site with the proposed project.

Consequently, the Applicant will be seeking zoning relief from Section 6.1.5 i.e., the Parking and Loading Space Standards required by the Bylaw with respect to its proposal.

In connection with the requested relief the Applicant would propose the following plan containing at least 3 TDM strategies:

- 1. Pay a stipend to workers without cars;
- 2. Provide preferential for carpooling vehicles; and
- 3. Provide cover bicycle parking and storage.

The property is in the inland wetland district and as a result the Applicant has also filed a Notice of Intent with the Conservation Commission and will proceed with a hearing before the Conservation Commission in connection with the Notice of Intent on March 3, 2022.

The proposal provides for 740-780 storage units within the five-story building.

The construction will comply with the dimensional and zoning provisions of the Zoning Bylaw as follows:

Zoning Regulation Requirements	Required	Provided
Maximum Front Yar Setback	10 Feet	10.0 Feet
Minimum Front Yard Setback	10 Feet	10.0 Feet

Side Yard Setback	10 Feet	10.0 Feet	
Rear Yard Setback	10 Feet	12.5 Feet	
Maximum Floor area Ratio	3.0	2.81	
Maximum Building Height	5 Stories	58 Feet, 5 Stores	
(<u>See</u> Dimensional form submitted as part of the Applicant's proposal)			

The proposal also provides bicycle parking with short term spaces totaling fifty-seven (57) spaces and long-term spaces totaling seventy-seven (77). The VHB plan depicts covered bicycle racks at the rear of the building and shows interior bicycle parking in the front portion of the building behind the sales office.

There are also interior wall mounted bicycle racks depicted VHB plan and referred in the arch plans.

The Applicant will be seeking relief from the bicycle parking requirements contained within the provisions of Section 6.1.12 of the Zoning Bylaw as part of its application.

The building sign and summary shown on the VHB plan shows five (5) proposed signs, four (4) of which will be wall signs and one (1) a free-standing sign.

The building sign summary is as follows:

			Specific	ation	
ID Number	Sign Type	Width	Height	Area	Desc.
1	Wall Sign	288"	90"	180 SF	CUBESMART
	_				Self-Storage
2	Wall Sign	288"	90"	180 SF	CUBESMART
					Self-Storage
3	Wall Sign	29.25"	6"	1.22 SF	OFFICE
4	Wall Sign	52"	11"	3.97 SF	LOADING
5	Freestanding sign	78"	44"	23.8 SF	CUBESMART
	• •				Self-Storage

The Applicant has also prepared and submitted as part of its proposal, a Stormwater Report of VHB dated February 2022, the substance of which indicates that with respect to the existing conditions at the property the site is predominantly impervious with generally flat topography, except that just to the south of the southerly property boundary there is a steep slope down to Millbrook. (See Page 4 i.e., drainage conditions)

The proposed drainage conditions as depicted in Figure 3 of the Stormwater Report indicates that Low Impact Development (LID) techniques and stormwater Best Management Practices (BMPs) implemented into the site design include reduction of impervious areas, minimized disturbance to existing trees and vegetation and a bioretention basin. The bioretention basin has been incorporated to collect stormwater from the parking area. The Stormwater Report indicates that in general stormwater from the proposed impervious surfaces is collected in a bioretention basin or deep sump hooded catch basins, prior to being discharged into a subsurface infiltration basin with an isolator row. The deep sump hooded catch basin and isolator row provide pretreatment prior to final treatment by the infiltration basin.

The report further indicates that the subsurface infiltration basin has an outlet control structure to control the rates of flow and ensure proper water quality volume, prior to discharging to the existing pipe discharge to the south of the property towards Mill Brook.

There is an anticipated net reduction of approximately 975 gpd of waste water generation and 1,070 gpd of water demand (-81%) with the proposed project according to the sewer and water calculations of the Applicant's team as follows:

Table 1.1 Wastewater Generation

manuse on his comment	Use	Unit Flow ¹	Total Units	Estimated Wastewater Generation	Estimated Water Demand
Existing	Autobody (Service	Websites on the		1,200 gpd	1,300 gpd
	S ta tion)	150 gpd/bay	8 bays		
Proposed	Dry Storage (Self-	15		225 gpd	248 gpd
	Storage Facility)	gpd/person	15 persons	\ }	

^{1.} Sewer design Unit Flow rates and Use categories are taken from MassDEP 310 CMR 15.00 section 203.

The Applicant suggests to the Members of Board that their proposal is in conformity with provisions of Section 3.3 of the Zoning Bylaw with respect to the decision criteria for the Board to grant a Special Permit.

It is suggested that the Board can make the following findings in granting a Special Permit for the Project:

1. The use requested is listed as a special permit in the use regulations for the applicable district or is so designated elsewhere in the Bylaw.

The property is in an I Zone, and the proposed use is an allowed use in the I Zone.

2. The requested use is essential or desirable to the public convenience or welfare

Arlington does not have a comparable storage facility and residents who wish to store property, particularly residents who may be living in smaller apartments or condominiums with no access to extra space would be served well by having access to a storage facility.

3. The requested use will not create undue traffic congestion or unduly impair pedestrian safety.

The requested use will not create undue traffic congestion or unduly impair pedestrian safety. The traffic report of VHB demonstrates that there will not be any undue traffic congestion or any adverse impairment of pedestrian safety with respect to the proposed project.

4. The requested use will not overload any public water, drainage or sewer system or any other municipal systems to such an extent that the requested use or any developed use int eh immediate area or in any other area of the Town will be unduly subjected to hazards affecting health, safety, or the general welfare.

The requested use will not overload any public water, drainage or sewer system or any other municipal systems.

Any special regulations for the use as may be provided in this Bylaw are fulfilled.

Any such regulations will be fulfilled.

6. The requested use will not impair the integrity or character of the district or adjoining districts, nor be detrimental to the health, morals, or welfare.

The proposed storage facility will be located in the industrial zone and the industrial zone has been created for uses such as the proposed storage facility. The proposed construction will be attractive and will be integrated nicely into the neighborhood.

7. The requested use will not, by its addition to a neighborhood, cause an excess of the particular use that could be detrimental to the character of said neighborhood.

The Applicant is unaware of any similar facility in the Town and the requested use will not by its addition to the industrial neighborhood cause an excess of the use that would be detrimental to the character of the neighborhood.

For all of the above reasons the Applicant respectfully requests that the Arlington Redevelopment Board grant the requested zoning relief under Environmental Design Review filed by PSI Atlantic Holdings VII, LLC.

PSI Atlantic Holdings VII, LLC

By its attorney,

Robert J. Annese, Esquire

BBO#: 019880

1171 Massachusetts Avenue

Arlington, MA 02476

781-646-4911

781-646-4910 – facsimile law@robertannese.com

DATED: February 22, 2022

TOWN OF ARLINGTON

Dimensional and Parking Information for Application to The Arlington Redevelopment Board

Property Location	34 Dudley Street	
-------------------	------------------	--

Owner: 34 Dudley Street LLC Address: 34 Dudley Street, Arlington, MA 02476

Present Use/Occupancy: No. of Dwelling Units:
AutoBody Shop / 0 Dwelling Units

Proposed Use/Occupancy: No. of Dwelling Units:

Self-Storage / 0 Dwelling Units

Address: 34 Dudley Street, Arlington,
Uses and their gross square feet:
AutoBody / 10,921 SF
Uses and their gross square feet:
Self-Storage / 95,706 SF

Docket No.

Zoning District Industrial (I)

Lot Size				
Frontage				
Floor Area Ratio				
Lot Coverage (%), where applicable				
Lot Area per Dwelling Unit (square feet)				
Front Yard Depth (feet)				
Side Yard Width (feet) right side				
left side				
Rear Yard Depth (feet)				
Height				
Stories				
Feet				
Open Space (% of G.F.A.)				
Landscaped (square feet)				
Usable (square feet)				
Parking Spaces (No.)				
Parking Area Setbacks (feet), where applicable				
Loading Spaces (No.)				
Type of Construction				
Distance to Nearest Building				

Present Conditions	Proposed Conditions	Min. or Max. Required by Zoning for Proposed Use
0.783-Ac	0.783-Ac	min. N/A
129.01 Ft	129.01 Ft	_{min.} N/A
0.32	2.81	_{max.} 3.0
92.1%	76.8%	_{max.} N/A
N/A	N/A	min. N/A
57.0 Ft	10 Ft	_{min.} 10 Ft
10.5 Ft	10 Ft	_{min.} 10 Ft
0.0 Ft	10 Ft	_{min.} 10 Ft
6.1 Ft	12.5 Ft	_{min.} 10 Ft
		max. 65 Ft /39 Ft
1	5	stories 5/3
23.8 Ft	58 Ft	_{feet} 65 Ft /39 Ft
23.1%	8.2%	min. N/A
2,527 SF	7,127 SF	(s.f.) N/A
0 SF	765 SF	(s.f.) N/A
23	11	_{min.} 96
0 Ft	5.3 Ft	_{min.} 5 / 10
UNK	4	_{min.} 3
4'+/-	14'+/-	min.







SELF STORAGE

Arlington, MA

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VIEW 2
Morning









Arlington, MA

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VIEW 3 Afternoon







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VIEW 3
Morning







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Site Plans

Issued for Local Approvals February 9, 2022 Date Issued February 9, 2022 Latest Issue

Proposed Self Storage Facility

34 Dudley Street Arlington, Massachusetts

Owner

34 Dudley Street LLC 34 Dudley Street Arlington, MA 02476

Applicant

PSI Atlantic Arlington MA, LLC 530 Oak Court Drive Suite 155 Memphis, TN 38117

Assessor's Map: 55 Lot: 2-39.B



Sheet Index							
No.	Drawing Title	Latest Issue					
C1.01	Legend and General Notes	2/9/2022					
C2.01	Site Preparation Plan	2/9/2022					
C3.01	Layout and Materials Plan	2/9/2022					
C4.01	Grading, Drainage, and Erosion Control Plan	2/9/2022					
C5.01	Utility Plan	2/9/2022					
C6.01-C6.	03 Site Details	2/9/2022					
L1.01	Planting Plan	2/9/2022					
L2.01	Planting Details	2/9/2022					

Reference Drawings						
No.	Drawing Title	Latest Issue				
Sv-1	Existing Conditions Plan of Land	11/5/202				
SL-1	Site Lighting Plan	2/9/2022				
A-101 to A-106	Floor Plans	2/9/2022				
A-201 to A-202	Exterior Elevations	2/9/2022				



Suite 200 Bedford, NH 03110 603.391.3900

Michael Parker Studios, PLLC VHB 13755 Thompson Place Drive 101 Walnut Street Mint Hill, NC 28227 704.578.2851

GeoEngineers, Inc. 239 Causeway Street Boston, MA 02114 617.749.9227

PO Box 9151 Watertown, MA 02471 617.924.1770

Exist.	Prop.		Exist.	Prop.	
	<u> </u>	DD ODEDTY LINE			CONCRETE
		PROPERTY LINE		[4,5, a) [48676.5]	HEAVY DUTY PAVEMENT
		PROJECT LIMIT LINE			BUILDINGS
		RIGHT-OF-WAY/PROPERTY LINE			
		EASEMENT			RIPRAP
		BUILDING SETBACK		%%%% 	CONSTRUCTION EXIT
10+00	10+00	PARKING SETBACK	27.35 TC×	27.35 TC×	TOP OF CURB ELEVATION
		BASELINE	26.85 BC×	26.85 BC×	BOTTOM OF CURB ELEVATION
		CONSTRUCTION LAYOUT	132.75 ×	132.75 ×	SPOT ELEVATION
		ZONING LINE	45.0 TW 38.5 BW	45.0 TW 38.5 BW	TOP & BOTTOM OF WALL ELEVATION
		TOWN LINE	-	50.5 BW	BORING LOCATION
		LIMIT OF DISTURBANCE	Ě		TEST PIT LOCATION
<u>&</u> _ ·		WETLAND LINE WITH FLAG	₩ W	→ MW	MONITORING WELL
		FLOODPLAIN			
		BORDERING LAND SUBJECT	——UD ——	——UD——	UNDERDRAIN
BLSF		TO FLOODING	12"D	12″D→	DRAIN
ВZ		WETLAND BUFFER ZONE	6"RD	6"RD—►	ROOF DRAIN
NDZ		NO DISTURB ZONE	12"S	12"S	SEWER
200'RA		200' RIVERFRONT AREA	FM	<u>FM</u>	FORCE MAIN
			—— OHW ———	——— OHW ———	OVERHEAD WIRE
		GRAVEL ROAD	6"W	6"W	WATER
EOP	<u>EOP</u>	EDGE OF PAVEMENT	4"FP	4"FP	FIRE PROTECTION
BB	BB	BITUMINOUS BERM		2"DW	DOMESTIC WATER
BC	BC	BITUMINOUS CURB	3"G	——-G——	GAS
CC	CC	CONCRETE CURB	——Е——	——Е——	ELECTRIC
	CG	CURB AND GUTTER	STM	STM	STEAM
CC	ECC	EXTRUDED CONCRETE CURB	——Т——	——т—	TELEPHONE
CC	<u>MCC</u>	MONOLITHIC CONCRETE CURB	———FA———	——FA——	FIRE ALARM
CC	PCC	PRECAST CONC. CURB	CATV		CABLE TV
SGE	SGE	SLOPED GRAN. EDGING			CATCULBACINI CONICENTRIC
VGC	VGC	VERT. GRAN. CURB			CATCH BASIN CONCENTRIC
		LIMIT OF CURB TYPE			CATCH BASIN ECCENTRIC
		SAWCUT			DOUBLE CATCH BASIN CONCENTRIC
٧.			-		DOUBLE CATCH BASIN ECCENTRIC
(//////		BUILDING			GUTTER INLET
] EN	BUILDING ENTRANCE	0	•	DRAIN MANHOLE CONCENTRIC
] ◀LD	LOADING DOCK	(D)		DRAIN MANHOLE ECCENTRIC
0	•	BOLLARD	=TD=		TRENCH DRAIN
D	D	DUMPSTER PAD	_co	_co	PLUG OR CAP
0	•	SIGN	•	•	CLEANOUT
	=	DOUBLE SIGN			FLARED END SECTION
					HEADWALL
тт		STEEL GUARDRAIL	(\$)	lacktriangle	SEWER MANHOLE CONCENTRIC
		WOOD GUARDRAIL	S		SEWER MANHOLE ECCENTRIC
			 CS ©	 CS ●	CURR CTOR 0: POY
		PATH	₩V ⊚	WV	CURB STOP & BOX
W \	~~~~	TREE LINE	TSV	⊙ TSV	WATER VALVE & BOX
-X X	-x x -	WIRE FENCE	→	— →	TAPPING SLEEVE, VALVE & BOX
-00	•	FENCE	HYD	HYD	FIRE DEPARTMENT CONNECTION
		STOCKADE FENCE	WM	® WM	FIRE HYDRANT
000000	∞	STONE WALL	PIV	⊡ PIV	WATER METER
		RETAINING WALL	•	•	POST INDICATOR VALVE
		STREAM / POND / WATER COURSE			WATER WELL
		DETENTION BASIN	GG O	GG	GAS GATE
		HAY BALES	GM □	GM ⊡	GAS METER
——×——	——×——	SILT FENCE	E	● EMH	ELECTRIC MANHOLE
· C:::::> ·	· C::::::> ·	SILT SOCK / STRAW WATTLE	EM □	EM	ELECTRIC METER
4	 4 	MINOR CONTOUR	<u> </u>	*	LIGHT POLE
— — 20 — —	20	MAJOR CONTOUR	<u> </u>	→ TMH	
(10)	<u>(10)</u>	DADVING COUNT		_	TELEPHONE MANHOLE
(10)	(10)	PARKING COUNT	T	T	TRANSFORMER PAD
P3.4	(C10)	COMPACT PARKING STALLS	-0-	•	UTILITY POLE
DYL	DYL	DOUBLE YELLOW LINE	0-	•-	GUY POLE
SL	SL	STOP LINE	Ţ	<u> </u>	
		CROSSWALK	HH	HH	GUY WIRE & ANCHOR
		ACCESSIBLE CURB RAMP	PB	₽B ⊡	HAND HOLE
Ŀ.	<u> </u>	ACCESSIBLE PARKING			PULL BOX
VAN	VAN	VAN-ACCESSIBLE PARKING			
VAN	VAN				MATCHLINE

Abbreviations

Ab	brevia	itions
	General	
	ABAN	ABANDON
	ACR	ACCESSIBLE CURB RAMP
	ADJ	ADJUST
	APPROX	APPROXIMATE
	BIT	BITUMINOUS
	BS	BOTTOM OF SLOPE
	BWLL	BROKEN WHITE LANE LINE
	CONC	CONCRETE
	DYCL	DOUBLE YELLOW CENTER LINE
	EL	ELEVATION
	ELEV	ELEVATION
	EX	EXISTING
	FDN	FOUNDATION FIRST FLOOR FLEWATION
	FFE	FIRST FLOOR ELEVATION
	GRAN	GRANITE
	GTD	GRADE TO DRAIN
	LA	LANDSCAPE AREA
	LOD	LIMIT OF DISTURBANCE
	MAX	MAXIMUM
	MIN	MINIMUM
	NIC	NOT IN CONTRACT
	NTS	NOT TO SCALE
	PERF	PERFORATED
	PROP	PROPOSED
	REM	REMOVE
	RET	RETAIN
	R&D	REMOVE AND DISPOSE
	R&R	REMOVE AND RESET
	SWEL	SOLID WHITE EDGE LINE
	SWLL	SOLID WHITE LANE LINE
	TS	TOP OF SLOPE
	TYP	TYPICAL
	Utility	
	СВ	CATCH BASIN
	СМР	CORRUGATED METAL PIPE
	СО	CLEANOUT
	DCB	DOUBLE CATCH BASIN
	DMH	DRAIN MANHOLE
	CIP	CAST IRON PIPE
	COND	CONDUIT
	DIP	DUCTILE IRON PIPE
	FES	FLARED END SECTION
	FM	FORCE MAIN
	F&G	FRAME AND GRATE
	F&C	FRAME AND COVER
	GI	GUTTER INLET
	GT	GREASE TRAP
	HDPE	HIGH DENSITY POLYETHYLENE PIPE
	НН	HANDHOLE
	HW	HEADWALL
	HYD	HYDRANT
	INV	INVERT ELEVATION
	I=	INVERT ELEVATION
	LP	LIGHT POLE
	MES	METAL END SECTION
		POST INDICATOR VALVE
		PAVED WATER WAY
		POLYVINYLCHLORIDE PIPE
	RCP	REINFORCED CONCRETE PIPE
	R=	RIM ELEVATION
		RIM ELEVATION
		SEWER MANHOLE
	TSV	TAPPING SLEEVE, VALVE AND BOX
	UG	UNDERGROUND
	Ju	CHEROMOUND

UTILITY POLE

Notes

General

- 1. CONTRACTOR SHALL NOTIFY "DIG-SAFE" (1-888-344-7233) AT LEAST 72 HOURS BEFORE EXCAVATING.
- 2. CONTRACTOR SHALL BE RESPONSIBLE FOR SITE SECURITY AND JOB SAFETY. CONSTRUCTION ACTIVITIES SHALL BE IN ACCORDANCE WITH OSHA STANDARDS AND LOCAL REQUIREMENTS.
- ACCESSIBLE ROUTES, PARKING SPACES, RAMPS, SIDEWALKS AND WALKWAYS SHALL BE CONSTRUCTED IN CONFORMANCE WITH THE FEDERAL AMERICANS WITH DISABILITIES ACT AND WITH STATE AND
- 4. AREAS DISTURBED DURING CONSTRUCTION AND NOT RESTORED WITH IMPERVIOUS SURFACES (BUILDINGS, PAVEMENTS, WALKS, ETC.) SHALL RECEIVE 6" INCHES LOAM AND SEED.
- 5. WITHIN THE LIMITS OF THE BUILDING FOOTPRINT, THE SITE CONTRACTOR SHALL PERFORM EARTHWORK OPERATIONS REQUIRED UP TO SUBGRADE ELEVATIONS.

LOCAL LAWS AND REGULATIONS (WHICHEVER ARE MORE STRINGENT).

- WORK WITHIN THE LOCAL RIGHTS-OF-WAY SHALL CONFORM TO LOCAL MUNICIPAL STANDARDS. WORK WITHIN STATE RIGHTS-OF-WAY SHALL CONFORM TO THE LATEST EDITION OF THE STATE
- HIGHWAY DEPARTMENTS STANDARD SPECIFICATIONS FOR HIGHWAYS AND BRIDGES. 7. UPON AWARD OF CONTRACT, CONTRACTOR SHALL MAKE NECESSARY CONSTRUCTION NOTIFICATIONS AND APPLY FOR AND OBTAIN NECESSARY PERMITS, PAY FEES, AND POST BONDS ASSOCIATED WITH THE WORK INDICATED ON THE DRAWINGS, IN THE SPECIFICATIONS, AND IN THE CONTRACT

DOCUMENTS. DO NOT CLOSE OR OBSTRUCT ROADWAYS, SIDEWALKS, AND FIRE HYDRANTS, WITHOUT

- 8. TRAFFIC SIGNAGE AND PAVEMENT MARKINGS SHALL CONFORM TO THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES.
- 9. AREAS OUTSIDE THE LIMITS OF PROPOSED WORK DISTURBED BY THE CONTRACTOR'S OPERATIONS SHALL BE RESTORED BY THE CONTRACTOR TO THEIR ORIGINAL CONDITION AT THE CONTRACTOR'S
- 10. IN THE EVENT THAT SUSPECTED CONTAMINATED SOIL, GROUNDWATER, AND OTHER MEDIA ARE ENCOUNTERED DURING EXCAVATION AND CONSTRUCTION ACTIVITIES BASED ON VISUAL, OLFACTORY, OR OTHER EVIDENCE, THE CONTRACTOR SHALL STOP WORK IN THE VICINITY OF THE SUSPECT MATERIAL TO AVOID FURTHER SPREADING OF THE MATERIAL, AND SHALL NOTIFY THE OWNER IMMEDIATELY SO THAT THE APPROPRIATE TESTING AND SUBSEQUENT ACTION CAN BE TAKEN.
- 11. CONTRACTOR SHALL PREVENT DUST, SEDIMENT, AND DEBRIS FROM EXITING THE SITE AND SHALL BE RESPONSIBLE FOR CLEANUP, REPAIRS AND CORRECTIVE ACTION IF SUCH OCCURS.
- 12. DAMAGE RESULTING FROM CONSTRUCTION LOADS SHALL BE REPAIRED BY THE CONTRACTOR AT NO
- 13. CONTRACTOR SHALL CONTROL STORMWATER RUNOFF DURING CONSTRUCTION TO PREVENT ADVERSE IMPACTS TO OFF SITE AREAS, AND SHALL BE RESPONSIBLE TO REPAIR RESULTING DAMAGES, IF ANY, AT NO COST TO OWNER.

- 1. THE LOCATIONS, SIZES, AND TYPES OF EXISTING UTILITIES ARE SHOWN AS AN APPROXIMATE REPRESENTATION ONLY. THE OWNER OR ITS REPRESENTATIVE(S) HAVE NOT INDEPENDENTLY VERIFIED THIS INFORMATION AS SHOWN ON THE PLANS. THE UTILITY INFORMATION SHOWN DOES NOT GUARANTEE THE ACTUAL EXISTENCE, SERVICEABILITY, OR OTHER DATA CONCERNING THE UTILITIES, NOR DOES IT GUARANTEE AGAINST THE POSSIBILITY THAT ADDITIONAL UTILITIES MAY BE PRESENT THAT ARE NOT SHOWN ON THE PLANS. PRIOR TO ORDERING MATERIALS AND BEGINNING CONSTRUCTION, THE CONTRACTOR SHALL VERIFY AND DETERMINE THE EXACT LOCATIONS, SIZES, AND ELEVATIONS OF THE POINTS OF CONNECTIONS TO EXISTING UTILITIES AND, SHALL CONFIRM THAT THERE ARE NO INTERFERENCES WITH EXISTING UTILITIES AND THE PROPOSED UTILITY ROUTES, INCLUDING ROUTES WITHIN THE PUBLIC RIGHTS OF WAY.
- WHERE AN EXISTING UTILITY IS FOUND TO CONFLICT WITH THE PROPOSED WORK, OR EXISTING CONDITIONS DIFFER FROM THOSE SHOWN SUCH THAT THE WORK CANNOT BE COMPLETED AS INTENDED. THE LOCATION, ELEVATION, AND SIZE OF THE UTILITY SHALL BE ACCURATELY DETERMINED WITHOUT DELAY BY THE CONTRACTOR, AND THE INFORMATION FURNISHED IN WRITING TO THE OWNER'S REPRESENTATIVE FOR THE RESOLUTION OF THE CONFLICT AND CONTRACTOR'S FAILURE TO NOTIFY PRIOR TO PERFORMING ADDITIONAL WORK RELEASES OWNER FROM OBLIGATIONS FOR ADDITIONAL PAYMENTS WHICH OTHERWISE MAY BE WARRANTED TO RESOLVE THE CONFLICT.
- 3. SET CATCH BASIN RIMS, AND INVERTS OF SEWERS, DRAINS, AND DITCHES IN ACCORDANCE WITH ELEVATIONS ON THE GRADING AND UTILITY PLANS.
- 4. RIM ELEVATIONS FOR DRAIN AND SEWER MANHOLES, WATER VALVE COVERS, GAS GATES, ELECTRIC AND TELEPHONE PULL BOXES, AND MANHOLES, AND OTHER SUCH ITEMS, ARE APPROXIMATE AND SHALL BE SET/RESET AS FOLLOWS:
 - A. PAVEMENTS AND CONCRETE SURFACES: FLUSH
 - B. ALL SURFACES ALONG ACCESSIBLE ROUTES: FLUSH

THE UTILITIES COMPANY.

- C. LANDSCAPE, LOAM AND SEED, AND OTHER EARTH SURFACE AREAS: ONE INCH ABOVE SURROUNDING AREA AND TAPER EARTH TO THE RIM ELEVATION.
- 5. THE LOCATION, SIZE, DEPTH, AND SPECIFICATIONS FOR CONSTRUCTION OF PROPOSED PRIVATE UTILITY SERVICES SHALL BE INSTALLED ACCORDING TO THE REQUIREMENTS PROVIDED BY, AND APPROVED BY, THE RESPECTIVE UTILITY COMPANY (GAS, TELEPHONE, ELECTRIC, FIRE ALARM, ETC.). FINAL DESIGN
- LOADS AND LOCATIONS TO BE COORDINATED WITH OWNER AND ARCHITECT. CONTRACTOR SHALL MAKE ARRANGEMENTS FOR AND SHALL BE RESPONSIBLE FOR PAYING FEES FOR POLE RELOCATION AND FOR THE ALTERATION AND ADJUSTMENT OF GAS, ELECTRIC, TELEPHONE, FIRE ALARM, AND ANY OTHER PRIVATE UTILITIES, WHETHER WORK IS PERFORMED BY CONTRACTOR OR BY
- 7. UTILITY PIPE MATERIALS SHALL BE AS FOLLOWS, UNLESS OTHERWISE NOTED ON THE PLAN:
 - A. WATER PIPES SHALL BE CEMENT LINED DUCTILE IRON (DI) CLASS 52.
 - B. SANITARY SEWER PIPES SHALL BE POLYVINYL CHLORIDE (PVC) SEWER PIPE, SDR-35
 - C. STORM DRAINAGE PIPES SHALL BE HIGH DENSITY POLYETHYLENE (HDPE).
 - D. PIPE INSTALLATION AND MATERIALS SHALL COMPLY WITH THE STATE PLUMBING CODE WHERE APPLICABLE. CONTRACTOR SHALL COORDINATE WITH LOCAL PLUMBING INSPECTOR PRIOR TO
- 8. CONTRACTOR SHALL COORDINATE WITH ELECTRICAL CONTRACTOR AND SHALL FURNISH EXCAVATION, INSTALLATION, AND BACKFILL OF ELECTRICAL FURNISHED SITEWORK RELATED ITEMS SUCH AS PULL BOXES, CONDUITS, DUCT BANKS, LIGHT POLE BASES, AND CONCRETE PADS. SITE CONTRACTOR SHALL FURNISH CONCRETE ENCASEMENT OF DUCT BANKS IF REQUIRED BY THE UTILITY COMPANY AND AS INDICATED ON THE DRAWINGS.
- 9. CONTRACTOR SHALL EXCAVATE AND BACKFILL TRENCHES FOR GAS IN ACCORDANCE WITH GAS COMPANY'S REQUIREMENTS.
- 10. ALL DRAINAGE AND SANITARY STRUCTURE INTERIOR DIAMETERS (4' MIN.) SHALL BE DETERMINED BY THE MANUFACTURER BASED ON THE PIPE CONFIGURATIONS SHOWN ON THESE PLANS AND LOCAL MUNICIPAL STANDARDS. FOR MANHOLES THAT ARE 20 FEET IN DEPTH AND GREATER, THE MINIMUM DIAMETER SHALL BE 5 FEET.

Layout and Materials

- 1. DIMENSIONS ARE FROM THE FACE OF CURB, FACE OF BUILDING, FACE OF WALL, AND CENTER LINE OF PAVEMENT MARKINGS, UNLESS OTHERWISE NOTED.
- 2. CURB RADII ARE 3 FEET UNLESS OTHERWISE NOTED.
- 3. CURBING SHALL BE PRECAST CONCRETE CURB (PCC) WITHIN THE SITE UNLESS OTHERWISE INDICATED ON THE PLANS.
- 4. SEE ARCHITECTURAL DRAWINGS FOR EXACT BUILDING DIMENSIONS AND DETAILS CONTIGUOUS TO THE BUILDING, INCLUDING SIDEWALKS, RAMPS, BUILDING ENTRANCES, STAIRWAYS, UTILITY PENETRATIONS, CONCRETE DOOR PADS, COMPACTOR PAD, LOADING DOCKS, BOLLARDS, ETC.
- 5. PROPOSED BOUNDS AND ANY EXISTING PROPERTY LINE MONUMENTATION DISTURBED DURING CONSTRUCTION SHALL BE SET OR RESET BY A PROFESSIONAL LAND SURVEYOR.
- 6. PRIOR TO START OF CONSTRUCTION, CONTRACTOR SHALL VERIFY EXISTING PAVEMENT ELEVATIONS AT INTERFACE WITH PROPOSED PAVEMENTS, AND EXISTING GROUND ELEVATIONS ADJACENT TO DRAINAGE OUTLETS TO ASSURE PROPER TRANSITIONS BETWEEN EXISTING AND PROPOSED FACILITIES.

Demolition

- 1. CONTRACTOR SHALL REMOVE AND DISPOSE OF EXISTING MANMADE SURFACE FEATURES WITHIN THE LIMIT OF WORK INCLUDING BUILDINGS, STRUCTURES, PAVEMENTS, SLABS, CURBING, FENCES, UTILITY POLES, SIGNS, ETC. UNLESS INDICATED OTHERWISE ON THE DRAWINGS. REMOVE AND DISPOSE OF EXISTING UTILITIES, FOUNDATIONS AND UNSUITABLE MATERIAL BENEATH AND FOR A DISTANCE OF 10 FEET BEYOND THE PROPOSED BUILDING FOOTPRINT INCLUDING EXTERIOR COLUMNS.
- 2. EXISTING UTILITIES SHALL BE TERMINATED, UNLESS OTHERWISE NOTED, IN CONFORMANCE WITH LOCAL, STATE AND INDIVIDUAL UTILITY COMPANY STANDARD SPECIFICATIONS AND DETAILS. THE CONTRACTOR SHALL COORDINATE UTILITY SERVICE DISCONNECTS WITH THE UTILITY REPRESENTATIVES.
- 3. CONTRACTOR SHALL DISPOSE OF DEMOLITION DEBRIS IN ACCORDANCE WITH APPLICABLE FEDERAL, STATE AND LOCAL REGULATIONS, ORDINANCES AND STATUTES.
- 4 THE DEMOLITION LIMITS DEPICTED IN THE PLANS IS INTENDED TO AID THE CONTRACTOR DURING THE BIDDING AND CONSTRUCTION PROCESS AND IS NOT INTENDED TO DEPICT EACH AND EVERY ELEMENT OF DEMOLITION. THE CONTRACTOR IS RESPONSIBLE FOR IDENTIFYING THE DETAILED SCOPE OF DEMOLITION BEFORE SUBMITTING ITS BID/PROPOSAL TO PERFORM THE WORK AND SHALL MAKE NO CLAIMS AND SEEK NO ADDITIONAL COMPENSATION FOR CHANGED CONDITIONS OR UNFORESEEN OR LATENT SITE CONDITIONS RELATED TO ANY CONDITIONS DISCOVERED DURING EXECUTION OF THE
- UNLESS OTHERWISE SPECIFICALLY PROVIDED ON THE PLANS OR IN THE SPECIFICATIONS, THE ENGINEER HAS NOT PREPARED DESIGNS FOR AND SHALL HAVE NO RESPONSIBILITY FOR THE PRESENCE, DISCOVERY, REMOVAL, ABATEMENT OR DISPOSAL OF HAZARDOUS MATERIALS, TOXIC WASTES OR POLLUTANTS AT THE PROJECT SITE. THE ENGINEER SHALL NOT BE RESPONSIBLE FOR ANY CLAIMS OF LOSS, DAMAGE, EXPENSE, DELAY, INJURY OR DEATH ARISING FROM THE PRESENCE OF HAZARDOUS MATERIAL AND CONTRACTOR SHALL INDEMNIFY AND HOLD HARMLESS THE ENGINEER FROM ANY CLAIMS MADE IN CONNECTION THEREWITH. MOREOVER, THE ENGINEER SHALL HAVE NO ADMINISTRATIVE OBLIGATIONS OF ANY TYPE WITH REGARD TO ANY CONTRACTOR AMENDMENT INVOLVING THE ISSUES OF PRESENCE, DISCOVERY, REMOVAL, ABATEMENT OR DISPOSAL OF ASBESTOS OR OTHER HAZARDOUS MATERIALS.

Erosion Control

- 1. PRIOR TO STARTING ANY OTHER WORK ON THE SITE, THE CONTRACTOR SHALL NOTIFY APPROPRIATE AGENCIES AND SHALL INSTALL EROSION CONTROL MEASURES AS SHOWN ON THE PLANS AND AS IDENTIFIED IN FEDERAL, STATE, AND LOCAL APPROVAL DOCUMENTS PERTAINING TO THIS PROJECT.
- 2. CONTRACTOR SHALL INSPECT AND MAINTAIN EROSION CONTROL MEASURES ON A WEEKLY BASIS (MINIMUM) OR AS REQUIRED PER THE ORDER OF CONDITIONS. THE CONTRACTOR SHALL ADDRESS DEFICIENCIES AND MAINTENANCE ITEMS WITHIN TWENTY-FOUR HOURS OF INSPECTION. CONTRACTOR SHALL PROPERLY DISPOSE OF SEDIMENT SUCH THAT IT DOES NOT ENCUMBER OTHER DRAINAGE STRUCTURES AND PROTECTED AREAS.
- 3. CONTRACTOR SHALL BE FULLY RESPONSIBLE TO CONTROL CONSTRUCTION SUCH THAT SEDIMENTATION SHALL NOT AFFECT REGULATORY PROTECTED AREAS. WHETHER SUCH SEDIMENTATION IS CAUSED BY WATER, WIND, OR DIRECT DEPOSIT.
- 4. CONTRACTOR SHALL PERFORM CONSTRUCTION SEQUENCING SUCH THAT EARTH MATERIALS ARE EXPOSED FOR A MINIMUM OF TIME BEFORE THEY ARE COVERED, SEEDED, OR OTHERWISE STABILIZED
- 5. UPON COMPLETION OF CONSTRUCTION AND ESTABLISHMENT OF PERMANENT GROUND COVER, CONTRACTOR SHALL REMOVE AND DISPOSE OF EROSION CONTROL MEASURES AND CLEAN SEDIMENT AND DEBRIS FROM ENTIRE DRAINAGE AND SEWER SYSTEMS.

Existing Conditions Information

- 1. BASE PLAN: THE PROPERTY LINES SHOWN ON THE LAYOUT AND MATERIALS PLAN WERE DETERMINED BY AN ACTUAL FIELD SURVEY CONDUCTED BY VHB, INC. IN OCTOBER, 2021, AND FROM DEEDS AND PLANS OF RECORD. THE TOPOGRAPHY AND PHYSICAL FEATURES ARE BASED ON AN ACTUAL FIELD SURVEY PERFORMED ON THE GROUND BY VHB, INC., DURING OCTOBER, 2021.
- A. DELINEATION OF THE WETLANDS AND PLACEMENT OF THE FLAGS WAS PERFORMED BY: VHB ENVIRONMENTAL DEPARTMENT IN OCTOBER, 2021.
- B. FLAGS MARKING THE WETLANDS WERE LOCATED BY: VHB, BY FIELD SURVEY IN OCTOBER, 2021
- 2. TOPOGRAPHY: ELEVATIONS ARE BASED ON NAVD OF 1988.
- 3. GEOTECHNICAL DATA INCLUDING TEST PIT AND BORING LOCATIONS AND ELEVATIONS WERE OBTAINED FROM GEOENGINEERS USA, PC DATED JANUARY 28, 2022.

Document Use

- 1. THESE PLANS AND CORRESPONDING CADD DOCUMENTS ARE INSTRUMENTS OF PROFESSIONAL SERVICE, AND SHALL NOT BE USED, IN WHOLE OR IN PART, FOR ANY PURPOSE OTHER THAN FOR WHICH IT WAS CREATED WITHOUT THE EXPRESSED, WRITTEN CONSENT OF VHB. ANY UNAUTHORIZED USE, REUSE, MODIFICATION OR ALTERATION, INCLUDING AUTOMATED CONVERSION OF THIS DOCUMENT SHALL BE AT THE USER'S SOLE RISK WITHOUT LIABILITY OR LEGAL EXPOSURE TO VHB.
- CONTRACTOR SHALL NOT RELY SOLELY ON ELECTRONIC VERSIONS OF PLANS, SPECIFICATIONS, AND DATA FILES THAT ARE OBTAINED FROM THE DESIGNERS, BUT SHALL VERIFY LOCATION OF PROJECT FEATURES IN ACCORDANCE WITH THE PAPER COPIES OF THE PLANS AND SPECIFICATIONS THAT ARE SUPPLIED AS PART OF THE CONTRACT DOCUMENTS.
- 3. SYMBOLS AND LEGENDS OF PROJECT FEATURES ARE GRAPHIC REPRESENTATIONS AND ARE NOT NECESSARILY SCALED TO THEIR ACTUAL DIMENSIONS OR LOCATIONS ON THE DRAWINGS. THE CONTRACTOR SHALL REFER TO THE DETAIL SHEET DIMENSIONS, MANUFACTURERS' LITERATURE, SHOP DRAWINGS AND FIELD MEASUREMENTS OF SUPPLIED PRODUCTS FOR LAYOUT OF THE PROJECT

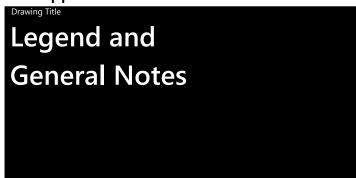


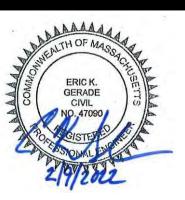
Proposed Self-Storage Facility

34 Dudley St Arlington, Massachusetts 02476

MEA February 9, 2022 Local Approvals

Not Approved for Construction





MATCHLINE

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THE PROPOSED PROJECT CONSISTS OF A 95,700± SQUARE-FOOT SELF STORAGE FACILITY WITH ANCILLARY LANDSCAPE IMPROVEMENTS, PARKING SPACES, AND UTILITY IMPROVEMENTS TO SUPPORT THIS USE. THE APPROXIMATELY 0.78 ACRE SITE WILL BE DEVELOPED AS A SINGLE-PHASE PROJECT.

EROSION AND SEDIMENTATION CONTROL TECHNIQUES

THE EROSION AND SEDIMENTATION CONTROLS SHOWN HEREON ARE PERIMETER MEASURES ONLY. THE CONTRACTOR IS REQUIRED TO PROVIDE ADDITIONAL INTERIM EROSION AND SEDIMENTATION CONTROLS, INCLUDING BUT NOT LIMITED TO THOSE LISTED BELOW. THE CONTRACTOR SHALL MANAGE EROSION AND SEDIMENTATION DURING CONSTRUCTION TO PREVENT IMPACTS TO RESOURCE AREAS, ROADWAYS, AND ABUTTING PROPERTIES. THE CONTRACTOR SHALL BE RESPONSIBLE TO MAINTAIN THE EROSION AND SEDIMENTATION CONTROLS THROUGHOUT THE DURATION OF CONSTRUCTION.

NEWLY CONSTRUCTED AND EXISTING CATCH BASINS WILL BE PROTECTED WITH SILT SACKS THROUGHOUT CONSTRUCTION.

GRAVEL AND CONSTRUCTION ENTRANCE/EXIT
A TEMPORARY CRUSHED-STONE CONSTRUCTION ENTRANCE/EXIT WILL BE CONSTRUCTED. A CROSS SLOPE WILL BE PLACED IN THE ENTRANCE TO DIRECT RUNOFF TO THE SEDIMENT TRAP.

STABILIZATION OF OPEN SOIL SURFACES WILL BE IMPLEMENTED WITHIN 14 DAYS AFTER GRADING OR CONSTRUCTION ACTIVITIES HAVE TEMPORARILY OR PERMANENTLY CEASED, UNLESS THERE IS SUFFICIENT SNOW COVER TO PROHIBIT IMPLEMENTATION. VEGETATIVE SLOPE STABILIZATION WILL BE USED TO MINIMIZE EROSION ON SLOPES OF 3:1 OR FLATTER. ANNUAL GRASSES, SUCH AS ANNUAL RYE, WILL BE USED TO ENSURE RAPID GERMINATION AND PRODUCTION OF ROOTMASS. PERMANENT STABILIZATION WILL BE COMPLETED WITH THE PLANTING OF PERENNIAL GRASSES OR LEGUMES. ESTABLISHMENT OF TEMPORARY AND PERMANENT VEGETATIVE COVER MAY BE ESTABLISHED BY HYDRO-SEEDING OR SODDING. A SUITABLE TOPSOIL, GOOD SEEDBED PREPARATION, AND ADEQUATE LIME, FERTILIZER AND WATER WILL BE PROVIDED FOR EFFECTIVE ESTABLISHMENT OF THESE VEGETATIVE STABILIZATION METHODS. MULCH WILL ALSO BE USED AFTER PERMANENT SEEDING TO PROTECT SOIL FROM THE IMPACT OF FALLING RAIN AND TO INCREASE THE CAPACITY OF THE SOIL TO ABSORB

TEMPORARY SEDIMENT BASINS WILL BE DESIGNED EITHER AS EXCAVATIONS OR BERMED STORMWATER DETENTION STRUCTURES (DEPENDING ON GRADING) THAT WILL RETAIN RUNOFF FOR A SUFFICIENT PERIOD OF TIME TO ALLOW SUSPENDED SOIL PARTICLES TO SETTLE OUT PRIOR TO DISCHARGE. THESE TEMPORARY BASINS WILL BE LOCATED BASED ON CONSTRUCTION NEEDS AS DETERMINED BY THE CONTRACTOR AND OUTLET DEVICES WILL BE DESIGNED TO CONTROL VELOCITY AND SEDIMENT. POINTS OF DISCHARGE FROM SEDIMENT BASINS WILL BE STABILIZED TO MINIMIZE EROSION. AT A MINIMUM, SEDIMENTATION BASINS SHALL BE DESIGNED AND CONSTRUCTED TO PROVIDE STORAGE FOR THE VOLUME OF RUNOFF GENERATED FROM A 2-YR, 24-HR DESIGN STORM, OR AT LEAST 3,600 CUBIC FEET OF STORAGE PER ACRE DRAINING TO THE BASIN.

SIDESLOPES OF STOCKPILED MATERIAL SHALL BE NO STEEPER THAN 2:1. STOCKPILES NOT USED WITHIN 30 DAYS NEED TO BE SEEDED AND MULCHED IMMEDIATELY AFTER FORMATION OF THE STOCKPILE. STRAW BALES AND SILT FENCE ARE TO BE PLACED AROUND THE STOCKPILE AREA APPROXIMATELY 10 FEET FROM THE TOE OF SLOPE.

PERIODICALLY MOISTEN EXPOSED SURFACES ON UNPAVED TRAVELWAYS TO KEEP THE TRAVELWAY DAMP AND

TEMPORARY EROSION AND SEDIMENTATION CONTROL MAINTENANCE (THROUGHOUT CONSTRUCTION)

THE SITE CONTRACTOR SHALL INSPECT AND MAINTAIN EROSION CONTROL MEASURES ON A WEEKLY BASIS (MINIMUM) OR AS REQUIRED PER ORDER OF CONDITIONS. THE CONTRACTOR SHALL ADDRESS DEFICIENCIES AND MAINTENANCE ITEMS WITHIN TWENTY-FOUR HOURS OF INSPECTION. CONTRACTOR SHALL PROPERLY DISPOSE OF SEDIMENT SUCH THAT IT DOES NOT ENCUMBER OTHER DRAINAGE STRUCTURES AND PROTECTED AREAS. RECORDS OF THE INSPECTIONS WILL BE PREPARED AND MAINTAINED ON-SITE BY THE CONTRACTOR.

SILT SHALL BE REMOVED FROM BEHIND BARRIERS IF GREATER THAN 6-INCHES DEEP OR AS NEEDED.

DAMAGED OR DETERIORATED ITEMS WILL BE REPAIRED IMMEDIATELY AFTER IDENTIFICATION.

SEDIMENT THAT IS COLLECTED IN STRUCTURES SHALL BE DISPOSED OF PROPERLY AND COVERED IF STORED

EROSION CONTROL STRUCTURES SHALL REMAIN IN PLACE UNTIL ALL DISTURBED EARTH HAS BEEN SECURELY STABILIZED. AFTER REMOVAL OF STRUCTURES, DISTURBED AREAS SHALL BE REGRADED AND STABILIZED AS SOON

MAINTAIN THE CONSTRUCTION ENTRANCE IN A CONDITION WHICH WILL PREVENT TRACKING AND WASHING OF SEDIMENTS ONTO PAVED SURFACES.

INFILTRATION AREA PROTECTION DURING CONSTRUCTION

FOR THE LONG-TERM FUNCTION OF THE INFILTRATION BASIN(S)/STRUCTURE(S), CARE SHALL BE TAKEN IN THE INFILTRATION AREAS DURING CONSTRUCTION THE CONSTRACTOR SHALL EMPLOY THE FOLLOWING MINIMUM BEST MANAGEMENT PRACTICES (BMPS):

- 1. INFILTRATION AREAS SHALL NOT BE USED AS TEMPORARY CONSTRUCTION SEDIMENTATION BASINS WITHOUT THE PRIOR APPROVAL OF THE ENGINEER. IF INFILTRATION AREAS ARE USED AS TEMPORARY SEDIMENTATION BASINS DURING CONSTRUCTION, THEN THE SOILS SHALL BE EXCAVATED A MINIMUM OF 2' FROM THE TEMPORARY BASIN BOTTOM TO REMOVE CLOGGED SOILS.
- 2. STORMWATER RUNOFF FROM EXPOSED SURFACES SHALL BE DIRECTED AWAY FROM THE INFILTRATION BASIN(S)/STRUCTURE(S) DURING CONSTRUCTION
- 3. CONSTRUCTION EQUIPMENT, VEHICULAR TRAFFIC, PARKING OF VEHICLES, AND STOCKPILING OF CONSTRUCTION MATERIALS SHALL BE LOCATED OUTSIDE OF THE INFILTRATION AREAS.
- 4. EXCAVATION FOR CONSTRUCTION OF THE INFILTRATION BASIN(S)/STRUCTURE(S) SHALL ENSURE THAT THE SOIL AT THE BOTTOM OF THE EXCAVATION IS NOT COMPACTED OR SMEARED.
- 5. THE PERIMETER OF THE INFILTRATION AREAS SHALL BE STAKED AND FLAGGED TO PREVENT THE USE OF THE

STABILIZED

- INSTALL SILT SACK IN

NEXT DOWNSTREAM CATCH BASIN

SILT SACK INLET

PROTECTION (TYP) -

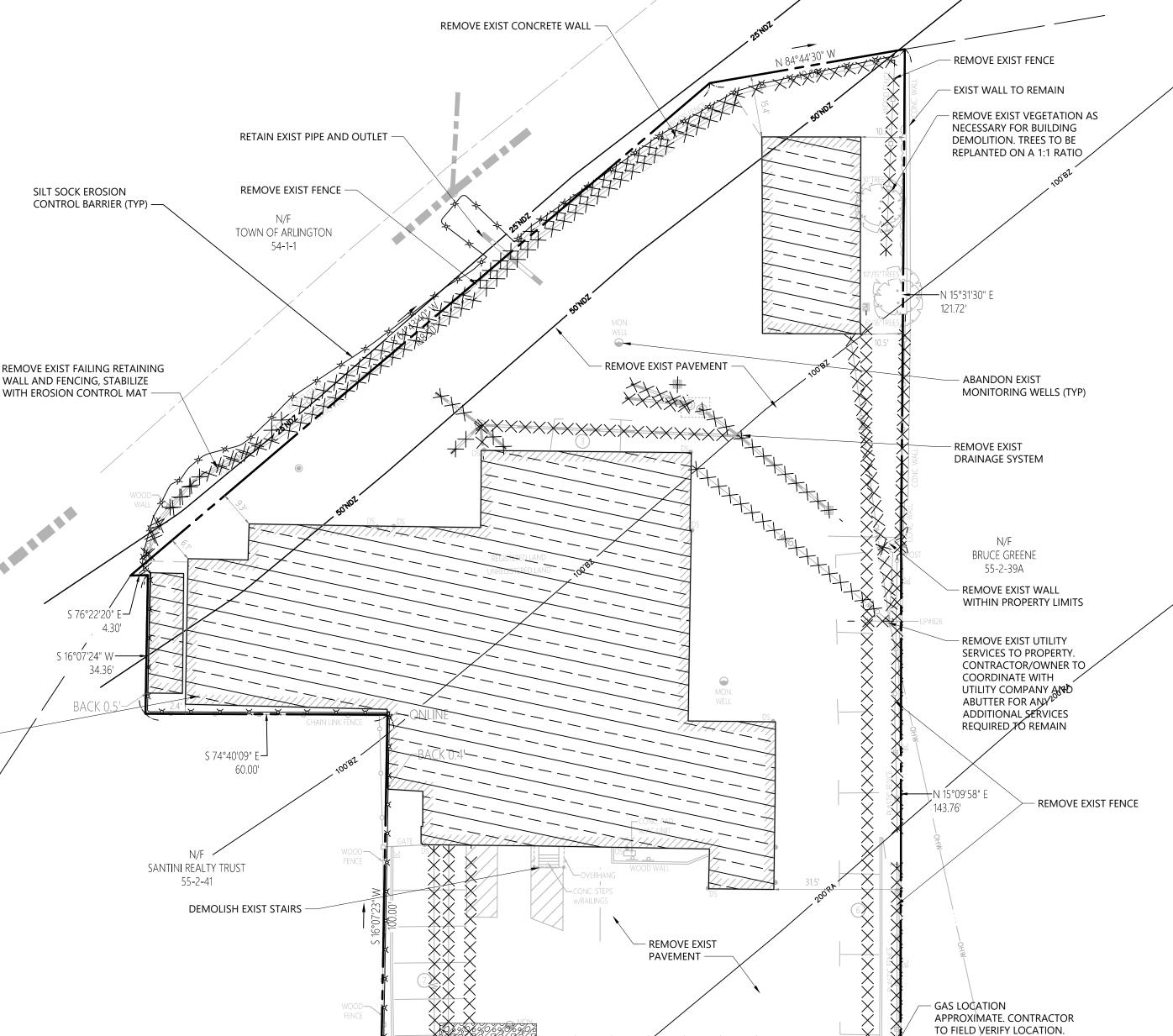
CAP EXIST WATER SERVICE,

COORDINATE WITH DPW -

CAP EXIST GAS, COORDINATE WITH PRIVATE UTILITY -

CONSTRUCTION EXIT

AREA FOR ACTIVITIES THAT MIGHT DAMAGE THE INFILTRATION ABILITY OF THE SYSTEM.



- REMOVE EXIST FENCE

Site Preparation Notes:

- UNLESS OTHERWISE SPECIFICALLY PROVIDED ON THE PLANS OR IN THE SPECIFICATIONS, THE ENGINEER HAS NOT PREPARED DESIGNS FOR AND SHALL HAVE NO RESPONSIBILITY FOR THE PRESENCE, DISCOVERY, REMOVAL, ABATEMENT OR DISPOSAL OF HAZARDOUS MATERIALS, TOXIC WASTES OR POLLUTANTS AT THE PROJECT SITE. THE ENGINEER SHALL NOT BE RESPONSIBLE FOR ANY CLAIMS OF LOSS, DAMAGE, EXPENSE, DELAY, INJURY OR DEATH ARISING FROM THE PRESENCE OF HAZARDOUS MATERIAL AND CONTRACTOR SHALL INDEMNIFY AND HOLD HARMLESS THE ENGINEER FROM ANY CLAIMS MADE IN CONNECTION THEREWITH. MOREOVER, THE ENGINEER SHALL HAVE NO ADMINISTRATIVE OBLIGATIONS OF ANY TYPE WITH REGARD TO ANY CONTRACTOR AMENDMENT INVOLVING THE ISSUES OF PRESENCE, DISCOVERY, REMOVAL, ABATEMENT OR DISPOSAL OF ASBESTOS OR OTHER
- CONTRACTOR SHALL REMOVE AND DISPOSE OF EXISTING MANMADE SURFACE FEATURES WITHIN THE LIMIT OF DEMOLITION INCLUDING BUILDINGS, STRUCTURES, PAVEMENTS, SLABS, CURBING, FENCES, UTILITY POLES, SIGNS, ETC. UNLESS INDICATED
- THE LOCATIONS, SIZES, AND TYPES OF EXISTING UTILITIES ARE SHOWN AS AN APPROXIMATE REPRESENTATION ONLY. THE OWNER OR IT'S REPRESENTATIVE(S) HAVE NOT INDEPENDENTLY VERIFIED THIS INFORMATION AS SHOWN ON THE PLANS. THE UTILITY INFORMATION SHOWN DOES NOT GUARANTEE THE ACTUAL EXISTENCE, SERVICEABILITY, OR OTHER DATA CONCERNING THE UTILITIES, NOR DOES IT GUARANTEE AGAINST THE POSSIBILITY THAT ADDITIONAL UTILITIES MAY BE PRESENT THAT ARE NOT SHOWN ON THE PLANS. PRIOR TO ORDERING MATERIALS AND BEGINNING CONSTRUCTION, THE CONTRACTOR SHALL VERIFY AND DETERMINE THE EXACT LOCATIONS, SIZES, AND ELEVATIONS OF THE POINTS OF CONNECTIONS TO EXISTING UTILITIES AND, SHALL CONFIRM THAT THERE ARE NO INTERFERENCES WITH EXISTING UTILITIES AND THE PROPOSED UTILITY ROUTES, INCLUDING ROUTES WITHIN THE PUBLIC RIGHTS OF WAY.
- EXISTING UTILITIES SHALL BE TERMINATED, UNLESS OTHERWISE NOTED, IN CONFORMANCE WITH LOCAL, STATE AND INDIVIDUAL UTILITY COMPANY STANDARD SPECIFICATIONS AND DETAILS. THE CONTRACTOR SHALL COORDINATE UTILITY SERVICE DISCONNECTS WITH THE UTILITY REPRESENTATIVES.
- CONTRACTOR SHALL DISPOSE OF DEMOLITION DEBRIS IN ACCORDANCE WITH APPLICABLE FEDERAL, STATE AND LOCAL REGULATIONS, ORDINANCES AND STATUTES.
- THE DEMOLITION LIMITS DEPICTED IS INTENDED TO AID THE CONTRACTOR DURING THE BIDDING AND CONSTRUCTION PROCESS AND IS NOT INTENDED TO DEPICT EACH AND EVERY ELEMENT OF DEMOLITION. THE CONTRACTOR IS RESPONSIBLE FOR IDENTIFYING THE DETAILED SCOPE OF DEMOLITION BEFORE SUBMITTING ITS BID/PROPOSAL TO PERFORM THE WORK AND SHALL MAKE NO CLAIMS AND SEEK NO ADDITIONAL COMPENSATION FOR CHANGED CONDITIONS OR UNFORESEEN OR LATENT SITE CONDITIONS RELATED TO ANY CONDITIONS DISCOVERED DURING EXECUTION OF THE WORK.
- EXISTING UTILITIES AND FEATURES TO REMAIN SHALL BE MAINTAINED AND PROTECTED AGAINST DAMAGE DURING DEMOLITION
- EXISTING UTILITY LINES NOT SPECIFICALLY NOTED OR SHOWN WHICH ARE ENCOUNTERED DURING CONSTRUCTION SHALL BE CAPPED, EXTENDED, PROTECTED, REMOVED, OR REWORKED AS DIRECTED OR REQUIRED BY THE OWNER OR THE TOWN OF
- 9. CM/CONTRACTOR SHALL APPLY FOR AND OBTAIN ALL NECESSARY PERMITS FROM LOCAL AND STATE AUTHORITIES TO COMPLETE
- 10. CM/CONTRACTOR SHALL COMPLY WITH ALL LOCAL, STATE AND FEDERAL SAFETY REGULATIONS TO PROTECT THE PUBLIC WHILE DEMOLITION WORK IS BEING PERFORMED.
- 11. FURNISH, ERECT AND MAINTAIN ALL TEMPORARY BARRICADES, FENCES, COVERINGS, ENCLOSURES, SIGNS AND LIGHTING AS MAY BE REQUIRED TO CARRY ON DEMOLITION WORK IN A SAFE AND LEGAL MANNER.
- 12. CATCH BASINS WITHIN THE LIMIT OF WORK AND IN THE IMMEDIATE VICINITY OF THE LIMIT OF WORK SHALL BE FITTED WITH SEDIMENTATION TRAPS UNTIL THE SITE IS PERMANENTLY STABILIZED.
- 13. CM/CONTRACTOR SHALL BE FULLY RESPONSIBLE TO CONTROL CONSTRUCTION SUCH THAT SEDIMENTATION SHALL NOT AFFECT
- REGULATORY PROTECTED AREAS, WHETHER SUCH SEDIMENTATION IS CAUSED BY WATER, WIND, OR DIRECT DEPOSIT.
- 14. DO NOT USE EXPLOSIVES FOR BUILDING DEMOLITION.

CAP EXIST GAS FOR FUTURE USE, COORDINATE WITH

PRIVATE UTILITY

CONTRACTOR TO PROVIDE TEMPORARY MEASURES FOR PEDESTRIANS DURING CONSTRUCTION AS NECESSARY. COORD WITH TOWN OF ARLINGTON

APPROX EXIST SEWER SERVICE LOCATION. CONTRACTOR

TO FIELD VERITY AND CAP FOR PROJECT USE, IF POSSIBLE

REMOVE EXIST SIGN,

LIGHTS, AND WOOD WALL

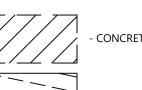
- 15. DUST CONTROL TREATMENTS SHALL BE APPLIED AS NECESSARY TO CONTROL AND REDUCE THE AMOUNT OF DUST WHICH MAY CAUSE OFF SITE DAMAGE, BE A HEALTH HAZARD TO HUMANS, WILDLIFE AND PLANT LIFE, OR POSE A HAZARD TO TRAFFIC SAFETY.
- 16. ADJOINING STREETS AND PROPERTIES SHALL BE KEPT FREE OF DEBRIS RESULTING FROM THE DEMOLITION AND SHALL BE BROOM CLEANED ON A DAILY BASIS.
- 17. HOURS OF OPERATION TO BE AS PER LOCAL ORDINANCE. CM/CONTRACTOR TO VERIFY PRIOR TO STARTING ON SITE OPERATIONS.
- 18. WHERE CONNECTIONS TO EXISTING UTILITIES ARE PROPOSED, THE CM/CONTRACTOR SHALL VERIFY THE LOCATION AND ELEVATION OF THE EXISTING UTILITY AT THE CONNECTION POINT PRIOR TO ORDERING MATERIALS OR DEMOLISHING ANY UNUSED PORTIONS OF THE UTILITY AS SPECIFICALLY CALLED OUT ON THIS PLAN. DISCREPANCIES WITH THE EXISTING CONDITIONS INFORMATION SHOWN SHALL BE REPORTED TO THE ENGINEER FOR DIRECTION.
- 19. CONTRACTOR IS RESPONSIBLE FOR MAINTAINING SITE ACCESS AND SITE SECURITY AT ALL TIMES DURING CONSTRUCTION.
- 20. ALL EXISTING TREES WITHIN THE LIMIT OF DEMOLITION SHALL BE REMOVED AND DISPOSED OF OFF SITE AT A SAFE, APPROVED LOCATION UNLESS OTHERWISE NOTED.
- 21. CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING AND MAINTAINING CONSTRUCTION EXITS AT ALL CONSTRUCTION VEHICLE ACCESS POINTS ONTO DISTURBED AREAS OF THE SITE. CONSTRUCTION EXITS SHALL BE MAINTAINED UNTIL DISTURBED PORTIONS OF THE SITE ARE STABILIZED AS DETERMINED BY THE ENGINEER
- 22. CONTRACTOR MUST MAINTAIN ALL EXISTING SERVICES TO THE ABUTTING PROPERTY.
- 23. PRIOR TO STARTING ANY OTHER WORK ON THE SITE, THE CONTRACTOR SHALL NOTIFY APPROPRIATE AGENCIES AND SHALL INSTALL EROSION CONTROL MEASURES AS SHOWN ON THE PLANS AND AS IDENTIFIED IN FEDERAL, STATE, AND LOCAL APPROVAL DOCUMENTS PERTAINING TO THIS PROJECT.
- 24. THE SITE CONTRACTOR SHALL INSPECT AND MAINTAIN EROSION CONTROL MEASURES ON A WEEKLY BASIS (MINIMUM) OR AS REQUIRED PER THE TOWN OF ARLINGTON CONSERVATION COMMISSION ORDER OF CONDITIONS. THE CONTRACTOR SHALL ADDRESS DEFICIENCIES AND MAINTENANCE ITEMS WITHIN TWENTY-FOUR HOURS OF INSPECTION. CONTRACTOR SHALL PROPERLY DISPOSE OF SEDIMENT SUCH THAT IT DOES NOT ENCUMBER OTHER DRAINAGE STRUCTURES AND PROTECTED AREAS. RECORDS OF THE INSPECTIONS WILL BE PREPARED AND MAINTAINED ON-SITE BY THE CONTRACTOR.



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XXXX - - TO BE REMOVED

////// - - UTILITIES TO BE ABANDONED IN PLACE

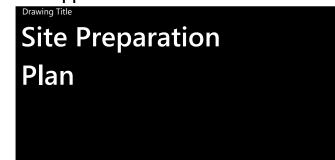


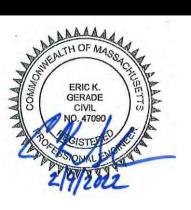
Proposed Self-Storage Facility 34 Dudley St

Arlington, Massachusetts 02476

February 9, 2022 **Local Approvals**

Not Approved for Construction





52816.00

45 of 491

DEMOLISH EXIST STRUCTURES (TYP) -

Zoning Summary Chart

Zoning District:	Industrial (I)	
Overlay District:	Inland Wetland	d District
Zoning Regulation Requirements	Required*	Provided
MAXIMUM FRONT YARD SETBACK	10 Feet	10.0 Feet
MINIMUM FRONT YARD SETBACK	10 Feet	10.0 Feet
SIDE YARD SETBACK	10 Feet	10.0 Feet
REAR YARD SETBACK	10 Feet	12.5 Feet
MAXIMUM FLOOR AREA RATIO	3.0	2.81
MAXIMUM BUILDING HEIGHT	5 Stories	58 Feet, 5 Stories **
* Zoning regulation requirements as specified in the To	wn of Arlington Zoning Bu	law Amended on April 26

** 58' Top of Parapet, 54' 10" to top of roof

Inland Wetland District Performance Standards

	Existing	Proposed	Improvemen
IMPERVIOUS AREA (50' SETBACK)	3790 SF	1461 SF	2329 SF (61.5%)
IMPERVIOUS SETBACK	25.9 Feet	34.1 Feet	+8.2 Feet

Sign Summary

Sign Summary							
M.U.T.C.D.							
Number	Width	Height	Desc.				
R1-1	30"	30"	STOP				
R7-8	12"	18"	RESERVED PARKING				
R7-8P	12"	6"	VAN ACCESSIBLE				
SP-1	12"	18"	RESERVED FOR CARPOOL PARKING				

Building Sign Summary

	Danaing Sign Sammary								
•	ID NI	Cian Tuna	Sp						
	ID Number	Sign Type	Width	Height	Area	Desc.			
	1	Wall Sign	288"	90"	180 SF	CUBESMART Self Storage			
	2	Wall Sign	288″	90″	180 SF	CUBESMART Self Storage			
	3	Wall Sign	29.25″	6"	1.22 SF	OFFICE			
	4	Wall Sign	52″	11"	3.97 SF	LOADING			
	5	Freestanding Sign	78″	44"	23.8 SF	CUBESMART Self Storage			

Parking Summary Chart

	Size		Spaces	
Description	Required	Provided	Required	Provided
STANDARD SPACES	8.5 x 18	8.5 x 18	96	7
PARALLEL SPACES	8 x 22	8 x 22	0	3
ACCESSIBLE SPACES*	8 x 18	8.5 x 18	-	1
TOTAL SPACES			96	11
LOADING BAYS**			3	4
BICYCLE SPACES***			134	11

* ADA/STATE/LOCAL REQUIREMENTS. (1 ACCESSIBLE SPACE PER 1-25 TOTAL PARKING SPACES) PER §

208.2 OF 2010 ADA STANDARDS FOR ACCESSIBLE DESIGN

** LOADING BAYS: THREE BAYS FOR BETWEEN 40,001 SF AND 120,000 SF *** BICYCLE PARKING REQUIRED BASED ON 0.8/1,000 SF LONG TERM AND 0.6/1,000 SF SHORT TERM PARKING. 4 BICYCLE SPACES ARE PROVIDED BY TWO RACKS UNDER THE BUILDING OVERHANG. 6 BICYCLE SPACES ARE PROVIDED WITHIN THE COVERED LOADING AREA. EMPLOYEE BICYCLE STORAGE WILL BE PROVIDED WITHIN A TENANT STORAGE UNIT THE BUILDING (1 SPACE MINIMUM).

WAIVERS REQUESTED FOR REDUCTION IN REQUIRED PARKING SPACES AND REDUCTION IN REQUIRED

Parking Requirements:

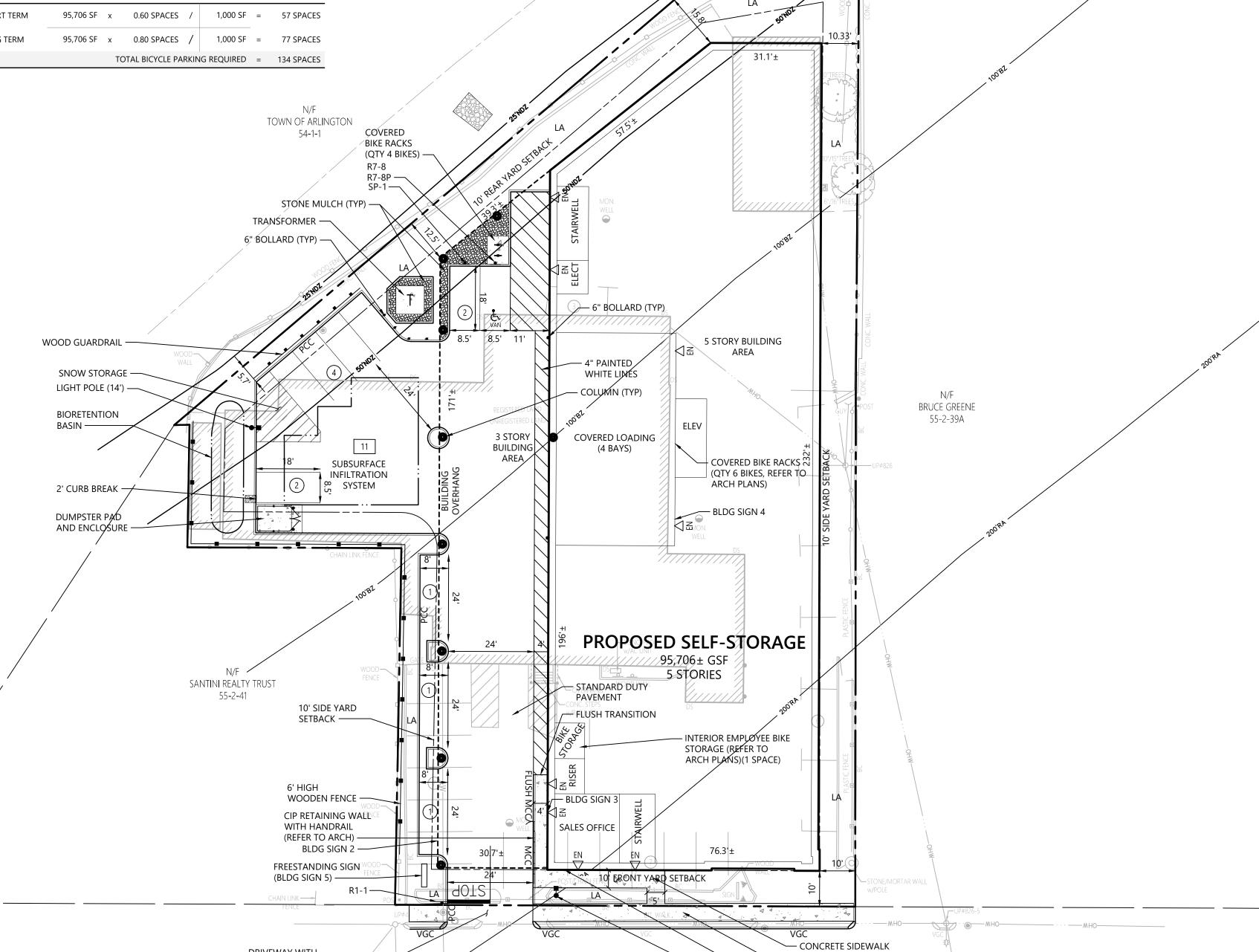
STORAGE	95,706 SF	Х	1 SPACES	/	1,000 SF	=	96 SPACES
			TOTAL PAI	RKIN	IG REQUIRED	=	96 SPACES

Bicycle Parking Requirements:

SHORT TERM	95,706 SF	Х	0.60 SPACES	/	1,000 SF	=	57 SPACES	
LONG TERM	95,706 SF	х	0.80 SPACES	/	1,000 SF	=	77 SPACES	
	TOTAL BICYCLE PARKING REQUIRED						134 SPACES	

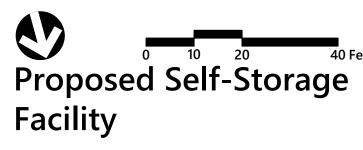
DRIVEWAY WITH SIDEWALK AND CURVED

TRANSITION CURB —



— REPLACE SIDEWALK ALONG FRONTAGE

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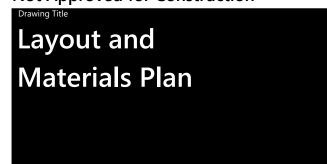


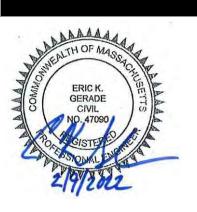
34 Dudley St Arlington, Massachusetts 02476

No.	Revision		Date	Appvd.

SJH	Checked by EKG
Issued for	Date
Local Approvals	February 9, 2022

Not Approved for Construction

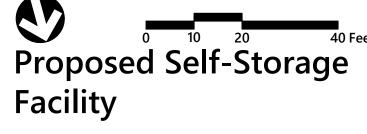




52816.00

SIGNS FROM SIGN PACKAGE PREPARED BY ELRO SIGNS FOR CUBESMART SELF STORAGE, 34 DUDLEY STREET, ARLINGTON, MA, DATED JANUARY 10, 2022. REFER TO SIGN PACKAGE FOR SIGN DETAILS AND RENDERINGS.





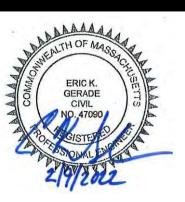
34 Dudley St Arlington, Massachusetts 02476

Local Approvals

February 9, 2022

Not Approved for Construction

Grading, Drainage, and Erosion Control Plan



C4.01

Sheet of 4 10

Project Number 52816.00

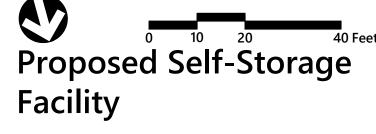
— CONNECT TO EXIST WATER WITH TSV, COORD WITH DPW

SERVICE. CONTRACTOR TO FIELD VERIFY LOCATION AND INVERTS.

COORD WITH ENGINEER AND DPW FOR FINAL CONNECTION. ——]=



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34 Dudley St Arlington, Massachusetts 02476

SJH	EKG
Issued for	Date
Local Approvals	February 9, 2022

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Project Number 52816.00

STANDARD DUTY FLEXIBLE PAVEMENT

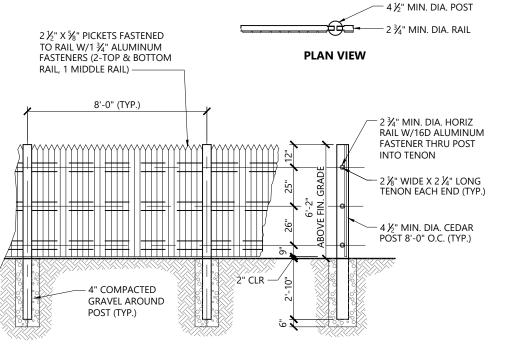
— COMPACTED SUBGRADE

BASE COURSE FOR PAVEMENT SHOULD BE PLACED IN 12" THICK LOOSE LIFTS AND COMPACTED TO AT LEAST 95 PERCENT OF ITS MAXIMUM DRY DENSITY (MDD) AS DETERMINED BY ASTM D1557 METHOD C (MODIFIED PROTRACTOR).

TYPICAL SPACING

Source: VHB

Bituminous Concrete Pavement Section Source: GeoEngineers, Inc.



6' Single Sided Stockade Fence

- 1. ALL FENCING MATERIAL SHALL BE NORTHERN WHITE CEDAR, SAWN TO THE DIMENSIONS SHOWN ON THE DRAWING.
- 2. ALL FENCE POSTS SHALL BE TREATED WITH PRESERVATIVE PER MANUFACTURER'S RECOMMENDATION ON ALL SIDES FOR A DIMENSION OF 3'-0" FROM BUTT OF POST.
- 3. POSTS SHALL MAINTAIN A DEPTH OF 2'-10" IN GROUND AND SHALL NOT BE RACKED TO ACCOMMODATE CHANGES IN GRADE.
- LINE OF FENCE TOP AND BOTTOM SHALL BE INSTALLED STRAIGHT AND TRUE.
 POSTS AND PICKETS SHALL BE INSTALLED PARALLEL AND PLUMB. RAILS SHALL BE INSTALLED PARALLEL TO GROUND SURFACE AND EACH OTHER.
- 5. GATE HARDWARE SHALL BE DOUBLE DIP HOT GALVANIZED. THE CONTRACTOR SHALL SUBMIT GATE AND FENCE SHOP DRAWINGS TO THE ENGINEER FOR REVIEW.



- TYPICAL SIGN

1. THIS DIMENSION SHALL BE A MINIMUM OF 5' FOR

2. THIS DIMENSION SHALL BE A MAXIMUM OF 8' FOR

(1.75" X 1.75")

— GROUND SURFACE

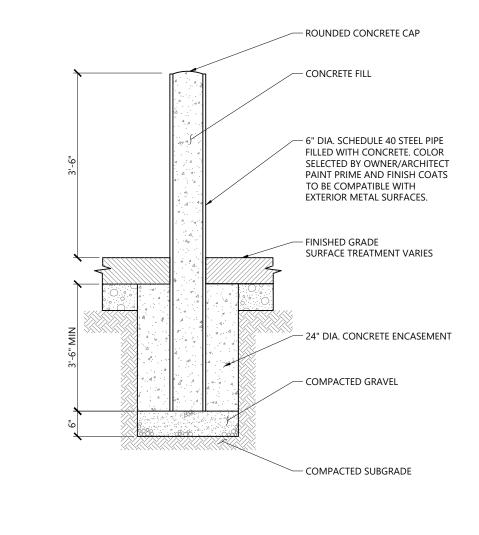
- ANCHOR SLEEVE (2.25" X 2.25")

- SIGN POST ANCHOR

(2.0" X 2.0")

ACCESSIBLE SIGNAGE.

ACCESSIBLE SIGNAGE



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LD_470

— W.W. MESH (6X6XW1.4XW1.4)

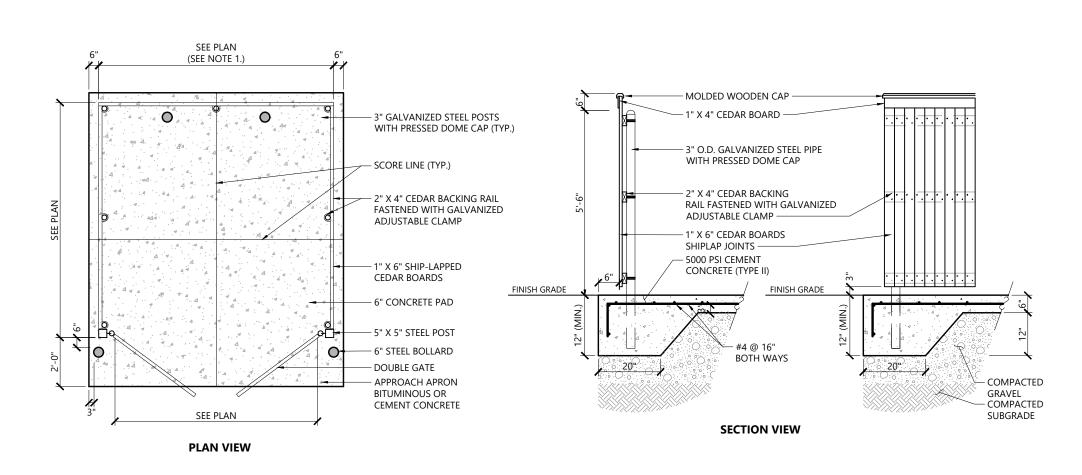
FLAT SHEETS - CENTER DEPTH

- FINISH GRADE

LD_421

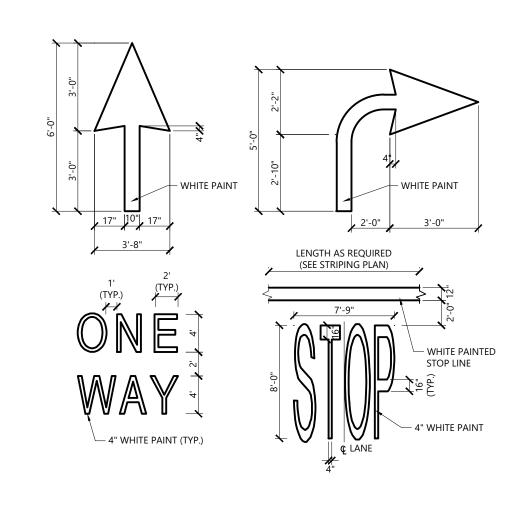
3/19 LD_702 Source: VHB

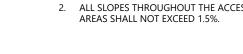


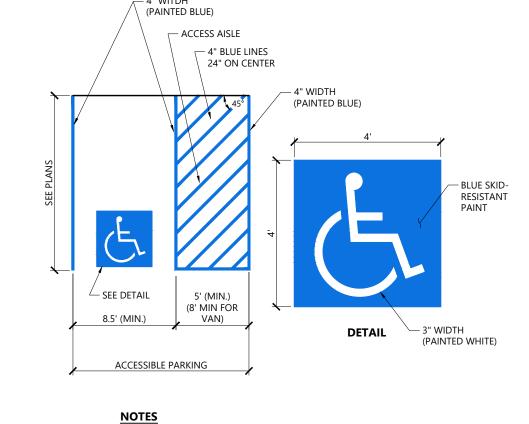


1. DUMPSTER PAD DIMENSIONS SHOWN AS MINIMUM. REFER TO PLAN FOR ACTUAL DIMENSION.

PAD DESIGNED FOR 6 YARD DUMPSTER.







1. ALL DIMENSIONS TO CENTER OF 4" PAVEMENT STRIPING. 2. ALL SLOPES THROUGHOUT THE ACCESSIBLE PARKING AND AISLE





1. PAVEMENT MARKINGS TO BE INSTALLED FOR ON SITE WORK IN LOCATIONS SHOWN.



TREATMENT VARIES

CONCRETE CURB

— ¾" (MAX.) CHAMFER

— TACK COAT

— BIT. CONCRETE PAVEMENT

TOP COURSE (1½" MIN.)

- SAWCUT 12" (MIN.) FROM FACE OF

CURB IF SET IN EXISTING PAVEMENT

- 4000 PSI CEMENT CONCRETE

- 1½" BY 2½" DOWEL SOCKETS

OF ALL CURB SECTIONS TO

RECEIVE ½" DIA. DOWEL

SHALL BE FURNISHED AT ENDS

- COMPACTED GRAVEL

(1½" MAX. STONE SIZE)

- COMPACTED SUBGRADE

STEEL REINFORCED PRECAST



34 Dudley St Arlington, Massachusetts 02476

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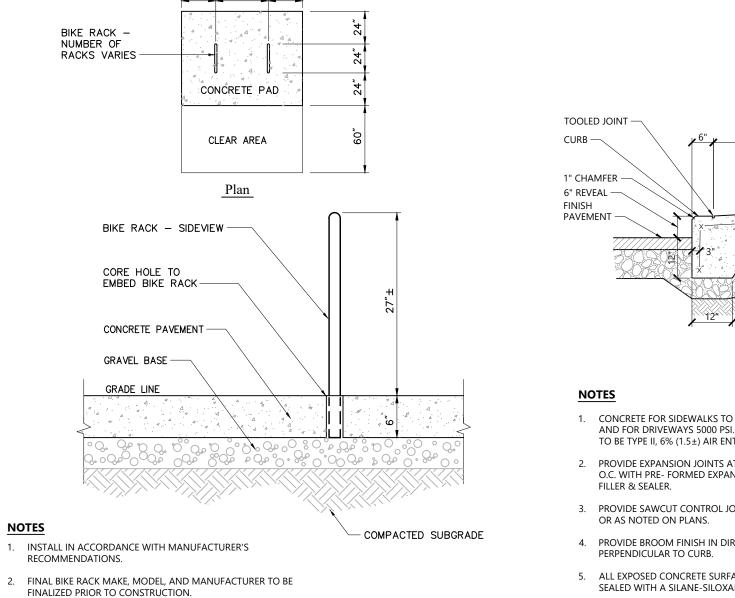
AS FURNISHED BY POLE MFG. — - LIGHT POLES BASES IN PARKING LOT TO - REINFORCEMENT – FINISH GRADE (MATERIALS VARY) TYP. COVER - 5,000 PSI CONCRETE, TYPE II CEMENT CONDUIT AND GROUND ROD CONNECT TO INSIDE METAL POLE SEE ELECTRICAL PLAN FOR SIZE BOLT LAYOUT COMPACTED OR UNDISTURBED & MOUNTING PROCEDURE AS PER MFG. SPECS — ON REBAR SECTION NOTES DETAIL PROVIDED FOR GENERAL INFORMATION ONLY. CONTRACTOR TO PROVIDE STAMPED FINAL DESIGN OF LIGHT POLE FOUNDATION BASED ON RECOMMENDATIONS FROM THE GEOTECHNICAL ENGINEER.

PROVIDE BASE COVER

LIGHT POLE & ANCHORING

SYSTEM BY MFG.

Light Pole Foundation Detail (Up to 15' Pole) 12/19 LD_310A



8" COMPACTED GRAVEL (1½" MAX. STONE SIZE) —— COMPACTED SUBGRADE — EXPANSION JOINT SEALANT CONCRETE CONCRETE FOR SIDEWALKS TO BE 4000 PSI AND FOR DRIVEWAYS 5000 PSI. BOTH MIXES SIDEWALK -TO BE TYPE II, 6% (1.5±) AIR ENTRAINED. **EXPANSION JOINT -**2. PROVIDE EXPANSION JOINTS AT MIN. 30 FT. O.C. WITH PRE- FORMED EXPANSION JOINT BLDG. FACE, FIXED OBJECT, OR CONC. SIDEWALK SECTION $-\!\!\!-$ 3. PROVIDE SAWCUT CONTROL JOINTS AT 6' O.C. **EXPANSION JOINT DETAIL** 4. PROVIDE BROOM FINISH IN DIRECTION 5. ALL EXPOSED CONCRETE SURFACES SHALL BE SEALED WITH A SILANE-SILOXANE PRODUCT. **Bicycle Rack - Embedded** Monolithic Concrete Curb (MCC) & Sidewalk

N.T.S.

6" REVEAL -PAVEMENT -W.W. MESH (6X6W1.4XW1.4) FLAT SHEETS, CENTER DEPTH COMPACTED SUBGRADE -8" COMPACTED GRAVEL (1½" MAX STONE SIZE) — SECTION - EXPANSION JOINT SEALANT CONCRETE FOR SIDEWALKS TO BE 4000 PSI AND FOR DRIVEWAYS 5000 PSI. BOTH MIXES CONCRETE TO BE TYPE II, 6% (1.5±) AIR ENTRAINED. PROVIDE EXPANSION JOINTS AT MIN. 30 FT. PANSION JOINT O.C. WITH PRE- FORMED EXPANSION JOINT BLDG. FACE, FILLER & SEALER. FIXED OBJECT, 3. PROVIDE SAWCUT CONTROL JOINTS AT 6' OR CONC. SIDEWALK SECTION — O.C. OR AS NOTED ON PLANS. **EXPANSION JOINT DETAIL** 4. PROVIDE MEDIUM BROOM FINISH IN DIRECTION PERPENDICULAR TO CURB. 5. ALL EXPOSED CONCRETE SURFACES SHALL BE SEALED WITH A SILANE-SILOXANE **Concrete Sidewalk**

Source: VHB

Precast Concrete Curb (PCC) LD_420 N.T.S.

4000 PSI CEMENT

CONCRETE IF LOCATED

IN LANDSCAPED AREA —

LD_404

Project Number 52816.00

N.T.S.

PROPOSED GRANITE

RADIUS VARIES (SEE PLANS) —

PROPOSED GRANITE TRANSITION CURB

FULL DEPTH

PAVEMENT

* DRIVEWAY AND SIDEWALK SLOPED TO MEET AT 1/2 OF THE CURB REVEAL

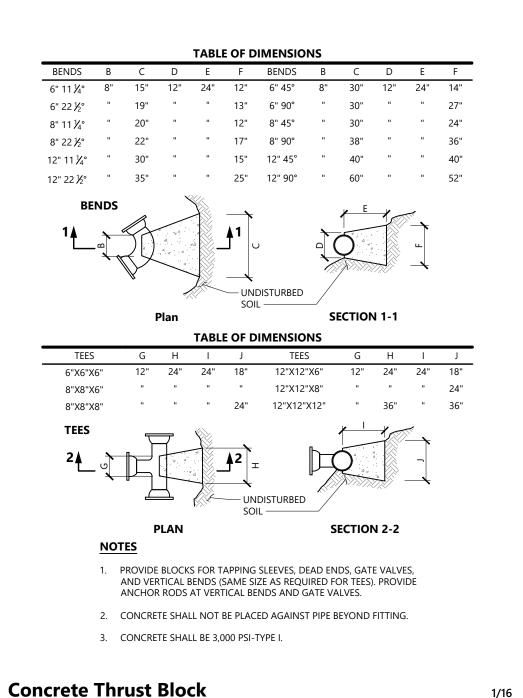
HOT MIX ASPHALT DRIVEWAY

SIDEWALK

CEM CONC 7.5%* MAX

TRAVEL WAY,

CURB —



Source: VHB

─ 3" REVEAL

BACK OF SIDEWALK LINE

SAWCUT - EXIST DRIVEWAY

CEM CONC

SIDEWALK

(CAST IRON)

7.5%* MAX

VERTICAL TRANSITION*

VARIES

SECTION B-B

MATCH DRIVEWAY WIDTH

CEM CONC DRIVEWAY

<u>PLAN</u>

VARIES

3' MIN

1.0%*

SECTION A-A

A ------

Α 🚤

TRANSITION CURB - TYP

ROADWAY SURFACE -

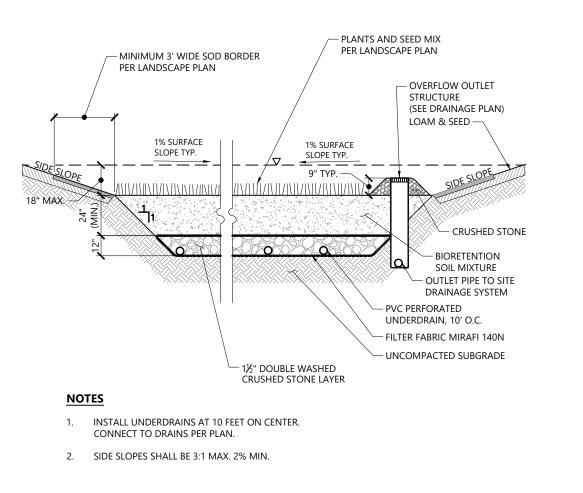
VARIES 2' MIN

CEM CONC DRIVEWAY

VARIES

2' MIN

12" ^{15% MAX}

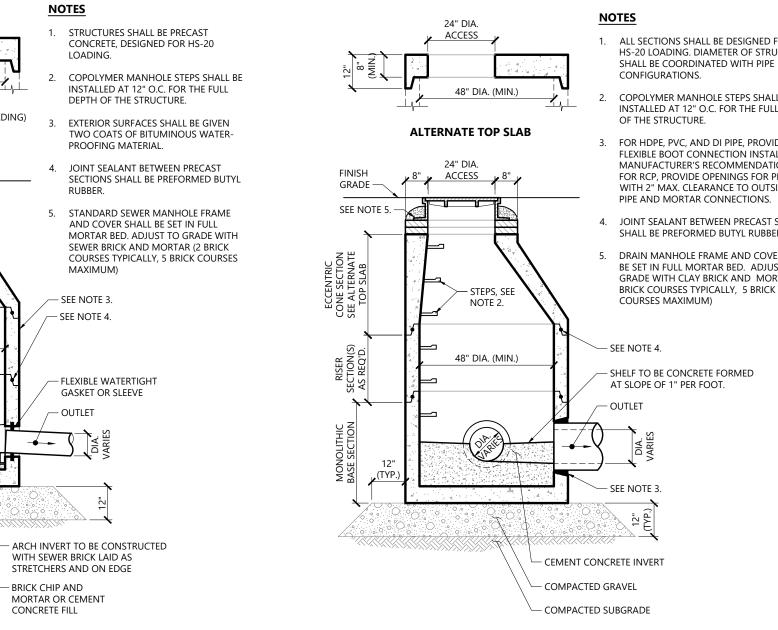


Source: VHB

Bioretention Basin

N.T.S.

LD_260



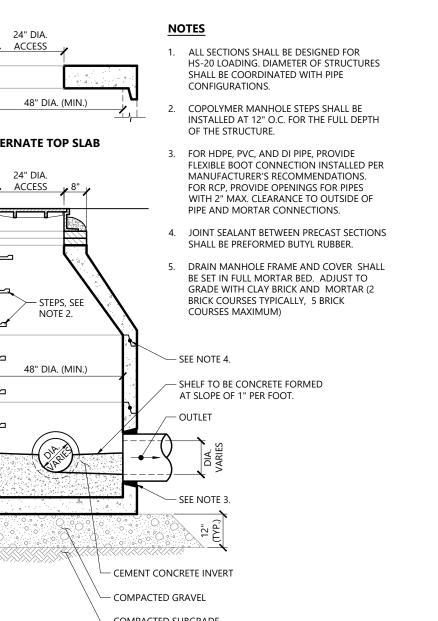
LD_200

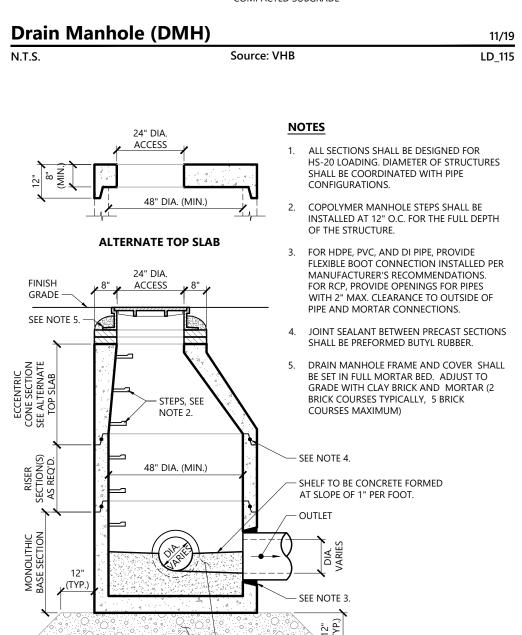
CONCRETE COLLAR

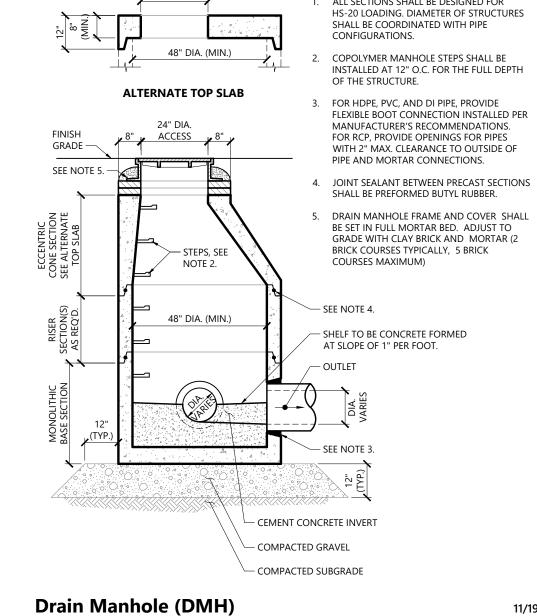
COMPACTED GRAVEL

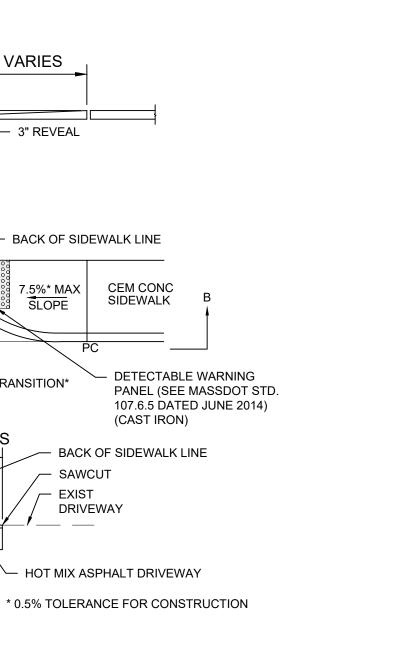
→ / ADA-COMPLIANT FLUSH GRATE

— HARDSCAPE









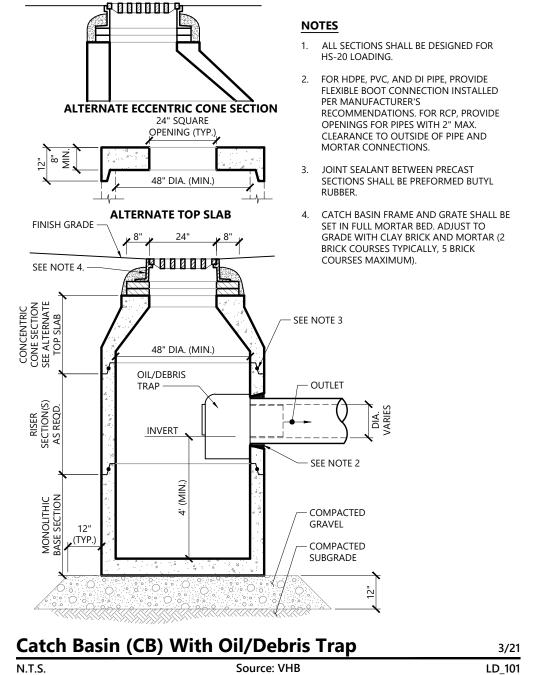
CRUSHED STONE

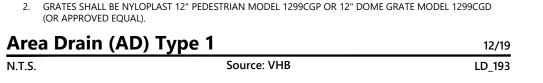
LD_134

N.T.S.

(2" STONE SIZE)

REV





- MANHOLE ACCESS

— STEPS, SEE NOTE 2

1. AREA DRAINS SHALL BE NYLOPLAST 12" DIAMETER DRAIN BASIN, OR APPROVED EQUAL.

12" MIN

ACCESS

8" ACCESS 8"

GRADE —

SHELF TO BE SEWER

BRICK LAID FLAT AT A

COMPACTED GRAVEL —

COMPACTED SUBGRADE —

Sanitary Sewer Manhole (SMH)

SLOPE OF 1"/FOOT —

N.T.S.

PIPE PER PLANS

(REFER TO UTILITY TRENCH DETAIL) —

FLOW

COMPACTED

SUBGRADE —

PRECAST CONCRETE WEIR -

WATER-TIGHT JOINT -

LD_199

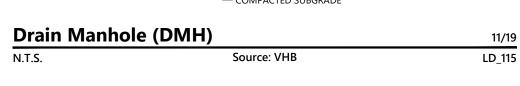
ALTERNATE TOP SLAB

(STEEL REINFORCED FOR HS-20 LOADING)

STEPS, SEE

NOTE2.

48" DIA. MANHOLE (MIN.)



Arlington, Massachusetts 02476

Proposed Self-Storage

101 Walnut Street

Watertown, MA 02471

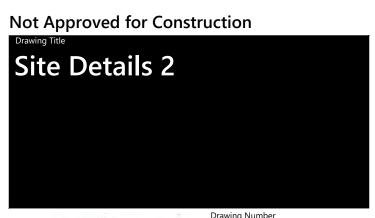
PO Box 9151

617.924.1770

February 9, 2022 **Local Approvals**

Facility

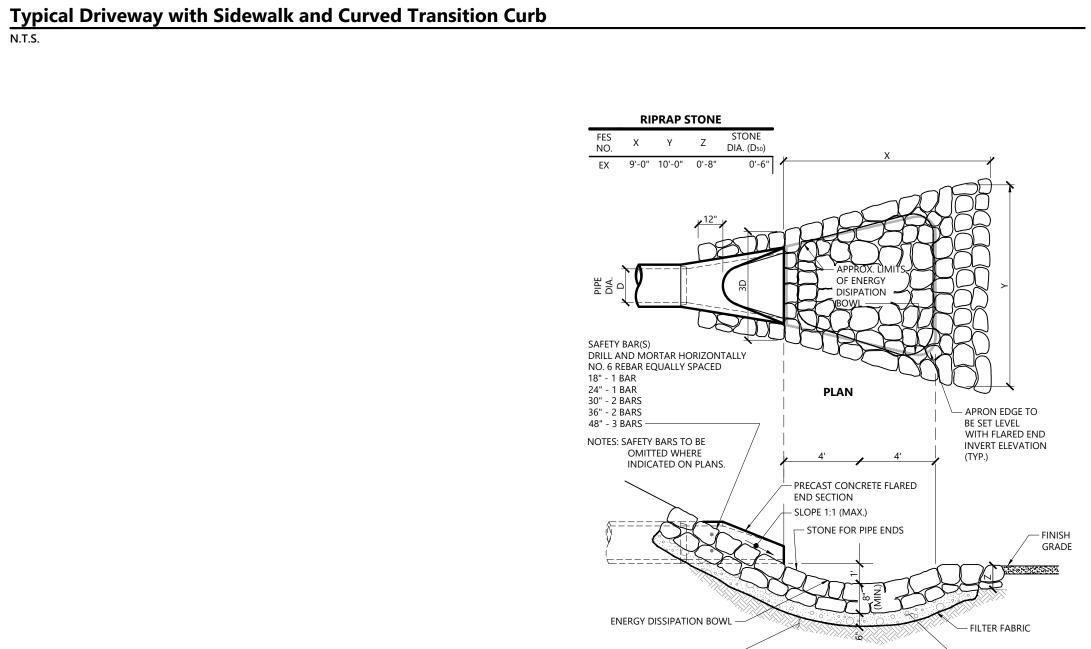
34 Dudley St



PAVED AREA SEE APPLICABLE PAVEMENT SECTION LANDSCAPED AREA - COMMON FILL/ ORDINARY BORROW COMPACTED GRANULAR FILL -SAWCUT -— DEPTH AND SURFACE TREATMENT VARIES - COMPACTED BEDDING - COMPACTED SUBGRADE DETENTION BASIN BERMS OR OTHER SUCH SPECIAL SECTIONS,

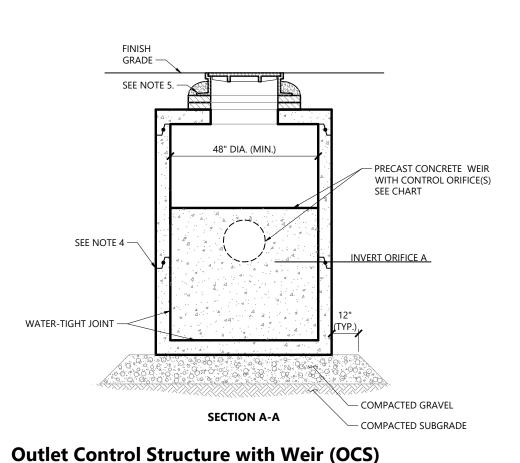
1. WHERE UTILITY TRENCHES ARE CONSTRUCTED THROUGH PLACE TRENCH BACKFILL WITH MATERIALS SIMILAR TO THE SPECIAL SECTION REQUIREMENTS. 2. USE METALLIC TRACING/WARNING TAPE OVER ALL PIPES. 3. COMPACTED GRANULAR FILL MAY CONSIST OF GRAVEL, CRUSHED STONE, SAND, OR OTHER MATERIAL AS APPROVED BY

ENGINEER. **Utility Trench** LD_300 N.T.S. Source: VHB



SECTION A-A

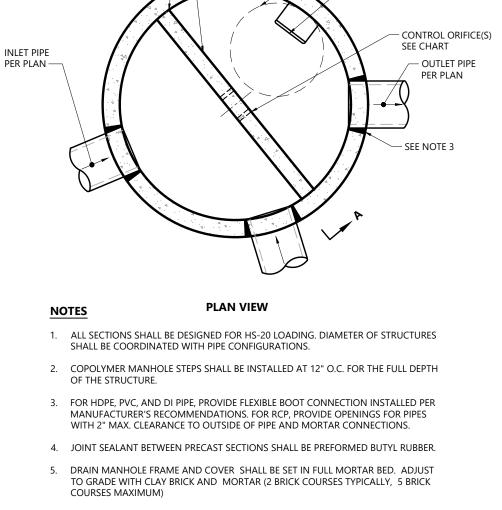
Flared End Section (FES) with Stone Protection



OUTLET STRUCTURE CHART

100 75.5 5" DIA. 71.5 N/A N/A

SSIS 1



3/20 LD_162A

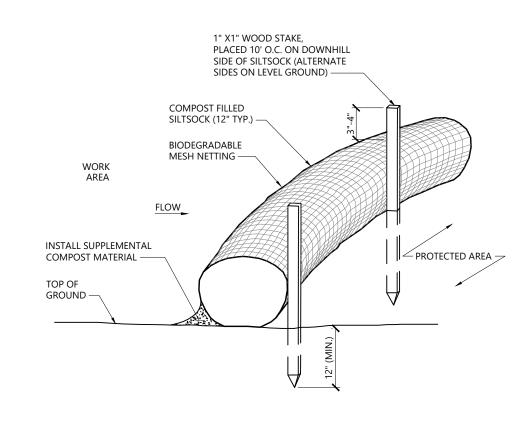
Source: VHB

COMPACTED SUBGRADE —

N.T.S.

- 1. BEGIN AT THE TOP OF BLANKET INSTALLATION AREA BY ANCHORING BLANKET IN A 6" DEEP TRENCH BACKFILL AND COMPACT TRENCH AFTER STAPLING.
- 2. ROLL THE BLANKET DOWN THE SWALE IN THE DIRECTION OF THE WATER FLOW.
- 3. THE EDGES OF BLANKETS MUST BE STAPLED WITH APPROX. 4 INCH OVERLAP WHERE 2 OR MORE STRIP WIDTHS ARE REQUIRED.
- 4. WHEN BLANKETS MUST BE SPLICED DOWN THE SWALE, PLACE UPPER BLANKET END OVER LOWER END WITH 6 INCH (MIN.) OVERLAP AND STAPLE BOTH TOGETHER.
- 5. METHOD OF INSTALLATION SHALL BE AS PER MANUFACTURER'S RECOMMENDATIONS.
- 6. EROSION CONTROL BLANKETS SHALL BE USED IN ALL AREAS WHERE SLOPES EXCEED 3:1.

Erosion Control Blanket Slope Installation



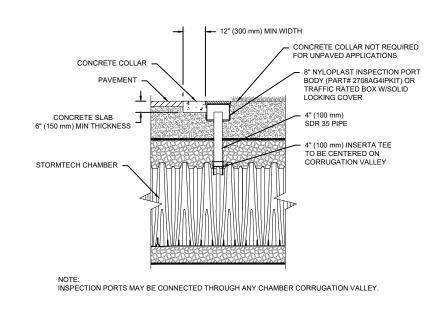
10/20

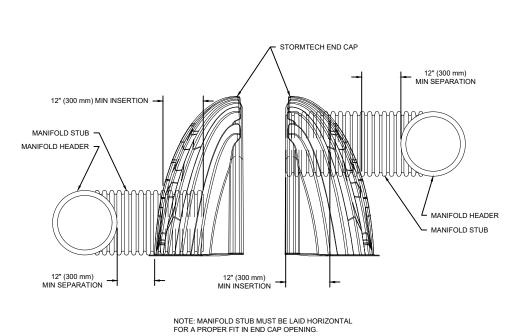
LD_680

- 1. SILTSOCK SHALL BE FILTREXX SILTSOXX, OR APPROVED EQUAL. 2. SILTSOCKS SHALL OVERLAP A MINIMUM OF 12 INCHES.
- 3. SILTSOCK SHALL BE INSPECTED PERIODICALLY AND AFTER ALL STORM EVENTS, AND REPAIR OR REPLACEMENT SHALL BE PERFORMED PROMPTLY
- 4. UPON SITE STABILIZATION, COMPOST MATERIAL SHALL BE DISPERSED ON
- SITE, AS DETERMINED BY THE ENGINEER. 5. IF NON BIODEGRADABLE NETTING IS USED THE NETTING SHALL BE

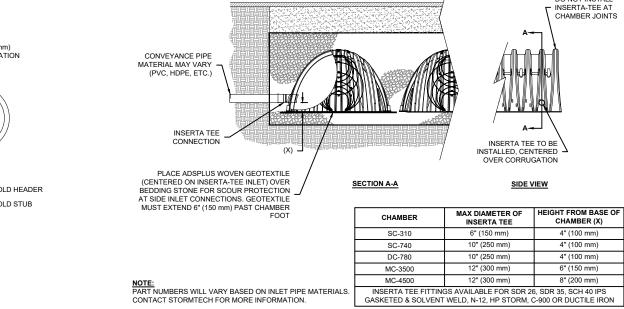
COLLECTED AND DISPOSED OF OFFSITE.

Siltsock - Erosion Control Barrier 10/20 LD_658





Stormtech Inspection Port		Stormtech End Cap Insertion	
N.T.S.	Source: Stormtech	N.T.S.	Source: Stormtech



Stormtech Inserta-Tee Side Inlet

ACCEPTABLE FILL MATERIALS: STORMTECH MC-4500 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.
С	INITIAL FILL: FILL MATERIAL FOR LAYER 'C' STARTS FROM THE TOP OF THE EMBEDMENT STONE (B' LAYER) TO 24" (600 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 M145¹ A-1, A-2-4, A-3 OR AASHTO M43¹ 3, 357, 4, 467, 5, 56, 57, 6, 67, 68, 7, 78, 8, 89, 9, 10	BEGIN COMPACTIONS AFTER 24" (600 mm) OF MATERIAL OVET THE CHAMBERS IS REACHED. COMPACT ADDITIONAL LAYERS 12" (300 mm) MAX LIFTS TO A MIN. 95% PROCTOR DENSITY FOI WELL GRADED MATERIAL AND 95% RELATIVE DENSITY FOR PROCESSED AGGREGATE MATERIALS.
В	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, 4	NO COMPACTION REQUIRED.
А	FOUNDATION STONE: FILL BELOW CHAMBERS FROM THE SUBGRADE UP TO THE FOOT (BOTTOM) OF THE CHAMBER.	CLEAN, CRUSHED, ANGULAR STONE	AASHTO M43 ¹ 3, 4	PLATE COMPACT OR ROLL TO ACHIEVE A FLAT SURFACE. ^{2,3}

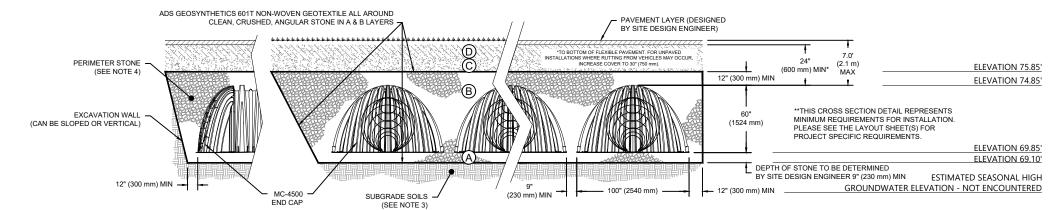
PLEASE NOTE:

1. THE LISTED ASHTO 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 9" (230 mm) (MAX) LIFTS USING TWO FULL COVERAGES WITH A VIBRATORY COMPACTOR.

3. WHERE INFLITRATION 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.

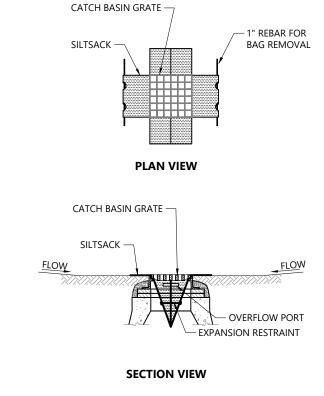
4. ONCE LAYER 'C' IS PLACED, ANY SOIL/MATERIAL CAN BE PLACED IN LAYER 'D' UP TO THE FINISHED GRADE. MOST PAVEMENT SUBBASE SOILS CAN BE USED TO REPLACE THE MATERIAL REQUIREMENTS OF LAYER 'C' OR 'D' AT THE SITE DESIGN ENGINEER'S DISCRETION.



- 1. CHAMBERS SHALL MEET THE REQUIREMENTS OF ASTM F2418-16a, "STANDARD SPECIFICATION FOR POLYPROPYLENE (PP) CORRUGATED WALL STORMWATER COLLECTION CHAMBERS" CHAMBER CLASSIFICATION 60x101 2. MC-4500 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 3". TO ENSURE THE INTEGRITY OF THE ARCH SHAPE DURING INSTALLATION, a) THE ARCH STIFFNESS CONSTANT AS DEFINED IN SECTION 6.2.8 OF ASTM F2418 SHALL BE GREATER THAN OR EQUAL TO 500 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.

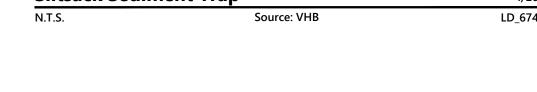
Subsurface Detention/Infiltration System (StormTech MC-4500)

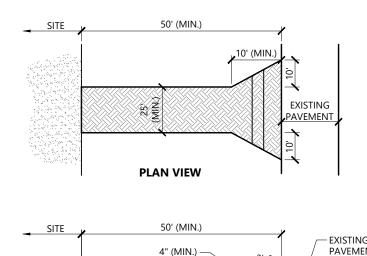
N.T.S.

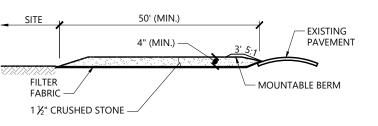


- 1. INSTALL SILTSACK IN ALL CATCH BASINS WHERE INDICATED ON THE PLAN BEFORE COMMENCING WORK OR IN PAVED AREAS AFTER BINDER COURSE IS PLACED AND HAY BALES HAVE BEEN REMOVED.
- 2. GRATE TO BE PLACED OVER SILTSACK.
- 3. SILTSACK SHALL BE INSPECTED PERIODICALLY AND AFTER ALL STORM EVENTS AND CLEANING OR REPLACEMENT SHALL BE PERFORMED PROMPTLY AS NEEDED. MAINTAIN UNTIL UPSTREAM AREAS HAVE BEEN PERMANENTLY STABILIZED

Siltsack Sediment Trap







CROSS-SECTION

- 1. EXIT WIDTH SHALL BE A TWENTY-FIVE (25) FOOT MINIMUM, BUT NOT LESS THAN THE FULL WIDTH AT POINTS WHERE INGRESS OR EGRESS
- 2. THE EXIT SHALL BE MAINTAINED IN A CONDITION WHICH SHALL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHTS-OF-WAY. THIS MAY REQUIRE PERIODIC TOP DRESSING WITH ADDITIONAL STONE AS CONDITIONS DEMAND AND REPAIR OR CLEANOUT OF ANY MEASURES USED TO TRAP SEDIMENT. ALL SEDIMENT SPILLED, DROPPED, WASHED OR TRACKED ONTO PUBLIC RIGHTS-OF-WAY MUST BE REMOVED IMMEDIATELY. BERM SHALL BE PERMITTED. PERIODIC INSPECTION AND MAINTENANCE SHALL BE PROVIDED AS NEEDED.
- 3. STABILIZED CONSTRUCTION EXIT SHALL BE REMOVED PRIOR TO FINAL FINISH MATERIALS BEING INSTALLED.

Ctabilinad Can	atuu ati a u Falit	
Stabilized Con	Struction Exit	1/16
N.T.S.	Source: VHB	LD_682

Proposed Self-Storage Facility

101 Walnut Street

Watertown, MA 02471

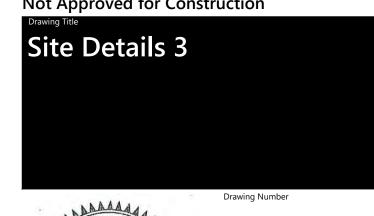
PO Box 9151

617.924.1770

34 Dudley St Arlington, Massachusetts 02476

Designed by	Checked by
MEA	EKG
Issued for	Date
Local Approvals	February 9, 202

Not Approved for Construction



Project Number 52816.00

StormTech MC-4500 Isolator Row Profile

COVER PIPE CONNECTION TO END CAP WITH ADS -GEOSYNTHETICS 601T NON-WOVEN GEOTEXTILE

SUMP DEPTH TBD BY SITE DESIGN ENGINEER (24" [600 mm] MIN RECOMMENDED)

Source: StormTech

51 of 491

ONE LAYER OF ADSPLUS175 WOVEN GEOTEXTILE BETWEEN FOUNDATION STONE AND CHAMBERS 10.3' (3.1 m) MIN WIDE CONTINUOUS FABRIC WITHOUT SEAMS

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)

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

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.

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.

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.

Planting Notes

- ALL PROPOSED PLANTING LOCATIONS SHALL BE STAKED AS SHOWN ON THE
 PLANS FOR FIELD REVIEW AND APPROVAL BY THE LANDSCAPE ARCHITECT
 PRIOR TO INSTALLATION.
- 2. CONTRACTOR SHALL VERIFY LOCATIONS OF ALL BELOW GRADE AND ABOVE GROUND UTILITIES AND NOTIFY OWNERS REPRESENTATIVE OF CONFLICTS.
- 3. NO PLANT MATERIALS SHALL BE INSTALLED UNTIL ALL GRADING AND CONSTRUCTION HAS BEEN COMPLETED IN THE IMMEDIATE AREA. CONTRACTOR SHALL NOTIFY OWNER'S REPRESENTATIVE OF ANY CONFLICT.
- 4. A 3-INCH DEEP MULCH PER SPECIFICATION SHALL BE INSTALLED UNDER ALL TREES AND SHRUBS, AND IN ALL PLANTING BEDS, UNLESS OTHERWISE INDICATED ON THE PLANS, OR AS DIRECTED BY OWNER'S REPRESENTATIVE.
- 5. ALL TREES SHALL BE BALLED AND BURLAPPED, UNLESS OTHERWISE NOTED IN THE DRAWINGS OR SPECIFICATION, OR APPROVED BY THE OWNER'S REPRESENTATIVE.
- 6. FINAL QUANTITY FOR EACH PLANT TYPE SHALL BE AS GRAPHICALLY SHOWN ON THE PLAN. THIS NUMBER SHALL TAKE PRECEDENCE IN CASE OF ANY DISCREPANCY BETWEEN QUANTITIES SHOWN ON THE PLANT LIST AND ON THE PLAN. THE CONTRACTOR SHALL REPORT ANY DISCREPANCIES BETWEEN THE NUMBER OF PLANTS SHOWN ON THE PLANT LIST AND PLANT LABELS PRIOR TO BIDDING.

- 7. ANY PROPOSED PLANT SUBSTITUTIONS MUST BE REVIEWED BY LANDSCAPE ARCHITECT AND APPROVED IN WRITING BY THE OWNER'S REPRESENTATIVE.
- 8. ALL PLANT MATERIALS INSTALLED SHALL MEET THE SPECIFICATIONS OF THE "AMERICAN STANDARDS FOR NURSERY STOCK" BY THE AMERICAN ASSOCIATION OF NURSERYMEN AND CONTRACT DOCUMENTS.
- 9. ALL PLANT MATERIALS SHALL BE GUARANTEED FOR ONE YEAR FOLLOWING DATE OF FINAL ACCEPTANCE.
- AREAS DESIGNATED "LOAM & SEED" SHALL RECEIVE MINIMUM 6" OF LOAM AND SPECIFIED SEED MIX. LAWNS OVER 2:1 SLOPE SHALL BE PROTECTED WITH EROSION CONTROL FABRIC.
- 11. ALL DISTURBED AREAS NOT OTHERWISE NOTED ON CONTRACT DOCUMENTS SHALL BE LOAM AND SEEDED OR MULCHED AS DIRECTED BY OWNER'S REPRESENTATIVE.
- 12. THIS PLAN IS INTENDED FOR PLANTING PURPOSES. REFER TO SITE / CIVIL DRAWINGS FOR ALL OTHER SITE CONSTRUCTION INFORMATION.

Plant Maintenance Notes

 CONTRACTOR SHALL PROVIDE COMPLETE MAINTENANCE OF THE LAWNS AND PLANTINGS. NO IRRIGATION IS PROPOSED FOR THIS SITE. THE CONTRACTOR SHALL SUPPLY SUPPLEMENTAL WATERING FOR NEW LAWNS AND PLANTINGS DURING THE ONE YEAR PLANT GUARANTEE PERIOD.

 CONTRACTOR SHALL PROVIDE ALL MATERIALS, LABOR, AND EQUIPMENT FOR THE COMPLETE LANDSCAPE MAINTENANCE WORK. WATER SHALL BE PROVIDED BY THE CONTRACTOR.

3. WATERING SHALL BE REQUIRED DURING THE GROWING SEASON, WHEN NATURAL RAINFALL IS BELOW ONE INCH PER WEEK.

4. WATER SHALL BE APPLIED IN SUFFICIENT QUANTITY TO THOROUGHLY SATURATE THE SOIL IN THE ROOT ZONE OF EACH PLANT.

 CONTRACTOR SHALL REPLACE DEAD OR DYING PLANTS AT THE END OF THE ONE YEAR GUARANTEE PERIOD. CONTRACTOR SHALL TURN OVER MAINTENANCE TO THE FACILITY MAINTENANCE STAFF AT THAT TIME.



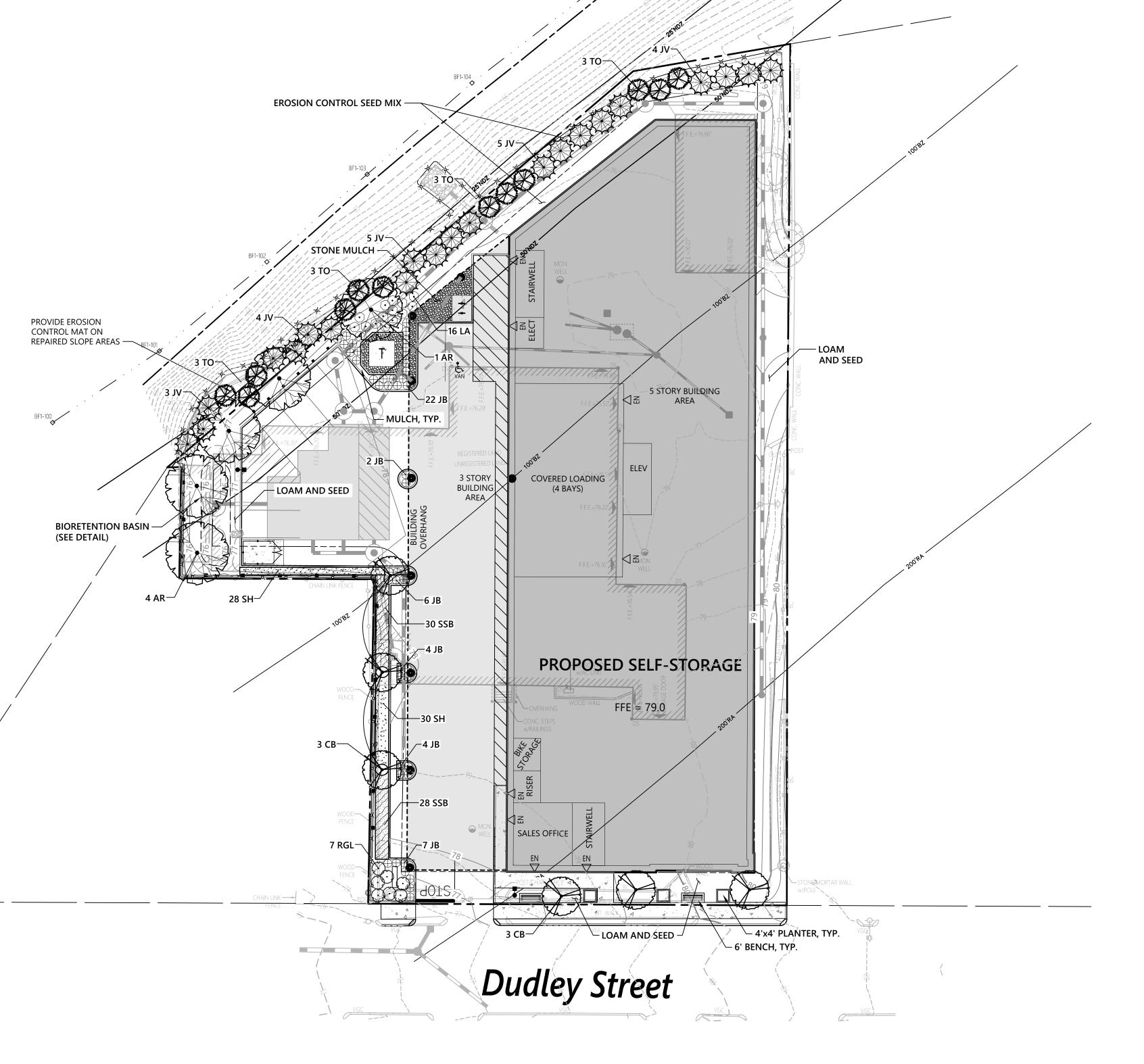
101 Walnut Street
PO Box 9151
Watertown, MA 02471
617.924.1770

PLANT SCHEDULE

DECIDUOUS TREES AR CB	<u>QTY</u> 5 6	BOTANICAL NAME Acer rubrum Carpinus betulus `Fastigiata`	COMMON NAME Red Maple Pyramidal European Hornbean	<u>SIZE</u> 2 1/2 - 3" CAL. 2 1/2 - 3" CAL.	
EVERGREEN TREES JV TO	<u>QTY</u> 21 12	BOTANICAL NAME Juniperus virginiana Thuja occidentalis `Nigra`	COMMON NAME Eastern Redcedar Dark American Arborvitae	<u>SIZE</u> 6 - 7` HT. 5 - 6` HT.	
SHRUBS JB LA RGL	<u>QTY</u> 45 16 7	BOTANICAL NAME Juniperus horizontalis `Bar Harbor` Leucothoe axillaris Rhus aromatica `Gro-Low`	COMMON NAME Bar Harbor Creeping Juniper Coastal Leucothoe Gro-Low Fragrant Sumac	<u>SIZE</u> 18 - 24" SPD 18 - 24" SPD 18 - 24" SPD	
ORNAMENTAL GRASSES SSB SH	<u>QTY</u> 58 58	BOTANICAL NAME Schizachyrium scoparium Sporobolus heterolepis	COMMON NAME Little Bluestem Grass Prairie Dropseed	SIZE 2 GAL. 2 GAL.	SPACING 24" o.c. 24" o.c.

Seed Mixtures:

- 1. AREAS INDICATED AS "BIORETENTION BASIN" ARE TO BE SEEDED WITH NEW ENGLAND EROSION CONTROL / RESTORATION MIX FOR DETENTION PONDS AND MOIST AREAS, AS MANUFACTURED BY NEW ENGLAND WETLAND PLANTS, INC. AMHERST, MA (413) 548-8000, www.NEWP.com,OR AN APPROVED EQUAL. APPLY IN ACCORDANCE WITH MANUFACTURERS RECOMMENDATIONS.
- 2. AREAS INDICATED AS "EROSION CONTROL SEED MIX" ARE TO BE SEEDED WITH NEW ENGLAND CONSERVATION EROSION CONTROL/RESTORATION MIX FOR DRY SITES, AS MANUFACTURED BY NEW ENGLAND WETLAND PLANTS, INC. AMHERST, MA (413) 548-8000, www.NEWP.com,OR AN APPROVED EQUAL. APPLY IN ACCORDANCE WITH MANUFACTURERS RECOMMENDATIONS.



34 Dudley St Arlington, Massachusetts 02476

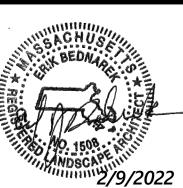
No. Revision Date Appvd.

SJH EKG

Issued for Date

Local Approvals February 9, 2022





L1.01

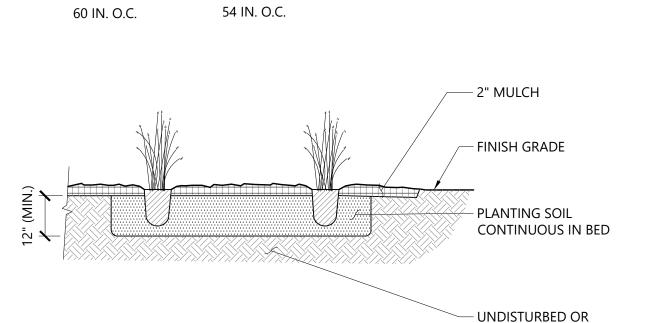
Sheet of 9 10

Project Number 52816.00



PO Box 9151 Watertown, MA 02471 617.924.1770

PLANT SPACING PLANT SPACING("A") ROW SPACING ("B") 5 IN. O.C. 6 IN. O.C. 8 IN. O.C. 7 IN. O.C. 10 IN. O.C. 8½ IN. O.C. 12 IN. O.C. 10 ½ IN. O.C. 15 IN. O.C. 13 IN. O.C. 16 IN. O.C. 18 IN. O.C. 24 IN. O.C. 21 IN. O.C. 26 IN. O.C. 30 IN. O.C. 30 IN. O.C. 36 IN. O.C. 42 IN. O.C. 48 IN. O.C. 48 IN. O.C. 54 IN. O.C.



EXCAVATE SHRUB BED TO REQUIRED DEPTH AND BACKFILL WITH SPECIFIED SOIL MIX. SOIL MIX SHALL BE CONTINUOUS WITHIN EACH SHRUB BED	TOP OF ROOTBALL 1 INCH ABOVE FINISH GRADE
3" PINE BARK MULCH DO NOT COVER STEMS OR TRUNK	SLOPE TO FORM SAUCER
ROOTBALL DEPTH 12" (MIN.)	
HOLE (THREE TIMES ROOTBALL DIA. WITH SLOPED SIDES)	SIT ROOTBALL ON EXISTING UNDISTURBED SOIL OR ON COMPACTED SUBGRADE UNTIE AND ROLL BACK BURLAP FROM 1/3 (MIN.) OF ROOTBALL; IF SYNTHETIC WRAP IS USED, REMOVE COMPLETELY.

NOTES

1. LOOSEN ROOTS AT THE OUTER EDGE OF ROOTBALL OF CONTAINER GROWN SHRUBS.

Shrub Bed Planting	
I.T.S.	Source: VHB

MIRAFI 140N FILTER FABRIC

COMPACTED SUBGRADE

- 3/4" WASHED STONE

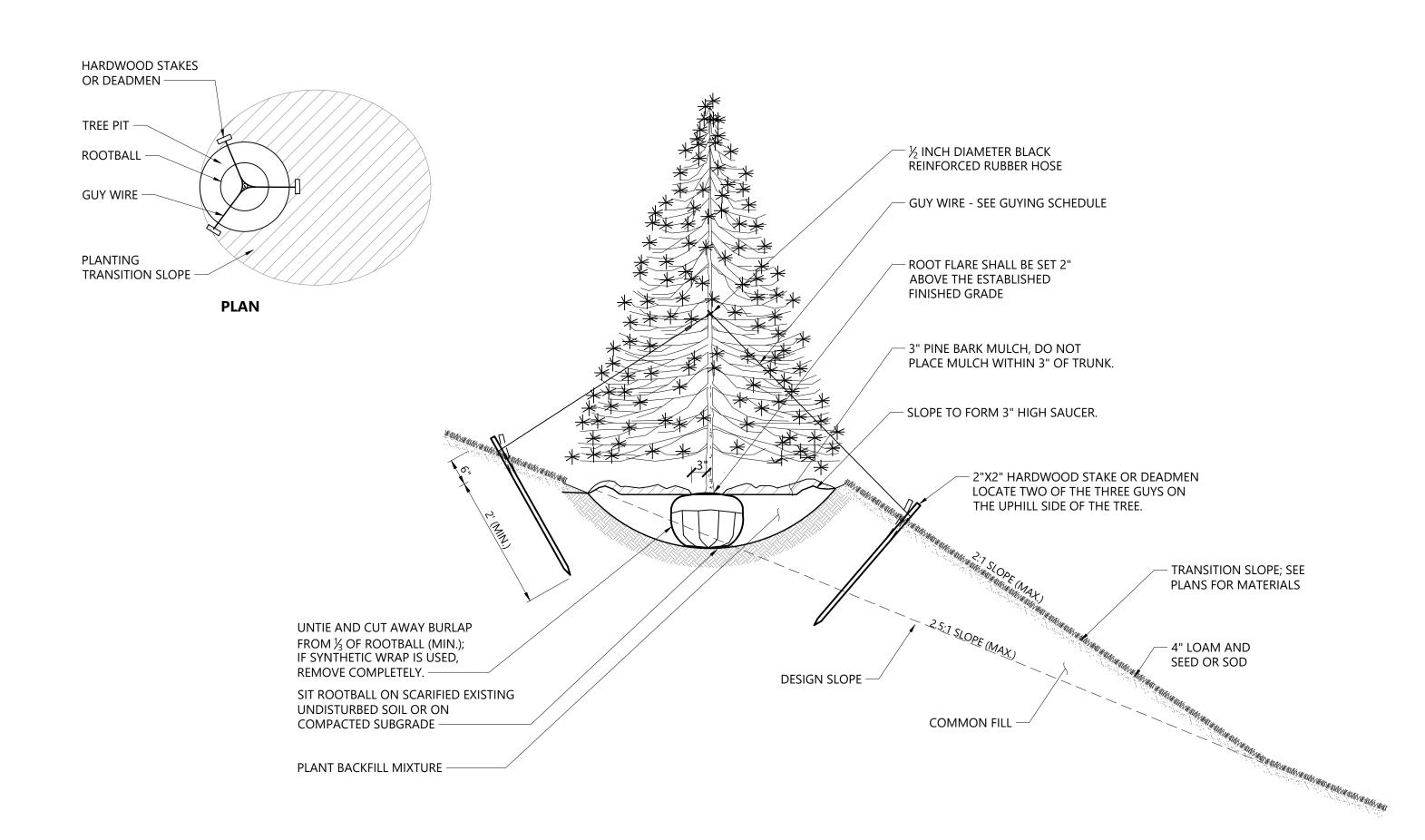
NOTES

 EDGE CONDITIONS VARIES. WHERE STONE MUCH DOES NOT ABUT CURB OR BUILDING FACE PROVIDE 12" LONG STEEL EDGING

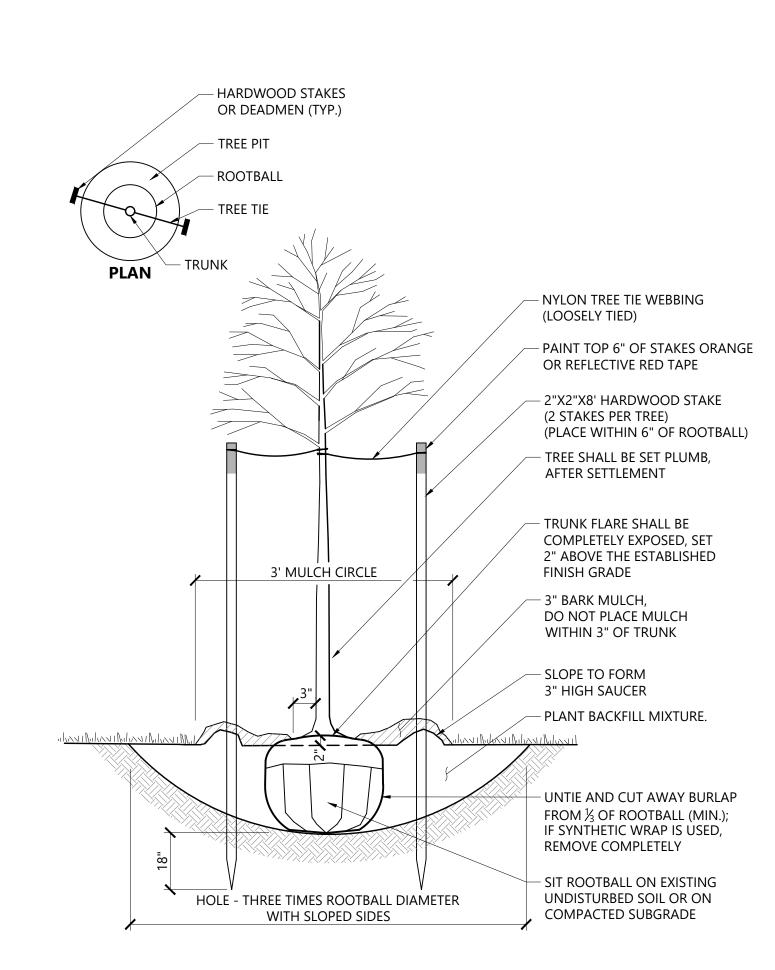
Stone Mulch	11/15	
N.T.S.	Source: VHB	LD_

Perennial and	d Ornamental Grass Planting	1/16
N.T.S.	Source: VHB	LD_618

COMPACTED SUBGRADE



Tree Planting on Slope1/16N.T.S.Source: VHB



Tree Planting	nting (For Trees Under 4" Caliper)	
N.T.S.	Source: VHB	LD 60

Proposed Self-Storage Facility

34 Dudley St Arlington, Massachusetts 02476

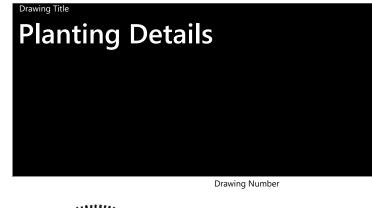
Designed by SJH EKG

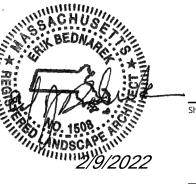
Ssued for Date

Local Approvals February 9, 2022

Not Approved for Construction

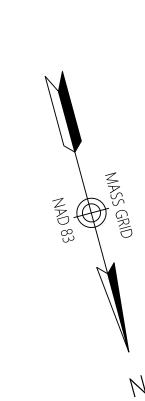
Drawing Title





Project Number **52816.00**

53 of 491



General Notes

- 1) THE PROPERTY LINES SHOWN ON THIS PLAN ARE BASED UPON AN ACTUAL FIELD SURVEY CONDUCTED BY VHB, INC. IN OCTOBER, 2021 AND FROM DEEDS AND PLANS OF RECORD.
- THE EXISTING CONDITIONS SHOWN ON THIS PLAN ARE BASED UPON AN ACTUAL ON-THE-GROUND INSTRUMENT SURVEY PERFORMED BY VHB, INC. IN OCTOBER, 2021.
 THE LOCATIONS OF EXISTING UNDERGROUND UTILITIES SHOWN ON THIS PLAN ARE BASED ON FIELD
- OBSERVATIONS AND INFORMATION OF RECORD. THEY ARE NOT WARRANTED TO BE EXACTLY LOCATED NOR IS IT WARRANTED THAT ALL UNDERGROUND UTILITIES OR OTHER STRUCTURES ARE SHOWN ON THIS PLAN.
- 4) HORIZONTAL DATUM IS BASED ON MASS. GRID SYSTEM, NAD 1983. ELEVATIONS SHOWN ON THIS PLAN REFER TO NAVD OF 1988.
- 5) THE WETLANDS SHOWN ON THIS PLAN WERE FLAGGED BY VHB ENVIRONMENTAL DEPARTMENT AND FIELD SURVEYED BY VHB IN OCTOBER, 2021.
- 6) THE TREE SYMBOL OUTLINE SHOWN ON THIS PLAN DOES NOT REPRESENT THE ACTUAL TREE CANOPY.
- 7) THE LOT LIES ENTIRELY WITHIN ZONE X (UNSHADED) (AREAS TO BE OUTSIDE THE 0.2% ANNUAL CHANCE FLOODPLAIN) AS SHOWN ON THE FLOOD INSURANCE RATE MAP FOR MIDDLESEX COUNTY, MASSACHUSETTS, MAP NUMBER 25017C0416E, EFFECTIVE DATE JUNE 4, 2010.

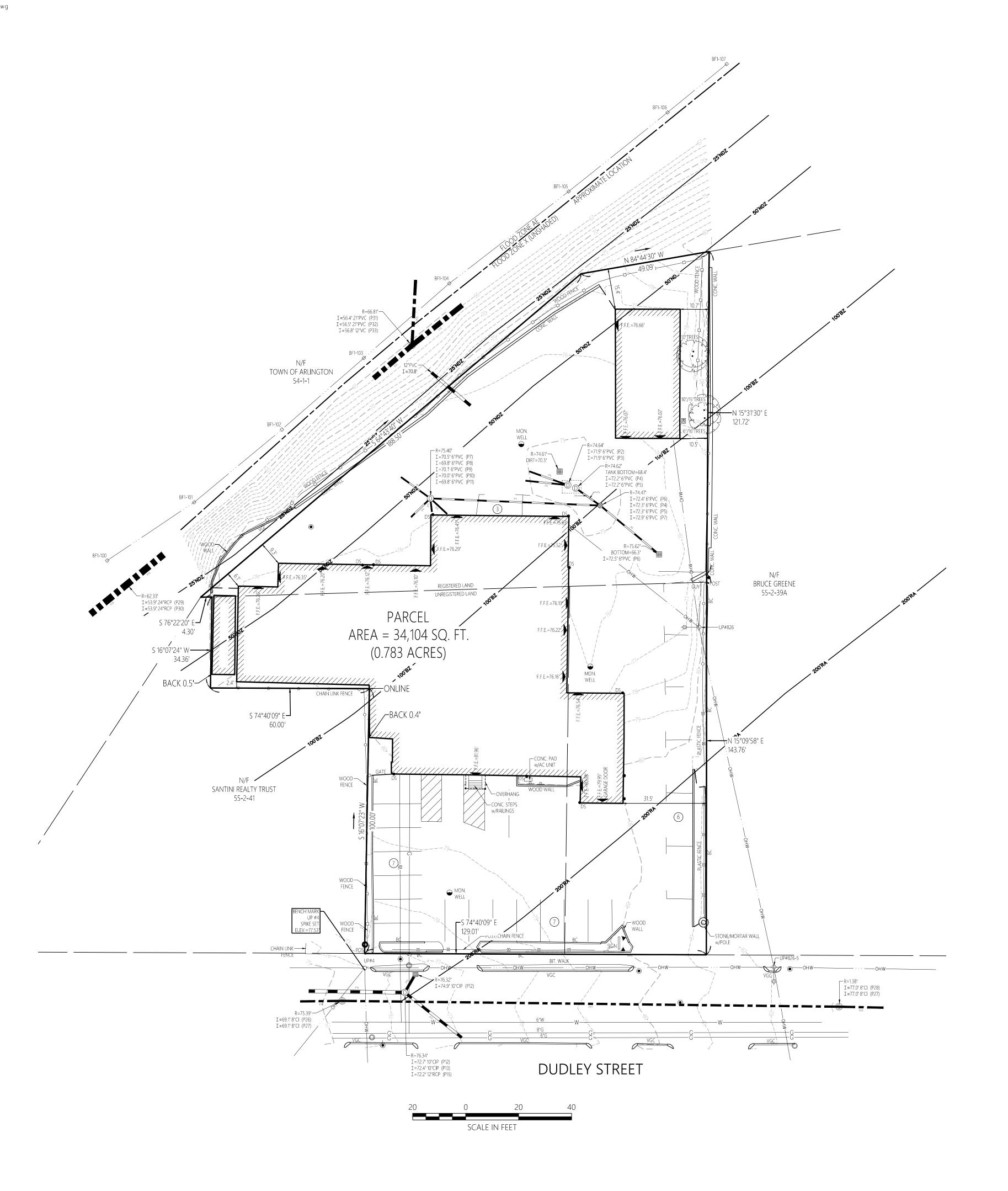
Zoning

THE LOT LIES ENTIRELY WITHIN THE INDUSTRIAL DISTRICT (I) AS SHOWN ON GIS MAPPING FOR THE TOWN OF ARLINGTON MASSACHUSETTS" AND THE INLAND WETLAND OVERLAY DISTRICT. DIMENSIONAL REQUIREMENTS FOR A (I) AT THE TIME OF THIS SURVEY ARE:

		REQUIRED	EXISTING
	MINIMUM LOT AREA	N/A	34,104 S.F
	MINIMUM FRONTAGE	N/A	129.01 FEET
	MINIMUM FRONT YARD SETBACK	10 FEET	57.0 FEET
	MINIMUM SIDE YARD SETBACK	10 FEET	0.0 FEET
	MINIMUM REAR YARD SETBACK	10 FEET	6.1 FEET
	MAXIMUM BUILDING HEIGHT	65*/39 FEET	23.8 FEET
CLI	DIFCT TO ANAENITY DECLUDENCENTS IN SEC	TION F (2 D/7)	

*SUBJECT TO AMENITY REQUIREMENTS IN SECTION 5.6.2 D(7)

54 of 491





101 Walnut Street PO Box 9151 Watertown, MA 02471 617.924.1770

D DRAIN MANHOLE ■ CATCH BASIN S SEWER MANHOLE Ē ELECTRIC MANHOLE T TELEPHONE MANHOLE MANHOLE HH□ HAND HOLE WATER GATE FIRE HYDRANT GAS GATE

Legend

FIRE HYDRANT
 GAS GATE
 BOLLARD w/LIGHT
 STREET SIGN
 ↓ LIGHT POLE
 UTILITY POLE
 GUY POLE

GUY WIRE MONITORING WELL FLOOD LIGHT WELL MARSH

F.F.E.=45.27'
FINISHED FLOOR ELEVATION
CNO COULD NOT OPEN
NPV NO PIPES VISIBLE
DYL DOUBLE YELLOW LINE

SGE
SGE
SLOPED GRANITE CURB
SLOPED GRANITE EDGE
BITUMINOUS BERM
BITUMINOUS CURB
GUARD RAIL
CHAIN LINK FENCE
DRAINAGE LINE

OVERHEAD WIRE

UNDERGROUND ELECTRIC

TO TELEPHONE LINE

G GAS LINE

WATER LINE

— — — — SEWER LINE

STONE WALL
TREE LINE
100'BZ 100-FT BUFFER ZONE
100'RA 100-FT RIVER FRONT AREA
200'RA 200-FT RIVER FRONT AREA

Self-Storage

34 Dudley Street Arlington, Massachusetts

Designed by Checked by

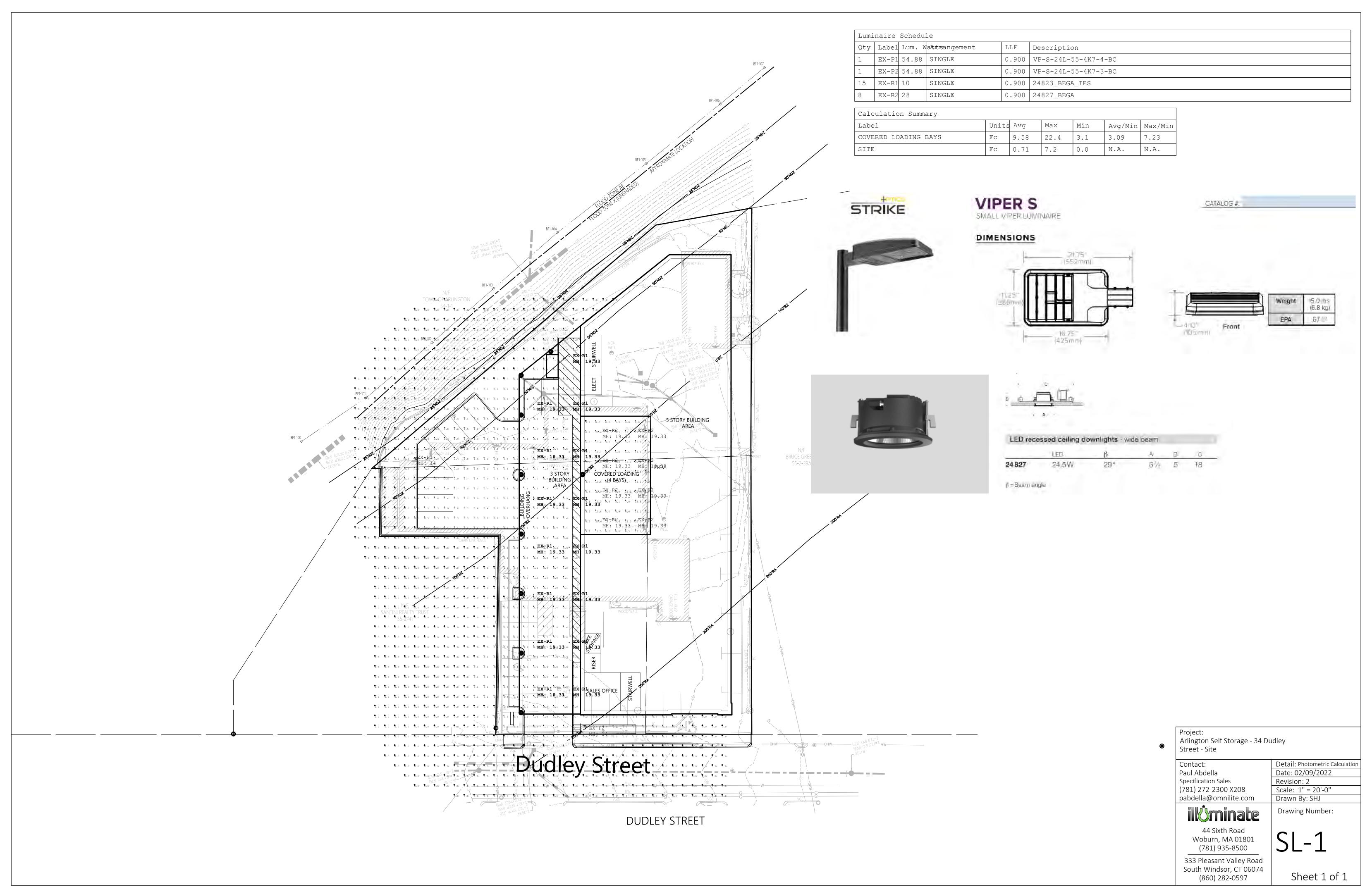
Issued for Date

October 28, 2021

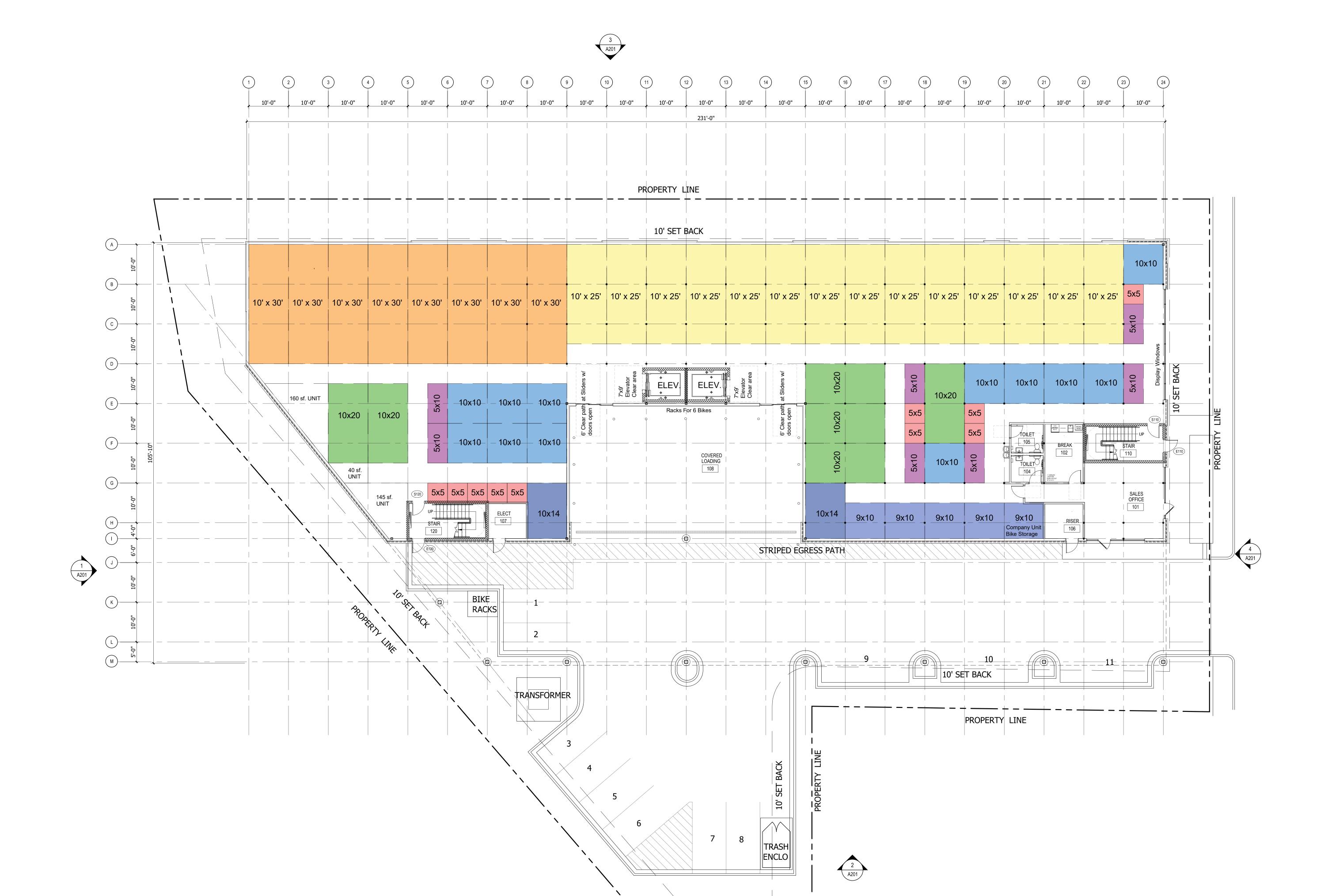




Project Number **52816.00**







10' SET BACK

PROPERTY LINE

PREMIER STORAGE INVESTORS

SELF STORAGE

ARLINGTON, MASSACHUSETTS
Project No. 21-033



Local Approvals Submission February 09, 2022 REVISIONS

No. Description Da

1st. FLOOR PLAN

A-101

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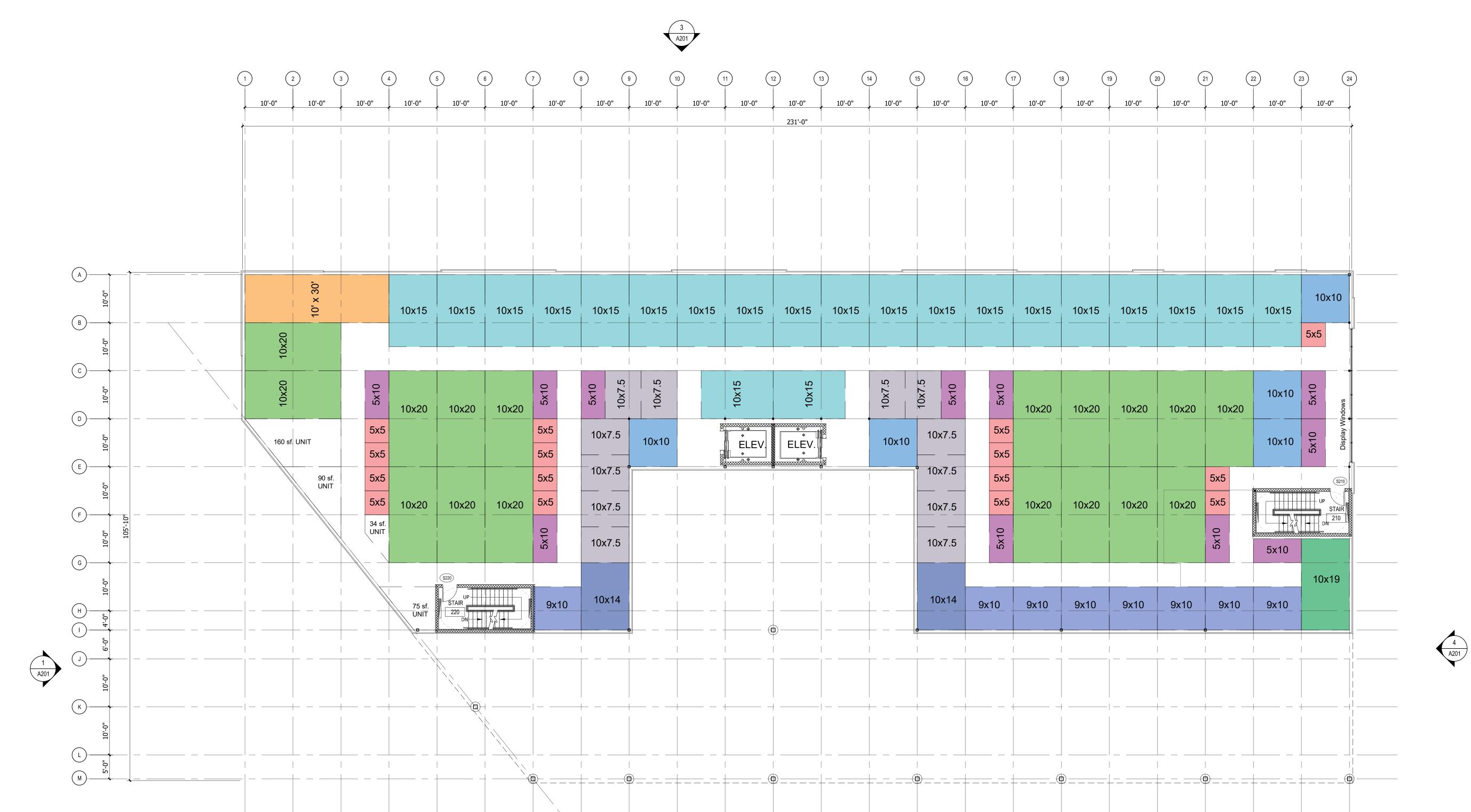
1st. FLOOR GROSS
13,677 sq.ft. - Storage
852 sq.ft. - Office
14,529 sq. ft TOTAL

BUILDING GROSS

94,854 sq.ft. - Storage 852 sq.ft. - Office 95,706 sq. ft TOTAL

NORTH





2nd. FLOOR GROSS 14,529 sq. ft TOTAL





SELF STORAGE

Local Approvals Submission
February 09, 2022

REVISIONS
No. Description Date

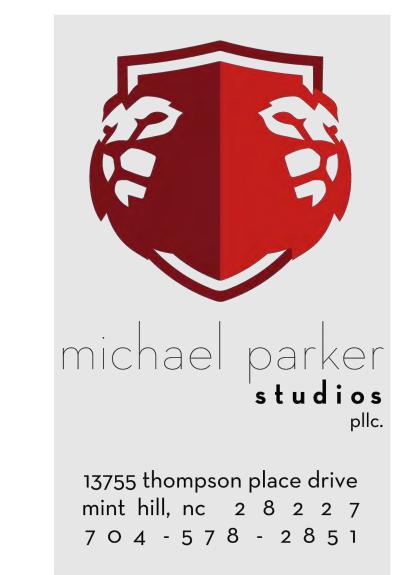
REVISIONS		
No.	Description	Da

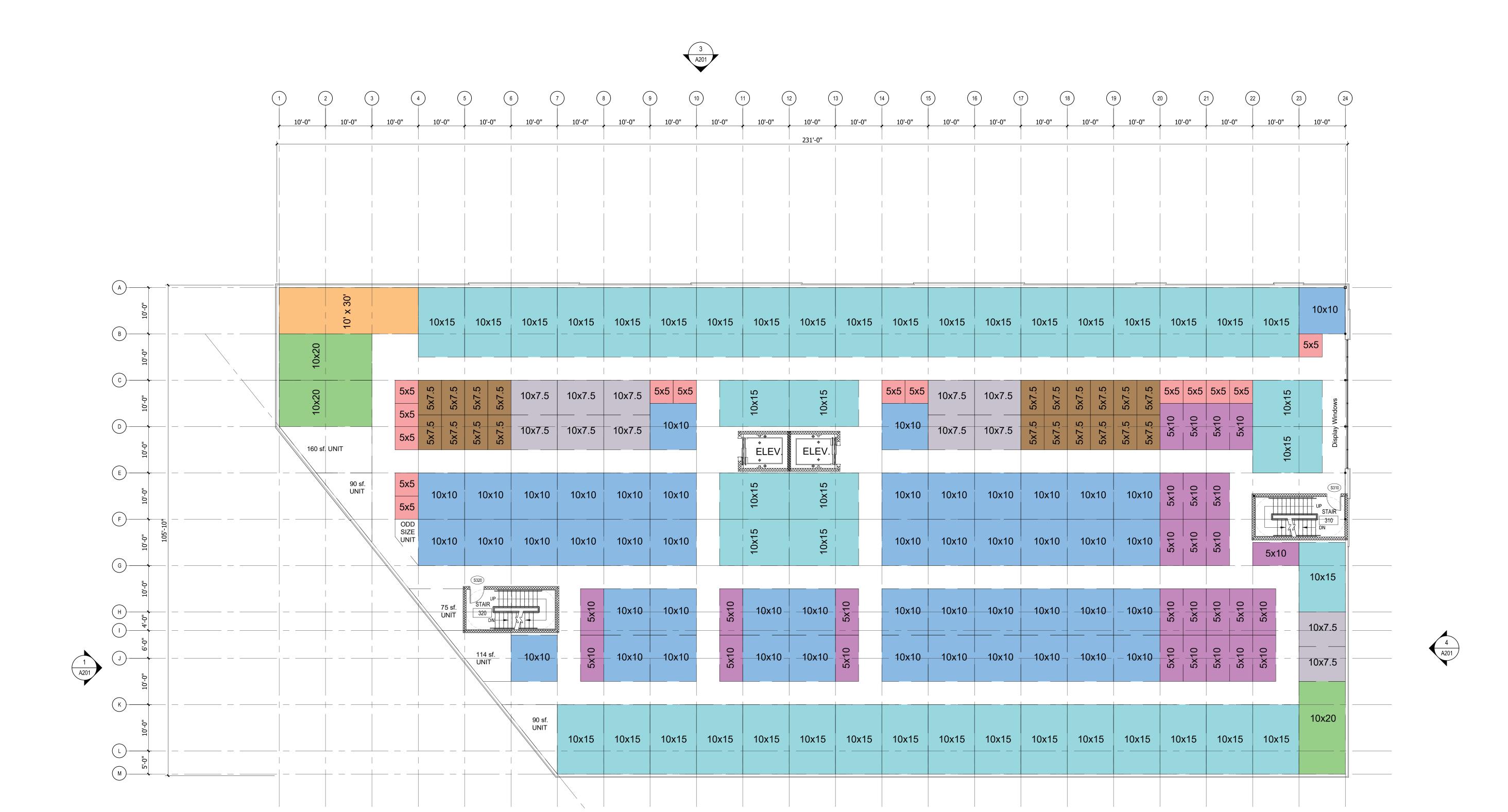
2nd. FLOOR PLAN



A-102

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STORAGE INVESTORS

SELF STORAGE

ARLINGTON, MASSACHUSETTS
Project No. 21-033



Local Approvals Submission
February 09, 2022

REVISIONS

3rd. FLOOR PLAN

2 A201

A-103

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3rd. FLOOR GROSS 22,216 sq. ft TOTAL



A201

В - 10x10 | 10x10 | 10x10 10x15 10x15 D ____ -10x10-| - 10x10-| 10x10-| 10x10-ELEV ELEV. 160 sf UNIT 10x10 10x10 10x10 10x10 UP STAIR
410
DN 10x10 😌 10x10 10x10 10x10 10x10 10x10 _10x10 _ __10x10_ 10x10 90 sf. UNIT 10x15 10x15

SELF STORAGE

ARLINGTON, MASSACHUSETTS
Project No. 21-033



February 09, 2022

REVISIONS

No. Description

4th. FLOOR PLAN

2 A201

A-104

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4th. FLOOR GROSS 22,216 sq. ft TOTAL

4 A201



A201

10x7.5 | 10x7.5 | 10x7.5 | 10x7.5 10x15 10x15 10x7.5 | 10x7.5 | 10x7.5 | 10x7.5 | 10x7.5 | 10x7.5 | 10x7.5 10x7.5 | 10x7.5 | 10x7.5 | 10x7.5 | 10x7.5 | 10x7.5 ELEV. ELEV. 160 sf UNIT 10x7.5 | 10x7.5 | 10x7.5 | 10x7.5 10x10 10x10 10x10 10x10 10x10 10x10 10x10 90 sf. UNIT 10x10 10x10 10x20 10x20 10x7.5 | 10x7.5 | 10x7.5 | 10x7.5 | 10x7.5 | 10x10 10x7.5 | 10x7.5 | 10x7.5 | 10x7.5 5x5 10x15 10x15 5x5 10x10 10x10 90 sf. UNIT

SELF STORAGE

ARLINGTON, MASSACHUSETTS
Project No. 21-033



February 09, 2022

REVISIONS

No. Description

5th. FLOOR PLAN

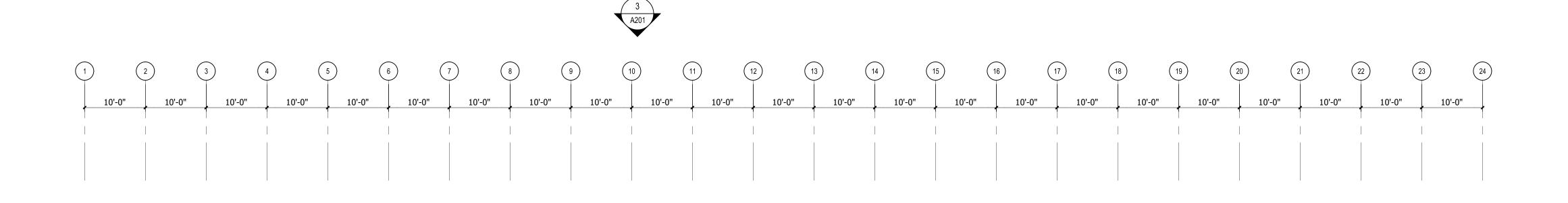
2 A201

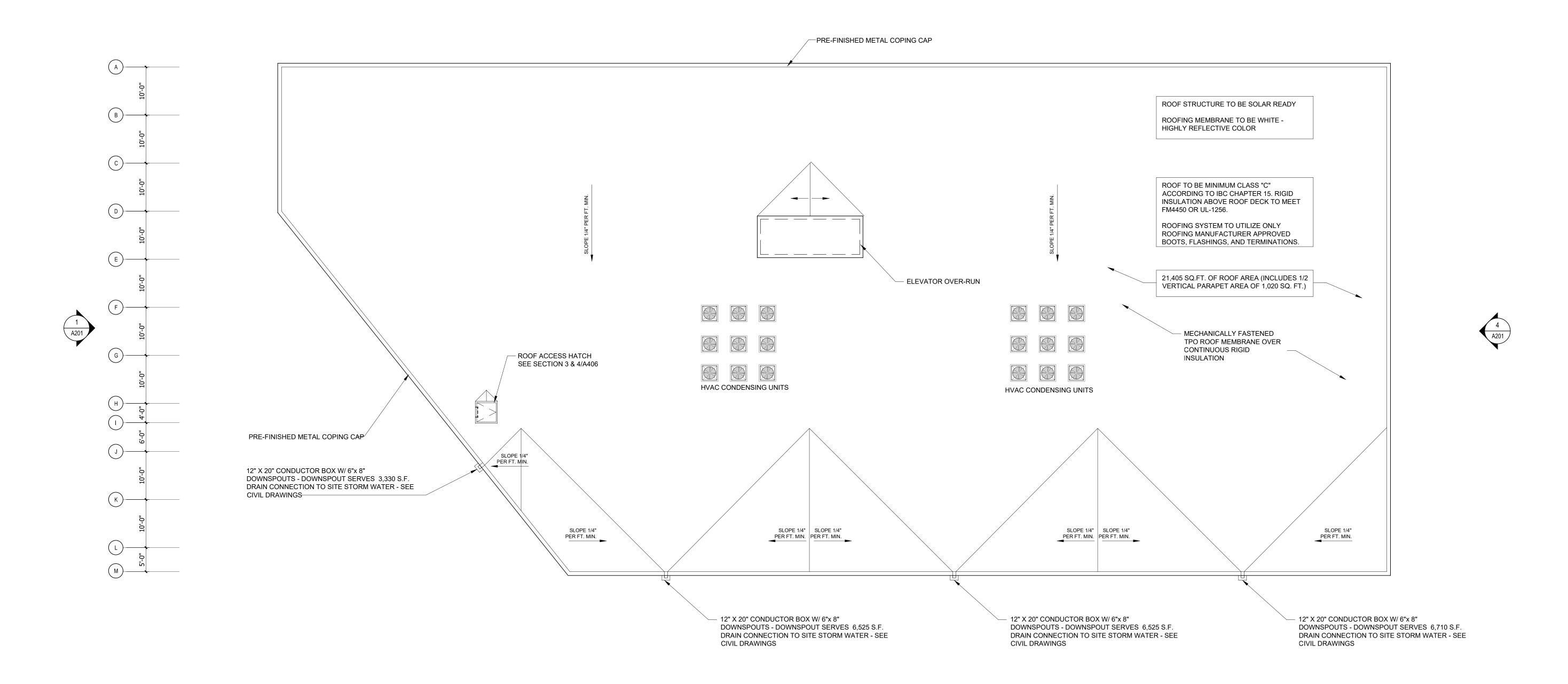
A-105

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5th. FLOOR GROSS 22,216 sq. ft TOTAL

4 A201



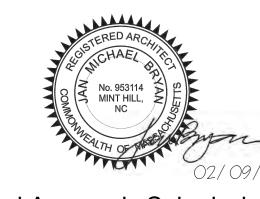








ARLINGTON, MASSACHUSETTS
Project No. 21-033



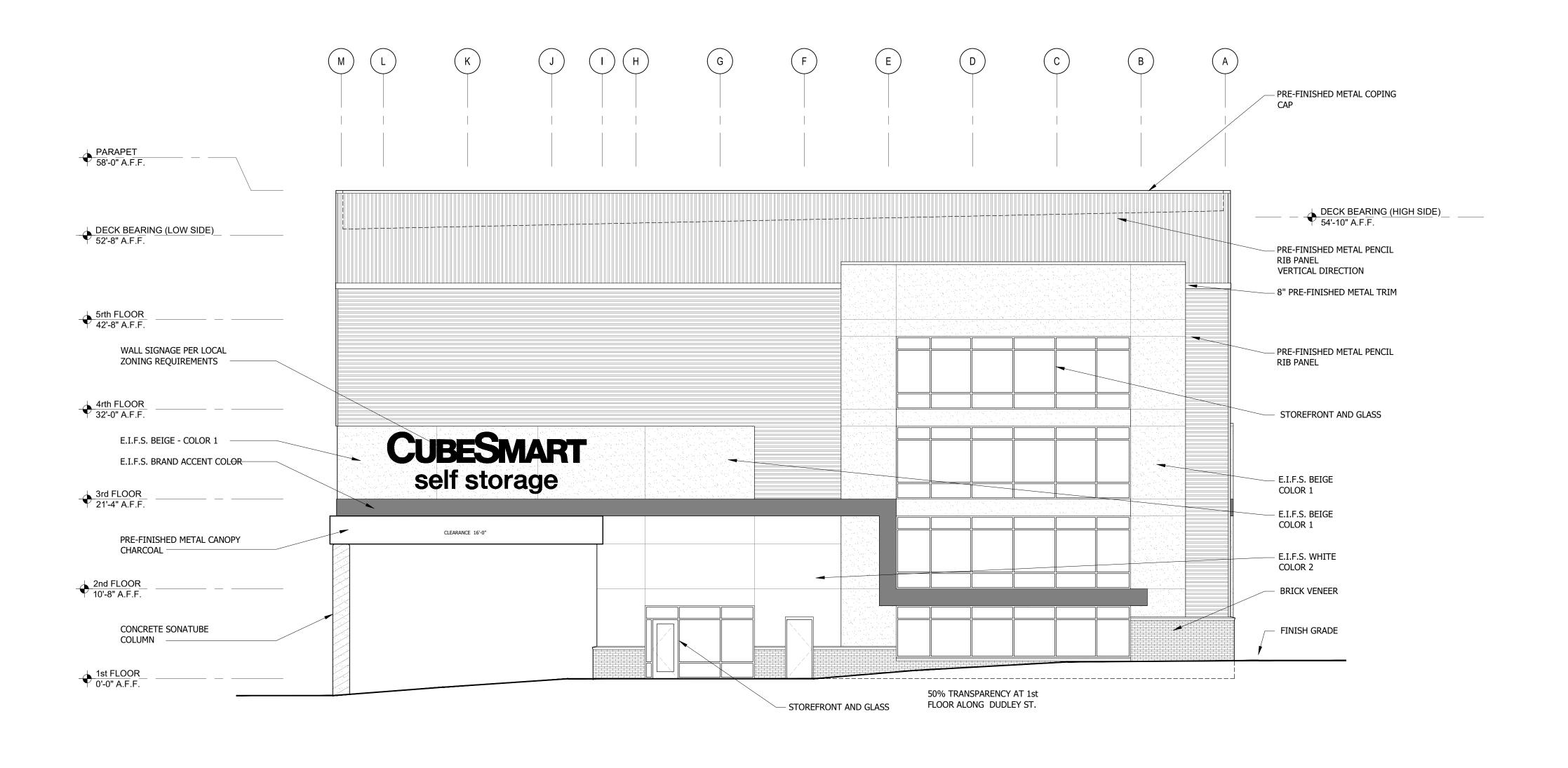
Local Approvals Submission February 09, 2022 REVISIONS

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	REVISIONS	
No.	Description	Da

ROOF PLAN

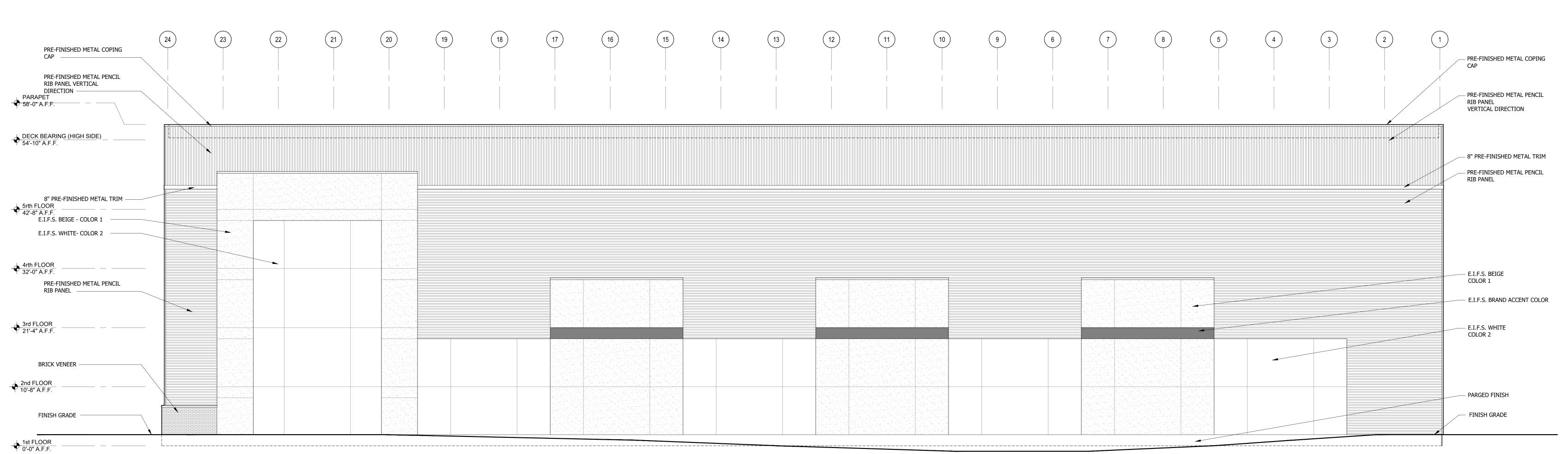
A-106

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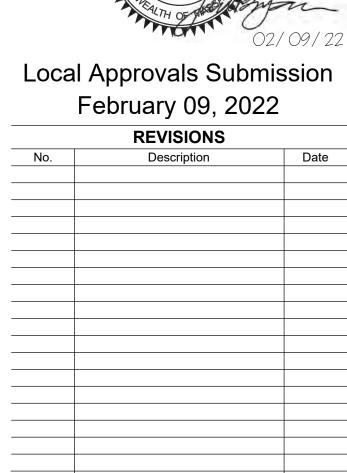
scale: 1/8"=1'-0"





Project No. 21-033

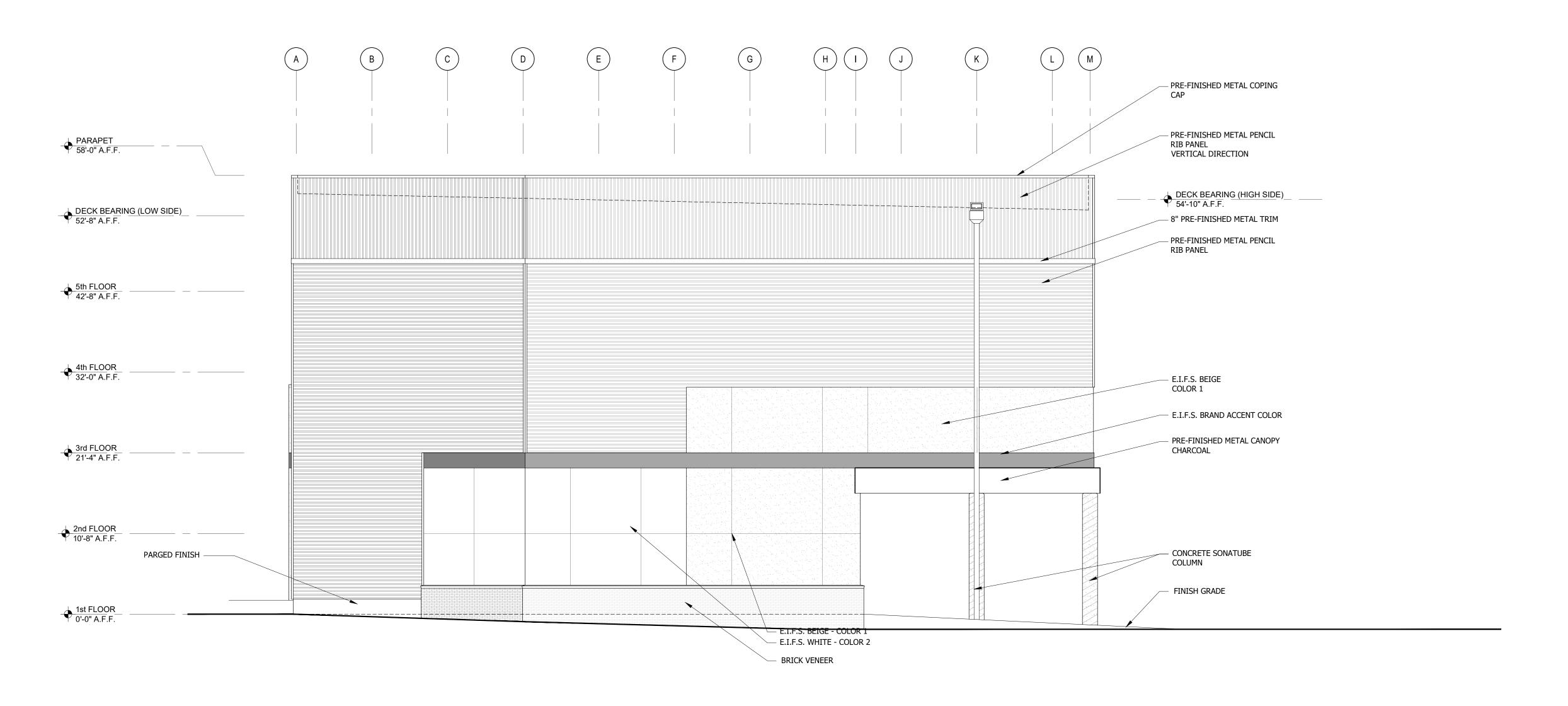
No. 953114
No



EXTERIOR ELEVATIONS

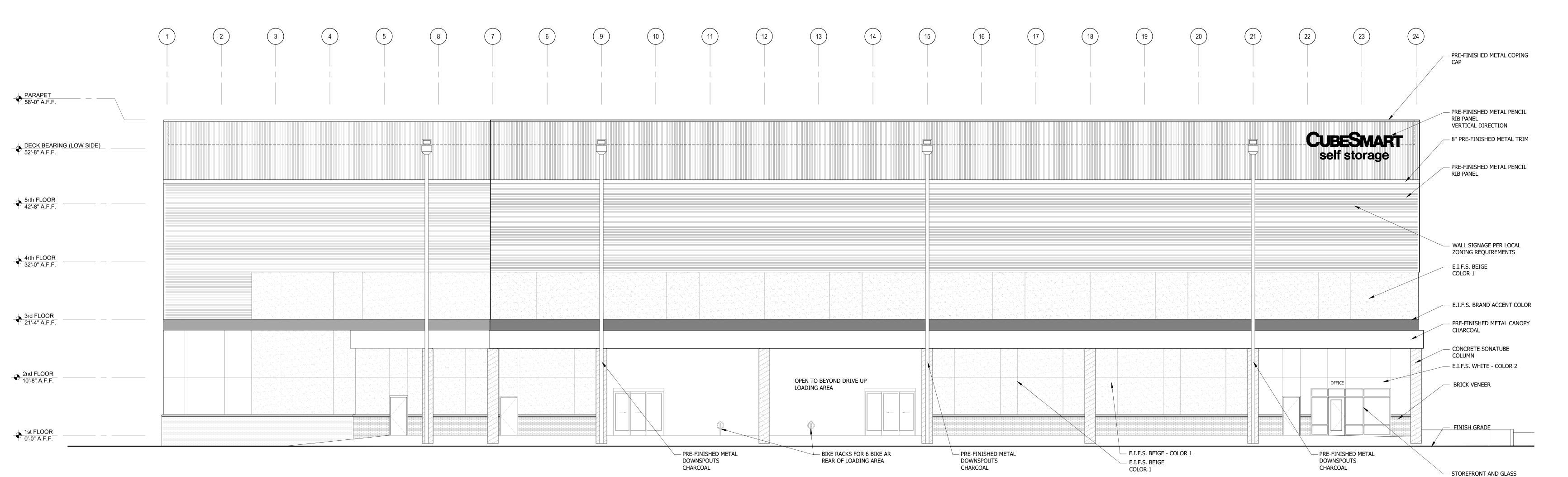
A-201

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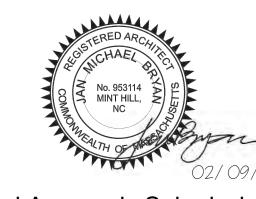


2 ELEVATION - SOUTH scale: 1/8"=1'-0"





ARLINGTON, MASSACHUSETTS Project No. 21-033

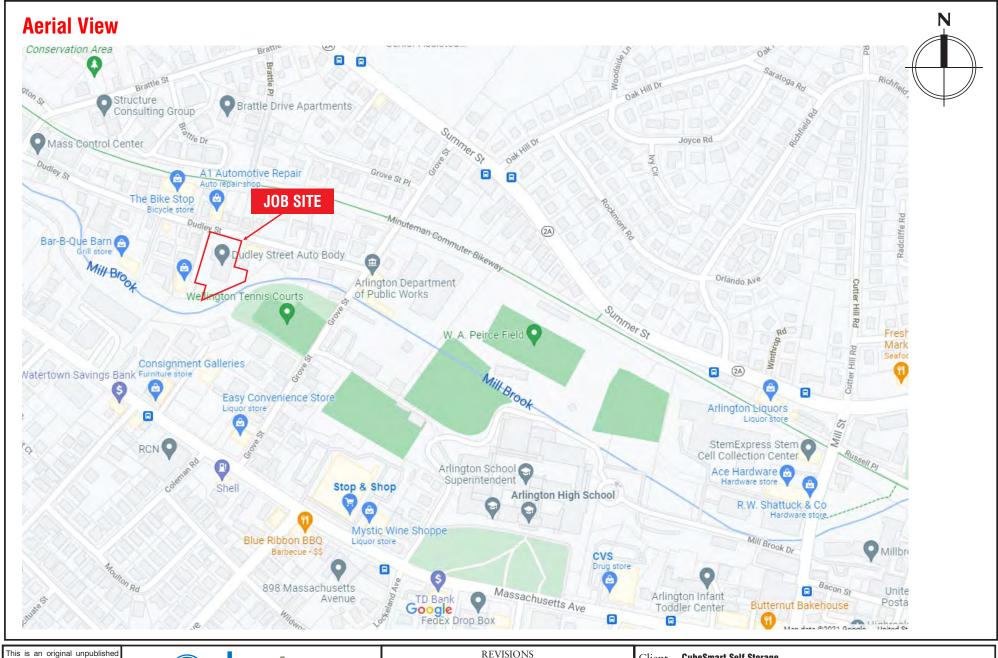


Local Approvals Submission

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	February 09, 2022	
	REVISIONS	
No.	Description	Date
	+	

EXTERIOR ELEVATIONS

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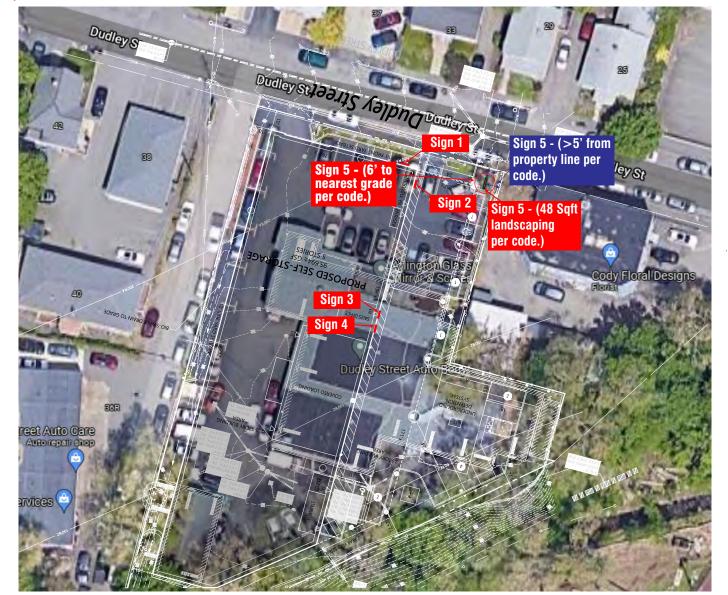
CALIFORNIA 400 West Walnut Street, Gardena, CA 90248 (800) 927-4555 • Fax (310) 380-7451

GEORGIA

NO.	COMMENTS	DATE
Α	Changed Sign 1 & 2 size and Sign 2 position-dw	01/10/22

Client CubeSmart	elf Storage
Address 34 Dudley	St, Arlington, MA 02476
Design No. 66668	Store No
Scale: AS NO	Sheet 1 of 11
Drawn By:	W Date12/20/2021
Approved By:	Date

Aerial View/Site View





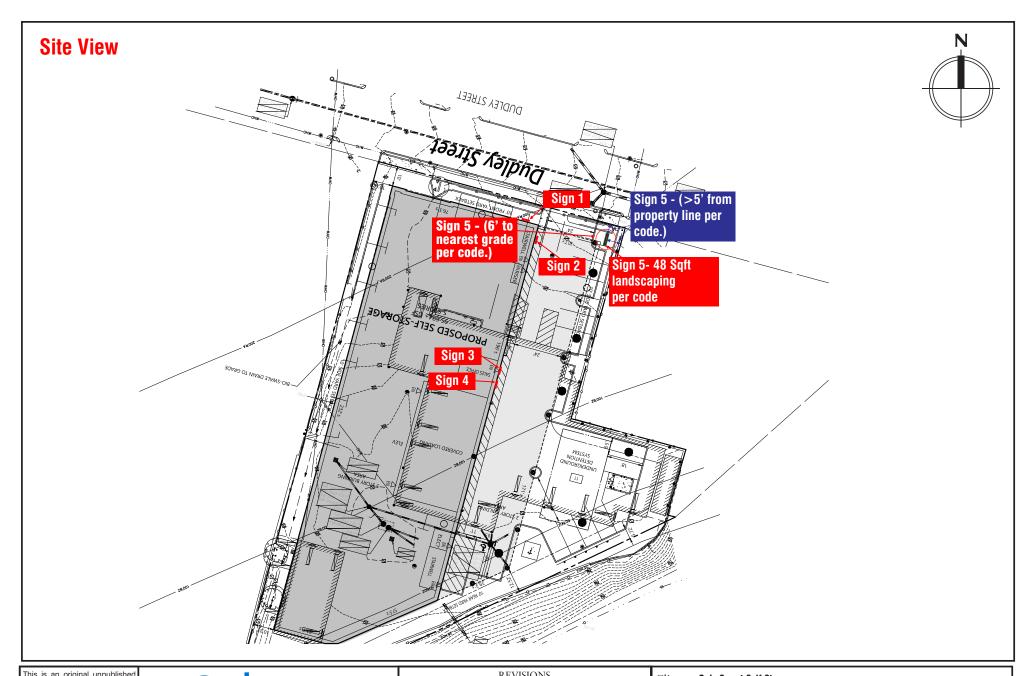
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REVISIONS		Γ
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Client Cub	eSmart Self St	orage				
Address_34	Dudley St, Arli	ngton, MA	02476			
Design No	66665		Sto	re No		
Scale:	AS NOTED		Shee	et 2	of	11
Drawn By:_ 65 of 491	DW	_ Date _	12/20/2021			
65 of 491						
Approved B	y:			Date_		



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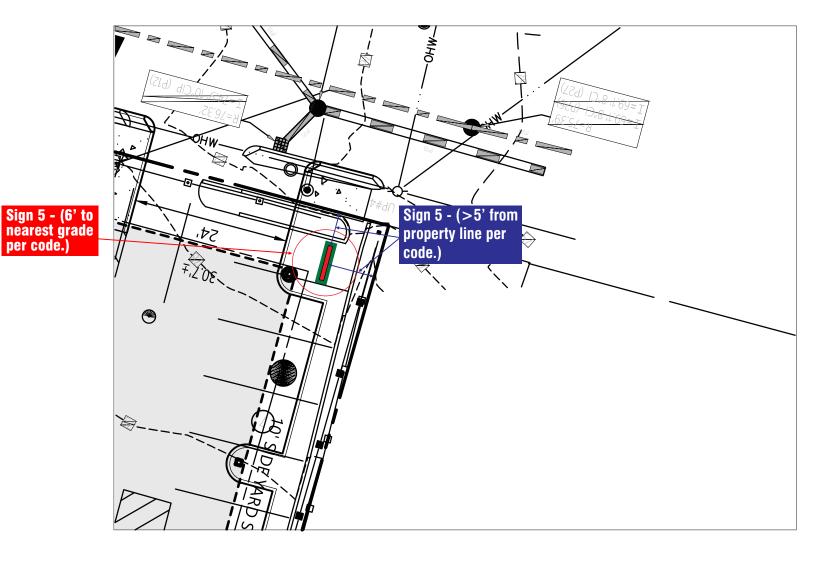
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REVISIONS	Client CubeSmart Self Storage
NO. COMMENTS DATE	
A Changed Sign 1 & 2 size and Sign 2 position-dw 01/10/22	Address 34 Dudley St, Arlington, MA 02476
	Design No Store No
	Scale: AS NOTED Sheet 3 of 11
	Drawn By: DW Date 12/20/2021
	66 of 491
	Approved By: Date
	Transfer of the second of the

Enlarged Site Detail - Landescaping



of ____11_



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REVISIONS		Client CubeSmart Self Storage
NO. COMMENTS A Changed Sign 1 & 2 size and Sign 2 position-dw	DATE 01/10/22	1 1 24 Dudley Ct. Arlington, MA 0047C
		Design No. 66665 Store No
		Scale: AS NOTED Sheet_
		Drawn By: DW Date 12/20/2021
		67 of 491
		Approved By: Dat

Sign 1 - North Elevation

Field Verify Sign Area & Dimensions.

New channel letters, raceway mounted.

LED illuminated channel letters with CS red acrylic faces.

Raceways to match wall color.

Qty-1.

Scale: 3/16" Sq Ft: 180

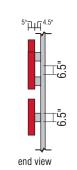
COLOR SPECIFICATIONS:

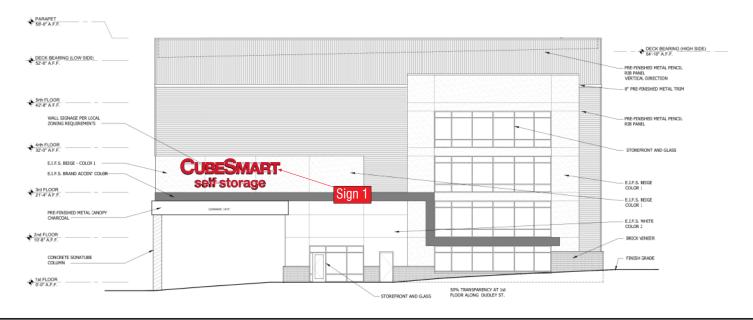


CS Red standard returns standard trim cap

Raceways match wall color

288" CUBESMART 18.25. self storage 34.3"





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GEORGIA

	REVISIONS					
NO.	COMMENTS	DATE				
Α	Changed Sign 1 & 2 size and Sign 2 position-dw	01/10/22				

Client CubeSmart Self Storage							
Address 34 Dudley St, Arlington, MA 02476							
Design No				Store	No		
Scale:	AS NOTED		S	heet_	5	_ of _	11
Drawn By:_ 68 of 491	DW	_ Date _	12/20/202	1			
68 of 491							
Approved B	y:				Date_		

Sign 2 - East Elevation

Field Verify Sign Area & Dimensions.

New channel letters, raceway mounted.

LED illuminated channel letters with CS red acrylic faces.

Raceways to match wall color.

Qty-1.

Scale: 3/16" Sq Ft: 180

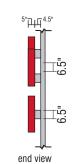
COLOR SPECIFICATIONS:

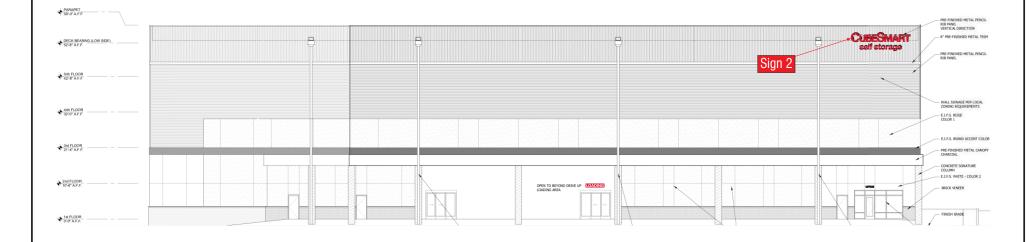


CS Red standard returns

Raceways match wall color

288" CUBESWART 15.48 **self storage** 34.3"





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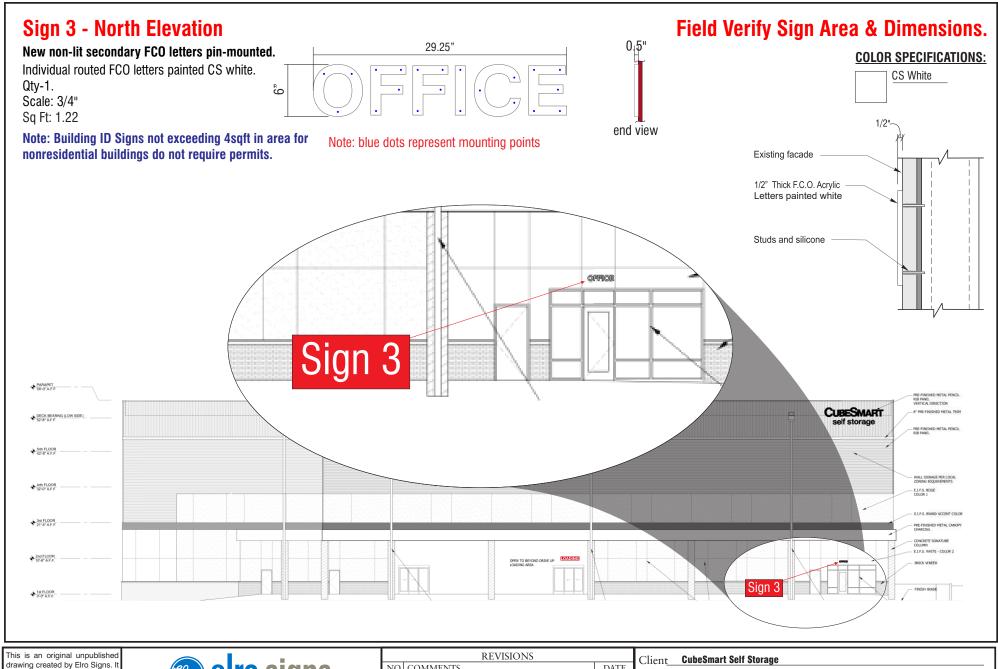


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GEORGIA

1	REVISIONS	
NO.	COMMENTS	DATE
Α	Changed Sign 1 & 2 size and Sign 2 position-dw	01/10/22

Client_C	CubeSmart Self Sto	orage
Address_	34 Dudley St, Arli	ington, MA 02476
Design N	о. 66665	Store No
Scale:	AS NOTED	Sheet 6 of 11
	y: DW 1 1 d By:	Date Date



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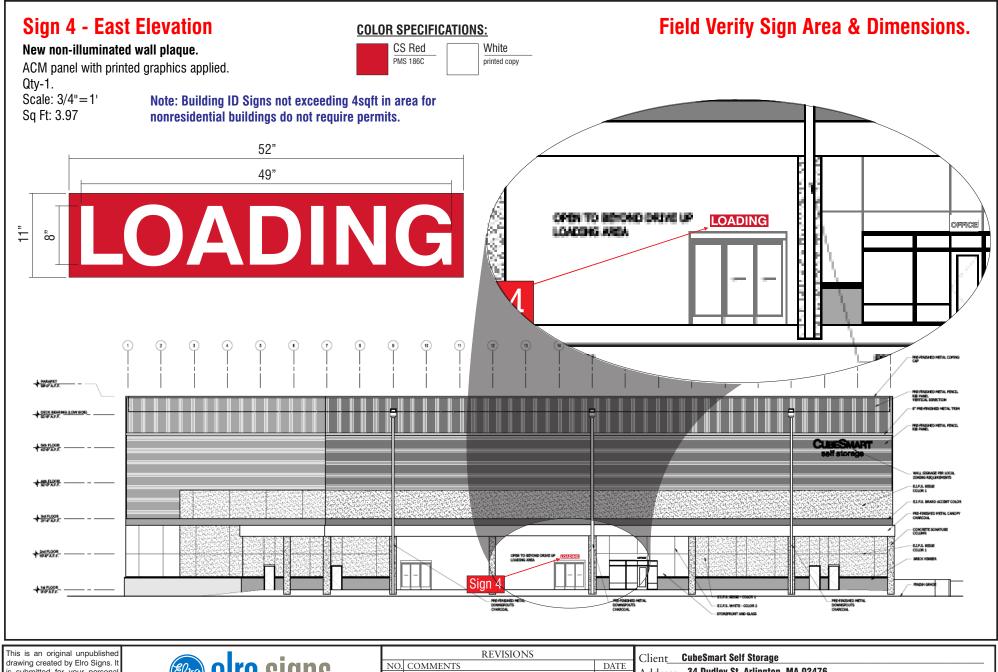


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GEORGIA

REVISIONS					
NO.	COMMENTS	DATE			
Α	Changed Sign 1 & 2 size and Sign 2 position-dw	01/10/22			

Client CubeSmart Self Storage					
Address 34 Dudley St, Arlington, MA 02476					
Design No. 6666	Store No				
Scale: AS N	IOTED Sheet 7 of 11				
Drawn By:	Date Date Date				



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(800) 927-4555 • Fax (310) 380-7451

GEORGIA

	REVISIONS		Client CubeSmart Self Storage
	COMMENTS	DATE	A 1.1 24 Budley St. Arlington MA 00475
Α	Changed Sign 1 & 2 size and Sign 2 position-dw	01/10/22	Address 34 budget St, Allington, MA 02470
			Design No Store No
			Scale: AS NOTED Sheet 8 of 11
			Drawn By: DW Date 12/20/2021
			71 of 491
			Approved By: Date
			rr //

Sign 5 - Freestanding Sign

New D/F illuminated monument sign.

Seamless white polycarbonate faces with CS vinyls applied.

Qty-1.

Scale: 1/4"=1' Sq Ft: 23.8

Note: Max. 24 sq. ft.

Max. 6 ft. to the nearest grade.

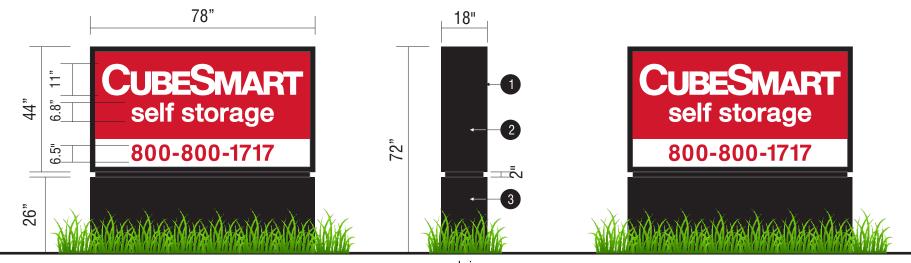
Min. 5 ft. setback from property line. Landscape area must be a min. of 2 sq. ft. for each 1 sq. ft. of sign area.

Height must be no more than 6' from grade.

Field Verify Sign Area & Dimensions.

Manufacturing Specs:

- white seamless polycarbonate panel with CS exterior grade vinyls applied first surface.
- 2 aluminum extruded D/F cabinet with H.O. lamping and ballasts, painted black. Note: depth of cabinet TBD by pole size per engineering calcs.
- 3 aluminum base and reveal, painted black. Note: depth of base TBD by pole size per engineering calcs.



end view

Note: placement & angle of sign subject to flagging and detailed field survey.

COLOR SPECIFICATIONS:



White polycarbonate panel



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400 West Walnut Street, Gardena, CA 90248 (800) 927-4555 • Fax (310) 380-7451

GEORGIA

REVISIONS	Client CubeSmart Self Storage
NO. COMMENTS DATE	4 11 24 Dudley Ct. Arlington MA 00476
A Changed Sign 1 & 2 size and Sign 2 position-dw 01/10/22	Address 34 Dudley St, Arlington, MA 02476
	Design No Store No
	Scale: AS NOTED Sheet 9 of 11
	Drawn By: DW Date 12/20/2021
	72 of 491
	Approved By: Date

Current Conditions





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CALIFORNIA 400 West Walnut Street, Gardena, CA 90248 (800) 927-4555 • Fax (310) 380-7451

GEORGIA 1640 Sands Place SE Suite A / Marietta, GA 30067 Toll Free: (877) 367-3576 • Fax (770) 952-4710

REVISIONS		Client CubeSmart Self Storage
NO. COMMENTS	DATE	Address 34 Dudley St, Arlington, MA 02476
A Changed Sign 1 & 2 size and Sign 2 position-dw	01/10/22	Address 34 budies St, Armigton, MA 02470
		Design No. 66665 Store No
		Scale: Sheet 10 of 11
		Drawn By: DW Date 12/20/2021
		73 of 491
		Approved By: Date
		11 ,

PERMIT SUMMARY

County: Middlesex County

Zoning: I - Industrial

Reface work does not require a permit. If you are not removing the sign or poles but replacing same for same there is no permit required.

Building identification signs not exceeding four square feet in area for nonresidential and mixed use buildings do not require permits. Non-illuminated signs which provide incidental information including, but not limited to credit card acceptance, business hours, open/closed, no soliciting, directions to services and facilities, or menus, provided these signs do not exceed an aggregate of six square feet in sign area;

Monument Sign

Industrial Sign District: Max. 1 per frontage; Max. 24 sq. ft. Max. 6 ft. to the nearest grade

Business, Industrial, Multi-Use and Open Space Sign District: Min. 5 ft. setback from property line.

Landscaping: A landscaped area consisting of shrubs, and/or perennial ground cover plants with a max. spacing of 3 ft. on center is required around the base of the signs. The landscape area must be a min. of 2 sq. ft. for each 1 sq. ft. of sign area.

Wall sign

Max. 1 per frontage; Max. 40 sq. ft per business Max. 25 ft. Height Signs with Individual Letters. Sign copy mounted as individual letters or graphics against a wall, fascia, mansard, or parapet of a building or surface of another structure, that has not been painted, textured or otherwise altered to provide a distinctive background for the sign copy, is measured as a sum of the smallest rectangle(s) that will enclose each word and each graphic in the total sign.

Raceway cabinets shall only be used in building mounted signs when access to the wall behind the sign is not feasible, shall not extend in width and height beyond the area of the sign, and shall match the color of the building to which it is attached. Where a raceway cabinet provides a contrast background to sign copy, the colored area is counted in the total allowable sign area allowed for the site or business. A raceway cabinet is not a cabinet sign.

Directional/driveway Signs

Number of Signs Max. 3 per lot. Max. 1 at each driveway or drive-through lane.

Sign Area Max. 3 sq. ft. per sign face.

Mounting Height Max. 6 ft. from nearest grade; except, max. 3 ft. at each driveway or drive-through lane.

Illumination Non-illuminated or internal illumination only. See Section 6.2.4(C).

Permitting Sign permit required. See Section 6.2.

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GEORGIA
1640 Sands Place SE Suite A / Marietta, GA 30067
Toll Free: (877) 367-3576 • Fax (770) 952-4710

REVISIONS		Client CubeSmart Self Storage
	DATE 1/10/22	Address 34 Dudley St, Arlington, MA 02476
A Changed Sign 1 & 2 size and Sign 2 position-dw 0	1, 10, 22	Design No. 66665 Store No.
		Scale: AS NOTED Sheet 11 of 11
		Drawn By: DW Date 12/20/2021
		74 of 491
		Approved By: Date

Proposed Self-Storage Facility

34 Dudley Street, Arlington, MA

PREPARED FOR

PSI Atlantic Arlington MA, LLC 530 Oak Court Drive Suite 155 Memphis, TN 38117

PREPARED BY



2 Bedford Farms Drive Suite 200 Bedford, NH 03110 603.391.3900

February 2022

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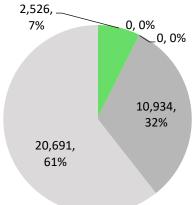
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Project Benefits





- Exceeds treatment standards set forth in MS4, TMDL, and Massachusetts Standards
 - 60% Phosphrous removal
 - >80% TSS removal
- Improvement of water quality for ecological function
- LID features such as bioretention and an impervious areas





Peak Rate (and Volume) Attenuation

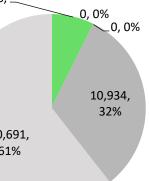
Proposed 10 year less than existing 2 year storm flow rates

- 312% increase in pervious area on site
- Reduction in stormwater volume by incorporating a bioretention basin and subsurface infiltration basin



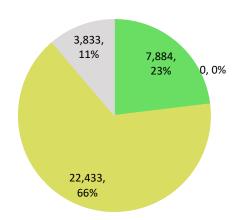
Protect Natural Resources

- Reduction of impervious surface in Riverfront Area
- Stabilization of existing, unstable slope
- Enhancement of upland vegetated
- Enhance wildlife
- Landscaping to species promoted by the Conservation Commission









Proposed Conditions Areas (SF)



Checklist for Stormwater Report



Bureau of Resource Protection - Wetlands Program

Checklist for Stormwater Report

A. Introduction

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





A Stormwater Report must be submitted with the Notice of Intent permit application to document compliance with the Stormwater Management Standards. The following checklist is NOT a substitute for the Stormwater Report (which should provide more substantive and detailed information) but is offered here as a tool to help the applicant organize their Stormwater Management documentation for their Report and for the reviewer to assess this information in a consistent format. As noted in the Checklist, the Stormwater Report must contain the engineering computations and supporting information set forth in Volume 3 of the Massachusetts Stormwater Handbook. The Stormwater Report must be prepared and certified by a Registered Professional Engineer (RPE) licensed in the Commonwealth.

The Stormwater Report must include:

- The Stormwater Checklist completed and stamped by a Registered Professional Engineer (see page 2) that certifies that the Stormwater Report contains all required submittals. This Checklist is to be used as the cover for the completed Stormwater Report.
- Applicant/Project Name
- Project Address
- Name of Firm and Registered Professional Engineer that prepared the Report
- Long-Term Pollution Prevention Plan required by Standards 4-6
- Construction Period Pollution Prevention and Erosion and Sedimentation Control Plan required by Standard 8²
- Operation and Maintenance Plan required by Standard 9

In addition to all plans and supporting information, the Stormwater Report must include a brief narrative describing stormwater management practices, including environmentally sensitive site design and LID techniques, along with a diagram depicting runoff through the proposed BMP treatment train. Plans are required to show existing and proposed conditions, identify all wetland resource areas, NRCS soil types, critical areas, Land Uses with Higher Potential Pollutant Loads (LUHPPL), and any areas on the site where infiltration rate is greater than 2.4 inches per hour. The Plans shall identify the drainage areas for both existing and proposed conditions at a scale that enables verification of supporting calculations.

As noted in the Checklist, the Stormwater Management Report shall document compliance with each of the Stormwater Management Standards as provided in the Massachusetts Stormwater Handbook. The soils evaluation and calculations shall be done using the methodologies set forth in Volume 3 of the Massachusetts Stormwater Handbook.

To ensure that the Stormwater Report is complete, applicants are required to fill in the Stormwater Report Checklist by checking the box to indicate that the specified information has been included in the Stormwater Report. If any of the information specified in the checklist has not been submitted, the applicant must provide an explanation. The completed Stormwater Report Checklist and Certification must be submitted with the Stormwater Report.

¹ The Stormwater Report may also include the Illicit Discharge Compliance Statement required by Standard 10. If not included in the Stormwater Report, the Illicit Discharge Compliance Statement must be submitted prior to the discharge of stormwater runoff to the post-construction best management practices.

² For some complex projects, it may not be possible to include the Construction Period Erosion and Sedimentation Control Plan in the Stormwater Report. In that event, the issuing authority has the discretion to issue an Order of Conditions that approves the project and includes a condition requiring the proponent to submit the Construction Period Erosion and Sedimentation Control Plan before commencing any land disturbance activity on the site.



Bureau of Resource Protection - Wetlands Program

Checklist for Stormwater Report

B. Stormwater Checklist and Certification

The following checklist is intended to serve as a guide for applicants as to the elements that ordinarily need to be addressed in a complete Stormwater Report. The checklist is also intended to provide conservation commissions and other reviewing authorities with a summary of the components necessary for a comprehensive Stormwater Report that addresses the ten Stormwater Standards.

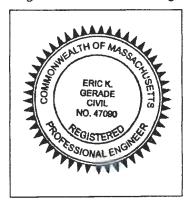
Note: Because stormwater requirements vary from project to project, it is possible that a complete Stormwater Report may not include information on some of the subjects specified in the Checklist. If it is determined that a specific item does not apply to the project under review, please note that the item is not applicable (N.A.) and provide the reasons for that determination.

A complete checklist must include the Certification set forth below signed by the Registered Professional Engineer who prepared the Stormwater Report.

Registered Professional Engineer's Certification

I have reviewed the Stormwater Report, including the soil evaluation, computations, Long-term Pollution Prevention Plan, the Construction Period Erosion and Sedimentation Control Plan (if included), the Long-term Post-Construction Operation and Maintenance Plan, the Illicit Discharge Compliance Statement (if included) and the plans showing the stormwater management system, and have determined that they have been prepared in accordance with the requirements of the Stormwater Management Standards as further elaborated by the Massachusetts Stormwater Handbook. I have also determined that the information presented in the Stormwater Checklist is accurate and that the information presented in the Stormwater Report accurately reflects conditions at the site as of the date of this permit application.

Registered Professional Engineer Block and Signature



Signature and Date

Checklist

	ject Type: Is the application for new development, redevelopment, or a mix of new and evelopment?
	New development
\boxtimes	Redevelopment
П	Mix of New Development and Redevelopment



Massachusetts Department of Environmental Protection Bureau of Resource Protection - Wetlands Program

Checklist for Stormwater Report

Checklist (continued)

env	Measures: Stormwater Standards require LID measures to be considered. Document what irronmentally sensitive design and LID Techniques were considered during the planning and design of project:
	No disturbance to any Wetland Resource Areas
	Site Design Practices (e.g. clustered development, reduced frontage setbacks)
\boxtimes	Reduced Impervious Area (Redevelopment Only)
	Minimizing disturbance to existing trees and shrubs
	LID Site Design Credit Requested:
	Credit 1
	☐ Credit 2
	☐ Credit 3
	Use of "country drainage" versus curb and gutter conveyance and pipe
	Bioretention Cells (includes Rain Gardens)
	Constructed Stormwater Wetlands (includes Gravel Wetlands designs)
	Treebox Filter
	Water Quality Swale
	Grass Channel
	Green Roof
	Other (describe):
Sta	ndard 1: No New Untreated Discharges
\boxtimes	No new untreated discharges
	Outlets have been designed so there is no erosion or scour to wetlands and waters of the Commonwealth
\boxtimes	$Supporting\ calculations\ specified\ in\ Volume\ 3\ of\ the\ Massachusetts\ Stormwater\ Handbook\ included.$



Bureau of Resource Protection - Wetlands Program

Checklist for Stormwater Report

Checklist (continued) Standard 2: Peak Rate Attenuation Standard 2 waiver requested because the project is located in land subject to coastal storm flowage and stormwater discharge is to a wetland subject to coastal flooding. Evaluation provided to determine whether off-site flooding increases during the 100-year 24-hour storm. Calculations provided to show that post-development peak discharge rates do not exceed predevelopment rates for the 2-year and 10-year 24-hour storms. If evaluation shows that off-site flooding increases during the 100-year 24-hour storm, calculations are also provided to show that post-development peak discharge rates do not exceed pre-development rates for the 100-year 24hour storm. Standard 3: Recharge Soil Analysis provided. Required Recharge Volume calculation provided. Required Recharge volume reduced through use of the LID site Design Credits. Sizing the infiltration, BMPs is based on the following method: Check the method used. ⊠ Static ☐ Simple Dynamic Dynamic Field¹ Runoff from all impervious areas at the site discharging to the infiltration BMP. Runoff from all impervious areas at the site is *not* discharging to the infiltration BMP and calculations are provided showing that the drainage area contributing runoff to the infiltration BMPs is sufficient to generate the required recharge volume. Recharge BMPs have been sized to infiltrate the Required Recharge Volume. Recharge BMPs have been sized to infiltrate the Required Recharge Volume *only* to the maximum extent practicable for the following reason: Site is comprised solely of C and D soils and/or bedrock at the land surface Solid Waste Landfill pursuant to 310 CMR 19.000 Project is otherwise subject to Stormwater Management Standards only to the maximum extent practicable. Calculations showing that the infiltration BMPs will drain in 72 hours are provided. Property includes a M.G.L. c. 21E site or a solid waste landfill and a mounding analysis is included.

^{180%} TSS removal is required prior to discharge to infiltration BMP if Dynamic Field method is used.



Massachusetts Department of Environmental Protection Bureau of Resource Protection - Wetlands Program

Checklist for Stormwater Report

Cł	necklist (continued)
Sta	andard 3: Recharge (continued)
	The infiltration BMP is used to attenuate peak flows during storms greater than or equal to the 10-year 24-hour storm and separation to seasonal high groundwater is less than 4 feet and a mounding analysis is provided.
	Documentation is provided showing that infiltration BMPs do not adversely impact nearby wetland resource areas.
Sta	andard 4: Water Quality
The	a Long-Term Pollution Prevention Plan typically includes the following: Good housekeeping practices; Provisions for storing materials and waste products inside or under cover; Vehicle washing controls; Requirements for routine inspections and maintenance of stormwater BMPs; Spill prevention and response plans; Provisions for maintenance of lawns, gardens, and other landscaped areas; Requirements for storage and use of fertilizers, herbicides, and pesticides; Pet waste management provisions; Provisions for operation and management of septic systems; Provisions for solid waste management; Snow disposal and plowing plans relative to Wetland Resource Areas; Winter Road Salt and/or Sand Use and Storage restrictions; Street sweeping schedules; Provisions for prevention of illicit discharges to the stormwater management system; Documentation that Stormwater BMPs are designed to provide for shutdown and containment in the event of a spill or discharges to or near critical areas or from LUHPPL; Training for staff or personnel involved with implementing Long-Term Pollution Prevention Plan; List of Emergency contacts for implementing Long-Term Pollution Prevention Plan. A Long-Term Pollution Prevention Plan is attached to Stormwater Report and is included as an attachment to the Wetlands Notice of Intent. Treatment BMPs subject to the 44% TSS removal pretreatment requirement and the one inch rule for calculating the water quality volume are included, and discharge: is within the Zone II or Interim Wellhead Protection Area is near or to other critical areas is within soils with a rapid infiltration rate (greater than 2.4 inches per hour) involves runoff from land uses with higher potential pollutant loads.
	The Required Water Quality Volume is reduced through use of the LID site Design Credits.
	Calculations documenting that the treatment train meets the 80% TSS removal requirement and, if applicable, the 44% TSS removal pretreatment requirement, are provided.



Bureau of Resource Protection - Wetlands Program

Checklist for Stormwater Report

Checklist (continued) Standard 4: Water Quality (continued) The BMP is sized (and calculations provided) based on: ☐ The ½" or 1" Water Quality Volume or The equivalent flow rate associated with the Water Quality Volume and documentation is provided showing that the BMP treats the required water quality volume. ☐ The applicant proposes to use proprietary BMPs, and documentation supporting use of proprietary BMP and proposed TSS removal rate is provided. This documentation may be in the form of the propriety BMP checklist found in Volume 2, Chapter 4 of the Massachusetts Stormwater Handbook and submitting copies of the TARP Report, STEP Report, and/or other third party studies verifying performance of the proprietary BMPs. A TMDL exists that indicates a need to reduce pollutants other than TSS and documentation showing that the BMPs selected are consistent with the TMDL is provided. Standard 5: Land Uses With Higher Potential Pollutant Loads (LUHPPLs) ☐ The NPDES Multi-Sector General Permit covers the land use and the Stormwater Pollution Prevention Plan (SWPPP) has been included with the Stormwater Report. The NPDES Multi-Sector General Permit covers the land use and the SWPPP will be submitted *prior* to the discharge of stormwater to the post-construction stormwater BMPs. The NPDES Multi-Sector General Permit does *not* cover the land use. LUHPPLs are located at the site and industry specific source control and pollution prevention measures have been proposed to reduce or eliminate the exposure of LUHPPLs to rain, snow, snow melt and runoff, and been included in the long term Pollution Prevention Plan. All exposure has been eliminated. All exposure has **not** been eliminated and all BMPs selected are on MassDEP LUHPPL list. The LUHPPL has the potential to generate runoff with moderate to higher concentrations of oil and grease (e.g. all parking lots with >1000 vehicle trips per day) and the treatment train includes an oil grit separator, a filtering bioretention area, a sand filter or equivalent. Standard 6: Critical Areas The discharge is near or to a critical area and the treatment train includes only BMPs that MassDEP has approved for stormwater discharges to or near that particular class of critical area. Critical areas and BMPs are identified in the Stormwater Report.



Bureau of Resource Protection - Wetlands Program

Checklist for Stormwater Report

Checklist (continued)

Standard 7: Redevelopments and Other Projects Subject to the Standards only to the maximum extent practicable

The project is subject to the Stormwater Management Standards only to the maximum Extent Practicable as a:
☐ Limited Project
 Small Residential Projects: 5-9 single family houses or 5-9 units in a multi-family development provided there is no discharge that may potentially affect a critical area. Small Residential Projects: 2-4 single family houses or 2-4 units in a multi-family development with a discharge to a critical area Marina and/or boatyard provided the hull painting, service and maintenance areas are protected from exposure to rain, snow, snow melt and runoff
☐ Bike Path and/or Foot Path
Redevelopment Project
Redevelopment portion of mix of new and redevelopment.
Certain standards are not fully met (Standard No. 1, 8, 9, and 10 must always be fully met) and an explanation of why these standards are not met is contained in the Stormwater Report. The project involves redevelopment and a description of all measures that have been taken to improve existing conditions is provided in the Stormwater Report. The redevelopment checklist found in Volume 2 Chapter 3 of the Massachusetts Stormwater Handbook may be used to document that the proposed stormwater management system (a) complies with Standards 2, 3 and the pretreatment and structural BMP requirements of Standards 4-6 to the maximum extent practicable and (b) improves existing conditions.

Standard 8: Construction Period Pollution Prevention and Erosion and Sedimentation Control

A Construction Period Pollution Prevention and Erosion and Sedimentation Control Plan must include the following information:

- Narrative;
- Construction Period Operation and Maintenance Plan;
- Names of Persons or Entity Responsible for Plan Compliance;
- Construction Period Pollution Prevention Measures;
- Erosion and Sedimentation Control Plan Drawings;
- Detail drawings and specifications for erosion control BMPs, including sizing calculations;
- Vegetation Planning;
- Site Development Plan;
- Construction Sequencing Plan;
- Sequencing of Erosion and Sedimentation Controls;
- Operation and Maintenance of Erosion and Sedimentation Controls;
- Inspection Schedule;
- Maintenance Schedule;
- Inspection and Maintenance Log Form.
- A Construction Period Pollution Prevention and Erosion and Sedimentation Control Plan containing the information set forth above has been included in the Stormwater Report.



Bureau of Resource Protection - Wetlands Program

Checklist for Stormwater Report

Checklist (continued) Standard 8: Construction Period Pollution Prevention and Erosion and Sedimentation Control (continued) The project is highly complex and information is included in the Stormwater Report that explains why it is not possible to submit the Construction Period Pollution Prevention and Erosion and Sedimentation Control Plan with the application. A Construction Period Pollution Prevention and Erosion and Sedimentation Control has not been included in the Stormwater Report but will be submitted **before** land disturbance begins. The project is **not** covered by a NPDES Construction General Permit. The project is covered by a NPDES Construction General Permit and a copy of the SWPPP is in the Stormwater Report. ☐ The project is covered by a NPDES Construction General Permit but no SWPPP been submitted. The SWPPP will be submitted BEFORE land disturbance begins. Standard 9: Operation and Maintenance Plan ☐ The Post Construction Operation and Maintenance Plan is included in the Stormwater Report and includes the following information: Name of the stormwater management system owners; Party responsible for operation and maintenance; Schedule for implementation of routine and non-routine maintenance tasks: Plan showing the location of all stormwater BMPs maintenance access areas; Description and delineation of public safety features; Estimated operation and maintenance budget; and Operation and Maintenance Log Form. The responsible party is **not** the owner of the parcel where the BMP is located and the Stormwater Report includes the following submissions: A copy of the legal instrument (deed, homeowner's association, utility trust or other legal entity) that establishes the terms of and legal responsibility for the operation and maintenance of the project site stormwater BMPs; A plan and easement deed that allows site access for the legal entity to operate and maintain BMP functions.

Standard 10: Prohibition of Illicit Discharges

any stormwater to post-construction BMPs.

\boxtimes	The Long-Term Pollution Prevention Plan includes measures to prevent illicit discharges;
	An Illicit Discharge Compliance Statement is attached;

NO Illicit Discharge Compliance Statement is attached but will be submitted *prior to* the discharge of



Stormwater Report Narrative

This Stormwater Report has been prepared to demonstrate compliance with the Massachusetts Stormwater Management Standards in accordance with the Massachusetts Wetlands Protection Act Regulations (310 CMR 10.00) and Water Quality Certification Regulations (314 CMR 9.00). This report also demonstrates compliance with the Town of Arlington Stormwater Management Standards.

Project Description

The Applicant, PSI Atlantic Arlington MA, LLC, is proposing to construct a Self-Storage redevelopment (the Project). As proposed, the Project consists of 95,706 square feet of building space, ancillary landscape improvements, parking spaces (11), and stormwater management and utility improvements to support this use.

The Project will entail the construction of a five story self-storage facility with associated parking and is not considered a Land Use with Higher Potential Pollutant Loads (LUHPPL).

Site Description

The Project Site is a 0.78-acre parcel of land (the Site) located within the Industrial zoning district at 34 Dudley Street in Arlington, Massachusetts (see Figure 1). The Site lies within the surface watershed of Mill Brook and is bounded by Dudley Street to the north, Mill Brook to the south, and commercial and residential uses to the east and west. See Figure 1, Site Locus Map.

Wetland Resource Areas on the Site include the following:

The resource areas identified on or near the Project Site subject to state regulations under the WPA include Bank and Riverfront Area. The resource areas are defined under the WPA (310 CMR 10.00) as follows:

- Bank: As defined at 310 CMR 10.54 (2), "a Bank is the portion of the land surface which normally abuts and confines a water body ... The upper boundary of Bank is the first observable break in slope or the mean annual flood level, whichever is lower."
- RA: As defined by 310 CMR 10.58 (2)(a)(3), Riverfront Area is "the area of land between a river's mean annual high-water line measured horizontally outward from the river and a parallel line located 200 feet away..."

An additional resource area established under the Bylaw is the 100-foot adjacent upland resource area. For the purposes of this NOI, the URA has been broken down into separate buffer zones. These areas are defined as follows:

- > 25-foot No Disturb Zone (NDZ) the innermost 25 feet of the 100-foot URA
- > 50-foot No Build Zone (NBZ) the inner 50 feet of the 100-foot URA
- > 100-foot URA land within 100 feet of a resource area

Wetlands and their buffer zones on/adjacent to the property are described in more detail in the Notice of Intent narrative, bound separately.

Table 1 Existing Conditions Hydrologic Data

Name	Critical Area (yes/no)	Zone 1 or Zone A (yes/no)	ORW or SRW (yes/no)	Zone II or IWPA (yes/no)	Other
Mill Brook	No	No	No	No	Impaired Waterbody (MA71-07) Benthic Macroinvertebrates
					Escherichia Coli (E. Coli)N/A

According to the National Resources Conservation Service (NRCS), surface soils on the Site include Merrimac-Urban land complex and Udorthents. On-site soils are classified as Hydrologic Soil Groups (HSG D) . To support the redevelopment and in accordance with the Town of Arlington Inland Wetland District, a subsurface geotechnical investigation was performed by GeoEngineers, Inc, Boston, MA, and advanced borings in monitoring wells in December 2021 and January 2022. The results of the soil boring analysis, the soils on the site are classified as HSG A soils with an infiltration rate of 2.4 inches per hour. The Geotechnical Report is included in Appendix C, the Site is not considered to be within an area of rapid infiltration (soils with a saturated hydraulic conductivity greater than 2.4 inches per hour).

Existing Drainage Conditions

Under existing conditions, the Site is developed and predominately impervious with generally flat topography. Just to the south of the southerly property boundary, there is a steep slope down to Mill Brook. Figure 2 illustrates the existing drainage patterns on the Site. Currently, the Site is divided into two drainage areas as stormwater runoff flows to two Design Points, which have been identified as Dudley Street (DP-1) and Mill Brook (DP-2). Table 2 below provides a summary of the existing conditions hydrologic data.

Table 2 Existing Conditions Hydrologic Data

Drainage Area	Discharge Location	Design Point	Area (Acres)	Curve Number	Time of Concentration (min)
EX-1	Dudley Street	DP-1	0.325	97	5.0
EX-2	Mill Brook	DP-2	0.459	96	5.0

Proposed Drainage Conditions

Figure 3 illustrates the proposed "post construction" drainage conditions for the project. As shown, the Site will be divided into 5 drainage areas that discharge treated stormwater to the 2 existing Design Points. Table 3 below provides a summary of the proposed conditions hydrologic data.

Table 3 Proposed Conditions Hydrologic Data

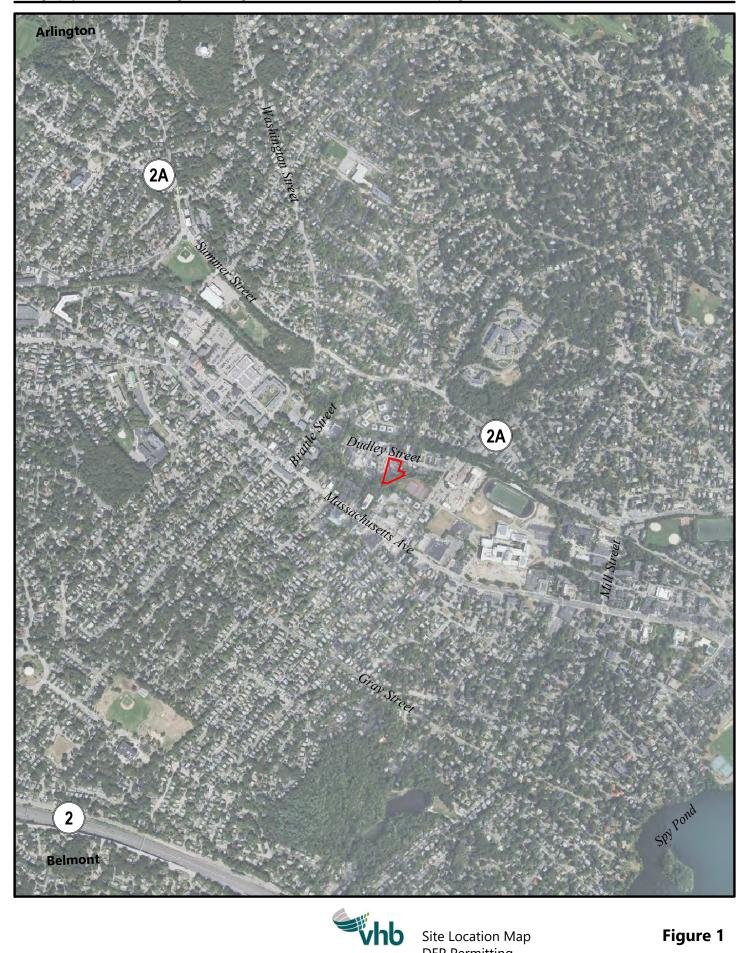
Drainage Area	Discharge Location	Design Point	Area (Acres)	Curve Number	Time of Concentration (min)
PR-1	Mill Brook	DP-2	0.515	98	5.0
PR-2	Mill Brook	DP-2	0.157	80	5.0
PR-3	Mill Brook	DP-2	0.009	96	5.0
PR-4	Mill Brook	DP-2	0.066	98	5.0
PR-5	Dudley Street	DP-1	0.036	87	5.0

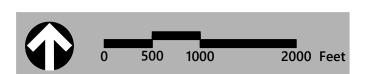
The site design integrates a comprehensive stormwater management system that has been developed in accordance with the Massachusetts Stormwater Handbook. The proposed stormwater management system has been designed to treat the half inch Water Quality Volume.

Environmentally Sensitive and Low Impact Development (LID) Techniques

Low Impact Development (LID) techniques and stormwater Best Management Practices (BMPs) implemented into the site design include reduction of impervious area, minimized disturbance to existing trees and vegetation, a bioretention basin, . The bioretention basin has been incorporated, as recommended by the Zoning Bylaws, to collect stormwater from the parking area. In general, stormwater from the proposed impervious surfaces is collected in a bioretention basin or deep sump hooded catch basins, prior to being discharged into a subsurface infiltration basin with an isolator row. The deep sump hooded catch basin and isolator row provide pretreatment prior to final treatment by the infiltration basin. Additionally,

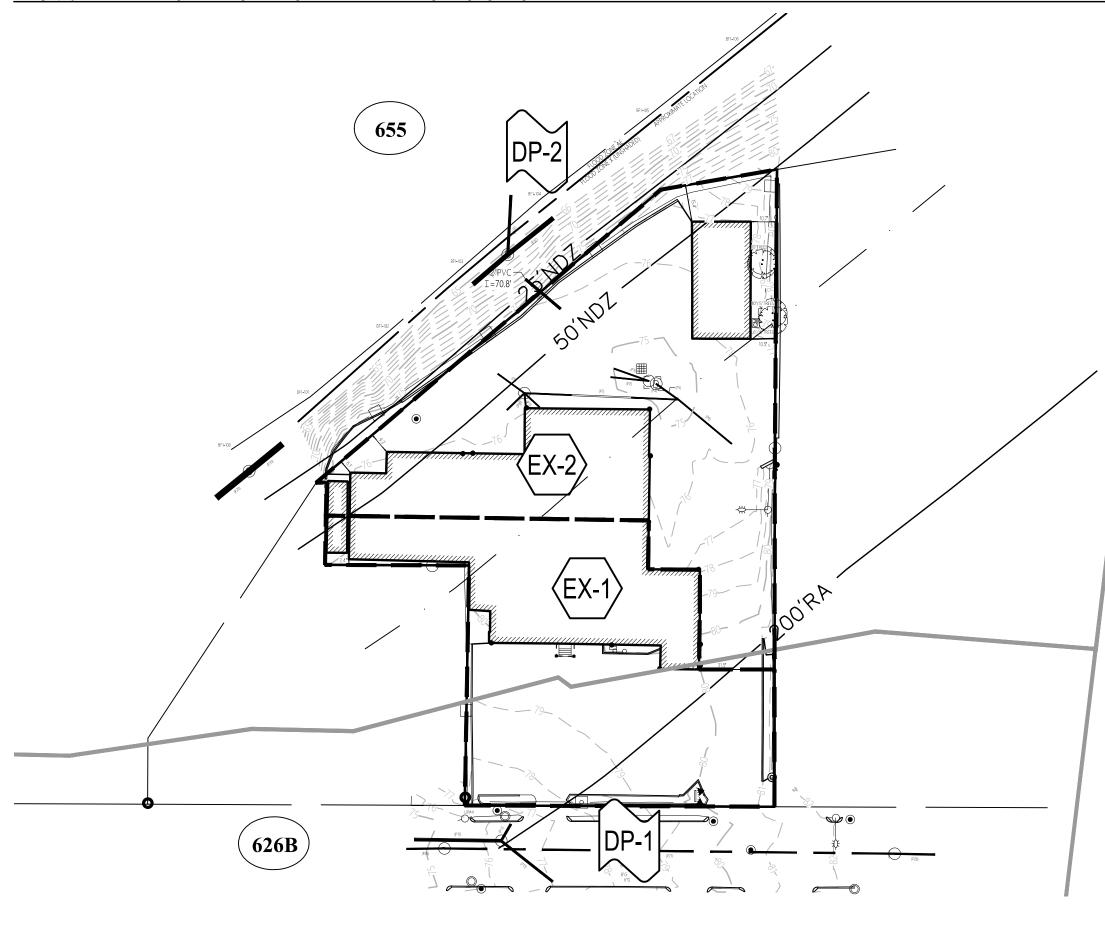
the bioretention basin has a sediment forebay for pretreatment prior to final treatment by the bioretention basin soil media. The overflow from the bioretention basin is connected to the larger subsurface infiltration basin to control larger storm events and provide additional water quality benefits. The subsurface infiltration basin has an outlet control structure to control the rates of flow and ensure proper water quality volume, prior to discharging to the existing pipe discharge to the south of the property towards Mill Brook.





Site Location Map DEP Permitting Arlington Self Storage Facility Arlington, MA

Figure 1
93 of 491
02/09/2022



Legend

SYMBOLS



DESIGN POINT

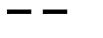


DRAINAGE AREA DESIGNATION



POND

LINETYPES



DRAINAGE AREA BOUNDARY



TIME OF CONCENTRATION FLOW LINE



SOIL TYPE BOUNDARY 100' BUFFER ZONE



WETLAND BOUNDARY

SCS SOIL CLASSIFICATIONS



MERRIMAC-URBAN LAND COMPLEX, 0 TO 8 PERCENT SLOPES, HSG A



UDORTHENTS, WET SUBSTRATUM

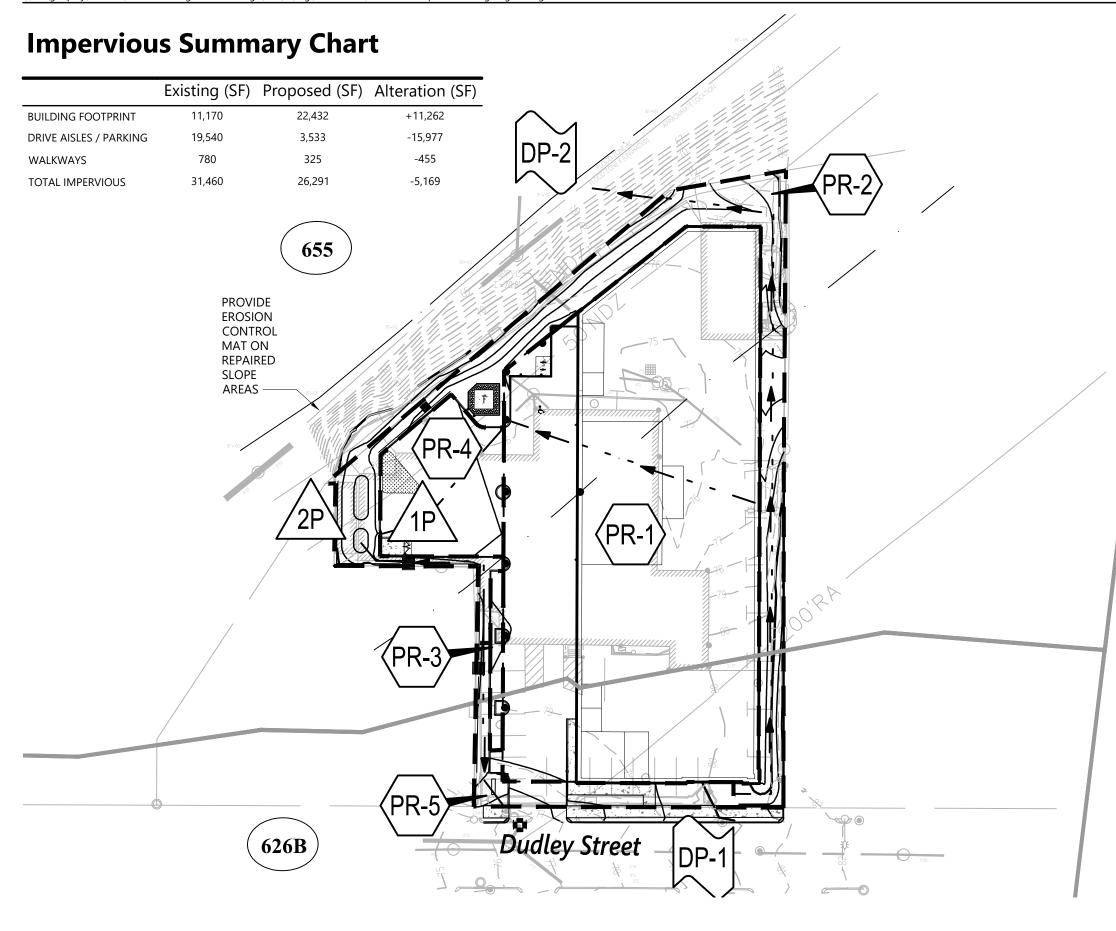


Existing Drainage Conditions

Figure 2

02/09/2022

95 of 491



97 of 491

Legend

SYMBOLS



DESIGN POINT



DRAINAGE AREA DESIGNATION



POND

LINETYPES



DRAINAGE AREA BOUNDARY



TIME OF CONCENTRATION FLOW LINE



SOIL TYPE BOUNDARY 100' BUFFER ZONE



WETLAND BOUNDARY

SCS SOIL CLASSIFICATIONS



MERRIMAC-URBAN LAND COMPLEX, 0 TO 8 PERCENT SLOPES, HSG A



UDORTHENTS, WET SUBSTRATUM



Proposed Drainage Conditions

Figure 3

Proposed Self Storage Facility Arlington, Massachusetts

National Flood Hazard Layer FIRMette



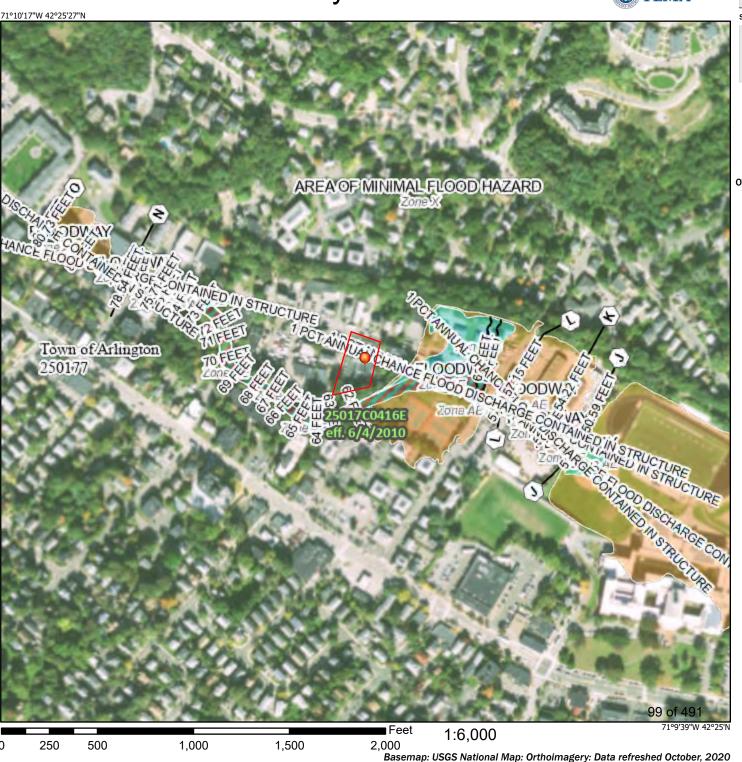
Legend SEE FIS REPORT FOR DETAILED LEGEND AND INDEX MAP FOR FIRM PANEL LAYOUT

Without Base Flood Elevation (BFE) With BFE or Depth Zone AE, AO, AH, VE, AR SPECIAL FLOOD **HAZARD AREAS** Regulatory Floodway 0.2% Annual Chance Flood Hazard, Areas of 1% annual chance flood with average depth less than one foot or with drainage areas of less than one square mile Zone X **Future Conditions 1% Annual** Chance Flood Hazard Zone X Area with Reduced Flood Risk due to Levee. See Notes. Zone X OTHER AREAS OF FLOOD HAZARD Area with Flood Risk due to Levee Zone D NO SCREEN Area of Minimal Flood Hazard Zone X Effective LOMRs OTHER AREAS Area of Undetermined Flood Hazard Zone D - - - Channel, Culvert, or Storm Sewer **GENERAL** STRUCTURES | LILLI Levee, Dike, or Floodwall 20.2 Cross Sections with 1% Annual Chance 17.5 Water Surface Elevation **Coastal Transect** Base Flood Elevation Line (BFE) Limit of Study Jurisdiction Boundary **Coastal Transect Baseline** OTHER Profile Baseline **FEATURES** Hydrographic Feature Digital Data Available No Digital Data Available MAP PANELS Unmapped The pin displayed on the map is an approximate point selected by the user and does not represent an authoritative property location. This map complies with FEMA's standards for the use of

This map complies with FEMA's standards for the use of digital flood maps if it is not void as described below. The basemap shown complies with FEMA's basemap accuracy standards

The flood hazard information is derived directly from the authoritative NFHL web services provided by FEMA. This map was exported on 2/9/2022 at 10:06 AM and does not reflect changes or amendments subsequent to this date and time. The NFHL and effective information may change or become superseded by new data over time.

This map image is void if the one or more of the following map elements do not appear: basemap imagery, flood zone labels, legend, scale bar, map creation date, community identifiers, FIRM panel number, and FIRM effective date. Map images for unmapped and unmodernized areas cannot be used for regulatory purposes.



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Regulatory Compliance

Massachusetts Department of Environmental Protection (DEP) - Stormwater Management **Standards**

As demonstrated below, the proposed Project fully complies with the DEP Stormwater Management Standards.

Standard 1: No New Untreated Discharges or Erosion to Wetlands

The Project has been designed to comply with Standard 1.

The Best Management Practices (BMPs) included in the proposed stormwater management system have been designed in accordance with the Massachusetts Stormwater Handbook. Supporting information and computations demonstrating that no new untreated discharges will result from the Project are presented through compliance with Standards 4 through 6.

All proposed Project stormwater outlets and conveyances have been designed to not cause erosion or scour to wetlands or receiving waters. Outlets from closed drainage systems have been designed with flared end sections and stone protection to dissipate discharge velocities.

Computations and supporting information for the sizing and selection of materials used to protect from scour and erosion are included in Appendix A.

Standard 2: Peak Rate Attenuation

The Project has been designed to comply with Standard 2.

The rainfall-runoff response of the Site under existing and proposed conditions was analyzed for storm events with recurrence intervals of 2, 10, 25 and 100 years. The results of the analysis, as summarized in Table 4 below, indicate that there is no increase in peak discharge rates between the existing and proposed conditions.

Computations and supporting information regarding the hydrologic modeling are included in Appendix B.

Table 4 Peak Discharge Rates (cfs*)

Design Point	2-year	10-year	25-year	100-year
Design Point: Dudley Street (DP-1)				
Existing	1.05	1.68	2.08	2.68
Proposed	0.08	0.15	0.20	0.27
Design Point: Mill Brook (DP-2)				
Existing	1.46	2.36	2.93	3.78
Proposed	0.56	1.45	2.46	3.67

Standard 3: Stormwater Recharge

The Project has been designed to comply with Standard 3.

In accordance with the Stormwater Handbook, the Required Recharge Volume for the Project is 1,315 cubic feet.

Recharge of stormwater has been provided through the use of a bioretention basin and subsurface infiltration basin, which have been sized using the Static method. Each infiltration BMP has been designed to drain completely within 72 hours. Table 5 below provides a summary of the proposed infiltration BMPs utilized for the Project.

Table 5 Summary of Recharge Calculations

Infiltration BMP	Provided Recharge Volume (cubic feet)		
Subsurface Infiltration Basin	1,954		
Total Provided Recharge	1,954		
Total Required Recharge	1,315		

Geotechnical Engineering Report, computations, and supporting information are included in Appendix C.

Standard 4: Water Quality

The Project has been designed to comply with Standard 4.

The proposed stormwater management system implements a treatment train of BMPs that has been designed to provide 80% TSS removal of stormwater runoff from all proposed impervious surfaces.

Computations and supporting information, including the Long-Term Pollution Prevention Plan, are included in Appendix D.

Standard 5: Land Uses with Higher Potential Pollutant Loads (LUHPPLs)

The Project is not considered a LUHPPL.

Standard 6: Critical Areas

The Project will not discharge stormwater near or to a critical area.

Standard 7: Redevelopments and Other Projects Subject to the Standards only to the Maximum Extent Practicable

The Project has been designed to comply with all ten of the Stormwater Management Standards.

Standard 8: Construction Period Pollution Prevention and Erosion and Sedimentation Controls

The Project will disturb approximately 0.8 acres of land and is not required to obtain coverage under the Environmental Protection Agency (EPA) National Pollutant Discharge Elimination System (NPDES) Construction General Permit. In lieu of the Stormwater Pollution Prevention Plan (SWPPP) required under NPDES, a Construction Period Pollution Prevention and Erosion Sedimentation Control Plan has been included in Appendix F.

Standard 9: Operation and Maintenance Plan

In compliance with Standard 9, a Post Construction Stormwater Operation and Maintenance (O&M) Plan has been developed for the Project. The O&M Plan is included in Appendix D as part of the Long Term Pollution Prevention Plan.

Standard 10: Prohibition of Illicit Discharges

Sanitary sewer and storm drainage structures which were part of the previous development on this site are to be completely removed during the site redevelopment. The design plans submitted with this report have been designed in full compliance with current standards. The Long-Term Pollution Prevention Plan includes measures to prevent illicit discharges.

Local Municipal Rules and Regulations

The following document intended to assist applicants and their consultants by providing Stormwater Management/Mitigation design quidelines, submission requirements, and review procedures in accordance with The Town of Arlington By-Law Title V, Article 15, Section 4.

The design and function of the stormwater drainage system shall conform to the following requirements, which may be modified by the Town of Arlington in a case-by-case situation to better suit the problems and specific needs of a particular site:

- 1. All projects subject to this By-Law must meet the standards of the most current Massachusetts Department of Environmental Protection (DEP) Stormwater Management Policy and any applicable By-Laws and/or Rules and Regulations of the Town of Arlington.
 - The Project, as currently designed and demonstrated by this stormwater management plan and report, fully complies with the DEP Stormwater management Policy and Town of Arlington regulations.
- 2. No project shall result in an increase in the peak rate of stormwater runoff or volume over natural and existing conditions for the 2-, 10-, and 25-Year 24-hour duration storm events. Project complies, refer to Table 4.
- 3. Technical design and construction standards for detention/retention/infiltration structures, including, but not limited to, groundwater separation, outlet control structures, sediment forebays, spillways, splashpads, as well as sizing for any basins, outlets, and spillways shall be consistent with DEP Stormwater Management Standards.
 - Project complies, refer to the Site Plans for the design and details for the stormwater management structures, which are consistent with the DEP Stormwater Management Standards.
- 4. The design for the capacity of all stormwater system pipes and inlet grates shall be based on a Rational Method Analysis (or acceptable equivalent) for a 25-Year Storm intensity.
 - The closed drainage system has been designed to adequately convey the 25-year storm event. Refer to Appendix G for the hydraulic capacity spreadsheet for the pipe network.
- 5. Existing lot grading shall be retained wherever possible to maintain predevelopment drainage patterns to the greatest extent possible. Where grading must be altered, the proposed grading shall not convey additional overland flows across lot lines or cause ponding on any adjacent property.
 - The project has been designed to mimic existing hydrologic drainage patterns. Stormwater management best management practices have been incorporated to provide water quality treatment and water quality control to ensure additional stormwater is not conveyed across lot lines or cause ponding on adjacent properties.

All projects to which the above referenced Town by-law applies, shall submit to the Engineering Division a Grading & Drainage Report and/or Plan at a minimum scale of 1"=40'. The Plans and/or Report shall consist of and include the following information (if applicable):

- 1. The Name, Mailing Address, Phone Number, and Email of the Property Owner, Land Developer, and the Engineer or Consultant working on the Project.
- 2. Delineation of:
 - Federal, State, and/or Local Wetlands.
 - The National Flood Insurance Program 100-Year Flood Zone and/or other Risk Areas. b.
 - C. Any Streams and/or Drainage Ways on or abutting the Site.
 - Any Easements or Right-of-Ways on or abutting the Site. d.
 - Extents of the Project or a Limit of Work/Disturbance Area. e.

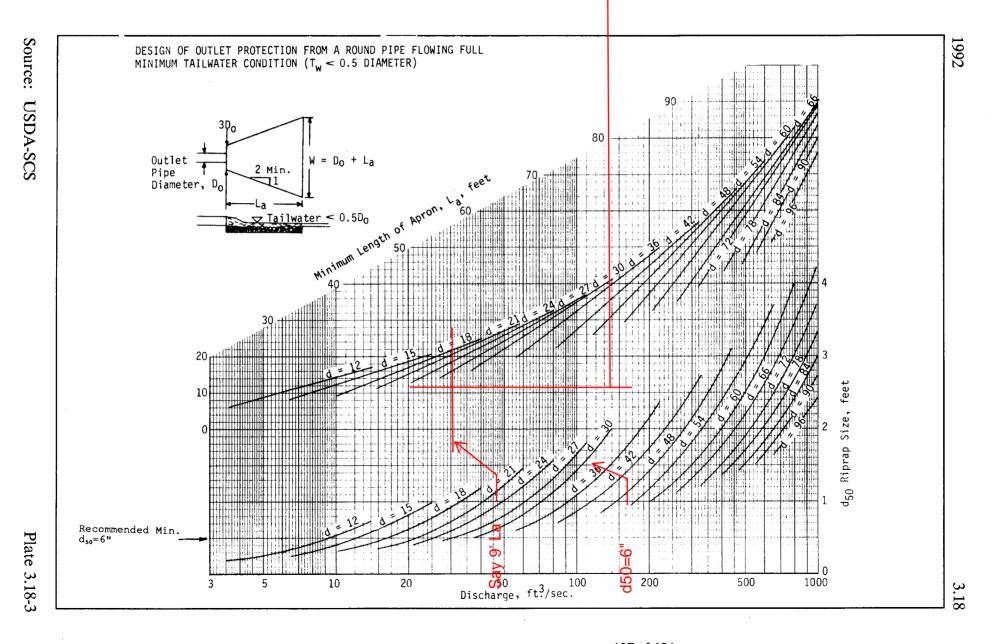
- 3. Existing and proposed contours on the site to indicate general topography. The contour interval shall be at a two- foot interval. Spot elevations shall be included in areas with grades of 2% or less. If permanent benchmarks are required for the proposed activities, those shall also be shown on the Plan.
 - Approximate existing contour lines that are appropriate for use in certain small-scale projects can be found on the Town of Arlington website at http://209.6.3.218/GISMaps//index1.htm.
- 4. Existing and proposed impervious surfaces shall be clearly delineated and labeled on the plan. Include a summary table of all features, both existing and proposed. An example summary table is shown below:

	Existing (SF)	Proposed (SF)	Alteratio n
Building Footprint	1,250	1,500	+ 250 SF
Bituminous Driveway	500	650	+ 150 SF
Concrete Walkway	40	30	- 10 SF
Total Impervious	1,790	2,180	+ 390 SF

- 5. Existing and Proposed locations of all drainage structures, including foundation and roof drains, with rim and invert elevations. Profile and/or Cross Section drawings shall be provided for all proposed infiltration/retention/detention systems.
- 6. Where stormwater recharge or infiltration is proposed, the plans shall include observed and estimated maximum groundwater elevations at the location of each proposed infiltration/retention/detention area.
 - Soil percolation testing or other acceptable soil absorption rate testing should be conducted in the vicinity of any proposed infiltration/retention/detention area.
- 7. Location and detail of proposed erosion & sediment control measures to be installed and maintained during construction activities.
- 8. Hydrologic calculations and a summary table showing the pre- and post-development runoff conditions for comparative purposes. Runoff calculations shall be prepared for the 2-, 10-, 25-, and 100-Year storm events for both the Existing and Proposed Conditions. These drainage calculations shall be prepared by utilizing the NRCS TR55 or TR20 Method.
 - With a written request from the applicant, and at the full discretion of the Town of Arlington Engineering Division, certain small-scale projects may adequately demonstrate through simple runoff/storage calculations that the proposed stormwater mitigation is appropriate.
- 9. The project has incorporated the requirements of the stormwater management plans and drainage report, as demonstrated by the technical analysis included in this report and Site **Plans**

Appendix A: Standard 1 Computations and Supporting Information

- > Outlet Protection Sizing Calculation
- > Pipe Sizing Calculations



Pipe Sizing Calculations

The closed drainage system was designed for the 25-year storm event, in accordance with the Town's by-laws.

Drainage pipes were sized using Manning's Equation for full-flow capacity and the Rational Method. Additionally, the performance of the system was analyzed using StormCAD, a HEC-22 based program.



Project	Proposed Self Storage Facility	Project #	52816.00
	Arlington, MA		
Calculated by	MEA	Date	2/9/2022
Checked by		Date	

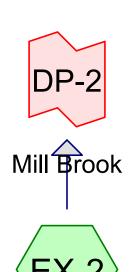
Start Node	Stop Node	Upstream Inlet Area	Upstream Inlet C	System CA	Time of Conc.	Intensity	Pipe Size	Material	Manning's "n"	Slope	Length	Capacity (Full Flow)	Flow (Design)	Velocity (Average)	Rim (Upper)	Hydraulic Grade Line In	Rim (Lower)	Hydraulic Grade Line Out	Invert (Upper)	Invert (Lower)
-	-	(acres)	-	(acres)	(min)	(in/hr)	(in)	-	-	(ft/ft)	(ft)	(cfs)	(cfs)	(ft/s)	(ft)	(ft)	(ft)	(ft)	(ft)	(ft)
101 (DRAIN)	Mill Brook	(N/A)	(N/A)	0.012	7.14	7.41	12	HDPE Pipe	0.013	0.015	13.6	4.32	1.21	4.72	77.52	71.46	0.00	71.17	71.00	70.80
108 (AD)	112 (AD)	0.03	0.2	0.006	5.00	8.47	8	HDPE Pipe	0.013	0.017	110.1	1.59	0.05	2.09	78.53	75.60	76.58	73.68	75.50	73.60
112 (AD)	110 (DRAIN)	0.031	0.2	0.012	5.88	8.04	8	HDPE Pipe	0.013	0.017	72.2	1.56	0.10	2.50	76.58	73.64	78.34	72.41	73.50	72.30
110 (DRAIN)	111 (DRAIN)	(N/A)	(N/A)	0.012	6.36	7.80	æ	HDPE Pipe	0.013	0.011	36.3	1.27	0.10	2.15	78.34	72.34	78.11	71.92	72.20	71.80
111 (DRAIN)	101 (DRAIN)	(N/A)	(N/A)	0.012	6.64	7.66	8	HDPE Pipe	0.013	0.010	61.4	1.19	0.10	2.05	78.11	71.84	77.52	71.46	71.70	71.10
MH-1	107	(N/A)	(N/A)	0.263	5.11	8.41	12	HDPE Pipe	0.013	0.014	14.6	4.17	2.23	5.40	76.40	75.64	78.06	75.34	75.00	74.80
102 (DRAIN)	Isolator Row	(N/A)	(N/A)	0.209	5.22	8.36	12	HDPE Pipe	0.013	0.012	7.4	3.98	2.18	5.18	77.94	70.53	75.05	70.42	69.90	69.85
103 (DRAIN)	102 (DRAIN)	(N/A)	(N/A)	0.000	0.08	8.47	12	HDPE Pipe	0.013	0.018	37.9	4.84	0.42	3.78	77.19	72.97	77.94	72.20	72.70	72.00
BEND	102 (DRAIN)	(N/A)	(N/A)	0.200	5.18	8.38	12	HDPE Pipe	0.013	0.017	11.5	4.70	1.69	5.50	76.51	75.55	77.94	75.24	75.00	74.80
104	102 (DRAIN)	0.009	0.9	0.008	5.00	8.47	12	HDPE Pipe	0.013	0.025	32.6	5.58	0.07	2.43	77.87	74.71	77.94	73.88	74.60	73.80
100 (DRAIN)	101 (DRAIN)	(N/A)	(N/A)	0.000	0.05	8.47		HDPE Pipe	0.013	0.005	85.4	2.44	1.12	3.04	77.49	71.98	77.52	71.55	71.50	
STORMTECH	100 (DRAIN)	(N/A)	(N/A)	0.000	0.00	8.47	12	HDPE Pipe	0.013	0.012	8.7	3.98	1.12	1.43	75.05	71.98	77.49	71.98	69.85	69.80
106 (AD)	103 (DRAIN)	(N/A)	(N/A)	0.000	0.00	8.47	12	HDPE Pipe	0.013	0.024	18.7	5.53	0.42	4.16	76.25	73.52	77.19	72.99	73.25	72.80
RD	BEND	0.223	0.9	0.200	5.00	8.47	12	HDPE Pipe	0.013	0.017	60.0	4.60	1.71	5.42	76.88	76.56	76.51	75.42	76.00	75.00
RD	MH-1	0.106	0.9	0.095	5.00	8.47	8	HDPE Pipe	0.013	0.023	34.6	1.84	0.81	5.10	79.30	76.23	76.40	75.64	75.80	75.00
RD	MH-1	0.186	0.9	0.167	5.00	8.47	12	HDPE Pipe	0.013	0.043	10.3	7.36	1.43	7.26	78.87	75.71	76.40	75.64	75.20	75.00
																				
																				
																				1

Appendix B: Standard 2 Computations and Supporting Information

The rainfall-runoff response of the Site under existing and proposed conditions was evaluated for storm events with recurrence intervals of 2, 10, 25 and 100-years. Rainfall volumes used for this analysis were based on the Natural Resources Conservation Service (NRCS) Type III, 24-hour storm and NOAA Atlas 14 precipitation depths for the site: 3.27, 5.16, 6.35, and 8.16 inches, respectively. Runoff coefficients for the pre- and post-development conditions, as previously shown in Tables 2 and 3 respectively, were determined using NRCS Technical Release 55 (TR-55) methodology as provided in HydroCAD. Drainage areas used in the analyses were described in previous sections and shown on Figures 2 and 3. The HydroCAD model is based on the NRCS Technical Release 20 (TR-20) Model for Project Formulation Hydrology.

HydroCAD Analysis: Existing Conditions

2-Year Storm Event – Existing



Back of Site



Front of Site



Dudley Street









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Rainfall Events Listing

Event#	Event Name	Storm Type	Curve	Mode	Duration (hours)	B/B	Depth (inches)	AMC
1	2-year	Type III 24-hr		Default	24.00	1	3.27	2
2	10-year	Type III 24-hr		Default	24.00	1	5.16	2
3	25-year	Type III 24-hr		Default	24.00	1	6.35	2
4	100-year	Type III 24-hr		Default	24.00	1	8.16	2

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Area Listing (all nodes)

Area (acres)	CN	Description (subcatchment-numbers)
0.017	89	<50% Grass cover, Poor, HSG D (EX-1, EX-2)
0.003	80	>75% Grass cover, Good, HSG D (EX-1)
0.475	98	Paved parking, HSG D (EX-1, EX-2)
0.251	98	Roofs, HSG D (EX-1, EX-2)
0.038	79	Woods, Fair, HSG D (EX-2)
0.783	97	TOTAL AREA

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Ground Covers (all nodes)

HSG-A (acres)	HSG-B (acres)	HSG-C (acres)	HSG-D (acres)	Other (acres)	Total (acres)	Ground Cover	Subcatchment Numbers
0.000	0.000	0.000	0.017	0.000	0.017	<50% Grass cover, Poor	EX-1, EX-2
0.000	0.000	0.000	0.003	0.000	0.003	>75% Grass cover, Good	EX-1
0.000	0.000	0.000	0.475	0.000	0.475	Paved parking	EX-1,
							EX-2
0.000	0.000	0.000	0.251	0.000	0.251	Roofs	EX-1,
							EX-2
0.000	0.000	0.000	0.038	0.000	0.038	Woods, Fair	EX-2
0.000	0.000	0.000	0.783	0.000	0.783	TOTAL AREA	

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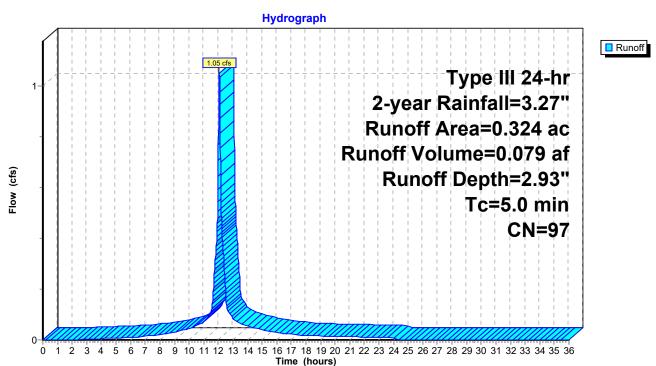
Summary for Subcatchment EX-1: Front of Site

Runoff = 1.05 cfs @ 12.07 hrs, Volume= 0.079 af, Depth= 2.93"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-36.00 hrs, dt= 0.01 hrs Type III 24-hr 2-year Rainfall=3.27"

_	Area	(ac)	CN	Desc	cription				
	0.	0.016 89 <50% Grass cover, Poor, HSG D							
	0.	003	80	>759	% Grass co	over, Good	, HSG D		
	0.179 98 Paved parking, HSG D								
_	0.	127	98	Roof	fs, HSG D				
	0.	324	97	Weig	ghted Aver	age			
	0.	019		5.74	% Perviou	s Area			
	0.	305		94.2	6% Imperv	ious Area			
	Тс	Leng	ıth	Slope	Velocity	Capacity	Description		
_	(min)	(fee	et)	(ft/ft)	(ft/sec)	(cfs)			
	5.0						Direct Entry.		

Subcatchment EX-1: Front of Site



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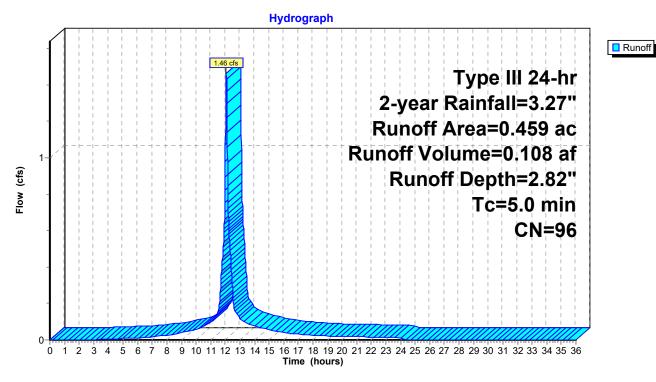
Summary for Subcatchment EX-2: Back of Site

Runoff = 1.46 cfs @ 12.07 hrs, Volume= 0.108 af, Depth= 2.82"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-36.00 hrs, dt= 0.01 hrs Type III 24-hr 2-year Rainfall=3.27"

_	Area	(ac)	CN	Desc	cription					
	0.	001	89	<509	50% Grass cover, Poor, HSG D					
	0.	296	98	Pave	ed parking	HSG D				
	0.	124	98	Root	fs, HSG D					
	0.	038	79	Woo	ds, Fair, F	ISG D				
	0.	459	96	Weig	ghted Aver	age				
	0.	039		8.53	% Perviou	s Area				
	0.	420		91.4	7% Imper	ious Area				
	_									
	Tc	Leng		Slope	Velocity	Capacity	Description			
_	(min)	(fee	et)	(ft/ft)	(ft/sec)	(cfs)				
	5.0						Direct Entry,			

Subcatchment EX-2: Back of Site



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Summary for Link DP-1: Dudley Street

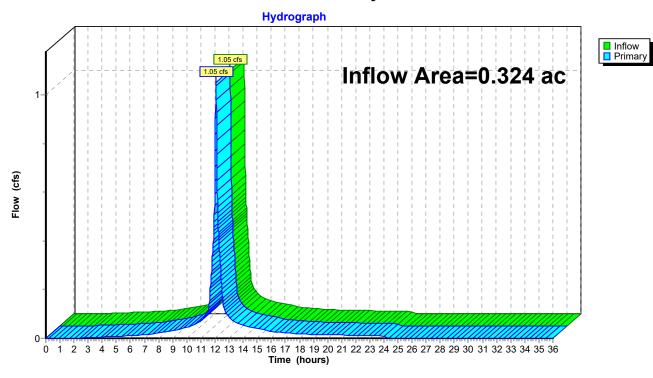
Inflow Area = 0.324 ac, 94.26% Impervious, Inflow Depth = 2.93" for 2-year event

Inflow = 1.05 cfs @ 12.07 hrs, Volume= 0.079 af

Primary = 1.05 cfs @ 12.07 hrs, Volume= 0.079 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-36.00 hrs, dt= 0.01 hrs

Link DP-1: Dudley Street



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Summary for Link DP-2: Mill Brook

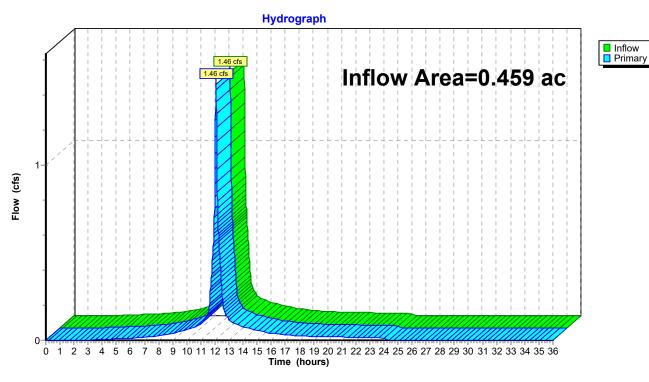
Inflow Area = 0.459 ac, 91.47% Impervious, Inflow Depth = 2.82" for 2-year event

Inflow = 1.46 cfs @ 12.07 hrs, Volume= 0.108 af

Primary = 1.46 cfs @ 12.07 hrs, Volume= 0.108 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-36.00 hrs, dt= 0.01 hrs

Link DP-2: Mill Brook



10-Year Storm Event – Existing

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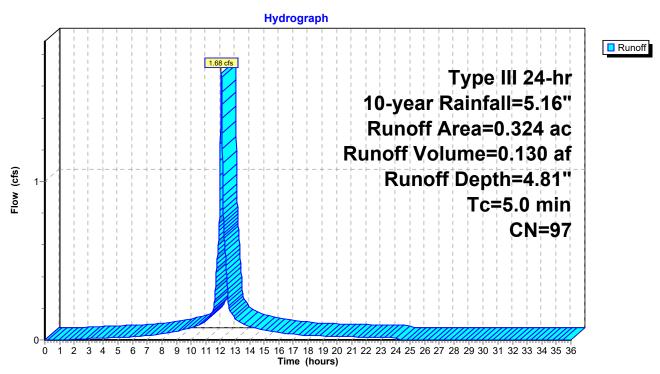
Summary for Subcatchment EX-1: Front of Site

Runoff 1.68 cfs @ 12.07 hrs, Volume= 0.130 af, Depth= 4.81"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-36.00 hrs, dt= 0.01 hrs Type III 24-hr 10-year Rainfall=5.16"

_	Area	(ac)	CN	Desc	cription				
	0.	0.016 89 <50% Grass cover, Poor, HSG D							
	0.	003	80	>759	% Grass co	over, Good	, HSG D		
	0.179 98 Paved parking, HSG D								
_	0.	127	98	Roof	fs, HSG D				
	0.	324	97	Weig	ghted Aver	age			
	0.	019		5.74	% Perviou	s Area			
	0.	305		94.2	6% Imperv	ious Area			
	Тс	Leng	ıth	Slope	Velocity	Capacity	Description		
_	(min)	(fee	et)	(ft/ft)	(ft/sec)	(cfs)			
	5.0						Direct Entry.		

Subcatchment EX-1: Front of Site



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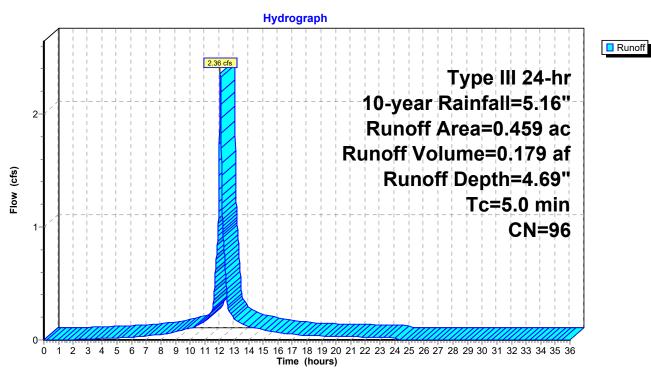
Summary for Subcatchment EX-2: Back of Site

Runoff = 2.36 cfs @ 12.07 hrs, Volume= 0.179 af, Depth= 4.69"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-36.00 hrs, dt= 0.01 hrs Type III 24-hr 10-year Rainfall=5.16"

_	Area	(ac)	CN	Desc	cription					
	0.	001	89	<509	50% Grass cover, Poor, HSG D					
	0.	296	98	Pave	ed parking	HSG D				
	0.	124	98	Root	fs, HSG D					
	0.	038	79	Woo	ds, Fair, F	ISG D				
	0.	459	96	Weig	ghted Aver	age				
	0.	039		8.53	% Perviou	s Area				
	0.	420		91.4	7% Imper	ious Area				
	_									
	Tc	Leng		Slope	Velocity	Capacity	Description			
_	(min)	(fee	et)	(ft/ft)	(ft/sec)	(cfs)				
	5.0						Direct Entry,			

Subcatchment EX-2: Back of Site



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Summary for Link DP-1: Dudley Street

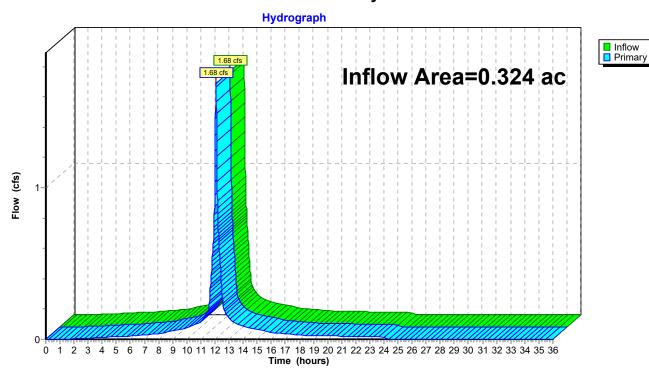
Inflow Area = 0.324 ac, 94.26% Impervious, Inflow Depth = 4.81" for 10-year event

Inflow = 1.68 cfs @ 12.07 hrs, Volume= 0.130 af

Primary = 1.68 cfs @ 12.07 hrs, Volume= 0.130 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-36.00 hrs, dt= 0.01 hrs

Link DP-1: Dudley Street



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Summary for Link DP-2: Mill Brook

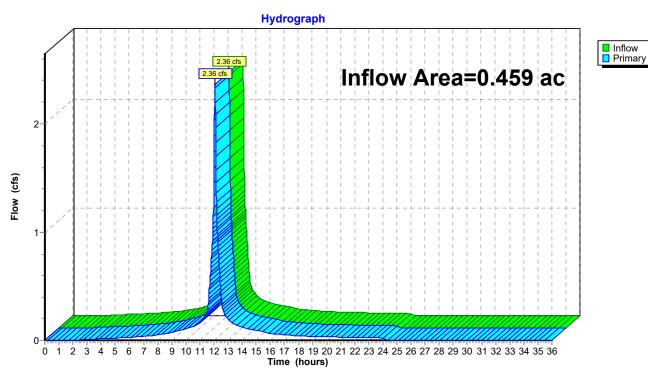
Inflow Area = 0.459 ac, 91.47% Impervious, Inflow Depth = 4.69" for 10-year event

Inflow = 2.36 cfs @ 12.07 hrs, Volume= 0.179 af

Primary = 2.36 cfs @ 12.07 hrs, Volume= 0.179 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-36.00 hrs, dt= 0.01 hrs

Link DP-2: Mill Brook



25-Year Storm Event – Existing

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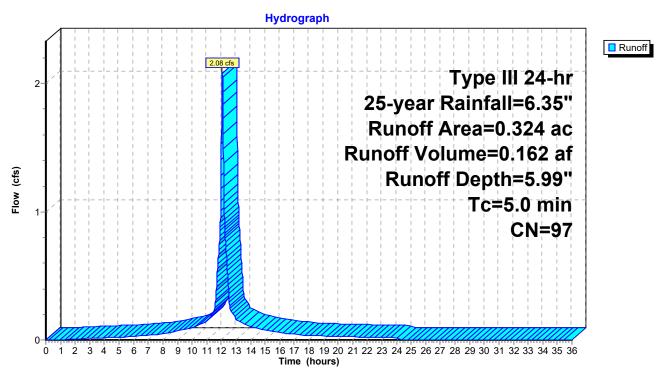
Summary for Subcatchment EX-1: Front of Site

Runoff = 2.08 cfs @ 12.07 hrs, Volume= 0.162 af, Depth= 5.99"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-36.00 hrs, dt= 0.01 hrs Type III 24-hr 25-year Rainfall=6.35"

_	Area	(ac)	CN	Desc	cription				
	0.	0.016 89 <50% Grass cover, Poor, HSG D							
	0.	003	80	>759	% Grass co	over, Good	, HSG D		
	0.179 98 Paved parking, HSG D								
_	0.	127	98	Roof	fs, HSG D				
	0.	324	97	Weig	ghted Aver	age			
	0.	019		5.74	% Perviou	s Area			
	0.	305		94.2	6% Imperv	ious Area			
	Тс	Leng	ıth	Slope	Velocity	Capacity	Description		
_	(min)	(fee	et)	(ft/ft)	(ft/sec)	(cfs)			
	5.0						Direct Entry.		

Subcatchment EX-1: Front of Site



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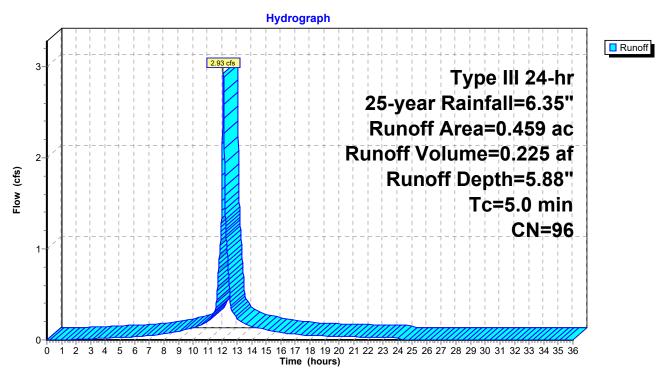
Summary for Subcatchment EX-2: Back of Site

Runoff = 2.93 cfs @ 12.07 hrs, Volume= 0.225 af, Depth= 5.88"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-36.00 hrs, dt= 0.01 hrs Type III 24-hr 25-year Rainfall=6.35"

	Area	(ac)	CN	Desc	cription						
	0.	001	89	<509	50% Grass cover, Poor, HSG D						
	0.	296	98	Pave	ed parking	HSG D					
	0.124 98 Roofs, HSG D										
_	0.	038	79	Woo	ds, Fair, F	ISG D					
	0.	459	96	Weig	ghted Aver	age					
	0.	039		8.53	% Perviou	s Area					
	0.	420		91.4	7% Imper	ious Area					
	Тс	Leng	th	Slope	Velocity	Capacity	Description				
	(min)	(fee	et)	(ft/ft)	(ft/sec)	(cfs)					
	5.0						Direct Entry.				

Subcatchment EX-2: Back of Site



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Summary for Link DP-1: Dudley Street

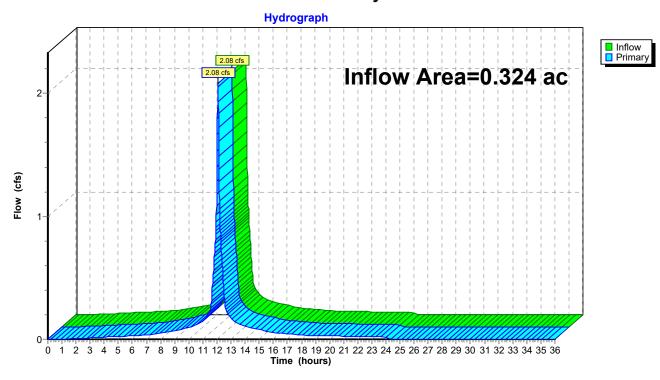
Inflow Area = 0.324 ac, 94.26% Impervious, Inflow Depth = 5.99" for 25-year event

Inflow = 2.08 cfs @ 12.07 hrs, Volume= 0.162 af

Primary = 2.08 cfs @ 12.07 hrs, Volume= 0.162 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-36.00 hrs, dt= 0.01 hrs

Link DP-1: Dudley Street



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Summary for Link DP-2: Mill Brook

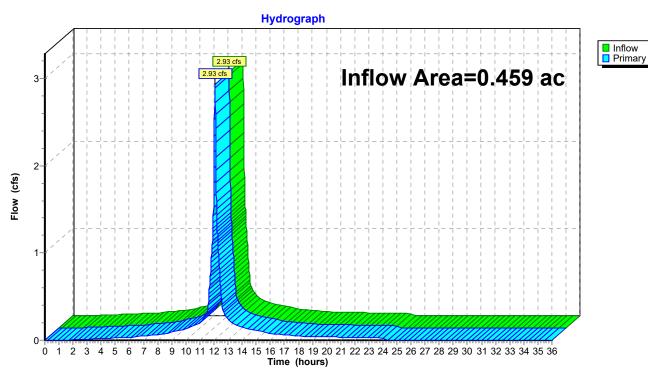
Inflow Area = 0.459 ac, 91.47% Impervious, Inflow Depth = 5.88" for 25-year event

Inflow = 2.93 cfs @ 12.07 hrs, Volume= 0.225 af

Primary = 2.93 cfs @ 12.07 hrs, Volume= 0.225 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-36.00 hrs, dt= 0.01 hrs

Link DP-2: Mill Brook



100-Year Storm Event – Existing

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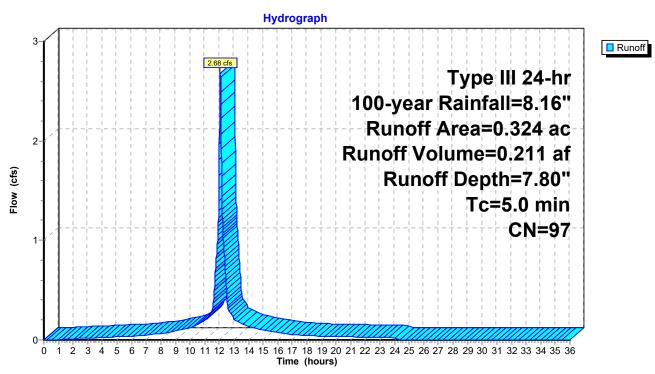
Summary for Subcatchment EX-1: Front of Site

Runoff = 2.68 cfs @ 12.07 hrs, Volume= 0.211 af, Depth= 7.80"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-36.00 hrs, dt= 0.01 hrs Type III 24-hr 100-year Rainfall=8.16"

_	Area	(ac)	CN	Desc	cription						
	0.016 89 <50% Grass cover, Poor, HSG D										
	0.	003	80	>759	% Grass co	over, Good	, HSG D				
	0.	179	98	Pave	Paved parking, HSG D						
	0.	127	98	Root	Roofs, HSG D						
	0.	324	97	Weig	hted Aver	age					
	0.	019		5.74	% Perviou	s Area					
	0.	305		94.2	6% Imper	ious Area					
	_										
	Тс	Leng		Slope	Velocity	Capacity	Description				
_	(min)	(fee	et)	(ft/ft)	(ft/sec)	(cfs)					
	5.0						Direct Entry.				

Subcatchment EX-1: Front of Site



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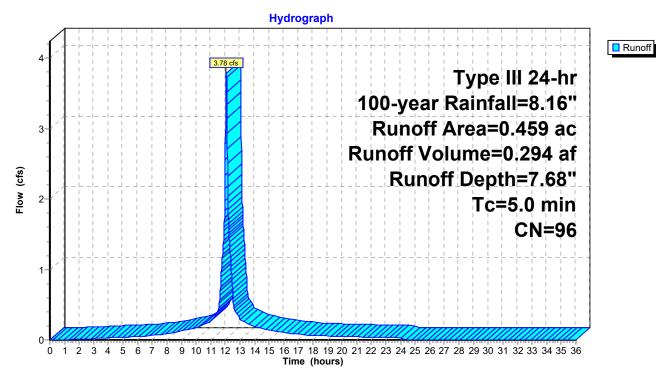
Summary for Subcatchment EX-2: Back of Site

Runoff = 3.78 cfs @ 12.07 hrs, Volume= 0.294 af, Depth= 7.68"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-36.00 hrs, dt= 0.01 hrs Type III 24-hr 100-year Rainfall=8.16"

Area	(ac)	CN	Desc	cription				
0.	001	89	<509	% Grass co	over, Poor,	, HSG D		
0.	296	98	Pave	ed parking	HSG D			
0.	.124 98 Roofs, HSG D							
0.	038	79	Woo	ds, Fair, H	SG D			
0.	0.459 96 Weighted Average							
0.039			8.53	8.53% Pervious Area				
0.420		91.4	7% Imperv	ious Area				
Tc	Leng		Slope	Velocity	Capacity	Description		
(min)	(fee	et)	(ft/ft)	(ft/sec)	(cfs)			
5.0						Direct Entry,		

Subcatchment EX-2: Back of Site



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Summary for Link DP-1: Dudley Street

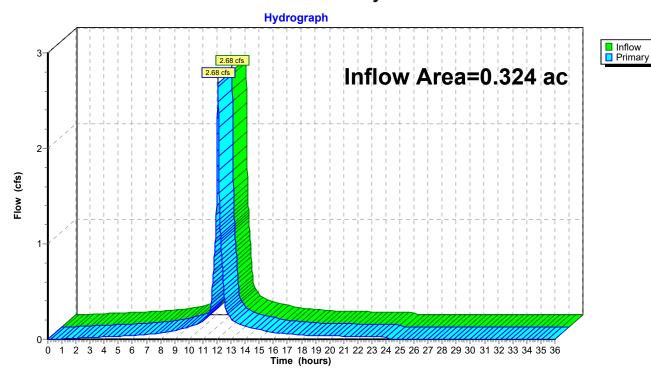
Inflow Area = 0.324 ac, 94.26% Impervious, Inflow Depth = 7.80" for 100-year event

Inflow = 2.68 cfs @ 12.07 hrs, Volume= 0.211 af

Primary = 2.68 cfs @ 12.07 hrs, Volume= 0.211 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-36.00 hrs, dt= 0.01 hrs

Link DP-1: Dudley Street



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Summary for Link DP-2: Mill Brook

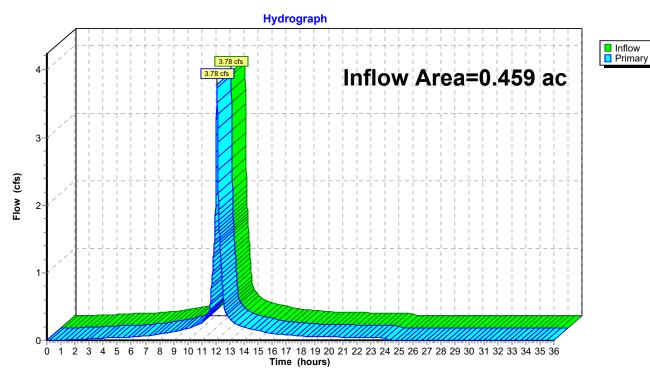
Inflow Area = 0.459 ac, 91.47% Impervious, Inflow Depth = 7.68" for 100-year event

Inflow = 3.78 cfs @ 12.07 hrs, Volume= 0.294 af

Primary = 3.78 cfs @ 12.07 hrs, Volume= 0.294 af, Atten= 0%, Lag= 0.0 min

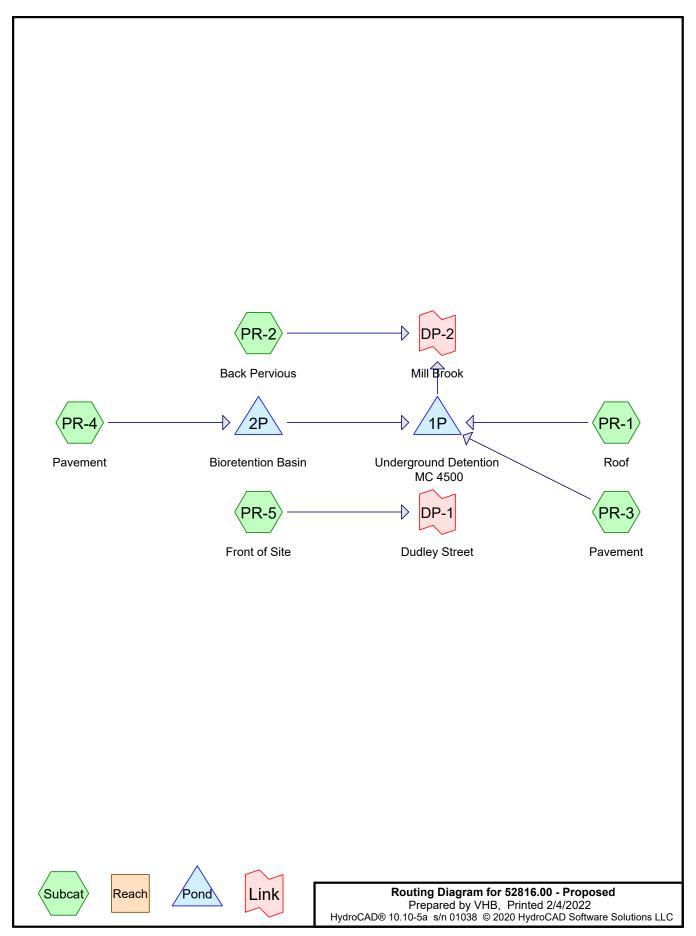
Primary outflow = Inflow, Time Span= 0.00-36.00 hrs, dt= 0.01 hrs

Link DP-2: Mill Brook



HydroCAD Analysis: Proposed Conditions

2-Year Storm Event – Proposed



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Rainfall Events Listing

Event#	Event Name	Storm Type	Curve	Mode	Duration (hours)	B/B	Depth (inches)	AMC
1	2-year	Type III 24-hr		Default	24.00	1	3.27	2
2	10-year	Type III 24-hr		Default	24.00	1	5.16	2
3	25-year	Type III 24-hr		Default	24.00	1	6.35	2
4	100-year	Type III 24-hr		Default	24.00	1	8.16	2

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Area Listing (selected nodes)

A	∖rea	CN	Description
(ac	res)		(subcatchment-numbers)
0.	0.179 80		>75% Grass cover, Good, HSG D (PR-2, PR-3, PR-5)
0.	880	98	Paved parking, HSG D (PR-2, PR-3, PR-4, PR-5)
0.	515	98	Roofs, HSG D (PR-1)
0	.783	94	TOTAL AREA

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Ground Covers (selected nodes)

 HSG-A (acres)	HSG-B (acres)	HSG-C (acres)	HSG-D (acres)	Other (acres)	Total (acres)	Ground Cover	Subcatchment Numbers
0.000	0.000	0.000	0.179	0.000	0.179	>75% Grass cover, Good	PR-2, PR-3, PR-5
0.000	0.000	0.000	0.088	0.000	0.088	Paved parking	PR-2, PR-3, PR-4, PR-5
0.000 0.000	0.000 0.000	0.000 0.000	0.515 0.783	0.000 0.000	0.515 0.783	Roofs TOTAL AREA	PR-1

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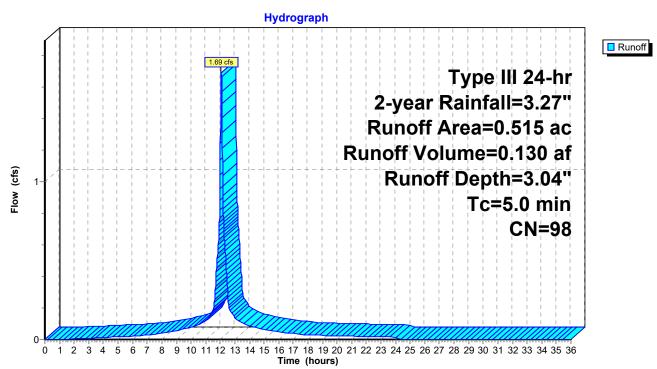
Summary for Subcatchment PR-1: Roof

Runoff = 1.69 cfs @ 12.07 hrs, Volume= 0.130 af, Depth= 3.04"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-36.00 hrs, dt= 0.01 hrs Type III 24-hr 2-year Rainfall=3.27"

	Area	(ac)	CN	Desc	cription		
	0.	515	98	Roof	s, HSG D		
-	0.	515		100.	00% Impe	rvious Area	a .
	Tc (min)	Leng (fee		Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
	5.0	•	•				Direct Entry,

Subcatchment PR-1: Roof



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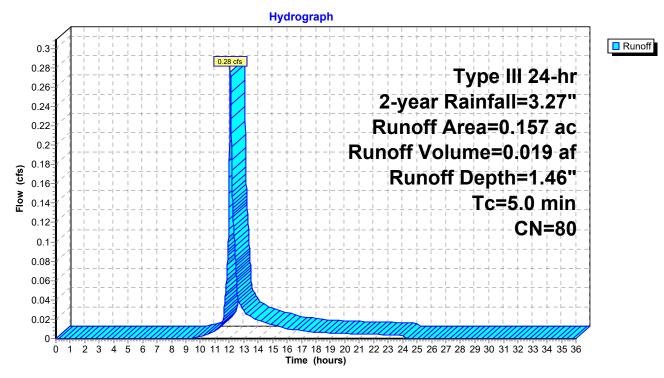
Summary for Subcatchment PR-2: Back Pervious

Runoff = 0.28 cfs @ 12.08 hrs, Volume= 0.019 af, Depth= 1.46"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-36.00 hrs, dt= 0.01 hrs Type III 24-hr 2-year Rainfall=3.27"

_	Area	(ac)	CN	Desc	ription					
	0.	0.156 80 >75% Grass cover, Good, HSG D								
_	0.	0.001 98 Paved parking, HSG D								
_	0.	157	80	Weig	hted Aver	age				
	0.	156		99.0	99.07% Pervious Area					
	0.001			0.93°	% Impervi	ous Area				
	_					• "				
	Tc	Lengt		Slope	Velocity	Capacity	Description			
_	(min)	(fee	t)	(ft/ft)	(ft/sec)	(cfs)				
	5.0						Direct Entry.			

Subcatchment PR-2: Back Pervious



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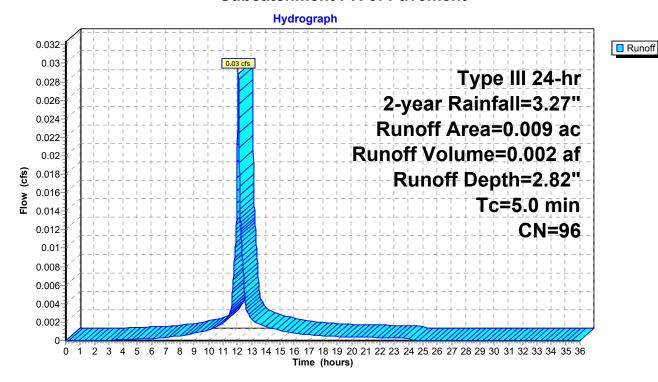
Summary for Subcatchment PR-3: Pavement

Runoff = 0.03 cfs @ 12.07 hrs, Volume= 0.002 af, Depth= 2.82"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-36.00 hrs, dt= 0.01 hrs Type III 24-hr 2-year Rainfall=3.27"

_	Area	(ac)	CN	Desc	ription		
	0.	001	80	>75%	6 Grass co	over, Good	d, HSG D
_	0.	800	98	Pave	d parking,	, HSG D	
	0.	009	96	Weig	hted Aver	age	
	0.001 10.00% Pervious Area						
	0.008			90.00	0% Imperv	ious Area	l
	т.	1 4		21	\/-l:4	Oit.	Description
	Tc	Lengt		Slope	Velocity	Capacity	·
_	(min)	(feet	τ)	(ft/ft)	(ft/sec)	(cfs)	
	5.0						Direct Entry.

Subcatchment PR-3: Pavement



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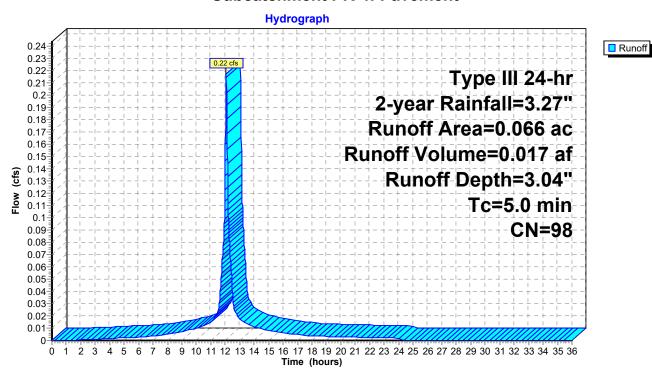
Summary for Subcatchment PR-4: Pavement

Runoff = 0.22 cfs @ 12.07 hrs, Volume= 0.017 af, Depth= 3.04"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-36.00 hrs, dt= 0.01 hrs Type III 24-hr 2-year Rainfall=3.27"

	Area	(ac)	CN	Desc	cription							
	0.	0.066 98 Paved parking, HSG D										
_	0.	066		100.	00% Impe	rvious Area	a					
	Tc (min)	Leng (fee		Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description					
	5.0						Direct Entry,					

Subcatchment PR-4: Pavement



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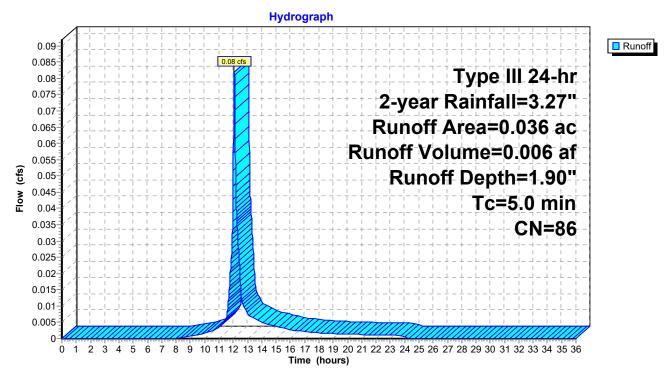
Summary for Subcatchment PR-5: Front of Site

Runoff = 0.08 cfs @ 12.07 hrs, Volume= 0.006 af, Depth= 1.90"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-36.00 hrs, dt= 0.01 hrs Type III 24-hr 2-year Rainfall=3.27"

_	Area	(ac)	CN	Desc	ription				
	0.	023	80	>75%	6 Grass co	over, Good	d, HSG D		
_	0.	013	98	Pave	d parking,	HSG D			
	0.	036	86	Weig	hted Aver	age			
	0.	023		64.04	4% Pervio	us Area			
	0.013 35				35.96% Impervious Area				
	_					• "	—		
	Tc	Lengt		Slope	Velocity	Capacity	·		
_	(min)	(fee	t)	(ft/ft)	(ft/sec)	(cfs)			
	5.0						Direct Entry.		

Subcatchment PR-5: Front of Site



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Summary for Pond 1P: Underground Detention MC 4500

Inflow Area = 0.590 ac, 99.85% Impervious, Inflow Depth = 2.84" for 2-year event
Inflow = 1.92 cfs @ 12.07 hrs, Volume= 0.140 af
Outflow = 0.52 cfs @ 12.40 hrs, Volume= 0.140 af, Atten= 73%, Lag= 19.8 min
Discarded = 0.46 cfs @ 9.40 hrs, Volume= 0.109 af
Primary = 0.46 cfs @ 12.40 hrs, Volume= 0.030 af

Routing by Stor-Ind method, Time Span= 0.00-36.00 hrs, dt= 0.01 hrs Peak Elev= 72.20' @ 12.40 hrs Surf.Area= 1,112 sf Storage= 2,371 cf

Plug-Flow detention time= 223.8 min calculated for 0.140 af (100% of inflow) Center-of-Mass det. time= 223.8 min (977.9 - 754.1)

Volume	Invert	Avail.Stora	age	Storage Descriptio	n					
#1	69.10'	1,939	9 cf		ta (Irregular)Listed b	pelow = 4,847 cf x 40.0% Voids				
#2	69.85'	824	4 cf	ADS_StormTech	MC-4500 b +Capx 7	Inside #1				
						.46 sf x 4.03'L = 106.5 cf 'L with 0.31' Overlap				
				Cap Storage= +39.5 cf x 2 x 1 rows = 79.0 cf ADS StormTech MC-4500 b +Cap x 7 Inside #1						
#3	69.85'	824	4 cf			′ Inside #1 .46 sf x 4.03'L = 106.5 cf				
				Overall Size= 100.0"W x 60.0"H x 4.33'L with 0.31' Overlap Cap Storage= +39.5 cf x 2 x 1 rows = 79.0 cf						
#4	69.85'	61	1 cf		.5 cf x 2 x 1 rows = 7 MC-4500 b +Cap x 5					
						.46 sf x 4.03'L = 106.5 cf 'L with 0.31' Overlap				
					.5 cf x 2 x 1 rows = 7					
#5	69.85'	398 cf			MC-4500 b +Cap x 3 4"W x 60 0"H => 26	Inside #1 .46 sf x 4.03'L = 106.5 cf				
				Overall Size= 100.	0"W x 60.0"H x 4.33	'L with 0.31' Overlap				
					.5 cf x 2 x 1 rows = 7	79.0 cf				
		4,598	8 cf	Total Available Sto	rage					
Elevatio			rim.	Inc.Store	Cum.Store	Wet.Area				
(fee			eet)	(cubic-feet)	(cubic-feet)	(sq-ft)				
69.1		,	46.5	0	0	1,112				
75.8	35	1,112 1	46.5	7,506	7,506	2,101				
Device	Routing	Invert	Outl	et Devices						
#1	Primary	71.70'		" Round Culvert	ad analastina. Ka-O	. 500				
					nd projecting, Ke= 0 70' / 71.60' S= 0.00					
				.013, Flow Area= 0						
#2	Device 1	71.70'		W x 4.0" H Vert. O ted to weir flow at lo	rifice/Grate C= 0.6	00				
#3	Device 1		6.0"	Vert. Orifice/Grate	C= 0.600 Limited	to weir flow at low heads				
#4	Device 1			long Sharp-Crested Rectangular Weir 2 End Contraction(s)						
#5	Discarded	69.10'	2.40	0 in/hr Exfiltration	over Surface area					

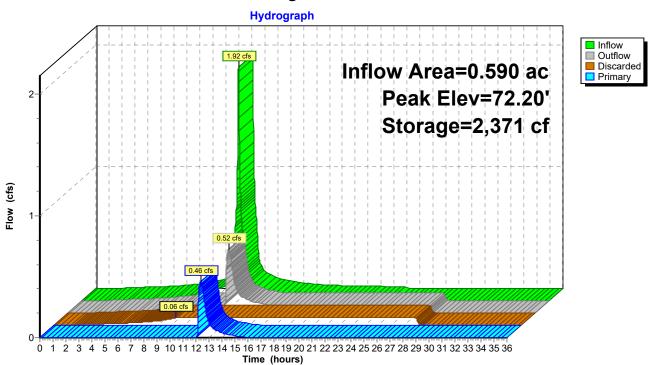
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Discarded OutFlow Max=0.06 cfs @ 9.40 hrs HW=69.17' (Free Discharge) **-5=Exfiltration** (Exfiltration Controls 0.06 cfs)

Primary OutFlow Max=0.46 cfs @ 12.40 hrs HW=72.20' (Free Discharge)

- -1=Culvert (Passes 0.46 cfs of 0.71 cfs potential flow)
 - -2=Orifice/Grate (Orifice Controls 0.46 cfs @ 2.76 fps)
 - -3=Orifice/Grate (Controls 0.00 cfs)
 - -4=Sharp-Crested Rectangular Weir (Controls 0.00 cfs)

Pond 1P: Underground Detention MC 4500



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Summary for Pond 2P: Bioretention Basin

Inflow Area = 0.066 ac,100.00% Impervious, Inflow Depth = 3.04" for 2-year event

0.22 cfs @ 12.07 hrs, Volume= Inflow 0.017 af

0.21 cfs @ 12.08 hrs, Volume= 0.017 af, Atten= 2%, Lag= 0.8 min Outflow

Discarded = 0.01 cfs @ 12.08 hrs, Volume= 0.010 af Primary 0.20 cfs @ 12.08 hrs, Volume= 0.007 af

Routing by Stor-Ind method, Time Span= 0.00-36.00 hrs, dt= 0.01 hrs Peak Elev= 76.32' @ 12.08 hrs Surf.Area= 213 sf Storage= 81 cf

Plug-Flow detention time= 51.9 min calculated for 0.017 af (100% of inflow)

Center-of-Mass det. time= 51.9 min (806.9 - 755.0)

Volume	Inve	ert Avail.S	Storage	Storage Description	n				
#1	75.5	0'	127 cf	Custom Stage Da	ta (Irregular)Listed	l below (Recalc)			
Elevation (fee		Surf.Area (sq-ft)	Perim. (feet)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)	Wet.Area (sq-ft)			
75.5	50	41	32.2	0	0	41			
76.1	10	115	45.3	45	45	125			
76.5	50	312	83.9	82	127	523			
Device	Routing	Inve	ert Outle	et Devices					
#1	Primary	72.0	00' 12.0 '	" Round Culvert					
	•		L= 1:	5.9' RCP, sq.cut e	nd projecting, Ke=	0.500			
			Inlet	/ Outlet Invert= 72.	00' / 71.50' S= 0.0	314 '/' Cc= 0.900			
			n= 0	n= 0.013, Flow Area= 0.79 sf					
#2	Device 1	76.2	25' 12.0 '	" Horiz. Orifice/Gra	ate C= 0.600 in 12	2.0" Grate (100% open	area)		
			Limit	Limited to weir flow at low heads					
#3	Discarde	d 75.5	0' 2.40	0 in/hr Exfiltration	over Surface area	1			

Discarded OutFlow Max=0.01 cfs @ 12.08 hrs HW=76.32' (Free Discharge) **3=Exfiltration** (Exfiltration Controls 0.01 cfs)

Primary OutFlow Max=0.20 cfs @ 12.08 hrs HW=76.32' TW=75.72' (Fixed TW Elev= 75.72')

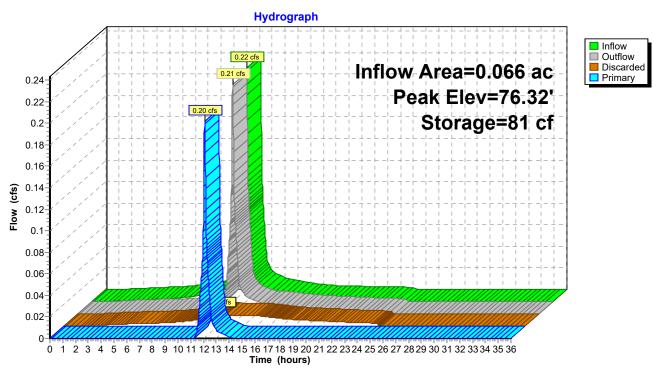
⁻¹⁼Culvert (Passes 0.20 cfs of 2.94 cfs potential flow)

²⁼Orifice/Grate (Weir Controls 0.20 cfs @ 0.88 fps)

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Pond 2P: Bioretention Basin



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Summary for Link DP-1: Dudley Street

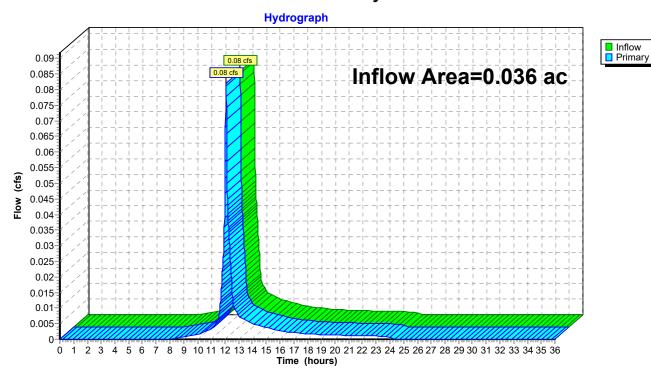
Inflow Area = 0.036 ac, 35.96% Impervious, Inflow Depth = 1.90" for 2-year event

Inflow = 0.08 cfs @ 12.07 hrs, Volume= 0.006 af

Primary = 0.08 cfs @ 12.07 hrs, Volume= 0.006 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-36.00 hrs, dt= 0.01 hrs

Link DP-1: Dudley Street



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Summary for Link DP-2: Mill Brook

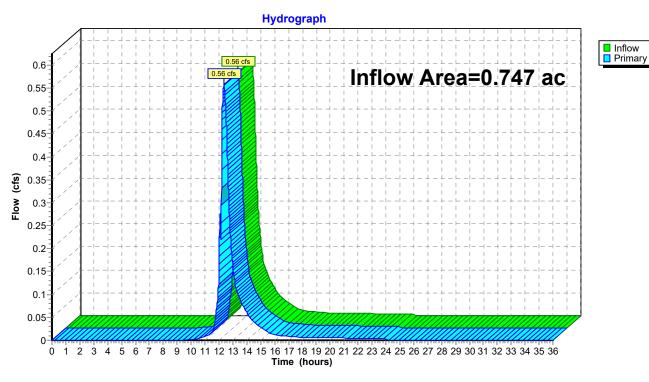
Inflow Area = 0.747 ac, 79.04% Impervious, Inflow Depth = 0.80" for 2-year event

Inflow = 0.56 cfs @ 12.36 hrs, Volume= 0.050 af

Primary = 0.56 cfs @ 12.36 hrs, Volume= 0.050 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-36.00 hrs, dt= 0.01 hrs

Link DP-2: Mill Brook



10-Year Storm Event – Proposed

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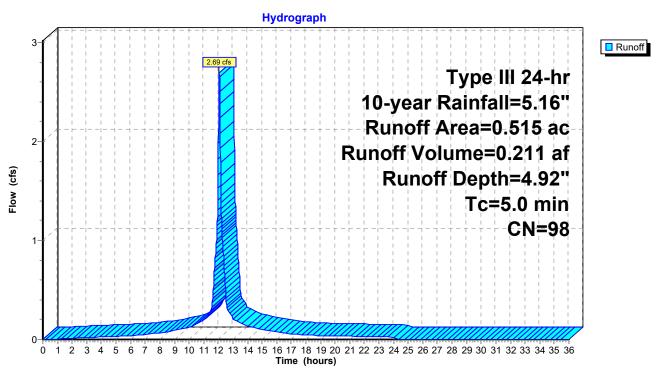
Summary for Subcatchment PR-1: Roof

Runoff = 2.69 cfs @ 12.07 hrs, Volume= 0.211 af, Depth= 4.92"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-36.00 hrs, dt= 0.01 hrs Type III 24-hr 10-year Rainfall=5.16"

	Area	(ac)	CN	Desc	cription		
	0.	515	98	Roof	s, HSG D		
-	0.	515		100.	00% Impe	rvious Area	a .
	Tc (min)	Leng (fee		Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
	5.0	•	•				Direct Entry,

Subcatchment PR-1: Roof



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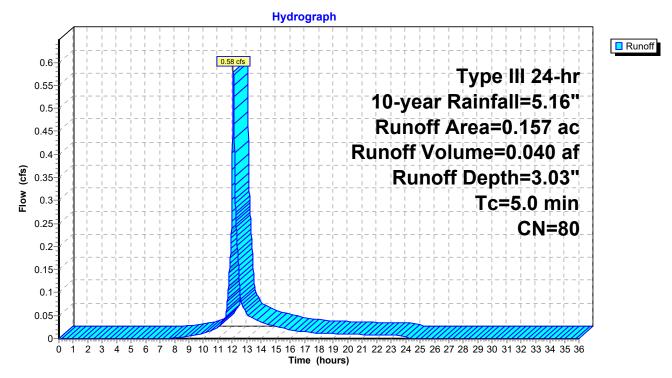
Summary for Subcatchment PR-2: Back Pervious

Runoff = 0.58 cfs @ 12.07 hrs, Volume= 0.040 af, Depth= 3.03"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-36.00 hrs, dt= 0.01 hrs Type III 24-hr 10-year Rainfall=5.16"

_	Area	(ac)	CN	Desc	ription		
	0.	156	80	>75%	6 Grass co	over, Good	d, HSG D
_	0.	001	98	Pave	d parking	, HSG D	
	0.	157	80	Weig	hted Aver	age	
	0.	156		99.0	7% Pervio	us Area	
	0.001 0.93% Impervious Area						
	_						
	Tc	Lengt		Slope	Velocity	Capacity	Description
_	(min)	(fee	t)	(ft/ft)	(ft/sec)	(cfs)	
	5.0						Direct Entry.

Subcatchment PR-2: Back Pervious



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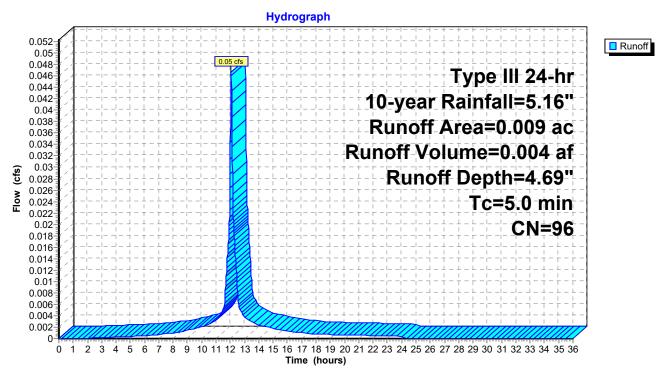
Summary for Subcatchment PR-3: Pavement

Runoff = 0.05 cfs @ 12.07 hrs, Volume= 0.004 af, Depth= 4.69"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-36.00 hrs, dt= 0.01 hrs Type III 24-hr 10-year Rainfall=5.16"

_	Area	(ac)	CN	Desc	ription			
	0.	001	80	>75%	6 Grass co	over, Good	I, HSG D	_
_	0.	800	98	Pave	d parking	, HSG D		
	0.	009	96	Weig	hted Aver	age		
	0.	001		10.00	0% Pervio	us Area		
	0.008			90.00	0% Imperv	∕ious Area		
	То	Long	th.	Clana	Volosity	Canacity	Description	
	Tc	Leng		Slope	Velocity	Capacity	Description	
_	(min)	(fee	et)	(ft/ft)	(ft/sec)	(cfs)		
	5.0						Direct Entry.	

Subcatchment PR-3: Pavement



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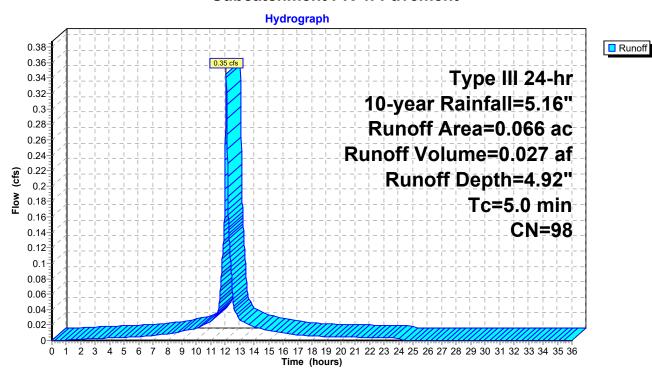
Summary for Subcatchment PR-4: Pavement

Runoff = 0.35 cfs @ 12.07 hrs, Volume= 0.027 af, Depth= 4.92"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-36.00 hrs, dt= 0.01 hrs Type III 24-hr 10-year Rainfall=5.16"

	Area	(ac)	CN	Desc	cription							
	0.	0.066 98 Paved parking, HSG D										
_	0.	066		100.	00% Impe	rvious Area	a					
	Tc (min)	Leng (fee		Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description					
	5.0						Direct Entry,					

Subcatchment PR-4: Pavement



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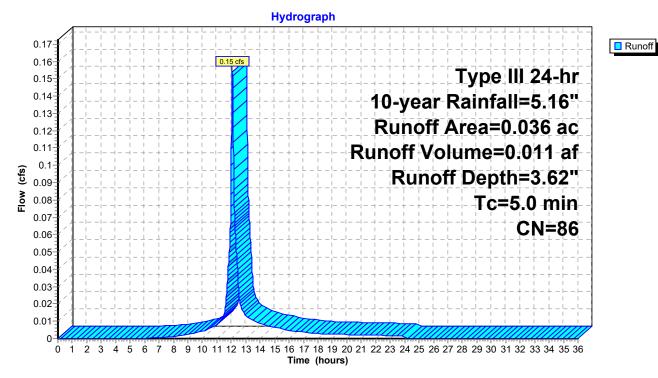
Summary for Subcatchment PR-5: Front of Site

Runoff = 0.15 cfs @ 12.07 hrs, Volume= 0.011 af, Depth= 3.62"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-36.00 hrs, dt= 0.01 hrs Type III 24-hr 10-year Rainfall=5.16"

_	Area	(ac)	CN	Desc	ription			
	0.	023	80	>75%	6 Grass co	over, Good	d, HSG D	
_	0.	013	98	Pave	d parking,	, HSG D		
	0.	036	86	Weig	hted Aver	age		
	0.023 64.04% Pervious Area							
	0.	013		35.96% Impervious Area				
	_						5	
	Tc	Lengt		Slope	Velocity	Capacity	Description	
_	(min)	(fee	t)	(ft/ft)	(ft/sec)	(cfs)		
	5.0						Direct Entry.	

Subcatchment PR-5: Front of Site



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Summary for Pond 1P: Underground Detention MC 4500

Inflow Area = 0.590 ac, 99.85% Impervious, Inflow Depth = 4.66" for 10-year event
Inflow = 3.06 cfs @ 12.07 hrs, Volume= 0.229 af
Outflow = 1.15 cfs @ 12.29 hrs, Volume= 0.229 af, Atten= 62%, Lag= 12.9 min
Discarded = 0.06 cfs @ 7.96 hrs, Volume= 0.128 af
Primary = 1.09 cfs @ 12.29 hrs, Volume= 0.101 af

Routing by Stor-Ind method, Time Span= 0.00-36.00 hrs, dt= 0.01 hrs Peak Elev= 73.71' @ 12.29 hrs Surf.Area= 1,112 sf Storage= 3,510 cf

Plug-Flow detention time= 175.4 min calculated for 0.229 af (100% of inflow) Center-of-Mass det. time= 175.5 min (921.3 - 745.9)

Volume	Invert	Avail.Storaç	ge Storage Description						
#1	69.10'	1,939	cf Custom Stage Data (Irregular)Listed below						
			7,506 cf Overall - 2,659 cf Embedded = 4,847 cf x 40.0% Voids						
#2	69.85'	824							
			Effective Size= 90.4"W x 60.0"H => 26.46 sf x 4.03'L = 106.5 cf						
			Overall Size= 100.0"W x 60.0"H x 4.33'L with 0.31' Overlap						
#3	69.85'	824	Cap Storage= +39.5 cf x 2 x 1 rows = 79.0 cf of ADS StormTech MC-4500 b +Capx 7 Inside #1						
πΟ	03.03	024	Effective Size= 90.4"W x 60.0"H => 26.46 sf x 4.03'L = 106.5 cf						
			Overall Size= 100.0"W x 60.0"H x 4.33'L with 0.31' Overlap						
			Cap Storage= +39.5 cf x 2 x 1 rows = 79.0 cf						
#4	69.85'	611							
			Effective Size= 90.4 "W x 60.0 "H => 26.46 sf x 4.03 'L = 106.5 cf						
			Overall Size= 100.0"W x 60.0"H x 4.33'L with 0.31' Overlap						
μг	60.051	200	Cap Storage= +39.5 cf x 2 x 1 rows = 79.0 cf						
#5	69.85'	398	f ADS_StormTech MC-4500 b +Capx 3 Inside #1 Effective Size= 90.4"W x 60.0"H => 26.46 sf x 4.03'L = 106.5 cf						
			Overall Size= 100.0"W x 60.0"H x 4.33'L with 0.31' Overlap						
			Cap Storage= +39.5 cf x 2 x 1 rows = 79.0 cf						
		4,598	· · ·						
-	0								
Elevation		rf.Area Peri							
(fee		(sq-ft) (fe 1.112 146							
69. ² 75.8	-	1,112 146 1,112 146	· · · · · · · · · · · · · · · · · ·						
75.0	33	1,112 140	J.S 1,500 1,500 2,101						
Device	Routing	Invert C	Outlet Devices						
#1	Primary	71.70' 1	2.0" Round Culvert						
			= 15.8' RCP, sq.cut end projecting, Ke= 0.500						
			nlet / Outlet Invert= 71.70' / 71.60' S= 0.0063 '/' Cc= 0.900						
#2	Davisa 1		= 0.013, Flow Area= 0.79 sf						
#2	Device 1		6.0" W x 4.0" H Vert. Orifice/Grate C= 0.600 Limited to weir flow at low heads						
#3	Device 1		5.0" Vert. Orifice/Grate C= 0.600 Limited to weir flow at low heads						
#4	Device 1		9.0' long Sharp-Crested Rectangular Weir 2 End Contraction(s)						
#5	Discarded		2.400 in/hr Exfiltration over Surface area						

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Discarded OutFlow Max=0.06 cfs @ 7.96 hrs HW=69.17' (Free Discharge) **5=Exfiltration** (Exfiltration Controls 0.06 cfs)

Primary OutFlow Max=1.09 cfs @ 12.29 hrs HW=73.71' (Free Discharge)

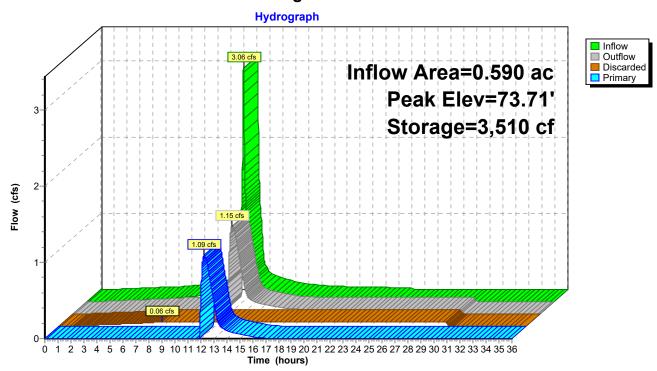
1=Culvert (Passes 1.09 cfs of 4.64 cfs potential flow)

2=Orifice/Grate (Orifice Controls 1.09 cfs @ 6.53 fps)

3=Orifice/Grate (Orifice Controls 0.00 cfs @ 0.30 fps)

-4=Sharp-Crested Rectangular Weir (Controls 0.00 cfs)

Pond 1P: Underground Detention MC 4500



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Summary for Pond 2P: Bioretention Basin

Inflow Area = 0.066 ac,100.00% Impervious, Inflow Depth = 4.92" for 10-year event 0.35 cfs @ 12.07 hrs, Volume= 0.027 af 0.04 cfs @ 12.08 hrs, Volume= 0.027 af, Atten= 1%, Lag= 0.8 min 0.01 cfs @ 12.08 hrs, Volume= 0.013 af 0.33 cfs @ 12.08 hrs, Volume= 0.015 af

Routing by Stor-Ind method, Time Span= 0.00-36.00 hrs, dt= 0.01 hrs Peak Elev= 76.35' @ 12.08 hrs Surf.Area= 227 sf Storage= 87 cf

Plug-Flow detention time= 45.8 min calculated for 0.027 af (100% of inflow) Center-of-Mass det. time= 45.8 min (792.4 - 746.6)

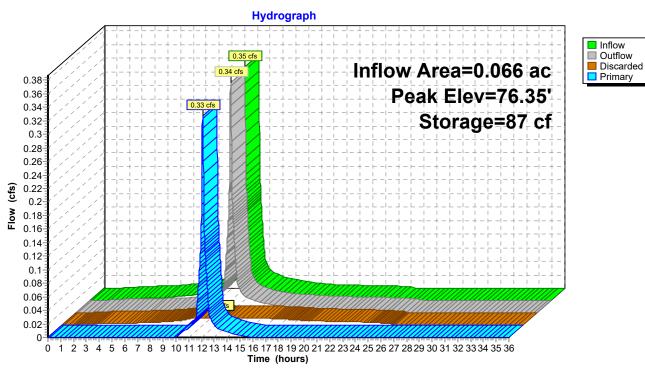
Volume	Inve	ert Avail.S	Storage	Storage Description	n				
#1	75.5	0'	127 cf	Custom Stage Da	ta (Irregular)Listed	l below (Recalc)			
Elevation (fee		Surf.Area (sq-ft)	Perim. (feet)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)	Wet.Area (sq-ft)			
75.5	50	41	32.2	0	0	41			
76.1	10	115	45.3	45	45	125			
76.5	50	312	83.9	82	127	523			
Device	Routing	Inve	ert Outle	et Devices					
#1	Primary	72.0	00' 12.0 '	" Round Culvert					
	•		L= 1:	5.9' RCP, sq.cut e	nd projecting, Ke=	0.500			
			Inlet	/ Outlet Invert= 72.	00' / 71.50' S= 0.0	314 '/' Cc= 0.900			
			n= 0	n= 0.013, Flow Area= 0.79 sf					
#2	Device 1	76.2	25' 12.0 '	" Horiz. Orifice/Gra	ate C= 0.600 in 12	2.0" Grate (100% open	area)		
			Limit	Limited to weir flow at low heads					
#3	Discarde	d 75.5	0' 2.40	0 in/hr Exfiltration	over Surface area	1			

Discarded OutFlow Max=0.01 cfs @ 12.08 hrs HW=76.35' (Free Discharge) **3=Exfiltration** (Exfiltration Controls 0.01 cfs)

Primary OutFlow Max=0.33 cfs @ 12.08 hrs HW=76.35' TW=75.72' (Fixed TW Elev= 75.72') 1=Culvert (Passes 0.33 cfs of 3.00 cfs potential flow) 2=Orifice/Grate (Weir Controls 0.33 cfs @ 1.04 fps)

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Pond 2P: Bioretention Basin



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Summary for Link DP-1: Dudley Street

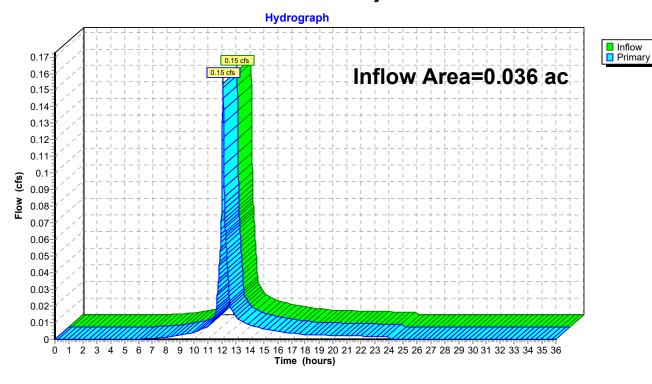
Inflow Area = 0.036 ac, 35.96% Impervious, Inflow Depth = 3.62" for 10-year event

Inflow = 0.15 cfs @ 12.07 hrs, Volume= 0.011 af

Primary = 0.15 cfs @ 12.07 hrs, Volume= 0.011 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-36.00 hrs, dt= 0.01 hrs

Link DP-1: Dudley Street



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Summary for Link DP-2: Mill Brook

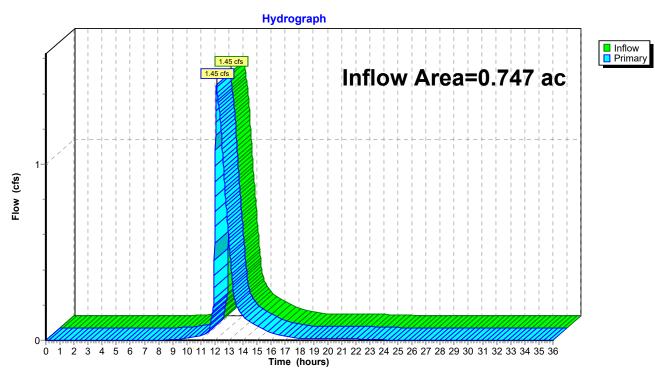
Inflow Area = 0.747 ac, 79.04% Impervious, Inflow Depth = 2.26" for 10-year event

Inflow = 1.45 cfs @ 12.11 hrs, Volume= 0.141 af

Primary = 1.45 cfs @ 12.11 hrs, Volume= 0.141 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-36.00 hrs, dt= 0.01 hrs

Link DP-2: Mill Brook



25-Year Storm Event – Proposed

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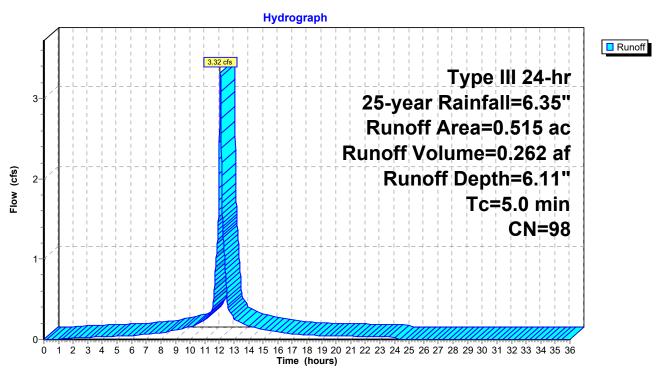
Summary for Subcatchment PR-1: Roof

Runoff = 3.32 cfs @ 12.07 hrs, Volume= 0.262 af, Depth= 6.11"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-36.00 hrs, dt= 0.01 hrs Type III 24-hr 25-year Rainfall=6.35"

	Area	(ac)	CN	Desc	cription					
	0.	515	98	Roof	s, HSG D					
-	0.515 100.00% Impervious Area									
	Tc (min)	Leng (fee		Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description			
	5.0	•	•				Direct Entry,			

Subcatchment PR-1: Roof



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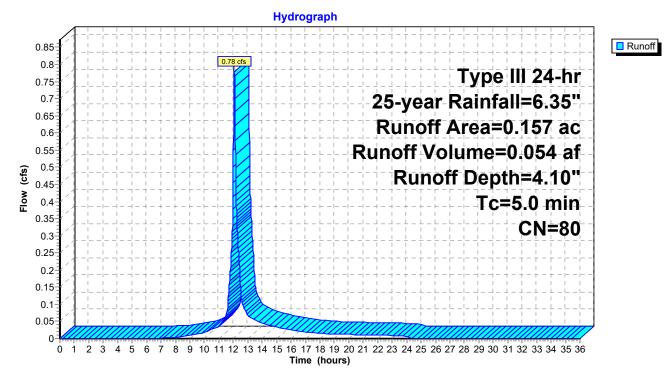
Summary for Subcatchment PR-2: Back Pervious

Runoff = 0.78 cfs @ 12.07 hrs, Volume= 0.054 af, Depth= 4.10"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-36.00 hrs, dt= 0.01 hrs Type III 24-hr 25-year Rainfall=6.35"

_	Area	(ac)	CN	Desc	Description									
	0.	156	80	>75%	6 Grass co	over, Good	d, HSG D							
_	0.	0.001 98 Paved parking, HSG D												
	0.	157	80	Weig	hted Aver	age								
	0.	156		99.0	7% Pervio	us Area								
	0.	001		0.93°	% Impervi	ous Area								
	т.	1		3 1	V/-1	0	Description							
	Tc	Lengt		Slope	Velocity	Capacity	•							
_	(min)	(fee	τ)	(ft/ft)	(ft/sec)	(cfs)								
	5.0						Direct Entry.							

Subcatchment PR-2: Back Pervious



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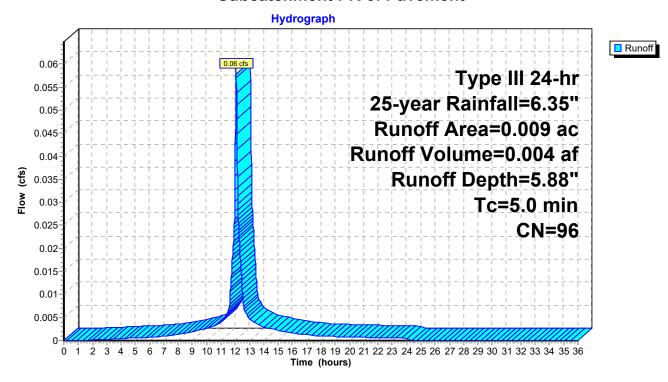
Summary for Subcatchment PR-3: Pavement

Runoff = 0.06 cfs @ 12.07 hrs, Volume= 0.004 af, Depth= 5.88"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-36.00 hrs, dt= 0.01 hrs Type III 24-hr 25-year Rainfall=6.35"

_	Area	(ac)	CN	Desc	ription						
	0.	0.001 80 >75% Grass cover, Good, HSG D									
_	0.	0.008 98 Paved parking, HSG D									
	0.	009	96	Weig	hted Aver	age					
	0.	001		10.00	0% Pervio	us Area					
	0.	800		90.00)% Imperv	ious Area					
	т.	1 4	.L. C	21	\/-l:4	Oit.	Description				
	Tc	Lengt		Slope	Velocity	Capacity	Description				
_	(min)	(feet	τ)	(ft/ft)	(ft/sec)	(cfs)					
	5.0						Direct Entry.				

Subcatchment PR-3: Pavement



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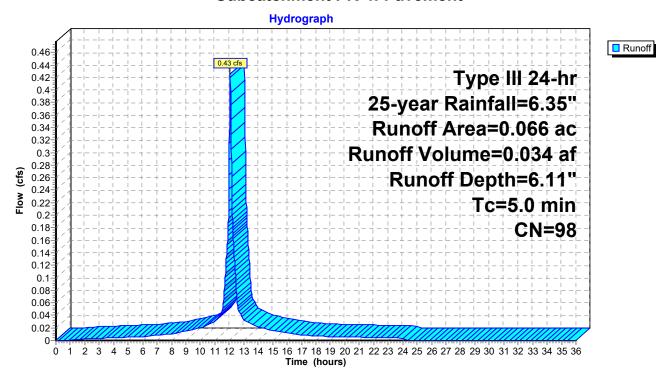
Summary for Subcatchment PR-4: Pavement

Runoff = 0.43 cfs @ 12.07 hrs, Volume= 0.034 af, Depth= 6.11"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-36.00 hrs, dt= 0.01 hrs Type III 24-hr 25-year Rainfall=6.35"

	Area	(ac)	CN	Desc	cription						
	0.066 98 Paved parking, HSG D										
_	0.	0.066 100.00% Impervious Area									
	Tc (min)	Leng (fee		Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description				
	5.0						Direct Entry,				

Subcatchment PR-4: Pavement



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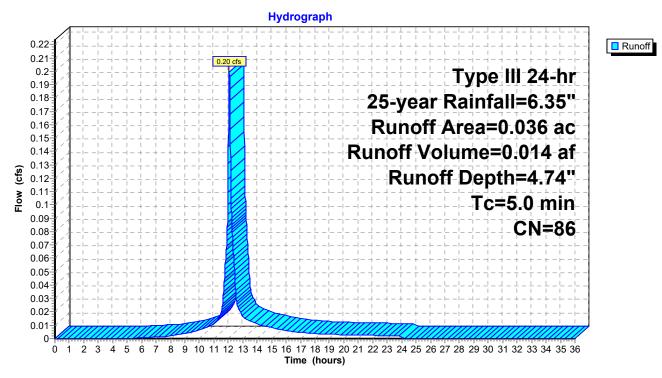
Summary for Subcatchment PR-5: Front of Site

Runoff = 0.20 cfs @ 12.07 hrs, Volume= 0.014 af, Depth= 4.74"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-36.00 hrs, dt= 0.01 hrs Type III 24-hr 25-year Rainfall=6.35"

 Area	(ac)	CN	Desc	Description									
 0.	023	80	>75%	6 Grass co	over, Good	I, HSG D							
 0.	0.013 98 Paved parking, HSG D												
 0.	036	86	Weig	hted Aver	age								
0.	023		64.04	4% Pervio	us Area								
0.	013		35.96	6% Imperv	ious Area								
_	_												
Tc	Leng		Slope	Velocity	Capacity	Description							
 (min)	(fee	et)	(ft/ft)	(ft/sec)	(cfs)								
5.0						Direct Entry,							

Subcatchment PR-5: Front of Site



#4

#5

Device 1

Discarded

75.80'

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Summary for Pond 1P: Underground Detention MC 4500

Inflow Area = 0.590 ac, 99.85% Impervious, Inflow Depth = 5.82" for 25-year event
Inflow = 3.78 cfs @ 12.07 hrs, Volume= 0.286 af
Outflow = 2.04 cfs @ 12.18 hrs, Volume= 0.286 af, Atten= 46%, Lag= 6.7 min
Discarded = 0.06 cfs @ 7.04 hrs, Volume= 0.138 af
Primary = 1.97 cfs @ 12.18 hrs, Volume= 0.149 af

Routing by Stor-Ind method, Time Span= 0.00-36.00 hrs, dt= 0.01 hrs Peak Elev= 74.47' @ 12.18 hrs Surf.Area= 1,112 sf Storage= 3,973 cf

Plug-Flow detention time= 157.9 min calculated for 0.286 af (100% of inflow) Center-of-Mass det. time= 157.9 min (900.6 - 742.7)

Volume	Invert	Avail	.Storage	Storage Descriptio	n						
#1	69.10'		1,939 cf	Custom Stage Da	Custom Stage Data (Irregular)Listed below						
				7,506 cf Overall - 2,659 cf Embedded = 4,847 cf x 40.0% Voice							
#2	69.85'		824 cf		MC-4500 b +Capx						
						6.46 sf x 4.03'L = 106.5 cf					
						B'L with 0.31' Overlap					
#3	69.85'		824 cf		.5 cf x 2 x 1 rows = MC-4500 b +Capx						
#3	09.00		024 CI			6.46 sf x 4.03'L = 106.5 cf					
						B'L with 0.31' Overlap					
					.5 cf x 2 x 1 rows = 0						
#4	69.85'		611 cf		MC-4500 b +Capx :						
						6.46 sf x 4.03'L = 106.5 cf					
						B'L with 0.31' Overlap					
	00.051		000 . (Cap Storage= +39.5 cf x 2 x 1 rows = 79.0 cf ADS_StormTech MC-4500 b +Cap x 3 Inside #1							
#5	69.85'		398 cf			3 Inside #1 3.46 sf x 4.03'L = 106.5 cf					
						8'L with 0.31' Overlap					
					.5 cf x 2 x 1 rows = 0.5 cf x 2 x 1 r	•					
			4,598 cf	Total Available Sto							
			.,000 0.		9-						
Elevation	n Su	rf.Area	Perim.	Inc.Store	Cum.Store	Wet.Area					
(fee	t)	(sq-ft)	(feet)	(cubic-feet)	(cubic-feet)	(sq-ft)					
69.1		1,112 146.5			0	1,112					
75.8	35	1,112	146.5	7,506	7,506	2,101					
Device	Routing	Inv	ert Out	let Devices							
#1	Primary			" Round Culvert							
π ι	0.500										
L= 15.8' RCP, sq.cut end projecting, Ke= 0.500 Inlet / Outlet Invert= 71.70' / 71.60' S= 0.0063 '/' Cc= 0.900											
n= 0.013, Flow Area= 0.79 sf											
#2	800										
Limited to weir flow at low heads											
#3	#3 Device 1 73.70' 6.0" Vert. Orifice/Grate C= 0.600 Limited to weir flow at low hea										

69.10' 2.400 in/hr Exfiltration over Surface area

4.0' long Sharp-Crested Rectangular Weir 2 End Contraction(s)

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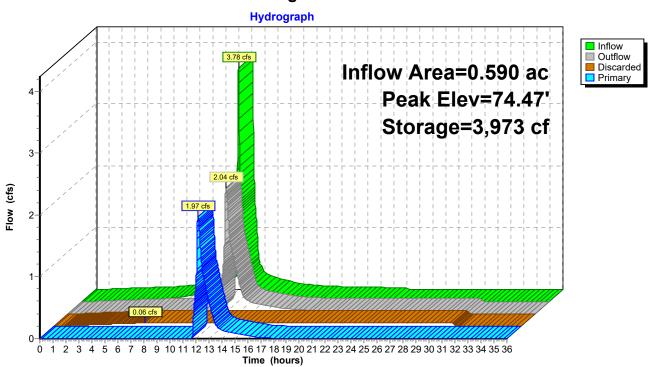
Discarded OutFlow Max=0.06 cfs @ 7.04 hrs HW=69.17' (Free Discharge) **5=Exfiltration** (Exfiltration Controls 0.06 cfs)

Primary OutFlow Max=1.97 cfs @ 12.18 hrs HW=74.47' (Free Discharge)
1=Culvert (Passes 1.97 cfs of 5.70 cfs potential flow)

—2=Orifice/Grate (Orifice Controls 1.29 cfs @ 7.76 fps)
—3=Orifice/Grate (Orifice Controls 0.68 cfs @ 3.47 fps)

-4=Sharp-Crested Rectangular Weir (Controls 0.00 cfs)

Pond 1P: Underground Detention MC 4500



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Summary for Pond 2P: Bioretention Basin

Inflow Area = 0.066 ac,100.00% Impervious, Inflow Depth = 6.11" for 25-year event

Inflow = 0.43 cfs @ 12.07 hrs, Volume= 0.034 af

Outflow = 0.42 cfs @ 12.08 hrs, Volume= 0.034 af, Atten= 1%, Lag= 0.7 min

Discarded = 0.01 cfs @ 12.08 hrs, Volume= 0.014 af

Discarded = 0.01 cfs @ 12.08 hrs, Volume= 0.014 af Primary = 0.41 cfs @ 12.08 hrs, Volume= 0.020 af

Routing by Stor-Ind method, Time Span= 0.00-36.00 hrs, dt= 0.01 hrs Peak Elev= 76.37' @ 12.08 hrs Surf.Area= 235 sf Storage= 91 cf

Plug-Flow detention time= 42.5 min calculated for 0.034 af (100% of inflow)

Assail Otamana Otamana Dagamintian

Center-of-Mass det. time= 42.6 min (786.0 - 743.4)

Volume Ir		ert Avail.S	Storage	Storage Description	n		
#1	75.5	0'	127 cf	Custom Stage Da	ta (Irregular) Listed	below (Recalc)	
Elevation (feet)		Surf.Area (sq-ft)	Perim. (feet)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)	Wet.Area (sq-ft)	
75.5	50	41	32.2	0	0	41	
76.10		115	45.3	45	45	125	
76.5	50	312	83.9	82	127	523	
Device	Routing	Inve	ert Outle	et Devices			
#1 Primary 72.00' 12.0" Round Culvert L= 15.9' RCP, sq.cut end projecting, Ke= 0.500 Inlet / Outlet Invert= 72.00' / 71.50' S= 0.0314 '/' Cc= 0.900 n= 0.013, Flow Area= 0.79 sf							
#2 Device 1 76.25' 12.0" Horiz. Orifice/Grate C= 0.600 in 12.0" Grate (100' Limited to weir flow at low heads					.0" Grate (100% open	area)	
#3 Discarded 75.5			60' 2.40	0 in/hr Exfiltration	over Surface area		

Discarded OutFlow Max=0.01 cfs @ 12.08 hrs HW=76.37' (Free Discharge) **3=Exfiltration** (Exfiltration Controls 0.01 cfs)

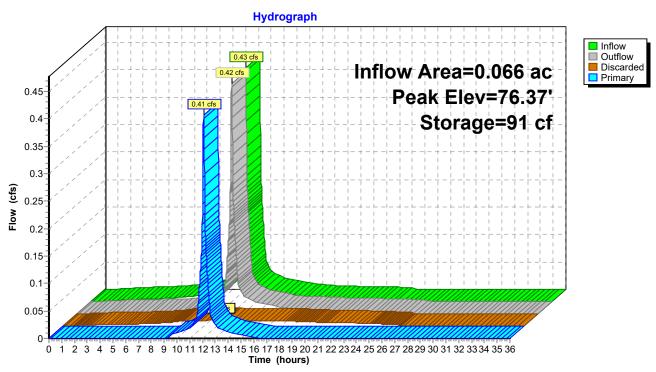
Primary OutFlow Max=0.41 cfs @ 12.08 hrs HW=76.37' TW=75.72' (Fixed TW Elev= 75.72')

¹⁼Culvert (Passes 0.41 cfs of 3.04 cfs potential flow)
2=Orifice/Grate (Weir Controls 0.41 cfs @ 1.11 fps)

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Pond 2P: Bioretention Basin



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Summary for Link DP-1: Dudley Street

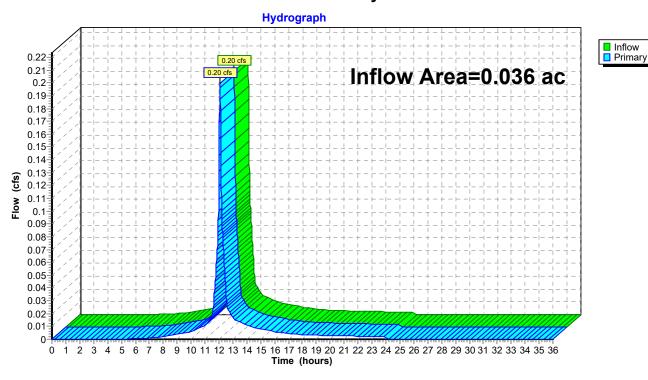
Inflow Area = 0.036 ac, 35.96% Impervious, Inflow Depth = 4.74" for 25-year event

Inflow = 0.20 cfs @ 12.07 hrs, Volume= 0.014 af

Primary = 0.20 cfs @ 12.07 hrs, Volume= 0.014 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-36.00 hrs, dt= 0.01 hrs

Link DP-1: Dudley Street



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Summary for Link DP-2: Mill Brook

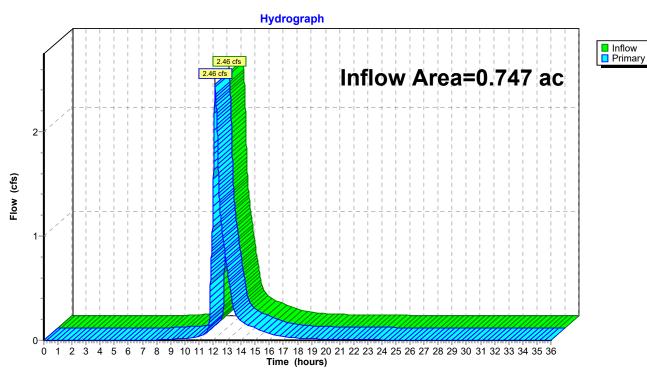
Inflow Area = 0.747 ac, 79.04% Impervious, Inflow Depth = 3.25" for 25-year event

Inflow = 2.46 cfs @ 12.15 hrs, Volume= 0.202 af

Primary = 2.46 cfs @ 12.15 hrs, Volume= 0.202 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-36.00 hrs, dt= 0.01 hrs

Link DP-2: Mill Brook



100-Year Storm Event – Proposed

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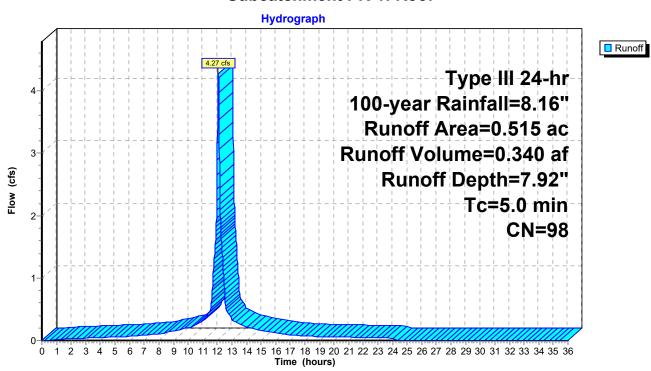
Summary for Subcatchment PR-1: Roof

Runoff = 4.27 cfs @ 12.07 hrs, Volume= 0.340 af, Depth= 7.92"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-36.00 hrs, dt= 0.01 hrs Type III 24-hr 100-year Rainfall=8.16"

	Area	(ac)	CN	Desc	cription					
	0.	515	98	Roof	s, HSG D					
-	0.515 100.00% Impervious Area									
	Tc (min)	Leng (fee		Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description			
	5.0	•	•				Direct Entry,			

Subcatchment PR-1: Roof



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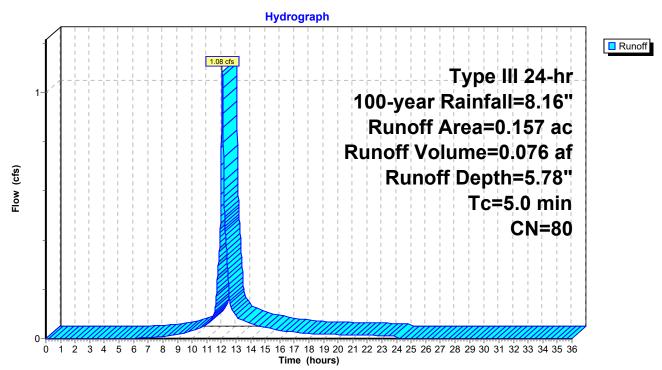
Summary for Subcatchment PR-2: Back Pervious

Runoff = 1.08 cfs @ 12.07 hrs, Volume= 0.076 af, Depth= 5.78"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-36.00 hrs, dt= 0.01 hrs Type III 24-hr 100-year Rainfall=8.16"

_	Area	(ac)	CN	Desc	Description									
	0.	156	80	>75%	√ Grass co	over, Good	, HSG D							
	0.	0.001 98 Paved parking, HSG D												
	0.	157	80	Weig	hted Aver	age								
	0.	156		99.0	7% Pervio	us Area								
	0.	001		0.93	% Impervi	ous Area								
	Tc (min)	Leng		Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description							
_	5.0	,		` '	,	, ,	Direct Entry,							

Subcatchment PR-2: Back Pervious



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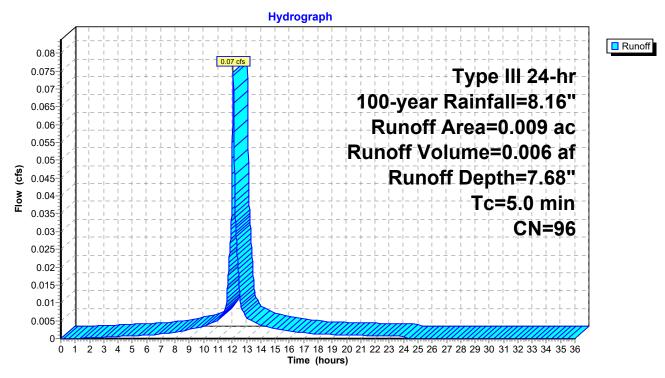
Summary for Subcatchment PR-3: Pavement

Runoff = 0.07 cfs @ 12.07 hrs, Volume= 0.006 af, Depth= 7.68"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-36.00 hrs, dt= 0.01 hrs Type III 24-hr 100-year Rainfall=8.16"

_	Area	(ac)	CN	Desc	ription			_
_	0.	001	80	>75%	6 Grass co	over, Good	d, HSG D	_
_	0.	800	98	Pave	d parking,	HSG D		_
	0.	009	96	Weig	hted Aver	age		
	0.	001		10.00	0% Pervio	us Area		
	0.	800		90.00	0% Imperv	ious Area		
	Τ.	1	u. 4	01	V/ . I !4	0	Description	
	Tc Length Slope Velocity Capacity						·	
_	(min)	(fee	τ)	(ft/ft)	(ft/sec)	(cfs)		_
	5.0						Direct Entry.	

Subcatchment PR-3: Pavement



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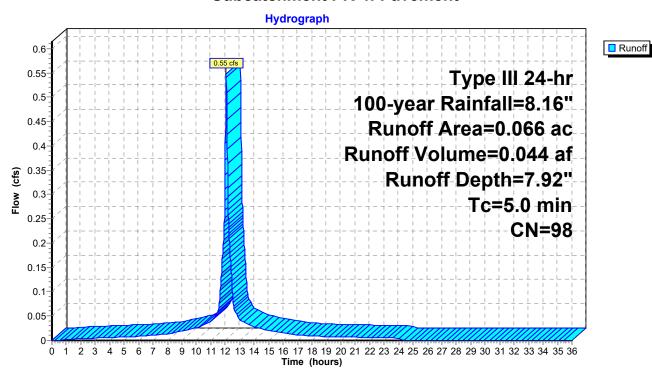
Summary for Subcatchment PR-4: Pavement

Runoff = 0.55 cfs @ 12.07 hrs, Volume= 0.044 af, Depth= 7.92"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-36.00 hrs, dt= 0.01 hrs Type III 24-hr 100-year Rainfall=8.16"

	Area	(ac)	CN	Desc	cription				
	0.066 98 Paved parking, HSG D								
_	0.066 100.00% Impervious Area								
	Tc (min)	Leng (fee		Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description		
	5.0						Direct Entry,		

Subcatchment PR-4: Pavement



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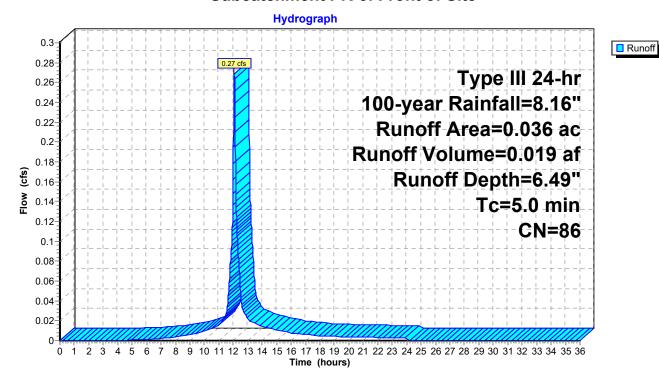
Summary for Subcatchment PR-5: Front of Site

Runoff = 0.27 cfs @ 12.07 hrs, Volume= 0.019 af, Depth= 6.49"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-36.00 hrs, dt= 0.01 hrs Type III 24-hr 100-year Rainfall=8.16"

_	Area	(ac)	CN	Desc	ription						
	0.	0.023 80 >75% Grass cover, Good, HSG D									
_	0.	013	98	Pave	d parking,	, HSG D					
	0.	036	86	Weig	hted Aver	age					
	0.	023		64.04	4% Pervio	us Area					
	0.	013		35.96	6% Imperv	ious Area					
	_						5				
	Tc	Lengt		Slope	Velocity	Capacity	Description				
_	(min)	(fee	t)	(ft/ft)	(ft/sec)	(cfs)					
	5.0						Direct Entry.				

Subcatchment PR-5: Front of Site



#5

Discarded

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Summary for Pond 1P: Underground Detention MC 4500

Inflow Area = 0.590 ac, 99.85% Impervious, Inflow Depth = 7.59" for 100-year event
Inflow = 4.87 cfs @ 12.07 hrs, Volume= 0.373 af
Outflow = 2.93 cfs @ 12.16 hrs, Volume= 0.373 af, Atten= 40%, Lag= 5.6 min
Discarded = 0.06 cfs @ 5.97 hrs, Volume= 0.149 af
Primary = 2.87 cfs @ 12.16 hrs, Volume= 0.225 af

Routing by Stor-Ind method, Time Span= 0.00-36.00 hrs, dt= 0.01 hrs Peak Elev= 75.79' @ 12.16 hrs Surf.Area= 1,112 sf Storage= 4,570 cf

Plug-Flow detention time= 139.0 min calculated for 0.373 af (100% of inflow) Center-of-Mass det. time= 138.9 min (878.4 - 739.5)

Volume	Invert	Avail.St	torage	Storage Description	1							
#1	69.10'	1,9	939 cf	Custom Stage Dat								
				7,506 cf Overall - 2,659 cf Embedded = 4,847 cf x 40.0% Voids								
#2	69.85'		824 cf	ADS_StormTech MC-4500 b +Capx 7 Inside #1								
				Effective Size= 90.4"W x 60.0"H => 26.46 sf x 4.03'L = 106.5 cf								
				Overall Size= 100.0"W x 60.0"H x 4.33'L with 0.31' Overlap Cap Storage= +39.5 cf x 2 x 1 rows = 79.0 cf								
#3	69.85'	,	824 cf	ADS StormTech								
πο	00.00	·	02+ 01			.46 sf x 4.03'L = 106.5 cf						
						L'L with 0.31' Overlap						
				Cap Storage= +39.	5 cf x 2 x 1 rows = 7	79.0 cf						
#4	69.85'	(611 cf	ADS_StormTech								
						.46 sf x 4.03'L = 106.5 cf						
						L'L with 0.31' Overlap						
#5	69.85'	•	398 cf	Cap Storage= +39. ADS_StormTech I								
#3	09.03	•	390 CI			.46 sf x 4.03'L = 106.5 cf						
						'L with 0.31' Overlap						
				Cap Storage= +39.								
		4,	598 cf	Total Available Stor	age							
Elevation			Perim.	Inc.Store	Cum.Store	Wet.Area						
(fee	,	(sq-ft)	(feet)	(cubic-feet)	(cubic-feet)	(sq-ft)						
69.1	-	1,112	146.5	0	0	1,112						
75.8	35	1,112	146.5	7,506	7,506	2,101						
Device	Routing	Inver	t Outl	et Devices								
#1	Primary	71.70		" Round Culvert								
" .	. mary	7 1.7 0	_	5.8' RCP, sq.cut er	nd projecting. Ke= ().500						
Inlet / Outlet Invert= 71.70' / 71.60' S= 0.0063 '/' Cc= 0.9												
n= 0.013, Flow Area= 0.79 sf												
#2 Device 1 71.70' 6.0" W x 4.0" H Vert. Orifice/Grate C= 0.600						00						
що.	Davida a 4	70.70		ted to weir flow at lov		l de comin flaco ad laco la caste						
#3 #4	Device 1	73.70				I to weir flow at low heads						
#4 Device 1 75.80' 4.0' long Sharp-Crested Rectangular Weir 2 End Contraction												

69.10' 2.400 in/hr Exfiltration over Surface area

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Discarded OutFlow Max=0.06 cfs @ 5.97 hrs HW=69.17' (Free Discharge) **5=Exfiltration** (Exfiltration Controls 0.06 cfs)

Primary OutFlow Max=2.87 cfs @ 12.16 hrs HW=75.78' (Free Discharge)

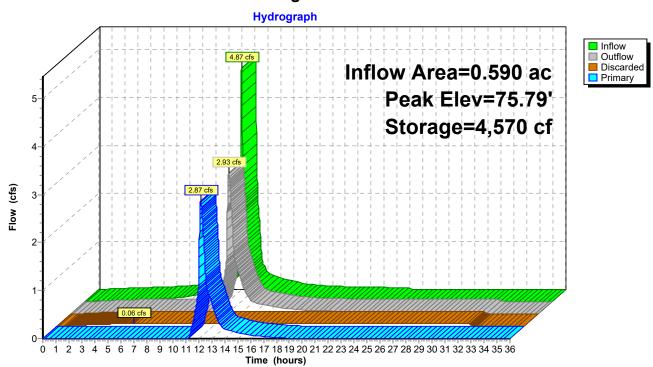
1=Culvert (Passes 2.87 cfs of 7.16 cfs potential flow)

2=Orifice/Grate (Orifice Controls 1.59 cfs @ 9.53 fps)

3=Orifice/Grate (Orifice Controls 1.28 cfs @ 6.52 fps)

-4=Sharp-Crested Rectangular Weir(Controls 0.00 cfs)

Pond 1P: Underground Detention MC 4500



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Summary for Pond 2P: Bioretention Basin

Inflow Area = 0.066 ac,100.00% Impervious, Inflow Depth = 7.92" for 100-year event

0.55 cfs @ 12.07 hrs, Volume= Inflow 0.044 af

0.54 cfs @ 12.08 hrs, Volume= 0.044 af, Atten= 1%, Lag= 0.7 min Outflow

Discarded = 0.01 cfs @ 12.08 hrs, Volume= 0.016 af Primary 0.53 cfs @ 12.08 hrs, Volume= 0.028 af

Routing by Stor-Ind method, Time Span= 0.00-36.00 hrs, dt= 0.01 hrs Peak Elev= 76.39' @ 12.08 hrs Surf.Area= 247 sf Storage= 96 cf

Plug-Flow detention time= 38.2 min calculated for 0.044 af (100% of inflow)

Center-of-Mass det. time= 38.2 min (778.2 - 740.0)

Volume	Inve	ert Avail.S	Storage	Storage Description	n		
#1	75.5	0'	127 cf	Custom Stage Da	ta (Irregular)Listed	l below (Recalc)	
Elevation (fee		Surf.Area (sq-ft)	Perim. (feet)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)	Wet.Area (sq-ft)	
75.5	50	41	32.2	0	0	41	
76.1	10	115	45.3	45	45	125	
76.5	50	312	83.9	82	127	523	
Device	Routing	Inve	ert Outle	et Devices			
#1	Primary	72.0	00' 12.0 '	" Round Culvert			
	•		L= 1:	5.9' RCP, sq.cut e	nd projecting, Ke=	0.500	
			Inlet	/ Outlet Invert= 72.	00' / 71.50' S= 0.0	314 '/' Cc= 0.900	
			n= 0	.013, Flow Area= 0	.79 sf		
#2	Device 1	76.2	25' 12.0 '	" Horiz. Orifice/Gra	ate C= 0.600 in 12	2.0" Grate (100% open	area)
			Limit	ed to weir flow at lo	w heads		,
#3	Discarde	d 75.5	0' 2.40	0 in/hr Exfiltration	over Surface area	1	

Discarded OutFlow Max=0.01 cfs @ 12.08 hrs HW=76.39' (Free Discharge) **3=Exfiltration** (Exfiltration Controls 0.01 cfs)

Primary OutFlow Max=0.53 cfs @ 12.08 hrs HW=76.39' TW=75.72' (Fixed TW Elev= 75.72')

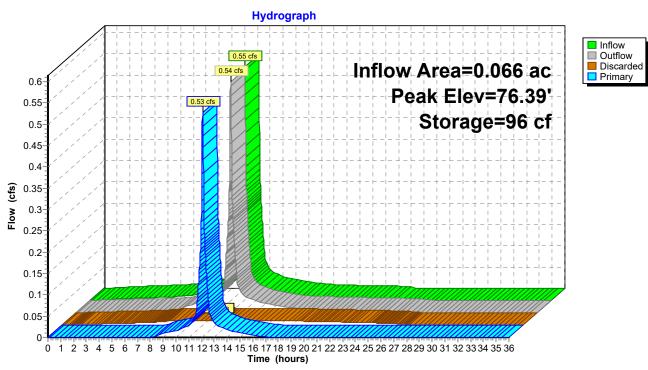
⁻¹⁼Culvert (Passes 0.53 cfs of 3.09 cfs potential flow)

²⁼Orifice/Grate (Weir Controls 0.53 cfs @ 1.21 fps)

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Pond 2P: Bioretention Basin



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Summary for Link DP-1: Dudley Street

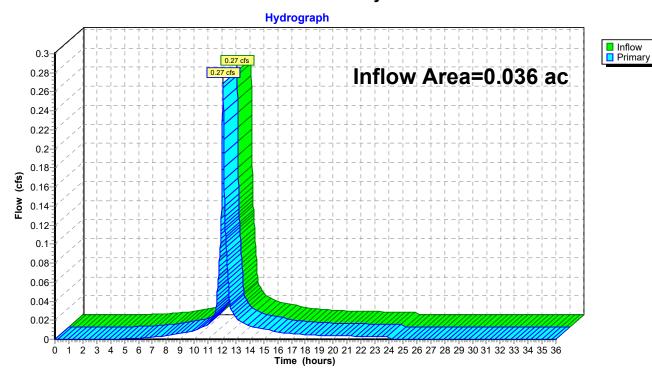
Inflow Area = 0.036 ac, 35.96% Impervious, Inflow Depth = 6.49" for 100-year event

Inflow = 0.27 cfs @ 12.07 hrs, Volume= 0.019 af

Primary = 0.27 cfs @ 12.07 hrs, Volume= 0.019 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-36.00 hrs, dt= 0.01 hrs

Link DP-1: Dudley Street



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Summary for Link DP-2: Mill Brook

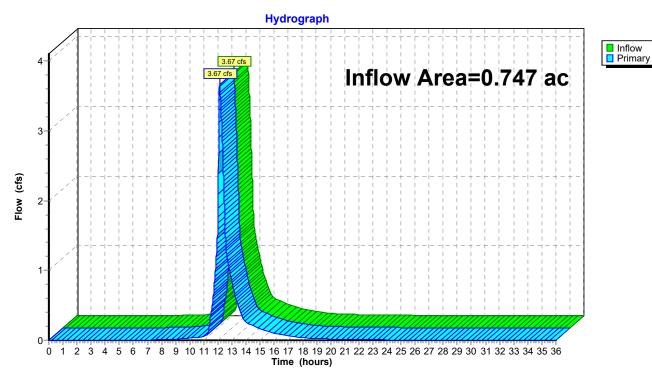
Inflow Area = 0.747 ac, 79.04% Impervious, Inflow Depth = 4.83" for 100-year event

Inflow = 3.67 cfs @ 12.12 hrs, Volume= 0.301 af

Primary = 3.67 cfs @ 12.12 hrs, Volume= 0.301 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-36.00 hrs, dt= 0.01 hrs

Link DP-2: Mill Brook



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Appendix C: Standard 3 Computations and **Supporting Documentation**

- Geotechnical Report (GeoEngineers Inc., dated January 28, 2022)
- **Recharge Volume Calculations**
- 72 hour drawdown analysis

Geotechnical Report



January 28, 2022

PSI Atlantic Arlington Massachusetts LLC 530 Oak Court Drive, Suite 155 Memphis, Tennessee 38117

Attention: Jay Tillman and Jesse Morgan

Subject: Geotechnical Engineering Letter Report

34 Dudley Street

Arlington, Massachusetts File No. 25754-001-00

GeoEngineers USA, PC (GeoEngineers) is pleased to provide this geotechnical engineering letter report to PSI Atlantic Arlington MA, LLC (PSI) for the proposed redevelopment for the property located at 34 Dudley Street in Arlington, Massachusetts (Site), as shown on Figure 1, Site Locus Map. This letter report is subject to the limitations attached herein.

SITE AND PROJECT DESCRIPTION

The existing site is comprised of a one to two story autobody shop and glass repair shop with a one-story garage located in the southwestern portion of the site and associated paved parking areas. As shown on Figure 2, Exploration Location Plan, the southern portion of the site slopes down to Mill Brook. GeoEngineers observed that portions of the slope have failed or are in poor condition.

Based on our conversations with you and the concept plans provided by VHB, Inc. (VHB), dated November 3, 2021, we understand the project consists of razing the existing structure to allow for the construction of a 5-story self-storage facility with a footprint of approximately 20,000 square feet and associated parking areas and drive aisles. Based on the grading plan we received on January 25, 2022, we understand the building will have a proposed finished floor elevation (FFE) of elevation (EI.) 79 feet and will be constructed at-grade without a basement. The site plans indicate that the upper portion of the slope along Mill Brook will be re-graded as part of the redevelopment. A stormwater infiltration system with a bottom of stone invert of El. 69.1 feet is also proposed in the northwestern portion of the Site, as shown on Figure 2.

Existing grades at the site vary between approximately El. 76 feet at the crest of the southern slope by Mill Brook and approximately El. 81 feet in the upper parking lot in the northern portion of the Site. Ground surface elevations in this memorandum are referenced to the North American Vertical Datum of 1988 (NAVD) and elevations are based on interpreting the existing conditions plans by VHB dated October 28, 2021.

SUBSURFACE EXPLORATION PROGRAM

The subsurface exploration program consisted of advancing six borings to depths between approximately 7 to 25 feet below existing ground surface (bgs). The boring program was completed between December 9, 2021, and January 8, 2022. The boring program was designed to meet the intent of the Town of Arlington zoning bylaw for redevelopments residing in the Inland Wetland District (Section 5.8.6 Development Conditions – subsection A.1). In addition, explorations were coordinated with the project environmental consultant, The Vertex Companies (Vertex) of Boston, Massachusetts as part of their Phase I Environmental Site Assessment (ESA). The approximate locations of the explorations are shown on Figure 2 and logs are provided in Attachment A.

Borings were advanced by Crawford Drilling Services, LLC (CDS) of Westminster, Massachusetts on December 18, 2021 using a truck-mounted drill rig equipped with hollow-stem augers and by G&M Subsurface on December 9, 2021 and January 8, 2022 using direct-push drilling methods. The boring programs were continuously observed by a representative from GeoEngineers who examined and classified the soils encountered, obtained representative soil samples, observed groundwater conditions (if present) and prepared a detailed log of each exploration. Soil samples were collected at 5-foot intervals with a 2-inch outside-diameter split-barrel standard penetration test (SPT) sampler. The blow counts are shown on the boring logs at the respective sample depths.

Soils encountered in the borings were visually classified in general accordance with the classification system described in Figure A-1. A key to the boring log symbols is also presented in Figure A-1. The logs of the borings are presented in Figures A-2 through A-7. The boring logs are based on our interpretation of the field and laboratory data and indicate the various types of soils encountered. The logs also indicate the depths at which these soils or their characteristics change, although the changes may actually be gradual. If the change occurred between samples, it was interpreted. The densities noted on the boring logs are based on the blow count data obtained in the borings and judgment based on the conditions encountered.

Geotechnical Laboratory Analysis

Three soil samples, from borings designated GEO-3, GEO-5, and GEO-6, were submitted to Thielsch Engineering of Braintree, Massachusetts by GeoEngineers for geotechnical laboratory testing to obtain index properties. Analyses included grain-size with hydrometer testing to confirm United States Department of Agriculture (USDA) textural classification for Rawls Rate correlations to support preliminary stormwater management design. The samples were selected to represent potential receiving layers within areas of the Site that are anticipated to receive stormwater. Results of the laboratory analysis are provided in Attachment B.

SUBSURFACE CONDITIONS

In general, the soil conditions observed at the Site consist of surface treatments (asphalt) underlain by fill overlying natural granular soils.

The existing fill consists of fine to coarse sand with varying gravel and silt content. Various non-soil constituents, consistent with historic (urban) fill, such as brick, asphalt, glass, and ash particles were observed within the fill layer.

The natural soil deposit is a glacial outwash deposit, consisting of dense to very dense sand with varying amounts of coarse gravel and silt. Coarse gravel and frequent cobbles were persistent throughout the outwash deposit and resulted in frequent auger and direct push refusal between 7 and 25 feet bgs. Cobbles and/or boulders should be expected during excavation of the materials during construction.

Groundwater

Groundwater was observed to be between approximately 15 and 24 feet bgs in the existing wells installed by others, designated MW-1 through MW-3, as indicated in Figure 2. The depths to groundwater shown on Figure 2 are based on measurements by Vertex on December 18, 2021. Installation logs and records of these monitoring wells were not available to us at the time of this letter report.

Groundwater is anticipated to flow southwards, from Dudley Street towards Mill Brook to the south of the Site. It should be noted that groundwater levels will vary depending on seasonal variations in temperature and precipitation and can also be influenced by subsurface utilities, construction development and other factors.

ENVIRONMENTAL CONSIDERATIONS

Please refer to the environmental reports prepared by Vertex regarding any provisions for soil and/or groundwater management during demolition and construction.

GEOTECHNICAL ENGINEERING RECOMMENDATIONS

The paragraphs below provide our geotechnical recommendations for building foundations and site work.

STORMWATER MANAGEMENT DESIGN RECOMMENDATIONS

Based on the subsurface conditions observed in the test borings at the Site, we anticipate the subsurface conditions below the proposed stormwater management to be generally consistent with subsurface conditions encountered in borings GEO-3 and GEO-5, with the exception that there may be a thicker fill layer as the existing building currently resides over the future stormwater management area. We recommend that the future stormwater management area be constructed such that the existing fill material is removed and the natural sand be used as the receiving layer for stormwater infiltration.

Based on grain-size analysis results, we recommend the receiving layer soil be classified as sand and loamy sand based on the USDA soil classification system. These soils are classified by the Hydrologic Soil Group (HSG) A and correlate to Rawls Rates between 2.41 and 8.27 inches per hour. The laboratory results are in the table below. We recommend VHB select the appropriate design value based on the depth of the stormwater management area and their engineering judgement.

Boring ID	Sample Depth (ft)	USDA Classification	Rawls Rate (in/hr)
GEO-3W	5-12	Loamy Sand	2.41
GEO-5W	9-10.8	Loamy Sand	2.41
GEO-6W	5.3-6	Sand	8.27

Note:

 $Rawls\ Rates\ taken\ from\ Table\ 2.3.3\ "1982\ Rawls\ Rates"\ from\ the\ Massachusetts\ Stormwater\ Handbook\ Volume\ 3\ Chapter\ 1.$

Evidence of Estimated Seasonal High Groundwater (ESHGW) was not observed during drilling. Based on observations during test borings and measured groundwater data, it is our opinion that ESHGW for the site is greater than 10 feet below ground surface and is not located within 4 feet of the bottom of the proposed stormwater infiltration system.



GEOTECHNICAL DESIGN RECOMMENDATIONS

Below is a summary of the primary geotechnical considerations associated with design and redevelopment of the Site:

- The proposed buildings can be supported by conventional shallow, spread footings and a slab-on-grade.
- The spread footings should bear directly on natural, inorganic, granular soils or on compacted structural fill bearing directly on natural, inorganic, granular soils. Footings should not bear directly on fill material. As such, over-excavation and replacement of the existing fill material will be necessary as specified herein. Over-excavation could extend from approximately 2 to 8 feet below existing grade.
- The top two (2) feet of fill below the slab should be excavated and replaced and recompacted prior to placing base course. The fill that is present and extends more than 2 feet below finished grade may remain in place provided is compacted as specified herein.
- Fill material below future pavement areas may remain in place provided it is proof-compacted as specified herein. Existing foundations, slabs, concrete, asphalt, utilities, and any remnants of the existing development should be removed in their entirety below building areas.
- We anticipate the inorganic, granular, on-site fill can be re-used as backfill outside of building areas provided it is placed and compacted in accordance with project specifications.
- The proximity of the southern building footings to the existing slope have the potential to create slope instability. As such, regrading of that slope to a minimum 2H:1V slope angle should be incorporated into the design considerations. Alternatively, the foundations along the slope edge should be installed deeper than the minimum frost depth.

Foundation Design Criteria

We recommend that the building be supported on shallow spread footings bearing on natural soils or on structural fill placed directly over natural soils. Some over-excavation of the existing fill material will be necessary to expose the top of the natural soils suitable for footing bearing. Fill should be over-excavated from within the zone of influence (ZOI) of the footings to expose the top of the natural soil. The ZOI is defined as a one horizontal to one vertical (1H:1V) line projecting outward and downward from the outside edge of the foundation element.

Allowable Bearing Pressure

For foundations constructed as recommended in this memorandum, we recommend using a net allowable bearing pressure of 2 tons per square foot (TSF) for footings bearing on natural, granular soil, or compacted structural fill bearing on natural soil deposits. The allowable soil bearing pressure applies to the total of dead and long-term live loads.

Foundation Dimensions

The minimum recommended lateral dimension for isolated spread footings is 36 inches, while continuous wall footings should be at least 18 inches wide. Footings in areas exposed to freezing temperatures should be founded at least 4 feet below exterior finished grade for frost protection. Interior footings, in areas not exposed to freezing temperatures, should be at least 24 inches below finished floor grade, or depth that provides at least 12 inches between top of footing and finished floor elevation, whichever is deeper.



Please note that the depth of the footings adjacent to the existing slope may need to be extended deeper to limit the potential for slope instability. Further analysis of this requirement is needed pending final grading and final design of the footing dimensions based on the net allowable bearing capacity provided herein.

Settlement

Provided the footing subgrade is prepared as recommended herein, we estimate that the total post-construction settlement will be less than 1 inch. Differential settlements are estimated to be less than 0.5 inches between adjacent columns but will vary based on live load distribution and column spacing.

Slab on Grade Design Criteria

As stated herein, the top 2 feet of fill material should be excavated, replaced and recompacted prior to placing the base course material. The slab should consist of a soil supported slab-on-grade. The base course layer directly below the slab should consist of 6 inches of MassDOT Item M2.01.7 Dense-graded Crushed Stone. Provided the subgrade soils are prepared as recommended herein, the slab should be designed as a beam on an elastic foundation with modulus of subgrade reaction of 150 pounds per cubic inch (pci).

Existing Fill Material

Based on observations and soil classification, we anticipate that the existing granular fill may be suitable for reuse below pavement areas provided it can be placed and compacted as specified herein.

Slope Rehabilitation Considerations

Given the poor condition of the existing slope, we recommend that the south-facing slope along Mill Brook be regraded to a minimum 2H:1V slope angle as part of reconstruction. Rehabilitated slopes should incorporate vegetative development and erosion control barriers to limit runoff and improve slope stability. Once structural column loads and footing sizes are available, we recommend that the slope stability be evaluated.

Earthwork Procedures for Preparation of Building Pad Areas

The following paragraphs describe the recommended earthwork procedures for preparation of the building areas.

- Foundations, utilities, existing concrete, topsoil and pavement, should be removed from the proposed building areas in their entirety.
- The existing fill material should be removed from the zone of influence (ZOI) of the footings in its entirety (to natural soil subgrade). For construction purposes, the ZOI is defined as the area within a line projecting outward and downward from the outside edge of the proposed footing at a 1H:1V (horizontal to vertical) slope. Fill material present in the buildings outside the ZOI may remain in place provided it is prepared as specified below.
- Fill below the proposed slab-on-grade should be excavated by 2 feet, replaced and recompacted as specified herein, provided the onsite fill meets the specifications herein for Structural Fill.
- The excavated site soil may be re-used as backfill provided it meets the requirements for Structural Fill provided herein. The fill should be placed in 12-inch-thick loose lifts and compacted to at least 95 percent of its maximum dry density (MDD) as determined by ASTM International (ASTM) D1557 Method C (modified proctor).

- After removing the existing fill as described above, the surface of the inorganic soils within the building footprint and 5 feet beyond the exterior walls should be proof compacted with at least six passes of a 10-ton vibratory roller (or equivalent effort) under the observation of a qualified geotechnical engineer, or his/her representative. Any soft or loose zones identified by proof compaction should be evaluated by excavation and replaced with compacted Structural Fill as specified herein.
- Temporary cut slopes for the over-excavation of fill material below proposed footings for building foundations should be conducted at a 2H:1V slope to maintain a safe excavation. The footing subgrade (at the bottom of the over-excavation) should be proof compacted, prior to the placement of raise-in-grade fill, with at least six passes of a 1,000-pound vibratory plate compactor.
- For the slab-on-grade, the subgrade should be proof-compacted with at least six passes of a 10,000-pound vibratory roller. Any soft or loose areas identified during proof-compaction should be over-excavated and replaced with Structural Fill as specified herein. The top 6 inches of fill directly below the slab should consist of base course material as specified herein. The fill should be placed in maximum 12-inch-thick loose lifts and compacted to at least 95 percent of its maximum dry density (MDD) as determined by ASTM International (ASTM) D1557 Method C (modified proctor).

Structural Fill

Fill placed to directly below and within the ZOI of foundations, within 5 feet of the bottom of slab elevation, within 5 feet of utilities (bottom and sides), and within 5 feet of finished grade for pavements and sidewalks should consist of Structural Fill as described below:

- Structural Fill used as base course for the building slab should meet the requirements of Dense-Graded Crushed Stone (1½-inch minus crushed stone) or Gravel Borrow Type B, MASSDOT, Items M2.01.7-1 or M1.03.0 Type B, respectively.
- Structural fill placed as base course below pavements and sidewalks should meet the requirements of Dense-Graded Crushed Stone (1½-inch minus crushed stone Type B, MASSDOT, Items M2.01.7-1), Gravel Borrow (M1.03.0 Type B), or Reclaimed Pavement Borrow (M1.09.0-1) in pavement areas only. Reclaimed Pavement Borrow should not be placed within the building footprint.
- Structural Fill placed as backfill of over-excavation below footings and within the ZOI of footings, and as general raise-in-grade fill in non-building areas (below base course) should consist of the following:

Sieve Size	Percent Passing By Weight
4-inch	100
1-inch	70-100
No. 4	30-60
No. 200	0-15

- Structural fill placed within irregularly shaped utility trenches or trenches not accessible to compaction equipment should consist of Controlled Density Fill (CDF) consisting of high slump Portland cement concrete with a compressive strength less than 150 pci at 28 days, otherwise the trench should be backfilled in accordance with the project specifications.
- Structural fill placed to stabilize footing subgrades, if needed, and for the proposed infiltration gallery crushed stone layer should meet the requirements of Crushed Stone (¾-inch crushed gravel), MASSDOT, Item M2.01.4.



Crushed Stone should be compacted with at least six passes of a 1,000-pound vibratory plate compactor, or until visibly firm and stable, as determined by the Geotechnical Engineer, or his/her qualified representative.

Earthwork Procedures for Preparation of Pavement Areas

- In proposed pavement areas, the existing asphalt, topsoil, foundations, slabs, and site utilities should be removed in their entirety. Where existing, deep utilities (>6 feet bgs) are present in proposed parking areas, it is acceptable to completely fill the utility with flowable fill and abandon the utility in-place.
- The exposed subgrade for future parking areas should be proof-compacted with at least six passes of a 10 ton
 vibratory roller (or equivalent effort) under the observation of a qualified geotechnical engineer, or his/her
 representative is recommended. Any soft or loose areas identified by the proof-compaction should be
 removed in their entirety and replaced with Structural Fill as specified herein.
- General raise-in-grade fill in parking areas should consist of Structural Fill and placed and compacted as specified herein.
- Base course for pavement should placed in 12-inch-thick loose lifts and compacted to at least 95 percent of its maximum dry density (MDD) as determined by ASTM International (ASTM) D1557 Method C (modified proctor).

Recommended Pavement Design

Parking area and access drive pavement subgrades should be prepared as specified herein. If soft or loose soils are encountered, such unsuitable subgrade soils should be over-excavated in their entirety and replaced with Structural Fill as specified herein.

Asphalt Concrete Pavement for Parking Areas

The pavement design is intended to strike a balance between performance and cost in consideration of the soil available at the Site and anticipated traffic loads (passenger vehicles). We recommend the following (minimum) flexible pavement cross-sections for both standard and heavy-duty applications.

Layer	Standard Duty	Heavy Duty		
Layer	Thickness			
Asphalt Wearing Course (MassDOT Item M3.11.03)	1.5 inches	1.5 inches		
Asphalt Binder Course (MassDOT Item M3.11.03)	1.5 inches	2.5 inches		
Pavement Base Course (Reclaimed Pavement Borrow, MassDOT Item M1.09.0, or Dense-Graded Crushed Stone, MassDOT Item M2.01.7)	9 inches	9 inches		



LIMITATIONS

We have prepared this preliminary design memorandum for the exclusive use of PSI Atlantic Arlington MA, LLC and their authorized agents for 34 Dudley Street in Arlington, Massachusetts.

Within the limitations of scope, schedule and budget, our services have been executed in accordance with generally accepted practices in the field of geotechnical engineering in this area at the time this memorandum was prepared. No warranty or other conditions, express or implied, should be understood.

Please refer to Appendix C, "Design Memorandum Limitations and Guidelines for Use" for additional information pertaining to use of this memorandum.

Sincerely,

GeoEngineers, Inc.

Mark Ruberti, PE

Geotechnical Engineer (MA)

Stan S. Sadkowski, PE

Principal Geotechnical Engineer (MA)

MNR:SSS:kab

Attachments:

Figure 1. Site Locus Map

Figure 2. Exploration Location Plan

Appendices:

Appendix A. Boring Logs

Figure A-1. Key to Exploration Logs

Figures A-2 through A-7. Logs of Borings

Appendix B. Laboratory Testing Data Sheet

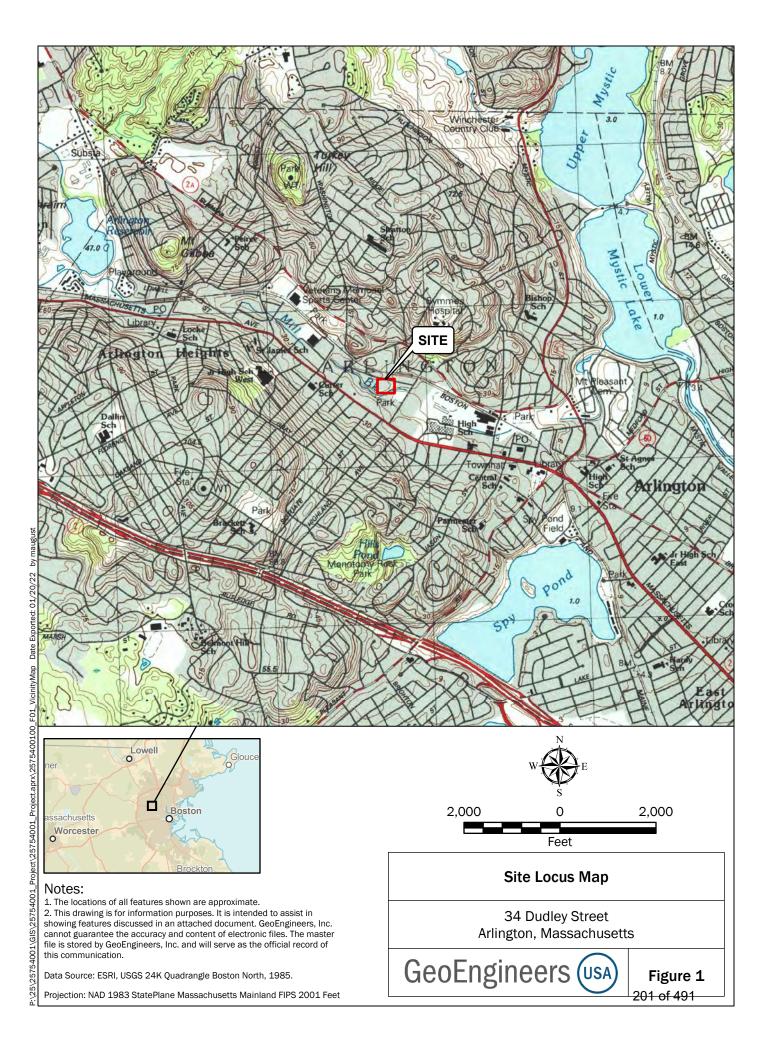
Figure 21-S-B478 through 21-S-B480 - Particle Size Distribution Report

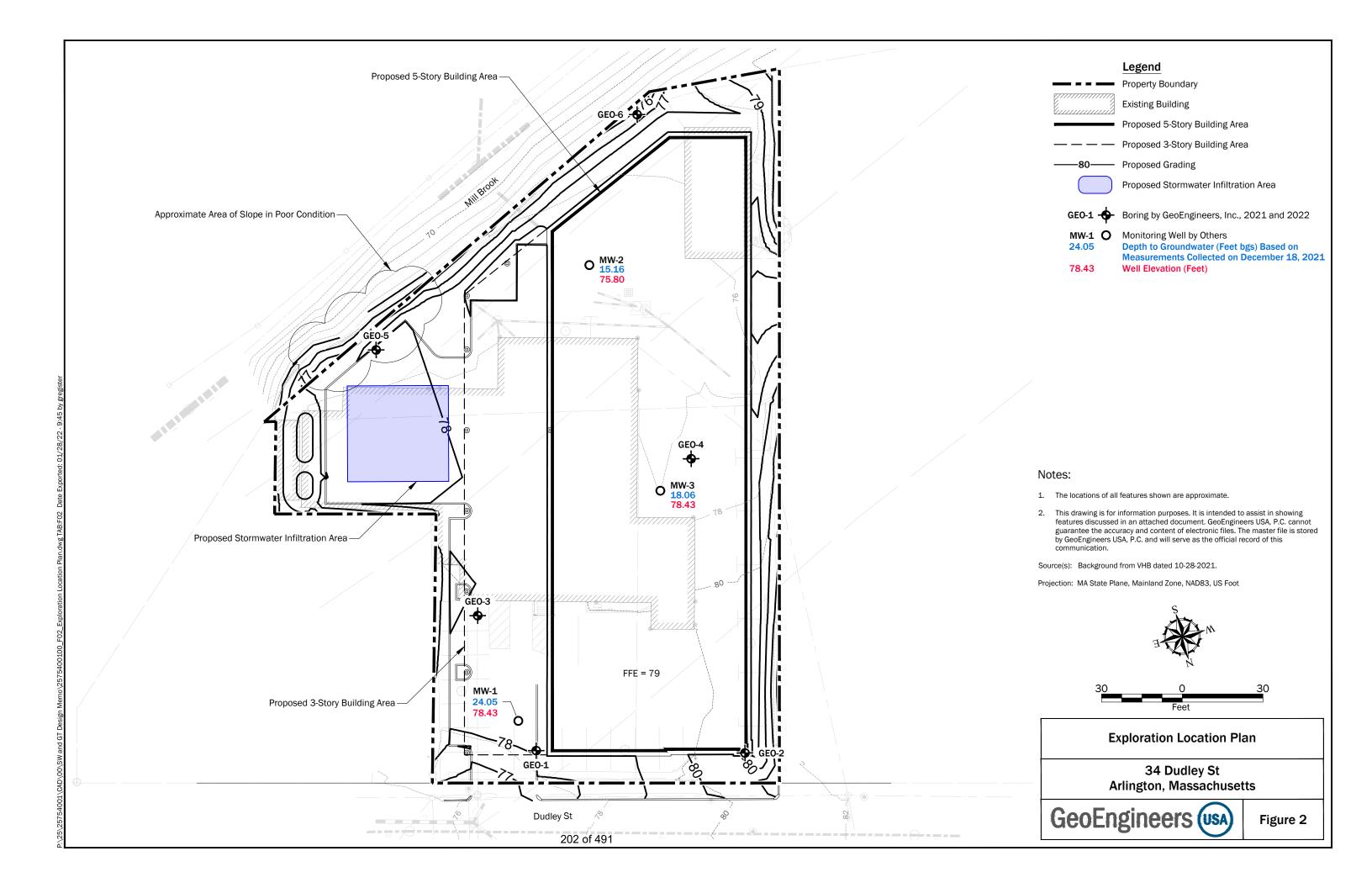
Figure S-B478-B480 - USDA Soil Classification

Appendix C. Design Memorandum Limitations and Guidelines for Use

One copy submitted electronically

Disclaimer: Any electronic form, facsimile or hard copy of the original document (email, text, table, and/or figure), if provided, and any attachments are only a copy of the original document. The original document is stored by GeoEngineers, Inc. and will serve as the official document of record





APPENDIX A
Boring Logs

SOIL CLASSIFICATION CHART

	MAJOR DIVIS	IONS	SYM	BOLS	TYPICAL	
	MAJOR DIVIS	10113	GRAPH	LETTER	DESCRIPTIONS	
	GRAVEL	CLEAN GRAVELS		GW	WELL-GRADED GRAVELS, GRAVEL - SAND MIXTURES	
	AND GRAVELLY SOILS	(LITTLE OR NO FINES)		GP	POORLY-GRADED GRAVELS, GRAVEL - SAND MIXTURES	
COARSE GRAINED SOILS	MORE THAN 50% OF COARSE	GRAVELS WITH FINES		GM	SILTY GRAVELS, GRAVEL - SAND - SILT MIXTURES	
SUILS	FRACTION RETAINED ON NO. 4 SIEVE	(APPRECIABLE AMOUNT OF FINES)		GC	CLAYEY GRAVELS, GRAVEL - SAND CLAY MIXTURES	
MORE THAN 50%	SAND	CLEAN SANDS		sw	WELL-GRADED SANDS, GRAVELLY SANDS	
RETAINED ON NO. 200 SIEVE	AND SANDY SOILS	(LITTLE OR NO FINES)		SP	POORLY-GRADED SANDS, GRAVELI SAND	
	MORE THAN 50% OF COARSE	SANDS WITH FINES		SM	SILTY SANDS, SAND - SILT MIXTUR	
	FRACTION PASSING ON NO. 4 SIEVE	(APPRECIABLE AMOUNT OF FINES)		sc	CLAYEY SANDS, SAND - CLAY MIXTURES	
				ML	INORGANIC SILTS, ROCK FLOUR, CLAYEY SILTS WITH SLIGHT PLASTICITY	
FINE GRAINED	SILTS AND CLAYS	LIQUID LIMIT LESS THAN 50		CL	INORGANIC CLAYS OF LOW TO MEDIUM PLASTICITY, GRAVELLY CLAYS, SANDY CLAYS, SILTY CLAYS LEAN CLAYS	
SOILS				OL	ORGANIC SILTS AND ORGANIC SILT CLAYS OF LOW PLASTICITY	
MORE THAN 50% PASSING NO. 200 SIEVE				МН	INORGANIC SILTS, MICACEOUS OR DIATOMACEOUS SILTY SOILS	
	SILTS AND CLAYS	LIQUID LIMIT GREATER THAN 50		СН	INORGANIC CLAYS OF HIGH PLASTICITY	
				ОН	ORGANIC CLAYS AND SILTS OF MEDIUM TO HIGH PLASTICITY	
	HIGHLY ORGANIC S	SOILS	min	PT	PEAT, HUMUS, SWAMP SOILS WITH HIGH ORGANIC CONTENTS	

NOTE: Multiple symbols are used to indicate borderline or dual soil classifications

Sampler Symbol Descriptions

2.4-inch I.D. split barrel

Standard Penetration Test (SPT)

Shelby tube
Piston

Direct-Push

Bulk or grab

Continuous Coring

Blowcount is recorded for driven samplers as the number of

"P" indicates sampler pushed using the weight of the drill rig.

blows required to advance sampler 12 inches (or distance noted).

"WOH" indicates sampler pushed using the weight of the hammer.

See exploration log for hammer weight and drop.

ADDITIONAL MATERIAL SYMBOLS

SYM	BOLS	TYPICAL			
GRAPH	LETTER	DESCRIPTIONS			
	AC	Asphalt Concrete			
	cc	Cement Concrete			
13	CR	Crushed Rock/ Quarry Spalls			
7 71 71 71 71 71	SOD	Sod/Forest Duff			
	TS	Topsoil			

Groundwater Contact

Ţ

Measured groundwater level in exploration, well, or piezometer



Measured free product in well or piezometer

Graphic Log Contact

Distinct contact between soil strata

Approximate contact between soil strata

Material Description Contact

Contact between geologic units

____ Contact between soil of the same geologic unit

Laboratory / Field Tests

%F Percent fines %G Percent gravel AL Atterberg limits CA Chemical analysis

CP Laboratory compaction test

CS Consolidation test
DD Dry density
DS Direct shear
HA Hydrometer analysis
MC Moisture content

MC Moisture content
MD Moisture content and dry density

Mohs Mohs hardness scale
OC Organic content

PM Permeability or hydraulic conductivity

PI Plasticity index
PL Point lead test
PP Pocket penetrometer
SA Sieve analysis

TX Triaxial compression
UC Unconfined compression

UU Unconsolidated undrained triaxial compression

VS Vane shear

Sheen Classification

NS No Visible Sheen SS Slight Sheen MS Moderate Sheen HS Heavy Sheen

NOTE: The reader must refer to the discussion in the report text and the logs of explorations for a proper understanding of subsurface conditions. Descriptions on the logs apply only at the specific exploration locations and at the time the explorations were made; they are not warranted to be representative of subsurface conditions at other locations or times.

Key to Exploration Logs

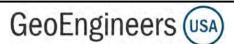
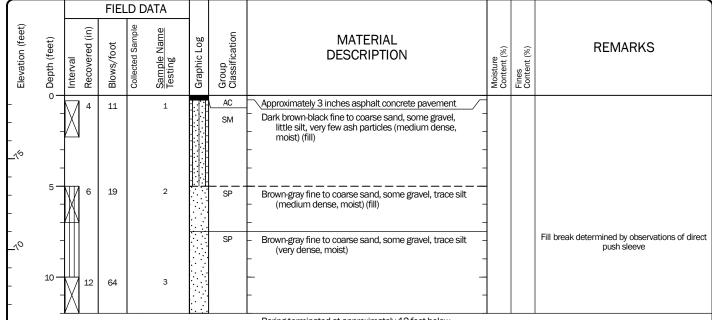


Figure A-1 204 of 491

Drilled	<u>Start</u> 1/8/2022	<u>End</u> 1/8/2022	Total Depth (ft)	12	Logged Checke		Driller G&M Subsurface		Drilling Direct Push
Surface I Vertical I	Elevation (ft) Datum		8.5 VD88		Hammer Data	14	Autohammer -0 (lbs) / 30 (in) Drop	Drilling Equipment	GeoProbe 7822DT
Easting (X) Northing (Y)		System Datum			Groundwate	er not observed at time of exploration			
Notes:	5.7								

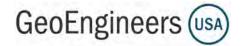


Boring terminated at approximately 12 feet below ground surface due to direct push refusal

Note: See Figure A-1 for explanation of symbols.

 $Coordinates\ Data\ Source: Horizontal\ approximated\ based\ on\ (undetermined).\ Vertical\ approximated\ based\ on\ Google\ Earth.$

Log of Boring GEO-1



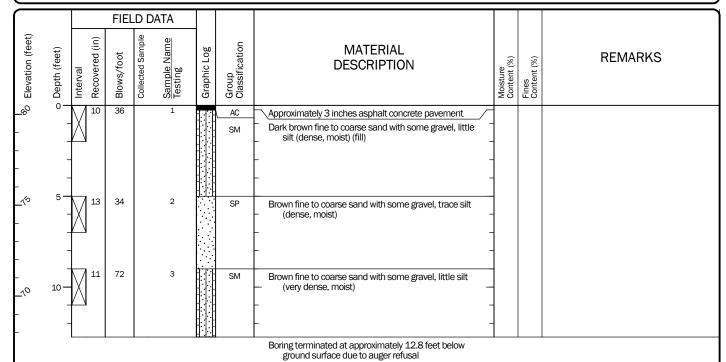
Project: 34 Dudley Street

Project Location: Arlington, Massachussetts

Project Number: 25754-001-00

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Drilled	<u>Start</u> 12/18/2021	<u>End</u> 12/18/2021	Total Depth (ft)	12.75	Logged By Checked By	SR/MR	Driller Crawford Drilling Serv	ice	Drilling Method Hollow-stem Auger
Surface Elevation (ft) Vertical Datum		80.5 NAVD88			Hammer Autohammer Data 140 (lbs) / 30 (in) Drop			Drilling Equipment	B52 Turck Rig
Easting (X) Northing (Y)				System Datum			Groundwate	r not observed at time of exploration	
Notes:									



Note: See Figure A-1 for explanation of symbols.

 $Coordinates\ Data\ Source: Horizontal\ approximated\ based\ on\ (undetermined).\ Vertical\ approximated\ based\ on\ Google\ Earth.$

Log of Boring GEO-2



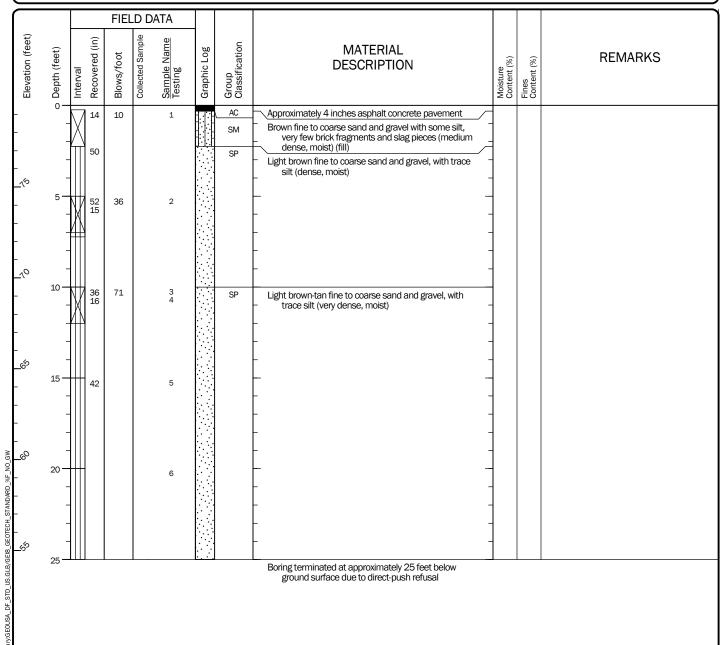
Project: 34 Dudley Street

Project Location: Arlington, Massachussetts

Project Number: 25754-001-00

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Drilled	<u>Start</u> 12/9/2021	<u>End</u> 12/9/2021	Total Depth (ft)	25	Logged By Checked By	VT	Driller G&M Subsurface		Drilling Method Direct Push
Surface Vertical	Elevation (ft) Datum		9.5 VD88		Hammer Data	140	Autohammer O (lbs) / 30 (in) Drop	Drilling Equipment	GeoProbe 7822DT
Easting Northing					System Datum			Groundwate	r not observed at time of exploration
Notes:									



Note: See Figure A-1 for explanation of symbols.

 $Coordinates\ Data\ Source: Horizontal\ approximated\ based\ on\ (undetermined).\ Vertical\ approximated\ based\ on\ Google\ Earth.$

Log of Boring GEO-3



Project: 34 Dudley Street

Project Location: Arlington, Massachussetts

Project Number: 25754-001-00

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Start Drilled 1/8/2022	<u>End</u> 1/8/2022	Total Depth (ft)	7	Logged By Checked By	PS/MR	Driller G&M Subsurface		Drilling Method Direct Push
Surface Elevation (ft) Vertical Datum		76 VD88		Hammer Data	14	Autohammer O (lbs) / 30 (in) Drop	Drilling Equipment	GeoProbe 7822DT
Easting (X) Northing (Y)				System Datum			Groundwate	er not observed at time of exploration
Notes:								

			FIEL	D D	ATA						
Elevation (feet)	, Depth (feet)	Interval Recovered (in)	Blows/foot	Collected Sample	<u>Sample Name</u> Testing	Graphic Log	Group Classification	MATERIAL DESCRIPTION	Moisture Content (%)	Fines Content (%)	REMARKS
	- - - -	12	32		1		AC SP	Approximately 5 inches asphalt concrete pavement Brown-gray fine to coarse sand, some gravel, trace silt (dense, moist) (fill)	-		Boring terminated at approximately 2.2 ft below ground surface due to direct push refusal; offset approximately 5 ft to the east and resumed advancing exploration
	5 -	15	80		2		SP	Brown-gray fine to coarse sand, some gravel, trace silt (very dense, moist)	-		

Boring terminated at approximately 7 feet below ground surface due to direct push refusal

Note: See Figure A-1 for explanation of symbols. Coordinates Data Source: Horizontal approximated based on (undetermined). Vertical approximated based on Google Earth.





Project: 34 Dudley Street

Project Location: Arlington, Massachussetts

Project Number: 25754-001-00

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Drilled	<u>Start</u> 12/18/2021	<u>End</u> 12/18/2021	Total Depth (ft)	16.25	Logged By Checked E	•	Driller Crawford Drilling Serv	ice	Drilling Method Hollow-stem Auger
Surface Vertical	Elevation (ft) Datum		5.5 /D88		Hammer Data	14	Autohammer 0 (lbs) / 30 (in) Drop	Drilling Equipment	B52 Turck Rig
Easting Northing					System Datum			Groundwate	er not observed at time of exploration
Notes:									

			FIEL	D D	ATA						
Elevation (feet)	Depth (feet)	Interval Recovered (in)	Blows/foot	Collected Sample	<u>Sample Name</u> Testing	Graphic Log	Group Classification	MATERIAL DESCRIPTION	Moisture Content (%)	Fines Content (%)	REMARKS
	0	12	12		1		\ AC SM	Approximately 3 inches asphalt concrete pavement Dark brown fine to coarse sand with some gravel, little silt, very few asphalt pieces, very few glass particles (medium dense, moist) (fill)			
- _10 - -	5 —	6	9		2		SP	Brown fine to coarse sand with some gravel, trace silt, very few asphalt pieces (loose, moist) (fill)			
- _& - -	10	10	71		3		GP	Gray gravel with some sand, trace silt (very dense, — moist) — — — — — — — — —			
_ <i>©</i>	15 	⊠ ∘	50/5"		4		NR SP	No recovery (very dense) Gray fine to coarse sand and gravel, with trace silt (very dense, moist)			
		△ 4	50/4"		5	,		Boring terminated at approximately 16.3 feet below			

ground surface due to auger refusal

Note: See Figure A-1 for explanation of symbols. Coordinates Data Source: Horizontal approximated based on (undetermined). Vertical approximated based on Google Earth.

Log of Boring GEO-5



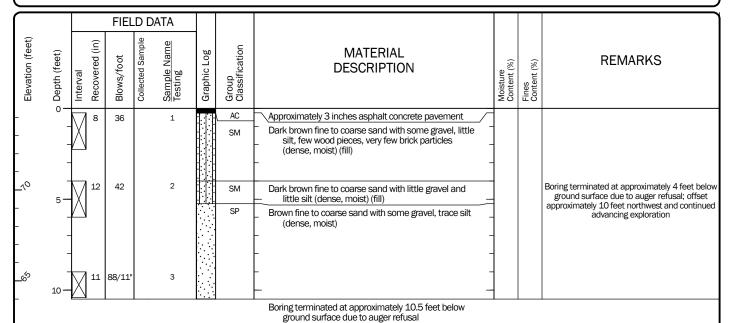
Project: 34 Dudley Street

Project Location: Arlington, Massachussetts

Project Number: 25754-001-00

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Drilled	<u>Start</u> 12/18/2021	<u>End</u> 12/18/2021	Total Depth (ft)	10.5	Logged By Checked By	SR/MR	Driller Crawford Drilling Servi	ice	Drilling Method Hollow-stem Auger
Surface Vertical	Elevation (ft) Datum		4.5 VD88		Hammer Data	140	Autohammer O (lbs) / 30 (in) Drop	Drilling Equipment	B52 Turck Rig
Easting Northin					System Datum			Groundwate	r not observed at time of exploration
Notes:									



Note: See Figure A-1 for explanation of symbols.

 $Coordinates\ Data\ Source: Horizontal\ approximated\ based\ on\ (undetermined).\ Vertical\ approximated\ based\ on\ Google\ Earth.$

Log of Boring GEO-6



Project: 34 Dudley Street

Project Location: Arlington, Massachussetts

Project Number: 25754-001-00

210 of 491 Sheet 1 of 1

APPENDIX BLaboratory Testing Data Sheet



195 Frances Avenue Cranston RI, 02910 Phone: (401)-467-6454 Fax: (401)-467-2398

thielsch.com Let's Build a Solid Foundation Client Information:
GeoEngineers, Inc.
239 Causeway Street, Boston, MA 02114
PM: Mark Ruberti
Assigned By: Mark Ruberti
Collected By: Client

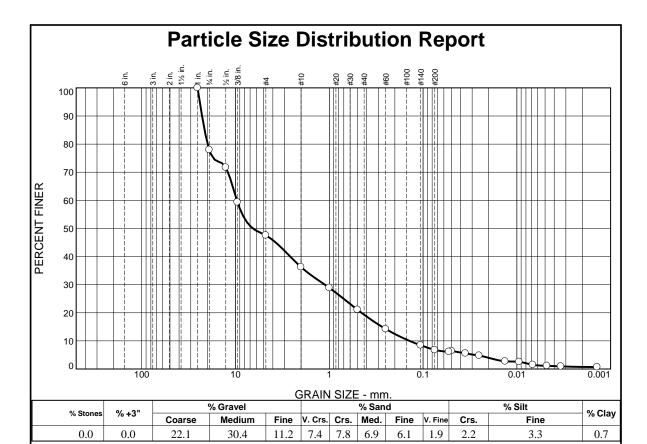
Project Information: 34 Dudley Street Arlington, MA

GeoEngineers Project Number: 25754-001-00 Summary Page: 1 of 1 Report Date: 01.03.2022

LABORATORY TESTING DATA SHEET, Report No.: 7421-M-B010

						I	dentificat	ion Test	S						Proctor / C	BR / Permeal	bility Tests			
Material Source	Sample No.	Depth (Ft)	Laboratory No.	As Received Water Content %	LL %	PL %	Gravel %	Sand %	Fines	Org. %	G_s	Dry unit wt. pcf	Test Water Content %	Yd MAX (pcf) W _{opt} (%)	γ _d MAX (pcf) W _{opt} (%) (Corr.)	Target Test Setup as % of Proctor	CBR @ 0.1"	CBR @ 0.2"	Permeability cm/sec	Laboratory Log and Soil Description
				D2216	D4:	318		D6913		D2974	D854			D1	557					
Boring	GEO-3 (S2 & S3)	5-12	21-S-B478				63.7	30.1	6.2											Light Brown loamy sand
Boring	GEO-5 (S1)	9-10.8	21-S-B479				68.3	23.9	7.8											Grey loamy sand
Boring	GEO-6 (S-1B)	5.3-6	21-S-B480				53.0	40.8	6.2											Light Brown sand

Date Received:	12.21.21	Reviewed By:	Chutu II Colu	Date Reviewed:	01.03.22



Test	Results (D691:	3 & ASTM D 1	1140)
Opening	Percent	Spec.*	Pass?
Size	Finer	(Percent)	(X=Fail)
1"	100.0		
3/4"	77.9		
1/2"	71.7		
3/8"	59.3		
#4	47.5		
#10	36.3		
#18	28.9		
#35	21.1		
#60	14.2		
#140	8.4		
#200	6.8		
#270	6.2		
0.0494 mm.	6.4		
0.0353 mm.	5.6		
0.0252 mm.	4.8		
0.0133 mm.	2.7		
0.0094 mm.	2.5		
0.0068 mm.	1.5		
0.0048 mm.	1.1		
0.0034 mm.	0.9		
0.0014 mm.	0.7		

Atterberg Limits (ASTM D 4318) PL= NP	Material Description
PL= NP	Light Brown loamy sand
PL= NP	
PL= NP	Atterhera Limits (ASTM D /318)
USCS (D 2487)= GP-GM AASHTO (M 145)= A-1-a	
D ₉₀ = 22.7414 D ₈₅ = 21.3790 D ₆₀ = 9.6783 D ₅₀ = 6.5171 D ₃₀ = 1.1164 D ₁₅ = 0.2733 D ₁₀ = 0.1393 C _u = 69.50 C _c = 0.92 Remarks Date Received: 12/21/21 Date Tested: 12/28/21 Tested By: DN / CC Checked By: Christina Colman	
Date Received: 12/21/21 Date Tested: 12/28/21 Tested By: DN / CC Checked By: Christina Colman	D₉₀= 22.7414 D₈₅= 21.3790 D₆₀= 9.6783 D₅₀= 6.5171 D₃₀= 1.1164 D₁₅= 0.2733
Tested By: DN / CC Checked By: Christina Colman	Remarks
Tested By: DN / CC Checked By: Christina Colman	
Tested By: DN / CC Checked By: Christina Colman	Date Received: 12/21/21 Date Tested: 12/28/21
Checked By: Christina Colman	
	Checked By: Christina Colman
Title: Laboratory Supervisor	Title: Laboratory Supervisor

(no specification provided)

Source of Sample: Boring Depth: 5-12' Sample Number: GEO-3 (S2 & S3)

Date Sampled:

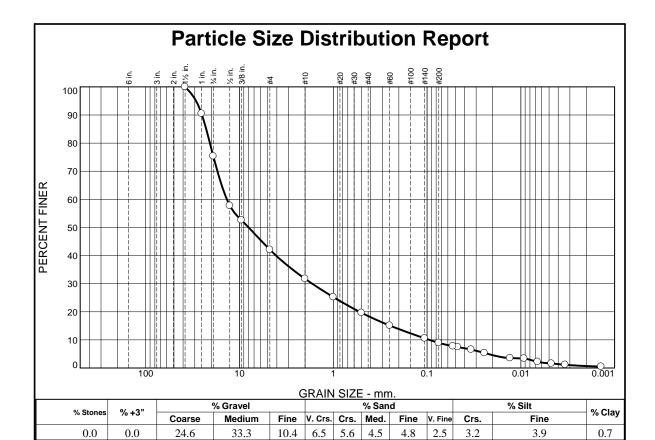
Thielsch Engineering Inc.

Client: GeoEngineers, Inc. **Project:** 34 Dudley Street

Arlington, MA

Cranston, RI Project No: 25754-001-00

Figure 21-S-B478



Test	Results (D6913	3 & ASTM D 1	1140)
Opening	Percent	Spec.*	Pass?
Size	Finer	(Percent)	(X=Fail)
1 1/2"	100.0		
1"	90.5		
3/4"	75.4		
1/2"	57.8		
3/8"	52.6		
#4	42.1		
#10	31.7		
#18	25.2		
#35	19.6		
#60	15.1		
#140	10.6		
#200	8.9		
#270	7.8		
0.0471 mm.	7.5		
0.0338 mm.	6.6		
0.0244 mm.	5.3		
0.0130 mm.	3.5		
0.0092 mm.	3.4		
0.0066 mm.	2.2		
0.0047 mm.	1.6		
0.0034 mm.	1.1		
0.0014 mm. *	0.5		

Atterberg Limits (ASTM D 4318) PL= NP
PL= NP
PL= NP
PL= NP
USCS (D 2487)= AASHTO (M 145)= Coefficients D ₉₀ = 25.0933 D ₈₅ = 22.6442 D ₆₀ = 13.6565 D ₅₀ = 7.9942 D ₃₀ = 1.6791 D ₁₅ = 0.2453 D ₁₀ = 0.0945 C _u = 144.54 C _c = 2.18 Remarks Date Received: 12/21/21 Date Tested: 12/28/21
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$
Date Received: 12/21/21
Tosted By: DN / CC
rested by. DN/CC
Checked By: Christina Colman
Title: Laboratory Supervisor

Source of Sample: Boring Sample Number: GEO-5 (S1) Depth: 9-10.8' Date Sampled:

Thielsch Engineering Inc.

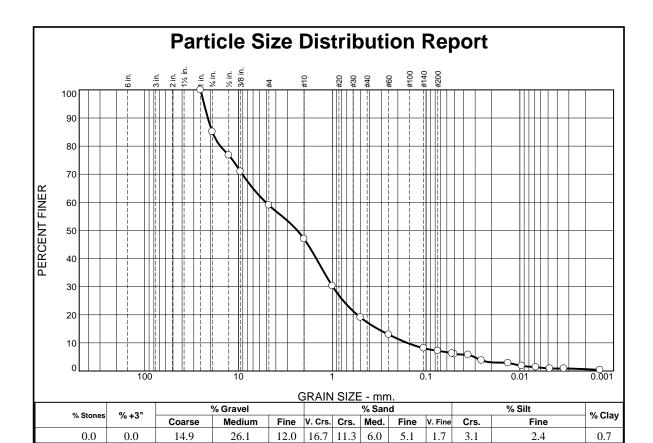
Client: GeoEngineers, Inc. **Project:** 34 Dudley Street

Arlington, MA

Cranston, RI

Project No: 25754-001-00 Figure 21-S-B479

^{* (}no specification provided)



	Test Results (D6913 & ASTM D 1140) ing Percent Spec.* Pass?							
Opening			(X=Fail)					
Size	Finer	(Percent)						
1"	100.0							
3/4"	85.1							
1/2"	76.8							
3/8"	70.9							
#4	59.0							
#10	47.0							
#18	30.3							
#35	19.0							
#60	13.0							
#140	8.1							
#200	7.2							
#270	6.2							
0.0502 mm.	6.0							
0.0356 mm.	5.8							
0.0256 mm.	3.8							
0.0134 mm.	2.8							
0.0095 mm.	1.8							
0.0068 mm.	1.4							
0.0048 mm.	0.9							
0.0034 mm.	0.9							
0.0014 mm.	0.4							

	Material D	escrip	<u>otion</u>							
Light Brown sand										
A 44 a	مانمونا بوسوماس	. /ACT	TM D 4240)							
Atterberg Limits (ASTM D 4318) PL= NP										
	Classif	icatio	n							
USCS (D 2487)= SW-SM AASHTO (M 145)= A-1-a										
	Coeffi									
D ₉₀ = 21.2538 D ₅₀ = 2.3620			D ₆₀ = 5.1201 D ₁₅ = 0.3280							
D ₁₀ = 0.1585	C_{u} = 32.3		C _C = 1.20							
Remarks										
Date Received:	12/21/21	Date	Tested: 12/28/21							
Tested By:	DN/CC	•								
Checked By: Christina Colman										
Title: Laboratory Supervisor										

* (no specification provided)

Source of Sample: Boring Sample Number: GEO-6 (S-1B)

Depth: 5.3-6'

Date Sampled:

Thielsch Engineering Inc.

Client: GeoEngineers, Inc. **Project:** 34 Dudley Street

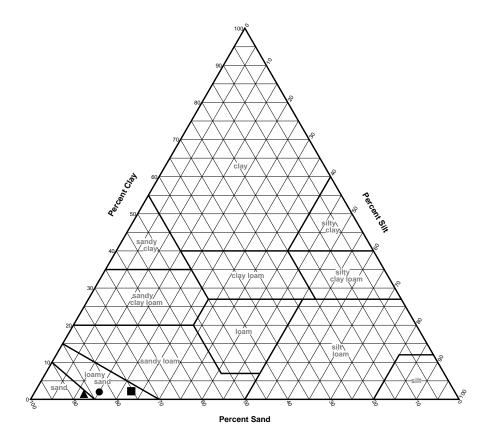
Arlington, MA

Cranston, RI

Project No: 25754-001-00

Figure 21-S-B480





	SOIL DATA								
	Source	Sample No.	Depth	Percentages From Material Passing a #10 Sieve			Classification		
	Source			Sand	Silt	Clay	Glasomoation		
•	Boring	GEO-3 (S2 & S3)	5-12'	82.9	15.2	1.9	Loamy sand		
	Boring	GEO-5 (S1)	9-10.8'	75.4	22.4	2.2	Loamy sand		
A	Boring	GEO-6 (S- 1B)	5.3-6'	86.8	11.7	1.5	Sand		
		ŕ							

APPENDIX C
Design Memorandum Limitations
and Guidelines for Use

APPENDIX C

DESIGN MEMORANDUM LIMITATIONS AND GUIDELINES FOR USE¹

This appendix provides information to help you manage your risks with respect to the use of this memorandum.

Read These Provisions Closely

It is important to recognize that the geoscience practices (geotechnical engineering, geology and environmental science) rely on professional judgment and opinion to a greater extent than other engineering and natural science disciplines, where more precise and/or readily observable data may exist. To help clients better understand how this difference pertains to our services, GeoEngineers includes the following explanatory "limitations" provisions in its memorandums. Please confer with GeoEngineers if you need to know more how these "Stormwater Evaluation Memorandum Limitations and Guidelines for Use" apply to your project or site.

Geotechnical Services are Performed for Specific Purposes, Persons and Projects

This memorandum has been prepared for PSI Atlantic Arlington MA, LLC and for the Project(s) specifically identified in the memorandum. The information contained herein is not applicable to other sites or projects.

GeoEngineers structures its services to meet the specific needs of its clients. No party other than the party to whom this memorandum is addressed may rely on the product of our services unless we agree to such reliance in advance and in writing. Within the limitations of the agreed scope of services for the Project, and its schedule and budget, our services have been executed in accordance with our Agreement with PSI Atlantic Arlington MA, LLC dated December 29, 2021 and generally accepted geotechnical practices in this area at the time this memorandum was prepared. We do not authorize, and will not be responsible for, the use of this memorandum for any purposes or projects other than those identified in the memorandum.

A Geotechnical and Stormwater Evaluation Memorandum is based on a Unique Set of Project-Specific Factors

This memorandum has been prepared for schematic design for the proposed development concept located at 34 Dudley Street in Arlington, Massachusetts. GeoEngineers considered a number of unique, project-specific factors when establishing the scope of services for this project and memorandum. Unless GeoEngineers specifically indicates otherwise, it is important not to rely on this memorandum if it was:

- Not prepared for you,
- Not prepared for your project,
- Not prepared for the specific site explored, or
- Completed before important project changes were made.

For example, changes that can affect the applicability of this memorandum include those that affect:

- The function of the proposed structure;
- Elevation, configuration, location, orientation or weight of the proposed structure;

¹ Developed based on material provided by GBA, GeoProfessional Business Association; www.geoprofessional.org.

- Composition of the design team; or
- Project ownership.

If changes occur after the date of this memorandum, GeoEngineers cannot be responsible for any consequences of such changes in relation to this memorandum unless we have been given the opportunity to review our interpretations and recommendations. Based on that review, we can provide written modifications or confirmation, as appropriate.

Subsurface Conditions Can Change

This stormwater evaluation memorandum is based on conditions that existed at the time the study was performed. The findings and conclusions of this memorandum may be affected by the passage of time, by man-made events such as construction on or adjacent to the site, new information or technology that becomes available subsequent to the memorandum date, or by natural events such as floods, earthquakes, slope instability or groundwater fluctuations. If more than a few months have passed since issuance of our memorandum or work product, or if any of the described events may have occurred, please contact GeoEngineers before applying this memorandum for its intended purpose so that we may evaluate whether changed conditions affect the continued reliability or applicability of our conclusions and recommendations.

Geotechnical and Geologic Findings are Professional Opinions

Our interpretations of subsurface conditions are based on field observations from widely spaced sampling locations at the site. Site exploration identifies the specific subsurface conditions only at those points where subsurface tests are conducted or samples are taken. GeoEngineers reviewed field and laboratory data and then applied its professional judgment to render an informed opinion about subsurface conditions at other locations. Actual subsurface conditions may differ, sometimes significantly, from the opinions presented in this memorandum. Our memorandum, conclusions and interpretations are not a warranty of the actual subsurface conditions.

Stormwater Evaluation Memorandum Recommendations are Not Final

We have developed the following recommendations based on data gathered from subsurface investigation(s). These investigations sample just a small percentage of a site to create a snapshot of the subsurface conditions elsewhere on the site. Such sampling on its own cannot provide a complete and accurate view of subsurface conditions for the entire site. Therefore, the recommendations included in this memorandum are preliminary and should not be considered final. GeoEngineers' recommendations can be finalized only by observing actual subsurface conditions revealed during construction. GeoEngineers cannot assume responsibility or liability for the recommendations in this memorandum if we do not perform construction observation.

We recommend that you allow sufficient monitoring, testing and consultation during construction by GeoEngineers to confirm that the conditions encountered are consistent with those indicated by the explorations, to provide recommendations for design changes if the conditions revealed during the work differ from those anticipated, and to evaluate whether earthwork activities are completed in accordance with our recommendations. Retaining GeoEngineers for construction observation for this project is the most effective means of managing the risks associated with unanticipated conditions. If another party performs field observation and confirms our expectations, the other party must take full responsibility for both the observations and recommendations. Please note, however, that another party would lack our project-specific knowledge and resources.

GeoEngineers USA, PC 219 of 491

A Stormwater Evaluation Memorandum Could Be Subject to Misinterpretation

Misinterpretation of this memorandum by members of the design team or by contractors can result in costly problems. GeoEngineers can help reduce the risks of misinterpretation by conferring with appropriate members of the design team after submitting the memorandum, reviewing pertinent elements of the design team's plans and specifications, participating in pre-bid and preconstruction conferences, and providing construction observation.

Do Not Redraw the Exploration Logs

Geotechnical engineers and geologists prepare final boring and testing logs based upon their interpretation of field logs and laboratory data. The logs included in a geotechnical engineering memorandum should never be redrawn for inclusion in architectural or other design drawings. Photographic or electronic reproduction is acceptable, but separating logs from the memorandum can create a risk of misinterpretation.

Give Contractors a Complete Memorandum and Guidance

Some owners and design professionals believe they can make contractors liable for unanticipated subsurface conditions by limiting what they provide for bid preparation. To help prevent costly problems, give contractors the complete geotechnical engineering memorandum, but preface it with a clearly written letter of transmittal. In that letter, advise contractors that the memorandum was not prepared for purposes of bid development and that the report's accuracy is limited; encourage them to confer with GeoEngineers and/or to conduct additional study to obtain the specific types of information they need or prefer. A pre-bid conference can also be valuable. Be sure contractors have sufficient time to perform additional study. Only then might an owner be in a position to give contractors the best information available, while requiring them to at least share the financial responsibilities stemming from unanticipated conditions. Further, a contingency for unanticipated conditions should be included in your project budget and schedule.

Contractors are Responsible for Site Safety on Their Own Construction Projects

Our geotechnical recommendations are not intended to direct the contractor's procedures, methods, schedule or management of the work site. The contractor is solely responsible for job site safety and for managing construction operations to minimize risks to on-site personnel and adjacent properties.

Geotechnical, Geologic and Environmental Memoranda Should Not Be Interchanged

The equipment, techniques and personnel used to perform an environmental study differ significantly from those used to perform a geotechnical or geologic study and vice versa. For that reason, a geotechnical engineering or geologic memorandum does not usually relate any environmental findings, conclusions or recommendations; e.g., about the likelihood of encountering underground storage tanks or regulated contaminants. Similarly, environmental memoranda are not used to address geotechnical or geologic concerns regarding a specific project.

Biological Pollutants

GeoEngineers' Scope of Work specifically excludes the investigation, detection, prevention or assessment of the presence of Biological Pollutants. Accordingly, this memorandum does not include any interpretations, recommendations, findings or conclusions regarding the detecting, assessing, preventing or abating of Biological Pollutants, and no conclusions or inferences should be drawn regarding Biological Pollutants as they may relate to this project. The term "Biological Pollutants" includes, but is not limited to, molds, fungi, spores, bacteria and viruses, and/or any of their byproducts.

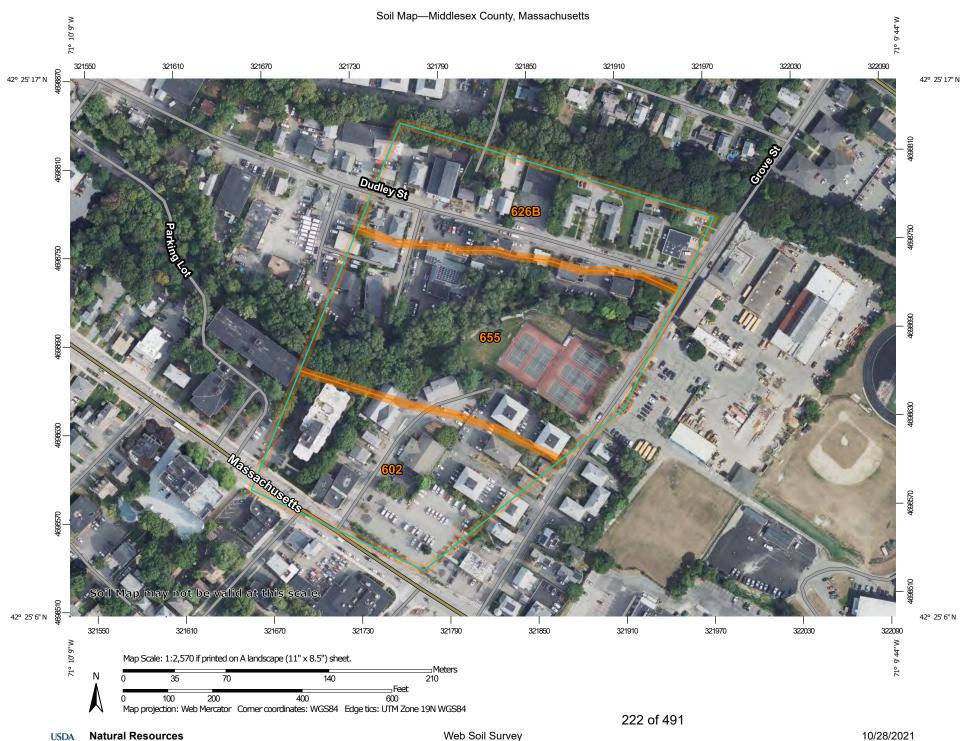
GeoEngineers USA, PC 220 of 491

A Client that desires these specialized services is advised to obtain them from a consultant who offers services in this specialized field.

Information Provided by Others

GeoEngineers has relied upon certain data or information provided or compiled by others in the performance of our services. Although we use sources that we reasonably believe to be trustworthy, GeoEngineers cannot warrant or guarantee the accuracy or completeness of information provided or compiled by others.

GeoEngineers USA, PC 221 of 491



MAP LEGEND

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Water Features

Transportation

Background

Spoil Area

Stony Spot

Wet Spot

Other

Rails

US Routes

Major Roads

Local Roads

Very Stony Spot

Special Line Features

Streams and Canals

Interstate Highways

Aerial Photography

Area of Interest (AOI)

Area of Interest (AOI)

Soils

Soil Map Unit Polygons

Soil Map Unit Lines

Soil Map Unit Points

Special Point Features

Blowout

Borrow Pit

Clay Spot

Closed Depression

Gravel Pit

Gravelly Spot

Landfill

Lava Flow

Marsh or swamp

Mine or Quarry

Miscellaneous Water

Perennial Water

Rock Outcrop

♣ Saline Spot

Sandy Spot

Severely Eroded Spot

Sinkhole

Slide or Slip

Sodic Spot

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:25.000.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service Web Soil Survey URL:

Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Middlesex County, Massachusetts Survey Area Data: Version 21, Sep 2, 2021

Soil map units are labeled (as space allows) for map scales 1:50.000 or larger.

Date(s) aerial images were photographed: Aug 13, 2020—Sep 15, 2020

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
602	Urban land	3.9	28.6%
626B	Merrimac-Urban land complex, 0 to 8 percent slopes	3.5	26.1%
655	Udorthents, wet substratum	6.1	45.3%
Totals for Area of Interest		13.6	100.0%

Required and Provided Recharge Volumes



Recharge Calculations

	Project	oject Arlington Self Storage		52816.00	
Calculated by Checked by		SJH	 Date	2/3/2022	
		EKG	Date	2/7/2022	
REQUIRE	ED RECHARGE VOLUME				
	Hydrologic	Area	Inches of Runoff	Volume	
	Soil Group (HSG)	(ft ²)	(in)	(ft ³)	
	Α	26,001	0.60	1,300	
	В	0	0.35	0	
	С	0	0.25	0	
	D	0	0.10	0	
	TOTAL			<u>1,300</u>	
CAPTUR	E AREA ADJUSTMENT				
CAI TOIL	E AREA ADJOSTINIENT				
	Required Recharge Vo	olume (ft ³)		1,300	
	Total Site Net Impervi	ious Area (ft²)		26,001	
	Total Site Impervious	Area Draining to Rechar	ge Facilities (ft²)	25,700	
	Capture Area Adjustm	nent Factor		1.01	
	Adjusted Required Recharge Volume (ft ³)			<u>1,315</u>	
PROVIDE	ED RECHARGE VOLUME				
	SUBSURFACE INFILTR	ATION SYSTEM #1:			
	MC-4500				
	Volumes provided belo	ow the lowest outlet at e	levation: 71.7		
	Provided Volume:		Bottom Area	Volume	
			(ft ²)	(ft ³)	
			1,112	<u>1,954</u>	
			D .		
	Drawdown:	(V _{Infiltration} /A _{Patters})/Rawl's	s Kate		
	Drawdown:	(V _{Infiltration} /A _{Bottom})/Rawl's Rawls Recharge Rate:		(in/hr)	
	Drawdown:	(V _{Infiltration} /A _{Bottom})/Rawl's Rawls Recharge Rate: Drawdown Time:	2.4 8.75	(in/hr) (hours)	
		Rawls Recharge Rate: Drawdown Time:	2.4		
RECHAR	Drawdown: GE VOLUME SUMMARY	Rawls Recharge Rate: Drawdown Time:	2.4		
RECHAR	GE VOLUME SUMMARY	Rawls Recharge Rate: Drawdown Time:	2.4		

Appendix D: Standard 4 Computations and Supporting Information

- Operation and Maintenance Plan
- Water Quality Volume Calculations
- TSS Removal Worksheets

Operations and Maintenance Plan

Proposed Self-Storage Facility

34 Dudley Street Arlington, Massachusetts

PREPARED FOR

PSI Atlantic Arlington MA, LLC 530 Oak Court Drive, Suite 155 Memphis, TN 38117

PREPARED BY



2 Bedford Farms Drive Suite 200 Bedford, NH 03110 603.391.3900

February 2022

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ii

Project Informtion

Site

Proposed Self-Storage Facility 34 Dudley Street Arlington, Massachusetts, 02476

Developel					
PSI Atlantic Arlington MA, LLC. 530 Oak Court Drive, Suite 155 Memphis, TN 38117 Phone Number:					
Site Supervisor					
Site Manager Name Site Manager Address Site Manager City, State Zip Site Manager Phone Number					
Site Contact					
Name:					
Telephone:					
Cell phone:					
Email:					

Section A: Source Control



A Source Control

A comprehensive source control program will be implemented at the Proposed Self-Storage Facility, which includes the following components:

- > Regular pavement sweeping on the asphalt surfaces
- > Catch basin cleaning
- > Clearing litter from the parking area, islands, and perimeter landscape areas
- > Enclosure and regular maintenance of all dumpsters
- > Spill Prevention training

Section B: Spill Prevention



B Spill Prevention

Spill prevention equipment and training will be provided by the Owner or property management company.

B.1 Initial Notification

المعمدة مانمه

immediately.	
Facility Manager (name):	
Facility Manager (phone):	
Construction Manager (name) :	
Construction Manager (phone):	

In the event of a spill the facility and/or construction manager or supervisor will be notified

The supervisor will first contact the Fire Department and then notify the Police Department, the Public Health Commission and the Conservation Commission. The Fire Department is ultimately responsible for matters of public health and safety and should be notified immediately.

B.2 Further Notification

Based on the assessment from the Fire Chief, additional notification to a cleanup contractor may be made. The Massachussets Department of Environmental Protection (DEP) and the EPA may be notified depending upon the nature and severity of the spill. The Fire Chief will be responsible for determining the level of cleanup and notification required. The attached list of emergency phone numbers shall be posted in the main construction/facility office and readily accessible to all employees. A hazardous waste spill report shall be completed as necessary using the attached form.

Emergency Notification Phone Numbers

1.	FACILITY M	ANAGER		
	Name:		Phone:	
			Beeper/Cell:	
			Home Phone:	
	Alternate Co	ontact:	Phone:	
			Beeper/Cell:	
			Home Phone:	
2.	FIRE & POLIC	CE DEPARTMENT	Emergency:	911
3.	CLEANUP CO	ONTRACTOR		
	Address:		Phone:	
			-	
4.	STATE DEPA	RTMENT OF ENVIRONMENTAL PROTECTION (DEP)	Emergency:	978-694-3200
		,		
5.	NATIONAL R	RESPONSE CENTER	Phone:	(800) 424-8802
	Alternate:	U.S. Environmental Protection Agency	Emergency:	
			Business:	
6.	MUNICIPAL	HEALTH DEPARTMENT	Phone:	(781) 316-3170
	Municipal Co	onservation Commission:	Phone:	(781) 316-3090

Hazardous Waste & Oil Spill Report

Date:		Time:		AM / PM
Exact location (Transformer #):				
Type of equipment:		Make:	Size:	
S / N:		Weather Conditions:		
On or near water?	es No If yes, name	of body of water:		
Type of chemical / oil spille	d:			
Amount of chemical / oil sp	illed:			
Cause of spill:				
Measures taken to contain or clean up spill:				
Amount of chemical / oil re	covered:	Me	thod:	
Material collected as a resu	It of cleanup:			
drums	containing			
drums	containing			
drums	containing			
Location and method of deb	ris disposal:			
Name and address of any por corporation suffering cha				
Procedures, method, and pre instituted to prevent a similar from recurring:				
Spill reported by General O	ffice by:	Tir	me:	_ AM / PM
Spill reported to DEP / Nati	onal Response Cent	er by:		
DEP Date:	Time:	AM / PM	Inspector:	
NRC Date:	Time:	AM / PM	Inspector:	
Additional comments:				

B.3 Assessment – Initial Containment

The supervisor or manager will assess the incident and initiate containment control measures with the appropriate spill containment equipment included in the spill kit kept on-site. A list of recommended spill equipment to be kept on site is included on the following page.

Fire / Police Department: 911

Municipality Health Department (781) 316-3170

Municipality Conservation Commission: (781) 316-3090

Emergency Response Equipment

The following equipment and materials shall be maintained at all times and stored in a secure area for long-term emergency response need.

Supplies	Quantity	Recommended Suppliers
> Sorbent Pillows/"Pigs"	2	http://www.newpig.com
		Item # KIT276 — mobile container with two pigs
> Sorbent Boom/Sock	25 feet	http://www.forestry-suppliers.com
> Sorbent Pads	50	
› Lite-Dri® Absorbent	5 pounds	
> Shovel	1	Item # 33934 — Shovel (or equivalent)
> Pry Bar	1	Item # 43210 — Manhole cover pick (or equivalent)
> Goggles	1 pair	Item # 23334 — Goggles (or equivalent)
Gloves – Heavy	1 pair	Item # 90926 — Gloves (or equivalent)

Section C: Snow Management



C Snow Management

Snow storage areas are shown on the attached Map.

- Snow storage areas will be managed to prevent blockage of storm drain catch basins and stormwater drainage swales. Snow combined with sand and debris may block a storm drainage system, diminishing the infiltration capacity of the system and causing localized flooding.
- > Sand and debris deposited on vegetated or paved areas shall be cleared from the site and properly disposed of at the end of the snow season, no later than May 15.
- > Snow shall not be dumped into any waterbody, pond, or wetland resource area.

Section D: Maintenance of Stormwater Management Systems



D Maintenance of Stormwater Management Systems

D.1 Pavement Systems

D.1.1 Standard Asphalt Pavement

- Sweep or vacuum standard asphalt pavement areas at least four times per year with a rotary brush sweeper or vacuum sweeper and properly dispose of removed material.
- > Recommended sweeping schedule:
- Oct/Nov
- > Feb/Mar
- Apr/May
- Aug/Sep
- More frequent sweeping of paved surfaces will result in less accumulation in catch basins, less cleaning of subsurface structures, and less disposal costs.
- > Check loading docks and dumpster areas frequently for spillage and/or pavement staining and clean as necessary.

D.2 Structural Stormwater Management Devices

D.2.1 Catch Basins and Area Drains

The proper removal of sediments and associated pollutants and trash occurs only when catch basin inlets and sumps are cleaned out regularly. The more frequent the cleaning, the less likely sediments will be re-suspended and subsequently discharged. In addition, frequent cleaning also results in more volume available for future deposition and enhances the overall performance. As noted in the pavement Operation and Maintenance (O&M) section, more frequent sweeping of paved surfaces will result in less accumulation in catch basins, less cleaning of subsurface structures, and less disposal costs.

There is one (1) catch basin and two (2) area drains at the Self-Storage Facility. These catch basins are constructed with sumps (minimum 4 feet) and hooded outlets to trap debris,

sediments, and floating contaminants. Disposal of all sediments must be in accordance with applicable local, state, and federal guidelines. A map of the catch basin locations is included in Section E.5 Maintenance Checklists and Device Location Maps.

Inspections and Cleaning

- All catch basins shall be inspected at least four times per year and cleaned a minimum of at least once per year.
- > Sediment (if more than six inches deep) and/or floatable pollutants shall be pumped from the basin and disposed of at an approved offsite facility in accordance with all applicable regulations.
- Any structural damage or other indication of malfunction will be reported to the site manager and repaired as necessary
- > During colder periods, the catch basin grates must be kept free of snow and ice.
- > During warmer periods, the catch basin grates must be kept free of leaves, litter, sand, and debris.

D.2.2 Subsurface Infiltration Basins

The subsurface infiltration/detention basins are used to detain and infiltrate roadway and rooftop runoff. There is one (1) subsurface infiltration basin at the Self-Storage Facility. Each of these basins has a water quality pre-treatment device in the form of a subsurface sediment removal row to protect the infiltration bed from clogging. The sediment removal row is an integral part of the underground infiltration system and is comprised of a perforated pipe, wrapped in a filter fabric and surrounded with gravel. To maintain pre-treatment functionality, this sediment removal row requires regular inspection and cleaning. A map of the infiltration basin locations is included in Section E.5 Maintenance Checklists and Device Location Maps.

Inspections and Cleaning

- > The subsurface infiltration systems will be inspected at least once each year by removing the manhole/access port covers and determining the thickness of sediment that has accumulated in the sediment removal row.
- > If sediment is more than six inches deep, it must be suspended via flushing with clean water and removed using a vactor truck.
- > Manufacturer's specifications and instructions for cleaning the sediment removal row are provided as an attachment to this section.
- > Emergency overflow pipes will be examined at least once each year and verified that no blockage has occurred.
- > System will be observed after rainfalls to see if it is properly draining.

D.2.3 Stormwater Outfalls

The stormwater drainage system at the Self-Storage Facility has one (1) outfall location where treated stormwater is discharged towards Mill Brook. A map of this location is included in Section E.5 Maintenance Checklists and Device Location Maps.

- > Inspect outfall locations monthly for the first three months after construction to ensure proper functioning and correct any areas that have settled or experienced washouts.
- > Inspect outfalls annually after initial three month period.
- > Annual inspections should be supplemented after large storms, when washouts may occur.
- > Maintain vegetation around outfalls to prevent blockages at the outfall.
- > Maintain rip rap pad below each outfall and replace any washouts.
- > Remove and dispose of any trash or debris at the outfall.

D.2.4 Roof Drain Leader

Roof runoff from buildings and parking areas at the Self-Storage Facility are directed to the bioretention basin and to the subsurface infiltration units.

- > Perform routine roof inspections quarterly.
- > Keep roofs clean and free of debris.
- > Keep roof drainage systems clear.
- > Keep roof access limited to authorized personnel.
- > Clean inlets twice per year or as necessary.

D.3 Vegetated Stormwater Management Devices

D.3.1 Rain Gardens / Bioretention Basins

The rain gardens at the Self-Storage Facility are excavated shallow surface depressions planted with specially-selected native vegetation to treat and capture runoff. The rain garden also has an overflow structure leading to the subsurface infiltration system to handle larger storm volumes. A location map for the rain garden can be found in Section E.5 Maintenance Checklists and Device Location Maps.

The vegetation in the rain gardens serves to filter runoff — improving water quality and reducing runoff quantity — and the root systems can enhance infiltration. The soil medium filters out pollutants and allows storage and infiltration of stormwater runoff; and the infiltration bed provides additional volume control. Properly designed rain gardens may mimic natural forest ecosystems through species diversity, density and distribution of vegetation, and the use of native species, resulting in a system that is resistant to insects, disease, pollution, and climatic stresses.

Rain gardens require routine maintenance (similar to conventional landscaping maintenance) to ensure that the system both functions well as a stormwater management practice while also maintaining an aesthetic quality compatible with the surrounding land uses.

Replacement of mulch is an important part of rain garden maintenance. Mulch keeps the soil moist, allowing for easy infiltration of rain water. Un-mulched surfaces may develop into a hardpan, a condition in which the soil surface becomes cemented together, forming a hard, impervious layer. Mulching also protects plants and reduces weed growth.

Initial Post-Construction Inspection

- During the initial period of vegetation establishment pruning and weeding are required twice in first year by contractor.
- > Any dead vegetation found after the first year must be replaced.
- > Proper mulching is mandatory and regular watering may be required initially to ensure proper establishment of new vegetation.

Long-Term Maintenance

- > Weeds and invasive plant species shall be removed by hand.
- > Leaf litter and other detritus shall be removed twice per year.
- > If needed to maintain aesthetic appearance, perennial plantings may be trimmed at the end of the growing season.
- > Trees and shrubs should be inspected twice per year to evaluate health and attended to as necessary.
- > Re-mulch rain gardens with well aged hardwood mulch to a depth of 3 inches each spring or whenever erosion is evident. The entire area may require mulch replacement once every two to three years. Mulch depth shall not exceed 3 inches and the depth of the depression shall not be compromised by the accumulation of vegetation or old mulch.
- > Seeded ground cover or grass areas shall not receive mulching.
- > Fertilizers should not be used in the rain garden as excessive nutrients in the rain garden may migrate to the underdrain and be discharged to adjacent surface waters.
- > Test pH of the soils in the planting bed annually. If the pH is below 5.2, limestone should be applied to increase it. If the pH is above 8.0, iron sulfate plus sulfur should be added to reduce it.
- > Rain gardens may require watering during periods of extended drought.

Inspections and Cleaning

> Rain gardens shall be inspected twice during for the first year and annually thereafter for sediment buildup, erosion, vegetative conditions, etc. If sediment build-up is found, sediment removal and core aeration or cultivating of un-vegetated areas may be required to ensure adequate filtration.

- > The inflow location should be inspected annually for clogging. Sediment build up is a common problem where runoff leaves an impervious surface and enters a vegetative or earthen surface. Any built-up sediment should be removed to prevent runoff from bypassing the facility. Sources of sediment should be prevented.
- > The overflow structure and underdrain standpipes should be inspected annually to ensure that they are functioning.
- Inspect rain gardens after a large storm event to ensure that proper drainage is occurring. Water that remains ponded on the surface of the rain garden after 48 hours of dry weather could indicate a problem with the subsurface drainage system or clogging of the underdrain. While the plants selected for the rain garden are tolerant of wet soils, they are not wetland species that can survive long periods of inundation. Immediate attention is required to prevent the loss of plant materials.

D.3.2 Vegetated Areas Maintenance

Although not a structural component of the drainage system, the maintenance of vegetated areas may affect the functioning of the stormwater management system. This includes the health/density of vegetative cover and activities such as the application and disposal of lawn and garden care products, disposal of leaves and yard trimmings and proper aeration of soils.

- > Inspect planted areas on a semi-annual basis and remove any litter.
- > Maintain planted areas adjacent to pavement to prevent soil washout.
- > Immediately clean any soil deposited on pavement.
- > Re-seed bare areas; install appropriate erosion control measures when native soil is exposed or erosion channels are forming.
- > Plant alternative mixture of grass species in the event of unsuccessful establishment.
- > The grass vegetation should be cut to a height between three and four inches.
- > Pesticide/Herbicide Usage No pesticides are to be used unless a single spot treatment is required for a specific control application.
- > Fertilizer usage should be avoided. If deemed necessary, slow release fertilizer should be used. Fertilizer may be used to begin the establishment of vegetation in bare or damaged areas, but should not be applied on a regular basis unless necessary.
- > Annual application of compost amendments and aeration are recommended.

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Section E: Operations and Maintenance Plan Summary

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E Operations and Maintenance Plan Summary

This Operation and Maintenance Plan has been prepared in accordance with the Stormwater Management Policy developed by the DEP and CZM and local regulations as applicable. It specifies operational practices and drainage system maintenance requirements for the the Self-Storage Facility redevelopment. Requirements should be adjusted by the site manager as necessary to ensure successful functioning of system components.

E.1 Routine Maintenance Checklists

Routine required maintenance is described in Sections A – D. The following checklists are to be used by the property manager to implement and document the required maintenance and inspection tasks.

E.2 Reporting and Documentation

The site supervisor shall be responsible for ensuring that the scheduled tasks as described in this plan are appropriately completed and recorded in the Maintenance Log. Accurate records of all inspections, routine maintenance and repairs shall be documented and these records shall be available for inspection by members of the Town of Arlington Conservation Commission or other designated body, or their designated agent, upon request.

The Maintenance Log shall:

- > Document the completion of required maintenance tasks.
- > Identify the person responsible for the completion of tasks.
- Identify any outstanding problems, malfunctions or inconsistencies identified during the course of routine maintenance.
- > Document specific repairs or replacements.

E.3 Construction Practices Maintenance/ Evaluation Checklist

Project Name – City, State

Best Management Practice	Inspection Frequency	Date Inspected	Inspector Initials	Minimum Maintenance and Key Items to Check	Cleaning or Repair Needed Yes/No (List Items)	Date of Cleaning or Repair	Performed by:
Compost Filter Tube/Hay Bales/ Silt Fencing	Weekly and after any rainfall			Sediment build up, broken or damaged tubes, bales or stakes			
Gravel Construction Entrance	Weekly and after any rainfall			Filled voids, runoff/sediments into street			
Catch Basin Protection	Weekly and after any rainfall			Clogged or sediment build- up at surface or in basin			
Diversion Channels	Weekly and after any rainfall			Maintained, moved as necessary to correct locations, Check for erosion or breakout			
Temporary Sedimentation Basins	Weekly and after any rainfall			Cracking, erosion, breakout, sediment buildup, contaminants			

|--|

E.4 Long-term Maintenance/Evaluation Checklist

Project Name – City, State

Best Management Practice	Minimum Maintenance and Key Items to Check	Inspection Frequency	Date Inspected	Inspector Initials	Cleaning Frequency	Cleaning or Repair Needed Yes/No	Date of Cleaning or Repair	Performed by:
Street Sweeping	Vacuum sweeper	4X per year			4X per year* minimum			
Outfall Structures	Remove debris and excess vegetation, replace any dislodged riprap	1X per year			1X per year			
Deep Sump and Hooded Catch basins	Remove sediment 1X per year or if >6 inches	4X per year			1X per year or as necessary			
Subsurface Infiltration Basins	Remove sediment 1X per year or if >6 inches	1X per year			1X per year			
Rain Gardens/ Bioretention Basins	Inspect inlets, vegetation, overflow discharge pipes, drain time less than 4 days	2X per year first year, annually thereafter			2X per year first year, annually thereafter			
Roof Drains	Remove debris, clean inlets draining to subsurface bed	4x per year roof inspection			2x per year inlet cleaning, roof debris as necessary			

* Recon	nmend sweeping	j Oct/Nov, Feb/N	lar, Apr/May	Jul/Aug with	late winter mos	st important
---------	----------------	------------------	--------------	--------------	-----------------	--------------

Stormwater Control Manager:	

E.5 Maintenance Checklists and Device Location Maps

These checklists are provided for the maintenance crew to photocopy and use when conducting inspections and cleaning activities to the stormwater management systems.

Maintenance Checklists

Catchbasins – Inspect 4 times per year, clean when sediment depth >6 inches or at least once per year.

Catch Basin / Area Drains	Inspected (Y/N)	Sediment Depth (inches)	Cleaning needed (Y/N)	Date Cleaned	Comments (Trash, Oil, Pet waste, Lawn Debris, Damage)
CB 1				/ /	
AD 1				/ /	
AD-2					

Outfalls – Inspect 4 times per year, replace any dislodged rip-rap, remove excess vegetation, remove any debris.

	Inspected	Sediment Depth	Cleaning needed	Date	
Outfall	(Y/N)	(inches)	(Y/N)	Cleaned	Comments (Trash, Oil, Pet waste, Lawn Debris, Damage)
OF 1				/ /	

Infiltration Basins - Inspect once per year, remove sediment if more than 6 inches has accumulated in sediment forebay or sediment collection row.

	Inspected	Sediment Depth	Cleaning needed	Date	
Basin	(Y/N)	(inches)	(Y/N)	Cleaned	Comments (Trash, Oil, Pet waste, Lawn Debris, Damage)
IB 1				/ /	

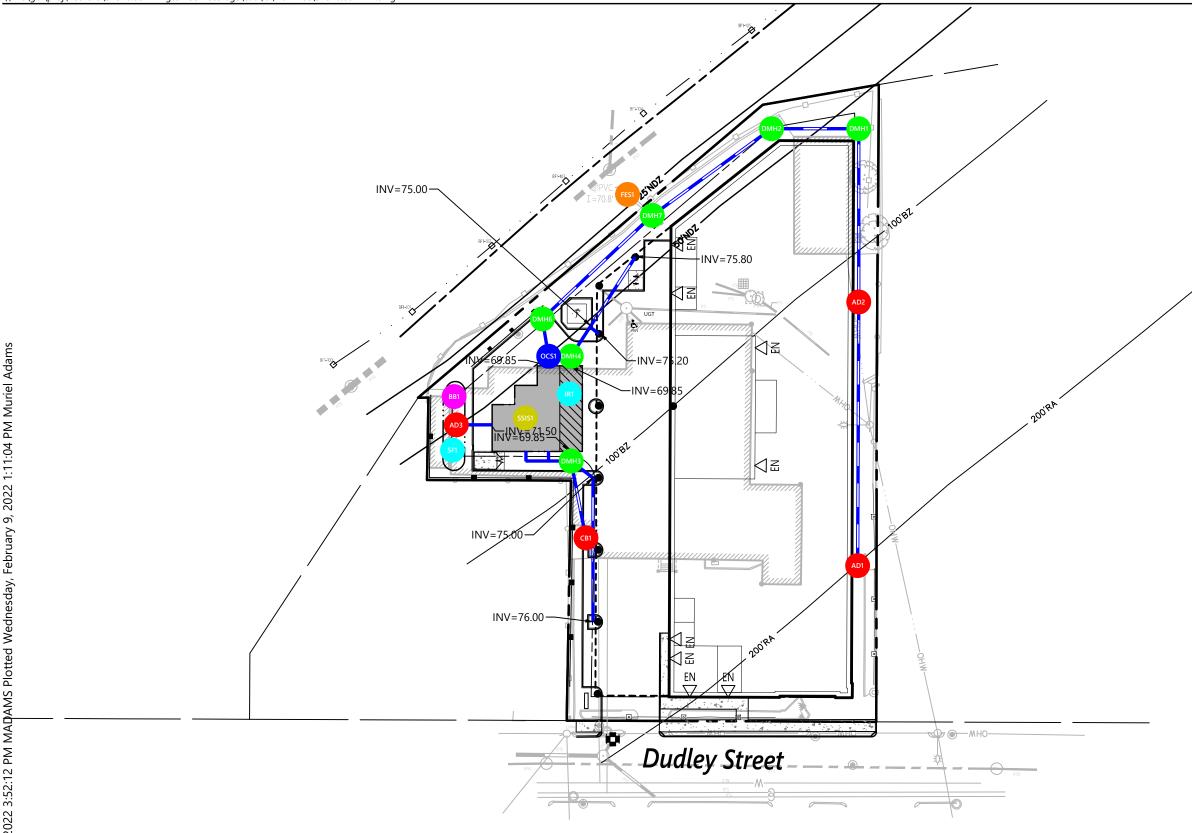
Rain Gardens/Bioretention Basins - Inspect twice during first year and annually thereafter for sediment buildup, erosion, vegetative conditions, etc. If sediment build-up is found, core aeration or cultivating of unvegetatd areas may be required to ensure adequate filtration. The overflow should be inspected annually to ensure that it is functioning.

		Sediment	Cleaning		
Rain	Inspected	Depth	needed	Date	
Garden	(Y/N)	(inches)	(Y/N)	Cleaned	Comments (Trash, Oil, Pet waste, Lawn Debris, Damage)
RG 1				/ /	

Roof Runoff Downspouts - Inspect roof drains monthly, clean inlets draining to the subsurface bed twice per year.

		Sediment	Cleaning		
	Inspected	Depth	needed	Date	
Bldg #	(Y/N)	(inches)	(Y/N)	Cleaned	Comments (Trash, Oil, Pet waste, Lawn Debris, Damage)
Bldg 1				/ /	

Device Location Map







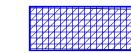
50

100 Feet

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Snow Storage Areas Map

Legend



SNOW STORAGE AREA

Proposed Self Storage Facility 34 Dudley Street Arlington, MA Project #: 52816.00

Section F: Product Literature

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StormTech GiC-4500 Chaming

Designed to meet the most stringent industry performance standards for superior structural integrity while providing designers with a cost-effective method to save valuable land and protect water resources.

The Stormlech system is designed primarily to be used under parking lots, thus maximizing land unage for commercial and municipal applications.

StormTech MC-4800 Chamber (not to scale)

Nominal Chamber Specifications

Size (L x W x H) 52" (1921 min) x 100" (2549 min) x 60" (1924 min)

Chamber Storage 100,5 ft* (3.01 m)

Min. leaderled Storage* 183.6 ft* (4.60 m?)

Weight 120 line (4.4 kg)

"This common a philosom of the (200 cycl) of since above, it (200 cycl) of some ballon characters, if (200) non-balances above layer and one and 40% above presently.

StormTook MC-4800 End Cap (not to scale)

Nominal Chamber Specifications

Size (LaWali) #51" (Will prof x poly?" (Main very a sout a form)

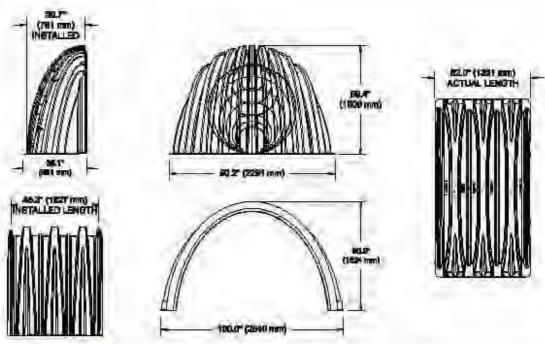
Chamber Storage St.7 ft" (1.01 m²)

Who, knyloševi Storage* 104.7 ft" (2.08 m²)

Weight 133 to (54.4 kg)

"This common a minimum of 12" (1800 cm) of atoms alone, it" (1800 cm) of atoms indices IT" (1800 cm) of alone particular, 9" (1800 cm) between alone alone alone atoms and 40% atoms percently.

Shipping 7 distribute/public 11 paints/bush



275 of 491

NC FORD CHARACTER

StormTech MC-4500 Chamber

Storage Volume Per Chamber/End Cap ft3 (m3)

	Bare Unit Storage	Chamber/End Cap and Stone Volume — Stone Foundation Depth in. (mm)					
	ft ³	9	12	15	18		
	(m ³)	(230)	(300)	(375)	(450)		
MC-4500	106.5	162.6	166.3	169.9	173.6		
Chamber	(3.02)	(4.60)	(4.71)	(4.81)	(4.91)		
MC-4500	35.7	108.7	111.9	115.2	118.4		
End Cap	(1.01)	(3.08)	(3.17)	(3.26)	(3.35)		

NOTE: Assumes 9" (230 mm) row spacing, 40% stone porosity, 12" (300 mm) stone above and includes the bare chamber/end cap volume. End cap volume assumes 12" (300 mm) stone perimeter.

Amount of Stone Per Chamber

ENGLISH tons	Stone Foundation Depth									
(yd³)	9"	12"	15"	18"						
MC-4500	7.4 (5.2)	7.8 (5.5)	8.3 (5.9)	8.8 (6.2)						
End Cap	9.6 (6.8)	10.0 (7.1)	10.4 (7.4)	10.9 (7.7)						
METRIC kg (m³)	230 mm	300 mm	375 mm	450 mm						
MC-4500	6681 (4.0)	7117 (4.2)	7552 (4.5)	7987 (4.7)						
End Cap	8691 (5.2)	9075 (5.4)	9460 (5.6)	9845 (5.9)						

NOTE: Assumes 12" (300 mm) of stone above, and 9" (230 mm) row spacing, and 12" (300 mm) of perimeter stone in front of end caps.

Volume of Excavation Per Chamber/End Cap yd3 (m3)

		Stone Found	ation Depth	
	9" (230 mm)	12" (300 mm)	15"(375 mm)	18"(450 mm)
MC-4500	10.5 (8.0)	10.8 (8.3)	11.2 (8.5)	11.5 (8.8)
End Cap	9.3 (7.1)	9.6 (7.3)	9.9 (7.6)	10.2 (7.8)

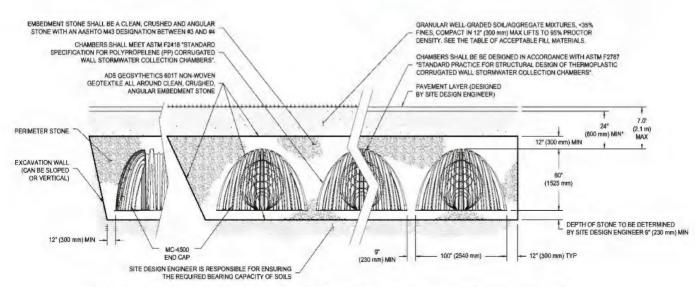
NOTE: Assumes 9" (230 mm) separation between chamber rows, 12" (300 mm) of perimeter in front of end caps, and 24" (600 mm) of cover. The volume of excavation will vary as the depth of cover increases.







General Cross Section



*MINIMUM COVER TO BOTTOM OF FLEXIBLE PAVEMENT. FOR UNPAVED INSTALLATIONS WHERE RUTTING FROM VEHICLES MAY OCCUR, INCREASE COVER TO 30" (750 mm).

Special applications will be considered on a project by project basis. Please contact our application department should you have a unique application for our team to evaluate.

2.0 Foundations for Chambers

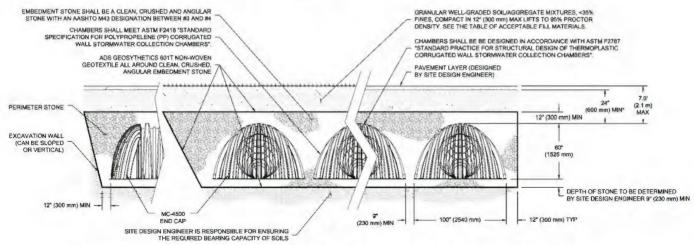
TABLE 2—MC-4500 Minimum Required Foundation Depth in inches (millimeters)

Assumes 9" (230 mm) row spacing.

Cover									Mi	nimum	Bearing	Resist	ance fo	r Servic	e Lnads	kst (kl	a)								
Hgt. ft.	4.4	4.3	4.2	4.1	4.0	3.9	3.8	3.7	3.6	3.5	3.4	3.3	3.2	3.1	3.0	2.9	2.8	2.7	2.5	2.5	2.4	2.3	2.2	2.1	2.0
(m)	(211)	(206)	(201)	(196)	(192)	(187)	(182)	(177)	(172)	(168)	(163)	(158)	(153)	(148)	(144)	(139)	(134)	(129)	(124)	(120)	(115)	(110)	(105)	(101)	(96)
2.0 (0.61)	9 (230)	9 (230)	9 (230)	9 (230)	9 (230)	9 (230)	9 (230)	9 (230)	9 (230)	9 (230)	9 (230)	9 (230)	9 (230)	9 (230)	9 (230)	9 (230)	9 (230)	9 (230)	12 (300)	12 (300)	12 (300)	15 (375)	15 (375)	15 (375)	18 (450)
2.5 (0.76)	9 (230)	9 (230)	9 (230)	9 (230)	9 (230)	9 (230)	9 (230)	9 (230)	9 (230)	9 (230)	12 (300)	12 (300)	12 (300)	15 (375)	15 (375)	18 (450)	18 (450)	24 (600)							
3.0	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	12	12	12	15	15	18	18	18	24	24
(0.91)	(230)	(230)	(230)	(230)	(230)	(230)	(230)	(230)	(230)	(230)	(230)	(230)	(230)	(230)	(230)	(300)	(300)	(300)	(375)	(375)	(450)	(450)	(450)	(600)	(6 00)
3.5	9	9	9	9	9	9	9	9	9	9	9	9	9	12	12	12	15	15	15	18	18	24	24	24	24
(1.07)	(230)	(230)	(230)	(230)	(230)	(230)	(230)	(230)	(230)	(230)	(230)	(230)	(230)	(300)	(300)	(300)	(375)	(375)	(375)	(450)	(450)	(600)	(600)	(600)	(600)
4.0 (1.22)	9 (230)	9 (230)	9 (230)	9 (230)	9 (230)	9 (230)	9 (230)	9 (230)	9 (230)	9 (230)	9 (230)	12 (300)	12 (300)	12 (300)	15 (375)	15 (375)	15 (375)	18 (450)	18 (450)	18 (450)	24 (600)	24 (600)	24 (600)	24 (600)	30 (750)
4.5	9	9	9	9	9	9	9	9	9	12	12	12	12	15	15	15	18	18	24	24	24	24	30	30	30
(1.37)	(230)	(230)	(230)	(230)	(230)	(230)	(230)	(230)	(230)	(300)	(300)	(300)	(300)	(375)	(375)	(375)	(450)	(450)	(600)	(600)	(600)	(600)	(750)	(750)	(750)
5.0 (1.52)	9 (230)	9 (230)	9 (230)	9 (230)	9 (230)	9 (230)	9 (230)	12 (300)	12 (300)	12 (300)	12 (300)	15 (375)	15 (375)	15 (375)	18 (450)	18 (450)	18 (450)	24 (600)	24 (600)	24 (600)	24 (600)	30 (750)	30 (750)	30 (750)	36 (900)
5.5	9	9	9	9	9	12	12	12	12	15	15	15	18	18	18	24	24	24	24	24	30	30	30	36	36
(1.68)	(230)	(230)	(230)	(230)	(230)	(300)	(300)	(300)	(300)	(375)	(375)	(375)	(450)	(450)	(450)	(600)	(600)	(600)	(600)	(600)	(750)	(750)	(750)	(900)	(900)
6.0	9	9	9	12	12	12	12	15	15	15	15	18	18	18	24	24	24	24	30	30	30	30	36	36	36
(1.83)	(230)	(230)	(230)	(300)	(300)	(300)	(300)	(375)	(375)	(375)	(375)	(450)	(450)	(450)	(600)	(600)	(60 0)	(600)	(750)	(750)	(750)	(750)	(900)	(900)	(900)
6.5	9	12	12	12	12	15	15	15	15	18	18	18	24	24	24	24	24	30	30	30	30	36	36	36	42
(1.98)	(230)	(300)	(300)	(300)	(300)	(375)	(375)	(375)	(375)	(450)	(450)	(450)	(600)	(600)	(6 00)	(600)	(600)	(750)	(750)	(750)	(750)	(900)	(900)	(900)	(1050)
7.0	12	12	12	12	15	15	15	15	18	18	18	24	24	24	24	24	30	30	30	30	36	36	36	42	42
(2.13)	(300)	(300)	(300)	(300)	(375)	(375)	(375)	(375)	(450)	(450)	(450)	(600)	(600)	(600)	(600)	(600)	(750)	(750)	(750)	(750)	(900)	(900)	(900)	(1050)	(1050)

NOTE: The design engineer is solely responsible for assessing the bearing resistance (allowable bearing capacity) of the subgrade soils and determining the depth of foundation stone. Subgrade bearing resistance should be assessed with consideration for the range of soil moisture conditions expected under a stormwater system.

FIGURE 10B-MC-4500 Structural Cross Section Detail (Not to Scale)



MINIMUM COVER TO BOTTOM OF FLEXIBLE PAVEMENT. FOR UNPAVED INSTALLATIONS WHERE RUTTING FROM VEHICLES MAY OCCUR, INCREASE COVER TO 30° (750 mm).

Special applications will be considered on a project by project basis. Please contact our applications department should you have a unique application for our team to evaluate.

3.0 Required Materials/Row Separation



3.1 Foundation and Embedment Stone

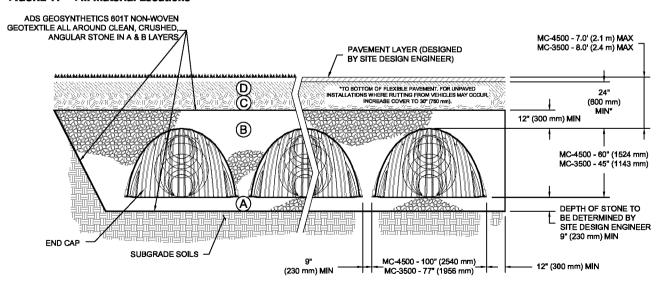
The stone surrounding the chambers consists of the foundation stone below the chambers and embedment stone surrounding the chambers. The foundation stone and embedment stone are important components of the structural system and also provide open void space for stormwater storage. Table 3 provides the stone specifications that achieve both structural requirements and a porosity of 40% for stormwater storage. Figure 11 specifies the extents of each backfill stone location.

TABLE 3—Acceptable Fill Materials

	MATERIAL LOCATION	DESCRIPTION	AASHTO DESIGNATION	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 UNPAYED 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.
С	INITIAL FILL: FILL MATERIAL FOR LAYER 'C' STARTS FROM THE TOP OF THE EMBEDMENT STONE (B' LAYER) TO 24" (600 mm) above the top of the Chamber. Note that Pavement subbase May be a part of the 'C' Layer.	GRANULAR WELL-GRADED SOIL/AGGREGATE MUXTURES, <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 COMPACTOINS AFTER 24" (600 mm) OF MATERIAL OVER THE CHAMBERS IS REACHED. COMPACT ADDITIONAL LAYERS IN 12" (300 mm) MAX LIFTS TO A MIN. 95% PROCTOR DENSITY FOR WELL-GRADED MATERIAL AND 95% RELATIVE DENSITY FOR PROCESSED AGGREGATE MATERIALS.
В	EMBEDMENT STONE: FILL SURROUNDING THE CHAMBERS FORM THE FOUDATION STONE (A' LAYER) TO THE 'C' LAYER ABOVE.	CLEAN, CRUSHED, ANGULAR STONE	AASHTO M43¹ 3, 4	NO COMPACTION REQUIRED
А	FOUNDATION STONE: FILL BELOW CHAMBERS FROM THE SUBGRADE UP TO THE FOOT (BOTTOM) OF THE CHAMBER.	CLEAN, CRUSHED, ANGULAR STONE	AASHTO M43¹ 3, 4	PLATE COMPACT OR ROLL TO ACHIEVE A FLAT SURFACE. 23

PLEASE NOTE:

FIGURE 11—Fill Material Locations



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 materials of layer 'C' or 'D' at the design engineer's discretion.

ASE NOTE:
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".
STORMTECH COMPACTION REQUIREMENTS ARE MET FOR 'A' LOCATION MATERIALS WHEN PLACED AND COMPACTED IN 9" (230 mm) (MAX) LIFTS USING TWO FULL COVERAGES

WITH A VIBRATORY COMPACTOR

WHERE INFLITRATION 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.

4.0 Hydraulics



4.1 GENERAL

StormTech subsurface chamber systems offer the flexibility for a variety of inlet and outlet configurations. Contact the StormTech Technical Services Department or your local StormTech representative for assistance configuring inlet and outlet connections.

The open graded stone around and under the chambers provides a significant conveyance capacity ranging from approximately 0.8 cfs (23 l/s) to 13 cfs (368 l/s) per MC-3500 chamber and 0.54 cfs (15 l/s) to 8.5 cfs (240 l/s) for the MC-4500 chamber. The actual conveyance capacity is dependent upon stone size, depth of foundation stone and head of water. Although the high conveyance capacity of the open graded stone is an important component of the flow network, StormTech recommends that a system of inlet and outlet manifolds be designed to distribute and convey the peak flow through the chamber system.

It is the responsibility of the design engineer to provide the design flow rates and storage volumes for the stormwater system and to ensure that the final design meets all conveyance and storage requirements. However, StormTech will work with the design engineer to assist with manifold and chamber layouts that meet the design objectives.

4.2 THE ISOLATOR® ROW

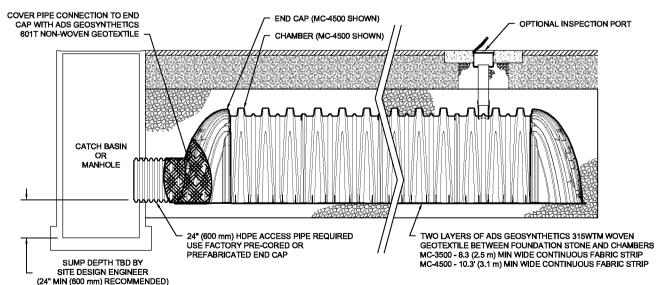
The Isolator Row is a patented system that inexpensively captures total suspended solids (TSS) and debris and provides easy access for inspection and maintenance. A double layer of woven geotextile between the bottom of the chambers and the foundation stone provides the filter media that satisfies most contaminant removal objectives. Each installed MC-3500 chamber and MC-3500 end cap provides 42.9 ft2 (4.0 m2) and 7.5 ft2 (0.7 m2) of bottom filter area respectively. Each installed MC-4500 chamber and MC-4500 end cap provides 30.1 ft² (2.80 m²) and 12.8 ft² (1.19 m²) of bottom filter area respectively.

The Isolator Row can be configured for maintenance objectives or, in some regulatory jurisdictions, for water quality objectives. For water quality applications, Isolator Rows can be sized based on water quality volume or flow rate.

All Isolator Rows require: 1) a manhole for maintenance access, 2) a means of diversion of flows to the Isolator Row and 3) a high flow bypass. Flow diversion can be accomplished by either a weir in the upstream access manhole or simply by feeding the Isolator Row at a lower elevation than the high flow bypass. Contact StormTech for assistance sizing Isolator Rows.

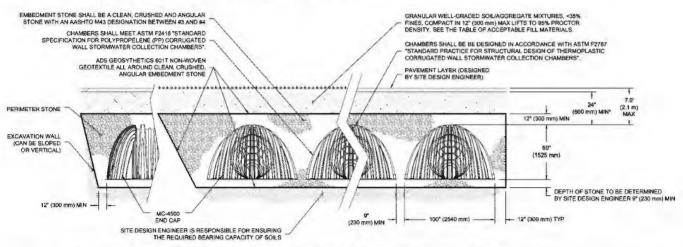
When additional stormwater treatment is required, StormTech systems can be configured using a treatment train approach where other stormwater BMPs are located in series.





7.0 Structural Cross Sections and Specifications

FIGURE 16-MC-4500 Structural Cross Section Detail (Not to Scale)



'MINIMUM COVER TO BOTTOM OF FLEXIBLE PAVEMENT. FOR UNPAVED INSTALLATIONS WHERE RUTTING FROM VEHICLES MAY OCCUR, INCREASE COVER TO 30" (750 mm).

Special applications will be considered on a project by project basis. Please contact our application department should you have a unique application for our team to evaluate.

MC-4500 STORMWATER CHAMBER SPECIFICATIONS

- Chambers shall be StormTech MC-4500 or approved equal.
- Chambers shall be made from virgin, impact-modified polypropylene copolymers.
- Chamber rows shall provide continuous, unobstructed internal space with no internal panels that would impede flow.
- 4. The structural design of the chambers, the structural backfill and the installation requirements shall ensure that the load factors specified in the AASHTO LRFD Bridge Design Specifications, Section 12.12 are met for: 1) long-duration dead loads and 2) short-duration live loads, based on the AASHTO Design Truck with consideration for impact and multiple vehicle presences.
- Chambers shall meet the requirements of ASTM F 2418, "Standard Specification for Polypropylene (PP) Corrugated Wall Stormwater Collection Chambers."

- Chambers shall conform to the requirements of ASTM F 2787, "Standard Practice for Structural Design of Thermoplastic Corrugated Wall Stormwater Collection Chambers."
- 7. Only chambers that are approved by the engineer will be allowed. The contractor shall submit (3 sets) of the following to the engineer for approval before delivering chambers to the project site:
 - A structural evaluation by a registered structural engineer that demonstrates that the load factors specified in the AASHTO LRFD Bridge Design Specifications, Section 12.12 are met. The 50-year creep modulus data specified in ASTM F 2418 must be used as part of the AASHTO structural evaluation to verify long-term performance.
 - Structural cross section detail on which the structural cross section is based.
- The installation of chambers shall be in accordance with the manufacturer's latest Construction Guide.

Detail drawings available in Cad Rev. 2000 format at www.stormtech.com

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Water Quality Volume Calculations



Water Quality Volume Calculations

BASIN #1	Calculated by Checked by subcatchment areas	SJH EKG PR-1, PR-3, PR-	4	Date Date	2/3/2022 2/7/2022
BASIN #1	•		4	Date	2/7/2022
	subcatchment areas	PR-1, PR-3, PR-	4		
Runoff from	subcatchment areas	PR-1, PR-3, PR-	4		
		Water Quality	Storm Runoff Depth	(in)	0.5
		٦	Total Impervious Area	(ft ²)	25,700
<u> </u>	BASIN WQV:				
i	Required Volume:	Run	off Depth to be Treat	ed	Required Volume
			(in)		(ft ³)
			0.5		<u>1,071</u>
i	Provided Volume:	Elevat	. Ar	ea	Cumulative Volume
		Lievat	(ft	²)	(ft ³)
		69.1	·		0
		71.7	1,1	12	<u>1,954</u>

TSS Removal Worksheets

TSS Removal Calculation Worksheet



101 Walnut Street Post Office Box 9151 Watertown, MA 02471 P 617.924.1770

Arlington Self Storage Project Name: Project Number: 52816.00 Arlington, MA Location: Discharge Point: DP-2 PR-1, PR-3 Drainage Area(s):

Sheet: 1 of 2 Date: Janaury 4, 2022 Computed by: SJH Checked by:

1. Pre-Treatment prior to Infiltration

BMP*
Deep Sump and Hooded Catch Basin
Isolator Row

TSS Removal Rate*
25%
25%
0%

Starting TSS Load**	Amount Removed (C*D)
100%	25%
75%	19%
56%	0%

-	
	Remaining Load
	(D-E)
	75%
	56%
	56%
	44%

Pre-Treatment TSS Removal =

2. Total TSS Removal including Pretreatment 1.

BMP*
Deep Sump and Hooded Catch Basin
Subsurface Infiltration Structure

TSS Removal Rate*
25%
80%
0%
0%

"	CIIC I.	
	Starting TSS	
	Load**	
	100%	
	75%	
	15%	
	15%	

Amount Rer (C*D)	moved
25%	
60%	
0%	
0%	

P
Remaining Load
(D-E)
75%
15%
15%
15%

Treatment Train TSS Removal =

285 of 491

85%

^{*} BMP and TSS Removal Rate Values from the MassDEP Stormwater Handbook Vol. 1. Removal rates for proprietary devices are from approved studies and/or manufacturer data (attach study or data source, or remove this sentence if

^{**} Equals remaining load from previous BMP (E)

^{***} Stormceptor sizing calculation gives a TSS removal rate of 87%. To be conservative, 80% removal is used for this calculation (Change name of device and the claimed removal rate shown on the calc. sheet. Remove this sentence if

Thb 101 Walnut Street **TSS Removal Calculation Worksheet**

Post Office Box 9151 Watertown, MA 02471 P 617.924.1770

Arlington Self Storage
52816.00
Arlington, MA
DP-2
PR-4

Sheet: 2 of 2 February 9, 2022 Date: Computed by: Checked by:

1. Pre-Treatment prior to Infiltration

BMP*
Sediment Forebay

TSS Removal Rate*
25%
0%
0%

Starting TSS	Amou
Load**	
100%	
75%	
75%	
:	

Amount Removed	Remaining Load
(C*D)	(D-E)
25%	75%
0%	75%
0%	75%

Pre-Treatment	TSS	Removal	=
---------------	-----	---------	---

25%

2. Total TSS Removal including Pretreatment 1.

BMP*	
Bioretention Area	

TSS Removal Rate*
90%
0%
0%
0%

Starting TSS Load**
100%
10%
10%
10%

Amount Removed
(C*D)
90%
0%
0%
0%

Remaining Load (D-E)
(2 2)
10%
10%
10%
10%

Treatment Train TSS Removal = 286 of 491

90%

^{*} BMP and TSS Removal Rate Values from the MassDEP Stormwater Handbook Vol. 1. Removal rates for proprietary devices are from approved studies and/or manufacturer data (attach study or data source, or remove this sentence if not applicable).

^{**} Equals remaining load from previous BMP (E)

^{***} Stormceptor sizing calculation gives a TSS removal rate of 87%. To be conservative, 80% removal is used for this calculation (Change name of device and the claimed removal rate shown on the calc. sheet. Remove this sentence if

Appendix E: Standard 7 Supporting Information

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The Project has been designed to comply with all ten of the Stormwater Management Standards. There is no required Standard 7 Supporting Information. This page intentionally left blank.

Appendix F: Standard 8 Supporting Information

Recommended Construction Period Pollution Prevention and Erosion and Sedimentation Controls

Proposed Self Storage Facility Project

34 Dudley Street

Arlington, Massachusetts, 02476

PREPARED FOR

PSI Atlantic Arlington MA, LLC 530 Oak Court Drive, Suite 155 Memphis, TN 38117

PREPARED BY



2 Bedford Farms Drive Suite 200 Bedford, NH 03110 603.391.3900

February 2022

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1

Erosion and Sedimentation Control Plan

As part of the Site Plan Review and Notice of Intent process, an erosion and sedimentation control plan will be developed, and will include measures such as those described below.

Erosion and Sedimentation Control Measures

An Erosion and Sediment Control Plan has been designed to ensure compliance with the MassDEP Stormwater Management Policy and Town of Arlington Bylaws and Regulations. The Project will disturb less than 1-acre of land and not subject to the NPDES General Permit for Stormwater Discharges from Construction Activities. The following minimum performance standards have been included in the Erosion and Sediment Control Plan attached to this report.

- 1. Erosion control structures will be located at the edge of land disturbances and will be designed so as not to create point discharges onto abutting properties.
- 2. Dust from all earthmoving activities shall be controlled.
- 3. Earth materials shall not be deposited onto any roadways.
- 4. The amount of disturbed area shall be minimized. Natural resources shall protected.
- 5. Vegetative stabilization measures shall be employed during the Regulated Activity and construction activity as required by the approving authority. All perimeter dikes and slopes, basin or trap embankments shall be stabilized with sod, seed, anchored mulch within seven (7) days of disturbance. All other disturbed areas shall be stabilized with sod, seed and anchored mulch within fourteen (14) days after disturbing activities are ceased
- 6. Topsoil shall be stripped from disturbed areas and stockpiled in an approved area and stabilized with a temporary vegetative cover if left more than fifteen (15) calendar days. Perimeter sediment controls shall be installed around stockpiled topsoil.

- 7. During cold weather months, when seeding and sodding may be impractical, anchored mulch shall be applied as approved.
- 8. All storm drain inlets shall be protected, and all newly constructed outlets shall be armored in accordance with the above-mentioned guidelines.
- 9. Perimeter controls shall be used at the site.
- 10. All construction site entrances and exits shall be stabilized to prevent off-site tracking.
- 11. Stormwater controls shall be inspected at consistent intervals, including during or immediately after a storm.
- 12. Construction site operators shall control all construction and waste materials.

The following erosion and sedimentation controls are for use during the earthwork and construction phases of the project. The following controls are provided as recommendations for the site contractor and do not constitute or replace the final Stormwater Pollution Prevention Plan that must be fully implemented by the Contractor and owner in Compliance with EPA NPDES regulations.

Compost Filter Tube (Perimeter Control)

Siltsock shall be installed around the project work limits as perimeter controls. Siltsocks shall be as manufactured by *Filtrexx* or approved equivalent. Approved siltsocks shall be composed of 12 inch diameter biodegradable mesh netting and filled with a compostable material. When installing multiple sections of siltsock, each individual section shall overlap a minimum of 12 inches. Since siltsocks shall be installed on top of the ground, without being trenched in, the Contractor shall install a supplemental compostable material on the upslope side of the siltsock, in order to prevent the flow of stormwater runoff beneath it.

Siltsocks will be inspected in compliance with the inspection schedule and maintained routinely throughout the duration of the project. The contractor must remove sediment before it accumulates to one-half of the above-ground height of any perimeter control. Additionally, sections of siltsock that appear to be damaged, removed, or of which the stakes have been removed, shall be repaired immediately upon observation.

Hay Bale Barriers

Hay bale barriers will be placed to trap sediment transported by runoff before it reaches the drainage system or leaves the construction site. Bales will be set at least four inches into the existing ground to minimize undercutting by runoff.

Silt Fencing

In areas where high runoff velocities or high sediment loads are expected, hay bale barriers will be backed up with silt fencing. This semi permeable barrier made of a synthetic porous fabric will provide additional protection. The silt fences and hay bale barrier will be replaced as determined by periodic field inspections.

Catch Basin Protection

Newly constructed and existing catch basins will be protected with hay bale barriers (where appropriate) or silt sacks throughout construction.

Gravel and Construction Entrance/Exit

A temporary crushed-stone construction entrance/exit will be constructed. A cross slope will be placed in the entrance to direct runoff to a protected catch basin inlet or settling area. If deemed necessary after construction begins, a wash pad may be included to wash off vehicle wheels before leaving the project site.

Diversion Channels

Diversion channels will be used to collect runoff from construction areas and discharge to either sedimentation basins or protected catch basin inlets.

Temporary Sediment Basins

Temporary sediment basins will be designed either as excavations or bermed stormwater detention structures (depending on grading) that will retain runoff for a sufficient period of time to allow suspended soil particles to settle out prior to discharge. These temporary basins will be located based on construction needs as determined by the contractor and outlet devices will be designed to control velocity and sediment. Points of discharge from sediment basins will be stabilized to minimize erosion.

Vegetative Slope Stabilization

Stabilization of open soil surfaces will be implemented within 14 days after grading or construction activities have temporarily or permanently ceased, unless there is sufficient snow cover to prohibit implementation. Vegetative slope stabilization will be used to minimize erosion on slopes of 3:1 or flatter. Annual grasses, such as annual rye, will be used to ensure rapid germination and production of root mass. Permanent stabilization will be completed with the planting of perennial grasses or legumes. Establishment of temporary and permanent vegetative cover may be established by hydro seeding or sodding. A suitable topsoil, good seedbed preparation, and adequate lime, fertilizer and water will be provided for effective establishment of these vegetative stabilization methods. Mulch will also be used after permanent seeding to protect soil from the impact of falling rain and to increase the capacity of the soil to absorb water.

Maintenance

> The contractor or subcontractor will be responsible for implementing each control shown on the Sedimentation and Erosion Control Plan. In accordance with EPA regulations, the contractor must sign a copy of a certification to verify that a plan has been prepared and that permit regulations are understood.

- The on site contractor will inspect all sediment and erosion control structures periodically and after each rainfall event. Records of the inspections will be prepared and maintained on site by the contractor.
- > Silt shall be removed from behind barriers if greater than 6 inches deep or as needed.
- > Damaged or deteriorated items will be repaired immediately after identification.
- > The underside of hay bales should be kept in close contact with the earth and reset as necessary.
- Sediment that is collected in structures shall be disposed of properly and covered if stored on site.
- > Erosion control structures shall remain in place until all disturbed earth has been securely stabilized. After removal of structures, disturbed areas shall be regraded and stabilized as necessary

The sedimentation and erosion control plan is included in project plan set; a reduced version and Erosion Control Maintenance checklist is included here for quick reference.

Spill Prevention and Response Plan

Spill prevention equipment and training will be provided by the Contractor.

Initial Notification

In the event of a spill the facility and/or construction manager or supervisor will be notified immediately.

Facility Manager

Name:	 Home Phone:	
Phone:	E-mail:	

Construction Manager

Name:	 Home Phone:	
Phone:	 E-mail:	

The supervisor will first contact the Fire Department and then notify the Police Department, the Public Health Commission and the Conservation Commission. The Fire Department is ultimately responsible for matters of public health and safety and should be notified immediately.

Further Notification

Based on the assessment from the Fire Chief, additional notification to a cleanup contractor may be made. The Massachusetts Department of Environmental Protection (DEP) and the

EPA may be notified depending upon the nature and severity of the spill. The Fire Chief will be responsible for determining the level of cleanup and notification required. The attached list of emergency phone numbers shall be posted in the main construction/facility office and readily accessible to all employees. A hazardous waste spill report shall be completed as necessary using the attached form.

Emergency Notification Phone Numbers

1.	Facility Manager									
	Name:	Home Pho	ne:							
	Phone:	E-mail:								
	Alternate									
	Name:	Home Pho	ne:							
	Phone:	E-mail:								
2.	Fire Department									
	Emergency:	911								
	Business:									
	Police Department									
	Emergency:	911								
	Business:									
3.	Cleanup Contractor									
	Address:									
	Phone:	·								
4.	Massachusetts Department of Environmental Protection									
	Emergency:									
	Northeast Regio	n:								
5.	National Response Ce	nter								
	Phone:	(800) 424-8802								
	Alternate U.S. Environ	mental Protection Agency								
	Emergency:	(800) 424-8802								
	Business:									
6.	Arlington Conservation	n Commission								
	Contact:									
	Phone:	(781) 316-3090								
7.	Arlington Health Depa	artment								
	Contact:	_ Natasha Waden (Director)								
	Phone:	(781) 316-3170								

Hazardous Waste / Oil Spill Report

Date			Time			AM /	PM
Exact Location #)	n (Transformer						
Type of Equipment		Make			Size		
S/N			Weather Co	nditions			
On or near wa	ater	□ Yes □ No	If Yes, name of water	e of body			
Type of chemi	ical/oil spilled						
Amount of ch	emical/oil spille	ed					
Cause of spill							
Measures take	en to contain o	r clean up					
Amound of ch recovered	nemical/oil			Method			
Material collec	cted as a result	of cleanup:					
	Drums contai	ning					
	Drums contai	ning					
	Drums contai	ning					
Location and	method of deb	ris disposal:					
Name and add	dress of any pe	rson, firm, or	corporation :	suffering da	amages:		
Procedures, m	nethod, and pre	cautions inst	tituted to prev	ent a simil	ar occurrenc	e from	recurring:
Spill reported Office by	to General			Time			AM/PM
-	to DEP / Natric	nal Respons	e Center by				
DEP Date		Time		AM/PM	Inspector		
NRC Date		Time		AM/PM	Inspector		
Additional cor	mments:						

Assessment – Initial Containment

The supervisor or manager will assess the incident and initiate containment control measures with the appropriate spill containment equipment included in the spill kit kept on-site. A list of recommended spill equipment to be kept on site is included on the following page.

Fire / Police Department:	911
Arlington Health Department:	(781) 316-3170
Arlington Conservation Commission:	(781) 316-3090

Emergency Response Equipment

The following equipment and materials shall be maintained at all times and stored in a secure area for long-term emergency response need.

Supplies		Recommended Suppliers	
SORBENT PILLOWS/"PIGS"	2	http://www.newpig.com	
SORBENT BOOM/SOCK	25 FEET	Item # KIT276 — mobile container with	
SORBENT PADS	50	two pigs, 26 feet of sock, 50 pads, and	
LITE-DRI® ABSORBENT	5 POUNDS	five pounds of absorbent (or equivalent http://www.forestry-suppliers.com	
SHOVEL	1	Item # 33934 — Shovel (or equivalent)	
PRY BAR	1	Item # 43210 — Manhole cover pick (or equivalent)	
GOGGLES	1 PAIR	Item # 23334 — Goggles (or equivalent)	
GLOVES – HEAVY	1 PAIR	Item # 90926 — Gloves (or equivalent)	

Supplemental Sewer and Water Form

Attached is the zoning form from the application.

Also, some text below to highlight the water and sewer reduction.

Sewer & Water

Existing Conditions

The existing facility is comprised of a 10,921 square foot (SF) Autobody shop, containing approximately 8 service bays. Utilizing the Unit Flow rates and Use categories are taken from MassDEP 310 CMR 15.00 section 203, a service station (without gas) is calculated as 150 gallons per day (gpd) per service bay. The existing use at the site generates approximately 1,200 gpd of sewer. Typically, water consumption is estimated at 110% of the wastewater generation rates, therefore, the water demand for the existing site is 1,320 gpd.

Proposed Conditions

The Project consists of a 95,706 square foot self-storage building. Utilizing the Unit Flow rates and Use categories are taken from MassDEP 310 CMR 15.00 section 203, for a Factory, Industrial Plant, Warehouse, or Dry Storage without Cafeteria, the unit flow is 15 gpd per person. A conservative estimate of 15 persons will occupy the building at a given time, generating 225 gpd. Refer to Table 1.1 for a summary of the existing and proposed wastewater generation and water demand rates.

There is an anticipated net reduction of approximately 975 gpd of wastewater generation and 1,070 gpd of water demand (-81%) with the proposed project.

Table 1.1 Wastewater Generation

F. 1. (1) (2) (2) (3)	Use	Unit Flow ¹	Total Units	Estimated Wastewater Generation	Estimated Water Demand
Existing	Autobody (Service	The second secon	: : :	1,200 gpd	1,300 gpd
:	Station)	150 gpd/bay	8 bays		
Proposed	Dry Storage (Self-	15		225 gpd	248 gpd
	Storage Facility)	gpd/person	15 persons		watch h

Sewer design Unit Flow rates and Use categories are taken from MassDEP 310 CMR 15.00 section 203.

Eric Gerade

Project Manager

Upcoming Vacation: Feb 21-23

P 603,391,3972 www.vhb.com

From: Eric Gerade

Sent: Wednesday, February 16, 2022 4:52 PM

To: Robert Annese < lesse@pssinvestors.com Co: Jay Tillman < jesse@pssinvestors.com ; Jan Bryan < jesse@pssinvestors.com) ; Jan Bryan jesse@pssinves

<elowder@mparkstudios.com>

Subject: RE: [External] RE: Arlington, MA



February 15, 2022

34 Dudley Street - LEED CONSIDERATIONS

The improvements at 34 Dudley Street will attempt to incorporate the items below per 'LEED v4 Warehouses and Distribution Centers' to support the sustainable building practices goal in Arlington, MA.

LOW EMITTING MATERIALS

These materials are to be integrated to reduce concentrations of chemical contaminants that can damage air quality, human health, productivity, and the environment. Some of these building materials are as follows:

Paints and Coatings

At least 75% of all paints and coatings, by volume or surface area, are to meet the VOC emissions evaluation AND 100% meet the VOC content evaluation.

Adhesives and Sealants

At least 75% of all adhesives and sealants, by volume or surface area, are to meet the VOC emissions evaluation AND 100% meet the VOC content evaluation.

Flooring

At least 90% of all flooring materials (carpet, ceramic, vinyl, rubber, engineered, solid wood, laminates), by cost or surface area, is to meet the VOC emissions evaluation OR inherently non emitting sources criteria, OR salvaged and reused materials criteria.

PRODUCTS

At least 70% of each new compliant building component (floor covering, insulation, framing/structural systems, drywall, doors, cabinets, countertops and/or interior trim), by weight or volume, will aim to meet one of the requirements below:

The product contains at least 25% reclaimed material, including salvaged, refurbished, or reused materials. For renovation projects, existing components are considered reclaimed. Wood by-products can be counted as reclaimed material. These include items from secondary manufacturers; felled, diseased, or dead trees from urban or suburban areas; or chard trees that are unproductive and cut for replacement; and wood recovered from landfills or water bodies.

Wood products must be Forest Stewardship Council (FSC) Certified, or USGBC-approved equivalent.

Bio-based materials. Bio-based products must meet the Sustainable Agriculture Network's Sustainable Agriculture Standard. Bio-based raw materials must be tested using ASTM Test Method D6866 and be legally harvested, as defined by the exporting and receiving country. Exclude hide products, such as leather and other animal skin material.

Concrete that consists of at least 30% fly ash or slag used as a cement substitute.

Extended producer responsibility. Products purchased from a manufacturer (producer) that participates in an extended producer responsibility program or is directly responsible for extended producer responsibility.

WATER USE REDUCTION

The project will seek to reduce aggregate water consumption by 20% from the baseline for each new fixture (toilets, hand sinks, etc.)

MINIMUM ENERGY PERFORMANCE

For climate-controlled storage areas, heating and cooling systems will look to meet the following equipment selection sizing guidelines, or next nominal size:

Cooling Equipment:

Single-Speed Compressor: 90-130% of total heat gain

Two-Speed Compressor: 90-140% of total heat gain

Variable-Speed Compressor: 90-160% of total heat gain

Heating Equipment:

100-140% of total heat loss AND energy performance compliance.

LEED v4 for BD+C: Warehouses and Distribution Centers

Project Checklist

Y ? N

Credit Integrative Process

dit Integrative Process 1

	5	0	4	Loca	tion and Transportation	16
			1	Credit	LEED for Neighborhood Development Location	16
	1			Credit	Sensitive Land Protection	1
			1	Credit	High Priority Site	2
l	2			Credit	Surrounding Density and Diverse Uses	5
	1			Credit	Access to Quality Transit	5
	1			Credit	Bicycle Facilities	1
			1	Credit	Reduced Parking Footprint	1
			1	Credit	Green Vehicles	1

3	1	3	Susta	10	
Υ	Prereq Construction Activity Pollution Prevention		Required		
	1		Credit	Site Assessment	1
		1	Credit	Site Development - Protect or Restore Habitat	2
		1	Credit	Open Space	1
		1	Credit	Rainwater Management	3
2			Credit	Heat Island Reduction	2
1			Credit	Light Pollution Reduction	1

0	2	2	Water	Efficiency	11
Υ			Prereq	Outdoor Water Use Reduction	Required
Υ	Prereq		Prereq	Indoor Water Use Reduction	Required
Υ	Prereq [Prereq	Building-Level Water Metering	Required
	1		Credit	Outdoor Water Use Reduction	2
	1		Credit	Indoor Water Use Reduction	6
		1	Credit	Cooling Tower Water Use	2
		1	Credit	Water Metering	1

0	1	6	Energ	gy and Atmosphere	33
Υ			Prereq	Fundamental Commissioning and Verification	Required
Υ			Prereq	Minimum Energy Performance	Required
Υ			Prereq	Building-Level Energy Metering	Required
Υ			Prereq	Fundamental Refrigerant Management	Required
		1	Credit	Enhanced Commissioning	6
		1	Credit	Optimize Energy Performance	18
		1	Credit	Advanced Energy Metering	1
		1	Credit	Demand Response	2
		1	Credit	Renewable Energy Production	3
		1	Credit	Enhanced Refrigerant Management	1
	1		Credit	Green Power and Carbon Offsets	2

Project Name: PSI Atlantic Arlington MA, LLC

Date: 15-Feb-22

0	4	1	Mater	ials and Resources	13
Υ			Prereq	Storage and Collection of Recyclables	Required
Υ			Prereq	Construction and Demolition Waste Management Planning	Required
		1	Credit	Building Life-Cycle Impact Reduction	5
	1		Credit	Building Product Disclosure and Optimization - Environmental Product Declarations	2
	1		Credit	Building Product Disclosure and Optimization - Sourcing of Raw Materials	2
	1		Credit	Building Product Disclosure and Optimization - Material Ingredients	2
	1		Credit	Construction and Demolition Waste Management	2

0	7	5	Indoo	r Environmental Quality	16
Υ			Prereq	Minimum Indoor Air Quality Performance	Required
Υ			Prereq	Environmental Tobacco Smoke Control	Required
		1	Credit	Enhanced Indoor Air Quality Strategies	2
	3		Credit	Low-Emitting Materials	3
		1	Credit	Construction Indoor Air Quality Management Plan	1
		1	Credit	Indoor Air Quality Assessment	2
	1		Credit	Thermal Comfort	1
	2		Credit	Interior Lighting	2
		1	Credit	Daylight	3
		1	Credit	Quality Views	1
	1		Credit	Acoustic Performance	1

1	0	1	Innovation	6
		1	Credit Innovation	5
1			Credit LEED Accredited Professional	1

0	0	4	Regional Priority	4
		1	Credit Regional Priority: Specific Credit	1
		1	Credit Regional Priority: Specific Credit	1
		1	Credit Regional Priority: Specific Credit	1
		1	Credit Regional Priority: Specific Credit	1

9 15 26 TOTALS Possible	Points: 110

Certified: 40 to 49 points, Silver: 50 to 59 points, Gold: 60 to 79 points, Platinum: 80 to 110



To: Jesse Morgan
Premier Storage Investors, LLC
530 Oak Court Drive, Suite 155
Memphis, TN 38117

Project #: 52816.00

From: Matt Kealey, PE, PTOE

Senior Project Manager

Re: 34 Dudley Street
Arlington, Massachusetts
Traffic Memorandum

Date: February 10, 2022

VHB has been retained by Premier Storage Investors, LLC (the "Proponent") to provide consulting services for a proposed self-storage/warehouse facility (the "Project") located at 34 Dudley Street in Arlington, Massachusetts. As part of the Project, VHB evaluated the following transportation-related elements of the Project:

- Trip Generation (as compared to the most recent use on the site);
- Trip Generation (as compared to comparable sites);
- Proposed parking supply (as compared to comparable sites);

The traffic evaluation has been conducted based on typical guidelines for the development of a traffic impact assessment, using trip generation estimates provided by the Institute of Transportation Engineers, and empirical traffic and parking data collected at other storage facilities.

Project Description

The Project site is located at 34 Dudley Street in Arlington, Massachusetts. The proposed self-storage facility involves the redevelopment of the existing 10,921 square foot (sf) auto repair building and 1,152 sf detached garage space (12,073 sf total). The Project involves the construction of a five-story, 95,706 sf self-storage warehouse building along with 11 surface parking spaces (one of which is accessible) on the site and 4 loading bays, for a total of 15 spaces for the facility. Access to the Site will be provided by a single curb cut on Dudley Street on the east side of the site. The existing curb cut on the west side of the site will be closed as part of the Project.

Trip Generation

As noted previously, the Site is currently occupied by an auto repair building and detached garage totaling 12,073 sf, which will be replaced by the proposed 95,706 sf self-storage warehouse building. In reviewing the appropriate Land Use Codes (LUC) offered by the Institute of Transportation Engineers (ITE) in the <u>Trip Generation Manual</u>, VHB considered that the current use of the site is best classified as Automobile Care Center (LUC 942) and that the self-storage facility is best classified as a Mini-Warehouse (LUC 151).

Table 1 provides for a comparison of the uses based on the ITE projections.

Page 2

Table 1: Trip Generation Comparison

		Vehicle Trips	
	Current Use ¹	Self-storage Use ²	Difference
Weekday AM			
Enter	18	5	-13
Exit	<u>9</u>	<u>4</u>	<u>-5</u>
Total	27	9	-18
Weekday PM			
•			
Enter	18	7	-11
Exit	<u>20</u>	<u>8</u>	<u>-12</u>
Total	38	15	-23

¹ Institute of Transportation Engineers (ITE) Trip Generation, Land Use Code 942 (Automobile Care Center) for 12,073 sf

As shown in Table 1, the proposed self-storage facility is expected to generate fewer peak hour trips to and from the site when compared to the current use.

Also, as part of this evaluation, VHB evaluated empirical data at three self-storage facilities. Weekday morning and weekday evening counts for two of the facilities, located at 490 Eastern Avenue and 650 Eastern Avenue in Malden, respectively, were done in May 2021. Daily data for the third facility, a CubeSmart located at 171 Bear Hill Road in Waltham, was collected from April 2020 to March 2021. Table 2 provides a comparison of trip generation for these existing facilities to the proposed Project.

² Institute of Transportation Engineers (ITE) Trip Generation, Land Use Code 151 (Mini-Warehouse) for 95,706 sf

Page 3

Table 2: Trip Generation Comparison – ITE vs. Empirical Data

		Vehicle	Trips	
	490 Eastern Avenue (Malden) 125,388 sf ¹	650 Eastern Avenue (Malden) 99,440 sf ¹	171 Bear Hill Road (Waltham) 111,921 sf ²	Proposed Project (Arlington) 95,694 sf ³
Weekday AM				
Enter	4	2	1	5
Exit	<u>1</u>	<u>2</u>	<u>1</u>	<u>4</u>
Total	5	9	2	9
Trip Generation Rate ⁴	0.04	0.09	0.02	0.09
Weekday PM				
Enter	2	2	1	7
Exit	<u>9</u>	<u>4</u>	<u>1</u>	<u>8</u>
Total	11	6	2	15
Trip Generation Rate	0.09	0.06	0.02	0.16

¹ Based on counts conducted in May 2021

As shown in Table 2, based on the traffic volumes counted at three comparable sites, the empirical trip generation rates are substantially lower than the ITE rates during the weekday evening peak period and equal or lower than the ITE rates during the weekday morning peak period. As such, it is likely that the ITE trip generation rates provide conservative projections of future traffic at the site.

Parking

As noted previously, the proposed project includes 11 parking spaces and 4 loading bays, for a total of 15 spaces on the site. Under the Zoning Ordinance, the parking requirement for the proposed use is 1 parking space per 1,000 SF of building area. In this case, the 95,694 sf of building space would translate to approximately 96 parking spaces on the site. Given the nature of the proposed self-storage facility use, the Proponent will be requesting a waiver from the parking requirement of the Zoning Bylaw as there are typically only one or two employees located at the site at any one time and the proposed use requires substantially less parking than the Zoning Ordinance requires for an industrial use.

To provide a comparison with empirical data, VHB reviewed parking demand counts collected in May 2021 at the same two comparable self-storage facilities located at 490 Eastern Avenue and 650 Eastern Avenue, respectively. These counts were conducted during the weekday morning peak period (7:00 AM to 9:00 AM) and the weekday

² Based on avg daily counts conducted from April 2020 to March 2021 with peak hour volumes calculated using ITE LUC 151 ratios between peak hour volumes and daily volume.

³ Institute of Transportation Engineers (ITE) Trip Generation, Land Use Code 151 (Mini-Warehouse) for 95,706 sf

⁴ Trip Generation Rate expressed in the number of trips per 1,000 sf.

Page 4

evening peak period (4:00 PM to 6:00 PM). Parking demand was documented in 15-minute intervals over the course of the two-hour count. The results of the parking counts are summarized in Table 3.

Table 3: Parking Comparison

	490 Eastern Avenue 125,388 sf ¹	650 Eastern Avenue 99,440 sf ¹
Weekday AM Maximum Observed Demand	5	2
Weekday PM Maximum Observed Demand	8	4

¹ Based on counts conducted in May 2021

As shown in Table 3, the peak parking demand was 5 vehicles during the weekday morning peak hour and 8 vehicles during the weekday evening peak hour. It is also important to note that both of these sites are larger than the proposed site, with 490 Eastern Avenue being substantially larger. The observed parking demand suggests that the proposed parking supply, which can accommodate 15 vehicles, should be more than adequate to accommodate the parking demand for the Project.

Transportation Demand Management (TDM)

Due to the nature of the proposed self-storage facility use, and the data supporting a low parking demand, the Proponent will be requesting a waiver from the parking requirement of the Zoning Bylaw. As stated in the Zoning Bylaw, "Any request for parking reduction must include a plan to reduce demand for parking...All projects requesting a parking reduction must employ at least three TDM strategies." Accordingly, the Proponent is proposing to implement the following TDM measures:

- Pay a stipend to workers without cars
- Provide preferential parking for carpooling vehicles
- Provide covered bicycle parking and storage

Conclusion

Based on the traffic and parking information outlined above, the Project is not expected to have a significant impact on the surrounding area roadways. The trip generation calculated for the Project based on ITE data shows a total of 9 trips (5 entering/4 exiting) during the weekday morning peak hour and 15 trips (7 entering/8 exiting) during the weekday evening peak hour. The trip generation for the Project is lower than the trip generation associated with the site's use as an auto repair facility. Further, empirical trip generation data collected at three similar self-storage

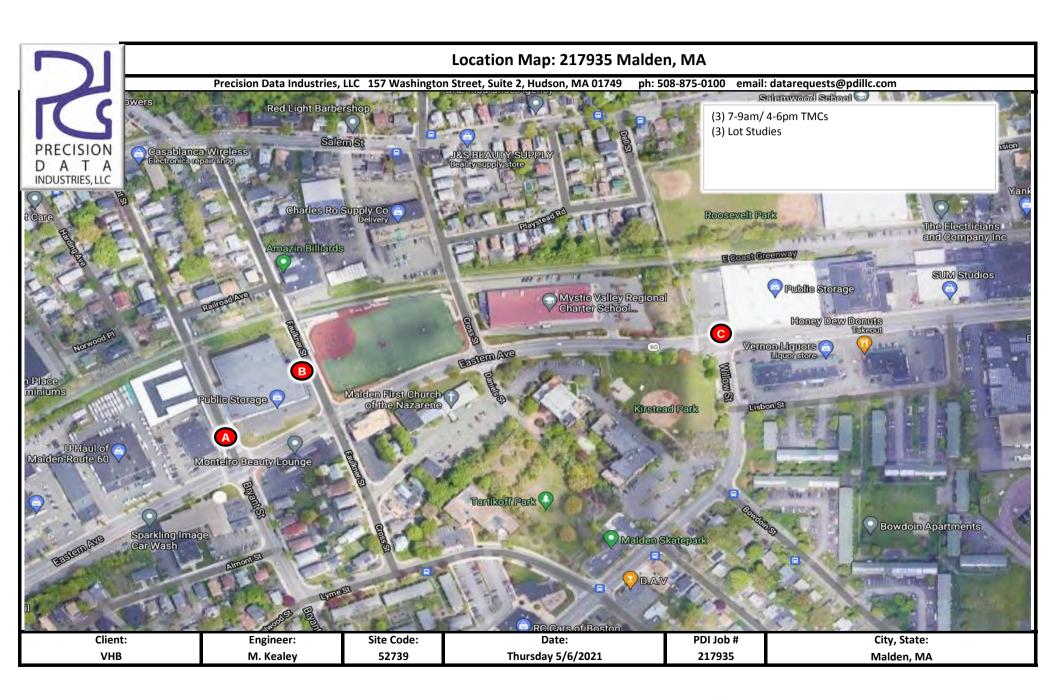
Page 5

facilities was lower than the ITE projections, which suggests that ITE data results in conservative projections. Lastly, parking counts conducted at comparable facilities showed a maximum parking demand of 5 vehicles during the weekday morning peak hour and 8 vehicles during the weekday evening peak hour, which suggests that the proposed parking supply of 15 spaces should be more than adequate to accommodate the parking demand for the Project.

Attachments

- Traffic Count Data
- Parking Count Data
- Trip Generation

Traffic Count Data



Location: N: Bryant Street S: Bryant Street Location: E: Public Storage Driveway

City, State: Malden, MA Client: VHB/ M. Kealey

Site Code: 52739

Count Date: Thursday, May 6, 2021

Start Time: 7:00 AM End Time: 9:00 AM

Class:



157 Washington Street, Suite 2 Hudson, MA 01749 Office: 508-875-0100 Fax: 508-875-0118 Email: datarequests@pdillc.com

Cars and Heavy Vehicles (Combined)

I				- 1					·				i e
		Bryant	Street		Р	ublic Stora	ge Driveway		Bryant Street				
		from I	North			from	East		from South				
	Thru	Left	U-Turn	Total	Right	Left	U-Turn	Total	Right	Thru	U-Turn	Total	Total
7:00 AM	21	1	0	22	0	0	0	0	0	0	0	0	22
7:15 AM	46	0	0	46	0	1	0	1	0	0	0	0	47
7:30 AM	38	0	0	38	0	0	0	0	0	0	0	0	38
7:45 AM	59	0	0	59	0	0	0	0	0	0	0	0	59
Total	164	1	0	165	0	1	0	1	0	0	0	0	166
8:00 AM	46	0	0	46	0	0	0	0	0	0	0	0	46
8:15 AM	57	0	0	57	0	1	0	1	0	0	0	0	58
8:30 AM	27	0	0	27	0	1	0	1	0	1	0	1	29
8:45 AM	30	0	0	30	0	1	0	1	0	1	0	1	32
Total	160	0	0	160	0	3	0	3	0	2	0	2	165
Grand Total	324	1	0	325	0	4	0	4	0	2	0	2	331
Approach %	99.7	0.3	0.0		0.0	100.0	0.0		0.0	100.0	0.0		
Total %	97.9	0.3	0.0	98.2	0.0	1.2	0.0	1.2	0.0	0.6	0.0	0.6	
Exiting Leg Total				2				1				328	331
Cars	312	1	0	313	0	4	0	4	0	2	0	2	319
% Cars	96.3	100.0	0.0	96.3	0.0	100.0	0.0	100.0	0.0	100.0	0.0	100.0	96.4
Exiting Leg Total				2				1				316	319
Heavy Vehicles	12	0	0	12	0	0	0	0	0	0	0	0	12
% Heavy Vehicles	3.7	0.0	0.0	3.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.6
Exiting Leg Total				0				0				12	12

7:30 AM		Bryant	Street		Public Storage Driveway				Bryant Street				
	from North			from East				from South					
	Thru	Left	U-Turn	Total	Right	Left	U-Turn	Total	Right	Thru	U-Turn	Total	Total
7:30 AM	38	0	0	38	0	0	0	0	0	0	0	0	38
7:45 AM	59	0	0	59	0	0	0	0	0	0	0	0	59
8:00 AM	46	0	0	46	0	0	0	0	0	0	0	0	46
8:15 AM	57	0	0	57	0	1	0	1	0	0	0	0	58
Total Volume	200	0	0	200	0	1	0	1	0	0	0	0	201
% Approach Total	100.0	0.0	0.0		0.0	100.0	0.0		0.0	0.0	0.0		
PHF	0.847	0.000	0.000	0.847	0.000	0.250	0.000	0.250	0.000	0.000	0.000	0.000	0.852
Cars	191	0	0	191	0	1	0	41	0	0	0	٥	192
Cars %	95.5	0.0	0.0	95.5	0.0	100.0	0 0.0	100.0	0.0	0.0	0.0	0.0	95.5
Heavy Vehicles	95.5	0.0	0.0	95.5	0.0	0.00	0.0	100.0	0.0	0.0	0.0	0.0	93.3
Heavy Vehicles %	4.5	0.0	0.0	4.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.5
Cars Enter Leg	191	0	0	191	0	1	0	1	0	0	0	0	192
Heavy Enter Leg	9	0	0	9	0	0	0	0	0	0	0	0	9
Total Entering Leg	200	0	0	200	0	1	0	1	0	0	0	0	201
Cars Exiting Leg				0				0				192	192
Heavy Exiting Leg				0				0				9	9
Total Exiting Leg				0				0				201	201

Location: N: Bryant Street S: Bryant Street
Location: E: Public Storage Driveway

City, State: Malden, MA
Client: VHB/ M. Kealey

Site Code: **52739**

Count Date: Thursday, May 6, 2021

Start Time: **7:00 AM**End Time: **9:00 AM**

Class:



157 Washington Street, Suite 2 Hudson, MA 01749 Office: 508-875-0100 Fax: 508-875-0118 Email: datarequests@pdillc.com

Cars

_							_						_
		Bryant	Street		P	ublic Stora	ge Driveway	′		Bryant	Street		
		from I	North			from	East			from	South		
	Thru	Left	U-Turn	Total	Right	Left	U-Turn	Total	Right	Thru	U-Turn	Total	Total
7:00 AM	21	1	0	22	0	0	0	0	0	0	0	0	22
7:15 AM	45	0	0	45	0	1	0	1	0	0	0	0	46
7:30 AM	37	0	0	37	0	0	0	0	0	0	0	0	37
7:45 AM	58	0	0	58	0	0	0	0	0	0	0	0	58
Total	161	1	0	162	0	1	0	1	0	0	0	0	163
8:00 AM	44	0	0	44	0	0	0	0	0	0	0	0	44
8:15 AM	52	0	0	52	0	1	0	1	0	0	0	0	53
8:30 AM	27	0	0	27	0	1	0	1	0	1	0	1	29
8:45 AM	28	0	0	28	0	1	0	1	0	1	0	1	30
Total	151	0	0	151	0	3	0	3	0	2	0	2	156
Grand Total	312	1	0	313	0	4	0	4	0	2	0	2	319
Approach %	99.7	0.3	0.0		0.0	100.0	0.0		0.0	100.0	0.0		I
Total %	97.8	0.3	0.0	98.1	0.0	1.3	0.0	1.3	0.0	0.6	0.0	0.6	
Exiting Leg Total				2				1				316	319

7:30 AM		Bryant	Street		Р	ublic Stora	ge Driveway	1		Bryant	Street		
		from I	North			from	East			from	South		
	Thru	Left	U-Turn	Total	Right	Left	U-Turn	Total	Right	Thru	U-Turn	Total	Total
7:30 AM	37	0	0	37	0	0	0	0	0	0	0	0	37
7:45 AM	58	0	0	58	0	0	0	0	0	0	0	0	58
8:00 AM	44	0	0	44	0	0	0	0	0	0	0	0	44
8:15 AM	52	0	0	52	0	1	0	1	0	0	0	0	53
Total Volume	191	0	0	191	0	1	0	1	0	0	0	0	192
% Approach Total	100.0	0.0	0.0		0.0	100.0	0.0		0.0	0.0	0.0		
PHF	0.823	0.000	0.000	0.823	0.000	0.250	0.000	0.250	0.000	0.000	0.000	0.000	0.828
Entering Leg	191	0	0	191	0	1	0	1	0	0	0	0	192
Exiting Leg				0				0				192	192
Total				191				1				192	384

Location: N: Bryant Street S: Bryant Street
Location: E: Public Storage Driveway

City, State: Malden, MA
Client: VHB/ M. Kealey

Site Code: **52739**

Count Date: Thursday, May 6, 2021

Start Time: 7:00 AM
End Time: 9:00 AM

Class:



157 Washington Street, Suite 2 Hudson, MA 01749 Office: 508-875-0100 Fax: 508-875-0118 Email: datarequests@pdillc.com

Heavy Vehicles-Combined (Buses, Single-Unit Trucks, Articulated Trucks)

		Bryant	Street		F	Public Stora	ge Driveway			Bryant	Street		
		from I	North			from	East			from	South		
	Thru	Left	U-Turn	Total	Right	Left	U-Turn	Total	Right	Thru	U-Turn	Total	Total
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	1	0	0	1	0	0	0	0	0	0	0	0	1
7:30 AM	1	0	0	1	0	0	0	0	0	0	0	0	1
7:45 AM	1	0	0	1	0	0	0	0	0	0	0	0	1
Total	3	0	0	3	0	0	0	0	0	0	0	0	3
8:00 AM	2	0	0	2	0	0	0	0	0	0	0	0	2
8:15 AM	5	0	0	5	0	0	0	0	0	0	0	0	5
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	2	0	0	2	0	0	0	0	0	0	0	0	2
Total	9	0	0	9	0	0	0	0	0	0	0	0	9
Grand Total	12	0	0	12	0	0	0	0	0	0	0	0	12
Approach %	100.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0	0.0		
Total %	100.0	0.0	0.0	100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Exiting Leg Total				0				0				12	12
Buses	8	0	0	8	0	0	0	0	0	0	0	0	8
% Buses	66.7	0.0	0.0	66.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	66.7
Exiting Leg Total				0				0				8	8
Single-Unit Trucks	4	0	0	4	0	0	0	0	0	0	0	0	4
% Single-Unit	33.3	0.0	0.0	33.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	33.3
Exiting Leg Total				0				0				4	4
Articulated Trucks	0	0	0	0	0	0	0	0	0	0	0	0	0
% Articulated	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Exiting Leg Total				0				0				0	0

7:30 AM		Bryant	Street		Р	ublic Stora	ge Driveway	•		Bryant	Street		
		from I	North			from	East			from	South		
	Thru	Left	U-Turn	Total	Right	Left	U-Turn	Total	Right	Thru	U-Turn	Total	Total
7:30 AM	1	0	0	1	0	0	0	0	0	0	0	0	1
7:45 AM	1	0	0	1	0	0	0	0	0	0	0	0	1
8:00 AM	2	0	0	2	0	0	0	0	0	0	0	0	2
8:15 AM	5	0	0	5	0	0	0	0	0	0	0	0	5
Total Volume	9	0	0	9	0	0	0	0	0	0	0	0	9
% Approach Total	100.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0	0.0		
PHF	0.450	0.000	0.000	0.450	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.450
Ducas		0	0	دا		0	0	٥	۱ ،	0	0	ام	
Buses Buses %	6	0	0	6	0	0	0	0		0	0	0	6
Single-Unit Trucks	66.7	0.0	0.0	66.7	0.0	0.0	0.0	0.0		0.0	0.0	0.0	66.7
ū	3	0	0	3	0	0	0	0	_	0	0	0	3
Single-Unit %	33.3	0.0	0.0	33.3	0.0	0.0	0.0	0.0		0.0	0.0	0.0	33.3
Articulated Trucks	0	0	0	0	0	0	0	0	0	0	0	0	0
Articulated %	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Buses	6	0	0	6	0	0	0	0	0	0	0	0	6
Single-Unit Trucks	3	0	0	3	0	0	0	0	0	0	0	0	3
Articulated Trucks	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Entering Leg	9	0	0	9	0	0	0	0	0	0	0	0	9
Buses				0				0				6	6
Single-Unit Trucks				0				0				3	3
Articulated Trucks				0				0				0	0
Total Exiting Leg				0				0				9	9

Location: N: Bryant Street S: Bryant Street Location: E: Public Storage Driveway

City, State: Malden, MA Client: VHB/ M. Kealey

Site Code: 52739

Thursday, May 6, 2021 Count Date:

Start Time: 7:00 AM End Time: 9:00 AM



157 Washington Street, Suite 2 Hudson, MA 01749 Office: 508-875-0100 Fax: 508-875-0118 Email: datarequests@pdillc.com

Buses

Class:						Bus	es						
		Bryant	Street		Р	ublic Storag	ge Driveway	,		Bryant	Street		
		from N	North			from	East			from :	South		
	Thru	Left	U-Turn	Total	Right	Left	U-Turn	Total	Right	Thru	U-Turn	Total	Total
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	1	0	0	1	0	0	0	0	0	0	0	0	1
7:45 AM	1	0	0	1	0	0	0	0	0	0	0	0	1
Total	2	0	0	2	0	0	0	0	0	0	0	0	2
8:00 AM	1	0	0	1	0	0	0	0	0	0	0	0	1
8:15 AM	3	0	0	3	0	0	0	0	0	0	0	0	3
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	2	0	0	2	0	0	0	0	0	0	0	0	2
Total	6	0	0	6	0	0	0	0	0	0	0	0	6
Grand Total	8	0	0	8	0	0	0	0	0	0	0	0	8
Approach %	100.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0	0.0		
Total %	100.0	0.0	0.0	100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Exiting Leg Total		·		0		·		0				8	8

													ľ
7:30 AM		Bryant	Street		P	ublic Stora	ge Driveway			Bryant	Street		
		from I	North			from	East			from	South		
	Thru	Left	U-Turn	Total	Right	Left	U-Turn	Total	Right	Thru	U-Turn	Total	Total
7:30 AM	1	0	0	1	0	0	0	0	0	0	0	0	1
7:45 AM	1	0	0	1	0	0	0	0	0	0	0	0	1
8:00 AM	1	0	0	1	0	0	0	0	0	0	0	0	1
8:15 AM	3					0	0	0	0	0	0	0	3
Total Volume	6	0	0	6	0	0	0	0	0	0	0	0	6
% Approach Total	100.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0	0.0		
PHF	0.500	0.000	0.000	0.500	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.500
Entering Leg	6	0	0	6	0	0	0	0	0	0	0	0	6
Exiting Leg				0				0				6	6
Total				6				0				6	12

Location: N: Bryant Street S: Bryant Street Location: E: Public Storage Driveway

City, State: Malden, MA Client: VHB/ M. Kealey

Site Code: 52739

Count Date: Thursday, May 6, 2021

Start Time: 7:00 AM End Time: 9:00 AM



157 Washington Street, Suite 2 Hudson, MA 01749 Office: 508-875-0100 Fax: 508-875-0118 Email: datarequests@pdillc.com

Single-Unit Trucks

Class:					S	ingle-Un	it Trucks						
		Bryant	Street		P	ublic Storล _์	ge Driveway			Bryant	Street		
		from N	North			from	East			from S	South		
	Thru	Left	U-Turn	Total	Right	Left	U-Turn	Total	Right	Thru	U-Turn	Total	Total
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	1	0	0	1	0	0	0	0	0	0	0	0	1
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	1	0	0	1	0	0	0	0	0	0	0	0	1
8:00 AM	1	0	0	1	0	0	0	0	0	0	0	0	1
8:15 AM	2	0	0	2	0	0	0	0	0	0	0	0	2
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	3	0	0	3	0	0	0	0	0	0	0	0	3
Grand Total	4	0	0	4	0	0	0	0	0	0	0	0	4
Approach %	100.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0	0.0		
Total %	100.0	0.0	0.0	100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Exiting Leg Total				0		·		0				4	4

													ľ
7:30 AM		Bryant	Street		P	ublic Stora	ge Driveway	,		Bryant	Street		
		from I	North			from	East			from	South		
	Thru	Left	U-Turn	Total	Right	Left	U-Turn	Total	Right	Thru	U-Turn	Total	Total
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	1	0	0	1	0	0	0	0	0	0	0	0	1
8:15 AM	2	0	0	2	0	0	0	0	0	0	0	0	2
Total Volume	3	0	0	3	0	0	0	0	0	0	0	0	3
% Approach Total	100.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0	0.0		
PHF	0.375	0.000	0.000	0.375	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.375
Entering Leg	3	0	0	3	0	0	0	0	0	0	0	0	3
Exiting Leg				0				0				3	3
Total				3				0				3	6

Location: N: Bryant Street S: Bryant Street Location: E: Public Storage Driveway

City, State: Malden, MA Client: VHB/ M. Kealey

Site Code: 52739

Count Date: Thursday, May 6, 2021

Start Time: 7:00 AM End Time: 9:00 AM



157 Washington Street, Suite 2 Hudson, MA 01749 Office: 508-875-0100 Fax: 508-875-0118 Email: datarequests@pdillc.com

Articulated Trucks

Class:					A	Articulate	d Trucks						
		Bryant	Street		Pi	ublic Storลยู	ge Driveway			Bryant	Street		
		from N	North			from	East			from :	South		
	Thru	Left	U-Turn	Total	Right	Left	U-Turn	Total	Right	Thru	U-Turn	Total	Total
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0
Grand Total	0	0	0	0	0	0	0	0	0	0	0	0	0
Approach %	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0	0.0		
Total %	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Exiting Leg Total				0		·		0				0	0

7:00 AM		Bryant	Street		P	ublic Stora	ge Driveway	•		Bryant	Street		
		from I	North			from	East			from	South		
	Thru	Left	U-Turn	Total	Right	Left	U-Turn	Total	Right	Thru	U-Turn	Total	Total
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	0	0	0	0	0	0	0	0	0	0	0	0	0
% Approach Total	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0	0.0		
PHF	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Entering Leg	0	0	0	0	0	0	0	0	0	0	0	0	0
Exiting Leg				0				0				0	0
Total				0				0				0	0

Location: N: Bryant Street S: Bryant Street

Location: E: Public Storage Driveway

City, State: Malden, MA Client: VHB/ M. Kealey

Site Code: 52739

Count Date: Thursday, May 6, 2021

Start Time: 7:00 AM End Time: 9:00 AM



157 Washington Street, Suite 2 Hudson, MA 01749 Office: 508-875-0100 Fax: 508-875-0118 Email: datarequests@pdillc.com

Class:							Bicycle	s (on F	Roadw	ay and	Cross	walks)							
			Bryant	Street				Publ	ic Stora	ge Drive	way				Bryant	Street			
			from I	North					from	East					from	South			
	Thru	Left	U-Turn	CW-EB	CW-WB	Total	Right	Left	U-Turn	CW-SB	CW-NB	Total	Right	Thru	U-Turn	CW-WB	CW-EB	Total	Total
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	1
7:45 AM	0	0	0	0	0	0		0	0	0	0	0	0	1	0	0	0	1	1
Total	0	0	0	0	0	0	0	0	0	1	0	1	0	1	0	0	0	1	2
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Grand Total	0	0	0	0	0	0	0	0	0	1	0	1	0	1	0	0	0	1	2
Approach %	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	100.0	0.0		0.0	100.0	0.0	0.0	0.0		
Total %	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	50.0	0.0	50.0	0.0	50.0	0.0	0.0	0.0	50.0	
Exiting Leg Total						1						1						0	2

7:00 AM			Bryant	Street				Publ	ic Stora	ge Drive	way				Bryant	Street			
			from	North					from	East					from	South			
	Thru	Left	U-Turn	CW-EB	CW-WB	Total	Right	Left	U-Turn	CW-SB	CW-NB	Total	Right	Thru	U-Turn	CW-WB	CW-EB	Total	Total
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	1
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	1
Total Volume	0	0	0	0	0	0	0	0	0	1	0	1	0	1	0	0	0	1	2
% Approach Total	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	100.0	0.0		0.0	100.0	0.0	0.0	0.0		
PHF	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.250	0.000	0.250	0.000	0.250	0.000	0.000	0.000	0.250	0.500
Entering Leg	0	0	0	0	0	0	0	0	0	1	0	1	0	1	0	0	0	1	2
Exiting Leg						1						1						0	2
Total			•	•	•	1		•		•	•	2					•	1	4

Location: N: Bryant Street S: Bryant Street

Location: E: Public Storage Driveway

City, State: Malden, MA
Client: VHB/ M. Kealey

Site Code: **52739**

Count Date: Thursday, May 6, 2021

Start Time: **7:00 AM**End Time: **9:00 AM**

Class:



157 Washington Street, Suite 2 Hudson, MA 01749 Office: 508-875-0100 Fax: 508-875-0118 Email: datarequests@pdillc.com

Pedestrians

	Bryant Street							Public Storage Driveway						Bryant Street					
	from North						from East						from South						
	Thru	Left	U-Turn	CW-EB	CW-WB	Total	Right	Left	U-Turn	CW-SB	CW-NB	Total	Right	Thru	U-Turn	CW-WB	CW-EB	Total	Total
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	1
7:30 AM	0	0	0	0	0	0	0	0	0	0	2	2	0	0	0	0	0	0	2
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	3	3	0	0	0	0	0	0	3
8:00 AM	0	0	0	0	0	0	0	0	0	0	2	2	0	0	0	0	0	0	2
8:15 AM	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	1
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	1
Total	0	0	0	0	0	0	0	0	0	1	3	4	0	0	0	0	0	0	4
ĺ																			l
Grand Total	0	0	0	0	0	0	0	0	0	1	6	7	0	0	0	0	0	0	7
Approach %	0	0	0	0	0		0	0	0	14.286	85.714		0	0	0	0	0		
Total %	0	0	0	0	0	0	0	0	0	14.286	85.714	100	0	0	0	0	0	0	
Exiting Leg Total						0						7						0	7

7:15 AM		Bryant Street						Public Storage Driveway						Bryant Street					
	from North						from East						from South						
	Thru	Left	U-Turn	CW-EB	CW-WB	Total	Right	Left	U-Turn	CW-SB	CW-NB	Total	Right	Thru	U-Turn	CW-WB	CW-EB	Total	Total
7:15 AM	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	1
7:30 AM	0	0	0	0	0	0	0	0	0	0	2	2	0	0	0	0	0	0	2
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0	0	2	2	0	0	0	0	0	0	2
Total Volume	0	0	0	0	0	0	0	0	0	0	5	5	0	0	0	0	0	0	5
% Approach Total	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	100.0		0.0	0.0	0.0	0.0	0.0		
PHF	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.625	0.625	0.000	0.000	0.000	0.000	0.000	0.000	0.625
Entering Leg	0	0	0	0	0	0	0	0	0	0	5	5	0	0	0	0	0	0	5
Exiting Leg						0						5						0	5
Total						0						10						0	10

Location: N: Bryant Street S: Bryant Street Location: E: Public Storage Driveway

City, State: Malden, MA Client: VHB/ M. Kealey

Site Code: 52739

Count Date: Thursday, May 6, 2021

Start Time: 4:00 PM End Time: 6:00 PM

Class:



157 Washington Street, Suite 2 Hudson, MA 01749 Office: 508-875-0100 Fax: 508-875-0118 Email: datarequests@pdillc.com

Cars and Heavy Vehicles (Combined)

		Bryant	Street		P		ge Driveway						
		from I				East							
	Thru	Left	U-Turn	Total	Right	Left	U-Turn	Total	Right	Thru	U-Turn	Total	Total
4:00 PM	47	0	0	47	0	0	0	0	0	1	0	1	48
4:15 PM	32	1	0	33	0	1	0	1	0	0	0	0	34
4:30 PM	35	0	0	35	0	0	0	0	0	1	0	1	36
4:45 PM	31	0	0	31	0	0	0	0	0	0	0	0	31
Total	145	1	0	146	0	1	0	1	0	2	0	2	149
5:00 PM	33	0	0	33	0	4	0	4	0	0	0	0	37
5:15 PM	46	0	0	46	0	0	0	0	0	0	0	0	46
5:30 PM	32	0	0	32	0	0	0	0	0	0	0	0	32
5:45 PM	36	0	0	36	0	0	0	0	0	0	0	0	36
Total	147	0	0	147	0	4	0	4	0	0	0	0	151
Grand Total	292	1	0	293	0	5	0	5	0	2	0	2	300
Approach %	99.7	0.3	0.0		0.0	100.0	0.0		0.0	100.0	0.0		
Total %	97.3	0.3	0.0	97.7	0.0	1.7	0.0	1.7	0.0	0.7	0.0	0.7	
Exiting Leg Total				2				1				297	300
Cars	286	1	0	287	0	5	0	5	0	2	0	2	294
% Cars	97.9	100.0	0.0	98.0	0.0	100.0	0.0	100.0	0.0	100.0	0.0	100.0	98.0
Exiting Leg Total				2				1				291	294
Heavy Vehicles	6	0	0	6	0	0	0	0	0	0	0	0	6
% Heavy Vehicles	2.1	0.0	0.0	2.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.0
Exiting Leg Total				0				0				6	6

5:00 PM		Bryant	Street		Р	ublic Storag	ge Driveway						
		from N	lorth			from	East						
	Thru	Left	U-Turn	Total	Right	Left	U-Turn	Total	Right	Thru	U-Turn	Total	Total
5:00 PM	33	0	0	33	0	4	0	4	0	0	0	0	37
5:15 PM	46	0	0	46	0	0	0	0	0	0	0	0	46
5:30 PM	32	0	0	32	0	0	0	0	0	0	0	0	32
5:45 PM	36	0	0	36	0	0	0	0	0	0	0	0	36
Total Volume	147	0	0	147	0	4	0	4	0	0	0	0	151
% Approach Total	100.0	0.0	0.0		0.0	100.0	0.0		0.0	0.0	0.0		
PHF	0.799	0.000	0.000	0.799	0.000	0.250	0.000	0.250	0.000	0.000	0.000	0.000	0.821
Cars	146	0	0	146	0	4	0	4	0	0	0	ام	150
Cars %	99.3	0.0	0.0	99.3	0.0	100.0	0.0	100.0	0.0	0.0	0.0	0.0	99.3
Heavy Vehicles	1	0	0	1	0	0	0	0	0	0	0	0	1
Heavy Vehicles %	0.7	0.0	0.0	0.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.7
Cars Enter Leg	146	0	0	146	0	4	0	4	0	0	0	0	150
Heavy Enter Leg	1	0	0	1	0	0	0	0	0	0	0	0	1
Total Entering Leg	147	0	0	147	0	4	0	4	0	0	0	0	151
Cars Exiting Leg				0				0				150	150
Heavy Exiting Leg				0				0				1	1
Total Exiting Leg				0				0				151	151

Location: N: Bryant Street S: Bryant Street Location: E: Public Storage Driveway

City, State: Malden, MA Client: VHB/ M. Kealey

Site Code: 52739

Count Date: Thursday, May 6, 2021

Start Time: 4:00 PM End Time: 6:00 PM



157 Washington Street, Suite 2 Hudson, MA 01749 Office: 508-875-0100 Fax: 508-875-0118 Email: datarequests@pdillc.com

Cars

Class:						Ca	rs						
		Bryant	Street		Р	ublic Stora	ge Driveway	'		Bryant	Street		
		from N	North			from	East			from	South		
	Thru	Left	U-Turn	Total	Right	Left	U-Turn	Total	Right	Thru	U-Turn	Total	Total
4:00 PM	45	0	0	45	0	0	0	0	0	1	0	1	46
4:15 PM	31	1	0	32	0	1	0	1	0	0	0	0	33
4:30 PM	34	0	0	34	0	0	0	0	0	1	0	1	35
4:45 PM	30	0	0	30	0	0	0	0	0	0	0	0	30
Total	140	1	0	141	0	1	0	1	0	2	0	2	144
5:00 PM	32	0	0	32	0	4	0	4	0	0	0	0	36
5:15 PM	46	0	0	46	0	0	0	0	0	0	0	0	46
5:30 PM	32	0	0	32	0	0	0	0	0	0	0	0	32
5:45 PM	36	0	0	36	0	0	0	0	0	0	0	0	36
Total	146	0	0	146	0	4	0	4	0	0	0	0	150
Grand Total	286	1	0	287	0	5	0	5	0	2	0	2	294
Approach %	99.7	0.3	0.0		0.0	100.0	0.0		0.0	100.0	0.0		
Total %	97.3	0.3	0.0	97.6	0.0	1.7	0.0	1.7	0.0	0.7	0.0	0.7	
Exiting Leg Total				2				1				291	294

5:00 PM		Bryant	Street		Р	ublic Stora	ge Driveway	/		Bryant	Street		
		from	North			from	East			from	South		
	Thru	Left	U-Turn	Total	Right	Left	U-Turn	Total	Right	Thru	U-Turn	Total	Total
5:00 PM	32	0	0	32	0	4	0	4	0	0	0	0	36
5:15 PM	46	0	0	46	0	0	0	0	0	0	0	0	46
5:30 PM	32	0	0	32	0	0	0	0	0	0	0	0	32
5:45 PM	36	0	0	36	0	0	0	0	0	0	0	0	36
Total Volume	146	0	0	146	0	4	0	4	0	0	0	0	150
% Approach Total	100.0	0.0	0.0		0.0	100.0	0.0		0.0	0.0	0.0		
PHF	0.793	0.000	0.000	0.793	0.000	0.250	0.000	0.250	0.000	0.000	0.000	0.000	0.815
Entering Leg	146	0	0	146	0	4	0	4	0	0	0	0	150
Exiting Leg				0				0				150	150
Total				146		•	•	4			•	150	300

Location: N: Bryant Street S: Bryant Street
Location: E: Public Storage Driveway

City, State: Malden, MA
Client: VHB/ M. Kealey

Site Code: **52739**

Count Date: Thursday, May 6, 2021

Start Time: 4:00 PM
End Time: 6:00 PM

Class:



157 Washington Street, Suite 2 Hudson, MA 01749 Office: 508-875-0100 Fax: 508-875-0118 Email: datarequests@pdillc.com

Heavy Vehicles-Combined (Buses, Single-Unit Trucks, Articulated Trucks)

		Bryant	Street			Public Stora	ge Driveway			Bryant	Street		
		from I	North			from	East			from	South		
	Thru	Left	U-Turn	Total	Right	Left	U-Turn	Total	Right	Thru	U-Turn	Total	Total
4:00 PM	2	0	0	2	0	0	0	0	0	0	0	0	2
4:15 PM	1	0	0	1	0	0	0	0	0	0	0	0	1
4:30 PM	1	0	0	1	0	0	0	0	0	0	0	0	1
4:45 PM	1	0	0	1	0	0	0	0	0	0	0	0	1
Total	5	0	0	5	0	0	0	0	0	0	0	0	5
5:00 PM	1	0	0	1	0	0	0	0	0	0	0	0	1
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	1	0	0	1	0	0	0	0	0	0	0	0	1
Grand Total	6	0	0	6	0	0	0	0	0	0	0	0	6
Approach %	100.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0	0.0		
Total %	100.0	0.0	0.0	100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Exiting Leg Total				0				0				6	6
Buses	2	0	0	2	0	0	0	0	0	0	0	0	2
% Buses	33.3	0.0	0.0	33.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	33.3
Exiting Leg Total				0				0				2	2
Single-Unit Trucks	4	0	0	4	0	0	0	0	0	0	0	0	4
% Single-Unit	66.7	0.0	0.0	66.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	66.7
Exiting Leg Total				0				0				4	4
Articulated Trucks	0	0	0	0	0	0	0	0	0	0	0	0	0
% Articulated	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Exiting Leg Total				0				0				0	0

4:00 PM		Bryant	Street		Р	ublic Storag	ge Driveway			Bryant	Street		ı
		from N	North			from	East			from	South		
	Thru	Left	U-Turn	Total	Right	Left	U-Turn	Total	Right	Thru	U-Turn	Total	Total
4:00 PM	2	0	0	2	0	0	0	0	0	0	0	0	2
4:15 PM	1	0	0	1	0	0	0	0	0	0	0	0	1
4:30 PM	1	0	0	1	0	0	0	0	0	0	0	0	1
4:45 PM	1	0	0	1	0	0	0	0	0	0	0	0	1
Total Volume	5	0	0	5	0	0	0	0	0	0	0	0	5
% Approach Total	100.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0	0.0		
PHF	0.625	0.000	0.000	0.625	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.625
Buses	1	0	0	1	0	0	0	0	0	0	0	0	1
Buses %	20.0	0.0	0.0	20.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	20.0
Single-Unit Trucks	4	0	0	4	0	0	0	0	0	0	0	0	4
Single-Unit %	80.0	0.0	0.0	80.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	80.0
Articulated Trucks	0	0	0	0	0	0	0	0	0	0	0	0	0
Articulated %	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Buses	1	0	0	1	0	0	0	0	0	0	0	0	1
Single-Unit Trucks	4	0	0	4	0	0	0	0	0	0	0	0	4
Articulated Trucks	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Entering Leg	5	0	0	5	0	0	0	0	0	0	0	0	5
Buses				0				0				1	1
Single-Unit Trucks				0				0				4	4
Articulated Trucks				0				0				0	0
Total Exiting Leg				0				0				5	5

N: Bryant Street S: Bryant Street Location: Location: E: Public Storage Driveway

City, State: Malden, MA Client: VHB/ M. Kealey

Site Code: 52739

Thursday, May 6, 2021 Count Date:

Start Time: 4:00 PM End Time: 6:00 PM



157 Washington Street, Suite 2 Hudson, MA 01749 Office: 508-875-0100 Fax: 508-875-0118 Email: datarequests@pdillc.com

Buses

Class:						Bus	ses						
		Bryant	Street		Р	ublic Stora	ge Driveway	1		Bryant	Street		
		from I	North			from	East			from	South		1
	Thru	Left	U-Turn	Total	Right	Left	U-Turn	Total	Right	Thru	U-Turn	Total	Total
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	1	0	0	1	0	0	0	0	0	0	0	0	1
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	1	0	0	1	0	0	0	0	0	0	0	0	1
5:00 PM	1	0	0	1	0	0	0	0	0	0	0	0	1
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	1	0	0	1	0	0	0	0	0	0	0	0	1
-	•								•			,	i
Grand Total	2	0	0	2	0	0	0	0	0	0	0	0	2
Approach %	100.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0	0.0		
Total %	100.0	0.0	0.0	100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Exiting Leg Total				0				0				2	2

4.4E DN4		Bryant	Stroot		D	ublic Stora	ge Driveway	,		Bryant	Street		•
4:15 PM		bi yant	Street		Г	ublic Stol a	ge Diiveway			Di yant	Jueer		
		from	North			from	East			from	South		
	Thru	Left	U-Turn	Total	Right	Left	U-Turn	Total	Right	Thru	U-Turn	Total	Total
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	1	0	0	1	0	0	0	0	0	0	0	0	1
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	1	0	0	1	0	0	0	0	0	0	0	0	1
Total Volume	2	0	0	2	0	0	0	0	0	0	0	0	2
% Approach Total	100.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0	0.0		
PHF	0.500	0.000	0.000	0.500	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.500
Entering Leg	2	0	0	2	0	0	0	0	0	0	0	0	2
Exiting Leg				0				0				2	2
Total				2				0				2	4

Location: N: Bryant Street S: Bryant Street Location: E: Public Storage Driveway

City, State: Malden, MA Client: VHB/ M. Kealey

Site Code: 52739

Count Date: Thursday, May 6, 2021

Start Time: 4:00 PM End Time: 6:00 PM



157 Washington Street, Suite 2 Hudson, MA 01749 Office: 508-875-0100 Fax: 508-875-0118 Email: datarequests@pdillc.com

Single-Unit Trucks

Class:					S	Single-Un	it Trucks						
		Bryant	Street		P	ublic Storล _์	ge Driveway			Bryant	Street		
		from N	North			from	East			from S	South		
	Thru	Left	U-Turn	Total	Right	Left	U-Turn	Total	Right	Thru	U-Turn	Total	Total
4:00 PM	2	0	0	2	0	0	0	0	0	0	0	0	2
4:15 PM	1	0	0	1	0	0	0	0	0	0	0	0	1
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	1	0	0	1	0	0	0	0	0	0	0	0	1
Total	4	0	0	4	0	0	0	0	0	0	0	0	4
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0
Grand Total	4	0	0	4	0	0	0	0	0	0	0	0	4
Approach %	100.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0	0.0		
Total %	100.0	0.0	0.0	100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Exiting Leg Total		•		0		•	•	0		•		4	4

4:00 PM		Bryant	Street		Р	ublic Stora	ge Driveway	1		Bryant	Street		
		from	North			from	East			from	South		
	Thru	Left	U-Turn	Total	Right	Left	U-Turn	Total	Right	Thru	U-Turn	Total	Total
4:00 PM	2	0	0	2	0	0	0	0	0	0	0	0	2
4:15 PM	1	0	0	1	0	0	0	0	0	0	0	0	1
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	1	0	0	1	0	0	0	0	0	0	0	0	1
Total Volume	4	0	0	4	0	0	0	0	0	0	0	0	4
% Approach Total	100.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0	0.0		
PHF	0.500	0.000	0.000	0.500	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.500
Entering Leg			•	اء		•	•		۱ .	•		٥	
Entering Leg	4	0	0	4	0	0	0	0	0	0	0	0	4
Exiting Leg				0				0				4	4
Total				4				0				4	8

Location: N: Bryant Street S: Bryant Street Location: E: Public Storage Driveway

City, State: Malden, MA Client: VHB/ M. Kealey

Site Code: 52739

Count Date: Thursday, May 6, 2021

Start Time: 4:00 PM End Time: 6:00 PM



157 Washington Street, Suite 2 Hudson, MA 01749 Office: 508-875-0100 Fax: 508-875-0118 Email: datarequests@pdillc.com

Articulated Trucks

Class:					A	Articulate	ed Trucks						
		Bryant	Street		Р	ublic Stora	ge Driveway	,		Bryant	Street		
		from I	North			from	East			from :	South		
	Thru	Left	U-Turn	Total	Right	Left	U-Turn	Total	Right	Thru	U-Turn	Total	Total
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0
Grand Total	0	0	0	0	0	0	0	0	0	0	0	0	0
Approach %	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0	0.0		
Total %	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Exiting Leg Total		·	·	0		·	·	0		·	·	0	0

4:00 PM		Bryant	Street		F	ublic Stora	ge Driveway	1		Bryant	Street		
		from I	North			from	East			from	South		
	Thru	Left	U-Turn	Total	Right	Left	U-Turn	Total	Right	Thru	U-Turn	Total	Total
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	0	0	0	0	0	0	0	0	0	0	0	0	0
% Approach Total	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0	0.0		
PHF	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Entering Leg	0	0	0	0	0	0	0	0	0	0	0	0	0
Exiting Leg				0				0				0	0
Total				0				0				0	0

N: Bryant Street S: Bryant Street Location:

Location: E: Public Storage Driveway

City, State: Malden, MA Client: VHB/ M. Kealey

Site Code: 52739

Count Date: Thursday, May 6, 2021

Start Time: 4:00 PM End Time: 6:00 PM



157 Washington Street, Suite 2 Hudson, MA 01749 Office: 508-875-0100 Fax: 508-875-0118 Email: datarequests@pdillc.com

Bicycles (on Roadway and Crosswalks)

Class:							Bicycle	s (on F	Roadw	ay and	Cross	walks)							
			Bryant	Street				Publ	ic Stora	ge Drive	way				Bryant	Street			
			from	North					from	East					from	South			
	Thru	Left	U-Turn	CW-EB	CW-WB	Total	Right	Left	U-Turn	CW-SB	CW-NB	Total	Right	Thru	U-Turn	CW-WB	CW-EB	Total	Total
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	2	2	0	0	0	0	0	0	2
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	2	2	0	0	0	0	0	0	2
Grand Total	0	0	0	0	0	0	0	0	0	0	2	2	0	0	0	0	0	0	2
Approach %	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	100.0		0.0	0.0	0.0	0.0	0.0		
Total %	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0	100.0	0.0	0.0	0.0	0.0	0.0	0.0	
Exiting Leg Total						0						2						0	2

																			_
4:30 PM			Bryant	Street				Publ	ic Stora	ge Drive	way				Bryant	Street			
			from	North					from	East					from	South			
	Thru	Left	U-Turn	CW-EB	CW-WB	Total	Right	Left	U-Turn	CW-SB	CW-NB	Total	Right	Thru	U-Turn	CW-WB	CW-EB	Total	Total
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	2	2	0	0	0	0	0	0	2
Total Volume	0	0	0	0	0	0	0	0	0	0	2	2	0	0	0	0	0	0	2
% Approach Total	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	100.0		0.0	0.0	0.0	0.0	0.0		
PHF	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.250	0.250	0.000	0.000	0.000	0.000	0.000	0.000	0.250
		_		_	_	_		_	_	_	_	_1	l _	_		_	_	_	
Entering Leg	0	0	0	0	0	0	0	0	0	0	2	2	0	0	0	0	0	0	2
Exiting Leg						0						2						0	2
Total						0						4						0	4

Location: N: Bryant Street S: Bryant Street

Location: E: Public Storage Driveway

City, State: Malden, MA
Client: VHB/ M. Kealey

Site Code: **52739**

Count Date: Thursday, May 6, 2021

Start Time: 4:00 PM
End Time: 6:00 PM

Class:



157 Washington Street, Suite 2 Hudson, MA 01749 Office: 508-875-0100 Fax: 508-875-0118 Email: datarequests@pdillc.com

Pedestrians

			Bryant	Street				Publ	ic Stora	ge Drive	way				Bryant	Street			
			from	North					from	East					from S	South			
	Thru	Left	U-Turn	CW-EB	CW-WB	Total	Right	Left	U-Turn	CW-SB	CW-NB	Total	Right	Thru	U-Turn	CW-WB	CW-EB	Total	Total
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	1
4:30 PM	0	0	0	0	0	0	0	0	0	1	1	2	0	0	0	0	0	0	2
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	2	1	3	0	0	0	0	0	0	3
5:00 PM	0	0	0	0	0	0	0	0	0	2	0	2	0	0	0	2	0	2	4
5:15 PM	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	1
5:30 PM	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	1
5:45 PM	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	1
Total	0	0	0	0	0	0	0	0	0	3	2	5	0	0	0	2	0	2	7
Grand Total	0	0	0	0	0	0	0	0	0	5	3	8	0	0	0	2	0	2	10
Approach %	0	0	0	0	0		0	0	0	62.5	37.5		0	0	0	100	0		
Total %	0	0	0	0	0	0	0	0	0	50	30	80	0	0	0	20	0	20	
Exiting Leg Total						0						8						2	10

4:15 PM			Bryant	Street				Pub	ic Stora	ge Drive	way				Bryant	Street			
			from	North					from	East					from	South			
	Thru	Left	U-Turn	CW-EB	CW-WB	Total	Right	Left	U-Turn	CW-SB	CW-NB	Total	Right	Thru	U-Turn	CW-WB	CW-EB	Total	Total
4:15 PM	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	1
4:30 PM	0	0	0	0	0	0	0	0	0	1	1	2	0	0	0	0	0	0	2
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0	2	0	2	0	0	0	2	0	2	4
Total Volume	0	0	0	0	0	0	0	0	0	4	1	5	0	0	0	2	0	2	7
% Approach Total	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	80.0	20.0		0.0	0.0	0.0	100.0	0.0		
PHF	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.500	0.250	0.625	0.000	0.000	0.000	0.250	0.000	0.250	0.438
Entering Leg	0	0	0	0	0	0	0	0	0	4	1	5	0	0	0	2	0	2	7
Exiting Leg						0						5						2	7
Total						0						10						4	14

Location: N: Faulkner Street S: Faulkner Street

Location: W: Public Storage Parking Area SW: Public Storage Front Lot

City, State: Malden, MA
Client: VHB/ M. Kealey

Site Code: **52739**

Class:

Count Date: Thursday, May 6, 2021

Start Time: 7:00 AM
End Time: 9:00 AM



157 Washington Street, Suite 2 Hudson, MA 01749 Office: 508-875-0100 Fax: 508-875-0118 Email: datarequests@pdillc.com

Cars and Heavy Vehicles (Combined)

		Fa	ulkner Stre	et			Fa	ulkner Stree	et	-	-		Storage Fro	nt Lot			Public S	torage Parki	ing Area		
		1	from North					from South				fro	om Southwe	est				from West			
	Right	Bear Right	Thru	U-Turn	Total	Thru	Left	Hard Left	U-Turn	Total	Hard Right	Bear Left	Hard Left	U-Turn	Total	Hard Right	Right	Left	U-Turn	Total	Total
7:00 AM	0	0	0	0	0	28	2	0	0	30	0	0	0	0	0	0	0	1	0	1	31
7:15 AM	0	0	0	0	0	26	0	0	0	26	0	0	0	0	0	0	0	0	0	0	26
7:30 AM	0	0	1	0	1	47	0	0	0	47	0	0	0	0	0	0	0	0	0	0	48
7:45 AM	0	0	0	0	0	74	0	0	0	74	0	0	0	0	0	0	0	0	0	0	74
Total	0	0	1	0	1	175	2	0	0	177	0	0	0	0	0	0	0	1	0	1	179
8:00 AM	0	0	0	0	0	58	0	0	0	58	0	0	0	0	0	0	0	0	0	0	58
8:15 AM	0	0	0	0	0	34	2	2	0	38	0	0	0	0	0	0	0	0	0	0	38
8:30 AM	0	0	0	0	0	36	0	1	0	37	0	0	0	0	0	0	0	0	0	0	37
8:45 AM	0	0	0	0	0	19	1	0	0	20	0	0	0	0	0	0	0	0	0	0	20
Total	0	0	0	0	0	147	3	3	0	153	0	0	0	0	0	0	0	0	0	0	153
Grand Total	0	0	1	0	1	322	5	3	0	330	0	0	0	0	0	0	0	1	0	1	332
Approach %	0.0	0.0	100.0	0.0		97.6	1.5	0.9	0.0		0.0	0.0	0.0	0.0		0.0	0.0	100.0	0.0		
Total %	0.0	0.0	0.3	0.0	0.3		1.5	0.9	0.0	99.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.3	
Exiting Leg Total					323					1					3					5	332
Cars	0	0	1	0	1	311	5	3	0	319	0	0	0	0	0	0	0	1	0	1	321
% Cars	0.0	0.0	100.0	0.0	100.0	96.6	100.0	100.0	0.0	96.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0	0.0	100.0	96.7
Exiting Leg Total					312					1					3					5	321
Heavy Vehicles	0	0	0	0	0	11	0	0	0	11	0	0	0	0	0	0	0	0	0	0	11
% Heavy Vehicles	0.0	0.0	0.0	0.0	0.0	3.4	0.0	0.0	0.0	3.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.3
Exiting Leg Total					11					0					0					0	11

Dook Hour /	Inalycic from	n 07:00 AM to	VAV 00.00	hogine at:

7:30 AM		Fa	ulkner Stre	et			Fa	ulkner Stree	et			Public	Storage Fro	nt Lot			Public St	torage Parki	ng Area		
		1	rom North					from South				fro	om Southwe	st				from West			
	Right	Bear Right	Thru	U-Turn	Total	Thru	Left	Hard Left	U-Turn	Total	Hard Right	Bear Left	Hard Left	U-Turn	Total	Hard Right	Right	Left	U-Turn	Total	Total
7:30 AM	0	0	1	0	1	47	0	0	0	47	0	0	0	0	0	0	0	0	0	0	48
7:45 AM	0	0	0	0	0	74	0	0	0	74	0	0	0	0	0	0	0	0	0	0	74
8:00 AM	0	0	0	0	0	58	0	0	0	58	0	0	0	0	0	0	0	0	0	0	58
8:15 AM	0	0	0	0	0	34	2	2	0	38	0	0	0	0	0	0	0	0	0	0	38
Total Volume	0	0	1	0	1	213	2	2	0	217	0	0	0	0	0	0	0	0	0	0	218
% Approach Total	0.0	0.0	100.0	0.0		98.2	0.9	0.9	0.0		0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0		
PHF	0.000	0.000	0.250	0.000	0.250	0.720	0.250	0.250	0.000	0.733	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.736
Cars	I 0	0	1	0	-1	208	2	2	0	212	۱ ،	0	0	0	0		0	0	0	ام	212
Cars %	0	0	100.0	0	100.0	208 97.7	100.0	100.0	0	212 97.7		0	0	0	0	0	0	0	0	0	213 97.7
Heavy Vehicles	0.0	0.0	100.0	0.0	100.0	97.7	100.0	100.0	0.0	97.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	97.7
Heavy Vehicles %	0.0	0.0	0.0	0.0	0.0	2.3	0.0	0.0	0	2.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.3
,	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0			0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Cars Enter Leg	0	0	1	0	1	208	2	2	0	212	0	0	0	0	0	0	0	0	0	0	213
Heavy Enter Leg	0	0	0	0	0	5	0	0	0	5	0	0	0	0	0	0	0	0	0	0	5
Total Entering Leg	0	0	1	0	1	213	2	2	0	217	0	0	0	0	0	0	0	0	0	0	218
Cars Exiting Leg					208					1					2					2	213
Heavy Exiting Leg					5					0					0					0	5
Total Exiting Leg					213					1					2					2	218

332 of 491

Location: N: Faulkner Street S: Faulkner Street

Location: W: Public Storage Parking Area SW: Public Storage Front Lot

City, State: Malden, MA
Client: VHB/ M. Kealey

Site Code: **52739**

Count Date: Thursday, May 6, 2021

Start Time: 7:00 AM
End Time: 9:00 AM

Class:



157 Washington Street, Suite 2 Hudson, MA 01749 Office: 508-875-0100 Fax: 508-875-0118 Email: datarequests@pdillc.com

Cars

		Fa	ulkner Stre	et			Fa	ulkner Stree	et			Public	Storage Fro	nt Lot			Public S	torage Park	ing Area		
		1	rom North					from South				fro	om Southwe	est				from West			
	Right	Bear Right	Thru	U-Turn	Total	Thru	Left	Hard Left	U-Turn	Total	Hard Right	Bear Left	Hard Left	U-Turn	Total	Hard Right	Right	Left	U-Turn	Total	Total
7:00 AM	0	0	0	0	0	28	2	0	0	30	0	0	0	0	0	0	0	1	0	1	31
7:15 AM	0	0	0	0	0	23	0	0	0	23	0	0	0	0	0	0	0	0	0	0	23
7:30 AM	0	0	1	0	1	46	0	0	0	46	0	0	0	0	0	0	0	0	0	0	47
7:45 AM	0	0	0	0	0	71	0	0	0	71	0	0	0	0	0	0	0	0	0	0	71
Total	0	0	1	0	1	168	2	0	0	170	0	0	0	0	0	0	0	1	0	1	172
8:00 AM	0	0	0	0	0	58	0	0	0	58	0	0	0	0	0	0	0	0	0	0	58
8:15 AM	0	0	0	0	0	33	2	2	0	37	0	0	0	0	0	0	0	0	0	0	37
8:30 AM	0	0	0	0	0	35	0	1	0	36	0	0	0	0	0	0	0	0	0	0	36
8:45 AM	0	0	0	0	0	17	1	0	0	18	0	0	0	0	0	0	0	0	0	0	18
Total	0	0	0	0	0	143	3	3	0	149	0	0	0	0	0	0	0	0	0	0	149
Grand Total	0	0	1	0	1	311	5	3	0	319	l o	0	0	0	0	l o	0	1	0	1	321
Approach %	0.0	0.0	100.0	0.0	-	97.5	1.6	0.9	0.0	313	0.0	0.0	·	0.0	· ·	0.0	0.0	100.0	0.0	•	321
Total %	0.0	0.0	0.3		0.3		1.6			99.4		0.0		0.0	0.0		0.0		0.0	0.3	
Exiting Leg Total					312					1					3					5	321

7:30 AM		Fai	ulkner Stree	et			Fa	ulkner Stree	et			Public	Storage Fro	nt Lot			Public S	torage Parki	ng Area		
		f	rom North					from South				fro	om Southwe	est				from West			
	Right	Bear Right	Thru	U-Turn	Total	Thru	Left	Hard Left	U-Turn	Total	Hard Right	Bear Left	Hard Left	U-Turn	Total	Hard Right	Right	Left	U-Turn	Total	Total
7:30 AM	0	0	1	0	1	46	0	0	0	46	0	0	0	0	0	0	0	0	0	0	47
7:45 AM	0	0	0	0	0	71	0	0	0	71	0	0	0	0	0	0	0	0	0	0	71
8:00 AM	0	0	0	0	0	58	0	0	0	58	0	0	0	0	0	0	0	0	0	0	58
8:15 AM	0	0	0	0	0	33	2	2	0	37	0	0	0	0	0	0	0	0	0	0	37
Total Volume	0	0	1	0	1	208	2	2	0	212	0	0	0	0	0	0	0	0	0	0	213
% Approach Total	0.0	0.0	100.0	0.0		98.1	0.9	0.9	0.0		0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0		
PHF	0.000	0.000	0.250	0.000	0.250	0.732	0.250	0.250	0.000	0.746	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.750
Entering Leg Exiting Leg	0	0	1	0	1 208	208	2	2	0	212 1	0	0	0	0	0 2	0	0	0	0	0 2	213 213
Total					209					213					2					2	426

Location: N: Faulkner Street S: Faulkner Street

Location: W: Public Storage Parking Area SW: Public Storage Front Lot

City, State: Malden, MA
Client: VHB/ M. Kealey

Site Code: **52739**

Class:

Count Date: Thursday, May 6, 2021

Start Time: 7:00 AM
End Time: 9:00 AM



157 Washington Street, Suite 2 Hudson, MA 01749 Office: 508-875-0100 Fax: 508-875-0118 Email: datarequests@pdillc.com

Heavy Vehicles-Combined (Buses, Single-Unit Trucks, Articulated Trucks)

Ciass.														a macito							
		Fa	ulkner Stre	et			F	aulkner Stre	et			Public	Storage Fro	nt Lot			Public S	torage Park	ing Area		
			from North	1				from South				fre	om Southwe	est				from West			
	Right	Bear Right	Thru	U-Turn	Total	Thru	Left	Hard Left	U-Turn	Total	Hard Right	Bear Left	Hard Left	U-Turn	Total	Hard Right	Right	Left	U-Turn	Total	Total
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	3	0	0	0	3	0	0	0	0	0	0	0	0	0	0	3
7:30 AM	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
7:45 AM	0	0	0	0	0	3	0	0	0	3	0	0	0	0	0	0	0	0	0	0	3
Total	0	0	0	0	0	7	0	0	0	7	0	0	0	0	0	0	0	0	0	0	7
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
8:30 AM	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
8:45 AM	0	0	0	0	0	2	0	0	0	2	0	0	0	0	0	0	0	0	0	0	2
Total	0	0	0	0	0	4	0	0	0	4	0	0	0	0	0	0	0	0	0	0	4
Grand Total	0	0	0	0	0	11	0	0	0	11	0	0	0	0	0	0	0	0	0	0	11
Approach %	0.0	0.0	0.0	0.0)	100.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0		
Total %	0.0	0.0	0.0	0.0	0.0	100.0	0.0	0.0	0.0	100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Exiting Leg Total					11					0					0					0	11
Buses	0	0	0	0	0	2	0	0	0	2	0	0	0	0	0	0	0	0	0	0	2
% Buses	0.0	0.0	0.0	0.0	0.0	18.2	0.0	0.0	0.0	18.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	18.2
Exiting Leg Total					2					0					0					0	2
Single-Unit Trucks	0	0	0	0	0	9	0	0	0	9	0	0	0	0	0	0	0	0	0	0	9
% Single-Unit	0.0	0.0	0.0	0.0	0.0	81.8	0.0	0.0	0.0	81.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	81.8
Exiting Leg Total					9					0					0					0	9
Articulated Trucks	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% Articulated	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Exiting Leg Total					0					0					0					0	0

7:00 AM		Fa	ulkner Stre	et			Fa	aulkner Stre	et	•		Public	Storage Fro	nt Lot			Public S	torage Parki	ng Area		
		•	from North					from South				fr	om Southwe	est				from West			
	Right	Bear Right	Thru	U-Turn	Total	Thru	Left	Hard Left	U-Turn	Total	Hard Right	Bear Left	Hard Left	U-Turn	Total	Hard Right	Right	Left	U-Turn	Total	Total
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	3	0	0	0	3	0	0	0	0	0	0	0	0	0	0	3
7:30 AM	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
7:45 AM	0	0	0	0	0	3	0	0	0	3	0	0	0	0	0	0	0	0	0	0	3
Total Volume	0	0	0	0	0	7	0	0	0	7	0	0	0	0	0	0	0	0	0	0	7
% Approach Total	0.0	0.0	0.0	0.0		100.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0		
PHF	0.000	0.000	0.000	0.000	0.000	0.583	0.000	0.000	0.000	0.583	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.583
Buses	0	0	0	0	0	2	0	0	0	2	0	0	0	0	0	I 0	0	0	0	0	2
Buses %	0.0	0.0	0.0	0.0	0.0	28.6	0.0	0.0	0.0	28.6	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	28.6
Single-Unit Trucks	0	0	0	0	0	5	0	0	0	5	0	0	0	0	0	0	0	0	0	0	5
Single-Unit %	0.0	0.0	0.0	0.0	0.0	71.4	0.0	0.0	0.0	71.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	71.4
Articulated Trucks	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Articulated %	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Buses	0	0	0	0	0	2	0	0	0	2	0	0	0	0	0	0	0	0	0	0	2
Single-Unit Trucks	0	0	0	0	0	5	0	0	0	5	0	0	0	0	0	0	0	0	0	0	5
Articulated Trucks	0	0	0	0	0	0	0	0	0	0	0	0	33⊻	4 of 494	0	0	0	0	0	0	0
Total Entering Leg	0	0	0	0	0	7	0	0	0	7	0	0	0	0	0	0	0	0	0	0	7
Buses					2					0					0					0	2

Location: N: Faulkner Street S: Faulkner Street

Location: W: Public Storage Parking Area SW: Public Storage Front Lot

City, State: Malden, MA

Client: VHB/ M. Kealey Site Code: **52739**

Count Date: Thursday, May 6, 2021

Start Time: 7:00 AM End Time: 9:00 AM



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Heavy Vehicles-Combined (Ruses Single-Unit Trucks Articulated Trucks)

Class:	Heavy Vehicles-Combined (Buses, Single-Unit Trucks, Articulated Trucks) Faulkner Street Faulkner Street Public Storage Front Lot Public Storage Parking Area															_					
		Fa	ulkner Stre	et			Fa	aulkner Stre	et			Public	Storage Fro	nt Lot			Public S	torage Park	ing Area		
			from North					from South	l			fro	om Southwe	est				from West			
	Right	Bear Right	Thru	U-Turn	Total	Thru	Left	Hard Left	U-Turn	Total	Hard Right	Bear Left	Hard Left	U-Turn	Total	Hard Right	Right	Left	U-Turn	Total	Total
Single-Unit Trucks					5					0					0					0	5
Articulated Trucks					0					0					0					0	0
Total Exiting Leg					7					0					0					0	7

Location: N: Faulkner Street S: Faulkner Street

Location: W: Public Storage Parking Area SW: Public Storage Front Lot

City, State: Malden, MA
Client: VHB/ M. Kealey

Site Code: **52739**

Class:

Count Date: Thursday, May 6, 2021

Start Time: 7:00 AM End Time: 9:00 AM



157 Washington Street, Suite 2 Hudson, MA 01749 Office: 508-875-0100 Fax: 508-875-0118 Email: datarequests@pdillc.com

Buses

		Fa	ulkner Stre	et			Fa	aulkner Stre	et			Public	Storage Fro	nt Lot			Public S	itorage Park	ing Area		
		,	from North					from South	1			fro	om Southwe	est				from West			1
	Right	Bear Right	Thru	U-Turn	Total	Thru	Left	Hard Left	U-Turn	Total	Hard Right	Bear Left	Hard Left	U-Turn	Total	Hard Right	Right	Left	U-Turn	Total	Total
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	C	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	1	0	0	0	1	0	0	0	0	C	0	0	0	0	0	1
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	C	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	1	0	0	0	1	0	0	0	0	C	0	0	0	0	0	1
Total	0	0	0	0	0	2	0	0	0	2	0	0	0	0	C	0	0	0	0	0	2
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	C	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	C	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	C	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	C	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	C	0	0	0	0	0	0
						i															•
Grand Total	0	0	0	0	0	2	0	0	0	2	0	0	0	0	C	0	0	0	0	0	2
Approach %	0.0	0.0	0.0	0.0		100.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0		
Total %	0.0	0.0	0.0	0.0	0.0	100.0	0.0	0.0	0.0	100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Exiting Leg Total			•		2		•		•	0		•	•		C		•		•	0	2

7:00 AM		Fa	ulkner Stre	et			Fa	ulkner Stre	et			Public	Storage Fro	ont Lot			Public S	torage Parki	ng Area		
		1	from North					from South				fro	om Southwe	est				from West			
	Right	Bear Right	Thru	U-Turn	Total	Thru	Left	Hard Left	U-Turn	Total	Hard Right	Bear Left	Hard Left	U-Turn	Total	Hard Right	Right	Left	U-Turn	Total	Total
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
Total Volume	0	0	0	0	0	2	0	0	0	2	0	0	0	0	0	0	0	0	0	0	2
% Approach Total	0.0	0.0	0.0	0.0		100.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0		1
PHF	0.000	0.000	0.000	0.000	0.000	0.500	0.000	0.000	0.000	0.500	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.500
Entering Leg		0	0	0	0	l ,	0	0	0	2	۰ ا	0	0	0	0	۰ ا	0	0	0	0	l ,
	U	U	U	U	0	2	U	U	U	2	U	U	U	U	0	U	U	U	U	0	2
Exiting Leg										- 0					- 0						
Total					2					2					0					0	4

Location: N: Faulkner Street S: Faulkner Street

Location: W: Public Storage Parking Area SW: Public Storage Front Lot

City, State: Malden, MA
Client: VHB/ M. Kealey

Site Code: **52739**

Count Date: Thursday, May 6, 2021

Start Time: 7:00 AM End Time: 9:00 AM

Class:



157 Washington Street, Suite 2 Hudson, MA 01749 Office: 508-875-0100 Fax: 508-875-0118 Email: datarequests@pdillc.com

Single-Unit Trucks

		Fa	ulkner Stre	et			Fa	aulkner Stre	et			Public	Storage Fro	nt Lot			Public S	torage Park	king Area		
			from North					from South				fre	om Southwe	est				from West	t		
	Right	Bear Right	Thru	U-Turn	Total	Thru	Left	Hard Left	U-Turn	Total	Hard Right	Bear Left	Hard Left	U-Turn	Total	Hard Right	Right	Left	U-Turn	Total	Total
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	2	0	0	0	2	0	0	0	0	0	0	0	0	0	0	2
7:30 AM	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
7:45 AM	0	0	0	0	0	2	0	0	0	2	0	0	0	0	0	0	0	0	0	0	2
Total	0	0	0	0	0	5	0	0	0	5	0	0	0	0	0	0	0	0	0	0	5
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
8:30 AM	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
8:45 AM	0	0	0	0	0	2	0	0	0	2	0	0	0	0	0	0	0	0	0	0	2
Total	0	0	0	0	0	4	0	0	0	4	0	0	0	0	0	0	0	0	0	0	4
Grand Total	0	0	0	0	0	9	0	0	0	9	0	0	0	0	0	0	0	0	0	0	9
Approach %	0.0	0.0	0.0	0.0		100.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0		
Total %	0.0	0.0	0.0	0.0	0.0	100.0	0.0	0.0	0.0	100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	,
Exiting Leg Total		•			9	•	•			0		•	•		0			•		0	9

,			U																		
7:00 AM		Fa	ulkner Stre	et			Fa	ulkner Stre	et			Public	Storage Fro	nt Lot			Public S	torage Parki	ng Area		1
			from North					from South				fre	om Southwe	est				from West			
	Right	Bear Right	Thru	U-Turn	Total	Thru	Left	Hard Left	U-Turn	Total	Hard Right	Bear Left	Hard Left	U-Turn	Total	Hard Right	Right	Left	U-Turn	Total	Total
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	2	0	0	0	2	0	0	0	0	0	0	0	0	0	0	2
7:30 AM	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
7:45 AM	0	0	0	0	0	2	0	0	0	2	0	0	0	0	0	0	0	0	0	0	2
Total Volume	0	0	0	0	0	5	0	0	0	5	0	0	0	0	0	0	0	0	0	0	5
% Approach Total	0.0	0.0	0.0	0.0		100.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0		<u> </u>
PHF	0.000	0.000	0.000	0.000	0.000	0.625	0.000	0.000	0.000	0.625	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.625
Entering Leg	1 0	0	0	0	О	5	0	0	0	5	0	0	0	0	0	0	0	0	0	0	5
Exiting Leg					5					0					0					0	5
Total					5					5					0					0	10

Location: N: Faulkner Street S: Faulkner Street

Location: W: Public Storage Parking Area SW: Public Storage Front Lot

City, State: Malden, MA
Client: VHB/ M. Kealey

Site Code: **52739**

Class:

Count Date: Thursday, May 6, 2021

Start Time: 7:00 AM End Time: 9:00 AM



157 Washington Street, Suite 2 Hudson, MA 01749 Office: 508-875-0100 Fax: 508-875-0118 Email: datarequests@pdillc.com

Articulated Trucks

		Fa	ulkner Stre	et			Fa	aulkner Stre	et			Public	Storage Fro	nt Lot			Public S	torage Park	king Area		
			from North					from South				fre	om Southwe	est				from West	t		
	Right	Bear Right	Thru	U-Turn	Total	Thru	Left	Hard Left	U-Turn	Total	Hard Right	Bear Left	Hard Left	U-Turn	Total	Hard Right	Right	Left	U-Turn	Total	Total
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	O	0
Grand Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Approach %	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0		
Total %	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0)
Exiting Leg Total			•		0		•	•	•	0		•	•		0			•		0	0

•			-																		
7:00 AM		Fa	ulkner Stre	et			Fa	ulkner Stre	et			Public	Storage Fro	nt Lot			Public S	torage Parki	ng Area		l
			from North					from South				fre	om Southwe	est				from West			
	Right	Bear Right	Thru	U-Turn	Total	Thru	Left	Hard Left	U-Turn	Total	Hard Right	Bear Left	Hard Left	U-Turn	Total	Hard Right	Right	Left	U-Turn	Total	Total
7:00 AM	C	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	C	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	C	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	C	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	C	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% Approach Total	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0		<u> </u>
PHF	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Entering Leg	1 0) 0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0'	0
Exiting Leg					0					0)				0					0	0
Total					0					0)				0					0	0

Location: N: Faulkner Street S: Faulkner Street

Location: W: Public Storage Parking Area SW: Public Storage Front Lot

City, State: Malden, MA
Client: VHB/ M. Kealey

Site Code: **52739**

Count Date: Thursday, May 6, 2021

Start Time: 7:00 AM
End Time: 9:00 AM

Class:



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Bicycles (on Roadway and Crosswalks)

0.055.							,	• (•					<u> </u>						
			Faulkne	r Street					Faulkne	r Street				Public	Storage	Parking	Area		
			from	North					from S	South					from	West			
	Right	Thru	U-Turn	CW-EB	CW-WB	Total	Thru	Left	U-Turn	CW-WB	CW-EB	Total	Right	Left	U-Turn	CW-NB	CW-SB	Total	Total
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Grand Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Approach %	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0		
Total %	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Exiting Leg Total						0						0						0	0

7:00 AM			Faulkne	r Street					Faulkne	r Street				Public	Storage	e Parking	Area		
			from I	North					from S	South					from	West			
	Right	Thru	U-Turn	CW-EB	CW-WB	Total	Thru	Left	U-Turn	CW-WB	CW-EB	Total	Right	Left	U-Turn	CW-NB	CW-SB	Total	Total
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% Approach Total	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0		
PHF	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Entering Leg	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Exiting Leg						0						0						0	0
Total						0						0						0	0

Location: N: Faulkner Street S: Faulkner Street

Location: W: Public Storage Parking Area SW: Public Storage Front Lot

City, State: Malden, MA
Client: VHB/ M. Kealey

Site Code: **52739**

Count Date: Thursday, May 6, 2021

Start Time: 7:00 AM
End Time: 9:00 AM

Class:



157 Washington Street, Suite 2 Hudson, MA 01749 Office: 508-875-0100 Fax: 508-875-0118 Email: datarequests@pdillc.com

Pedestrians

			Faulkne	r Street					Faulkne	r Street				Public	Storage	Parking	Area		
			from	North					from	South					from	West			
	Right	Thru	U-Turn	CW-EB	CW-WB	Total	Thru	Left	U-Turn	CW-WB	CW-EB	Total	Right	Left	U-Turn	CW-NB	CW-SB	Total	Total
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	2	2
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	2	3	3
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2	2
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	4	8	8
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8	6	14	14
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	7	10	10
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7	8	15	15
8:45 AM	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	5	4	9	10
Total	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	23	25	48	49
						ĺ												ĺ	
Grand Total	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	27	29	56	57
Approach %	0	0	0	0	100		0	0	0	0	0		0	0	0	48.214	51.786		
Total %	0	0	0	0	1.7544	1.7544	0	0	0	0	0	0	0	0	0	47.368	50.877	98.246	
Exiting Leg Total						1						0						56	57

8:00 AM			Faulkne	r Street					Faulkne	r Street				Public	Storage	Parking	Area		
			from I	North					from :	South					from	West			
	Right	Thru	U-Turn	CW-EB	CW-WB	Total	Thru	Left	U-Turn	CW-WB	CW-EB	Total	Right	Left	U-Turn	CW-NB	CW-SB	Total	Total
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8	6	14	14
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	7	10	10
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7	8	15	15
8:45 AM	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	5	4	9	10
Total Volume	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	23	25	48	49
% Approach Total	0.0	0.0	0.0	0.0	100.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	47.9	52.1		
PHF	0.000	0.000	0.000	0.000	0.250	0.250	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.719	0.781	0.800	0.817
Entering Leg	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	23	25	48	49
Exiting Leg						1						0						48	49
Total						2						0			<u> </u>			96	98

Location: N: Faulkner Street S: Faulkner Street

Location: W: Public Storage Parking Area SW: Public Storage Front Lot

City, State: Malden, MA Client: VHB/ M. Kealey

Site Code: **52739**

Heavy Exiting Leg Total Exiting Leg

Count Date: Thursday, May 6, 2021

Start Time: 4:00 PM End Time: 6:00 PM



157 Washington Street, Suite 2 Hudson, MA 01749 Office: 508-875-0100 Fax: 508-875-0118 Email: datarequests@pdillc.com

Class:								(Cars and H	Heavy Ve	ehicles (Co	ombined))								
		Fa	ulkner Stre	et			Fau	ılkner Stree	et			Public	Storage Fro	nt Lot			Public S	torage Parki	ng Area		
			from North				f	rom South				fro	m Southwe	st				from West			
	Right	Bear Right	Thru	U-Turn	Total	Thru	Left	Hard Left	U-Turn	Total	Hard Right	Bear Left	Hard Left	U-Turn	Total	Hard Right	Right	Left	U-Turn	Total	Total
4:00 PM	0	0	0	0	0	54	2	1	0	57	0	0	0	0	0	0	0	1	0	1	58
4:15 PM	0	0	1	0	1	44	2	0	0	46	0	0	0	0	0	0	0	1	0	1	48
4:30 PM	0	0	0	0	0	57	0	0	0	57	0	1	0	0	1	0	0	0	0	0	58
4:45 PM	0	0	0	0	0	58	0	1	0	59	0	1	0	0	1	0	0	1	0	1	61
Total	0	0	1	0	1	213	4	2	0	219	0	2	0	0	2	0	0	3	0	3	225
5:00 PM	0	0	0	0	0	63	0	1	0	64	1	0	0	0	1	0	1	0	0	1	66
5:15 PM	0	0	0	0	0	58	0	0	0	58	0	0	0	0	0	0	0	0	0	0	58
5:30 PM	0	0	0	0	0	33	0	0	0	33	0	0	0	0	0	0	0	0	0	0	33
5:45 PM	0	0	0	0	0	57	0	1	0	58	0	0	0	0	0	0	0	0	0	0	58
Total	0	0	0	0	0	211	0	2	0	213	1	0	0	0	1	0	1	0	0	1	215
Grand Total	0	0	1	0	1	424	4	4	0	432	1	2	0	0	3	0	1	3	0	4	440
Approach %	0.0	0.0	100.0	0.0		98.1	0.9	0.9	0.0		33.3	66.7	0.0	0.0		0.0	25.0	75.0	0.0		
Total %	0.0	0.0	0.2	0.0	0.2	96.4	0.9	0.9	0.0	98.2	0.2	0.5	0.0	0.0	0.7	0.0	0.2	0.7	0.0	0.9	
Exiting Leg Total					429					3					4					4	440
Cars	0	0	1	0	1	420	4	4	0	428	0	2	0	0	2	0	0	3	0	3	434
% Cars	0.0	0.0	100.0	0.0	100.0	99.1	100.0	100.0	0.0	99.1	0.0	100.0	0.0	0.0	66.7	0.0	0.0	100.0	0.0	75.0	98.6
Exiting Leg Total					425					1					4					4	434
Heavy Vehicles	0	0	0	0	0	4	0	0	0	4	1	0	0	0	1	0	1	0	0	1	6
% Heavy Vehicles	0.0	0.0	0.0	0.0	0.0	0.9	0.0	0.0	0.0	0.9	100.0	0.0	0.0	0.0	33.3	0.0	100.0	0.0	0.0	25.0	1.4
Exiting Leg Total					4					2					0					0	6

Peak Hour Analysis fro	m 04:00 PN	1 to 06:00 PN	∕I begins at:																		
4:30 PM		Fai	ulkner Stree	et			Fa	ulkner Stree	et			Public	Storage Fro	nt Lot			Public St	orage Parki	ng Area		
		f	rom North					from South				fro	om Southwe	est				from West			
	Right	Bear Right	Thru	U-Turn	Total	Thru	Left	Hard Left	U-Turn	Total	Hard Right	Bear Left	Hard Left	U-Turn	Total	Hard Right	Right	Left	U-Turn	Total	Total
4:30 PM	0	0	0	0	0	57	0	0	0	57	0	1	0	0	1	0	0	0	0	0	58
4:45 PM	0	0	0	0	0	58	0	1	0	59	0	1	0	0	1	0	0	1	0	1	61
5:00 PM	0	0	0	0	0	63	0	1	0	64	1	0	0	0	1	0	1	0	0	1	66
5:15 PM	0	0	0	0	0	58	0	0	0	58	0	0	0	0	0	0	0	0	0	0	58
Total Volume	0	0	0	0	0	236	0	2	0	238	1	2	0	0	3	0	1	1	0	2	243
% Approach Total	0.0	0.0	0.0	0.0		99.2	0.0	0.8	0.0		33.3	66.7	0.0	0.0		0.0	50.0	50.0	0.0		
PHF	0.000	0.000	0.000	0.000	0.000	0.937	0.000	0.500	0.000	0.930	0.250	0.500	0.000	0.000	0.750	0.000	0.250	0.250	0.000	0.500	0.920
Cars	0	0	0	0	0	234	0	2	0	236	0	2	0	0	2	0	0	1	0	1	239
Cars %	0.0	0.0	0.0	0.0	0.0	99.2	0.0	100.0	0.0	99.2	0.0	100.0	0.0	0.0	66.7	0.0	0.0	100.0	0.0	50.0	98.4
Heavy Vehicles	0	0	0	0	0	2	0	0	0	2	1	0	0	0	1	0	1	0	0	1	4
Heavy Vehicles %	0.0	0.0	0.0	0.0	0.0	0.8	0.0	0.0	0.0	0.8	100.0	0.0	0.0	0.0	33.3	0.0	100.0	0.0	0.0	50.0	1.6
Cars Enter Leg	0	0	0	0	0	234	0	2	0	236	0	2	0	0	2	0	0	1	0	1	239
Heavy Enter Leg	0	0	0	0	0	2	0	0	0	2	1	0	0	0	1	0	1	0	0	1	4
Total Entering Leg	0	0	0	0	0	236	0	2	0	238	1	2	0	0	3	0	1	1	0	2	243
Cars Exiting Leg					237					0					2					0	239

239

341 of 491

Location: N: Faulkner Street S: Faulkner Street

Location: W: Public Storage Parking Area SW: Public Storage Front Lot

City, State: Malden, MA
Client: VHB/ M. Kealey

Site Code: **52739**

Class:

Count Date: Thursday, May 6, 2021

Start Time: 4:00 PM
End Time: 6:00 PM



157 Washington Street, Suite 2 Hudson, MA 01749 Office: 508-875-0100 Fax: 508-875-0118 Email: datarequests@pdillc.com

Cars

ĺ		Fa	ulkner Stre	et			Fa	ulkner Stree	et			Public	Storage Fro	nt Lot			Public S	torage Park	ing Area		
		f	rom North	<u>I</u>				from South				fro	m Southwe	st				from West			
	Right	Bear Right	Thru	U-Turn	Total	Thru	Left	Hard Left	U-Turn	Total	Hard Right	Bear Left	Hard Left	U-Turn	Total	Hard Right	Right	Left	U-Turn	Total	Total
4:00 PM	0	0	0	0	0	54	2	1	0	57	0	0	0	0	0	0	0	1	0	1	58
4:15 PM	0	0	1	0	1	43	2	0	0	45	0	0	0	0	0	0	0	1	0	1	47
4:30 PM	0	0	0	0	0	57	0	0	0	57	0	1	0	0	1	0	0	0	0	0	58
4:45 PM	0	0	0	0	0	57	0	1	0	58	0	1	0	0	1	0	0	1	0	1	60
Total	0	0	1	0	1	211	4	2	0	217	0	2	0	0	2	0	0	3	0	3	223
5:00 PM	0	0	0	0	0	62	0	1	0	63	0	0	0	0	0	0	0	0	0	0	63
5:15 PM	0	0	0	0	0	58	0	0	0	58	0	0	0	0	0	0	0	0	0	0	58
5:30 PM	0	0	0	0	0	33	0	0	0	33	0	0	0	0	0	0	0	0	0	0	33
5:45 PM	0	0	0	0	0	56	0	1	0	57	0	0	0	0	0	0	0	0	0	0	57
Total	0	0	0	0	0	209	0	2	0	211	0	0	0	0	0	0	0	0	0	0	211
Grand Total	l 0	0	1	0	1	420	4	4	0	428	0	2	0	0	2	l 0	0	3	0	3	434
Approach %	0.0	0.0	100.0	0.0		98.1	0.9	0.9	0.0		0.0	100.0	0.0	0.0		0.0	0.0	100.0	0.0		
Total %	0.0	0.0	0.2		0.2	96.8	0.9	0.9		98.6	0.0		0.0	0.0	0.5	0.0	0.0			0.7	
Exiting Leg Total					425					1					4					4	434

4:30 PM		Fa	ulkner Stre	et			Fa	ulkner Stre	et			Public	Storage Fro	nt Lot			Public S	torage Parki	ng Area		
			from North	1				from South				fre	om Southwe	est				from West			
	Right	Bear Right	Thru	U-Turn	Total	Thru	Left	Hard Left	U-Turn	Total	Hard Right	Bear Left	Hard Left	U-Turn	Total	Hard Right	Right	Left	U-Turn	Total	Total
4:30 PM	0	0	0	0	0	57	0	0	0	57	0	1	0	0	1	0	0	0	0	0	58
4:45 PM	0	0	0	0	0	57	0	1	0	58	0	1	0	0	1	0	0	1	0	1	60
5:00 PM	0	0	0	0	0	62	0	1	0	63	0	0	0	0	0	0	0	0	0	0	63
5:15 PM	0	0	0	0	0	58	0	0	0	58	0	0	0	0	0	0	0	0	0	0	58
Total Volume	0	0	0	0	0	234	0	2	0	236	0	2	0	0	2	0	0	1	0	1	239
% Approach Total	0.0	0.0	0.0	0.0		99.2	0.0	0.8	0.0		0.0	100.0	0.0	0.0		0.0	0.0	100.0	0.0		
PHF	0.000	0.000	0.000	0.000	0.000	0.944	0.000	0.500	0.000	0.937	0.000	0.500	0.000	0.000	0.500	0.000	0.000	0.250	0.000	0.250	0.948
Entering Leg	l o	0	0	0	0	234	0	2	0	236	I 0	2	0	0	2	I 0	0	1	0	1	239
Exiting Leg										0		2	O	U	2		O	-	O	0	239
Total	tal 237									236					4					1	478

Location: N: Faulkner Street S: Faulkner Street

Location: W: Public Storage Parking Area SW: Public Storage Front Lot

City, State: Malden, MA Client: VHB/ M. Kealey

Site Code: **52739**

Count Date: Thursday, May 6, 2021

Start Time: 4:00 PM End Time: 6:00 PM



157 Washington Street, Suite 2 Hudson, MA 01749 Office: 508-875-0100 Fax: 508-875-0118 Email: datarequests@pdillc.com

Class:						F	leavy Ve	hicles-Co	mbined (Buses, Si	ngle-Unit	Trucks,	Articulate	d Trucks)						
		Fa	ulkner Stre	et			Fa	aulkner Stree	et			Public	Storage Fro	nt Lot			Public S	torage Park	ng Area		
		f	rom North					from South				fro	om Southwe	est				from West			
	Right	Bear Right	Thru	U-Turn	Total	Thru	Left	Hard Left	U-Turn	Total	Hard Right	Bear Left	Hard Left	U-Turn	Total	Hard Right	Right	Left	U-Turn	Total	Total
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
Total	0	0	0	0	0	2	0	0	0	2	0	0	0	0	0	0	0	0	0	0	2
5:00 PM	0	0	0	0	0	1	0	0	0	1	1	0	0	0	1	0	1	0	0	1	3
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
Total	0	0	0	0	0	2	0	0	0	2	1	0	0	0	1	0	1	0	0	1	4
Grand Total	0	0	0	0	0	4	0	0	0	4	1	0	0	0	1	0	1	0	0	1	6
Approach %	0.0	0.0	0.0	0.0		100.0	0.0	0.0	0.0		100.0	0.0	0.0	0.0		0.0	100.0	0.0	0.0		
Total %	0.0	0.0	0.0	0.0	0.0	66.7	0.0	0.0	0.0	66.7	16.7	0.0	0.0	0.0	16.7	0.0	16.7	0.0	0.0	16.7	
Exiting Leg Total					4					2					0					0	6
Buses	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% Buses	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Exiting Leg Total					0					0					0					0	0
Single-Unit Trucks	0	0	0	0	0	4	0	0	0	4	0	0	0	0	0	0	1	0	0	1	5
% Single-Unit	0.0	0.0	0.0	0.0	0.0	100.0	0.0	0.0	0.0	100.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0	0.0	0.0	100.0	83.3
Exiting Leg Total					4					1					0					0	5
Articulated Trucks	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	1
% Articulated	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0	0.0	0.0	0.0	100.0	0.0	0.0	0.0	0.0	0.0	16.7
Exiting Leg Total					0					1					0					0	1

4:15 PM		Fa	ulkner Stre	et			Fa	ulkner Stree	et			Public	Storage Fro	nt Lot			Public St	torage Parki	ng Area		
		•	from North					from South				fro	om Southwe	est				from West			
	Right	Bear Right	Thru	U-Turn	Total	Thru	Left	Hard Left	U-Turn	Total	Hard Right	Bear Left	Hard Left	U-Turn	Total	Hard Right	Right	Left	U-Turn	Total	Total
4:15 PM	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
5:00 PM	0	0	0	0	0	1	0	0	0	1	1	0	0	0	1	0	1	0	0	1	3
Total Volume	0	0	0	0	0	3	0	0	0	3	1	0	0	0	1	0	1	0	0	1	5
% Approach Total	0.0	0.0	0.0	0.0		100.0	0.0	0.0	0.0		100.0	0.0	0.0	0.0		0.0	100.0	0.0	0.0		
PHF	0.000	0.000	0.000	0.000	0.000	0.750	0.000	0.000	0.000	0.750	0.250	0.000	0.000	0.000	0.250	0.000	0.250	0.000	0.000	0.250	0.417
	- 1										1					-					
Buses	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Buses %	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Single-Unit Trucks	0	0	0	0	0	3	0	0	0	3	0	0	0	0	0	0	1	0	0	1	4
Single-Unit %	0.0	0.0	0.0	0.0	0.0	100.0	0.0	0.0	0.0	100.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0	0.0	0.0	100.0	80.0
Articulated Trucks	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	1
Articulated %	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0	0.0	0.0	0.0	100.0	0.0	0.0	0.0	0.0	0.0	20.0
Buses	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Single-Unit Trucks	0	0	0	0	0	3	0	0	0	3	0	0	0.0	0	0	0	1	0	0	1	4
Articulated Trucks	0	0	0	0	0	0	0	0	0	0	1	0	343	3 of 49∄	1	0	0	0	0	0	1
Total Entering Leg	0	0	0	0	0	3	0	0	0	3	1	0	0	0	1	0	1	0	0	1	5

Location: N: Faulkner Street S: Faulkner Street

Location: W: Public Storage Parking Area SW: Public Storage Front Lot

City, State: Malden, MA

Client: VHB/ M. Kealey Site Code: **52739**

Count Date: Thursday, May 6, 2021

Start Time: 4:00 PM End Time: 6:00 PM



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Heavy Vehicles-Combined (Ruses Single-Unit Trucks Articulated Trucks)

Class:						1	Heavy Ve	hicles-Co	mbined	(Buses, Si	ingle-Unit	t Trucks, /	Articulate	d Trucks)						_
		Fa	ulkner Stre	et			Fa	aulkner Stre	et			Public	Storage Fro	nt Lot			Public S	torage Park	ing Area		l
			from North	1				from South	l			fro	om Southwe	est				from West			
	Right	Bear Right	Thru	U-Turn	Total	Thru	Left	Hard Left	U-Turn	Total	Hard Right	Bear Left	Hard Left	U-Turn	Total	Hard Right	Right	Left	U-Turn	Total	Total
Buses					0					0					0					0	0
Single-Unit Trucks					3					1					0					0	4
Articulated Trucks					0					1					0					0	1
Total Exiting Leg					3					2					0					0	5

Location: N: Faulkner Street S: Faulkner Street

Location: W: Public Storage Parking Area SW: Public Storage Front Lot

City, State: Malden, MA
Client: VHB/ M. Kealey

Site Code: **52739**

Class:

Count Date: Thursday, May 6, 2021

Start Time: 4:00 PM
End Time: 6:00 PM



157 Washington Street, Suite 2 Hudson, MA 01749 Office: 508-875-0100 Fax: 508-875-0118 Email: datarequests@pdillc.com

Buses

		Fa	ulkner Stre	et			F	aulkner Stre	et			Public	Storage Fro	nt Lot			Public S	itorage Park	ing Area		
			from North					from South	1			fro	om Southwe	est				from West			1
	Right	Bear Right	Thru	U-Turn	Total	Thru	Left	Hard Left	U-Turn	Total	Hard Right	Bear Left	Hard Left	U-Turn	Total	Hard Right	Right	Left	U-Turn	Total	Total
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	C	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	C	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	C	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	C	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	C	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	C	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	C	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	C	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	C	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	C	0	0	0	0	0	0
	ī				ı	i					ī					i					
Grand Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	C	0	0	0	0	0	0
Approach %	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0		
Total %	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Exiting Leg Total				•	0					0			•		C			•		0	0

•			Ü																		
4:00 PM	ı	Fa	aulkner Stre	et			Fa	ulkner Stre	et			Public	Storage Fro	nt Lot			Public S	torage Park	ing Area		
			from North	ı				from South				fre	om Southwe	est				from West			
	Right	Bear Right	Thru	U-Turn	Total	Thru	Left	Hard Left	U-Turn	Total	Hard Right	Bear Left	Hard Left	U-Turn	Total	Hard Right	Right	Left	U-Turn	Total	Total
4:00 PM	1 (0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	l (0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	l (0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	l (0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	; (0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% Approach Total	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0		<u> </u>
PHF	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
	i .		_	_	_1	I _	_	_	_		1 .	_		_	_	I .		_	_	_	
Entering Leg		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Exiting Leg					0					0	!				0					0	0
Total	l l				0					0	I				0	l				0	0

Location: N: Faulkner Street S: Faulkner Street

Location: W: Public Storage Parking Area SW: Public Storage Front Lot

City, State: Malden, MA
Client: VHB/ M. Kealey

Site Code: **52739**

Class:

Count Date: Thursday, May 6, 2021

Start Time: 4:00 PM
End Time: 6:00 PM



157 Washington Street, Suite 2 Hudson, MA 01749 Office: 508-875-0100 Fax: 508-875-0118 Email: datarequests@pdillc.com

Single-Unit Trucks

		Fa	ulkner Stre	et			Fa	aulkner Stre	et			Public	Storage Fro	nt Lot			Public S	torage Park	ing Area		
		t	from North					from South				fro	om Southwe	est				from West			
	Right	Bear Right	Thru	U-Turn	Total	Thru	Left	Hard Left	U-Turn	Total	Hard Right	Bear Left	Hard Left	U-Turn	Total	Hard Right	Right	Left	U-Turn	Total	Total
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
Total	0	0	0	0	0	2	0	0	0	2	0	0	0	0	0	0	0	0	0	0	2
5:00 PM	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	1	0	0	1	. 2
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
Total	0	0	0	0	0	2	0	0	0	2	0	0	0	0	0	0	1	0	0	1	3
Grand Total	0	0	0	0	0	4	0	0	0	4	0	0	0	0	0	0	1	0	0	1	. 5
Approach %	0.0	0.0	0.0	0.0		100.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0		0.0	100.0	0.0	0.0		
Total %	0.0	0.0	0.0	0.0	0.0	80.0	0.0	0.0	0.0	80.0	0.0	0.0	0.0	0.0	0.0	0.0	20.0	0.0	0.0	20.0	
Exiting Leg Total					4					1					0					0	5

•			-																		
4:15 PM		Fa	ulkner Stre	et			Fa	ulkner Stre	et			Public	Storage Fro	nt Lot			Public S	torage Parki	ng Area		l
			from North					from South				fro	om Southwe	est				from West			
	Right	Bear Right	Thru	U-Turn	Total	Thru	Left	Hard Left	U-Turn	Total	Hard Right	Bear Left	Hard Left	U-Turn	Total	Hard Right	Right	Left	U-Turn	Total	Total
4:15 PM	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
5:00 PM	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	1	0	0	1	2
Total Volume	0	0	0	0	0	3	0	0	0	3	0	0	0	0	0	0	1	0	0	1	4
% Approach Total	0.0	0.0	0.0	0.0		100.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0		0.0	100.0	0.0	0.0		<u> </u>
PHF	0.000	0.000	0.000	0.000	0.000	0.750	0.000	0.000	0.000	0.750	0.000	0.000	0.000	0.000	0.000	0.000	0.250	0.000	0.000	0.250	0.500
Entering Leg						۱ .				_											
	0) 0	0	0	0	3	0	0	0	3	0	0	0	0	0	0	1	0	0	1	4
Exiting Leg					3					1					0					0	4
Total	I				3					4	l				0	l				1	8

Location: N: Faulkner Street S: Faulkner Street

Location: W: Public Storage Parking Area SW: Public Storage Front Lot

City, State: Malden, MA
Client: VHB/ M. Kealey

Site Code: **52739**

Class:

Count Date: Thursday, May 6, 2021

Start Time: 4:00 PM
End Time: 6:00 PM



157 Washington Street, Suite 2 Hudson, MA 01749 Office: 508-875-0100 Fax: 508-875-0118 Email: datarequests@pdillc.com

Articulated Trucks

		Fa	ulkner Stre	et			Fa	aulkner Stre	et			Public	Storage Fro	nt Lot			Public S	torage Park	ing Area		
		1	from North					from South	I			fre	om Southwe	est				from West			
	Right	Bear Right	Thru	U-Turn	Total	Thru	Left	Hard Left	U-Turn	Total	Hard Right	Bear Left	Hard Left	U-Turn	Total	Hard Right	Right	Left	U-Turn	Total	Total
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	. 0	0	0	0	0	1
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	. 0	0	0	0	0	1
i	Ì				Ī	Ī					Ī					Ī					Ī
Grand Total	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	. 0	0	0	0	0	1
Approach %	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0		100.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0		
Total %	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0	0.0	0.0	0.0	100.0	0.0	0.0	0.0	0.0	0.0	
Exiting Leg Total					0					1					0					0	1

•			Ü																		
4:15 PM		Fa	ulkner Stre	et			Fa	ulkner Stre	et			Public	Storage Fro	nt Lot			Public S	torage Park	ing Area		
		,	from North					from South				fr	om Southwe	est				from West			
	Right	Bear Right	Thru	U-Turn	Total	Thru	Left	Hard Left	U-Turn	Total	Hard Right	Bear Left	Hard Left	U-Turn	Total	Hard Right	Right	Left	U-Turn	Total	Total
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	1
Total Volume	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	1
% Approach Total	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0		100.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0		
PHF	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.250	0.000	0.000	0.000	0.250	0.000	0.000	0.000	0.000	0.000	0.250
		_	_	_	_		_	_		_		_		_				_		_	
Entering Leg	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0	01	1
Exiting Leg					0					1					0					0	1
Total					0					1					1	l				0	2

Location: N: Faulkner Street S: Faulkner Street

Location: W: Public Storage Parking Area SW: Public Storage Front Lot

City, State: Malden, MA
Client: VHB/ M. Kealey

Site Code: **52739**

Count Date: Thursday, May 6, 2021

Start Time: 4:00 PM End Time: 6:00 PM

Class:



157 Washington Street, Suite 2 Hudson, MA 01749 Office: 508-875-0100 Fax: 508-875-0118 Email: datarequests@pdillc.com

Bicycles (on Roadway and Crosswalks)

								•		•									
			Faulkne	r Street					Faulkne	r Street				Public	Storage	Parking	Area		
			from	North					from	South					from '	West			
	Right	Thru	U-Turn	CW-EB	CW-WB	Total	Thru	Left	U-Turn	CW-WB	CW-EB	Total	Right	Left	U-Turn	CW-NB	CW-SB	Total	Total
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1 _		_			-1	_		_		_	_1	1 _	_	_			_1	_
Grand Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Approach %	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0		
Total %	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Exiting Leg Total						0						0						0	0

4:00 PM			Faulkne	r Street					Faulkne	r Street				Public	Storage	Parking	Area		
			from I	North					from S	South					from	West			
	Right	Thru	U-Turn	CW-EB	CW-WB	Total	Thru	Left	U-Turn	CW-WB	CW-EB	Total	Right	Left	U-Turn	CW-NB	CW-SB	Total	Total
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% Approach Total	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0		
PHF	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Entering Leg	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Exiting Leg						0						0						0	0
Total						0						0						0	0

Location: N: Faulkner Street S: Faulkner Street

Location: W: Public Storage Parking Area SW: Public Storage Front Lot

City, State: Malden, MA
Client: VHB/ M. Kealey

Site Code: **52739**

Count Date: Thursday, May 6, 2021

Start Time: 4:00 PM End Time: 6:00 PM

Class:



157 Washington Street, Suite 2 Hudson, MA 01749 Office: 508-875-0100 Fax: 508-875-0118 Email: datarequests@pdillc.com

Pedestrians

			Faulkne	r Street					Faulkne	r Street				Public	Storage	Parking	Area		
			from	North					from	South					from	West			
	Right	Thru	U-Turn	CW-EB	CW-WB	Total	Thru	Left	U-Turn	CW-WB	CW-EB	Total	Right	Left	U-Turn	CW-NB	CW-SB	Total	Total
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	0	4	4
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	3	3
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5	3	8	8
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	1	3	3
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	1	4	4
													Ī						
Grand Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8	4	12	12
Approach %	0	0	0	0	0		0	0	0	0	0		0	0	0	66.667	33.333		
Total %	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	66.667	33.333	100	
Exiting Leg Total						0						0						12	12

4:00 PM			Faulkne	r Street					Faulkne	r Street				Public	Storage	Parking	Area		
			from I	North					from :	South					from	West			
	Right	Thru	U-Turn	CW-EB	CW-WB	Total	Thru	Left	U-Turn	CW-WB	CW-EB	Total	Right	Left	U-Turn	CW-NB	CW-SB	Total	Total
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	0	4	4
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	3	3
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1
Total Volume	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5	3	8	8
% Approach Total	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	62.5	37.5		
PHF	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.313	0.250	0.500	0.500
Entering Leg	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5	3	8	8
Exiting Leg						0						0						8	8
Total						0						0						16	16

Location: N: #650 Public Storage Driveway

Location: E: Eastern Avenue (Route 60) W: Eastern Avenue (Route 60)

City, State: Malden, MA
Client: VHB/ M. Kealey

Site Code: **52739**

Count Date: Thursday, May 6, 2021

Start Time: 7:00 AM
End Time: 9:00 AM

Class:



157 Washington Street, Suite 2 Hudson, MA 01749 Office: 508-875-0100 Fax: 508-875-0118 Email: datarequests@pdillc.com

Cars and Heavy Vehicles (Combined)

						100.1		,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,					
	#650	O Public Sto	rage Drivev	vay	Ea	stern Aveni	ue (Route 60	0)	Ea	stern Aveni	ue (Route 60	0)	
		from I	North			from	East			from	West		•
	Right	Left	U-Turn	Total	Right	Thru	U-Turn	Total	Thru	Left	U-Turn	Total	Total
7:00 AM	0	0	0	0	0	144	0	144	111	0	0	111	255
7:15 AM	0	0	0	0	0	184	0	184	124	1	0	125	309
7:30 AM	0	0	0	0	0	163	0	163	145	1	0	146	309
7:45 AM	1	1	0	2	0	198	0	198	173	0	0	173	373
Total	1	1	0	2	0	689	0	689	553	2	0	555	1246
8:00 AM	0	0	0	0	0	148	0	148	158	0	0	158	306
8:15 AM	0	0	0	0	0	151	0	151	130	0	0	130	281
8:30 AM	0	0	0	0	1	140	0	141	127	1	0	128	269
8:45 AM	0	0	0	0	0	130	0	130	98	0	0	98	228
Total	0	0	0	0	1	569	0	570	513	1	0	514	1084
Grand Total	1	1	0	2	1	1258	0	1259	1066	3	0	1069	2330
Approach %	50.0	50.0	0.0		0.1	99.9	0.0		99.7	0.3	0.0		
Total %	0.0	0.0	0.0	0.1	0.0	54.0	0.0	54.0	45.8	0.1	0.0	45.9	
Exiting Leg Total				4				1067				1259	2330
Cars	1	1	0	2	1	1216	0	1217	993	2	0	995	2214
% Cars	100.0	100.0	0.0	100.0	100.0	96.7	0.0	96.7	93.2	66.7	0.0	93.1	95.0
Exiting Leg Total				3				994				1217	2214
Heavy Vehicles	0	0	0	0	0	42	0	42	73	1	0	74	116
% Heavy Vehicles	0.0	0.0	0.0	0.0	0.0	3.3	0.0	3.3	6.8	33.3	0.0	6.9	5.0
Exiting Leg Total				1				73				42	116

7:15 AM	#650	Public Sto	rage Drivew	ay	Ea	stern Aveni	ue (Route 60))	Eas	stern Aveni	ue (Route 60))	
		from N	North			from	East			from	West		
	Right	Left	U-Turn	Total	Right	Thru	U-Turn	Total	Thru	Left	U-Turn	Total	Total
7:15 AM	0	0	0	0	0	184	0	184	124	1	0	125	309
7:30 AM	0	0	0	0	0	163	0	163	145	1	0	146	309
7:45 AM	1	1	0	2	0	198	0	198	173	0	0	173	373
8:00 AM	0	0	0	0	0	148	0	148	158	0	0	158	306
Total Volume	1	1	0	2	0	693	0	693	600	2	0	602	1297
% Approach Total	50.0	50.0	0.0		0.0	100.0	0.0		99.7	0.3	0.0		
PHF	0.250	0.250	0.000	0.250	0.000	0.875	0.000	0.875	0.867	0.500	0.000	0.870	0.869
Cars	1	1	0	اد	0	671	0	671	562	1	0	563	1236
Cars %	100.0	100.0	0.0	100.0	0.0	96.8	0.0	96.8	93.7	50.0	0.0	93.5	95.3
Heavy Vehicles	0.00	0	0.0	0.00	0.0	22	0.0	22	38	1	0.0	39	61
Heavy Vehicles %	0.0	0.0	0.0	0.0	0.0	3.2	0.0	3.2	6.3	50.0	0.0	6.5	4.7
Cars Enter Leg	1	1	0	2	0	671	0	671	562	1	0	563	1236
Heavy Enter Leg	0	0	0	0	0	22	0	22	38	1	0	39	61
Total Entering Leg	1	1	0	2	0	693	0	693	600	2	0	602	1297
Cars Exiting Leg				1				563				672	1236
Heavy Exiting Leg				1				38				22	61
Total Exiting Leg				2				601				694	1297

Location: N: #650 Public Storage Driveway

Location: E: Eastern Avenue (Route 60) W: Eastern Avenue (Route 60)

City, State: Malden, MA
Client: VHB/ M. Kealey

Site Code: **52739**

Count Date: Thursday, May 6, 2021

Start Time: **7:00 AM**End Time: **9:00 AM**

Class:



157 Washington Street, Suite 2 Hudson, MA 01749 Office: 508-875-0100 Fax: 508-875-0118 Email: datarequests@pdillc.com

Cars

							-						
	#650	Public Sto	rage Drivew	<i>y</i> ay	Ea	stern Avenı	ue (Route 60	0)	Ea	stern Aveni	ue (Route 60	0)	
		from I	North			from	East			from	West		
	Right	Left	U-Turn	Total	Right	Thru	U-Turn	Total	Thru	Left	U-Turn	Total	Total
7:00 AM	0	0	0	0	0	140	0	140	104	0	0	104	244
7:15 AM	0	0	0	0	0	180	0	180	117	1	0	118	298
7:30 AM	0	0	0	0	0	159	0	159	132	0	0	132	291
7:45 AM	1	1	0	2	0	190	0	190	165	0	0	165	357
Total	1	1	0	2	0	669	0	669	518	1	0	519	1190
8:00 AM	0	0	0	0	0	142	0	142	148	0	0	148	290
8:15 AM	0	0	0	0	0	147	0	147	117	0	0	117	264
8:30 AM	0	0	0	0	1	132	0	133	116	1	0	117	250
8:45 AM	0	0	0	0	0	126	0	126	94	0	0	94	220
Total	0	0	0	0	1	547	0	548	475	1	0	476	1024
0 17.1	1 .			اء	1 .								
Grand Total	1	1	0	2	1	1216	0	1217	993	2	0	995	2214
Approach %	50.0	50.0	0.0		0.1	99.9	0.0		99.8	0.2	0.0		
Total %	0.0	0.0	0.0	0.1	0.0	54.9	0.0	55.0	44.9	0.1	0.0	44.9	
Exiting Leg Total				3				994				1217	2214

7:15 AM	#650	O Public Sto	rage Drivev	vay	Ea	stern Aven	ue (Route 6	0)	Ea	stern Aven	ue (Route 60	0)	
		from I	North			from	East			from	West		
	Right	Left	U-Turn	Total	Right	Thru	U-Turn	Total	Thru	Left	U-Turn	Total	Total
7:15 AM	0	0	0	0	0	180	0	180	117	1	0	118	298
7:30 AM	0	0	0	0	0	159	0	159	132	0	0	132	291
7:45 AM	1	1	0	2	0	190	0	190	165	0	0	165	357
8:00 AM	0	0	0	0	0	142	0	142	148	0	0	148	290
Total Volume	1	1	0	2	0	671	0	671	562	1	0	563	1236
% Approach Total	50.0	50.0	0.0		0.0	100.0	0.0		99.8	0.2	0.0		
PHF	0.250	0.250	0.000	0.250	0.000	0.883	0.000	0.883	0.852	0.250	0.000	0.853	0.866
Entering Leg	1	1	0	2	0	671	0	671	562	1	0	563	1236
Exiting Leg				1				563				672	1236
Total				3				1234				1235	2472

Location: N: #650 Public Storage Driveway

Location: E: Eastern Avenue (Route 60) W: Eastern Avenue (Route 60)

City, State: Malden, MA
Client: VHB/ M. Kealey

Site Code: **52739**

Count Date: Thursday, May 6, 2021

Start Time: 7:00 AM
End Time: 9:00 AM

Class:



157 Washington Street, Suite 2 Hudson, MA 01749 Office: 508-875-0100 Fax: 508-875-0118 Email: datarequests@pdillc.com

Heavy Vehicles-Combined (Buses, Single-Unit Trucks, Articulated Trucks)

	#65	0 Public Sto	rage Drivew	/ay	Ea	stern Aveni	ue (Route 60	0)	Ea	stern Aven	ue (Route 60	0)	
		from I	North			from	East			from	West		
	Right	Left	U-Turn	Total	Right	Thru	U-Turn	Total	Thru	Left	U-Turn	Total	Total
7:00 AM	0	0	0	0	0	4	0	4	7	0	0	7	11
7:15 AM	0	0	0	0	0	4	0	4	7	0	0	7	11
7:30 AM	0	0	0	0	0	4	0	4	13	1	0	14	18
7:45 AM	0	0	0	0	0	8	0	8	8	0	0	8	16
Total	0	0	0	0	0	20	0	20	35	1	0	36	56
8:00 AM	0	0	0	0	0	6	0	6	10	0	0	10	16
8:15 AM	0	0	0	0	0	4	0	4	13	0	0	13	17
8:30 AM	0	0	0	0	0	8	0	8	11	0	0	11	19
8:45 AM	0	0	0	0	0	4	0	4	4	0	0	4	8
Total	0	0	0	0	0	22	0	22	38	0	0	38	60
Grand Total	0	0	0	0	0	42	0	42	73	1	0	74	116
Approach %	0.0	0.0	0.0		0.0	100.0	0.0		98.6	1.4	0.0		
Total %	0.0	0.0	0.0	0.0	0.0	36.2	0.0	36.2	62.9	0.9	0.0	63.8	
Exiting Leg Total				1				73				42	116
Buses	0	0	0	0	0	9	0	9	21	0	0	21	30
% Buses	0.0	0.0	0.0	0.0	0.0	21.4	0.0	21.4	28.8	0.0	0.0	28.4	25.9
Exiting Leg Total				0				21				9	30
Single-Unit Trucks	0	0	0	0	0	24	0	24	43	1	0	44	68
% Single-Unit	0.0	0.0	0.0	0.0	0.0	57.1	0.0	57.1	58.9	100.0	0.0	59.5	58.6
Exiting Leg Total				1				43				24	68
Articulated Trucks	0	0	0	0	0	9	0	9	9	0	0	9	18
% Articulated	0.0	0.0	0.0	0.0	0.0	21.4	0.0	21.4	12.3	0.0	0.0	12.2	15.5
Exiting Leg Total				0				9				9	18

7:45 AM	#650	O Public Sto	rage Drivew	/ay	Ea	stern Aveni	ue (Route 60	(0	Ea	stern Aveni	ue (Route 60	0)	
		from I	North			from	East			from	West		
	Right	Left	U-Turn	Total	Right	Thru	U-Turn	Total	Thru	Left	U-Turn	Total	Total
7:45 AM	0	0	0	0	0	8	0	8	8	0	0	8	16
8:00 AM	0	0	0	0	0	6	0	6	10	0	0	10	16
8:15 AM	0	0	0	0	0	4	0	4	13	0	0	13	17
8:30 AM	0	0	0	0	0	8	0	8	11	0	0	11	19
Total Volume	0	0	0	0	0	26	0	26	42	0	0	42	68
% Approach Total	0.0	0.0	0.0		0.0	100.0	0.0		100.0	0.0	0.0		
PHF	0.000	0.000	0.000	0.000	0.000	0.813	0.000	0.813	0.808	0.000	0.000	0.808	0.895
Duran				ام		_		-	l 45	•	•	ء ۔ ا	20
Buses	0	0	0	0	0	5	0	5	15	0	0	15	20
Buses %	0.0	0.0	0.0	0.0	0.0	19.2	0.0	19.2		0.0	0.0	35.7	29.4
Single-Unit Trucks	0	0	0	0	0	17	0	17	19	0	0	19	36
Single-Unit %	0.0	0.0	0.0	0.0	0.0	65.4	0.0	65.4	45.2	0.0	0.0	45.2	52.9
Articulated Trucks	0	0	0	0	0	4	0	4	8	0	0	8	12
Articulated %	0.0	0.0	0.0	0.0	0.0	15.4	0.0	15.4	19.0	0.0	0.0	19.0	17.6
Buses	0	0	0	0	0	5	0	5	15	0	0	15	20
Single-Unit Trucks	0	0	0	0	0	17	0	17	19	0	0	19	36
Articulated Trucks	0	0	0	0	0	4	0	4	8	0	0	8	12
Total Entering Leg	0	0	0	0	0	26	0	26	42	0	0	42	68
Buses				0				15				5	20
Single-Unit Trucks				0				19				17	36
Articulated Trucks				0				8				4	12
Total Exiting Leg				0				42		-		26	68

Location: N: #650 Public Storage Driveway

Location: E: Eastern Avenue (Route 60) W: Eastern Avenue (Route 60)

City, State: Malden, MA
Client: VHB/ M. Kealey

Site Code: **52739**

Count Date: Thursday, May 6, 2021

Start Time: **7:00 AM**End Time: **9:00 AM**

Class:

PRECISION D A T A INDUSTRIS, LLC

157 Washington Street, Suite 2 Hudson, MA 01749 Office: 508-875-0100 Fax: 508-875-0118 Email: datarequests@pdillc.com

Buses

	#650	O Public Sto	orage Drivev	vay	Ea	stern Aven	ue (Route 6	0)	Ea	stern Avenu	ue (Route 60	0)	
		from I	North			from	East			from '	West		
	Right	Left	U-Turn	Total	Right	Thru	U-Turn	Total	Thru	Left	U-Turn	Total	Total
7:00 AM	0	0	0	0	0	2	0	2	3	0	0	3	5
7:15 AM	0	0	0	0	0	0	0	0	1	0	0	1	1
7:30 AM	0	0	0	0	0	2	0	2	2	0	0	2	4
7:45 AM	0	0	0	0	0	2	0	2	4	0	0	4	6
Total	0	0	0	0	0	6	0	6	10	0	0	10	16
8:00 AM	0	0	0	0	0	1	0	1	6	0	0	6	7
8:15 AM	0	0	0	0	0	1	0	1	3	0	0	3	4
8:30 AM	0	0	0	0	0	1	0	1	2	0	0	2	3
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	3	0	3	11	0	0	11	14
Grand Total	0	0	0	o	0	9	0	9	21	0	0	21	30
Approach %	0.0	0.0	0.0	·	0.0	100.0	0.0		100.0	0.0	0.0		
• •	0.0	0.0		0.0			0.0	20.0		0.0		70.0	I
Total %	0.0	0.0	0.0			30.0	0.0	30.0		0.0	0.0	70.0	
Exiting Leg Total				0				21				9	30

									1				
7:30 AM	#650	O Public Sto	rage Drivev	vay	Ea	stern Aven	ue (Route 60	0)	Ea	istern Aven	ue (Route 6	0)	
		from I	North			from	East			from	West		
	Right	Left	U-Turn	Total	Right	Thru	U-Turn	Total	Thru	Left	U-Turn	Total	Total
7:30 AM	0	0	0	0	0	2	0	2	2	0	0	2	4
7:45 AM	0	0	0	0	0	2	0	2	4	0	0	4	6
8:00 AM	0	0	0	0	0	1	0	1	6	0	0	6	7
8:15 AM	0	0	0	0	0	1	0	1	3	0	0	3	4
Total Volume	0	0	0	0	0	6	0	6	15	0	0	15	21
% Approach Total	0.0	0.0	0.0		0.0	100.0	0.0		100.0	0.0	0.0		
PHF	0.000	0.000	0.000	0.000	0.000	0.750	0.000	0.750	0.625	0.000	0.000	0.625	0.750
Entering Leg	0	0	0	0	0	6	0	6	15	0	0	1.5	21
Entering Leg	U	U	0	U	U	б	0	О	15	U	0	15	21
Exiting Leg				0				15				6	21
Total				0				21				21	42

Location: N: #650 Public Storage Driveway

Location: E: Eastern Avenue (Route 60) W: Eastern Avenue (Route 60)

City, State: Malden, MA Client: VHB/ M. Kealey

Site Code: 52739

Count Date: Thursday, May 6, 2021

Start Time: 7:00 AM End Time: 9:00 AM



157 Washington Street, Suite 2 Hudson, MA 01749 Office: 508-875-0100 Fax: 508-875-0118 Email: datarequests@pdillc.com

Class:					S	ingle-Un	it Trucks						
	#650	Public Sto	rage Drivew	ay	Eas	stern Avenu	ue (Route 60	1)	Eas	tern Avenu	ie (Route 60))	
		from N	North			from	East			from \	West		
	Right	Left	U-Turn	Total	Right	Thru	U-Turn	Total	Thru	Left	U-Turn	Total	Total
7:00 AM	0	0	0	0	0	0	0	0	3	0	0	3	3
7:15 AM	0	0	0	0	0	2	0	2	6	0	0	6	8
7:30 AM	0	0	0	0	0	2	0	2	11	1	0	12	14
7:45 AM	0	0	0	0	0	5	0	5	2	0	0	2	7
Total	0	0	0	0	0	9	0	9	22	1	0	23	32
8:00 AM	0	0	0	0	0	5	0	5	2	0	0	2	7
8:15 AM	0	0	0	0	0	3	0	3	7	0	0	7	10
8:30 AM	0	0	0	0	0	4	0	4	8	0	0	8	12
8:45 AM	0	0	0	0	0	3	0	3	4	0	0	4	7
Total	0	0	0	0	0	15	0	15	21	0	0	21	36
Grand Total	0	0	0	0	0	24	0	24	43	1	0	44	68
Approach %	0.0	0.0	0.0		0.0	100.0	0.0		97.7	2.3	0.0		
Total %	0.0	0.0	0.0	0.0	0.0	35.3	0.0	35.3	63.2	1.5	0.0	64.7	
Exiting Leg Total				1				43				24	68

7:30 AM	#650	Public Sto	rage Drivev	vay	Ea	stern Aveni	ue (Route 60))	Ea	stern Aven	ue (Route 6	0)	
		from I	North			from	East			from	West		
	Right	Left	U-Turn	Total	Right	Thru	U-Turn	Total	Thru	Left	U-Turn	Total	Total
7:30 AM	0	0	0	0	0	2	0	2	11	1	0	12	14
7:45 AM	0	0	0	0	0	5	0	5	2	0	0	2	7
8:00 AM	0	0	0	0	0	5	0	5	2	0	0	2	7
8:15 AM	0	0	0	0	0	3	0	3	7	0	0	7	10
Total Volume	0	0	0	0	0	15	0	15	22	1	0	23	38
% Approach Total	0.0	0.0	0.0		0.0	100.0	0.0		95.7	4.3	0.0		
PHF	0.000	0.000	0.000	0.000	0.000	0.750	0.000	0.750	0.500	0.250	0.000	0.479	0.679
Entering Leg	0	0	0	0	0	15	0	15	22	1	0	23	38
Exiting Leg				1				22				15	38
Total				1				37				38	76

Location: N: #650 Public Storage Driveway

Location: E: Eastern Avenue (Route 60) W: Eastern Avenue (Route 60)

City, State: Malden, MA
Client: VHB/ M. Kealey

Site Code: **52739**

Count Date: Thursday, May 6, 2021

Start Time: **7:00 AM**End Time: **9:00 AM**

Class:



157 Washington Street, Suite 2 Hudson, MA 01749 Office: 508-875-0100 Fax: 508-875-0118 Email: datarequests@pdillc.com

Articulated Trucks

	#650	Public Sto	rage Drivew	/ay	Ea	stern Aven	ue (Route 60	0)	Ea	stern Avenu	ue (Route 60	0)	
		from I	North			from	East			from '	West		
	Right	Left	U-Turn	Total	Right	Thru	U-Turn	Total	Thru	Left	U-Turn	Total	Total
7:00 AM	0	0	0	0	0	2	0	2	1	0	0	1	3
7:15 AM	0	0	0	0	0	2	0	2	0	0	0	0	2
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	1	0	1	2	0	0	2	3
Total	0	0	0	0	0	5	0	5	3	0	0	3	8
8:00 AM	0	0	0	0	0	0	0	0	2	0	0	2	2
8:15 AM	0	0	0	0	0	0	0	0	3	0	0	3	3
8:30 AM	0	0	0	0	0	3	0	3	1	0	0	1	4
8:45 AM	0	0	0	0	0	1	0	1	0	0	0	0	1
Total	0	0	0	0	0	4	0	4	6	0	0	6	10
Grand Total	0	0	0	0	0	9	0	9	9	0	0	9	18
Approach %	0.0	0.0	0.0		0.0	100.0	0.0		100.0	0.0	0.0		
Total %	0.0	0.0	0.0	0.0	0.0	50.0	0.0	50.0	50.0	0.0	0.0	50.0	
Exiting Leg Total				0		<u> </u>		9				9	18

7:45 AM	#650) Public Sto	orage Drivev	vay	Ea	stern Aven	ue (Route 60	0)	E	astern Aven	ue (Route 6	0)	
		from	North			from	East			from	West		
	Right	Left	U-Turn	Total	Right	Thru	U-Turn	Total	Thru	Left	U-Turn	Total	Total
7:45 AM	0	0	0	0	0	1	0	1	2	0	0	2	3
8:00 AM	0	0	0	0	0	0	0	0	2	0	0	2	2
8:15 AM	0	0	0	0	0	0	0	0	3	0	0	3	3
8:30 AM	0	0	0	0	0	3	0	3	1	0	0	1	4
Total Volume	0	0	0	0	0	4	0	4	8	0	0	8	12
% Approach Total	0.0	0.0	0.0		0.0	100.0	0.0		100.0	0.0	0.0		
PHF	0.000	0.000	0.000	0.000	0.000	0.333	0.000	0.333	0.667	0.000	0.000	0.667	0.750
Entering Leg	0	0	0	0	0	4	0	4	8	0	0	8	12
Exiting Leg				0				8				4	12
Total				0				12				12	24

Location: N: #650 Public Storage Driveway

Location: E: Eastern Avenue (Route 60) W: Eastern Avenue (Route 60)

City, State: Malden, MA

Client: VHB/ M. Kealey

Site Code: **52739**

Count Date: Thursday, May 6, 2021

Start Time: 7:00 AM
End Time: 9:00 AM

Class:

Grand Total

Approach %

Exiting Leg Total

Total %



157 Washington Street, Suite 2 Hudson, MA 01749 Office: 508-875-0100 Fax: 508-875-0118 Email: datarequests@pdillc.com

Email: datarequests@pdillc.com

Bicycles (on Roadway and Crosswalks)

#650 Public Storage Driveway Eastern Avenue (Route 60) Eastern Avenue (Route 60) from West from North from East Total Total Left U-Turn CW-EB CW-WB Total U-Turn CW-SB CW-NB Total Thru Left CW-NB CW-SB Right 7:00 AM 7:15 AM 7:30 AM 7:45 AM Total 8:00 AM 8:15 AM 8:30 AM 8:45 AM Total

0.0

0.0

0.0

0.0

0.0

0.0

33.3

0.0

0.0

0.0

0.0

0.0

0.0

100.0

33.3

0.0

0.0

33 :

Peak Hour Analysis from 07:00 AM to 09:00 AM begins at:

0.0

0.0

0.0

0.0

100.0

33.3

0.0

0.0

33.3

0.0

0.0

100.0

33.3

0.0

																			_
7:00 AM		#650 P	ublic Sto	orage Dr	iveway			Easte	rn Aven	ue (Rou	te 60)	·		Easte	rn Aven	ue (Rout	te 60)		
			from	North					from	East					from	West			
	Right	Left	U-Turn	CW-EB	CW-WB	Total	Right	Thru	U-Turn	CW-SB	CW-NB	Total	Thru	Left	U-Turn	CW-NB	CW-SB	Total	Total
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	1	0	1	2
7:45 AM	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
Total Volume	0	0	0	1	0	1	0	1	0	0	0	1	0	0	0	1	0	1	3
% Approach Total	0.0	0.0	0.0	100.0	0.0		0.0	100.0	0.0	0.0	0.0		0.0	0.0	0.0	100.0	0.0		
PHF	0.000	0.000	0.000	0.250	0.000	0.250	0.000	0.250	0.000	0.000	0.000	0.250	0.000	0.000	0.000	0.250	0.000	0.250	0.375
	I						· 						· 						
Entering Leg	0	0	0	1	0	1	0	1	0	0	0	1	0	0	0	1	0	1	3
Exiting Leg						1						0						2	3
Total		•			•	2		•	•	•		1		•			•	3	6

Location: N: #650 Public Storage Driveway

Location: E: Eastern Avenue (Route 60) W: Eastern Avenue (Route 60)

City, State: Malden, MA Client: VHB/ M. Kealey

Site Code: 52739

Count Date: Thursday, May 6, 2021

Start Time: 7:00 AM End Time: 9:00 AM



157 Washington Street, Suite 2 Hudson, MA 01749 Office: 508-875-0100 Fax: 508-875-0118 Email: datarequests@pdillc.com

Pedestrians

Class:									Pedes	trians									
		#650 P	ublic Sto	orage Dr	iveway			Easte	rn Aven	ue (Rout	te 60)			Easte	rn Aven	ue (Rout	e 60)		
			from	North					from	East					from	West			
	Right	Left	U-Turn	CW-EB	CW-WB	Total	Right	Thru	U-Turn	CW-SB	CW-NB	Total	Thru	Left	U-Turn	CW-NB	CW-SB	Total	Total
7:00 AM	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	5	0	5	6
7:15 AM	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	1	1	2
7:30 AM	0	0	0	1	2	3	0	0	0	0	2	2	0	0	0	4	1	5	10
7:45 AM	0	0	0	2	0	2	0	0	0	0	5	5	0	0	0	13	1	14	21
Total	0	0	0	3	3	6	0	0	0	0	8	8	0	0	0	22	3	25	39
8:00 AM	0	0	0	0	10	10	0	0	0	0	11	11	0	0	0	10	3	13	34
8:15 AM	0	0	0	3	0	3	0	0	0	2	1	3	0	0	0	8	6	14	20
8:30 AM	0	0	0	1	1	2	0	0	0	0	0	0	0	0	0	2	1	3	5
8:45 AM	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	1	1	2	3
Total	0	0	0	5	11	16	0	0	0	2	12	14	0	0	0	21	11	32	62
Grand Total	0	0	0	8	14	22	0	0	0	2	20	22	0	0	0	43	14	57	101
Approach %	0	0	0	36.364	63.636		0	0	0	9.0909	90.909		0	0	0	75.439	24.561		
Total %	0	0	0	7.9208	13.861	21.782	0	0	0	1.9802	19.802	21.782	0	0	0	42.574	13.861	56.436	
Exiting Leg Total						22						22						57	101

7:30 AM		#650 P	ublic Sto	orage Dr	iveway			Easte	rn Aveni	ue (Rou	te 60)			Easte	rn Aven	ue (Rout	e 60)		
			from	North					from	East					from	West			
	Right	Left	U-Turn	CW-EB	CW-WB	Total	Right	Thru	U-Turn	CW-SB	CW-NB	Total	Thru	Left	U-Turn	CW-NB	CW-SB	Total	Total
7:30 AM	0	0	0	1	2	3	0	0	0	0	2	2	0	0	0	4	1	5	10
7:45 AM	0	0	0	2	0	2	0	0	0	0	5	5	0	0	0	13	1	14	21
8:00 AM	0	0	0	0	10	10	0	0	0	0	11	11	0	0	0	10	3	13	34
8:15 AM	0	0	0	3	0	3	0	0	0	2	1	3	0	0	0	8	6	14	20
Total Volume	0	0	0	6	12	18	0	0	0	2	19	21	0	0	0	35	11	46	85
% Approach Total	0.0	0.0	0.0	33.3	66.7		0.0	0.0	0.0	9.5	90.5		0.0	0.0	0.0	76.1	23.9		
PHF	0.000	0.000	0.000	0.500	0.300	0.450	0.000	0.000	0.000	0.250	0.432	0.477	0.000	0.000	0.000	0.673	0.458	0.821	0.625
Entering Leg	0	0	0	6	12	18	0	0	0	2	19	21	0	0	0	35	11	46	85
Exiting Leg						18						21						46	85
Total		•	•			36		•		•		42	•		•	•	•	92	170

Location: N: #650 Public Storage Driveway

Location: E: Eastern Avenue (Route 60) W: Eastern Avenue (Route 60)

City, State: Malden, MA
Client: VHB/ M. Kealey

Site Code: **52739**

Count Date: Thursday, May 6, 2021

Start Time: 4:00 PM
End Time: 6:00 PM

Class:



157 Washington Street, Suite 2 Hudson, MA 01749 Office: 508-875-0100 Fax: 508-875-0118 Email: datarequests@pdillc.com

Cars and Heavy Vehicles (Combined)

						, , ,		,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,					
	#650	Public Sto	rage Drivev	vay	Ea	stern Aveni	ue (Route 60	0)	Ea	stern Aveni	ue (Route 60	0)	
		from I	North			from	East			from	West		•
	Right	Left	U-Turn	Total	Right	Thru	U-Turn	Total	Thru	Left	U-Turn	Total	Total
4:00 PM	2	0	0	2	1	136	1	138	192	1	0	193	333
4:15 PM	0	0	0	0	0	150	0	150	187	0	0	187	337
4:30 PM	3	0	0	3	0	141	0	141	199	0	0	199	343
4:45 PM	0	0	0	0	1	168	0	169	197	0	0	197	366
Total	5	0	0	5	2	595	1	598	775	1	0	776	1379
5:00 PM	0	0	0	0	0	150	0	150	200	0	0	200	350
5:15 PM	0	1	0	1	0	126	0	126	222	1	0	223	350
5:30 PM	0	0	0	0	1	115	0	116	176	0	0	176	292
5:45 PM	0	0	0	0	0	126	0	126	187	1	0	188	314
Total	0	1	0	1	1	517	0	518	785	2	0	787	1306
Grand Total	5	1	0	6	3	1112	1	1116	1560	3	0	1563	2685
Approach %	83.3	16.7	0.0		0.3	99.6	0.1		99.8	0.2	0.0		
Total %	0.2	0.0	0.0	0.2	0.1	41.4	0.0	41.6	58.1	0.1	0.0	58.2	
Exiting Leg Total				6				1562				1117	2685
Cars	5	1	0	6	3	1095	1	1099	1529	3	0	1532	2637
% Cars	100.0	100.0	0.0	100.0	100.0	98.5	100.0	98.5	98.0	100.0	0.0	98.0	98.2
Exiting Leg Total				6				1531				1100	2637
Heavy Vehicles	0	0	0	0	0	17	0	17	31	0	0	31	48
% Heavy Vehicles	0.0	0.0	0.0	0.0	0.0	1.5	0.0	1.5	2.0	0.0	0.0	2.0	1.8
Exiting Leg Total				0				31				17	48

4:30 PM	#650	Public Sto	rage Drivew	ay	Eas	stern Aveni	ue (Route 60)	Eas	stern Aveni	ue (Route 60	0)	
		from N	North			from	East			from	West		
	Right	Left	U-Turn	Total	Right	Thru	U-Turn	Total	Thru	Left	U-Turn	Total	Total
4:30 PM	3	0	0	3	0	141	0	141	199	0	0	199	343
4:45 PM	0	0	0	0	1	168	0	169	197	0	0	197	366
5:00 PM	0	0	0	0	0	150	0	150	200	0	0	200	350
5:15 PM	0	1	0	1	0	126	0	126	222	1	0	223	350
Total Volume	3	1	0	4	1	585	0	586	818	1	0	819	1409
% Approach Total	75.0	25.0	0.0		0.2	99.8	0.0		99.9	0.1	0.0		
PHF	0.250	0.250	0.000	0.333	0.250	0.871	0.000	0.867	0.921	0.250	0.000	0.918	0.962
Cars	3	1	0	4	1	575	0	576	804	1	0	805	1385
Cars %	100.0	100.0	0.0	100.0	100.0	98.3	0.0	98.3	98.3	100.0	0.0	98.3	
Heavy Vehicles	0	0	0	0	0	10	0	10	14	0	0	14	24
Heavy Vehicles %	0.0	0.0	0.0	0.0	0.0	1.7	0.0	1.7	1.7	0.0	0.0	1.7	1.7
Cars Enter Leg	3	1	0	4	1	575	0	576	804	1	0	805	1385
Heavy Enter Leg	0	0	0	0	0	10	0	10	14	0	0	14	24
Total Entering Leg	3	1	0	4	1	585	0	586	818	1	0	819	1409
Cars Exiting Leg				2				805				578	1385
Heavy Exiting Leg				0				14				10	24
Total Exiting Leg				2				819				588	1409

Location: N: #650 Public Storage Driveway

Location: E: Eastern Avenue (Route 60) W: Eastern Avenue (Route 60)

City, State: Malden, MA Client: VHB/ M. Kealey

Site Code: 52739

Count Date: Thursday, May 6, 2021

Start Time: 4:00 PM End Time: 6:00 PM



157 Washington Street, Suite 2 Hudson, MA 01749 Office: 508-875-0100 Fax: 508-875-0118 Email: datarequests@pdillc.com

Class:						Ca	rs						
	#650) Public Sto	rage Drivew	/ay	Ea	stern Avenı	ue (Route 60	0)	Ea	stern Aveni	ue (Route 60	0)	
		from N	North			from	East			from	West		
	Right	Left	U-Turn	Total	Right	Thru	U-Turn	Total	Thru	Left	U-Turn	Total	Total
4:00 PM	2	0	0	2	1	135	1	137	191	1	0	192	331
4:15 PM	0	0	0	0	0	146	0	146	179	0	0	179	325
4:30 PM	3	0	0	3	0	139	0	139	195	0	0	195	337
4:45 PM	0	0	0	0	1	162	0	163	190	0	0	190	353
Total	5	0	0	5	2	582	1	585	755	1	0	756	1346
5:00 PM	0	0	0	0	0	148	0	148	199	0	0	199	347
5:15 PM	0	1	0	1	0	126	0	126	220	1	0	221	348
5:30 PM	0	0	0	0	1	115	0	116	172	0	0	172	288
5:45 PM	0	0	0	0	0	124	0	124	183	1	0	184	308
Total	0	1	0	1	1	513	0	514	774	2	0	776	1291
-													
Grand Total	5	1	0	6	3	1095	1	1099	1529	3	0	1532	2637
Approach %	83.3	16.7	0.0		0.3	99.6	0.1		99.8	0.2	0.0		
Total %	0.2	0.0	0.0	0.2	0.1	41.5	0.0	41.7	58.0	0.1	0.0	58.1	
Exiting Leg Total				6				1531				1100	2637

4:30 PM	#650	O Public Sto	rage Drivev	vay	Ea	stern Aven	ue (Route 6	0)	Ea	stern Aven	ue (Route 60	0)	
		from I	North			from	East			from	West		
	Right	Left	U-Turn	Total	Right	Thru	U-Turn	Total	Thru	Left	U-Turn	Total	Total
4:30 PM	3	0	0	3	0	139	0	139	195	0	0	195	337
4:45 PM	0	0	0	0	1	162	0	163	190	0	0	190	353
5:00 PM	0	0	0	0	0	148	0	148	199	0	0	199	347
5:15 PM	0	1	0	1	0	126	0	126	220	1	0	221	348
Total Volume	3	1	0	4	1	575	0	576	804	1	0	805	1385
% Approach Total	75.0	25.0	0.0		0.2	99.8	0.0		99.9	0.1	0.0		
PHF	0.250	0.250	0.000	0.333	0.250	0.887	0.000	0.883	0.914	0.250	0.000	0.911	0.981
Entering Leg	3	1	0	4	1	575	0	576	804	1	0	805	1385
Exiting Leg				2				805				578	1385
Total				6				1381				1383	2770

Location: N: #650 Public Storage Driveway

Location: E: Eastern Avenue (Route 60) W: Eastern Avenue (Route 60)

City, State: Malden, MA
Client: VHB/ M. Kealey

Site Code: **52739**

Count Date: Thursday, May 6, 2021

Start Time: 4:00 PM
End Time: 6:00 PM

Class:



157 Washington Street, Suite 2 Hudson, MA 01749 Office: 508-875-0100 Fax: 508-875-0118 Email: datarequests@pdillc.com

Heavy Vehicles-Combined (Buses, Single-Unit Trucks, Articulated Trucks)

	#65	0 Public Sto	rage Drivev	vay	Ea	astern Aven	ue (Route 60	0)	Eas	stern Aven	ue (Route 60	0)	
		from I	North			from	East			from	West		
	Right	Left	U-Turn	Total	Right	Thru	U-Turn	Total	Thru	Left	U-Turn	Total	Total
4:00 PM	0	0	0	0	0	1	0	1	1	0	0	1	2
4:15 PM	0	0	0	0	0	4	0	4	8	0	0	8	12
4:30 PM	0	0	0	0	0	2	0	2	4	0	0	4	6
4:45 PM	0	0	0	0	0	6	0	6	7	0	0	7	13
Total	0	0	0	0	0	13	0	13	20	0	0	20	33
5:00 PM	0	0	0	0	0	2	0	2	1	0	0	1	3
5:15 PM	0	0	0	0	0	0	0	0	2	0	0	2	2
5:30 PM	0	0	0	0	0	0	0	0	4	0	0	4	4
5:45 PM	0	0	0	0	0	2	0	2	4	0	0	4	6
Total	0	0	0	0	0	4	0	4	11	0	0	11	15
Grand Total	0	0	0	0	0	17	0	17	31	0	0	31	48
Approach %	0.0	0.0	0.0		0.0	100.0	0.0		100.0	0.0	0.0		
Total %	0.0	0.0	0.0	0.0	0.0	35.4	0.0	35.4	64.6	0.0	0.0	64.6	
Exiting Leg Total				0				31				17	48
Buses	0	0	0	0	0	1	0	1	3	0	0	3	4
% Buses	0.0	0.0	0.0	0.0	0.0	5.9	0.0	5.9	9.7	0.0	0.0	9.7	8.3
Exiting Leg Total				0				3				1	4
Single-Unit Trucks	0	0	0	0	0	13	0	13	21	0	0	21	34
% Single-Unit	0.0	0.0	0.0	0.0	0.0	76.5	0.0	76.5	67.7	0.0	0.0	67.7	70.8
Exiting Leg Total				0				21				13	34
Articulated Trucks	0	0	0	0	0	3	0	3	7	0	0	7	10
% Articulated	0.0	0.0	0.0	0.0	0.0	17.6	0.0	17.6	22.6	0.0	0.0	22.6	20.8
Exiting Leg Total				0				7				3	10

4:15 PM	#650	O Public Sto	rage Drivew	ay	Eas	stern Avenu	ue (Route 60))	Eas	stern Avenu	ue (Route 60))	
		from N	North			from	East			from '	West		
	Right	Left	U-Turn	Total	Right	Thru	U-Turn	Total	Thru	Left	U-Turn	Total	Total
4:15 PM	0	0	0	0	0	4	0	4	8	0	0	8	12
4:30 PM	0	0	0	0	0	2	0	2	4	0	0	4	6
4:45 PM	0	0	0	0	0	6	0	6	7	0	0	7	13
5:00 PM	0	0	0	0	0	2	0	2	1	0	0	1	3
Total Volume	0	0	0	0	0	14	0	14	20	0	0	20	34
% Approach Total	0.0	0.0	0.0		0.0	100.0	0.0		100.0	0.0	0.0		
PHF	0.000	0.000	0.000	0.000	0.000	0.583	0.000	0.583	0.625	0.000	0.000	0.625	0.654
Buses	0	0	0	0	0	0	0	О	1	0	0	1	1
Buses %	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.0	0.0	0.0	5.0	2.9
Single-Unit Trucks	0	0	0	0	0	12	0	12	14	0	0	14	26
Single-Unit %	0.0	0.0	0.0	0.0	0.0	85.7	0.0	85.7	70.0	0.0	0.0	70.0	76.5
Articulated Trucks	0	0	0	0	0	2	0	2	5	0	0	5	7
Articulated %	0.0	0.0	0.0	0.0	0.0	14.3	0.0	14.3	25.0	0.0	0.0	25.0	20.6
Buses	0	0	0	0	0	0	0	0	1	0	0	1	1
Single-Unit Trucks	0	0	0	0	0	12	0	12	14	0	0	14	26
Articulated Trucks	0	0	0	0	0	2	0	2	5	0	0	5	7
Total Entering Leg	0	0	0	0	0	14	0	14	20	0	0	20	34
Buses				0				1				0	1
Single-Unit Trucks				0				14				12	26
Articulated Trucks				0				5				2	7
Total Exiting Leg				0				20				14	34

Location: N: #650 Public Storage Driveway

Location: E: Eastern Avenue (Route 60) W: Eastern Avenue (Route 60)

City, State: Malden, MA
Client: VHB/ M. Kealey

Site Code: **52739**

Count Date: Thursday, May 6, 2021

Start Time: **4:00 PM**End Time: **6:00 PM**

Class:

PRECISION D A T A INDUSTRIS, LLC

157 Washington Street, Suite 2 Hudson, MA 01749 Office: 508-875-0100 Fax: 508-875-0118 Email: datarequests@pdillc.com

Buses

	#650	O Public Sto	rage Drivew	ay ay	Ea	stern Aven	ue (Route 6	0)	Ea	stern Avenu	ue (Route 60	0)	
		from I	North			from	East			from \	West		
	Right	Left	U-Turn	Total	Right	Thru	U-Turn	Total	Thru	Left	U-Turn	Total	Total
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	1	0	0	1	1
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	1	0	0	1	1
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	1	0	0	1	1
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	1	0	1	1	0	0	1	2
Total	0	0	0	0	0	1	0	1	2	0	0	2	3
Grand Total	0	0	0	0	0	1	0	1	3	0	0	3	4
Approach %	0.0	0.0	0.0		0.0	100.0	0.0		100.0	0.0	0.0		
Total %	0.0	0.0	0.0	0.0	0.0	25.0	0.0	25.0	75.0	0.0	0.0	75.0	
Exiting Leg Total	<u></u>			0				3				1	4

5:00 PM	#650) Public Sto	rage Drivev	vay	Ea	stern Aveni	ue (Route 60	0)	Ea	stern Aven	ue (Route 6	0)	
		from I	North			from	East			from	West		
	Right	Left	U-Turn	Total	Right	Thru	U-Turn	Total	Thru	Left	U-Turn	Total	Total
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	1	0	0	1	1
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	1	0	1	1	0	0	1	2
Total Volume	0	0	0	0	0	1	0	1	2	0	0	2	3
% Approach Total	0.0	0.0	0.0		0.0	100.0	0.0		100.0	0.0	0.0		
PHF	0.000	0.000	0.000	0.000	0.000	0.250	0.000	0.250	0.500	0.000	0.000	0.500	0.375
Entering Leg	0	0	0	0	0	1	0	1	2	0	0	2	3
Exiting Leg				0				2				1	3
Total				0				3				3	6

Location: N: #650 Public Storage Driveway

Location: E: Eastern Avenue (Route 60) W: Eastern Avenue (Route 60)

City, State: Malden, MA Client: VHB/ M. Kealey

Site Code: 52739

Count Date: Thursday, May 6, 2021

Start Time: 4:00 PM End Time: 6:00 PM



157 Washington Street, Suite 2 Hudson, MA 01749 Office: 508-875-0100 Fax: 508-875-0118 Email: datarequests@pdillc.com

Class:					9	ingle-Un	it Trucks						
	#650	0 Public Sto	rage Drivew	<i>r</i> ay	Eas	stern Aveni	ue (Route 60	0)	Eas	stern Avenı	ue (Route 60))	
		from N	North			from	East			from '	West		
	Right	Left	U-Turn	Total	Right	Thru	U-Turn	Total	Thru	Left	U-Turn	Total	Total
4:00 PM	0	0	0	0	0	1	0	1	1	0	0	1	2
4:15 PM	0	0	0	0	0	3	0	3	6	0	0	6	9
4:30 PM	0	0	0	0	0	2	0	2	3	0	0	3	5
4:45 PM	0	0	0	0	0	5	0	5	5	0	0	5	10
Total	0	0	0	0	0	11	0	11	15	0	0	15	26
5:00 PM	0	0	0	0	0	2	0	2	0	0	0	0	2
5:15 PM	0	0	0	0	0	0	0	0	1	0	0	1	1
5:30 PM	0	0	0	0	0	0	0	0	2	0	0	2	2
5:45 PM	0	0	0	0	0	0	0	0	3	0	0	3	3
Total	0	0	0	0	0	2	0	2	6	0	0	6	8
Grand Total	0	0	0	0	0	13	0	13	21	0	0	21	34
Approach %	0.0	0.0	0.0		0.0	100.0	0.0		100.0	0.0	0.0		
Total %	0.0	0.0	0.0	0.0	0.0	38.2	0.0	38.2	61.8	0.0	0.0	61.8	
Exiting Leg Total				0				21		·		13	34

4:00 PM	#65	n Public Sto	rage Drivev	vav	Fa	stern Aven	ue (Route 60))	Fa	stern Aven	ue (Route 6	0)	•
4.00 PIVI	#05	o i abiic otc	ruge Drivev	vay	Lu	Stern Aven	ac (noute of	7)	Lu	Stern Aven	ac (noute o	0)	
		from I	North			from	East			from	West		
	Right	Left	U-Turn	Total	Right	Thru	U-Turn	Total	Thru	Left	U-Turn	Total	Total
4:00 PM	0	0	0	0	0	1	0	1	1	0	0	1	2
4:15 PM	0	0	0	0	0	3	0	3	6	0	0	6	9
4:30 PM	0	0	0	0	0	2	0	2	3	0	0	3	5
4:45 PM	0	0	0	0	0	5	0	5	5	0	0	5	10
Total Volume	0	0	0	0	0	11	0	11	15	0	0	15	26
% Approach Total	0.0	0.0	0.0		0.0	100.0	0.0		100.0	0.0	0.0		
PHF	0.000	0.000	0.000	0.000	0.000	0.550	0.000	0.550	0.625	0.000	0.000	0.625	0.650
Entering Leg	0	0	0	0	0	11	0	11	15	0	0	15	26
Exiting Leg				0				15				11	26
Total				0				26				26	52

Location: N: #650 Public Storage Driveway

Location: E: Eastern Avenue (Route 60) W: Eastern Avenue (Route 60)

City, State: Malden, MA Client: VHB/ M. Kealey

Site Code: 52739

Count Date: Thursday, May 6, 2021

Start Time: 4:00 PM End Time: 6:00 PM



157 Washington Street, Suite 2 Hudson, MA 01749 Office: 508-875-0100 Fax: 508-875-0118 Email: datarequests@pdillc.com

Articulated Trucks

Class:					A	Articulate	d Trucks						
	#650	Public Sto	rage Drivew	ay ay	Eas	stern Aveni	ue (Route 60))	Eas	stern Avenu	ie (Route 60))	
		from N	North			from	East			from \	West		
	Right	Left	U-Turn	Total	Right	Thru	U-Turn	Total	Thru	Left	U-Turn	Total	Total
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	1	0	1	1	0	0	1	2
4:30 PM	0	0	0	0	0	0	0	0	1	0	0	1	1
4:45 PM	0	0	0	0	0	1	0	1	2	0	0	2	3
Total	0	0	0	0	0	2	0	2	4	0	0	4	6
5:00 PM	0	0	0	0	0	0	0	0	1	0	0	1	1
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	2	0	0	2	2
5:45 PM	0	0	0	0	0	1	0	1	0	0	0	0	1
Total	0	0	0	0	0	1	0	1	3	0	0	3	4
Grand Total	0	0	0	0	0	3	0	3	7	0	0	7	10
Approach %	0.0	0.0	0.0		0.0	100.0	0.0		100.0	0.0	0.0		
Total %	0.0	0.0	0.0	0.0	0.0	30.0	0.0	30.0	70.0	0.0	0.0	70.0	
Exiting Leg Total		·		0				7				3	10

4:15 PM	#65	0 Public Sto	rage Drivev	vay	Ea	stern Aven	ue (Route 60	0)	Ea	astern Aven	ue (Route 6	0)	
		from I	North			from	East			from	West		
	Right	Left	U-Turn	Total	Right	Thru	U-Turn	Total	Thru	Left	U-Turn	Total	Total
4:15 PM	0	0	0	0	0	1	0	1	1	0	0	1	2
4:30 PM	0	0	0	0	0	0	0	0	1	0	0	1	1
4:45 PM	0	0	0	0	0	1	0	1	2	0	0	2	3
5:00 PM	0	0	0	0	0	0	0	0	1	0	0	1	1
Total Volume	0	0	0	0	0	2	0	2	5	0	0	5	7
% Approach Total	0.0	0.0	0.0		0.0	100.0	0.0		100.0	0.0	0.0		
PHF	0.000	0.000	0.000	0.000	0.000	0.500	0.000	0.500	0.625	0.000	0.000	0.625	0.583
Entering Leg	0	0	0	0	0	2	0	2	5	0	0	5	7
Exiting Leg				0				5				2	7
Total				0				7				7	14

Location: N: #650 Public Storage Driveway

Location: E: Eastern Avenue (Route 60) W: Eastern Avenue (Route 60)

City, State: Malden, MA

Client: VHB/ M. Kealey

Site Code: 52739

Count Date: Thursday, May 6, 2021

Start Time: 4:00 PM End Time: 6:00 PM



157 Washington Street, Suite 2 Hudson, MA 01749 Office: 508-875-0100 Fax: 508-875-0118 Email: datarequests@pdillc.com

Bicycles (on Roadway and Crosswalks)

Class:						1	Bicycle	s (on F	Roadw	ay and	Cross	walks)							
		#650 P	ublic Sto	rage Dr	iveway			Easte	n Aven	ue (Rout	e 60)			Easte	rn Aven	ue (Rout	e 60)		
			from I	North					from	East					from	West			
	Right	Left	U-Turn	CW-EB	CW-WB	Total	Right	Thru	U-Turn	CW-SB	CW-NB	Total	Thru	Left	U-Turn	CW-NB	CW-SB	Total	Total
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	1	3	3
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	1	3	3
5:00 PM	0	0	0	0	1	1	0	1	0	0	0	1	0	0	0	0	0	0	2
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1
5:30 PM	0	0	0	1	0	1	0	0	0	0	0	0	2	0	0	0	0	2	3
5:45 PM	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	1
Total	0	0	0	1	1	2	0	2	0	0	0	2	2	0	0	0	1	3	7
Grand Total	0	0	0	1	1	2	0	2	0	0	0	2	2	0	0	2	2	6	10
Approach %	0.0	0.0	0.0	50.0	50.0		0.0	100.0	0.0	0.0	0.0		33.3	0.0	0.0	33.3	33.3		
Total %	0.0	0.0	0.0	10.0	10.0	20.0	0.0	20.0	0.0	0.0	0.0	20.0	20.0	0.0	0.0	20.0	20.0	60.0	
Exiting Leg Total						2						2						6	10

5:00 PM		#650 P	ublic Sto	orage Dr	iveway			Easte	rn Aveni	ue (Rout	te 60)			Easte	rn Aven	ue (Rout	e 60)		
			from	North					from	East					from	West			
	Right	Left	U-Turn	CW-EB	CW-WB	Total	Right	Thru	U-Turn	CW-SB	CW-NB	Total	Thru	Left	U-Turn	CW-NB	CW-SB	Total	Total
5:00 PM	0	0	0	0	1	1	0	1	0	0	0	1	0	0	0	0	0	0	2
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1
5:30 PM	0	0	0	1	0	1	0	0	0	0	0	0	2	0	0	0	0	2	3
5:45 PM	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	1
Total Volume	0	0	0	1	1	2	0	2	0	0	0	2	2	0	0	0	1	3	7
% Approach Total	0.0	0.0	0.0	50.0	50.0		0.0	100.0	0.0	0.0	0.0		66.7	0.0	0.0	0.0	33.3		
PHF	0.000	0.000	0.000	0.250	0.250	0.500	0.000	0.500	0.000	0.000	0.000	0.500	0.250	0.000	0.000	0.000	0.250	0.375	0.583
Entering Leg	0	0	0	1	1	2	0	2	0	0	0	2	2	0	0	0	1	3	7
Exiting Leg						2						2						3	7
Total		•		•	•	4		•		•	•	4					•	6	14

Location: N: #650 Public Storage Driveway

Location: E: Eastern Avenue (Route 60) W: Eastern Avenue (Route 60)

City, State: Malden, MA
Client: VHB/ M. Kealey

Site Code: **52739**

Count Date: Thursday, May 6, 2021

Start Time: 4:00 PM
End Time: 6:00 PM

Class:



157 Washington Street, Suite 2 Hudson, MA 01749 Office: 508-875-0100 Fax: 508-875-0118 Email: datarequests@pdillc.com

Pedestrians

		#650 P	ublic Sto	orage Dr	iveway			Easte	rn Avenı	ue (Rout	te 60)			Easte	rn Aven	ue (Rout	e 60)		
			from	North					from	East					from	West			
	Right	Left	U-Turn	CW-EB	CW-WB	Total	Right	Thru	U-Turn	CW-SB	CW-NB	Total	Thru	Left	U-Turn	CW-NB	CW-SB	Total	Total
4:00 PM	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	8	2	10	11
4:15 PM	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	2	2	3
4:30 PM	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	11	11	12
4:45 PM	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	1	2	3	4
Total	0	0	0	0	4	4	0	0	0	0	0	0	0	0	0	9	17	26	30
5:00 PM	0	0	0	0	4	4	0	0	0	0	0	0	0	0	0	5	0	5	9
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	3	3
5:30 PM	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	6	8	14	15
5:45 PM	0	0	0	1	3	4	0	0	0	0	0	0	0	0	0	2	0	2	6
Total	0	0	0	1	8	9	0	0	0	0	0	0	0	0	0	13	11	24	33
Grand Total	0	0	0	1	12	13	0	0	0	0	0	0	0	0	0	22	28	50	63
Approach %	0	0	0	7.6923	92.308		0	0	0	0	0		0	0	0	44	56		
Total %	0	0	0	1.5873	19.048	20.635	0	0	0	0	0	0	0	0	0	34.921	44.444	79.365	
Exiting Leg Total				•		13				•		0		•			•	50	63

																			_
5:00 PM		#650 Pt	ublic Sto	rage Dr	iveway			Easte	rn Aven	ue (Rou	te 60)			Easte	ern Aven	ue (Rou	te 60)		
			from	North					from	East					from	West			
	Right	Left	U-Turn	CW-EB	CW-WB	Total	Right	Thru	U-Turn	CW-SB	CW-NB	Total	Thru	Left	U-Turn	CW-NB	CW-SB	Total	Total
5:00 PM	0	0	0	0	4	4	0	0	0	0	0	0	0	0	0	5	0	5	9
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	3	3
5:30 PM	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	6	8	14	15
5:45 PM	0	0	0	1	3	4	0	0	0	0	0	0	0	0	0	2	0	2	6
Total Volume	0	0	0	1	8	9	0	0	0	0	0	0	0	0	0	13	11	24	33
% Approach Total	0.0	0.0	0.0	11.1	88.9		0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	54.2	45.8		
PHF	0.000	0.000	0.000	0.250	0.500	0.563	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.542	0.344	0.429	0.550
Entering Leg	0	0	0	1	8	9	0	0	0	0	0	0	0	0	0	13	11	24	33
Exiting Leg						9						0						24	33
Total						18						0						48	66

Parking Count Data

	Parking Occupancy C	Counts (5/6/21)	
	Storage Facility #490	Storage Facility #650	Proposed Facility
7:00 AM	1	0	
7:15 AM	3	0	
7:30 AM	2	1	
7:45 AM	2	2	
8:00 AM	2	0	
8:15 AM	2	0	
8:30 AM	5	0	
8:45 AM	5	2	
9:00 AM	4	2	
MAX	5	2	
4:00 PM	5	4	
4:15 PM	7	4	
4:30 PM	8	4	
4:45 PM	7	1	
5:00 PM	6	2	
5:15 PM	1	2	
5:30 PM	1	2	
5:45 PM	1	3	
6:00 PM	2	4	
MAX	8	4	15
Area	125,388	99,440	89,690
Rate	0.064	0.040	0.167

Trip Generation

ITE TRIP GENERATION WORKSHEET

(11th Edition, Updated 2021)

LANDUSE: Automobile Parts and Service Center

LANDUSE CODE: 942

Independent Variable ---

SETTING/LOCATION: General Urban/Suburban

JOB NAME: Arlington
JOB NUMBER: 52816.00

FLOOR AREA (KSF): 12.073

WEEKDAY

RATES:			To	otal Trip End	s	Indepen	dent Variabl	e Range	Direc Distrik	
	# Studies	R^2	Average	Low	High	Average	Low	High	Enter	Exit
DAILY	0		0.00	0.00	0.00	0	0.00	0	0%	0%
AM PEAK OF GENERATOR	6	0.65	2.83	1.93	5.74	17	7.19	40	56%	44%
PM PEAK OF GENERATOR	6	0.71	3.51	2.75	7.15	17	7.19	40	49%	51%
AM PEAK (ADJACENT ST)	6		2.25	1.20	5.30	17	7.19	40	66%	34%
PM PEAK (AD IACENT ST)	6	0.83	3 11	1.87	5.65	17	7 10	40	48%	52%

TRIPS:

DAILY AM PEAK OF GENERATOR PM PEAK OF GENERATOR AM PEAK (ADJACENT ST) PM PEAK (ADJACENT ST)

BY AVERAGE							
Total	Enter	Exit					
n/a	n/a	n/a					
34	19	15					
42	21	22					
27	18	9					
38	18	20					

BY REGRESSION						
Total	Enter	Exit				
n/a	n/a	n/a				
40	22	17				
49	24	25				
n/a	n/a	n/a				
41	20	21				

SATURDAY

RATES:

Studies R^2 Av.
DAILY 2 -- 2:
PEAK OF GENERATOR -- --

	Total Trip Ends		
Average	Low	High	
23.72	15.87	28.20	

Independent Variable Range					
Average	Low	High			
31	23	40			

Directional
Distribution
Enter Exit
50% 50%

TRIPS:

DAILY PEAK OF GENERATOR

	BY AVERAGE	
Total	Enter	Exit
286	143	143
n/a	n/a	n/a

BY REGRESSION					
Total	Enter	Exit			
n/a	n/a	n/a			
n/a	n/a	n/a			
1.0.2					

SUNDAY

RATES:

			To	otal Trip End	ls
	# Studies	R^2	Average	Low	High
DAILY	2		11.88	2.59	17.18
PEAK OF GENERATOR					

Independent Variable Range						
Average	High					
31	23	40				

Directional						
Distrib	oution					
Enter	Exit					
50%	50%					

TRIPS:

DAILY PEAK OF GENERATOR

BY AVERAGE						
Total	Enter	Exit				
143	72	72				
n/a	n/a	n/a				

BY REGRESSION						
Total	Exit					
n/a	n/a	n/a				
n/a	n/a	n/a				

ITE TRIP GENERATION WORKSHEET

(11th Edition, Updated 2021)

LANDUSE: Mini Warehouse

LANDUSE CODE: 151

LOCATION: General Urban / Suburban

JOB NAME: JOB NUMBER: Independent Variable --- 1,000 Sq. Feet Gross Floor Area

FLOOR AREA (KSF): 95.706

WEEKDAY

RATES:			Т.	otal Trip End	ls	Indepen	dent Variabl	e Range	Direc Distrib	
	# Studies	R^2	Average	Low	High	Average	Low	High	Enter	Exit
DAILY	16		1.45	0.38	3.25	55	7.5	101	50%	50%
AM PEAK OF GENERATOR	11		0.18	0.07	0.79	66	7.5	114	51%	49%
PM PEAK OF GENERATOR	16		0.18	0.06	1.05	56	7.5	114	51%	49%
AM PEAK (ADJACENT ST)	13		0.09	0.04	0.17	70	27	114	59%	41%
PM PEAK (ADJACENT ST)	18		0.15	0.02	0.64	59	7.5	114	47%	53%

TRIPS:

DAILY AM PEAK OF GENERATOR PM PEAK OF GENERATOR AM PEAK (ADJACENT ST) PM PEAK (ADJACENT ST)

BY AVERAGE Total Enter Exit 139 69 69 17 9 8 17 9 8 9 5 4				
Total	Enter	Exit		
139	69	69		
17	9	8		
17	9	8		
9	5	4		
14	7	8		

ľ	BY REGRESSION										
Ī	Total	Enter	Exit								
Ī	N/A	N/A	N/A								
	N/A	N/A	N/A								
	N/A	N/A	N/A								
	N/A	N/A	N/A								
	N/A	N/A	N/A								

SATURDAY

RATES:

Studies 0.57 PEAK OF GENERATOR

	Io	ital Trip End	ds
Α١	/erage	Low	High
	1.77	1.21	3.29
	0.17	0.04	0.31

Independent Variable Range Average Low High 43 20 87 71 90 114

	Directional Distribution					
Enter	Exit					
50%	50%					
62%	38%					

TRIPS:

DAILY PEAK OF GENERATOR

BY AVERAGE							
Total	Enter	Exit					
169	85	85					
16	10	6					

Е	Y REGRESSIO	ON					
Total	Total Enter						
129	64	64					
N/A	N/A	N/A					

SUNDAY

RATES:

Total Trip Ends # Studies Average Low High DAILY 1.50 0.69 3.70 PEAK OF GENERATOR 0.20 0.16 0.23

Independent Variable Range								
Average	Low	High						
40	20	87						
70	71	87						

	tional bution
Enter	Exit
50%	50%
45%	55%

TRIPS:

DAILY PEAK OF GENERATOR

	BY AVERAGE	
Total	Enter	Exit
144	72	72
19	9	11

ВҮ	REGRESSIO	ON
Total	Enter	Exit
N/A	N/A	N/A
N/A	N/A	N/A

Customer Visits - CubeSmart

171 Bear Hill Road, Waltham, MA

111,921 Square Feet

	Total Number of Customers per Month (Broken Down by Day)												
					August	September	October	November	December	January	February		
Day	April 2020	May 2020	June 2020	July 2020	2020	2020	2020	2020	2020	2021	2021	March 2021	Total
Sunday	20	46	67	71	144	95	70	114	76	108	53	76	940
Monday	8	40	74	71	113	76	61	64	72	53	53	75	760
Tuesday	17	36	85	69	95	117	56	68	94	55	41	79	812
Wednesday	23	40	50	94	83	97	59	69	87	53	59	67	781
Thursday	16	44	60	94	74	85	93	46	56	51	65	66	750
Friday	11	42	57	97	122	75	80	60	61	67	51	64	787
Saturday	29	58	68	91	168	98	118	89	70	124	60	90	1063
Total	124	306	461	587	799	643	537	510	516	511	382	517	5,893

	Average Number of Customers per Day												
					August	September	October	November	December	January	February		
Day	April 2020	May 2020	June 2020	July 2020	2020	2020	2020	2020	2020	2021	2021	March 2021	Total
Sunday	5.0	9.2	16.8	17.8	28.8	23.8	17.5	22.8	19.0	21.6	13.3	19.0	18.1
Monday	2.0	10.0	14.8	17.8	22.6	19.0	15.3	12.8	18.0	13.3	13.3	15.0	14.6
Tuesday	4.3	9.0	17.0	17.3	23.8	23.4	14.0	17.0	18.8	13.8	10.3	15.8	15.6
Wednesday	4.6	10.0	12.5	18.8	20.8	19.4	14.8	17.3	17.4	13.3	14.8	13.4	14.7
Thursday	3.2	11.0	15.0	18.8	18.5	21.3	18.6	11.5	11.2	12.8	16.3	16.5	14.4
Friday	2.8	8.4	14.3	19.4	30.5	18.8	16.0	15.0	15.3	13.4	12.8	16.0	15.1
Saturday	7.3	11.6	17.0	22.8	33.6	24.5	23.6	22.3	17.5	24.8	15.0	22.5	20.4
Total (Per Day)	4.1	9.9	15.4	18.9	25.8	21.4	17.3	17.0	16.6	16.5	13.6	16.7	16.1



Arlington Redevelopment Board Presentation Introduction

- Introduction
 - VHB
 - Eric Gerade, PE LEED AP Project Manager/Civil Engineer
 - Matthew Kealey, PE, PTOE Traffic Engineer
 - Premier Storage Investors
 - James "Pete" Williams President
 - Robert Annese, Esq.
 - Michael Parker Studios
 - Jan Bryan, NCARB, Architect
- Proposed Project
 - 95,700 SF Self-Storage Building (5-Story)

Discussion Points

- Current Project Status / Reviews & Coordination
 - Arlington Conservation Commission
- Site Conditions
- Proposed Project & Site Improvements
- Proposed Project & Site Improvements
 - Site
 - Traffic
 - Architectural
- Summary & Conclusion

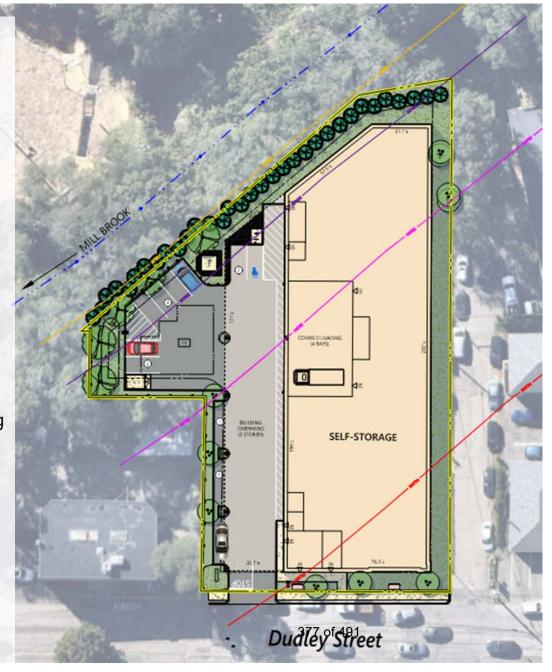
Project Status / Reviews & Coordination

- Current:
 - Arlington Conservation Commission 1st Hearing (3/3/2022)
 - Arlington Redevelopment Board (3/28/2022)
 - Planning Dept. Coordination
 - Engineering Dept. Coordination
- Project Required
 - Town of Arlington
 - Redevelopment Board (Special Permit)
 - Conservation Commission (Order of Conditions)



Proposed Project & Site Improvements

- Self-Storage Building
 - 95,700 SF
 - 5-Stories
 - Close an existing curb cut
- Site Improvements
 - 11 New Parking Spaces (requesting a reduction from ARB)
 - Pedestrian Amenities along frontage
 - Landscape reduced impervious
 - Enclosed Loading Facilities
 - Covered / Enclosed Bicycle Parking
 - Enclosed Dumpster Area
- Utilities
 - Underground
 - Reduced Water & Sewer Demand
 - Stormwater Management
 - MassDEP Stormwater Regs
 - Subsurface Infiltration Basin
 - Bioretention Basin









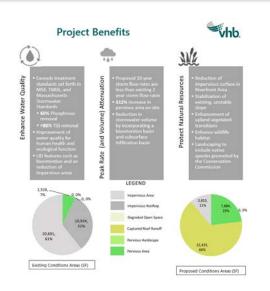


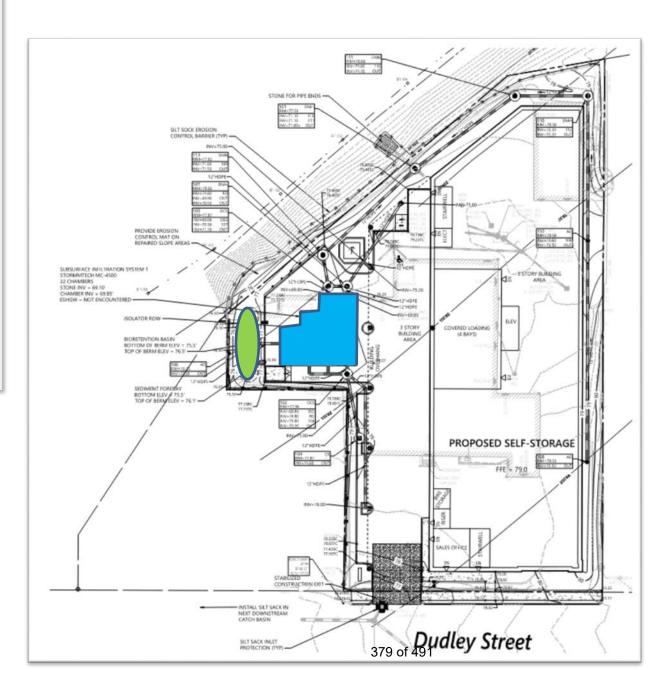
Arlington, MA

February 09, 2022

Stormwater Management

- Water Quality (0.5" WQV)
- Pretreatment
- Final Treatment
 - Subsurface Infiltration
 - Bioretention Basin
- Recharge
- Peak Rate Reduction
- O&M Plan
- Erosion & Sedimentation Control Plan





Traffic Discussion

- Trip Generation
 - ITF Rates
 - Empirical Data
 - Decrease in traffic
- Vehicle Parking
 - 96 per Zoning
 - 11 Surface, 4 Loading
 - Study Data 8 needed
- Bicycle Parking
 - 134 required per zoning (57 Short, 77 Long)
 - 11 Provided (more than adequate for use)
- Transportation Demand Management (TDM)
 - Pay a stipend to workers without cars
 - Provide preferential parking for carpooling vehicles
 - Provide covered bicycle parking and storage

Table 1: Trip Generation Comparison

	Vehicle Trips						
	Current Use ¹	Self-storage Use ²	Difference				
Weekday AM							
Enter	18	5	-13				
Exit	<u>9</u>	<u>4</u>	<u>-5</u>				
Total	27	9	-18				
Weekday PM							
Enter	18	7	-11				
Exit	<u>20</u>	<u>8</u>	<u>-12</u>				
Total	38	15	-23				

¹ Institute of Transportation Engineers (ITE) Trip Generation, Land Use Code 942 (Automobile Care Center) for 12,073 sf ² Institute of Transportation Engineers (ITE) Trip Generation, Land Use Code 151 (Mini-Warehouse) for 95,706 sf

Parking Summary Chart

	Size		Spaces	
Description	Required	Provided	Required	Provided
STANDARD SPACES	8.5 x 18	8.5 x 18	96	7
PARALLEL SPACES	8 x 22	8 x 22	0	3
ACCESSIBLE SPACES*	8 x 18	8.5 x 18	-	1
TOTAL SPACES			96	11
LOADING BAYS**			3	4
BICYCLE SPACES***			134	11

- ADA/STATE/LOCAL REQUIREMENTS. (1 ACCESSIBLE SPACE PER 1-25 TOTAL PARKING SPACES) PER §
 208.2 OF 2010 ADA STANDARDS FOR ACCESSIBLE DESIGN
- LOADING BAYS: THREE BAYS FOR BETWEEN 40,001 SF AND 120,000 SF
- *** BICYCLE PARKING REQUIRED BASED ON 0.8/1,000 SF LONG TERM AND 0.6/1,000 SF SHORT TERM PARKING. 4 BICYCLE SPACES ARE PROVIDED BY TWO RACKS UNDER THE BUILDING OVERHANG. 6 BICYCLE SPACES ARE PROVIDED WITHIN THE COVERED LOADING AREA. EMPLOYEE BICYCLE STORAGE WILL BE PROVIDED WITHIN A TENANT STORAGE UNIT THE BUILDING (1 SPACE MINIMUM).

WAIVERS REQUESTED FOR REDUCTION IN REQUIRED PARKING SPACES AND REDUCTION IN REQUIRED BICYCLE SPACES.

Parking Requirements:

STORAGE	95,706 SF	х	1 SPACES	/	1,000 SF	=	96 SPACES
			TOTAL PARKING REQUIRED				96 SPACES

Bicycle Parking Requirements:

SHORT TERM	95,706 SF	Х	0.60 SPACES	/	1,000 SF	=	57 SPACES
LONG TERM	95,706 SF	х	0.80 SPACES	/	1,000 SF	=	77 SPACES
380 of 491				=	134 SPACES		

Architectural





Summary & Conclusion

- In Review
 - Project Status / Reviews & Coordination
 - Current Site Conditions
 - Proposed Project & Site Improvements

From: Wynelle Evans <evco7@rcn.com>

To: EBenson@town.arlington.ma.us, KLau@town.arlington.ma.us, mtintocalis@town.arlington.ma.us, srevilak@town.arlington.ma.us,

rzsembery@town.arlington.ma.us

Cc: Jenny Raitt <JRaitt@town.arlington.ma.us>

Date: Thu, 24 Mar 2022 17:48:31 -0400

Subject: Correspondence and suggestion re: Docket #3690, 34 Dudley St.

CAUTION: This email originated from outside your organization. Exercise caution when opening attachments or clicking links, especially from unknown senders.

CAUTION: This email originated from outside of the Town of Arlington's email system. Do not click links or open attachments unless you recognize the REAL sender (whose email address in the From: line in "< >" brackets) and you know the content is safe.

Dear Board Members and Director Raitt:

Please add this letter to the correspondence record for the Monday, March 28 ARB hearing on agenda item 2, the proposed self-storage project at 34 Dudley St.

Section II of the Board's memo on this project deals with the application of Special Permit criteria. The comments on Section 3.3.3.F note that "the rear façade will be visible from the adjacent Mill Book and Wellington Park. The Applicant could consider introducing windows or other architectural detailing along the rear façade to minimize the massing of the building. The Applicant could also consider moving from pre-finished metal to prefabricated masonry."

And in Section III, sub-section 2, dealing with EDR-2 standards, the Board further notes that "While the 'face' of the building visible from Wellington Park is actually the back of the building, additional treatments to diminish the impact of overall building height and appearance should be considered. Further, while the ground floor storefront and front façade meets transparency requirements, its relationship to Dudley Street could be improved. An overall improved building façade treatment addresses and minimizes the building massing would improve the relationship of the building to the environment."

Improving the appearance from Wellington Park by adding windows might be problematic for a self-storage facility. But printed screening offers an idea for a simple approach to architectural detailing. The first two images below are of a nearby parking structure, located on the inbound side of Rt. 2, opposite Thorndike Field, between the Tempo 2 Cambridge apartment complex and the AC Marriott Hotel.

The bottom two image shows garages in Cleveland and Texas with tensile mesh screens, in appealing designs.

If applied to the rear facade of 34 Dudley St., a printed screen could hold any image, would not require washing as windows would, and would be a relatively simple and cost-effective element to incorporate into the design. The printed images could reference the Mill Brook, the flora and fauna in the area, the nature playground it will stand over, or any other compatible imagery.

To see more ideas and for some info:

https://flexfacades.com/materials/fabric-vs-metal-screening/

Please present these images during the discussion about the appearance of this building, for consideration by the Board and the design team.

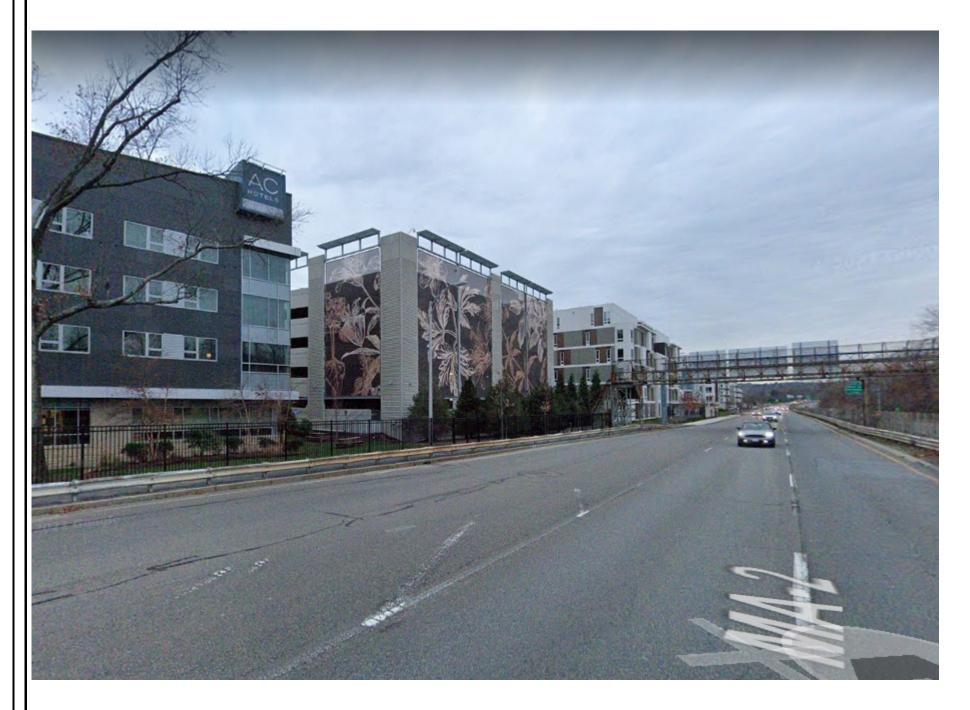
Thank you!

Wynelle

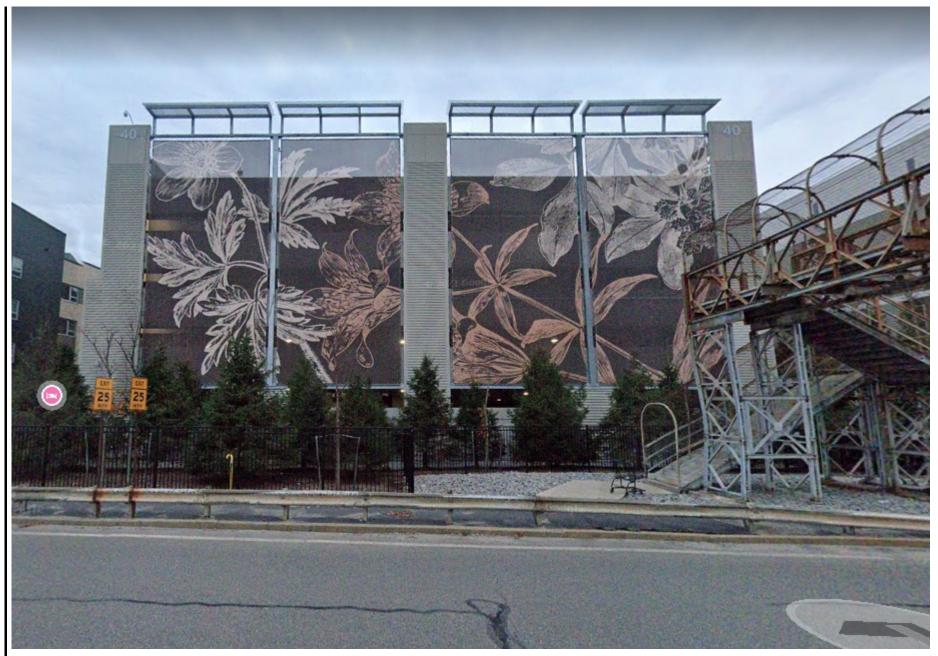
Wynelle Evans TMM pct. 14 20 Orchard Place Arlington, MA 02476 781.643.4547 office 781.859.9291 mobile

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evco7@rcn.com



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TOWN OF ARLINGTON, MASSACHUSETTS ARLINGTON REDEVELOPMENT BOARD

	DOCKET NO. 3690
34 DUDLEY STREEET, LLC, Petitioner	 MEMORANDUM IN OPPOSITION TO APPLICATION FOR ENVIRONMENTAL DESIGN REVIEW SPECIAL PERMIT

BACKGROUND INFORMATION

This Memorandum is provided on behalf of Gary R. Santini and Mark Santini, Trustees of Santini Realty Trust ("Santini"), owners of the property at 26 Dudley Street (the "Santini Property"), a direct abutter to the Petitioner's proposed Project. The Santinis have owned the Santini Property since 1986. In addition to the Santini Property, the Santinis own the premises at 60 Dudley Street which houses their construction company, a business started in 1921, a residential property at 61 Dudley Street and they own and operate Arlington Self Storage at 4 Brattle Court, notwithstanding the Petitioner's assertion in its filing that Arlington does not have a "comparable storage facility". The Santini's objection to the proposed facility is not based on their ownership and operation of Arlington Self Storage, but rather primarily on the adverse effects that the proposed facility will have on the Santini Property (including the potential shadowing effects on it), the building mass of the Project, the potential shadowing effects on other abutting property and increased traffic congestion and parking on Dudley Street.

TRAFFIC AND PARKING ON DUDLEY STREET

The Santinis have owned their properties on Dudley Street for decades. They are intimately familiar with the ongoing and frequent traffic congestion on Dudley Street, having experienced it daily. The Santinis believe that the traffic study submitted by the Petitioner drastically understates the expected traffic volumes that will be produced were the Project constructed and thus the negative and serious effect it will have on the other, existing commercial and residential uses on Dudley Street. The Santinis strongly urge that the Board require an independent, peer traffic study and analysis prior to approving the Project. In order to grant a special permit, the Board must find that "The requested use will not create undue traffic congestion or unduly impair pedestrian safety". The Santinis believe and aver that

requiring an independent peer traffic study and analysis is integral to the ability to make the required finding.

SHADOWING AND RELATED IMPACTS

There are a number of places in the Zoning By-Law that require "shadowing" to be considered. Even though Dudley Street is not in a residential zone (although there are a number of residential structures and uses on the Street), the Petitioner's property appears to abut an RO zone and public open space adjacent to the Mill Brook. The Board should require under Section 3.4.4 B., or generally, given the height and mass of the proposed building, appropriate shadowing studies for the Project, especially in light of the requirement that it be "solar ready".

CIRCULATION

Section 3.3.4 D. provides: "Circulation. With respect to vehicular, pedestrian and bicycle circulation, including entrances, ramps, walkways, drives, and parking, special attention shall be given to location and number of access points to the public streets (especially in relation to existing traffic controls and mass transit facilities), width of interior drives and access points, general interior circulation, separation of pedestrian and vehicular traffic, access to community facilities, and arrangement of vehicle parking and bicycle parking areas, including bicycle parking spaces required by Section 6.1.12 that are safe and convenient and, insofar as practicable, do not detract from the use and enjoyment of proposed buildings and structures and the neighboring properties."

The Santinis urge the Board to carefully consider how the proposed use, especially in light of the size of the proposed building and number of requested storage units, can meet the above standards, especially as they might negatively affect vehicular and pedestrian traffic to and from the facility and the neighboring properties.

REQUIRED PARKING

The proposed building contains 96,000 square feet. The Zoning By-Law requires 1 space per 1,000 square feet of gross floor area or, in this case, 96 spaces. The Santinu's existing self-storage facility meets this requirement. In their experience, that ratio establishes a number of spaces that may be needed during peak days, hours and times of the year, such as in late summer when people often are moving (leases often run from September to September) or when college students are returning from college in May and going back to school in late summer. During those times the required spaces are needed. Any reliance on a reduced (especially to 25% under the authority provided to the Board under Section 6.1.5) number of spaces will, based on the experience at Arlington Self Storage, result in the spaces provided

not meeting actual demand during peaks hours, days and times of year. This will result in customers parking on Dudley Street or in front of or on abutting and adjacent properties. A reduction for a selfstorage use is not justified and will lead to street and neighborhood traffic congestion. Historically, to my clients' knowledge and belief all prior developments in the Industrial Zone have been required to meet the historical standard of 1 per 1,000 of gross floor area. That should be the standard required except in extraordinary and heavily documented and justified instances where relief might be appropriate. It is important to note that although the Petitioner seeks a reduction to less than 25% of the required 96 spaces, no further reduction is possible as that further reduction can only occur in a Business, not an Industrial Zone.

In summary, for the reasons stated, the Board should require (1) an independent peer traffic and parking study and (2) shadowing studies before making any Decision on the requested Environmental Design Review Special Permit. In addition, the Board should require a redesign of the Project to accommodate a reasonable amount of customer and employee parking spaces, but in no event fewer than 25% of those dictated by any Project redesign. Alternatively, due to expected traffic and parking impacts on the neighborhood, the Board should simply deny the requested Environmental Design Review Special Permit.

Santini reserves the right to file further and supplementary responses in connection with any continued hearing in this matter.

Dated: March 28, 2022

Respectfully submitted,

Santini Realty Trust

Thomas Wray Falwell, Esqure

Its attorney

Comins & Newbury LLP 9 Damonmill Square, Suite 4D

Concord, MA 01742

(978) 341-0222

3



Town of Arlington, Massachusetts

Meeting Minutes (2/28/2022)

Summary:

10:10 p.m. Board members will review and may vote on 2/28/22 meeting minutes

ATTACHMENTS:

File Name Description Type

Reference 02282022 Draft Minutes Redevelopment 02282022_Draft_ARB_Minutes.pdf Material

Board

Arlington Redevelopment Board Monday, February 28, 2022, 7:30 PM Meeting Conducted Remotely via Zoom Meeting Minutes

This meeting was recorded by ACMi.

PRESENT: Rachel Zsembery (Chair), Eugene Benson, Kin Lau, Melisa Tintocalis, Steve Revilak

STAFF: Jennifer Raitt, Director of Planning and Community Development and Kelly Lynema, Assistant Director

The Chair called the meeting to order and notified all attending that the meeting is being recorded by ACMi.

The Chair explained that this meeting is being held remotely in accordance with the Governor's March 12, 2020 order suspending certain provisions of the Open Meeting Law G.L. c. 30A, Section 20. This order from Governor Baker allows for meetings to be held remotely during this time to avoid public gatherings.

The Chair introduced the first agenda item, MBTA Communities. Ms. Raitt introduced the presentation, a review of the draft guidelines created at the State level by the Department of Housing and Community Development. The expectation is that the guidelines will be finalized this summer after community feedback is received. Ms. Raitt said that the Department wanted to share the current information with the Board. Ms. Lynema reviewed the MBTA Communities guidelines including the legislation, funding and compliance, draft guidelines, timeline, and possible ideas for compliance. In order to be eligible communities must have "at least one zoning district of reasonable size in which multi-family housing is permitted as of right". The multi-family zoning requirement must have no age restrictions, a minimum gross density of 15 units per acre, and not be more than half a mile from a subway station or bus station. The draft guidelines interpret the legislation as follows: at least 50 acres total, building with 3+ residential dwelling units, no age restrictions or bedroom limits in zoning, capacity of 5,115 units (This number is based on current housing units and community type. Arlington is categorized as a Rapid Transit Community; this number is 25% of total housing units.), at least half of the land area of the district is within half a mile of the station.

By complying with the MBTA Communities legislation communities would remain eligible for funding from MassWorks Infrastructure Program, Housing Choice Initiative funding, and Local Capital Projects Fund. Arlington can use funding from MassWorks Infrastructure Program for design and construction funding for public infrastructure (roads, utilities, biking and pedestrian facilities, and improvements to public properties). Arlington does not currently qualify as a Housing Choice Initiative community but may in the future. Housing Choice Initiative provides community capital grants for infrastructure upgrades, updating Master Plan, and zoning amendments/studies. Arlington does not qualify for the Local Capital Projects Fund. Arlington can use MassWorks funding for Mass Ave/Appleton project, for example. MassWorks 2021 awards averaged \$1.1 Million per project in 51 communities. Arlington may be eligible for Housing Choice Initiative Grants in 1-2 years.

In the future the State may funnel more funding through these programs that are tied to incentive-based standards for those communities that are compliant. Arlington is not compliant at the moment because Arlington does not meet the MBTA Communities as of right zoning and reasonable size requirements. The timeline for compliance includes the following deadlines: May 2, 2022 have to hold a briefing with the Select Board and submit information regarding current compliance, March 31, 2023 submit Arlington's action plan to the state for approval. The action plan should describe how Arlington intends to become compliant, December 31, 2023 Action plan for any zoning changes must be adopted. Once the DHCD final guidelines are issued the Department will provide the Board an update. Ideas for compliance include reducing development subject to special permit and increasing dwelling unit flexibility.

The locations that can be considered include: Arlington Heights by the bus depot, Arlington Center where many bus lines converge, and the Alewife area. Options include completely locating the district within Arlington Heights, having three separate districts, or to consider a corridor overlay along Mass Ave and having two different sub-districts.

The Chair opened the floor to the Board for questions. Mr. Lau suggested holding forums with affected neighbors, realtors, and developers to get their feedback. Mr. Lau said that this plan aligns with the Master Plan and may help with the housing shortage. Mr. Lau would like some additional time to review the plan details.

Mr. Benson said that he agrees that some sort of public process before making a decision is a very important step. The legislation in the guideline prohibits Special Permits, but it does allow for site plan review. Mr. Benson said that the Board should determine how site plan reviews will be conducted. Mr. Benson said that green space, open space, and climate must be addressed with construction and site plan reviews will allow the Board to ensure those considerations are addressed. Mr. Benson said that the inclusionary zoning bylaw will need to be updated with more than additional units allowed by right. Mr. Benson said he does not agree that the Heights bus depot as it currently operates meets the guidance definition. Mr. Benson asked what Arlington would need to do to become a Housing Choice Community. Ms. Lynema said that Arlington would have to have a certain amount of housing production within a time period or meet the highest threshold for production. With the approval of 1165R Mass Ave., Downing Square, and a few other projects we are getting close to that threshold number. Allowing multi-family by right in at least one zoning area would both meet the requirements for Housing Choice funding and be compliant with MBTA Communities. A parking reduction requirement would also bring Arlington closer to qualifying for Housing Choice funding. Mr. Benson asked if Town Meeting approves the bylaw amendment proposals to allow two-family by right in the single family district and allowing ADUs would create an MBTA Community. Ms. Lynema said that would bring Arlington closer to the density requirements.

Mr. Benson said that he thinks that the legislation is important but he thinks that the guidance is pretty terrible and goes beyond what the legislation contemplated. Mr. Benson said he is not clear if the guidance gives MBTA Communities the right to allow a 25% increase in housing, places that should have the higher percentage of new housing have managed to keep out more housing than Arlington. Mr. Benson said he can think of more suburban places with rail and bus service that should be doing more than Arlington, that this is guidance is backwards. Mr. Benson suggested submitting feedback with recommendations how to change the MBTA Communities guidance.

Ms. Tintocalis said that he MassWorks grants cannot be lost, in the communities that Ms. Tintocalis has worked with the grants have averaged closer to the 3 million dollar range. Ms. Tintocalis said that she thinks that mixed-use would also be included. The structure of transit further out is different than the Arlington area. Ms. Tintocalis said she feels that MBTA Communities is looking for feedback.

Mr. Revilak said he looks at this as an opportunity and this is moving towards transit oriented development. Due to building practices in the 20thcentury we now have a lot of traffic and greenhouse gas emissions due to passenger vehicles. The idea of transit oriented development is thrilling. Mr. Revilak said this will depend where we draw this on the map but keep in mind East Arlington is subject to future sea level rise and flooding so flood resilience measures should be included. Mr. Revilak said he would hope to allow some housing by right would then trigger some inclusionary zoning with site plan review. The Bikeway is also a transit resource making part of the district follow the bikeway in places. Mr. Revilak said he is intrigued by the idea of Arlington Center as a part of the MBTA Community district as an area with high bus ridership.

Mr. Benson brought up the question of what to do with the Russell parking lot, which is also included with the Housing Production Plan and should be considered here.

Mr. Revilak asked if there is any chance of getting the Red Line extension back. Ms. Raitt said she gets asked this question frequently. Ms. Raitt said right now the Green Line extension to the Mystic River Valley extension is the focus. Extending the Red Line would give up the amazing resource we have in the Minuteman Bikeway and would require great expense. The possibility of a Red Line extension might be something to discuss when creating the next Master Plan.

The Chair opened the floor for public comment.

Don Seltzer said he wanted to point out that what the legislature passed last year was fairly simple. Mr. Seltzer said he provided the Board with some detailed calculations and analysis of the existing district within half a mile of Alewife station. The Alewife Station area already meets a good number of the requirements to qualify as a MBTA Community. The Department of Housing and Community Development has exceeded what the State has passed by including the multi-family housing by right requirement. That requirement would accommodate up to 5,115 housing units, which is a much higher density than the State required.

Elizabeth Dray asked if the 50 acres could be cumulative over different locations over town. Ms. Lynema confirmed that is possible.

Kristin Anderson said she was at a MWRA meeting on 2/15 and heard that the MWRA's sewer system through the Alewife cannot handle capacity during major storm events. Ms. Anderson said she hopes that the Board mentions in their feedback that the MWRA has work to do in the Alewife area. The pump station is reaching capacity and going to the Chelsea Street headworks, which is also reaching capacity. Climate change is going to exacerbate this problem, stormwater sewers must be separated from sanitary sewers so Deer Island does not reach capacity.

Mr. Benson said that he was also at that MWRA meeting and he does not think that what ends up being proposed should have a significant impact on the sewer system. Arlington has plans and has already done some work to reduce the excess stormwater flow into the sanitary sewer system. Some communities are requiring new developments remove twice as much inflow and infiltration (I&I) as is added to the system. Mr. Benson suggested having a conversation with DPW or adding requirements to the site plan review if there is going to be a large development in town.

Steve Revilak said he has been corresponding with Mike Rademacher, Arlington's Director of Public Works, and Mr. Revilak said that they discussed the sewer capacity. Mr. Revilak said that Mr. Rademacher said due to newer low flow toilets there is some room for growth in Arlington's system. Mr. Revilak said that there is a schedule for sewer line replacement to and prevent stormwater from getting into the sanitary sewers.

The Chair introduced the second agenda item, Committee Updates. The Chair introduced Alex Bagnall to give an update for Envision Arlington. Envision Arlington organized an education forum with local affordable housing developers to discuss where current housing construction challenges lie, how they create projects, and how Arlington can make itself more attractive. Envision Arlington held Candidate Night and Town Meeting Candidate Night in 2020 and will again this year. Envision Arlington created a civic engagement group to assist with a variety of outreach programs. Envision Arlington was created to looking at the long term plan for Arlington to tie in with housing, environmental, diversity, and education issues to create more actionable plans. Mr. Bagnall said Envision Arlington would like suggestions from the Board for any additional areas of focus.

Jagat Adhiya is good to see the variety of topics that Envision Arlington is involved with so far. The task groups within Envision Arlington have all reappointed Chairs. The Community Engagement Group is the newest task group to amplify

Envision Arlington's outreach. Diversity task group spearheading diversity topics in public schools and regarding affordable housing. The 2021 survey is in final review after being delayed due to the pandemic and the 2022 town survey will be posted soon. Mr. Adhiya said that the Broadway design contest is in the works and Envision Arlington will be releasing more information about the contest.

Mr. Lau asked if Mr. Bagnall and Mr. Adhiya discussed supporting business and business growth in town. Mr. Lau asked if Arlington wants to be a bedroom community or if Arlington does want street activity and vendors. Mr. Lau suggested that Envision Arlington spearheads identifying Arlington residents' vision and goals regarding economic development for the next 30 years.

Mr. Adhiya said that Envision Arlington might partner with the Board to support economic development feedback and data collection from a wide variety of residents.

The Chair asked Ms. Raitt if now that the the Arlington Tourism and Economic Development Committee is being retooled, if there might be a Board designee on that committee in the future. Ms. Raitt said that the newer ATED charge is meant to be more inclusive and comprehensive and to incorporate the Economic Development Recovery Task Force findings for the future. Ms. Raitt said it will soon be time to update the Master Plan and Envision Arlington should take the opportunity to find other ways of engaging the public to build long range plans.

Mr. Benson said that when he moved to town the original Master Plan for 2020 was being created. Mr. Benson said that the Envision Arlington group is an important to get residents connected. Mr. Benson said as part of crafting the updated Master Plan it will be good to consider what the entire metropolitan area will look like in 30 years and what Arlington's role should be in that area. Mr. Benson said that there are some opportunities for us to think about that in the future. Mr. Benson suggested thinking about the Envision Arlington task groups and if there should be any additional task groups.

Mr. Revilak said that when he received his first Envision Arlington/Vision 2020 survey in the mail he was astounded that the Town was looking for feedback about setting priorities. Envision Arlington is a unique and important resource. Mr. Revilak said that the next three decides will be very important for the Town and the metropolitan region and that Envision Arlington will return to having forward looking view.

Wendy Richter, the Board's designee to the Open Space Committee's liaison with the Board, said that the Open Space Committee is tasked with preparing and monitoring a 7 year open space plan and is now if the process of updating that plan. The OSC has had virtual meetings and identified a few of the goals that will most likely be part of the updated plan. The projects that the OSC has taken on projects like Wellington Park and creating walking maps for the Town that also identify existing open spaces. The OSC identified that the town needs to balance development with open space/natural resources as the town becomes more densely populated. Ms. Richter_said that resources should be open to all members of the community and access to public spaces should be encouraged.

Mr. Benson said regarding environmental justice, the state has an environmental justice map and on the census block level with the town's environmental justice designations. Environmental justice communities tend to have much less tree cover and heat island effect. Mr. Benson asked what the town's parks provide and if they provide what the people in those neighborhoods need. Mr. Benson said that at some point the Board should start incorporating some of the biophillic cities standards into the Open Space and Recreation Plan.

Ms. Tintocalis said that the connection between nature and the city brings the biophillic attitude brings such a quality of life

to cities.

Mr. Revilak said that he likes Broadway Plaza and the Plaza in Davis Square so he is glad to see Broadway Plaza getting some attention. Mr. Revilak said he is inspired by the city of Paris and using space that was previously used as roads as an urban forest.

Ms. Raitt said that the Open Space and Recreation plan will come to the Board for approval, as has been done in the past. Ms. Raitt said that the Plan is scheduled to be ready for review in April.

The Chair introduced the third agenda item, Meeting Minutes (1/24/22 and 2/7/22)

 $Mr.\ Benson\ moved\ to\ approve\ the\ meeting\ minutes\ from\ 1/24/22\ as\ amended,\ Mr.\ Lau\ seconded,\ approved\ 5-0.$

Mr. Lau moved to approve the meeting minutes from 2/7/22 as amended, Ms. Tintocalis seconded, approved 5-0.

The Chair introduced the last agenda item, Open Forum

James Fleming asked why he received a legal notice in the mail about the business district warrant article he proposed. Ms. Lynema said that Mr. Fleming was included with the mailing to abutters because he is the petitioner.

Ms. Raitt said that she will include the meeting dates in April and details regarding the transition to in person meetings with the Board's next agenda.

Mr. Lau moved to adjourn, Ms. Tintocalis seconded, approved 5-0. Meeting adjourned.



Town of Arlington, Massachusetts

Correspondence Received:

Summary:

Correspondence received from:

- M. Rizkallah 2-25-2022
- L. Maida, Maida Pharmacy 3-2-2022
- N. Mann 3-5-2022
- P. Parise 3-6-2022
- E. Pyle 3-6-2022
- D. Seltzer 3-6-2022
- S. Blagden 3-7-2022
- E. Cahill 3-7-2022
- C. Carney 3-7-2022
- C. Cunningham 3-7-2022
- B. Kun 3-7-2022
- L. Vivenzio 3-7-2022
- J. Weber 3-7-2022
- A. Hollman 3-8-2022
- R. Peterson 3-8-2022
- J. Weber 3-8-2022
- T. Allor 3-11-2022
- E. Fischer 3-11-2022
- R. Lemp 3-12-2022
- X. Pretzer 3-12-2022
- S. Berczuk 3-13-2022
- L. Curtis 3-13-2022
- J. Susse 3-13-2022
- S. Blagden 3-14-2022 (two letters)
- J. Brodman 3-14-2022
- C. Gibson 3-14-2022
- R. Jacob 3-14-2022
- B. Lowe 3-14-2022
- S. Smith 3-14-2022 (two letters)
- A. Bala 3-15-2022
- B. Eastwood 3-16-2022
- J. Fleming 3-16-2022
- M. Fudala 3-16-2022
- S. Hansel 3-16-2022
- N. Angus 3-17-2022
- J. Fleming 3-17-2022
- P. Parise 3-18-2022
- T. Allor 3-19-2022
- D. Bradley 3-19-2022
- D. Seltzer 3-19-2022
- S. Blagden 3-20-2022
- A. Hollett 3-20-2022
- B. Borgia 3-21-2022
- K. Doherty 3-21-2022
- L. Curtis Hayes 3-21-2022

- E. Maynard 3-21-2022
- C. Noah 3-21-2022
- C. Pedersen 3-21-2022
- L. Wiener 3-21-2022
- W. Evans 3-24-2022
- G. Sinnott 3-25-2022
- M. Polking 3-27-2022

ATTACHMENTS.

ΑT	TACHMEN	TS:	
	Туре	File Name	Description
D	Reference Material	Article_FRizkallah_Support_Letter150_Mass_Ave_Rezoning.pdf	Correspondence from M. Rizkallah received 02252022
ם	Reference Material	Article_FMaida_Pharmacy_Letter_re_Rezoning.pdf	Correspondence from L. Maida received 03022022
D	Reference Material	Correspondence_from_NMann_received_3-5-2022.pdf	Correspondence from N. Mann received 03052022
D	Reference Material	Correspondence_from_PParise_recieved_3-6-2022.pdf	Correspondence from P. Parise received 03062022
ם	Reference Material	Correspondence_from_EPyle_received_3-6-2022.pdf	Correspondence from E. Pyle received 03062022
ם	Reference Material	Correspondence_from_DSeltzer_received_3-6-2022.pdf	Correspondence from D. Seltzer received 03062022
ם	Reference Material	Correspondence_from_SBlagden_received_3-7-2022.pdf	Correspondence from S. Blagden received 0307022
ם	Reference Material	Correspondence_from_ECahill_received_3-7-2022.pdf	Correspondence from E. Cahill received 03072022
ם	Reference Material	Correspondence_from_CCarney_received_3-7-2022.pdf	Correspondence from C. Carney received 03072022
ם	Reference Material	Correspondence_from_CCunningham_received_3-7-22.pdf	Correspondence from C. Cunningham received 03072022
ם	Reference Material	Correspondence_from_BKun_received_3-7-2022.pdf	Correspondence from B. Kun received 03072022
D	Reference Material	Correspondence_from_LVivenzio_received_3-7-2022.pdf	Correspondence from L. Vivenzio

	IVIANOTIAI	03072022
ם	Reference Correspondence_from_JWeber_received_3-7-2022.pdf Material	Correspondence from J. Weber received 03072022
ם	Reference Correspondence_from_AHollman_received_3-8-2022.pdf Material	Correspondence from A. Hollman received 03082022
ם	Reference Correspondence_from_RPeterson_received_3-8-2022.pdf	Correspondence from R. Peterson received 03082022
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ם	Reference Correspondence_from_EFischer_3-11-2022.pdf Material	Correspondence from E. Fischer received 03112022
D	Reference Correspondence_from_RLemp_received_3-12-2022.pdf Material	Correspondence from R. Lemp received 03122022
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ם	Reference Correspondence_from_ABala_received_3-15-2022.pdf Material	Correspondence from A. Bala received 3-15- 2022
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FROM THE DESK OF

Dr. Mouhab Zakhari Rizkallah

Feb 25, 2022

TO: The Arlington Redevelopment Board

RE: 150 Mass Ave, Arlington

Dear Arlington Redevelopment Board,

I am the owner of the property at 150 Mass Ave, Arlington.

This letter is in support of the proposed zoning map amendment (Article F: Expand Business Districts).

I appreciate the proponent's dedication to his neighborhood, and am perfectly fine with the map change to B3.

Respectfully Yours,

Dr. Monhab Z Rizkallah

From: Lawrence Maida <lamaida@maidapharmacy.com>

To: jraitt@town.arlington.ma.us **Date:** 03/02/2022 12:47 PM

Subject: Article F zoning map ammendment

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Maida Pharmacy Compounding is opposed to the rezoning from residential to proposed B3.

- 1. Parking
- 2.competition
- 3.been here since 1933 now a 4th generation
- 4.we been here for 90 yrs.
- 5. I talked to to neibors say NO

From: Nora Mann <noramann2@gmail.com>
Date: March 5, 2022 at 3:29:37 PM EST
To: Jenny Raitt <JRaitt@town.arlington.ma.us>

Subject: ARB Meeting 3/7/22 Proposed Warrant Article re: Two Family

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Dear Ms. Raitt and Members of the Arlington Redevelopment Board:

I write in support of the proposal, being presented to the ARB on Monday, 3/7/22 by Annie LaCourt and Laura Weiner to allow two-families to be built <u>by right</u> in these areas; no other changes to lot size, frontage, height, setbacks, or open space requirements. I need not repeat the proponent's arguments, though they appear to be sound and comprehensive. My perspective is as a longtime resident, former longtime member of the ARB, former longtime (and hopefully future) member of TM (pct 20) and advocate for housing access and equity. I know, as you do, that there is no single solution to the housing crisis - here in Arlington or regionally. This proposal should be put before TM and as a member of TM I will support its passage.

It is one tool in a multi-pronged effort to increase supply and, over time, address access and costs. The impact will be incremental, we will not see any immediate or overwhelming change in our neighborhoods. My house - a single family - won't suddenly become multi family nor will I be required to sell - at the appropriate time - to a developer.

It offers options, and supports a more fulsome discussion about how to address housing and equity in our community. I look forward to an opportunity to be a part of that conversation and I appreciate your consideration of this important topic.

Sincerely,

~n

Nora Mann (she, her, hers)

339-368-0495

405 of 491

Begin forwarded message:

From: Paul <paul456x@gmail.com>
Date: March 6, 2022 at 6:41:24 PM EST

To: Jennifer Raitt < jraitt@town.arlington.ma.us>

Cc: Eugene Benson <EBenson@town.arlington.ma.us>, Kin Lau <KLau@town.arlington.ma.us>, Melisa Tintocalis <mtintocalis@town.arlington.ma.us>, Rachel Zsembery <RZsembery@town.arlington.ma.us>,

Stephen Revilak <srevilak@town.arlington.ma.us>

Subject: Warrant Article 38 Comment

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Please note my comment below regarding the review of Article 38 by the Redevelopment Board at the upcoming March 7th meeting..

Please add this communication to the correspondence received for this meeting and any other consideration of proposed Warrant Article 38.

Thank you.

ARTICLE 38

ZONING BYLAW AMENDMENT / TWO FAMILY CONSTRUCTION ALLOWED BY RIGHT IN R0 AND R1 RESIDENTIAL ZONES

I have lived here for more than 40 years.

I chose to purchase and live in a single family neighborhood. I moved here from a multi-family neighborhood in the city.

In my opinion, this article takes away my right to continue to live in a neighborhood of my choosing (i.e., single family)

This article reduces the number of housing choices in Arlington.

As I understand, of the total Arlington housing stock available, only 39% are single family residences. The majority of our residences are multi-family.

Many single family lots are non-conforming and not suitable for two- or multi-family dwellings without potentially imposing significant quality of life issues for the abutters, including loss of light, loss of privacy, and other infringments on the quiet enjoyment of our exisiting property.

I urge the Board to REJECT this proposed warrant article.

In addition, with respect to process, I do not understand the issues, if any, that may arise with the board hearing a citizen's article that includes a member of the board as one of the article's sponsors/supporters. I would expect that that board member may recuse him/herself from voting on such an article to avoid any appearance of impropriety, if necessary.

Sincerely,

Paul Parise 106 Hemlock St. From: Elizabeth Pyle <elizabeth.m.pyle@gmail.com>

Date: March 6, 2022 at 12:52:42 PM EST

To: Jenny Raitt <JRaitt@town.arlington.ma.us>, Eugene Benson <EBenson@town.arlington.ma.us>, klau@town.arlington.ma.us, srevilak@town.arlington.ma.us, mtintocalis@town.arlington.ma.us,

rzsembery@town.arlington.ma.us

Subject: Proposed Article 38, two-family construction allowed by right in R0 and R1 zones

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Dear Members of the Redevelopment Board,

I am writing to request that you vote "No Action" on proposed Article 38, which would allow two-family construction by right in the R0 and R1 Residential Zoning Districts. This article would have detrimental unintended consequences for our Town, and it will not increase affordable housing.

By way of introduction, I am a land use and zoning attorney at Hill Law, with more than 20 years experience in residential zoning matters. My law firm regularly consults with municipalities to advise them on affordable housing issues, including by serving as special Town Counsel on affordable housing matters.

I was also a member of Arlington's Residential Zoning Study Group (the "RSG") for its entire three-year existence, from 2016-2019. The RSG was formed through a Town Meeting resolution to study the impacts of new construction on the residential zoning districts, and to recommend potential zoning changes. The RSG viewed Arlington neighborhoods with large numbers of teardowns/rebuilds, and received input from developers, residents, realtors and members of Inspectional Services. RSG members developed a consensus that many proposed zoning changes could easily have negative unintended consequences, and that it was important to study and debate any proposed zoning changes with all stakeholders.

My single biggest take-away from serving on the RSG was that single-family houses located in the 2-family residential districts were specially targeted for teardown/rebuilds, and that this was detrimental to Arlington from a public policy perspective. On the RSG, I learned that mid-level or more affordable single family "starter homes" in Arlington were often subject to teardown/rebuilds when they could be replaced with a two-family home at the same location. However, the newly-built two-family homes were vastly more expensive than the homes they replaced, leading to an increase of luxury units at the highest price points. For example, it was not uncommon for a single-family home to be sold for \$600,000-\$700,000 only to be replaced by two units in a duplex selling for \$900,000 to \$1 million each. This replacement of less expensive homes with luxury units increases our affluent population, puts upward pressure on the valuations of nearby homes, and ultimately makes our community less affordable. It also decreases housing choices in the mid-level market. Over time, the increase in home values also raises property taxes for the surrounding residences, putting additional burdens on seniors and other lower-income residents, further creating conditions that drive out lower-income people from our community.

Also when I was on the RSG, I saw that new two-family homes in Arlington are constructed to the maximum size of the building envelope permitted under the Bylaw, in order to increase developer profit and accommodate the square footage necessary for two units. This causes a loss of green space, yards, and mature trees in our residential districts, which makes our community less resilient to flood storage and climate change impacts.

If proposed Article 38 was implemented, increasing gentrification and loss of green space would occur throughout the R0 and R1 districts, instead of just in those few locations where a single family house is 491

located in a R2 zone. The consequences of such impacts are serious and wide-ranging, and should not be endorsed by the Redevelopment Board without significant study, community outreach and professional analysis. For example, Article 38 should not be recommended without consultation with Arlington's Finance Committee, so that the impact on the school population and budgetary overrides can be assessed.

What the proponents of eliminating single-family housing appear not to appreciate is that Arlington, as an individual town, cannot be separated from the supply and demand of the housing market in the greater-Boston metropolitan area. If Arlington builds more two-family housing, it will be only for affluent buyers of luxury units who will move to Arlington from surrounding communities because of the highly-rated school system and desirable location close to Boston. No matter how many new duplexes are built, it will not increase affordable housing in Arlington, because the regional demand for luxury units in greater-Boston will drive the market.

Arlington also should not be the first and only "test case" for eliminating single-family housing in Massachusetts. Instead, legislation recently signed by the governor shows a way forward to increase multi-family housing on a regional basis, by requiring all communities served by the MBTA to enact multi-family zoning near public transportation stations. The new legislation equitably asks all municipalities to add some density as part of a regional solution to the housing crisis, without the burdens of going it alone or being first. Arlington should give this new legislation a chance to work before adopting untested measures like eliminating single-family housing.

For these reasons, I urge you to vote "No Action" on Article 38.

Sincerely yours,

Elizabeth Pyle 66 Gloucester Street Arlington, MA 02476 Town Meeting Member, Precinct 8 **From:** Don Seltzer <timoneer@gmail.com> **Date:** March 6, 2022 at 4:12:15 PM EST **To:** Jenny Raitt <JRaitt@town.arlington.ma.us>

Subject: Correspondence regarding Warrant Article 38

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TO: Arlington Redevelopment Board

In preparation for the hearing on this article, I would like to provide the Board with a simple summary of fuseful acts regarding the makeup of our R0 and R1 single family zoning districts. The numbers are based upon both the 2020 US Census and our local Assessor's database.

If there are any questions regarding this summary I would be pleased to provide further explanation and spreadsheet listings of all properties and their classification.

Don Seltzer

Diverse

#12

R0 and R1 Fact Sheet

Just 39% of Arlington's housing is single 39% family. 61% consists of two family or more.

Single family homes in R0 and R1 comprise 38% just 1240 acres, which is only 38% of Arlington's land area

> The R1 district is Arlington's most diverse. Besides single family homes, it includes more than 600 multifamily households. It

includes all of our schools and their playgrounds. It includes our churches and cemeteries. Town Hall, Robbins Library, two fire stations, and other municipal buildings are in R1, as well as Dept of Conservation and Recreation land. No other district approaches this level of diversity.

Among the 351 cities and towns in the Commonwealth, Arlington ranks #12 in housing density. We are the 2nd densest town and denser than 2/3 of all cities.

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From: STEPHEN B <srbz@aol.com>

To: rzsembery@town.arlington.ma.us, KLau@town.arlington.ma.us, Eugene Benson

<EBenson@town.arlington.ma.us>, MTintocalis@town.arlington.ma.us, Steve Revilak <steve@srevilak.net>

Cc: jraitt@town.arlington.ma.us

Date: Mon, 7 Mar 2022 12:12:55 -0500

Subject: Article 38 - Two Family Agenda item comments

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March 7, 2022

Re: Article 38 - Two Family

Chair and Board members,

This article proposes to add "TWO FAMILY CONSTRUCTION ALLOWED BY RIGHT IN R0 AND R1 RESIDENTIAL ZONES".

Allowing two units per lot in single family zones was already done last year with the ADU bylaw, with many of the same rationales used for this one.

Prudence and good Planning practice would be to wait 5 or 10 years or so to see how adding second units in the single family zone is working before expanding the scope and impact.

Article 38 actually quadruples down and incentivizes rapid change in single family neighborhoods.

Advertised as replacing one single family with a two family/duplex, the change would allow, by-right, a two family and two Accessory Dwelling Units, for a total of four dwelling units where there is now one.

Article 38 incentivizes rapid change because it creates great profit potential by tearing down most any non-pristine home and replacing with two large, expensive units, possibly including two additional income units to raise the price even more. It is common practice for builders to solicit people to sell homes to them. The higher profit potential created by Article 38 will increase this practice, increase the selling price of existing homes and further price out middle income buyers.

The State of California recently allowed, by-right, building of four units where a single family currently exists.

Filling the gap of home owners who want to tap into the profit potential but can't afford it, companies have started offering profit sharing, where a developer will build the units, the owner gets to stay, and the owner gets 80% of the profit. See here: https://www.homestead.is

There is no reason that could not happen in Arlington, weakening the argument that change will occur very, very, slowly.

The memo presents the change as a benefit to property owners.

The greater benefit actually goes to builders, developers and house flippers.

If you look at building permits for new construction and major remodels, the vast majority are issued to builders or development companies that have purchased and demolished existing homes.

The large increase in value and utility did not go to the original property owner but to the builder/developer.

There is nothing wrong with what the builder is doing. They are operating in the framework the town provides for them.

It is up to town government, and elected and appointed officials to ensure development does not change the character of the town beyond what the residents want.

That these teardowns and new construction happen so easily points to a deficiency in the Special Permit process.

Someone adding 1000 sf to a 2000sf house needs to get a Special Permit, but someone tearing down the same 2000 sf house and building a 4000sf house, no problem, even though the same or greater effects occur that the Special Permit process exists for, but I'll leave that topic for another time.

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The Memo and Presentation use an Orwellianish logic that removing single family housing increases choice for housing seekers. Buyers have a choice now of single family, two family, or condoized two families.

How does reducing options increase choice?

A Housing Production Plan chart shows school age children concentrated in single family housing.

This makes sense as when families form and children arrive it is a natural desire to live in a place of their own; a life stage.

By removing single family zoning, Arlington is telling families with school age children, "We don't have a place for you, look elsewhere".

This will not affect the salability of Arlington properties as the market is regional.

Over time, it will affect demographics, culture and schools. Is this what you want? Is this what residents want?

Planning and Zoning changes should be made after careful consideration and with the expectation property owners will take advantage of the changes.

With Article 38, the Memo minimizes the impact, stating there are not many properties in a circumstance to use it, and it will take a long time for appreciable change.

If it is the case the change will be so minimal and incremental, it would be better to just not do it.

The reality is that it is a race between builders and families to buy any non-pristine house that comes on the market.

Here is an example, of many, a 2200 square foot brick house, built in 1958, that many families would have been happy to purchase and fix up for \$860,000 in 2018, but was torn down and replaced by a 4600 square foot house:

https://www.redfin.com/MA/Arlington/5-Old-Middlesex-Path-02474/home/8437248

Single family and two family houses in the existing two family zone have been demolished and replaced by duplexes that dominate the lot, out of scale with surrounding homes, and with each unit selling for much more than the original house sold for.

Builders, naturally, maximize profit. They do that by building to the full structural envelope allowed by bylaws. They are not concerned with how it affects the neighbors, neighborhood, or affordability.

There is no "affordability" in this process. As has been said, Arlington is in a regional market. No matter how many units are built they will not be sufficient to move prices down.

If prices were to move down, developers do not build into a declining market, as seen during recessions.

Builders have land, material and labor costs. Unless one or more of those is subsidized by someone else, "affordable" is market price.

What are more affordable are the houses that are torn down, which middle income families will not get a chance to live in.

Both the Memo and Presentation use misleading statistics, including, "60% of total land area falling within the R0 and R1 Zoning Districts. Of Arlington's land zoned for residential use, 80% is restricted to single- family homes."

The Zoning Map includes schools, golf courses, churches, cemeteries, Town Hall, Robbins Library and other non-residential uses in the residential zone.

If the substantial land area of non-residential uses was properly zoned and deducted from the residential land area, those percentages are reduced.

The Zoning Map and bylaw should be revised to reflect actual land use for good and informed decision making.

The Presentation says, "Smaller homes in shared structures have a lower carbon footprint per person than an equivalent single-family homes."

The reality is, that each side of the duplex is usually larger than the home it replaced, more than doubling the size of what was there before.

The Presentation says, "Single family homes aren't suitable for everyone at all stages in their lives; some people can't afford it, while others may want to downsize but stay in Town". This is true, but by eliminating single family zoning, those who are at the single family life stage and can afford it are out of luck with Article 38.

Attempting to mollify this reality by saying the change will occur over time does not change the end goal and result.

The Presentation says, "Because the dimensional regulations don't change, the housing is similar in appearance to others in the neighborhood."

In other words, "don't believe your lying eyes." The duplexes built to replace existing single family or two family houses are built to or close to the limits and are glaringly larger than the others in the neighborhood.

If the desire is to have the Presentation statement be true, Article 38 should include language that the replacement structure should be built in the same building envelope as the existing home, or some small percentage larger.

The Presentation says, "Bonus: A Tour of Arlington's Illegal Neighborhoods"

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Unfortunately, this section is false and misleading.

If one looks at the Assessor Database and past Zoning Maps, the houses deemed "illegal", were built prior to the original 1924 Zoning bylaw, were legal when built and are currently legal non-conforming, or were legally built under an earlier Zoning bylaw.

One could look at the "illegal" houses shown and acknowledge that it was these types of mismatches that lead to the desire to have a Zoning Code and orderly development in the first place.

Rather than look at the examples and say we already have mixed housing, one could ask if we want to go back to disorderly development with four unit houses (two family + two ADUs) adjacent to single family homes?

Stephen Blagden

p.s. The proposed motion language appears to create an internal conflict in the by-law.

From: <eileentighecahill@gmail.com>

To: <EBenson@town.arlington.ma.us>, <KLau@town.arlington.ma.us>, <mtintocalis@town.arlington.ma.us>,

<srevilak@town.arlington.ma.us>, <rzsembery@town.arlington.ma.us>

Date: Mon, 7 Mar 2022 14:05:00 -0500 Subject: Proposed Town Meeting Article 38

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Dear Arlington Redevelopment Board Members,

Please include my comments in the public record. Thank you.

I am writing with serious concern over proposed Town Meeting Article 38. I urge you to reject it.

I am writing to you as a concerned Arlington resident. Town Meeting Article 38 does not consider the significant impacts a change to zoning would have on the town's infrastructure. Not considering impacts to infrastructure is irresponsible to the Town's finances and the health of the townspeople.

Changing the zoning to allow two family construction throughout the town is mind-blowing to me as a civil engineer. Sizing of infrastructure is all based on zoning. For example, when designing a sewer, an engineer looks at the zoning to determine how much flow will go to the sewer. The engineer counts the number of lots, and estimates flow per lot based on the likely number of bedrooms per lot. The sewer pipe is sized based on the estimated flow (which is based on the town zoning). Sewer pumping stations are based on estimated flows (which is based on zoning). The wetwells in a sewage pumping stations are designed to hold the proposed amount of wastewater, and pump efficiently to draw down the wastewater in the wetwells to convey the wastewater to the sewage force main. The wetwells, pumps and force main are all based on estimated wastewater flow (which is based on zoning). Increasing flow to the town sewage pumping stations would strain the pumps and the sewage force mains.

It would be completely irresponsible for the town to significantly change its zoning without considering impacts to infrastructure. The Town of Arlington already has failing water, sewer and roadway infrastructure, based on the age of the town's infrastructure. Trenchless sewer repairs are happening all over town, likely to reduce infiltration to aged and broken pipes. Trenchless sewer pipe lining repairs do not increase the size of sewers. The DPW has at least 25 locations of "Trouble Spots" to check for sewer issues. The Town's system is old and in need of attention. That is to be expected, and it is wonderful we have a conscientious public works department to maintain our system. But, how can you increase flow without looking at the town's infrastructure?

This Town Meeting Article is intended to increase the town's population. How will the increased sewage flow be conveyed safely, so there are not sewage back-ups in basements, or back-ups into the streets through sewer manholes?

Water mains are sized the same way. It is based on the zoning. How will clean drinking water be safely conveyed throughout town without tremendous financial strain to the town of infrastructure upgrades?

Another consideration is the roads. The roads would have increased traffic, and more pavement issues to repair and rehabilitate.

Finally, trash disposal would be an issue. The Town already has a very bad rat infestation problem.

I urge the ARB to reject this Town Meeting Article. It is irresponsible to not consider impacts to the Town's infrastructure, and the costs associated with those impacts.

Please contact me with any questions you may have. I can be reached by email or phone at 617-335-8455.

From: Chuck Carney <chuckcarney@gmail.com>

To: EBenson@town.arlington.ma.us, KLau@town.arlington.ma.us, mtintocalis@town.arlington.ma.us,

srevilak@town.arlington.ma.us, rzsembery@town.arlington.ma.us

Date: Mon, 7 Mar 2022 13:34:50 -0500

Subject: Against Article 38

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Hi, I would like to offer my view on this article as you consider it's adoption.

If the goal for increasing affordable housing, I do NOT think Article 38 is the answer. Here are some reasons why:

- As we know, half of a house in Arlington is currently in the 800k+ range, which is not an affordable price for those in need of housing
- The article will accelerate the pace of "tear downs" to reap profits for developers, but not solving the affordable housing challenge
- These accelerated tear downs have many detrimental effects, except for developers. Those include
- Environmental and loss of green space, even with town regulations which can be bypassed by paying into a town tree fund
- Straining of public services, especially schools with the increase. While some may think the schools can handle it, there are challenges with recent spikes would only be exacerbated with this change
- Changing of the town landscape with the creation of more large "McMansions", already a concern for many and may be a matter of taste, but folks living here can have an opinion about their proliferation
- The increase of cars which will result from 3-4 person per dwelling, and for many, who cannot get access to the T / Alewife easily. Articles are being proposed to change on-street parking regulations, which fundamentally changes the feel of the town
- And more...

To address affordable housing, let's focus on supporting the Housing Corp of Arlington. And while some may think this topic was properly analyzed in the Housing Implementation Plan, it did not receive the transparency and participation necessary to fully represent the community and get feedback on concerns.

I think this article is very controversial and divisive and it was poor judgement to bring it forward without fully appreciating the issues it will cause.

Chuck Carney 2 Kimball Road From: Colleen Cunningham <colleenpattypaige@gmail.com>

To: EBenson@town.arlington.ma.us, KLau@town.arlington.ma.us, mtintocalis@town.arlington.ma.us,

srevilak@town.arlington.ma.us, Rachel Zsembery <rzsembery@town.arlington.ma.us>

Cc: Jenny Raitt <JRaitt@town.arlington.ma.us>

Date: Mon, 7 Mar 2022 06:59:20 -0500

Subject: opposition to the elimination of single family zoning in Arlington (Article 38)

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Good morning Jenny and ARB members,

Please include this letter in the official correspondence received for the upcoming hearing concerning Article 38

regarding the elimination of single family zoning.

Please confirm the inclusion of this letter for Monday night's meeting March 7, 2022

thank you, Colleen Cunningham Kensington Park

Opposition to elimination of single family zoning in Arlington (Article 38)

This warrant will have many detrimental results for the town. It will allow, over time, the elimination of <u>all</u> single family homes. It incentivizes developers and outside speculators to buy all single family homes, regardless of size and beauty of architectural styles, and tear them down to build as many "luxury" residences as they are allowed. It will only drive prices upward and will eliminate real choice.

Who benefits? No one but the property development/real estate industry. It certainly does not benefit current residents/taxpayers who chose their neighborhoods for a bit of green space/views/yards. It unethically breaks the implicit agreement with the town to live in a particular type of neighborhood made when the current owners purchased their homes. It certainly does not benefit potential future residents who seek to purchase a single family home in a suburb, but instead only will have the choice of a condo or apartment. The result will be a lack of diversity of housing styles as only modern condos and other multifamily housing will be available. Imagine our beautiful town without the architecture of various time periods anymore because the houses will be tragically torn down.

A result of eliminating single family or any other residential zoning may be property tax overrides for infrastructure, school buildings and services. It adds to the problem of increasing number of cars and traffic congestion, not to mention the environmental impacts of tearing down existing homes and trees.

I prefer preservation of Arlington's existing homes and open spaces rather than encouraging destructive tear downs in residential neighborhoods. The existing Arlington is the one I love and have lived in for my entire life.

Colleen Cunningham Kensington Park From: Beth Kun <beth.kun@gmail.com>

To: EBenson@town.arlington.ma.us, KLau@town.arlington.ma.us, mtintocalis@town.arlington.ma.us, srevilak@town.arlington.ma.us, rzsembery@town.arlington.ma.us, eric@ericforselectboard.com

Date: Mon, 7 Mar 2022 09:53:23 -0500 Subject: Concern about zoning changes

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Dear ARB ---

I am writing to you as a homeowner and concerned resident of Arlington. I worry that the proposal seeking to end single-family zoning will begin to change this town into urban sprawl.

This very thing happened in the Virginia town where I grew up. After the zoning rules changed, formerly quiet neighborhoods became a patchwork of smaller original houses and newer, larger buildings with parking spaces that took up entire yards. The greenspaces ebbed away, and a town that had previously served as a respite from urban life became filled with traffic and stress and lost all its personality. My town became more and more urbanized in an attempt to supply the growing population with the infrastructure required to support it.

I never go back to my home town because it has lost everything that made it livable and desirable.

Currently, Arlington has a range of neighborhoods with very distinct personalities. This is what gives the town its flavor, interest and value. Please do not squander the things that make this town special.

I ask that my comments be added to the minutes of tonight's meeting.

Thank you! Beth Kun From: lah-rah veevy <veewoolfie@yahoo.com>

To: "EBenson@town.arlington.ma.us" <EBenson@town.arlington.ma.us>, "KLau@town.arlington.ma.us" <KLau@town.arlington.ma.us>, "mtintocalis@town.arlington.ma.us" <mtintocalis@town.arlington.ma.us>, "srevilak@town.arlington.ma.us" <srevilak@town.arlington.ma.us>, "rzsembery@town.arlington.ma.us" <rzsembery@town.arlington.ma.us>, "eric@ericforselectboard.com" <eric@ericforselectboard.com> Date: Mon, 7 Mar 2022 14:23:30 +0000 (UTC)

Subject: COMMENT: Concern for Housing Article

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Dear ARB ---

As a homeowner, a parent, and a resident of Arlington, I am writing to express my deep concern with the proposal seeking to end single-family zoning and allow 2-families in all single-family districts.

The proposal will cause stress on the current infrastructure, make it more difficult to park, cause more traffic, and also reduce green and open space in Arlington. Neighborhoods will continue to (more so than they already are) morph into a crowded hodgepodge of multi-family units mixed in with single-family homes. Not passing this Article will help preserve the integrity of the neighborhoods that currently exist in town.

I respectfully request that my comment be added to the record at tonight's meeting on this topic held on 3/7/2022.

Thank you, Laura Vivenzio

From: david weber <jawdbw@yahoo.com>

To: "ebenson@town.arlington.ma.us" <ebenson@town.arlington.ma.us>, "klau@town.arlington.ma.us" <klau@town.arlington.ma.us>, "mtintocalis@town.arlington.ma.us" <mtintocalis@town.arlington.ma.us>, "srevilak@town.arlington.ma.us" <srevilak@town.arlington.ma.us>, "rzsembery@town.arlington.ma.us" <rzsembery@town.arlington.ma.us>, "cawagner@hotmail.com" <cawagner@hotmail.com>

Date: Mon, 7 Mar 2022 15:14:31 +0000 (UTC)

Subject: Article 38

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Dear Members of the ARB.

I would like to oppose the Article 38 which states changing single family zoning to multi family zoning.

People who live in single family homes are in areas which they prefer because of the open space. When you allow multi-family dwellings you are increasing traffic and parking.

Making two family homes does not help the low income market at all so you are keeping people from affordable housing. Rentals in Arlington are sometimes, most often, more than a mortgage which only helps the home owner, not the renter. Using this rationale as a way to change zoning is deceptive at least.

Some of you make single family owners feel guilty because they prefer to live in their single family homes. I know this because I tried to change my street back to its original single family zoning and was admonished by one of your members who shall remain anonymous.

My street has already been impacted by this zoning and has turned a single family into a two family dwelling with no design qualifications which fit in with the rest of the homes. It has a sparkling cinder block wall while all other walls are more colonial looking structures.

Please reconsider your Zoning Article 38 as it disenfranchises current single family homeowners and their neighborhoods.

The recent movement out of Arlington has been because of the poor Planning Board and ARB regulations which do not help the reason for those of us who moved to this town in the first place, not to mention the higher taxes.

Sincerely, Janice A. Weber Precinct 21

From: ahollman@aol.com

To: "rszemberry@town.arlington.ma.us" <rszemberry@town.arlington.ma.us>, "klau@town.arlington.ma.us" <klau@town.arlington.ma.us>, "ebenson@town.arlington.ma.us" <ebenson@town.arlington.ma.us>, "mtintocalis@town.arlington.ma.us" <mtintocalis@town.arlington.ma.us>, "jraitt@town.arlington.ma.us"

<iraitt@town.arlington.ma.us>

Date: Mon, 7 Mar 2022 21:33:16 +0000 (UTC)

Subject: Article 38 comment

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To the members of the Arlington Redevelopment Board,

I respectfully request that my comments regarding Article 38 be added to the public record.

I am Aram Hollman of 12 Whittemore St., Arlington.

I am writing to express my opposition to the proposed Article zoning changes to R0 and R1 districts for the following reasons.

The arguments made in favor of it do not hold. I address the claims made in the March 3 Memorandum from Jennifer Raitt, Kelly Lynema and Talia Fox to the ARB. Similar claims have been made by the article's proponents, Annie LeCourt and others.

The claim that it will create "more affordable" housing does not specify more affordable than what? Anecdote: A 2family near me, on Avon Place was recently renovated. The 2 units sold for \$800,000 and for \$1.3 million respectively. This was within an existing shell, not new construction. These are -not- prices that anyone would consider affordable, and new construction would cost even more.

The claim that Arlington can or should address the "racist legacy" of past zoning is laudable, and may even be possible, but further raising the price of housing in Arlington will simply make Arlington's housing even less accessible to those of limited means, of whatever racial background. In short, it would be at least arguable that this zoning change -is- another racist policy encoded in zoning.

The claim that the zoning will improve environmental sustainability likewise does not hold. Yes, newer construction, built to meet energy efficiency standards, will be more sustainable. However, that would be true of -any- housing that is constructed, regardless of whether Article 38 is passed, so it is not an argument in favor of Article 38. As for the argument that 2-family units will be more efficient than the existing 1-family, that too does not make the construction more environmentally sustainable. The proposed zoning holds the dimensions of the structure, and thus its volume, to what they were before. With the same volume, the same quantity of heating will be required. No matter how it is measured the environmental impact of 2 households, even in smaller surroundings, is greater than the environmental impact of 1 household. In fact, while I would not argue this, it -could- be argued that the best way to reduce environmental impact would be to make -all- of Arlington's construction 1-family!

The claim that this increases housing choice does not hold. The prime candidates for teardowns and for conversion to 2-families are the smaller "starter" homes which still exist. Replacing them with expensive 2-families may increase housing choice for those at the upper end of the income spectrum, but does nothing for those of more limited means.

From page 8: "While this amendment would not generate housing affordable to households making 80% of Area Median Income (AMI) or less, it has the potential to result in greater housing choice for middle income households." This distinction surprises me. People making 80% of AMI are precisely the people Arlington -should- be trying to attract. 80% is not poor, it is working people and working families. In contrast, this definition makes equal and more than 100% of AMI middle income. That's people making well over \$100,000 a year, possibly \$200,000. That's not middle income, that's affluent.

Finally, the emphasis on creating denser housing is detrimental to the town in a number of ways. It strains the schools. The argument that an increase to the property tax base will improve the town's financial position does not hold, because most of the additional tax revenue will be spent on increased services. This is most notable with the schools. At \$12 per \$1000 of assessed value, a \$1 million home brings in \$12,000. The additional cost to the tayyn for an arrival. student in the schools is \$15,000. And that is a reasonable consideration, because people choose Arlington for its schools.

In short, Article 38, in many ways, will achieve precisely the opposite of the results it is intended to create. Given how obvious that is, one can only wonder at the motives of its proponents.

Sincerey,

Aram Hollman 12 Whittemore St. Arlington, MA 02474 ahollman@aol.com (781) 648-6417

From: Rebecca Peterson < rebeccaopeterson@gmail.com>

To: EBenson@town.arlington.ma.us, KLau@town.arlington.ma.us, mtintocalis@town.arlington.ma.us,

srevilak@town.arlington.ma.us, rzsembery@town.arlington.ma.us

Date: Mon, 7 Mar 2022 18:41:50 -0500 Subject: Article A / Single Family Zoning

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Dear members of the ARB: please add my comments (below) to the official record for this meeting.

I urge you to reject the elimination of single-family zoning in Arlington.

Arlington appeals to many homebuyers because it has the feel of a town with yards and trees, but at the same time urban conveniences such as proximity to the T, good restaurants, and being just minutes from Boston. But eliminating single family housing will destroy the thing that drew most people here! I feel that this proposal is unfair to those who scrimped and saved to buy specifically in a single-family neighborhood, and who have spent subsequent years paying for and improving our homes.

I respectfully ask, what about those of us who want a single-family neighborhood, and why don't our opinions matter? Is the only goal to stuff as many people as we possibly can inside the town borders?

Many of us don't want to live somewhere as dense as Cambridge – we appreciate the town-like feel of Arlington. In addition, eliminating single-family housing does nothing for true affordable housing – but it is a dream for the tear-down crowd and the developers.

The constant push from town officials for increased density is tiresome. We should be trying to protect what little green space we have left and maintain our quality of life rather than encourage people to build on every square inch possible.

Sincerely, Rebecca Peterson 31 Florence Ave. From: david weber <jawdbw@yahoo.com>

To: "ebenson@town.arlington.ma.us" <ebenson@town.arlington.ma.us>, "klau@town.arlington.ma.us" <klau@town.arlington.ma.us>, "mtintocalis@town.arlington.ma.us" <mtintocalis@town.arlington.ma.us>, "rzsembery@town.arlington.ma.us" <rzsembery@town.arlington.ma.us>, "C. Wagner" <askarfrr@outlook.com>

Date: Tue, 8 Mar 2022 02:50:09 +0000 (UTC)

Subject: Warrant article #38

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Having attended tonight's meeting the conclusion is 77% against this warrant article; 24 against and 7 in favor. I had one more comment to make.

I surveyed my neighbors when I wanted to go back to R1 and they were for going back to that zoning.

I don't care about California, which is a total mess altogether, or any other city or town.

I want Arlington to remain a place for anyone who wants to live here can be able to afford to do so and, right now, that is not possible even for those of us who are struggling to hold on.

The taxes keep rising even though there has been more building. I really do not feel that the people who run this town care what happens to people who love the town.

I would like to know how many people on that zoom meeting actually live in this town.

Janice Weber

Precinct 21-Town Meeting Member

From: Thomas Allor <thomas.allor@gmail.com> **Date:** March 11, 2022 at 4:12:37 PM EST **To:** Jenny Raitt <JRaitt@town.arlington.ma.us> **Cc:** Marielle Allor <marielle.allor@gmail.com>

Subject: NOTE of OPPOSITION: Article F Zoning for Input to Town mtg on March 14.

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Hello Ms. Rait,

RE: Article F Zoning Map Amendment, put forward by town resident, James Fleming (petitioner).

Thomas Allor and Marielle Allor Residents of 151.1 Massachusetts Ave are petitioning in opposition of Article F zoning map amendment/expand business district of the zoning from R2/R5 to B3 for the following properties address:

155 Massachusetts Ave (8 Families)

151.1 Massachusetts Ave Unit 1 (condo)

151.2 Massachusetts Ave Unit 2 (condo)

147 Massachusetts Ave (multi family)

150 Massachusetts Ave (multi family)

There are several good reasons as a Town on why not to move forward with voting on this in the foreseeable future. I will attempt to provide them below:

- 1. TREE'S. There are about 15 trees that exist on these plots that provide air, filter and beauty in the neighborhood. My residence has a flowering Magnolia and Cherry Tree. 147 Mass Ave has beautiful Pine trees. And 155 has 2 Large Maple trees out front. The Town plan calls out the desire for TREE lined Streets and this zoning change could negatively impact our environment, town aspiration and beauty.
- 1a. "B3 Zoning" is at best elusive as called out in the Town Plan as Mixed Use and not properly defined. In fact, there is a "no Property abutment" in B3's guidance that would allow a developer to build UP TO the Property Line. This would cause Density of housing, elimination of current Tree/landscape and only a small "set back" is required from Mass Ave. Do we want to be Porter Square?
- 1b. PARKING. There are only 956 spaces in town to Park. The addition of the bike lane and bus Lanes in East Arlington does not allow more parking spaces on Mass Ave to support a Mixed Use -undefined development.
- 1c. SAFETY. More stores and residences will impact traffic. There have already been several Pedestrian accidents and sad to say Fatalities as Mass Ave is situated today.
- 2. COMMUNITY. The neighborhood "as is' is a great use of both residential and business. Development of these properties will dis-place families and individuals in affordable rental conditions. PorchFest would also suffer from not having Bands rocking and rolling on our porches in East Arlington if the porches don't exist.
- 2a. Questions for the Town to consider:

426 of 491

Does the town really need another bank, drycleaner, pizza shop, cafe, coffee, barber in East Arlington.?Is the town willing to risk "attrition" as a result of a competitive threat moving into the business community by having a mix use business move in? Covid certainly proved that the existing business community ebs and flows already.

Are the streets livable and safe for pedestrians and motorists with an increase by Mixed use dwellings?

Is the business community and residents willing to live next to a construction project and face the environmental impacts? Will material be ready to construct and be shortened given our Supply strain constraints in the construction industry? A 2yr scope could easily turn into 3-5 given current supply constraints.

How does East Arlington Livable Streets feel about the above?

Aren't there current B3 Zones in Town that need businesses to occupy the space first?

3 TAXES/RENT- increased as well as Rent Increased is unknown.

Statement below provided by (Petitioner) to me in email on Feb 24,2022, from Interim Director of Assessment.

"If the zoning were to change, but the building was not modified nor a commercial business started, the assessment would not change. If a neighboring property (e.g. 147 Mass Ave) were to change their use to increase foot traffic (e.g. start a business), then that could have a small effect on assessment."

If this is so, Can We all get this in Writing from the Town of Arlington?

Adding another retail space has not been studied by the town and development of these properties will negatively impact our local East Arlington Business community from a Tax perspective as well as have potential Rent Increase and displace existing residents and businesses who have strived to afford living in East Arlington.

Finally, we find it interesting that the (petitioner) does not live in the residences affected above. Neither do the 10 persons who signed the petition. Why? If owners of these residents were enamored by this proposal, why haven't they signed this petition?

So as Arlington strives to find answers on the above, we believe this petition can be "tabled" for the foreseeable future until we all know more about the impacts on East Arlington Residents and Business Community.

Thank You.
Thomas & Marielle Allor
151.1 Massachusetts Ave, East Arlington, MA
proud owners of magnolia and cherry trees.

From: Ezra Fischer <ezrafischer@gmail.com>

To: EBenson@town.arlington.ma.us, KLau@town.arlington.ma.us, mtintocalis@town.arlington.ma.us,

srevilak@town.arlington.ma.us, rzsembery@town.arlington.ma.us

Date: Fri, 11 Mar 2022 07:24:23 -0500

Subject: Support for Article 38

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CAUTION: This email originated from outside your organization. Exercise caution when opening attachments or clicking links, especially from unknown senders. Hello ARB,

My name is Ezra Fischer and I'm a Town Meeting member representing Precinct Four. I wasn't able to attend your recent meeting but I wanted to voice my support for Article 38. There are lots of good reasons for allowing multifamily housing throughout Arlington and I hope you all will consider supporting it. Happy to write more or talk though this issue, but I feel certain that you all are better versed and have spent much more time pondering it than I have! Thanks for your service to the town!

Thanks, Ezra

732-429-8802

From: Marti and Robin Lemp < lemphome@gmail.com>

Date: March 12, 2022 at 10:01:26 AM EST

To: JRaitt@town.arlington.ma.us

Cc: Marielle Allor <marielle.allor@gmail.com>, thomas.allor@gmail.com

Subject: Article F Zoning Map Amendment

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Dear Ms. Rait,

My husband and I are writing to express our opposition to the Article F zoning map amendment outlined in the email below by our friends who own and reside in one of those addresses. We strongly concur with all of the arguments outlined below and agree with them that this type of change in East Arlington is NOT desirable for our community, one that the town has made an effort to beautify in recent years and one that we believe is already a great balance of residential and commercial properties. We would not be happy to have the number of commercial properties increased in our neighborhood. It seems that a better focus might be on creating more dynamic businesses in the existing store fronts, many of which seem to come and go, possibly because of rents that are inflated. We have also heard repeatedly that the relationships between landlords and business owners in Arlington are very poor from many of the town's wonderful business owners. A much better focus would thus be to address these issues in whatever way possible to support the many wonderful small businesses that try to but fail to thrive in our community.

Thank you for your consideration.

Kind regards, Marti and Robin Lemp, owners of 11 Harlow St., Apt. 2 in East Arlington.

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RE: Article F Zoning Map Amendment, put forward by town resident, James Fleming (petitioner).

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429 of 491

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and Business Community.

Thank You. Thomas & Marielle Allor 151.1 Massachusetts Ave, East Arlington, MA proud owners of magnolia and cherry trees.

From: Xavid <xavid@xavid.us>

Date: March 12, 2022 at 10:20:23 PM EST **To:** Jenny Raitt <JRaitt@town.arlington.ma.us> **Subject: Writing in Favor of Article 38**

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Hello,

I wanted to write a letter of support to the ARB for Article 38, allowing two-family buildings by right.

Unless we provide an alternative in single-family zones, houses are going to just get larger and more expensive over town. Allowing two-family buildings in these areas provides a strong alternative that results in more homes at lower costs than large single-family homes. We have many buildings that could accommodate two families without any change to their outside appearance, and this is an excellent opportunity to better utilize our limited land area and welcome more neighbors into our neighborhoods. Our current two-family and apartment areas are localized in certain parts of town, resulting in areas of town that have much less economic and other diversity, leading to some of our schools being at a disadvantage in terms of diversity.

Adopting this proposal would make Arlington a leader in terms of housing equity and represent a strong step forward in addressing our regional housing crisis.

I strongly encourage the Board to recommend action on this article.

Sincerely, ~Xavid Pretzer Precinct 17 From: Steve Berczuk <steve.berczuk@gmail.com> To: Marion Carroll <marion@leedscarroll.com>

Cc: arlingtonlist <arlington@arlingtonlist.org>, EBenson@town.arlington.ma.us, KLau@town.arlington.ma.us, mtintocalis@town.arlington.ma.us, srevilak@town.arlington.ma.us, rzsembery@town.arlington.ma.us Date: Sun, 13 Mar 2022 17:16:20 -0400

Subject: Re: [arlington] Redevelopment board to continue to hear concerning Articles Mon Mar 14 7:30: reducing apartment parking, removing abutter notice on zoning changes

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On Sun, Mar 13, 2022 at 4:37 PM Marion Carroll <marion@leedscarroll.com> wrote:

> I hope the article proposing cutting the required parking allotments will include easy-toreach, free - public parking lots!

> Marion

I believe the goal of the parking change is to make it possible to build more housing for those who don't need or want multiple vehicles.

Since people have different needs, and not every housing unit will meet all the needs of everyone, it seems reasonable to make it possible for an extra couple of families to have a place to live. (though parking lots, not nec free, might be an interesting approach to address demand for those who have more cars than their attached parking can fit)

Steve

Steve Berczuk | steve.berczuk@gmail.com | https://linkprotect.cudasvc.com/url? a=http%3a%2f%2fwww.berczuk.com&c=E,1,n0xuUab6uYwuUZ6pB8X9WJ0hn_BQSZKdignQAxGcvEGIVFc_Ajrg82S5 <u>OLOtpLmo454NfbNiiX455y4WlfJbBHon2uP-MhI164qsbfYgahkMj6-3KYBOyxh_IA,,&typo=1</u> | @sberczuk SaneBox keeps my inbox clean, try it here: https://linkprotect.cudasvc.com/url? a=http%3a%2f%2fsanebox.com%2ft%2f8714z&c=E,1,nZ57-V_Wsrha9ja7oa7-55n Pjr2KgqUZ24CasRTv8ncR0t1iE 7IUCIpqpHnecgfwMvs0SHMdVw1ZZ1r3D1RukgZ61lc1xr6itIZRBghCTBFg,,& typo=1

433 of 491

From: Lara Curtis < lara.curtis@gmail.com> **Date:** March 13, 2022 at 9:59:56 PM EDT

To: JRaitt@town.arlington.ma.us

Subject: Comments on Zoning Map Amendment, Article F

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Hi Jenny,

Please forward this letter to the ARB ahead of the public hearing Monday evening. It is regarding the proposed zoning map amendment.

Thank you,

Lara Curtis Hayes

Lara Curtis Hayes

5 Cleveland Street Arlington, MA 02474 lara.curtis@gmail.com

March 13, 2022

Arlington Redevelopment Board

% Jennifer Raitt, Director, Planning & Community Development Town of Arlington Sent via email

Dear members of the Arlington Redevelopment Board,

I am writing to express my concern and opposition to Town Meeting Warrant Article F, the Zoning Map amendment intended to expand the business district in the Capitol Square neighborhood.

When I first received notice of this proposed warrant article, I was curious to know why someone would want to rezone this block. On reading the supporting language for the article, the only reasoning I can determine for this amendment is because an interested resident "wants to see more storefronts." This seems like an incredibly vague motivation. An amendment that changes the zoning of multiple properties should entail a greater level of consideration.

The subject properties are well maintained and already occupied, unlike many others along Mass Ave, and I don't see the need to rezone them on a whim. This warrant article, along with the separately proposed warrant article seeking to dramatically increase allowed FAR in business districts, would most likely result in the demolition of these structures, one of which is providing multiple units of housing.

Should the petitioner have a desire for a specific use, or a specific development type, a more involved planning process should be undertaken to determine what might be appropriate and in the best interests of the neighborhood. But I cannot support what appears to be rezoning without adequate planning.

I urge you to recommend "No Action" on this zoning map amendment.

Sincerely,

Lara Curtis Hayes, AICP

From: Jennifer Susse < jennifer.susse@gmail.com>

To: Rachel Zsembery <rzsembery@town.arlington.ma.us>, Steve Revilak <steve@srevilak.net>, Kin Lau <klau@town.arlington.ma.us>, mtintocalis@town.arlington.ma.us, ebenson@town.arlington.ma.us

Cc: Jenny Raitt < jraitt@town.arlington.ma.us>, Annie LaCourt < annie@lacourt.net>, "laura.wiener@rcn.com"

<laura.wiener@rcn.com>

Date: Sun, 13 Mar 2022 18:19:35 -0400

Subject: Article 38: Allowing 2-Family Zoning by Right

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March 13, 2022

Dear Redevelopment Board,

When I was asked last year whether I supported allowing two-family houses to be built by right in all of Arlington I said that I wasn't sure we were ready for that yet. Here is/was my worry. Allowing two families to be built by right is, as I'm sure you realize, a fairly conservative zoning change that will produce only a modest addition to our housing stock, and yet it feels like a huge change to so many people. In other words, we have a proposal that produces maximum anxiety with only minimal effect.

I've come to change my mind. While I still support prioritizing other types of housing initiatives—for example, allowing 3 and 4 family housing near transportation corridors, and larger mixed-use housing on those corridors, I think it is important to advocate for any and all common-sense zoning reform.

I also think it is important to use article 38 to start a conversation about the type of development we would like to see in Arlington. We know that we don't have the option to freeze time (we can't just insist that houses remain as small and affordable as they were 10 or 20 years ago). As in many things, the market pressures have and will dominate. What we can do, is remove regulations that go against our values as a community. Having a zoning rule that encourages the production of very large single-family homes instead of something closer to middle-income housing does not reflect the value we place on economic and generational diversity in Arlington.

It is possible that this zoning change will not pass Town Meeting this year, but it may. Arlington has been on the vanguard on so many issues in the past—from our adoption of Arlington Community Electricity, and the Net Zero Action Plan, to allowing ADUs by right, to considering Ranked Choice Voting on the ballot, to passing the Trust Act, and to possibly implementing a Police Civilian Review Board. We are a community that other communities look to emulate. Allowing two-family zoning by right is still on the vanguard. It is still new and scary to people. So far only Minneapolis, Oregon, and California (partially) have made the change.

In the meantime, even if Town Meeting doesn't pass this article this year, the conversations the article will engender about important issues of housing affordability, diversity, and sustainability are important to have. Those conversations can only happen if the Redevelopment Board votes favorably on Article 38.

One small point, if it feels easier to exclude the R0 districts from this zoning change I encourage you to do so. The practical effect of that exclusion would be minimal, but given the sway that residents from these older and wealthier areas of town have, this small change may make the proposal feel description.

threatening. It would also defang the argument that builders would create very large two-family homes, as only the RO district have super large lot sizes.

All the Best, Jennifer Susse Teel Street

Re: Self Service Gas Station Article

Chair and Board Members,

Articles for self-service stations appear every few years, unsuccessfully, so far.

Why Self-Serve?

Allowing self-service gas stations in Arlington has only one possible benefit, lower gas prices.

However, if you have noticed driving through surrounding towns or looking at GasBuddy.com, a web site with live gas prices (sample from 3/6 attached), Arlington's low price gas stations have always been competitive with self-service prices, sometimes lower, sometimes a little higher.

Self service options are rarely done to benefit the consumer.

Look at the relatively recent self serve checkout lines, using CVS as an example.

At first it seems a benefit, to be able to get out quickly if you only have a couple of items. However, the corporate purpose was to reduce labor costs. So, next step was to reduce checkout cashiers. Now, you can wait in line for both the manned and self serve lines. Great.

Another change where you don't realize what you have until it is gone.

Down Sides

Since there is little to no benefit to self-service stations for the consumer, what are the negatives?

Drive Out Small Business Over Time

Arlington gas stations are almost all (maybe all) independent small businesses. Self–service are usually chain or corporate operations. Gresham's law, in a gas station corollary, shows, as seen in other towns, cities and states, which allow self-serve, that, over time, self-serve drives out full serve. This will accelerate the change of gas station locations to other uses.

Loss of Actual Service

Arlington gas stations are also service stations; a place to take your car to be fixed. Service stations are usually faster and less expensive than Dealership service. Self-service stations typically have no service. As service stations disappear, there is less choice for Arlington residents to find a place to have their cars fixed.

Annual Inspections

Vehicles have to be inspected every year. Most service stations do inspections. Self-service typically have minimal staffing and do not do inspections. As the end of the month draws near, there are often lines at service stations to get a sticker. Where will those Arlington residents go as lines get longer and longer as there are less sticker stations?

Convenience Stores

Self-Serve stations often have an attached convenience store. This is nice, but will put economic pressure on Arlington's long time existing stand alone convenience stores.

Future Electric Vehicle Charging and Service

As electric vehicles become more prevalent, there will need to be more places to charge them and service them. Existing gas stations are a natural location for this.

Equity

Equity is a trendy consideration lately. More well off people, with newer cars, do not have to worry about keeping an older vehicle functioning. Those of lesser means benefit from a neighborhood service station. Newer cars can be dropped off at the dealership for a sticker with a shuttle ride to work, not a choice for others.

Removing options and choice for those not as economically well off is not equitable.

Elderly and Disabled

The elderly and disabled are currently treated just like everyone else at Arlington service stations. Self-serve stations may have additional wait time or no service at all for elderly or disabled.

The Federal Government ADA site says:

"People with disabilities may find it difficult or impossible to use the controls, hose, or nozzle of a self-serve gas pump. As a result, at stations that offer both self and full service, people with disabilities might have no choice but to purchase the more expensive gas from a full-serve pump. At locations with only selfserve pumps, they might be unable to purchase gas at all.

The Americans with Disabilities Act (ADA) requires self-serve gas stations to provide equal access to their customers with disabilities. If necessary to provide access, gas stations must -

*Provide refueling assistance upon the request of an individual with a disability. A service station or convenience store is not required to provide such service at any time that it is operating on a remote control basis with a single employee, but is encouraged to do so, if feasible.

*Let patrons know (e.g., through appropriate signs) that customers with disabilities can obtain refueling assistance by either honking or otherwise signaling an employee.

*Provide the refueling assistance without any charge beyond the self-serve price."

Massachusetts Gas Station Law similarly says at https://www.mass.gov/doc/disability-rights-laws-in-massachusetts/download:
"Massachusetts Gas Station Law
G.L. c. 94, § 295CC

Every gas station owner offering motor fuel for sale from both full-service and self-service pumps shall dispense fuel from the self-service pump for any owner-operator of a motor vehicle bearing handicapped person or disabled veteran number plates as described in section two of chapter ninety (see section on Massachusetts Handicapped Plate and Placard Law below for more information). The gas station must display signs in a prominent location stating its compliance with the provisions of this law. The Division of Standards shall develop standards for such signs including, but not limited to, size, text, legibility and location. Note: The Americans with Disabilities Act also directs gas stations assist people with disabilities. See http://www.ada.gov/gasserve.htm "

Notice, there is no requirement for assistance for the elderly or partially disabled, and even disabled must have a plate or placard.

Do you want your older self, a parent, grandparent, or elderly neighbor to have to pump their own gas or be treated differently, aka lessly?

Do You Want to Pump Gas in a Snow Storm?

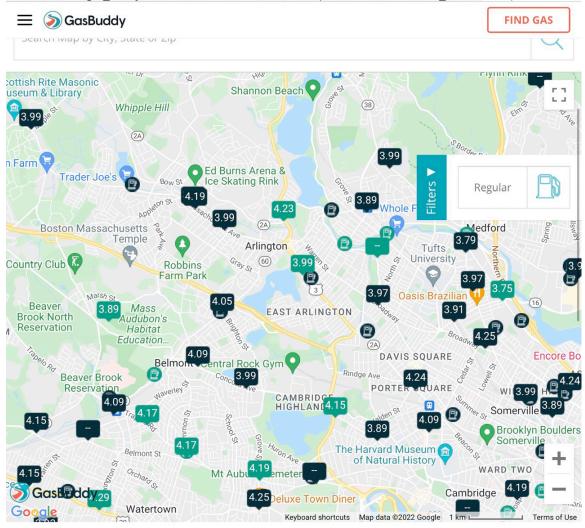
The most obvious negative is weather and convenience. How many days are just the right temperature and humidity where you wouldn't mind getting out of the car to pump your gas? Certainly not between November and April, with cold, or biting cold, temperatures, wind driven snow, or cold rain, stinging your face, slush on the ground to walk through. Certainly not in the dog days of summer with high temperatures, humidity and your clothes sticking to your skin as you

watch the gas meter spinning. Not when you are on the way to work or an event, nicely dressed, dreading a splash of gas which smell will linger for hours.

Please continue to let Arlington residents and visitors benefit from full service gas stations by recommending no action on the self-service article.

Stephen Blagden

Gas Buddy gas prices March 6, 2022 (look like a bargain now)



See what gas prices are around the country at a glance. Areas are color coded according to their price for the average price for regular unleaded gasoline.

From: STEPHEN B <srbz@aol.com>
Date: March 14, 2022 at 2:50:37 PM EDT

To: klau@town.arlington.ma.us, mtintocalis@town.arlington.ma.us, srevilak@town.arlington.ma.us,

rzsembury@town.arlington.ma.us, ebenson@town.arlington.ma.us

Cc: Jenny Raitt <JRaitt@town.arlington.ma.us>

Subject: Article 41 Apartment parking comments

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Chair and Board members,

The memo mentions bringing parity between 1, 2 and 3 unit residences and apartments as a reason to reduce parking requirements for apartments.

Parity can go both ways.

A better case could be made for bringing 1, 2, and 3 units to apartment parking standards than what is proposed.

The ACS cited does show 3/4 of renters have 1 car or less, but it also shows renters entirely have more than one car per renter.

More information would be helpful. Rather than the few actual parking stats, a more complete survey of apartment and condo buildings would give a clearer picture.

If the existing apartments have a persistent parking surplus, we should see them renting out the extra spaces. They are businesses whose existence is renting space. They are not going to leave money on the table by letting spaces lie empty month after month. Are they renting spaces? How many? Enough to support reducing parking spaces as proposed? Is there evidence of classified ads advertising such?

What about visitors?

While visitors to single family homes are likely to find spaces on the street, visitors to apartments are most likely going to need on site parking.

Those who established the current parking requirements undoubtedly had practical reasons for the numbers they chose.

Allowing insufficient parking, in any zone, will increase pressure for overnight parking.

That will solve nothing as, just like roads, the cars expand to fill the space.

Do cities that allow overnight parking have surplus on-street parking or do people do things like putting chairs in spaces to keep them?

Eventually, the choice is to maintain sufficient off street parking and deal with those who can't find a space, or allow on street parking and have to deal with even more people who can't find parking.

Section 6.1.5 already provides relief for those with good reason to request reduced parking. The town can grant reductions when necessary, but cannot demand more than what the bylaw requires.

Better to leave the existing standards pending more and better convincing information.

Stephen Blagden

443 of 491

From: Janice Brodman < janicezbrodman@gmail.com>

To: rzsembery@town.arlington.ma.us Date: Mon, 14 Mar 2022 12:32:20 -0400

Subject: Re: Articles 41 and 43

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Sorry, I forgot to add: Please add my comments to the record. Thank you.

On Mar 14, 2022, at 12:30 PM, Janice Brodman <janicezbrodman@gmail.com> wrote:

Dear Rachel,

Please do not approve the amendments to Articles 41 and 43 for the following reasons:

Article 41 would reduce parking allotted to building units to unrealistic levels. It's detrimental and short-sighted to decree a law that cannot be implemented effectively. There are other ways to promote reduced car use that would be far more effective while being realistic in operation.

Article 43 would demolish the very essence of informing Arlington residents of major changes that would affect their lives and property. We live near some properties that were rezoned. After we were informed of the proposed zoning changes, we were able to participate in meetings that informed those designing the new development — which actually improved the design — and converted local hostility to cooperative engagement. Article 43 as it stands is exactly what is needed to ensure that those whose lives and property would be directly affected by a zoning change can provide key information and a local response. The proposed changes to Article 43 would create extremely problematic and adversarial situations that could be prevented before they arise.

Respectfully,

Janice Zarro Brodman 41 Pine St. Arlington, MA 02474 From: Chad Gibson <chdgibson@yahoo.com>

To: "EBenson@town.arlington.ma.us" <ebenson@town.arlington.ma.us>, "KLau@town.arlington.ma.us" <klau@town.arlington.ma.us>, "srevilak@town.arlington.ma.us" <srevilak@town.arlington.ma.us>, "mtintocalis@town.arlington.ma.us" <mtintocalis@town.arlington.ma.us>, "rzsembery@town.arlington.ma.us" <rzsembery@town.arlington.ma.us>

Date: Mon, 14 Mar 2022 23:13:56 +0000 (UTC)

Subject: Comments for Articles 40 and 41 for Town Meeting

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Hello,

I can't make the hearing tonight but would like to voice my support for Article 41 to reduce required parking for apartment buildings. One per unit is plenty, builders can always build more! Our current law is based in 1970's thinking of suburbia. We have multiple transportation options, apt buildings, mostly renters tend to have fewer cars anyway.

On Article 40, I support changing the zoning for the two houses and apt building on Mass Ave in East Arlington near Trowbridge and Melrose. Those should be zoned B3, they can continue to be houses, but business, ideally mixed use should be an option for redevelopment in the future.

Thanks, Chad Gibson Varnum St.

From: Ruthellyn Jacob <ruthellyn16@gmail.com>

To: jraitt@town.arlington.ma.us

Date: Mon, 14 Mar 2022 09:06:08 -0400 Subject: Redevelopment Board Meeting Tonight

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To: Redevelopment Board Members

I am sending this to voice my concern regarding your discussions of rezoning RO and R1.

I have been an Arlington resident for over 20 years. My mother was born and raised in Arlington. I have a vast history and love for this town.

Myself and many of my fellow community members are completely opposed to changing zoning rules on single family lots. The only ones who will benefit from this will be building contractors (aka Seaver).

They will build very expensive, unaffordable multi-level buildings instead of one. We already see these units for sale in Arlington. The cost is unattainable for most people.

This will in no way assist lower/middle income home buyers because for the average person it will be unaffordable. This will also affect the current neighbors in the community. It will cause Arlington to be even more congested, cause parking issues, increase taxes (more use of resources), overcrowd our schools (many that we have just rebuilt in recent years), and the list goes on. This will do nothing for diversity or lower/middle income families.

The housing crisis is a national issue and should be treated as such. Eventually this crisis will pass. Everything is cyclical and we are in difficult times currently. We just got out of a 2 year pandemic, dealing with the highest energy costs & inflation.

Arlington is a desirable, suburban town and that is what we want to keep it as. **Please do not permanently change the footprint of Arlington which will affect future generations to come.** Please keep it as a desirable area and community to raise your family without the feel of being in an overcrowded city.

Another thing too, please investigate these larger homes being built on small lots. **Try to find a way to incentivize preserving ranches, capes and 2000 sq foot homes in Arlington.** This will also assist with affordability for families in the future.

I ask you to please re- consider zoning changes and think of the current community you represent and not the builders.

Thank you for your consideration,

Ruthellyn Jacob

Arlington Resident & taxpayer

From: boblowedesign.com <bob@boblowedesign.com>

To: "jraitt@town.arlington.ma.us" < jraitt@town.arlington.ma.us>

Date: Mon, 14 Mar 2022 13:47:03 +0000

Subject: Article F zoning

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Dear Ms. Raitt;

Regarding Article F zoning map amendment/expand business district of the zoning from R2/R5 to B3 for the following properties address; 147 Massachusetts Ave; 150 Massachusetts Ave; 151 Massachusetts Ave; 155 Massachusetts Ave.

We have recently been informed that a resident of East Arlington has filed a petition to get the residential property at 155 Massachusetts Ave. and adjacent properties rezoned for mixed commercial use (B3). We are writing to let you know we oppose this proposal. As residents of East Arlington for over 28 years we have been strong supporters of the East Arlington businesses, library, bikeway, and streetscape improvements. We strongly feel that the suggested zoning changes to the existing are proposed for the benefit of a few to the detriment of most of the surrounding community. It is critical that we continue to preserve the quality of the East Arlington neighborhoods for the enjoyment and wellbeing of residents, visitors, and business owners.

Bob Lowe, Nancy Lowe 22 Harlow Street Arlington MA bob@boblowedesign.com **From:** Scott Smith <smithsteiner@comcast.net> **Date:** March 14, 2022 at 4:45:10 PM EDT **To:** rzsembery@town.arlington.ma.us

Cc: JRaitt@town.arlington.ma.us, ebenson@town.arlington.ma.us, klau@town.arlington.ma.us,

srevilak@town.arlington.ma.us, mtintocalis@town.arlington.ma.us

Subject: In favor of Article 41

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Dear members of the ARB,

I urge your support of the reduction in minimum parking requirements for apartment buildings, to be inline with the regulations for homes. Most rental households are 0 or 1 car (2016 MAPC report). Furthermore, these are minimums: the property owner can add more parking if the demand is there. But, there is no reason to require a property owner to supply parking that might not be needed.

Thank you for your volunteer service to the Town.

· Scott Smith

39 Amherst Street

(precinct 7)

From: "Scott Smith" <smithsteiner@comcast.net>

To: <rzsembery@town.arlington.ma.us>

Cc: <jraitt@town.arlington.ma.us>, <EBenson@town.arlington.ma.us>, <KLau@town.arlington.ma.us>,

<srevilak@town.arlington.ma.us>, <mtintocalis@town.arlington.ma.us>

Date: Mon, 14 Mar 2022 16:44:42 -0400

Subject: In favor of Article 41

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Dear members of the ARB,

I urge your support of the reduction in minimum parking requirements for apartment buildings, to be in-line with the regulations for homes. Most rental households are 0 or 1 car (2016 MAPC report). Furthermore, these are minimums: the property owner can add more parking if the demand is there. But, there is no reason to require a property owner to supply parking that might not be needed.

Thank you for your volunteer service to the Town.

· Scott Smith

39 Amherst Street (precinct 7)

From: Ajay Bala <ajay.bala@gmail.com> Date: March 15, 2022 at 11:08:01 AM EDT

To: JRaitt@town.arlington.ma.us, Shilpi <shilpagovada@gmail.com>

Subject: NOTE of OPPOSITION: Article F Zoning for Input to Town mtg

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Hello Ms. Rait,

RE: Article F Zoning Map Amendment, put forward by town resident, James Fleming (petitioner).

Ajay Balasubramaniam and Shilpa Govada, owners of 151.1 Massachusetts Ave are petitioning in opposition of Article F zoning map amendment/expand business district of the zoning from R2/R5 to B3 for the following properties address:

We would like to fully support any and all points in opposition that may have been previously raised as a result of which we believe the town should not vote in favor of this in the foreseeable future. In essence we have not fully understood all the impacts of what this rezoning will do and are very concerned of the detrimental impacts (Environmental, taxes, traffic, etc) that it will potentially bring to the surroundings and to the town,

Thank you. Regards,

- Ajay Balasubramanian and Shilpa Govada

151.1 Massachusetts Ave Unit 1, East Arlington, MA 02474

From: Brian Eastwood <iambeastwood@gmail.com>

To: jraitt@town.arlington.ma.us

Date: Wed, 16 Mar 2022 14:31:38 -0400

Subject: Support for Article 39

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Jennifer,

My name is Brian Eastwood. I have lived on Marathon Street in Arlington for ~4 years. I recently received a flier in my mailbox about Article 39 - purportedly about the detrimental effect that increased residential density in our business districts would have on the town.

I am writing to express my support for Article 39. Simply put, Arlington needs more housing, and the most sensible place to put it is in dense areas with ready access to main roads and mass transit. I understand the concerns that the author of this filer has about the loss of space for businesses, but the abundance of retail space for rent in this town, coupled with the dearth of affordable housing options - how many homes in Arlington are selling for \$150,000+ over asking price? - indicates that the town needs to re-prioritize the utilization of real estate in corridors such as Mass. Ave. In addition, just because a building can have more residential space and less commercial space doesn't mean that it will - witness the abundance of commercial and lab space under development in Boston and Cambridge at the moment.

As for concerns about the loss of parking: It is not incumbent upon Arlington, or any municipality, to prioritize the free or heavily discounted storage of private property (cars) on public roads, particularly those served by major bus routes, within close proximity to the community path that connects to other bus routes and the Red Line, or - in the case of Arlington Center - served by a large municipal parking lot. In fact, reduced parking and vehicular traffic will make the business districts safer for the pedestrians and cyclists within these neighborhoods who are frequent visitors to the businesses based there.

Thank you, --Brian

--

Brian Eastwood

Freelance Writer Brian Eastwood Writes

- Writing Samples
- · Core Areas of Focus

----- Forwarded message ------

From: James Fleming < jflemingwpi13@gmail.com >

Date: Wed, Mar 16, 2022 at 9:10 PM Subject: letter in support of article 39

To: Jenny Raitt < jraitt@town.arlington.ma.us >

Hi Jenny!

Please include this as public comment to the meeting this coming Monday.

I am in support of Article 39. I find it frankly ridiculous that the commercial buildings in my neighborhood (Capitol Square) can't even add a second story. Buildings should be allowed to increase in size incrementally over time, expanding the opportunity for residents and businesses and providing a natural opportunity for redevelopment.

I don't know whether an FAR of 4 is the right number or not. I do know that, without the opportunity for redevelopment and rejuvenation, our neighborhoods will stagnate at best, decline at worst. I urge you to support this article, with whatever FAR you deem appropriate.

- James

From: Muriel Fudala < muriel.fudala@gmail.com>

To: jraitt@town.arlington.ma.us

Date: Wed, 16 Mar 2022 15:24:47 -0400

Subject: Article 39 zoning bylaw amendment -- OPPOSED!!!

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Ms. Jennifer Raitt,

Director of Planning & Community Development, Arlington

Dear Ms. Raitt,

Why would Arlington with an already high density population want to increase its population and FAR density? Especially, substantially higher than Brookline, Newton, Watertown, and Cambridge?

There is not enough parking as it is. How many times have I foregone stopping at a local bakery, store, or business because after circling the block, there was no parking? And it was freezing cold, raining, or snowing?

We don't want high rises in Arlington which spoil the feel of an old-fashioned town. We don't want more people, more traffic, fewer parking spaces, and fewer businesses.

I strongly oppose increasing the FAR standard from 1.5 to 4.0, especially if a majority of that density is from new residences.

I have been a resident of Arlington for about 30 years, I pay a lot of taxes, and I value my neighborhood. Don't ruin

Sincerely, Muriel Fudala 17 Marathon St. Arlington, MA 02474 Arlington Redevelopment Board 730 Mass Ave Annex Arlington, MA 02476

Via email: <u>jraitt@town.arlington.ma.us</u>

Re: <u>Article 39: Zoning bylaw amendment / increased floor area ratio for mixed-use structures in</u> business districts

I am writing to register my strong opposition to this warrant article and urge the ARB to vote against it.

The article proposes an unprecedented increase in the Floor Area Ratio (FAR) to 4.0 for mixed-use structures in *all* business districts. This is an increase of more than *two and a half times the current ratio* of 1.5. This is too much, and it's too broad; it will have several detrimental effects on our town. Raising the FAR by this much will make our business districts excessively dense areas, full of multi-story structures towering over our residential neighborhoods (a "skyscraperfication" of Arlington). This will drastically alter the skyline and character of our town. This proposed article will also cause a loss of business space and contribute to the increasing price of housing in Arlington through the erosion of commercial space and a proliferation of expensive apartments. Two cases in point: 1) The original proposal for the redevelopment of 190-200 Mass Ave was for a massive 5-story building with a FAR of 4.1 that would have caused the loss of 8,000 sq feet of business space in the heart of Capitol Square. 2) The Toraya block redevelopment at 882 Mass Ave has significantly reduced the previous commercial space (by 70% or so), replacing five former businesses with a four-story apartment building and only one space on the ground floor for commercial use.

Article 39 also contradicts the definition and purpose of some of our business districts, particularly the B1 and B2 districts (see below; emphasis added). Raising the FAR to 4.0 for mixed-use structures in these zones will create an internal conflict within our zoning bylaws.

Town of Arlington Zoning Bylaw, Section 5.5 Business Districts, Subs-section 5.5.1. Districts and Purposes:

A. **B1:** Neighborhood Office District. In the Neighborhood Office District, the predominant uses include one- and two-family dwellings, houses with offices on the ground floor, or office structures which are in keeping with the scale of adjacent houses. Primarily located on or adjacent to Massachusetts Avenue, this district is intended to encourage preservation of small-scale structures to provide contrast and set off the higher-density, more active areas along the Avenue. Mixed-use buildings without retail space are allowed in this district. The Town discourages uses that would detract from the desired low level of activity, consume large amounts of land, or otherwise interfere with the intent of this Bylaw.

B. **B2:** Neighborhood Business District. The Neighborhood Business District is intended for small retail and service establishments serving the needs of adjacent neighborhoods and oriented to pedestrian traffic, and mixed-use buildings. Locations are almost all along Massachusetts Avenue or Broadway. The Town discourages uses that would detract from the district's small-scale business character or otherwise interfere with the intent of this Bylaw.

Arlington is already very dense, particularly East Arlington. This proposed FAR increase is so drastic, it's almost unbelievable. What is the precedent for raising the FAR by so much in all business districts across the board, in one exponential leap? The traffic and parking implications are frightening (and should be properly studied before such a proposal can be considered), not to mention pedestrian and vehicular safety, and the erosion of the small-town character and charm of our business districts.

For comparison, here are some of the maximum floor area ratios allowed in business districts in nearby towns*. *You will not see a FAR of 4.0 anywhere*, because it's simply NOT a realistic ratio for neighborhood/local business districts like the ones we have here in Arlington!

- Brookline maximum FAR 0.5 to 1.75 (Coolidge Corner's FAR is 1.75).
- **Newton** maximum FAR 1.0 to 2.5 in mixed-use districts (a FAR of 2.5 is only allowable by special permit).
- **Watertown** maximum FAR 1.0 in Regional Mixed-Use Districts (Arsenal Street corridor) and "in no instance shall increased intensity of use allowed by Special Permit exceed a FAR of 2.0" in the district.
- Waltham FAR by right between 0.2 to 0.5 in business districts; a maximum FAR of 2.5 is allowed only by special permit.
- **Cambridge** maximum FAR 0.75 to 1.75 in Cambridge local and neighborhood business zones.

A floor area ratio of 4.0 is not even remotely applicable to the business districts we have here in Arlington. If a higher FAR is desired in particular business areas, or for particular projects, there are better ways to achieve that than an indiscriminate increase as proposed in Article 39. A more carefully specified and realistic proposal could allow for better opportunities to engage in wider, more productive community conversation and planning. It could also allow Arlington to adequately study the infrastructure, safety, housing, and economic implications of increasing the FAR and density in the different business districts. This sweeping increase just doesn't make sense.

I urge you to vote "no action" on Article 39.

Sincerely, Stephanie M. Hansel 3 Cleveland Street

^{*}Maximum FAR numbers presented for neighborhood/local business districts in nearby towns do not include specific overlay districts, which have specific development goals.

February 22, 2022

Arlington Redevelopment Board 730 Mass Ave. Annex Arlington, MA 02476

Re: Article F Proposed Change to Zoning Map to Expand Business District (155, 151, 147, 150 MassAve.)

Dear Chairperson Zsembery,

I recently received a notice of the above-referenced proposed zoning map amendment. I support the expansion of business in Arlington but it is important to ensure we continue to provide a mix of compatible uses along this commercial corridor and that includes residential. East Arlington is quickly gentrifying and diverse and affordable housing options are becoming scarce. This proposed zone change would eliminate a large number of existing residential units.

There are a few other factors that I hope the ARB looks at when considering this zone change. Many of the commercial buildings on corners along Mass. Ave. only address Mass. Ave. and completely ignore the side streets. As these lots are fairly deep and extend into the residential neighborhoods quite a bit, it is essential that any redevelopment consider the scale and context of the surrounding areas and include façade improvements that address both frontages and avoid blank facades along the side streets. It appears another Zone Change proposed (Enhanced Business Districts) would address some of this.

Another concern is delivery access and waste management. Commercial waste management is almost always located in the rear, directly adjacent to the abutting residential properties and this creates potential public health issues when businesses do not regularly maintain these areas. When placed in the rear, these areas are often "out of sight- out of mind" for the businesses - but not the adjacent residents. I'm sure you have heard of the exploding rat population in our neighborhoods so proper containment, control, management and enforcement is essential if more businesses are going to be permitted in this area.

I'm certain that most of my issues/concerns raised above can be addressed through good design but the petition for the zone change does not appear to provide a great deal of supporting information or detail. Without a broader analysis, review, and consideration of the potential impacts on both Mass. Ave and the adjacent residential side streets, it may be premature to consider re-zoning these properties at this time.

I trust that if the ARB does consider supporting this zone change, they will ensure the above issues are taken into consideration during the design review of any future redevelopment proposal. Thank you for the opportunity to comment and thank you to the ARB and the Planning and Community Development for all the work you do to keep Arlington growing in a more sustainable direction.

Sincerely

Cc:

Neil Angus, FAICP, LEED AP

5 Melrose Street

Jennifer Raitt, Director, Planning & Community Development

From: James Fleming < jflemingwpi13@gmail.com>

To: Jenny Raitt < jraitt@town.arlington.ma.us>, Rachel Zsembery < rzsembery@town.arlington.ma.us>, Kin Lau

<klau@town.arlington.ma.us>, Eugene Benson <eugene.b.benson@gmail.com>, Kelly Lynema

<klynema@town.arlington.ma.us>, mtintocalis@town.arlington.ma.us, srevilak@town.arlington.ma.us

Date: Thu, 17 Mar 2022 15:20:32 -0400 Subject: Article 40: Expand Business Districts

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CAUTION: This email originated from outside your organization. Exercise caution when opening attachments or clicking links, especially from unknown senders. Hi Jenny, Kelly

I checked the agenda for the 3/21 ARB meeting and saw that there was a comment from an A. Bala, the other owner of 151 Mass Ave. They are opposed to the re-zoning petition.

I'd like the ARB (copied here as well) to be aware of this. One of my comments in the public hearing was that a majority of owners were in support -- 3 in favor, 1 opposed, 1 unknown. Ajay was one of the 3 I counted as being in favor, based on prior email correspondence.

Whether due to a change of mind, or my misinterpreting his statement at the time, I would like to amend my prior statement -- there are 2 in favor, 2 opposed, 1 unknown.

- James

From: Paul <paul456x@gmail.com>

To: Jennifer Raitt < jraitt@town.arlington.ma.us>

Cc: Eugene Benson <EBenson@town.arlington.ma.us>, Kin Lau <KLau@town.arlington.ma.us>, Melisa Tintocalis <mtintocalis@town.arlington.ma.us>,

Rachel Zsembery <rzsembery@town.arlington.ma.us>, Stephen Revilak <srevilak@town.arlington.ma.us>

Date: Fri, 18 Mar 2022 11:45:01 -0400 Subject: Warrant Article 39 Comment

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CAUTION: This email originated from outside your organization. Exercise caution when opening attachments or clicking links, especially from unknown senders. Please note my comment below regarding the review of Article 39 by the Redevelopment Board at the upcoming March 21st meeting..

Please add this communication to the correspondence received for this meeting and any other consideration of proposed Warrant Article 39.

Thank you.

Paul Parise Hemlock St.

ARTICLE 39

ZONING BYLAW AMENDMENT / MIXED USE IN BUSINESS DISTRICTS

The proposed article indicates changing the FAR allowed in certain business districts to 4.0. Given all the other requirements (setbacks, open space, parking,etc.) this proposed FAR seems extremely high. In my opinion, it would lead to very dense and tall residential developments with only a small token of commercial space required in the overall building volume. Compared to the FAR requirements for mixed-use of nearby cities and towns (as was cited by another commentator), the FAR requirement of 4.0 seems wholly inappropriate for Arlington.

I urge the Board to vote No Action on this warrant article.

While I support mixed use development in these main thoroughfare areas, it seems that recent mixed use developments have led primarily to residential spaces with only a token street level area/space reserved for commercial use. While not part of this warrant article, it seems important to me that we find means and methods to promote more commercial development in these mixed use buildings.

From: Thomas Allor <thomas.allor@gmail.com>
To: Jenny Raitt <jraitt@town.arlington.ma.us>

Date: Sat, 19 Mar 2022 08:26:21 -0400

Subject: Article 39: Zoning Bylaw amendment/ increased floor area ratio for mixed use structures in business districts

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CAUTION: This email originated from outside your organization. Exercise caution when opening attachments or clicking links, especially from unknown senders. Dear Miss Rait,

I am writing to register my opposition to this warrant article.

The article proposes an increase in the Floor Area Ratio to 4.0 for mixed use structures in all business districts. That is more than 2.5x the current ratio of 1.5.

This is too much and too broad. It will have several detrimental effects and make our neighborhoods a lot more dense without any planning or consideration on the town's current infrastructure to support such rapid growth. Causing unforseen costs to the town and tax payers. Please consider No-Action of this Article. Thank you.

Regards, Tom Allor 151 Mass Ave Arlington, MA From: Diane Bradley <dianebradley9@hotmail.com>

To: "Jraitt@town.arlington.ma.us" < Jraitt@town.arlington.ma.us>

Date: Sat, 19 Mar 2022 18:19:22 +0000

Subject: Article 40

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Please vote NO, thank you Sent from my iPhone From: Don Seltzer <timoneer@gmail.com>

To: Rachel Zsembery <rzsembery@town.arlington.ma.us>, KLau@town.arlington.ma.us, Eugene Benson <EBenson@town.arlington.ma.us>,

MTintocalis@town.arlington.ma.us, Stephen Revilak <srevilak@town.arlington.ma.us>

Cc: Jenny Raitt <JRaitt@town.arlington.ma.us>

Date: Sat, 19 Mar 2022 13:24:55 -0400 Subject: Fiddling with FAR - Article 39

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CAUTION: This email originated from outside your organization. Exercise caution when opening attachments or clicking links, especially from unknown senders. Correspondence to the Redevelopment Board

In reviewing the presentation posted in support for Article 39, Increasing FAR Limits, I was immediately struck by the serious factual errors it contains. The petitioner does not understand how FAR is calculated and the examples given for existing Arlington properties are grossly incorrect. Furthermore, there is nothing in the presentation to suggest an understanding that FAR is not some independent metric, but is just one interrelated element in an array of dimensional restrictions, as noted in the Planning Dept memo.

Below I provide the Board with the corrected values for the Capitol Theatre Block and 5-11 Water St.

204 Mass Ave: the Capitol Block

- District: B3
 39208 sq f
- Gross Floor Area: 61448 sq ft
- Lot Area: 23810 sq ft
- FAR: 2.6 1.65
- Max FAR under current zoning: 1.4



The actual countable gross floor area of the Capitol Theatre Block is 39,208 sq ft.

The petitioner has incorrectly included the below ground cellar area.

The real FAR is 1.65.

461 of 491

The primary reason that this building is non-compliant with today's zoning bylaw is that it lacks any rear yard setback. Our ZBL respects the rights of adjacent homeowners to not have 35 - 60 ft tall buildings built right up to the property line. The chief impediment to erecting a Capitol Theatre building today is the need for a 30 ft rear yard setback, as a buffer from the adjacent residential properties, and also to accommodate required landscaping and parking.

Supposing that there were such a 30 ft wide strip added, the FAR would drop to 1.36, completely compliant with the current B3 FAR requirement.

5 Water Street Offices

- District: B5 27,492 sq ft
- Gross Floor Area: 36656 sq ft
- Lot Area: 16515 sq ft
- FAR: 2.2 1.66
- Max FAR under current zoning: 1.8



The actual countable gross floor area of 5-11 Water St is 27,494 sq ft. The petitioner has again incorrectly included the below ground cellar and parking area. The real FAR is 1.66.

This is already compliant with the B5 FAR limit of 1.8.

For his vision of what could be built under the proposed article, the petitioner cites last year's proposal for the Christo Block, at 190 Mass Ave. The presentation features a highly distorted perspective view which suggests that the 50 ft tall building would somehow appear to be no taller than the 30 ft tall utility poles adjacent.



The claim is that the only reason that this building could not be built was the unreasonable FAR. As this Board knows, there were many residents who spoke eloquently on the detrimental impact on their neighboring homes. There were numerous other ZBL violations such as insufficient rear yard setback, failure to comply with 5.3.17 on upper story setbacks, 5.3.8 on street yard setbacks for corner lots, and zero usable open space. And then there was the little matter of eliminating nearly 80% of the street level commercial space on a block that is central to the Capitol Square business district.

FAR is but one interrelated element in an array of dimensional requirements in our ZBL. If the other requirements could have been met, it is likely that FAR would not have been an obstacle to the redevelopment of this block.

Not every lot is suitable for 5 story buildings.

Don Seltzer

Irving St

March 20, 2022

Chair and Board Members,

Large Additions v. New Construction

There is a disparate treatment of large additions, which require a Special Permit, and new construction, which can proceed by right even though it may have greater negative impacts than a large addition and/or be much larger than the remodeled home.

There should be a level playing field for these types of construction, no unfair advantage of one over the other. That would be in greater conformance with the Master Plan, Zoning Bylaw and consideration of neighbors and the neighborhood.

A Special Permit process should be required for new construction or demo/new construction where the resulting building(s) are greater than 750 square feet or 50% more than the original home.

Here is an example.

25 Brunswick Rd, a 3200 square foot house sold in 2020. If a new owner wanted to increase the size of the house to 4000 square feet (greater than 750sf addition), they would have to apply for a Special Permit and have a Public Hearing with notice to neighbors, for their input.

The Board of Appeals would have to "find that the alteration or addition is in harmony with other structures and uses in the vicinity."

In making its determination, the Board of Appeals "shall consider, among other relevant facts, the proposed alteration or addition's dimensions and setbacks in relation to abutting structures and uses and its conformity to the purposes of this Bylaw as set forth in Section 1.2"

Relevant portions of 1.2 include, "the conservation of natural conditions for flora and fauna and to serve as urban amenity for scenic and aesthetic enjoyment", "It is made with reasonable consideration to the character of the district and to its peculiar suitability for particular uses"

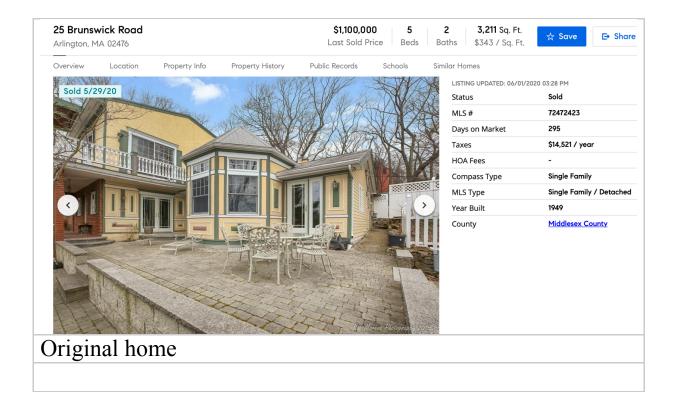
The purpose of the R1 district is, "The Town discourages intensive land uses, uses that would detract from the single-family residential character of these neighborhoods, and uses that would otherwise interfere with the intent of this Bylaw."

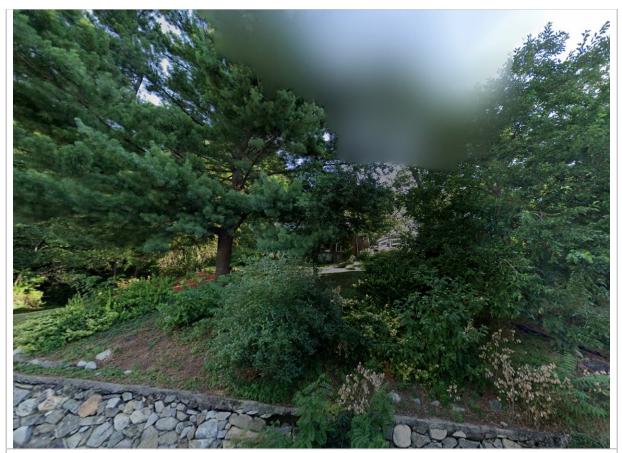
Instead, a developer purchased the house, tore it down, subdivided the lot, cut down most of the trees, and built three 4200+/- square foot houses, by right.

In a Special Permit hearing, would the Board of Appeals have been able to find that replacing a well screened 3200 square foot structure with over 12,000 square feet of buildings on clear stripped lots was, "in harmony with other structures and uses in the vicinity"?

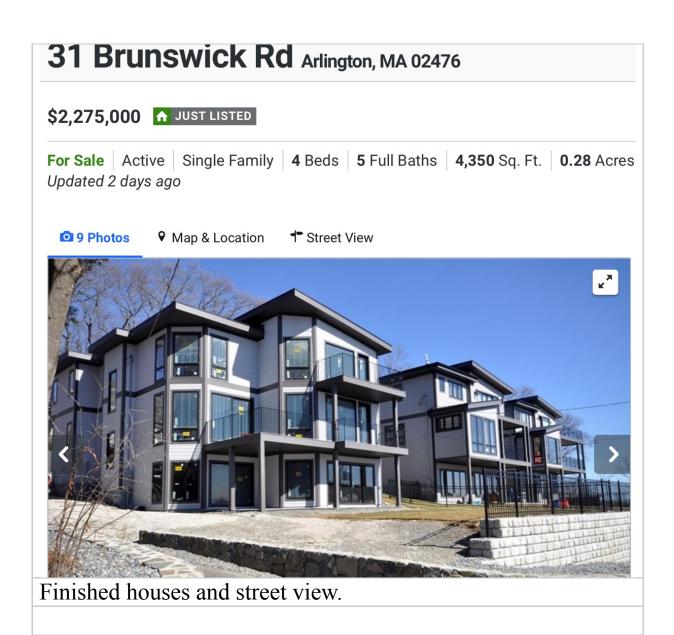
How would the Board have considered the three 4200 square foot structures, "dimensions and setbacks in relation to abutting structures and uses."?

The details are below.





Street view of original Brunswick Rd home. You can just barely see the home through the trees.



How to Proceed in Requiring Special Permits for New Construction Meeting Thresholds

The purpose of requiring demo/new construction to get a Special Permit is to recognize that it is equivalent to or more impactful than a large addition.

The purpose is not to stop building or demolitions.

It does give an opportunity for neighbors to weigh in on impacts and that the Master Plan Implementation Committee did find that is a problem.

Might putting large additions and demo/new on the same playing field slow down demolitions? Probably, to the extent a hearing would need to be held, neighbors heard, and findings made.

Would new construction continue to dwarf existing and surrounding homes?

The Board of Appeals does have to find the alteration is in harmony with surrounding structures, so that could result in more consideration of the size of new homes.

Would requiring Special Permits give families more of a chance in buying existing homes to live in or remodel? To the extent that the Special Permit process does take up some time and insert some uncertainty in the process, it could give families and individuals a fighting chance with development companies.

Would requiring Special Permits increase affordability? Indirectly, as the home would be sold and occupied at its lower existing value, not replaced with another at twice the price, or 6 times the price in the Brunswick example.

The Board could modify the language of Article 36 to clarify that it applies to new construction; demo/new construction; and demo, subdivide, new construction; when the same additional square footage thresholds are crossed.

An alternative is to understand that the existing bylaws already

require a Special Permit for those situations.

A demolition and new construction is an "alteration" as defined in the bylaw.

Demo and new construction is, "construction, reconstruction, or other **similar action** resulting in a change in the structural parts, height, number of stories, exits, size, use, or location of a building or other structure."

If in doubt that this applies, the Zoning Bylaw, at 1.4, requires, "that provision which imposes the greater restriction, or the higher standard shall govern."

5.4.2 requires a Special Permit for such alteration.

A demo, subdivide and new construction is also a change in "use" according to the definition.

"Use: The purpose for which a structure or lot is arranged, designed, or intended to be used, occupied, or maintained." A lot split is a rearrangement of the lot, and change in how it is to be used and occupied, as use for one house changes to use for 2 lots and two houses, or more.

5.4.2 requires a Special Permit for such change in use.

Stephen Blagden

Supporting Town Documents:

The Town adopted a Master Plan in 2015.

A Master Plan Implementation Committee was appointed to oversee and plan implementation.

Their April 2017 report to Town Meeting included:

"Study and consider techniques that could address concern for neighbor impacts of new large homes constructed in existing residential neighborhoods. The Residential Study Group was formed to address concerns regarding new construction in existing neighborhoods, as requested in a resolution at Spring 2016 Town Meeting.

The purposes of the Zoning By-Laws are:

"1.2 PURPOSES

The purpose of this Bylaw is to promote health, safety, convenience, morals and welfare of the inhabitants of the Town of Arlington; to lessen congestion in the streets; to conserve health; to secure safety from fire, panic and other dangers; to provide adequate light and air; to prevent the overcrowding of land; to avoid undue concentration of population; to encourage housing for persons at all income levels; to facilitate the adequate provision of transportation, water, sewerage, schools, parks and other public requirements; to protect and preserve open space as a natural resource, for the conservation of natural conditions for flora and fauna and to serve as urban amenity for scenic and aesthetic enjoyment and recreational use; to conserve the value of land and buildings; to encourage the most appropriate use of land throughout the Town; to achieve optimum environmental quality through review and cooperation by the use of incentives, bonuses and design review; and to preserve and increase its amenities and to encourage an orderly

expansion of the tax base by utilization, development, and redevelopment of land. It is made with reasonable consideration to the character of the district and to its peculiar suitability for particular uses, with a view to giving direction or effect to land development policies and proposals of the Redevelopment Board, including the making of Arlington a more viable and more pleasing place to live, work, and play."

Applicable Definitions for this discussion:

Alteration: Any construction, reconstruction, or other similar action resulting in a change in the structural parts, height, number of stories, exits, size, use, or location of a building or other structure.

Use: The purpose for which a structure or lot is arranged, designed, or intended to be used, occupied, or maintained.

Section 5.4.1 A Residential Districts - Purposes

- "(1) R0: Large Lot Single-Family District. The Large Lot Single-Family District has the lowest residential density of all districts and is generally served by local streets only. The Town discourages intensive land uses, uses that would detract from the single-family residential character of these neighborhoods, and uses that would otherwise interfere with the intent of this Bylaw.
- (2) R1: Single-Family District. The predominant uses in R1 are single-family dwellings and public land and buildings. The Town discourages intensive land uses, uses that would detract from the single-family residential character of these

neighborhoods, and uses that would otherwise interfere with the intent of this Bylaw."

5.4.2

- "(6) Large Additions. No alteration or addition which increases the gross floor area of a building by 750 square feet or more, or by 50% or more of the building's gross floor area on the date of application for a permit or because of cumulative alterations or additions during the previous two years, shall be allowed unless:
 - The addition is constructed entirely within the existing foundation, or
 - The Board of Appeals, acting pursuant to Section 3.3, finds that the alteration or addition is in harmony with other structures and uses in the vicinity. In making its determination, the Board of Appeals shall consider, among other relevant facts, the proposed alteration or addition's dimensions and setbacks in relation to abutting structures and uses and its conformity to the purposes of this Bylaw as set forth in Section 1.2."
 - 1.4 Applicability
 - "...Whenever the regulations made under the authority hereof differ from those prescribed by any statute, bylaw, other section of the Zoning Bylaw, or other regulation, that provision which imposes the greater restriction, or the higher standard shall govern."

From: Andrew Hollett <andrewkhollett@gmail.com>

To: mmuszynski@town.arlington.ma.us

Cc: jraitt@town.arlington.ma.us

Date: Sun, 20 Mar 2022 19:47:05 -0400 Subject: Support for Articles 38 and 39

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I received a flyer at my door decrying the ills of Article 39 and urging we reach out to Jennifer. So I just want to say as an Arlington resident I support these changes. Xavid's presentation makes clear the reason for the change and what it would and wouldn't do. Raising allowable maximums isn't a magic wand that outlaws smaller buildings. I'm saddened but not shocked by the arguments against. This doesn't green light 'high rises'; there are still separate height restrictions (mostly to 4 floors if I understood correctly). Neither does 38 make your single family home illegal. The idea that similar amendments destroyed this or that town you knew 20 years ago or somehow robs your future is really a shame.

Why do towns and neighborhoods change over the decades? Time passes on. The population is growing. We know we need new people entering the workforce to drive economic prosperity, and we want to continue to have staff in our local schools, pharmacies, restaurants, etc. Boston is a desirable metro area to live in with tons of opportunity. Those workers happen to be people who need to live somewhere. Arlington will not hold these pressures at bay with exclusionary zoning. What we can do is plan for a future we want. We should plan for more access to public transit, to be able to walk and bike to local businesses. As long as the city knows that it can accommodate what seem to me like modest changes to specific corridors, this drives a virtuous cycle of more foot traffic to support more businesses meaning more options that locals can walk or bike or bus to. Thank you for your consideration!

Andrew Hollett

To: Arlington Redevelopment Board and the Citizens of Arlington From: Bill Borgia, Arlington Citizen, Property Owner and Taxpayer

Please add this input to the record regarding the entirety of the 2022 Annual Town Meeting Draft Zoning Bylaw Amendments:

I object to the approach and process the board is using to impose these new mandates, the haste at which the board is proceeding, the failure to incorporate citizen debate and input into the proposal, and the near unlimited, town-wide breadth of the proposal on the table. The board must proceed much more deliberately, working with the citizens to actually incorporate their input with either binding or advisory referenda; and experimenting with changes limited in area and scope, to provide a basis to actually validate the hypothetical ideas and effects that board members are pursuing.

Instead what we see is pure opportunism, with our politicians taking advantage of a recent change in Commonwealth law to impose sweeping changes, changes that that we citizens previously rejected. But now they are being pushed under a purported legal duress that is actually self-imposed.

Our politicians' first premise is: that Arlington "needs" new housing. This isn't an actual fact, it's a subjective assertion based on increasing demand for housing. Just because demand increases doesn't impose an actual burden on we citizens as our politicians claim, and in fact there are many ways for society to meet this demand. The idea of dramatically increasing the population of Arlington is a *choice* left to *today's* citizens of the town. Instead a small band of Elite Oligarchs is stepping to make this fundamental choice for us.

A proposal to change zoning, especially one intended to dramatically increase the population, is a monumental change. Once we build new units, there is no way to correct mistakes that are made in the process. This fact alone warrants that the board proceed both deliberately, as well as substantiate its accountability to the citizens of Arlington. After all, truly accountable leaders would seek validation from the voters through either binding or advisory referenda, as was required for issues of lesser magnitude, such as the budget override, and the high school bond issue. A documented, overwhelming popular opinion of today's voters choosing to increase the population is perhaps the only valid rationale for making such sweeping changes, yet our politicians have only sought pro forma input on their farreaching proposals.

Second, more than 60 percent of Arlington's housing, both by land area and number of units, is already multi-family. This is especially true in East Arlington, which is one of the most densely populated areas in the Commonwealth, and has considerable access to public transit. We are largely if not fully compliant today with the new law requiring a single multi-family district; in fact we actually have several multi-family districts with large numbers of existing multi-family units. And even if we're not compliant, the new law only justifies minor changes, not a wholesale change to the zoning of the entire town.

Finally, the idea that these changes "support public transit" not only lacks critical thought, it's laughable given recent experience with the MBTA. There's nothing in the act that actually compels the MBTA to provide more service for an expanded community. In fact, the MBTA has recently *reduced* service to Arlington, with lower frequencies in high-density East Arlington on the critical 77 and 350 buses, and permanent elimination of the 79 bus. We taxpayers who use public transit already feel the pain from this loss, and know these sweeping zoning changes will indeed make it much worse.

The politicians assert that, because individual property owners have a choice to redevelop their own properties, actual changes would happen over many years. So why would we pursue a one-time, sweeping town-wide change, but rather seek specific neighborhoods who find these changes palatable, and experiment gradually with small districts to evaluate whether hypothetical changes are having the desired effects? Following evidence-based practices like this not only ensures better results, it also helps strengthen public support for reshaping our neighborhoods.

The politicians are our elected servants. They are to serve we the people, not act as Elite Oligarchs. These changes are being advanced on false and invalid premises; they are pursuing monumental changes that provide little room for error; and most critically, they have failed in their obligation to, in good faith, seek and *incorporate* public support from we the people.

Regardless of what process the Commonwealth may "allow," our elected servants have a singular, solemn duty to today's sovereign citizens of Arlington. A goal to dramatically increase the population is a choice for today's voters through either advisory or binding means. Not the 'Redevelopment Board,' not Town Meeting, not the Select Board, and definitely not the Town Manager; but kept by the Sovereign, today's voters. It's past time that the Arlington Redevelopment Board backs down on the breadth and scope of these changes, and instead pursues evidence-based, incremental changes that garner overwhelming support at the ballot box.

From: KELLIE DOHERTY < kmd19@verizon.net>

Date: March 21, 2022 at 1:56:54 PM EDT

To: jraitt@townl.arlington.ma.us

Cc: ebenson@town.arlington.ma.us, klau@town.arlington.ma.us, srevilak@town.arlington.ma.us, mtintocalis@town.arlington.ma.us,

rzsembery@town.arlington.ma.us

Subject: Article 39

Ms. Raitt and ARB members:

I recently learned of Article 39 and wanted to share my thoughts on the matter. I will attempt to be succinct. Increasing density on MA Ave is a complex issue with both pros and cons even after careful consideration, review, and even if special permits are required in order to allow it, as Towns such as Newton require.

Therefore my primary concern is the scale of the proposed FAR increase being discussed AND the lack of detailed evaluation tied to it. Things that should require specific evaluation for such an intensive FAR include:

- shadowing (to homes adjacent to MA Ave) and nighttime lighting spillover to adjacent homes
- adequacy of traffic and loading/unloading zones (particularly for frequent turnover developments like rentals)
- review of road/parking capacity to ensure safety near major intersections, schools, playgrounds & parks
- adequate emergency infrastructure, adequate access, staging and evacuation areas proximate for 5 story residential buildings ...without closing MA Ave, key intersections or significantly affecting neighboring residences.
- % business loss (sq foot/tax revenue)
- % affordable housing gain
- noise pollution, particularly from associated parking garage exit warnings, back up generators, etc.
- energy use and air pollutants ... generators, solar, green bldg etc.
- adequacy of existing sewer and water and storm water infrastructure, including water pressure (fire protection pressures too) with large scale residential additions.

I could go on about a number of visual and character and facade issues that are likely even more important to most Arlington residents but I know that Arlington does have design standards that seek to address those. I will summarize with my key comment:

Any increase in FAR should be a "carrot" to developers and not an automatic giveaway. It should require a special permit at a minimum, as in Newton, and should be used to reward developers who do proper site analysis and design and give due consideration to the concerns of neighbors and the needs of the Town.

Thank you, Kellie

Sent from my iPad

Lara Curtis Hayes

5 Cleveland Street Arlington, MA 02474 lara.curtis@gmail.com

March 21, 2022

Arlington Redevelopment Board

% Jennifer Raitt, Director, Planning & Community Development Town of Arlington Sent via email

Dear members of the Arlington Redevelopment Board,

I am writing to express my concern and opposition to Town Meeting Warrant Article 39 (aka "L"), the zoning amendment that would raise the allowed FAR for mixed use development in all business districts to 4.0.

This warrant article would raise the allowed FAR in our business districts to a level beyond acceptable. An FAR of 4.0 is, simply, extremely high – too high to blanket rezone almost all of our town's business districts. Very few neighboring municipalities allow an FAR this high in any of their business districts, let alone nearly all of them. Allowing such a high FAR in our zoning should be done, if at all, with care for the district's location and an understanding of the impacts on the surrounding neighborhood. Good planning best practices would allow such a high FAR only in concert with strict design requirements and other safeguards that neighboring properties could depend on – not the flexible Environmental Design Review special permit.

Since the warrant article was submitted with very little explanation or argument, I am left to guess at its motivation. Rumor has hinted that it is designed to increase the development of affordable housing, and if so, this is hardly the best tool in the toolbox; it shows little consideration for the existing neighborhood fabric. Several Massachusetts municipalities meet the 10 percent affordable housing threshold without such high allowed FAR limits. As this would be such a significant zoning change, the petitioner should have provided research and data to support its adoption.

When making a zoning change, care should be taken as mistakes are made in bricks and concrete and cannot easily be undone. This article feels more like an attempt to slip something through. I urge you to recommend "No Action" on zoning amendment Article 39.

Sincerely,

Lara Curtis Hayes, AICP

From: Elaine Maynard <emaynard_2000@yahoo.com>

Date: March 21, 2022 at 5:43:30 PM EDT

To: Jenny Raitt <JRaitt@town.arlington.ma.us>, klau@town.arlington.ma.us, ebenson@town.arlington.ma.us, srevilak@town.arlington.ma.us,

mtintocalis@town.arlington.ma.us, rzsembery@town.arlington.ma.us, ebenson@town.arlington.ma.us

Cc: Judith Halperin <pbandjphoto@mac.com>, Kellie Doherty <kmd19@verizon.net>

Subject: Article 39

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Dear Ms. Raitt and ARB members:

I live at 13 Chandler Street in East Arlington.

I recently learned of Article 39 with concern and dismay. I ask that you vote no on the proposal to dramatically increase the floor area ratio for mixed-use structures in Arlington business districts from 1.5 to 4.0.

It is my understanding that acceptance of Article 39 would leave Arlington with the highest FAR in the area (Cambridge only has a FAR of 1.75). What is the justification for Arlington having a significantly higher FAR than Cambridge, Brookline, Newton, Watertown, and Waltham? Are most town residents even aware of this potential change? I only learned of these proposed dramatic changes a few weeks ago via word of mouth.

I am deeply concerned about the scale of the proposed FAR increase that is being discussed and an overall lack of evaluation related to the proposal. Before even being considered, there are numerous areas that require detail analysis and discussion including:

- Traffic impact studies
- Review of road/parking capacity to ensure safety near major intersections, schools, playgrounds and adjacent homes
- Noise pollution studies
- Shadowing (to homes adjacent) and nighttime lighting spillover to adjacent homes/ areas
- Adequacy of traffic and loading/unloading zones (particularly for frequent turnover developments like rentals)
- Adequate emergency infrastructure, access, staging and evacuation areas proximate for starty residential building without closing MA Ave, key intersections or significantly affecting neighboring residences.

- % business loss (sq foot/tax revenue)
- % affordable housing gain
- energy use and air pollutants ... generators, solar, green bldg etc.
- adequacy of existing sewer and water and storm water infrastructure, including water pressure (fire protection pressures too) with large scale residential additions.

Please put the brakes on this extreme increase at this time. It doesn't make sense to even be considering this without a thorough examination of the implications and without taking into account the interests of as many town residents as possible. Any increase in FAR should be a "carrot" to developers and not an automatic giveaway. It should require a special permit at a minimum, as in Newton, and should be used to reward developers who do proper site analysis and design and give due consideration to the concerns of neighbors and the needs of the Town.

Kind regards, Elaine Maynard From: Christine Noah <christinenoah@gmail.com>

Date: March 21, 2022 at 7:20:30 PM EDT **To:** Jenny Raitt < JRaitt@town.arlington.ma.us> **Subject: ARB: Support for Article 39**

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Hey Jenny,

I can't attend tonight's ARB meeting, but I wanted to send along my support for Article 39, presented by Xavid Pretzer. I believe increasing the FAR limit for mixed-use buildings in business districts would allow for more vibrant and accessible options for both housing and commercial space. I currently live in the Capitol Theatre building at 210 Mass Ave, and my building could not have been built under the current FAR limit. I love where I live because of the overlap of residents and businesses and the sense of community it creates. I think making space for more buildings like mine would enliven our business districts and allow for healthy growth and diversification. Town Meeting has already voted for some 4- and 5-story mixed-use buildings along Mass Ave that would be made possible by this FAR change, so this step would really just move us in the direction we're already heading.

Thank you for your time!

Best, Christine

Christine Noah (she/her/hers) (502) 298-6397 | christinenoah@gmail.com

Co-Artistic Director | Fort Point Theater Channel



This email was sent from the traditional territory of the Massachusett people, a place which has long served as a site of meeting and exchange among nations.

Catherine Pedersen

31 Chandler Street Arlington, MA 02474 cathay.pedersen@gmail.com

21st March 2022

Arlington Redevelopment Board

730 Mass Ave Annex Arlington, MA 02476

Dear ARB members,

I'm writing to ask that you vote against Article 39: the Zoning bylaw amendment that would dramatically increase the floor area ratio for mixed-use structures in Arlington business districts from 1.5 to 4.0.

This is too dramatic of an increase.

Arlington hasn't even had an opportunity to recover from the pandemic and we are already considering an enormous increase to FAR that would forever change the character of the town. It doesn't make sense to do this without a thorough review of every aspect of this decision:

- Arlington would by far have the highest FAR in the area (even Cambridge only has a FAR of 1.75). What is the justification for Arlington having a significantly higher FAR than Cambridge, Bookline, Newton, Watertown, and Waltham?
- Do we know whether such a FAR increase would do anything to entice new commercial renters?
- Do we even know whether a dramatic increase in FAR would help town residents who need more affordable housing?
- Have we done a study yet of the impact of ADUs in providing additional affordable housing? I.e., do we even need to increase FAR now that ADUs are allowed?
- Do we know whether the town's schools can support such a FAR increase?
- Do we know whether we have enough parking spots to support such a FAR increase?
- Are there concerns about increased traffic and bottlenecks, particularly where developers are trying to flip their modest properties into highly lucrative high-rises?
- Commercial renters in town have complained for years about rental increases forcing them out of business. Would an extreme FAR increase reward such a business practice?

• Do we know whether most town residents are even aware of this potential change? Has any polling been done?

Please put the brakes on this extreme increase at this time. It doesn't make sense to even be considering this without a thorough examination of the implications, and without taking into account the interests of as many town residents as possible.

Thank you,

Catherine Pedersen

From: Laura Wiener < laura.wiener73@gmail.com>
To: Jenny Raitt < JRaitt@town.arlington.ma.us>
Date: Mon, 21 Mar 2022 08:23:49 -0400
Subject: Article 39–FAR in Commercial zones

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Dear Jenny and Redevelopment Board Members,

I am writing in support of Article 39, allowing greater FAR in Commercial zones. Arlington needs to add more housing. Prices here are escalating at an alarming rate, threatening our diversity and for many residents, their ability to live here. The commercial zones are the logical place to add multi-family housing.

Building housing near transit, along Mass. Ave. and Broadway, is more environmentally sustainable because it allows residents to drive less, and uses less land area per household than single family homes.

Mass. Ave. Is a wide corridor, making it a good place to build higher buildings with less impact. Additional residents in commercial zones will add customers for our local businesses and restaurants. Building more units will add to our affordable housing inventory through inclusionary zoning. The units will likely be smaller than single family homes, the predominant form of housing in Arlington. Smaller units provide options for small households, including seniors.

In summary, this article could have a meaningful impact on housing availability with minimal impact on traffic and open space. It can add affordable housing as well as smaller units of market rate housing, and could add vibrancy to our business districts.

I hope you will vote to support this meaningful reform by sending this Article to Town Meeting with a favorable recommendation. Thank you for your service to the Town.

Sincerely, Laura Wiener 73 Jason Street Arlington

Sent from my iPad

From: Wynelle Evans <evco7@rcn.com>

To: EBenson@town.arlington.ma.us, KLau@town.arlington.ma.us, mtintocalis@town.arlington.ma.us, srevilak@town.arlington.ma.us,

rzsembery@town.arlington.ma.us

Cc: Jenny Raitt < JRaitt@town.arlington.ma.us>

Date: Thu, 24 Mar 2022 17:48:31 -0400

Subject: Correspondence and suggestion re: Docket #3690, 34 Dudley St.

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Dear Board Members and Director Raitt:

Please add this letter to the correspondence record for the Monday, March 28 ARB hearing on agenda item 2, the proposed self-storage project at 34 Dudley St.

Section II of the Board's memo on this project deals with the application of Special Permit criteria. The comments on Section 3.3.3.F note that "the rear facade will be visible from the adjacent Mill Book and Wellington Park. The Applicant could consider introducing windows or other architectural detailing along the rear facade to minimize the massing of the building. The Applicant could also consider moving from pre-finished metal to prefabricated masonry."

And in Section III, sub-section 2, dealing with EDR-2 standards, the Board further notes that "While the 'face' of the building visible from Wellington Park is actually the back of the building, additional treatments to diminish the impact of overall building height and appearance should be considered. Further, while the ground floor storefront and front façade meets transparency requirements, its relationship to Dudley Street could be improved. An overall improved building facade treatment addresses and minimizes the building massing would improve the relationship of the building to the environment." Improving the appearance from Wellington Park by adding windows might be problematic for a self-storage facility. But printed screening offers an idea for a simple approach to architectural detailing. The first two images below are of a nearby parking structure, located on the inbound side of Rt. 2, opposite Thorndike Field, between the Tempo 2 Cambridge apartment complex and the AC Marriott Hotel.

The bottom two image shows garages in Cleveland and Texas with tensile mesh screens, in appealing designs.

If applied to the rear facade of 34 Dudley St., a printed screen could hold any image, would not require washing as windows would, and would be a relatively simple and cost-effective element to incorporate into the design. The printed images could reference the Mill Brook, the flora and fauna in the area, the nature playground it will stand over, or any other compatible imagery.

To see more ideas and for some info:

https://flexfacades.com/materials/fabric-vs-metal-screening/

Please present these images during the discussion about the appearance of this building, for consideration by the Board and the design team.

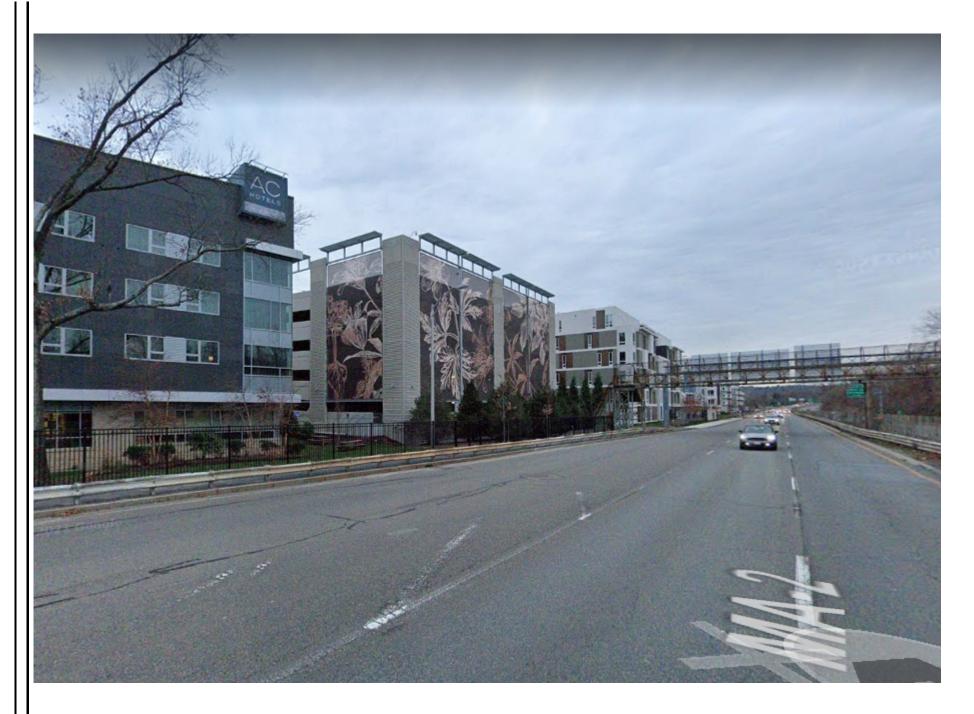
Thank you! Wynelle

Wynelle Evans TMM pct. 14

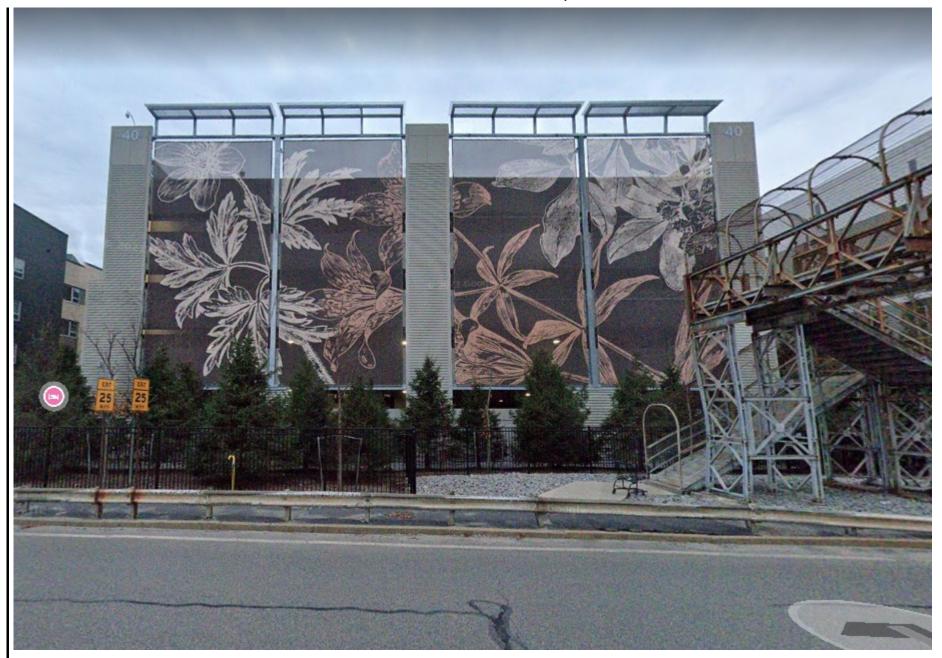
evco7@rcn.com

20 Orchard Place Arlington, MA 02476 781.643.4547 office 781.859.9291 mobile

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From: Gillian Sinnott <gmsinnott@gmail.com> **Date:** March 25, 2022 at 10:06:51 AM EDT

To: JRaitt@town.arlington.ma.us

Subject: support for warrant article 39

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Dear Ms. Raitt,

I am an Arlington resident, and I am writing to you in support of warrant article 39, proposed by Xavid Pretzer, to increase FAR limits for mixed-use buildings. I know that the current FAR limits (among other rules) make it difficult to use the mixed-use zoning rules to their full potential. I would love to see more vibrant commercial areas in Arlington, which would allow residents more access to stores and restaurants within walking distance of where they live and would also result in more tax revenue for the town. I live in Arlington Heights, where stores that depend on foot traffic often seem to struggle, and it would be great to support these kinds of businesses by facilitating denser development. It would also allow for more housing close to transit and help Arlington to contribute to the regional housing shortage in a sustainable way.

Thank you for considering my views.

Sincerely,

Gillian Sinnott

From: Mark Polking <mjpolking@gmail.com>

To: rzsembery@town.arlington.ma.us, KLau@town.arlington.ma.us, EBenson@town.arlington.ma.us,

srevilak@town.arlington.ma.us, mtintocalis@town.arlington.ma.us

Date: Sun, 27 Mar 2022 11:37:18 -0400 Subject: Question on Proposed Article 29

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To the Redevelopment Board:

I'm concerned about the proposed Article 29 in the 2022 Town Meeting Warrant that relates to planting of public trees. Would this proposed change to the bylaws apply only to Mass Ave. and Broadway, or would this apply to all public streets within Arlington? I have numerous trees on my property already, and I don't want additional town-owned trees to be planted next to my house. Additional trees would block sunlight to my existing trees, to garden plants, many of which require full sun, and to my roof, on which I would like to install solar panels.

I am also concerned about this proposed bylaw change due to the town's record of gross negligence in maintaining its existing trees. A rotting tree owned by the town nearly destroyed my home in October of 2019, and the town refused to take any responsibility on the grounds that I couldn't prove that the town had been negligent in its maintenance of this particular tree. (I'm pretty sure that if one of my trees damaged town-owned property, the town wouldn't have to prove that I was negligent in maintaining it.) Not only does the town fail to maintain its trees, it isn't even aware of what trees it owns. As shown in the attached slides, for example, a town-owned tree next to my driveway that has existed for at least 15 years isn't listed in the tree inventory, and the tree that fell two and half years ago is still in this inventory. Given that the town doesn't even keep track of what trees it owns, it's very difficult for me to believe that they actually do any maintenance on these trees at all.

If the Redevelopment Board wishes to proceed with this proposed bylaw change, I ask that you allow residents to opt out of having trees planted on their properties, compel the town to maintain its existing (and possible future) trees properly, and ask the town to acquire sufficient insurance to take responsibility for property damage caused by town-owned trees.

Best, Mark Polking 12 Arnold St.