NEEDHAM PLANNING BOARD

<u>Tuesday, January 4, 2022</u> 7:00 p.m.

Virtual Meeting using Zoom

Meeting ID: **826-5899-3198** (Instructions for accessing below)

To view and participate in this virtual meeting on your phone, download the "Zoom Cloud Meetings" app in any app store or at www.zoom.us. At the above date and time, click on "Join a Meeting" and enter the following Meeting ID: 826-5899-3198

To view and participate in this virtual meeting on your computer, at the above date and time, go to www.zoom.us click "Join a Meeting" and enter the following ID: 826-5899-3198

Or to Listen by Telephone: Dial (for higher quality, dial a number based on your current location): US: +1 312 626 6799 or +1 646 558 8656 or +1 301 715 8592 or +1 346 248 7799 or +1 669 900 9128 or +1 253 215 8782 Then enter ID: 826-5899-3198

Direct Link to meeting: https://us02web.zoom.us/s/82658993198

- 1. Zoning Review of Proposed Medical Use: Major Project Site Plan Special Permit No. 2005-07: Needham Gateway LLC, 66 Cranberry Lane, Needham, Massachusetts, Petitioner. (Property located at 100 and 120 Highland Avenue, Needham, Massachusetts).
- 2. Transfer of Special Permit to Affiliate Entity: Major Project Site Plan Special Permit No. 2011-01: Wingate Senior Living at Needham, Inc., 63 Kendrick Street, Needham, Massachusetts, Petitioner. (Property located at 235 Gould Street, Needham, Massachusetts).
- 3. Board Deliberation: Major Project Site Plan: Needham Enterprises, LLC, 105 Chestnut Street, Suite 28, Needham, MA, Petitioner. (Property located at 1688 Central Avenue, Needham, MA). Regarding proposal to construct a new child-care facility of 9,966 square feet and 30 parking spaces, that would house an existing Needham child-care business, Needham Children's Center (NCC).
- 4. Consideration of zoning to allow brewery uses in Needham.
- 5. Board of Appeals January 20, 2022.
- 6. Minutes.
- 7. Report from Planning Director and Board members.
- 8. Correspondence.

(Items for which a specific time has not been assigned may be taken out of order.)



Town of Needham **Building Department**500 Dedham Avenue
Needham, MA 02492

Phone: 781-455-7550 Fax: 781-453-2510 www.needhamma.gov

December 29, 2021

Planning Board Town of Needham 500 Dedham Street Needham, MA 02492

Re: Needham Gateway Shopping Center- Carbon Health

Dear Board Members:

Both Lee Newman and I have recently met via zoom with Rick Mann, counsel for Needham Gateway, LLC, the owner/operator of the Needham Gateway Shopping Center at 100-120 Highland Avenue, concerning a prospective tenant for the Center.

According to Attorney Mann:

- A letter of intent has been executed with Carbon Health Medical Group of Florida, PA for approximately 3,000 square feet of space in the building in the Center located at 120 Highland Avenue.
- Carbon Health intends to use the premises for the provision of primary and walk-in medical care.
- Carbon Health is a Florida professional corporation qualified and registered in Massachusetts and is wholly owned and controlled by a single physician.
- Carbon Health intends to have a maximum of eight (8) medical and non-medical staff on premises at any one time, including no more than two licensed physicians.
- The facility will <u>not</u> be required to be licensed as a clinic under GL Chapter 111, Section 51.

Attorney Mann has requested my interpretation of certain Zoning By-Law provisions applicable to the proposed use and my consequent determination of the proper characterization of the proposed use under the Zoning By-Law.

It is my determination that the proposed use constitutes a "professional office" which is allowed as a matter of right in the Highland Commercial-128 District in which the premises are located.

I base this determination on the following analysis of the applicable Zoning By-Law provisions.

Section 3.2.5.1 includes the following as <u>permitted uses</u> in the Highland Commercial-128 District:

"Professional, business or administrative office, but not including a medical clinic or Medical Services Building or Group Practices or alternative medicine practices, physical therapy, and wellness treatment facilities including, but not limited to, acupuncture, yoga, chiropractic and/or nutrition services, all as defined in Sections 1.3 and 3.2.4.1." (emphasis added)

Section 1.3 of the Zoning By-Law defines a "Professional" as follows:

"Professional – a person who by education and experience is a member of a recognized profession such as a **physician**, dentist, architect, attorney, artist or engineer." (emphasis added)

The word "Professional" and "Non-Group Practice" are further defined in Section 3.2.4.1 (c) of the Zoning By-Law as follows:

"Professional" shall include professional **medical**, surgical, psychiatric, dental, orthodontic or psychologist practice by a group of two or fewer **such professionals** ("Non-group Practice")." (emphasis added)

A "Group Practice" is defined in Section 3.2.3.1. (c) as follows

"... medical, surgical, psychiatric, dental, orthodontic, or psychologist group practices comprised of **three or more** such professionals (hereinafter "Group Practices")" (emphasis added)

A "medical clinic" is defined in Section 1.3 as follows:

"Medical Clinic – An institution or facility providing medical, surgical, dental, restorative or mental hygiene services to persons not accommodated overnight therein, under license as a clinic under Massachusetts General Laws, whether or not affiliated with a hospital or other health care facility." (emphasis added)

A "Medical Services Building" is defined in Section 1.3 as follows:

"Medical Services Building – Premises with occupancy limited to doctor's offices, dentist's offices, orthodontic services, psychiatric, psychological and other mental health services, radiology and laboratory services, sale, and repair of medical devises and equipment or other health care or health care services, whether or not owned or affiliated with a hospital, but not including those licensed as a clinic." (emphasis added)

In reaching my determination, I have necessarily concluded that a "professional" in this context includes only a licensed physician and not a licensed nurse or other licensed para-professional. In this regard, it is telling that reference to nurses and paraprofessionals is conspicuously absent from the above definitions. My interpretation is, therefore, wholly consistent with the actual language of the Zoning By-Law cited above. It is also supported by the fact that elsewhere in the Zoning By-Law where there was an intent to include such other licensed parties, the By-Law explicitly so states (e.g. Section 3.6.7 (c) (1) referring to "physician, physician's assistant and nurse practitioner").

Based on the foregoing analysis, Carbon Health's proposed use fits the definition of a "Professional Office" and is not a Group Practice, Medical Clinic or a Medical Services Building, nor is it an alternative medicine practice, physical therapy or wellness treatment facility as defined. Accordingly, as a "Professional Office," Carbon Health's proposed use, as described herein, is permitted as a matter of right in the Highland Commercial - 128 District in which the Center is located.

Very truly yours,

David A. Roche, Building Commissioner

Varda Rock

cc: Lee Newman



One Charles River Place 63 Kendrick Street Needham, MA 02494

Tel: (781) 707-9030 Fax: (781) 707-9230

Jonathan A. Scharf, General Counsel jscharf@wingatehealthcare.com

December 17, 2021

Via First Class Mail

Planning Board Town of Needham 1471 Highland Avenue Needham, MA 02494

Dear Planning Board Members:

Please take notice, pursuant to Section 3.15 of the March 15, 2011 Decision regarding Major Project Site Plan Special Permit, Wingate Senior Living at Needham, Inc., SPMP No. 20211-01 and pursuant to Section 3.13 of the October 20, 2014 Decision regarding Amendment to Major Project Site Plan Special Permit, Wingate Senior Living at Needham, Inc., SPMP No. 2011-1 (collectively, the "Decisions") of a transfer of the Special Permit to an affiliate entity under common control with Wingate Senior Living at Needham, Inc. (the "Current Operator").

Specifically, pursuant to an Operations Transfer Agreement dated November 9, 2021, the Current Operator will transfer the operations of the property to WSL Needham AL IL OP, LLC (the "New Operator"), which is an affiliate under common control with Current Operator. The transfer is expected to become effective as of December 17, 2021.

The New Operator will maintain its place of business at: 235 Gould Street, Needham, MA 02494. The New Operator will also maintain a corporate office address of: One Charles River Place, 63 Kendrick Street, Needham, MA 02494.

Please feel free to contact me if you have any questions.

Very truly yours,

Jonathan Scharf

Jonathan Scharf



One Charles River Place 63 Kendrick Street Needham, MA 02494

Tel: (781) 707-9030 OWN OF NEEDHAM Fax: (781) 707-9230 SELECT BOARD

Jonathan A. Scharf, General Counsel ischarf@wingatehealthcare.com

December 13, 2021

Via US Mail

Rieko Hayahshi Department of Housing and Community Development 100 Cambridge Street, 3rd Floor Boston, MA 02114 Kate Fitzpatrick Town Manager Needham Town Hall 1471 Highland Avenue Needham, MA 02492

Re: Request for Consent to Sale

Dear Ms. Hayashi and Ms. Fitzpatrick:

I am writing on behalf of Wingate Healthcare ("Wingate"), to respectfully request the Department of Housing and Community Development (the "Department") and the Town of Needham (the "Town") to consent to the sale of the Wingate Residences at Needham and One Wingate Way, located at 235 Gould Street, Needham, MA 02494 ("Project"). WHC Needham I, Limited Partnership, an affiliate of Wingate ("Developer"), is the developer of the Project under those certain Regulatory Agreements and Declaration of Restrictive Covenants for Rental Project dated: (i) June 1, 2016 and recorded in the Clerk's Office of the Norfolk County Land Court as Doc # 1,360,186 (the "2016 Agreement"), and (ii) November 20, 2013 and recorded in that same office as Doc # 1,298,394 (the "2013 Agreement" and,together with the 2016 Agreement, the "Regulatory Agreements").

Developer proposes to sell the Project to EPC Wingate LLC, a Delaware limited liability company ("**Proposed Buyer**"), having its principal office located at 4500 Dorr Street, Toledo, Ohio 43615.

As required by Section 9(a) of the 2016 Agreement, we provide the following additional information:

- (i) Attached is a signed agreement which states that Proposed Buyer will assume in full the Developer's obligations and duties under the Agreement. Please also find a certification from Fidelity National Title Insurance Company that it will be held in escrow and recorded in the Registry of Deeds with the deed.
- (ii) Proposed Buyer is controlled by Welltower, Inc., a Delaware corporation (NYSE: WELL) ("Welltower"). Welltower, through its subsidiaries and other entities that it controls, owns the following affordable housing developments in the Commonwealth: Waterstone at Wellesley, located at 27 Washington Street, Wellesley, MA 02481.

(iii) Attached is a certification from the Municipality that the Project is in compliance with the affordability requirements of the Agreement.

Please let us know if you require any additional information regarding this matter. Otherwise, please indicate your consent to this sale by executing the acknowledgment and consent below and returning to my attention by email and regular mail.

Sincerely,

Jonathan Scharf

Jonathan Scharf

Acknowledged and Consented:
DEPARTMENT OF HOUSING
AND COMMUNITY DEVELOPMENT

Acknowledged and Consented: TOWN OF NEEDHAM

By:

Its:

Date:

Its:

1245/17/2021

cc: Lee Newman, Director of Planning and Community Development

500 Dedham Avenue

Needham, MA 02492

Prepared by and return to:

Matthew E. Jassak, Esq. Foley & Lardner LLP 301 East Pine Street Suite 1200 Orlando, FL 32801

ASSIGNMENT AND ASSUMPTION OF REGULATORY AGREEMENTS

THIS ASSIGNMENT AND ASSUMPTION OF REGULATORY AGREEMENTS (this "Agreement") is made as of this day of December, 2021 (the "Effective Date"), by and between WHC Needham I, Limited Partnership, a Massachusetts limited partnership ("Seller"), having an address at 63 Kendrick Street, Needham, Massachusetts 02494, and EPC Wingate LLC, a Delaware limited liability company ("Buyer"), having its principal office located at 4500 Dorr Street, Toledo, Ohio 43615.

RECITALS

- A. Seller is the owner and holder of a residential housing project called The Wingate Residences at Needham and One Wingate Way, located at 235 Gould Street, Needham, MA 02494 as more particularly described on the Exhibit A attached hereto (the "Project").
- B. As of the Effective Date, and in accordance with that certain Purchase and Sale Agreement between Seller and Buyer (as successor-in-interest to Welltower Inc.), Seller has sold to Buyer, and Buyer has purchased from Seller, the Project (the "Purchase").
- C. The Project is encumbered by and is subject to those certain Regulatory Agreements and Declaration of Restrictive Covenants for Rental Project dated: (i) June 1, 2016 and recorded in the Clerk's Office of the Norfolk County Land Court as Doc # 1,360,186, and (ii) November 20, 2013 and recorded in that same office as Doc # 1,298,394 (together, the "Regulatory Agreements").
- D. In connection with the Purchase, and in accordance with Section 9 of the Regulatory Agreements, Buyer has agreed to assume from Seller all of Seller's duties and obligations under the Regulatory Agreements.

NOW, THEREFORE, for good and valuable consideration, the receipt and sufficiency which are hereby acknowledged, Seller and Buyer hereby agree as follows:

- 1. Recitals. The Recitals are true and correct and are incorporated herein by reference.
- 2. <u>Assignment of Regulatory Agreements</u>. Effective as of the date of Seller's conveyance of the Project to Buyer, Seller hereby assigns to Buyer all of Seller's rights, obligations, duties, covenants and responsibilities under the Regulatory Agreements.
- 3. <u>Assumption of Regulatory Agreements</u>. Effective as of the date of Seller's conveyance of the Project to Buyer, Buyer hereby assumes from Seller all of Seller's rights, obligations, duties, covenants and responsibilities under the Regulatory Agreements. Buyer agrees to assume in full the Seller's duties and obligations under the Regulatory Agreements.
- 4. <u>Further Assurances</u>. Seller and Buyer agree to execute and deliver such other assignments, affidavits, instruments or certifications as any other party reasonably may request as necessary or appropriate to fully consummate the assignment and assumption of the Regulatory Agreements.
- 5. <u>Governing Law.</u> This Agreement shall be governed by and construed in accordance with the internal laws of the Commonwealth of Massachusetts.

6. <u>Binding Effect</u>. This Agreement shall be binding upon and shall inure to the benefit of the parties hereto and their respective heirs, executors, administrators, legal representatives, successors and assigns. This Agreement may be executed in counterparts, each of which shall be deemed an original, but all of which, together, shall constitute one and the same instrument.

[Signature Pages to Follow]

IN WITNESS WHEREOF, Seller and Buyer have executed this Agreement as of the Effective Date.

SELLER:

WHC Needham I, Limited Partnership

By: WHC Needham I, Inc., its General Partner

Bv:

Namer Jonathan Scharf

Title: Clerk

COMMONWEALTH OF

MASSACHUSETTS

) ss.

COUNTY OF NORFOLK

On this day of December, 2021, before me, the undersigned notary public, personally appeared Jonathan Scharf, personally known to me to be the person whose named is signed on the preceding or attached document, and acknowledged to me that he signed it voluntarily for its stated purpose as Clerk of WHC Needham I, Inc., the General Partner of WHC Needham I, Limited Partnership, a Massachusetts limited partnership.

[Signature of person taking acknowledgement]

Title or Rank

Serial number, if any

MAUREEN SULLIVAN BRINN
Notary Public

My Commission Expires February 14, 2025

EPC Wingate LLC

By: Welltower Inc.

Its: Manager

By: Mary Ellen Pisanelli

Title: Authorized Signatory

STATE OF OHIO

) ss.

COUNTY OF LUCAS

On this 12th day of December, 2021, before me, the undersigned notary public, personally

BUYER:

On this 12th day of December, 2021, before me, the undersigned notary public, personally appeared Mary Ellen Pisanelli, personally known to me to be the person whose name is signed on the preceding or attached document, and acknowledged to me that he/she signed it voluntarily for its stated purpose as Authorized Signatory of WELLTOWER INC., a Delware corporation, in its capacity as Manager of EPC WINGATE LLC, a Delaware limited liability company.

[Signature of person taking acknowledgement]

Title or Rank

Serial number, if any

Theresa S Whetro
Notary Public
In and for the State of Ohio
My Commission Expires
June 16, 2025

EXHIBIT A PROJECT

2013

Property Description

A certain parcel of land situated in the Town of Needham, Norfolk County, Massachusetts, known as and numbered 235 Gould Street, Needham, MA, containing 3.42 acres more or less, and being shown as Lots 13, 15 and an unregistered parcel of land, containing 12,320 s.f. (the Unregistered Parcel") on a plan entitled "Subdivision Plan of Land Gould Street Needham, Mass.", Scale 1" = 40' prepared by R.E. Cameron & Associates, Inc. dated November 15, 2010, as modified and approved by the Land Court, filed with the Land Registration Office as Plan 18430-O, a copy of a portion of which is filed with the Norfolk County Registry District of the Land Court with Certificate of Title No. 181742.

Said parcel is bounded and described as follows:

Commencing at a point on Gould Street at the northerly corner of Lot 15, as shown on said plan; thence running

SOUTHERLY: along Gould Street, seventy-four and 09/100 (74.09) feet to a point; thence

SOUTHERLY: along Gould Street and the Unregistered Parcel, thirty-seven and 26/100 (37.26) feet to a point; thence

SOUTHWESTERLY: S 42'29'49" W by land now or formerly of NHP Properties Business Trust, two hundred forty-one and 39/100 (241.39) feet to a point; thence

SOUTHWESTERLY: S 42*29'49" W by said land now or formerly of NHP Properties Business Trust, four hundred seventy-four and 96/100 (474.96) feet to a point on Cross Street; thence

NORTHWESTERLY: N 51*58'34" W along Cross Street and by land now or formerly of Joseph F. Picheth Tr Arbor St Realty Trust, two hundred thirty-four and 89/100 (234.89) feet; thence

NORTHBASTERLY: N 41'58'34" E by Massachusetts Bay Transportation Authority Monumented Railroad Baseline, five hundred sixty-nine and 85/100 (569.85) feet to a point at the northwest comer of Lot 14; thence

SOUTHBASTERLY: by Lot 14, one hundred fifty-nine and 35/100 (159.35) feet to a point at the southwest corner of Lot 14; thence

NORTHEASTERLY: by Lot 14, fifty-four and 02/100 (54.02) feet to a point at the northwesterly corner of the Unregistered Parcel; thence

NORTHEASTERLY: two and 46/100 (2.46) feet to a point; thence

NORTHEASTERLY: three and 43/100 (3.43) feet to a point; thence

NORTHEASTERLY: by Lot 14, one hundred eighty-three and 02/100 (183.02) feet to the point of beginning.

Included within the above described parcel are the following registered land parcels:

A certain parcel of land situated in the Town of Needham, shown as Lots 13 and 15 on a plan entitled "Subdivision Plan of Land Gould Street Needham, Mass.", Scale 1" = 40' prepared by R.E. Cameron & Associates, Inc. dated November 15, 2010, as modified and approved by the Land Court and filed with the Land Registration Office as Plan 18430-O, a copy of a portion of which is filed with the Norfolk County Registry District of the Land Court with Certificate of Title No. 181742.

Said parcel being a portion of the real property conveyed by Quitelaim Deed from the Hearst Corporation to WHC Needham I, Limited Partnership, dated December 21, 2010, and recorded on January 7, 2011 with the Norfolk County Registry of Deeds in Book 28490, Page 310 and registered with the Norfolk County Registry District of the Land Court as Document No. 1217816 on Certificate No. 181742.

Property Description

A certain parcel of land situated in the Town of Needham, shown as Lot 14 on a plan entitled "Subdivision Plan of Land Gould Street Needham, Mass.", Scale 1" = 40' prepared by R.E. Cameron & Associates, Inc. dated November 15, 2010, as modified and approved by the Land Court and filed with the Land Registration Office as Plan 18430-O, a copy of a portion of which is filed with the Norfolk County Registry District of the Land Court with Certificate of Title No. 181742, together with all buildings, structures and other improvements on the Parcel (the Parcel and such buildings, structures and other improvements being herein collectively referred to as the "Real Property").

The Real Property is conveyed together with and subject to all recorded easements, restrictions, reservations and other matters of record applicable to the Real Property or any part thereof and to any lien for real estate taxes not yet due and payable.

The Real Property was conveyed to Grantor by Quitclaim Deed from WHC Needham I, Limited Partnership, dated November 17, 2011 and filed with the Norfolk Country Registry District of the Land Court as Document No. 1239574, as noted on Certificate of Title No. 183435.

STATE OF OHIO) SS COUNTY OF RICHLAND)

CERTIFICATION AND RECEIPT OF ESCROW AGENT

I, the undersigned, do hereby certify that I am an AVP at Fidelity National Title Insurance Company (the "Escrow Agent"), and as such officer I do further certify as follows:

- 1. That WHC Needham I, Limited Partnership, a Massachusetts limited partnership ("Seller"), having an address at 63 Kendrick Street, Needham, Massachusetts 02494, and EPC Wingate LLC, a Delaware limited liability company ("Buyer"), having its principal office located at 4500 Dorr Street, Toledo, Ohio 43615, are parties to a contemplated agreement whereby the buyer will purchase a residential housing project called The Wingate Residences at Needham and One Wingate Way, located at 235 Gould Street, Needham, Massachusetts 02494 ("Agreement").
- 2. That, in connection with the requirements of those certain Regulatory Agreements and Declaration of Restrictive Covenants for Rental Project dated: (i) June 1, 2016 and recorded in the Clerk's Office of the Norfolk County Land Court as Doc # 1,360,186, and (ii) November 20, 2013 and recorded in that same office as Doc # 1,298,394, Escrow Agent is agreeing to hold the attached assumption agreement ("Agreement") in escrow.
- 3. That once the purchase and sale closes, the Escrow Agent will cause the Agreement to be recorded in the Registry of Deeds along with the deed and/or any other recorded documents effecting the sale.

IN WITNESS WHEREOF, I hereunto affix my signature and the seal of the Escrow Agent, this 13th of December, 2021.

Suzanne A. Rippel, as Escrow Agent

1:0m 9 42

Office of the TOWN MANAGER

TOWN OF NEEDHAM

TOWN HALL Needham, MA 02492-2669

TEL: (781) 455-7500

December 10, 2021

Mr. Jonathan Scharf c/o WHC Needham I, Limited Partnership 235 Gould Street Needham, MA 02494

Regarding: Wingate Compliance with Affordability Requirements

Dear Mr. Scharf:

This letter is to confirm that The Residences at Wingate and One Wingate Way are in compliance with state affordability requirements with two and five affordable units, respectively. The Major Project Site Plan Special Permit and the amendment for the second phase specify that the Town of Needham ensure compliance with the project's affordability requirements on an annual basis and provide an annual report to the state. The Regulatory Agreements further confirm the need for annual monitoring to verify the continuing affordability of the existing affordable units.

The Town has conducted this annual monitoring in 2021 and has found that affordability requirements are being met. If you have any questions concerning this monitoring or require further documentation, you can contact the Town's Housing Specialist, Karen Sunnarborg, at ksunnarborg@needhamma.gov or 781-455-7550 ext. 220.

Sincerely,

Kate Fitzpatrick

P.P. Kathleon King

Town Manager

CC: Katie King, Assistant Town Manager/Director of Operations
Lee Newman, Director of Planning and Community Development

Karen Sunnarborg, Housing Specialist



TOWN OF NEEDHAM, MA PECEIVED TOWN CLERIC PLANNING AND COMMUNITY

PLANNING AND COMMUNITY DEVELOPMENT DEPARTMENT

2011 MARO 250 Althain Nee

Needham, MA 02492 781-455-7500

PLANNING

DECISION March 15, 2011

Major Project Site Plan Special Permit Wingate Senior Living at Needham, Inc. SPMP No. 2011-01

DECISION of the Planning Board (hereinafter referred to as the Board) on the petition of Wingate Senior Living at Needham, Inc., 63 Kendrick Street, Needham, Massachusetts 02494 (hereinafter the Petitioner), for property located on the westerly side of Gould Street between the Wingate at Needham Nursing Home at 589 Highland Avenue and the MBTA Right of Way. The property is shown on Assessor's Map No. 77 as Parcels 25 and 26 containing 200,749 square feet in the Elder Services Zoning District.

This Decision is in response to an application submitted to the Board on December 20, 2010 by the Petitioner for a Major Project Site Plan Special Permit under Section 7.4 of the Needham Zoning By-Law (hereinafter the By-Law), and associated special permits.

The requested Major Project Site Plan Special Permit would, if granted, permit the Petitioner to construct a three story structure (plus a 67 space basement parking garage) for an 80-unit facility comprised of 20 independent living units, 40 regular assisted living units and 20 regular assisted living units specializing in Alzheimer's and other memory loss related conditions. The building will be comprised of approximately 112,950 square feet, including the basement garage space of 30,165 square feet. The project will also include 19 surface parking spaces (for a total of 86 on-site parking spaces) together with associated landscaping, driveways and other improvements.

In accordance with the Zoning By-Law, Section 3.12.4, a Special Permit is required for independent living units and assisted living and/or Alzheimer's/memory loss facilities in the Elder Services Zoning District. In accordance with the Zoning By-Law Section 5.1.1.5, a Special Permit is required to waive strict adherence with the requirements of Section 5.1.3 (Parking Plan Design Requirements) of the Zoning By-Law, more specifically, in Section 5.1.3(a), to waive the parking lot illumination requirement of "at least one foot candle," Section 5.1.3(j), to waive a four-foot minimum setback from the lot line to parking spaces, maneuvering aisles and driveways, and in Section 5.1.3(k), to waive the landscape requirements requiring that the four-foot setbacks be landscaped. In accordance with the Zoning By-Law, Section 7.4, a Major Project Site Plan Review is required.

After causing notice of the time and place of the public hearing and of the subject matter thereof to be published, posted and mailed to the Petitioner, abutters and other parties in interest as required by law, the hearing was called to order by the Chairperson, Ronald W. Ruth on Tuesday, February 1, 2011 at 8:00 p.m. in the Charles River Room, First Floor, Public Services Administration Building, 500 Dedham Avenue, Needham, Massachusetts. Board members, Ronald W. Ruth, Jeanne S. McKnight and Sam Bass Warner were present throughout the February 1, 2011 proceedings. The February 1 hearing was immediately continued, without any testimony taken, to February 8, 2011 at 7:30 p.m., in the Performance Center of the Eliot School, 135 Wellesley Avenue, Needham, MA 02494. Board members, Martin Jacobs, Bruce T. Eisenhut, Jeanne S. McKnight, Ronald W. Ruth and Sam Bass Warner were present throughout the February 8, 2011

proceedings. The hearing was further continued to March 1, 2011 at 7:30 p.m. in the Charles River Room, First Floor, Public Services Administration Building, 500 Dedham Avenue, Needham, Massachusetts. Board members, Martin Jacobs, Bruce T. Eisenhut, Jeanne S. McKnight, Ronald W. Ruth and Sam Bass Warner were present throughout the March 1, 2011 proceedings. The record of the proceedings and the submission upon which this Decision is based may be referred to in the office of the Town Clerk or the office of the Board.

Submitted for the Board's deliberation prior to the close of the public hearing were the following exhibits:

- Exhibit 1 Application Form for Site Plan Review completed by the applicant dated December 20, 2010.
- Exhibit 2 Two letters from Attorney Roy A. Cramer to the Needham Planning Board dated December 17, 2010.
- Plans entitled, "Site Development Plans for Wingate Senior Living (Lot A) @ Needham," prepared by Kelly Engineering Group, Inc., 0 Campanelli Drive, Braintree, MA, 02184, consisting of 7 sheets: Sheet 1 of 7, Sheet 1, Cover Sheet, dated November 23, 2010; Sheet 2 of 7, Sheet 2, entitled "Existing Conditions Plan," dated November 23, 2010; Sheet 3 of 7, Sheet 3, entitled "Layout Plan," dated November 23, 2010; Sheet 4 of 7, Sheet 4, entitled "Grading Plan," dated November 23, 2010; Sheet 5 of 7, Sheet 5, entitled "Drainage & Utility Plan," dated November 23, 2010; Sheet 6 of 7, Sheet 6, entitled "Detail Sheet," dated November 23, 2010; Sheet 7 of 7, Sheet 7, entitled "Detail Sheet," dated November 23, 2010.
- Plans entitled, "Site Development Plans for Wingate Senior Living (Lot A) @ Needham," prepared by Kelly Engineering Group, Inc., 0 Campanelli Drive, Braintree, MA, 02184, consisting of 7 sheets: Sheet 1 of 7, Sheet 1, Cover Sheet, dated November 23, 2010; Sheet 2 of 7, Sheet 2, entitled "Existing Conditions Plan," dated November 23, 2010; Sheet 3 of 7, Sheet 3, entitled "Layout Plan," dated November 23, 2010; Sheet 4 of 7, Sheet 4, entitled "Grading Plan," dated November 23, 2010; Sheet 5 of 7, Sheet 5, entitled "Drainage & Utility Plan," dated November 23, 2010; Sheet 6 of 7, Sheet 6, entitled "Detail Sheet," dated November 23, 2010; Sheet 7 of 7, Sheet 7, entitled "Detail Sheet," dated November 23, 2010.
- Exhibit 5 Architectural Plan entitled "Wingate Senior Living at Needham," prepared by The Architectural Team Inc., 50 Commandant's Way at Admiral's Hill, Chelsea, MA, 02150, consisting of 6 sheets: Sheet 1 of 6, Sheet A1.01, entitled "First and Second Floor Plans," dated November 23, 2010; Sheet 2 of 6, Sheet A1.02, entitled "Third Floor and Roof Plan," dated November 23, 2010; Sheet 3 of 6, Sheet A1.00, entitled "Garage Plan," dated November 23, 2010; Sheet 4 of 6, Sheet A4.01, entitled "Exterior Building Elevations," dated November 23, 2010; Sheet 6 of 6, Sheet A4.03, entitled "Exterior Building Elevations," dated November 23, 2010.
- Exhibit 6 Landscape Plan, entitled "Wingate Senior Living at Needham," prepared by Hawk Design Inc., 277 Main Street, Boston, MA 02129, consisting of 1 sheet: Sheet L1, entitled "Lot A Landscape Plan," dated December 13, 2010.

- Exhibit 7 Landscape Plan, entitled "Wingate Senior Living at Needham," prepared by Hawk Design Inc., 277 Main Street, Boston, MA 02129: Sheet L1, entitled "Lot A Landscape Plan," dated December 13, 2010, revised March 1, 2011.
- Exhibit 8 Site Lighting and Photometric Plan, entitled "Wingate Senior Living at Needham," prepared by Hawk Design Inc., 277 Main Street, Boston, MA 02129, consisting of 1 sheet: Sheet L2, entitled "Site Lighting Photometric Plan," dated December 13, 2010.
- Exhibit 9 Traffic Impact and Access Study, Proposed Assisted Living/Independent Living Facility, Needham, MA", prepared by Vanesse & Associates, Inc., Transportation Engineers and Planners, 10 New England Business Center Drive, Suite 314, Andover, MA 01810, dated December, 2010.
- Exhibit 10 Stormwater Management Report, Wingate Senior Living at Needham MA prepared by Kelly Engineering Group, Inc., 0 Campanelli Drive, Braintree, MA, 02184, dated November 22, 2010.
- Exhibit 11 Hydrogeological Assessment, Wingate at Needham Phase II, Gould Street, Needham, Massachusetts, prepared by McArdle Gannon Associates, Inc., 1125 Main Street, Hanover, Massachusetts, 02339, dated December 2010.
- Exhibit 12 Two letters to the Needham Planning Board from Carlyn and Dennis Uyenoyama, 73, Evelyn Road, dated February 3, 2011, and February 22, 2011.
- Exhibit 13 Email to Alexandra Clee from Terence Ryan, 79 Evelyn Road, dated February 3, 2011.
- Exhibit 14 Email to Alexandra Clee from Andy Effenson, Evelyn Road, dated February 3, 2011.
- Exhibit 15 Design Review Board comments dated January 3, 2011.
- Exhibit 16 Two emails to Alexandra Clee from Sherri Meek, 49 Evelyn Road, dated February 5, 2011 and February 24, 2011.
- Exhibit 17 Email from Barry Charton, 62 Putnam Street, dated February 10, 2011.
- Exhibit 18 Letter to the Needham Planning Board from Terence Ryan, 79 Evelyn Road, dated February 23, 2011.
- Exhibit 19 Letter to the Needham Planning Board from David Kelly, Kelly Engineering, dated February 24, 2011.
- Exhibit 20 Letter to the Needham Planning Board from Brandon Li, dated February 25, 2011, with attachment consisting of 12 pages of information pertaining to NPDES regulations.
- Exhibit 21 Letter to the Needham Planning Board from Brandon Li, dated February 25, 2011.
- Exhibit 22 Information on Evelyn Road homes water damage, provided by Carlyn Uyenoyama on March 1, 2011.

- Exhibit 23 Plans stamped approved by Design Review Board on January 3, 2011.
- Exhibit 24 Interdepartmental Communication (IDC) to the Board from Chief Paul Buckley, Needham Fire Department, dated February 1, 2011; IDC to the Board from Lt. John H. Kraemer, Needham Police Department, dated January 26, 2011; IDC from Anthony Del Gaizo, Assistant Director, DPW, dated February 1, 2011, February 8, 2011 and March 1, 2011; IDC to the Planning Department from Janice Berns, Needham Health Department, dated January 25, 2011; and IDC to the Board from Patricia Barry, Conservation Department, dated February 7, 2011.

Exhibits 1, 2, 4, 5, 7, 8, 9, 10 and 11 are referred to hereinafter as the Plan.

FINDINGS AND CONCLUSIONS

Based upon its review of the exhibits and the record of the proceedings, the Board found and concluded that:

- The subject property is located in the Elder Services Zoning District. The subject property is located on the westerly side of Gould Street between the Wingate at Needham Nursing Home at 589 Highland Avenue and the MBTA Right of Way. The property is shown on Assessor's Map No. 77 as Parcels 25 and 26 containing 200,749 square feet. The property is presently owned by the WHC Needham, Inc.
- The site is presently vacant. The Petitioner proposes to construct a three-story structure (plus a 67-space basement parking garage) for an 80-unit facility comprised of 20 independent living units (26 bedrooms), 40 assisted-living units (46 beds) and 20 assisted-living units (24 beds) specializing in Alzheimer's and other memory loss related conditions. 10 of the 60 assisted living units will have two beds in them, for a total of 70 assisted living unit beds. The building will be comprised of approximately 112,950 square feet, including the basement garage space of 30,165 square feet. The project will also include 19 surface parking spaces (for a total of 86 on-site parking spaces) together with associated landscaping, driveways and other improvements. Access to and from the site will continue to be from the existing Highland Avenue curb-cut, as well as the relocated Gould Street curb-but.
- As indicated in the Zoning Table shown on the Plan, the lot conforms to zoning requirements as to area and frontage. As indicated in the Zoning Table shown on the Plan, the proposed building will comply with all applicable dimensional and density requirements of the Elder Services Zoning District for an institutional use namely, front, side and rear setback, maximum building height, maximum number of stories, and floor area ratio.
- The project is comprised of the following: 20 independent living units (26 bedrooms), 60 assisted living units (total of 70 beds). 20 of the assisted living units will specialize in Alzheimer's and other memory loss related conditions. The maximum number of employees at the site on the largest shift will be 34. The evening shift (11:00 p.m. to 7:00 a.m.) will be substantially less.
- Under the By-Law, Section 5.1.2, the parking requirement for the project is 62, calculated as follows: a) 20 independent living units x 0.5 spaces per unit equals 10 spaces, plus b) 70 assisted-living beds x 0.5 spaces equals 35 spaces, plus c) 34 employees at the largest shift

- at 1 space per two employees equals 17 parking spaces. A total of 86 spaces are provided, which is an excess of 24 spaces over what is required in the By-Law.
- 1.6 The project complies with all of the parking area design criteria set forth in Section 5.1.3 except that the Petitioner is seeking a waiver from Section 5.1.3(a), 5.1.3(j) and 5.1.3 (k). The Petitioner is seeking a waiver from the 5.1.3(a) minimum parking lot illumination requirement of one-foot candle and proposes instead an average minimum illumination of one-foot candle. The Petitioner is seeking a waiver from the 5.1.3(j) requirement of a four-foot minimum setback from the lot line to parking spaces, maneuvering aisles and driveways. With respect to the driveway to be constructed connecting the Property with the adjacent Wingate at Needham Nursing Home, as well as to accommodate the new driveway to be constructed from the property to Gould Street, which accesses Gould Street over a portion of Lot B (the Wingate at Needham Nursing Home parcel) via an easement to be created as shown on the Plan, the 4-foot minimum setback is proposed to be 0. The Petitioner is also seeking a waiver from Section 5.1.3(k) insofar as the waivers requested from Section 5.1.3(j) described above, require that the four-foot minimum setback be landscaped.
- 1.7 Vanasse & Associates, Inc. (VAI) conducted a Traffic Impact and Access Study (TIAS) to determine the traffic impacts associated with the construction the proposed assisted living/independent living facility. The study reviewed existing traffic operating parameters on key roadways and intersections, estimated the anticipated traffic volume increases as a result of the proposed project, and analyzed the projects traffic-related impacts.
- 1.8 The addition of project-related traffic to the adjacent roadways is not anticipated to significantly impact traffic operations over the no-build condition. During peak commuter periods, it is anticipated that the project-related traffic increase would amount to approximately one percent during the peak hours. Under 2010 existing conditions, 2015 No-Build conditions, and 2015 Build conditions the Highland Avenue at Gould Street and Hunting Road intersections will continue to operate at LOS D during the weekday morning peak hour. The proposed project has very little impact at this location. Finally, the critical movements at the Gould Street site driveway are projected to operate at LOS B or better during the weekday peak hours under all analysis conditions.
- 1.9 The Petitioner intends to place a gas powered emergency back-up generator at the front of the building. The Petitioner has stated that the emergency generator will be designed so as to comply with all applicable Federal, state and local regulations addressing sound attenuation to protect the adjoining adjacent properties, and shall be screened as far as is practical, so as to minimize the visibility of said generator.
- 1.10 The project will connect to the Town's sewer system by means of connecting to the sewer main located across Gould Street in TV Place. This sewer connects to the Reservoir B pump station which pumps to the MWRA collector line. The Reservoir B pump station is in disrepair and the design of its replacement has been funded by the Town. It is expected that this design will be completed later this year and that the replacement of the station will begin in late 2011 or early 2012. The Petitioner has had discussions with the Town Engineering and Sewer Departments to determine the mitigation that will be necessary to ensure that the proposed project has no negative impacts on the operation of the existing Reservoir B pump station. The Petitioner has committed to, depending on the timing of the construction of this project in relation to the timing of the replacement of the station, to either identify and remove infiltration and inflow ("I and I") from the sewer lines at a rate of 2 gallons to every gallon that is expected to be generated by the project or to pay the normal connection rate on a per gallon basis.

- 1.11 The Petitioner appeared before the Design Review Board on January 3, 2011, and obtained approval for the project.
- 1.12 The facility will have a minimal impact on neighboring streets. Adequate parking has been provided for staff, deliveries, visiting professionals, family and friends of residents.
- 1.13 Adjoining premises will be protected against seriously detrimental uses on the site by provision of surface water drainage, sound and site buffers and preservation of views, light and air. The site has been designed to ensure that there will be no off-site drainage impacts. An extensive stormwater management system has been designed for the property that will comply with the Town of Needham requirements and the Massachusetts Department of Environmental Protection Stormwater Management standards. The system will incorporate Best Management Practices that include deep sump catch basins with oil separating elbows, proprietary stormwater quality structures, surface and subsurface recharge/detention systems and an operation and maintenance program. The system will ensure that peak storm generation levels will remain unchanged, that recharge to the groundwater is achieved and that water quality will be enhanced.

A detailed landscaping plan has been proposed which will provide sound and sight buffers and preservation of views, light and air. The site has been designed to maintain to the maximum extent possible the existing vegetation and slope buffers that exist on each side of the property. Additional landscape screening will be added as shown on the Plans. Noise and visual impacts will be reduced by locating the proposed building as distant from the residential neighbors along the south side as much as possible. The neighbors to the north will be protected by means of the existing buffering provided by the MBTA rail bed.

The lighting system has been designed to preclude light spill off-site and will consist of cutoff fixtures on low poles.

- 1.14 The convenience and safety of vehicular and pedestrian movement within the site and on adjacent streets, the location of driveway openings in relation to traffic or to adjacent streets and, when necessary, compliance with other regulations for the handicapped, minors and the elderly, has been adequately provided for. The primary access and egress to the property will be via a new driveway on Gould Street that will provide access to both the proposed building and the existing skilled nursing facility on the adjacent property to the south. The driveway has been designed so as to align with the Muzi Motors property located across Gould Street, therefore providing for safer access and egress to both properties. Sidewalks and walkways are provided within the site to allow easy pedestrian passage between the properties and to connect the site to the sidewalk that exists on Gould Street.
- The arrangement of parking and loading spaces in relation to the proposed uses of the premises is adequate. The proposed project has been designed to fully comply with the parking and loading requirements (except as waived herein). The parking is distributed throughout the site to provide convenience for employees and visitors. The loading dock is located at the Northeast side of the building. The main parking area is located underground. This feature allows for a maximum buffer between the neighborhood and any noise or unpleasantness that may result from a larger on-site parking lot. Some parking is provided at the front of the building. The maneuvering aisles have been designed to accommodate turning movements of delivery and emergency vehicles.

- 1.16 Adequate methods for disposal of refuse and waste will be provided. The project's wastewater system will be connected to the municipal sewage system. A dumpster will be placed in the subsurface parking garage with the refuse removed by a licensed hauler on a regular basis.
- 1.17 The relationship of structures and open spaces to the natural landscape, existing buildings and other community assets in the area are in compliance with other requirements of this By-Law has been adequately addressed by this project. The project has been designed to maximize the landscape area and limit the impervious areas. This is accomplished by providing a subsurface parking garage that will accommodate 67 parking spaces which is 77% of the total parking provided. Additionally, the natural slope of the site has been utilized so that the building will appear to be smaller as viewed from Evelyn Road. Finally the MBTA Right Of Way and vegetation at the rear of the property will provide a buffer.
- The project will not have an adverse affect on the Town's resources, including the Town's water supply and distribution system, sewer collection and treatment, fire protection and streets. The facility will not generate large numbers of motor vehicles and the project has been designed to accommodate fire and other emergency services. The project will connect to the Town's water system that is located in Gould Street. This area of Town has good pressure and flow characteristics sufficient to meet the needs of this property. The project will connect to the Town's sewer system by means of connecting to the sewer main located across Gould Street in TV Place. An analysis of that sewer system has been performed and it has been determined that there is sufficient capacity in that line to service the development as mitigated and further described in Section 1.10 above. Finally, the addition of a facility comprised of independent living, assisted living and a memory loss center in the Town of Needham will have a positive impact on the Town, both from a financial point of view as well as providing a resource for people to age in a familiar environment.
- Under Section 7.4 of the By-Law, a Major Project Site Plan Special Permit may be granted in the Elder Services Zoning District, if the Board finds that the proposed development complies with the standards and criteria set forth in the provisions of the By-Law. On the basis of the above findings and conclusions, the Board finds that the proposed development Plan, as conditioned and limited herein for the site plan review, to be in harmony with the purposes and intent of the By-Law, to comply with all applicable By-Law requirements, to have minimal adverse impact and to have promoted a development which is harmonious with the surrounding area.
- 1.20 Under Section 3.12.4 of the By-Law, a special permit to operate independent living units and assisted living and/or Alzheimer's/memory loss facilities in the Elder Services Zoning District may be granted if the Board finds that the proposed development complies with the standards and criteria set forth in the provisions of the By-Law. On the basis of the above findings and conclusions, the Board finds that the proposed development Plan, as conditioned and limited herein, to be in harmony with the purposes and intent of the By-Law, to comply with all applicable By-Law requirements, to have minimal adverse impact and to have promoted a development which is harmonious with the surrounding area.
- 1.21 Under Section 5.1.1.5 of the By-Law, a Special Permit to waive certain parking plan and design requirements as set forth in Section 5.1.3, more specifically, in Section 5.1.3 (a), to waive the average minimum 1-foot candle parking lot illumination level, may be granted in the Elder Services Zoning District, if the Board finds that owing to special and unique circumstances, the particular use, structure or lot does not warrant the application of certain design requirements. Given the lighting plan submitted with this application and the waiver request, the Board finds that the level of illumination proposed will not constitute a

demonstrable adverse impact on the surrounding area resulting from an improper level of illumination. On the basis of the above findings and conclusions, the Board finds that there are special and unique circumstances justifying the reduction in the illumination level requirements, as conditioned and limited herein, which will also be consistent with the intent of the By-Law and which will not increase the detriment to the Town's and neighborhood's inherent use. Under Section 5.1.1.5 of the By-Law, a Special Permit to waive certain parking plan and design requirements as set forth in Section 5.1.3, more specifically in Section 5.1.3(j), to waive the four (4) foot parking setback requirement from the property line and in Section 5.1.3(k), to waive the associated four (4) foot wide landscaped area requirements pertaining to the relief requested from Section (j), if the Board finds that owing to special and unique circumstances, the particular use, structure or lot does not warrant the application of certain design requirements, and that a reduction in the four (4) foot landscaped parking setback requirement are warranted. On the basis of the above findings and conclusions, the Board finds that there are special and unique circumstances justifying the reduction in the landscaping and parking setback requirements, as conditioned and limited herein, which will also be consistent with the intent of the By-Law and which will not increase the detriment to the Town's and neighborhood's inherent use.

THEREFORE, the Board voted 5-0 to GRANT (1) the requested Major Project Site Plan Special Permit under Section 7.4 of the By-Law, (2) the requested Special Permit under 3.12.4 for independent living units and assisted living and/or Alzheimer's/memory loss facilities in the Elder Services Zoning District, and (3) the requested Special Permit under Section 5.1.1.5, to waive strict adherence with the requirements of Section 5.1.3 (Parking Plan Design Requirements) of the Zoning By-Law, more specifically, in Section 5.1.3(a), to waive parking lot illumination requirement of "at least one foot candle," Section 5.1.3(j), to waive a four-foot minimum setback from the lot line to parking spaces, maneuvering aisles and driveways, and in Section 5.1.3(k), to waive the landscape requirements requiring that the four-foot setbacks be landscaped; subject to the following plan modifications, conditions and limitations.

PLAN MODIFICATIONS

Prior to the issuance of a building permit or the start of any construction on the site, the Petitioner shall cause the Plan to be revised to show the following additional, corrected, or modified information. The Building Inspector shall not issue any building permit nor shall he permit any construction activity on the site to begin on the site until and unless he finds that the Plan is revised to include the following additional corrected or modified information. Except where otherwise provided, all such information shall be subject to the approval of the Building Inspector. Where approvals are required from persons other than the Building Inspector, the Petitioner shall be responsible for providing a written copy of such approvals to the Building Inspector before the Inspector shall issue any building permit or permit for any construction on the site. The Petitioner shall submit nine copies of the final Plans as approved for construction by the Building Inspector to the Board prior to the issuance of a Building Permit.

- 2.0 The Plan shall be modified to include the requirements and recommendations of the Board, Department of Public Works and Fire Department for review and comment, and to the Board for approval and endorsement. All requirements and recommendations of the Department of Public Works, Fire Department and Board, set forth below, shall be met by the Petitioner.
 - a. The Plan shall be modified to show a separate construction driveway located off of Gould Street in order to allow construction vehicles access to the site that is separate from the normal business entrance. Said access shall be incorporated into the staging plans so as to ensure separation of construction vehicles from normal business activities during the construction of this project.

- b. The Plan shall be revised to show a "Right Turn Only" sign and arrow at the curb cut to Highland Avenue exit. Additionally, the Plan shall be revised to show the traffic island within Highland Avenue extended to the west so as to prevent a left hand turn from the Highland Avenue exit.
- c. The Plan shall be revised to show a "Truck Entering Sign" at the construction driveway access at Gould Street.
- d. The Plan shall be revised to show a total of 70 beds for the 60 proposed assisted living units. Namely 10 of the 60 assisted units shall have 2 beds and 50 shall have 1 bed.
- e. The Plan shall be modified to show the open space area retained for a future building landscaped, largely as a grassy area.
- f. The Plan shall be modified to increase the width of the access driveway to the loading dock at the northeast corner of the building from 14 feet to 24 feet, per the recommendation of the Fire Department.
- g. The Plan shall be revised to show a rip rap treatment at the interim construction driveway entrance at Gould Street to prevent construction materials from being carried off the site.

CONDITIONS

- 3.0 The following conditions of this approval shall be strictly adhered to. Failure to adhere to these conditions or to comply with all applicable laws and permit conditions shall give the Board the rights and remedies set forth in Section 3.43 hereof.
- This permit is issued for the operation of an 80-unit facility comprised of 20 independent living units (26 bedrooms), 40 regular assisted-living units (46 beds) and 20 Alzheimer's related assisted-living units (24 beds) specializing in Alzheimer's and other memory loss related conditions. Notwithstanding the above, the Petitioner may reallocate the 70 assisted living beds to either the regular assisted living classification or the Alzheimer's assisted living classification as authorized under Section 3.2 below.
- 3.2 No administrative use, other than that needed for operation of the independent living units, regular assisted living units, Alzheimer's assisted living units or other community activity incidental to the facility being conducted on the site, shall be allowed.
- The building, parking areas, driveways, walkways, landscape areas, and other site and offsite features shall be constructed in accordance with the Plan, as modified by this Decision. Any changes, revisions or modifications to the Plan, as modified by this Decision, shall require approval by the Board.
- 3.4 The proposed building and support services shall contain the dimensions and shall be located on that portion of the locus exactly as shown on the Plan, as modified by this Decision, and in accordance with the applicable dimensional requirements of the By-Law. Notwithstanding the above, the Petitioner may revise the floor plans without the need for additional hearings or approvals, provided that the total square footage of the building does not increase, the total number of independent living units does not exceed 20 units (26 bedrooms), the total number of assisted-living units does not exceed 60, and the total number of assisted living beds (whether they be regular assisted living beds or Alzheimer's related assisted living beds) does not exceed 70.
- 3.5 All buildings and land constituting the premises shall remain under a single ownership.
- 3.6 The staffing for the 60 regular assisted living units and Alzheimer's related units shall be limited to 34 employees on-site during the largest shift, including both assisted living

- employees, and other assisted living affiliated employees. The evening shift (11:00 p.m. to 7:00 a.m.) shall have substantially less than 34 employees.
- 3.7 Sufficient parking shall be provided on the locus at all times in accordance with the Plan, as modified by this Decision, and there shall be no parking of motor vehicles off the locus at any time.
- 3.8 A total of 86 parking spaces shall be provided on the site at all times in accordance with the Plan, as modified by this Decision. All off-street parking shall comply with the requirements of Section 5.1.3 of the By-Law, except as otherwise waived by this Decision.
- 3.9 All required handicapped parking spaces shall be provided including above-grade signs at each space that include the international symbol of accessibility on a blue background with the words "Handicapped Parking Special Plate Required Unauthorized Vehicles May Be Removed At Owners Expense". The quantity & design of spaces, as well as the required signage shall comply with the M.S.B.C. 521 CMR Architectural Access Board Regulation and the Town of Needham General By-Laws, both as may be amended from time to time.
- 3.10 All shift changes shall be staggered and the Petitioner shall use best efforts to prevent shift changes during the a.m. and p.m. peak-hour traffic periods.
- 3.11 The emergency gas generator to be installed at the front of the building shall be designed and operated so as to comply with all applicable Federal, state and local regulations addressing sound attenuation to protect adjoining properties and the nearest inhabited residence from excessive noise, as defined in said regulations. The emergency gas generator shall also be installed and screened as far as practical so as to minimize the visibility of the emergency generator. The Petitioner shall deliver to the Board for its review and approval plans and specifications of said emergency gas generator, including sound attenuation components, if necessary together with Petitioner's certification to the Board that said emergency generator has been designed such that when it is operated it will be in compliance with the regulations described above with respect to noise, and screened in accordance with the requirements described above.
- 3.12 Prior to project occupancy, an as-built plan of the emergency generator together with a sound level analysis prepared by an acoustical engineer (if, in the opinion of the Board, available manufacturer's specifications are insufficient to demonstrate compliance with applicable noise standards) shall be submitted to the Board for its review and approval. The sound analysis shall demonstrate compliance with all applicable Federal, state and local regulations addressing sound attenuation to protect adjoining properties and the nearest inhabited residence from excessive noise, as defined in said regulations.
- 3.13 Normal maintenance and testing of the emergency generator shall be limited to one occurrence per month between the weekday hours of 9:00 a.m. and 5:00 p.m. for a period not to exceed 2 hours. The emergency generator shall not operate more than 300 hours per rolling 12 month period, including the normal maintenance and testing procedure as recommended by the manufacturer and periods when the primary power source for Wingate Senior Living at Needham, Inc., has been lost during an emergency, such as a power outage, an on-site disaster or an act of God.
- With respect to the driveway to be constructed connecting the subject site with the adjacent Wingate at Needham Nursing Home, as well as to accommodate the new driveway to be constructed from the subject site to Gould Street, which accesses Gould Street over a portion of Lot B (the Wingate at Needham Nursing Home parcel), the Petitioner shall

secure an easement, as shown on the plan, from the adjacent property owner to ensure continued access to the subject site in accordance with this approval. Additionally, with respect to the drainage easement from Lot B (the Wingate at Needham Nursing Home parcel) to the drainage facility on Lot A (the Wingate Senior Living at Needham Inc., parcel) and the mutual access easement from Lot A (the Wingate Senior Living at Needham Inc., parcel) through Lot B (the Wingate at Needham Nursing Home parcel), the Petitioner shall secure the noted easements, as shown on the plan, in accordance with this approval. Said easements and associated plans shall be recorded at the Norfolk County Registry of Deeds with written evidence of said recordation filed with the Board prior to the issuance of the certificate of occupancy for this project.

- 3.15 This Special Permit to operate an 80-unit facility as described in this Decision is issued to Wingate Senior Living at Needham, Inc., 63 Kendrick Street, Needham, Massachusetts, and the operation may not be transferred, set over, or assigned by Wingate Senior Living at Needham, Inc., to any other person or entity without the prior written approval of the Board following such notice and hearing, if any, as the Board, in its sole and exclusive discretion, shall deem due and sufficient. Notwithstanding the above, this permit may be transferred to an affiliated entity (under common control with Wingate Senior Living at Needham, Inc.,) without Board approval or action, provided the Board is provided with a copy of the name and address of such entity.
- 3.16 The assisted living units residents' shall not have any kitchen facilities; all dining activities are to be communal; Non-Alzheimer's and memory loss assisted living units may have a refrigerator, microwave and sink in the unit. The Petitioner shall install a charcoal filtration ventilation system for cooking exhaust and shall operate the kitchen without negative impact on the abutting properties from cooking odors.
- 3.17 As described in the Traffic Impact Access Study (Exhibit 9), the Petitioner shall install a Stop-sign at the Gould Street exiting driveway. Additionally, a STOP sign and a "Right Turn Only" sign shall be installed at the driveway approach to Highland Avenue. The left-turn out movement at Highland Avenue shall be restricted during all times of the day. To ensure compliance with the "Right Turn Only" requirement at Highland, the Petitioner shall advise its employees of this condition and shall secure its enforcement. Any new signage or vegetation shall be set back sufficiently so as not to obstruct any sight lines exiting the driveways.
- 3.18 All utilities, including telephone and electrical service, shall be installed underground from the street line.
- 3.19 The Petitioner shall secure from the Needham Department of Public Works a Sewer Connection Permit or impact fee, if applicable.
- 3.20 The Petitioner shall secure from the Needham Department of Public Works a Street Opening Permit and any grants of location that are required from the utility companies.
- 3.21 The Petitioner shall secure from the Needham Department of Public Works a Water Main and Water Service Connection Permit per Town requirements.
- 3.22 The Petitioner shall seal all abandoned drainage connections and other drainage connections where the developer cannot identify the sources of the discharges. Sealing of abandoned drainage facilities and abandonment of all utilities shall be carried out per Town requirements.

- 3.23 The Petitioner shall connect the sanitary sewer line only to known sources. All known sources that cannot be identified shall be disconnected and properly sealed.
- 3.24 The construction, operation and maintenance of any subsurface infiltration facility, on-site catch basins and pavement areas, shall conform to the requirements outlined in the EPA's Memorandum of Understanding signed by the Needham Board of Selectmen.
- 3.25 The Petitioner shall implement the following maintenance plan:
 - a. Parking lot sweeping sweep twice per year; once in spring after snowmelt, and early fall.
 - b. Catch basin cleaning inspect basins twice per year; in late spring and fall. Clean basins in spring.
 - c. Proprietary Devices inspect and maintain per manufacturing recommendations.
- 3.26 The maintenance of site and parking lot landscaping shall be the responsibility of the Petitioner and the site and parking lot landscaping shall be maintained in good condition.
- 3.27 The Storm Water Management Policy form shall be submitted to the Town of Needham signed and stamped and shall include construction mitigation and an operation and maintenance plan as described in the policy. A copy of the inspection reports for the Operations and Maintenance Program of the Stormwater Management Report shall be provided to the Planning Board on an annual basis.
- 3.28 All solid waste shall be removed from the site by a private contractor. Snow shall also be removed or plowed by private contractor. All snow shall be removed or plowed such that the total number and size of parking spaces are not reduced.
- 3.29 All deliveries and trash dumpster pick up shall occur only between the hours of 8:00 a.m. and 6:00 p.m., Monday through Saturday, not at all on Sundays and holidays. The trash shall be picked up no less than two times per week. The dumpster shall be screened with a wooden fence, which shall be maintained in good condition. The dumpster shall be maintained in a locked condition with the key controlled by management so as to ensure compliance with the trash removal conditions of this permit. The dumpster shall be emptied, cleaned and maintained to meet Board of Health standards.
- 3.30 All lights shall be shielded and adjusted during the evening hours to prevent any annoyance to the neighbors. The Petitioner shall adjust its parking lights during the night and early morning. Between the hours of 10:00 p.m. and 11:00 p.m., the Petitioner shall shut off most of the parking lot lights using the lights on the building to shine down and provide basic security. The building lights shall be set at a low light level to prevent any annoyance to the neighbors.
- 3.31 The Petitioner shall make available to all staff shuttle service to the Needham Heights MBTA train stop whenever such train service is available.
- 3.32 In constructing and operating the proposed building on the locus pursuant to this Special Permit, due diligence shall be exercised and reasonable efforts shall be made at all times to avoid damage to the surrounding areas or adverse impact on the environment.

- 3.33 Excavation material and debris, other than rock used for walls and ornamental purposes and fill suitable for placement elsewhere on the site, shall be removed from the site.
- All construction staging shall be on-site. No construction parking shall be on public streets. Construction parking shall be all on site or a combination of on-site and off-site parking at locations in which the Petitioner can make suitable arrangements. Construction staging plans shall be included in the final construction documents prior to the filing of a Building Permit and shall be subject to the review and approval of the Building Inspector.
- 3.35 Prior to the issuance of the building permit, the Petitioner shall file with MassDOT for a State Highway Access Permit and shall use its best efforts to extend the median along Highland Avenue as shown on the Plan as modified by this Decision. If approved the median shall be installed prior to the issuance of the occupancy permit. Should the plan be denied by MassDOT, it shall be refiled in two years. In the event the Town secures control over this portion of Highland Avenue and the median has not otherwise been extended in accordance with the Plan, as modified by this Decision, the Petitioner shall apply to the Town for the required median extension. Obtaining approval to construct said median strip extension shall not be a condition for issuance of a building permit or certificate of occupancy.
- 3.36 Prior to the installation of any impervious areas on the property, or the filling of the depression area located on the western side of the property, the subsurface retention system shall be substantially constructed as shown on the Plan, as modified by this Decision to ensure that storm runoff from the property is properly disposed of.
- 3.37 The following interim safeguards shall be implemented during construction:
 - a. The hours of construction shall be 7:00 a.m. to 5:00 p.m. Monday through Saturday.
 - b. The Petitioner's contractor shall provide temporary security chain-link or similar type fencing around the portions of the project site, which require excavation or otherwise pose a danger to public safety.
 - c. The Petitioner's contractor shall designate a person who shall be responsible for the construction process. That person shall be identified to the Police Department, the Department of Public Works, the Building Inspector and the abutters and shall be contacted if problems arise during the construction process. The designee shall also be responsible for assuring that truck traffic and the delivery of construction material does not interfere with or endanger traffic flow on Highland Avenue and Gould Street.
 - d. The Petitioner shall take appropriate steps to minimize, to the maximum extent feasible, dust generated by the construction including, but not limited to, requiring subcontractors to place covers over open trucks transporting construction debris and keeping Highland Avenue and Gould Street clean of dirt and debris and watering appropriate portions of the construction site from time to time as may be required.
- 3.38 No building permit shall be issued in pursuance of the Special Permit and Site Plan Approval until:
 - a. The final plans shall be in conformity with those approved by the Board, and a statement certifying such approval shall have been filed by this Board with the Building Inspector.

- b. A construction management and staging plan shall have been submitted to the Police Chief and Building Inspector for their review and approval.
- c. The Petitioner shall deliver to the Board for its review and approval plans and specifications of said emergency gas generator, including sound attenuation components, if necessary together with Petitioner's certification to the Board that said emergency generator has been designed such that when it is operated it will be in compliance with the regulations described above with respect to noise. The emergency gas generator shall also be installed and screened as far as practical so as to minimize the visibility of the emergency generator. Said plans and certification shall be approved by the Board.
- d. The Petitioner shall have filed with MassDOT for a State Highway Access to extend the median along Highland Avenue as shown on the Plan as modified by this Decision.
- e. The Petitioner shall have recorded with the Norfolk County Registry of Deeds a certified copy of this Decision granting this Special Permit and Site Plan Approval with the appropriate reference to the book and page number of the recording of the Petitioner's title deed or notice endorsed thereon.
- 3.39 No building or structure, or portion thereof, subject to this Special Permit and Site Plan Approval shall be occupied until:
 - a. An as-built plan, supplied by the engineer of record certifying that the on-site and off-site project improvements were built according to the approved documents, has been submitted to the Board and Department of Public Works. The as-built plan shall show the building, all finished grades and final construction details of the driveways, parking areas, drainage systems, utility installations, and sidewalk and curbing improvements on-site and off-site, in their true relationship to the lot lines. In addition to the engineer of record, said plan shall be certified by a Massachusetts Registered Land Surveyor.
 - b. There shall be filed with the Building Inspector and Board a statement by the Department of Public Works certifying that the finished grades and final construction details of the driveways, parking areas, drainage systems, utility installations, and sidewalks and curbing improvements on-site and off-site, have been constructed to the standards of the Town of Needham Department of Public Works and in accordance with the approved Plan.
 - c. There shall be filed with the Board and Building Inspector a Certificate of Compliance signed by a registered architect upon completion of construction.
 - d. There shall be filed with the Board and Building Inspector an as-built Landscaping Plan showing the final location, number and type of plant material, final landscape features, parking areas, and lighting installations. Said plan shall be prepared by the landscape architect of record and shall include a certification that such improvements were completed according to the approved documents.
 - e. The Petitioner shall have secured an access easement with respect to the driveway to be constructed connecting the subject site with the adjacent Wingate at Needham Nursing Home, as well as to accommodate the new driveway to be constructed from the subject site to Gould Street, which accesses Gould Street over a portion of Lot B (the Wingate at Needham Nursing Home parcel). Additionally, the Petitioner shall have secured the

drainage easement from Lot B (the Wingate at Needham Nursing Home parcel) to the drainage facility on Lot A (the Wingate Senior Living at Needham Inc., parcel) and the mutual access easement from Lot A (the Wingate Senior Living at Needham Inc., parcel) through Lot B (the Wingate at Needham Nursing Home parcel). Said easements and associated plans shall have recorded with the Norfolk County Registry of Deeds with the appropriate reference to the book and page number of the recording of the Petitioner's title deed referenced therein or notice endorsed thereon. Said easements and associated plans shall be reviewed and approved by the Board. Written evidence of said recordation is to be filed with the Board.

- f. The Petitioner shall have secured a sewer easement along TV Place to connect the proposed development to the private sewer at that locale. An updated plan with bearings and distances for the noted sewer easement shall accompany said easement. Said easement and associated plan shall have been recorded with the Norfolk County Registry of Deeds with the appropriate reference to the book and page number of the recording of the Petitioner's title deed or notice endorsed thereon. Said easements and associated plans shall be reviewed and approved by the Board. Written evidence of said recordation is to be filed with the Board.
- g. There shall be filed by the Petitioner an as-built plan of the emergency generator and a sound level analysis prepared by an acoustical engineer (if, in the opinion of the Board, available manufacturer's specifications are insufficient to demonstrate compliance with applicable noise standards). The sound analysis shall demonstrate compliance with all applicable Federal, state and local regulations addressing sound attenuation to protect adjoining properties and the nearest inhabited residence from excessive noise, as defined in said regulations. Said as-built plan and sound level analysis shall be reviewed and approved by the Board.
- h. The Petitioner has committed to, depending on the timing of the construction of this project in relation to the timing of the replacement of the station, to either identify and remove infiltration and inflow ("I and I") from the sewer lines at a rate of 2 gallons to every gallon that is expected to be generated by the project or to pay the normal connection rate on a per gallon basis. If, applicable, the Petitioner shall have removed from the sewer system all inflow/infiltration (I/I) required by the Department of Public Works in accordance with the Petitioner's sewer connection permit.
- i. An as-built plan supplied by the engineer of record certifying that the off-site traffic improvements were completed according to the approved documents has been submitted to and approved by the Board and Department of Public Works.
- j. There shall be filed with the Building Inspector a statement by the Board approving the final off-site traffic improvements.
- k. The Petitioner shall have completed all improvements required on the adjacent Wingate at Needham Nursing Home parcel (Lot A) as contained in Major Project Site Plan Special Permit No. 1993-03, issued to the Continental Wingate Company on March 15, 2011. Provided further, however, as provided in said Special Permit No. 1993-03, as amended by decision dated March 15, 2011, obtaining approval to construct the median strip extension in Highland Avenue, and the completion of said improvement, shall not be a condition of obtaining a certificate of occupancy of the building, structure, or any portion thereof, that is the subject of this Decision.

- Notwithstanding the provisions of Sections a, b, and d hereof, the Building Inspector may issue one or more certificates for temporary occupancy of all or portions of the buildings prior to the installation of final landscaping and other site features, provided that the Petitioner shall have first filed with the Board in an amount not less than 135% of the value of the aforementioned remaining landscaping or other work to secure installation of such landscaping and other site and construction features.
- 3.40 In addition to the provisions of this approval, the Petitioner must comply with all requirements of all state, federal, and local boards, commissions or other agencies, including, but not limited to, the Board of Selectmen, Building Inspector, Fire Department, Department of Public Works, Conservation Commission, Police Department, and Board of Health.
- 3.41 That the building or structure authorized for construction by this permit shall not be occupied or used, and no activity except the construction activity authorized by this permit shall be conducted within said area until a Certificate of Occupancy and Use or a Certificate of Temporary Occupancy and Use has been issued by the Building Inspector.
- 3.42 The Petitioner, by accepting this permit Decision, warrants that the Petitioner has included all relevant documentation, reports, and information available to the Petitioner in the application submitted, that this information is true and valid to the best of the Petitioner's knowledge.
- Violation of any of the conditions of this Special Permit shall be grounds for revocation of this Special Permit, or of any building permit granted hereunder. In the case of violation of the continuing obligations of this permit, the Town will notify the owner of such violation and give the owner reasonable time, not to exceed thirty (30) days, to cure the violation. If, at the end of said thirty (30) day period, the Owner has not cured the violation, or in the case of violations requiring more than thirty (30) days to cure, has not commenced the cure and prosecuted the cure continuously, the permit granting authority may, after notice to the Owner, conduct a hearing in order to determine whether the failure to abide by the conditions contained herein should result in revocation of the Special Permit. As an alternative, the Town may enforce compliance with the conditions of this permit by an action for injunctive relief before any court of competent jurisdiction. The Owner agrees to reimburse the Town for its reasonable costs in connection with the enforcement of the conditions of this permit.

LIMITATIONS

- 4.0 The authority granted to the Petitioner by this permit is limited as follows:
- 4.1 This permit applies only to the site and off-site improvements, which are the subject of this petition. All construction to be conduced on-site and off-site shall be conducted in accordance with the terms of this permit and shall be limited to the improvements on the Plan, as modified by this Decision.
- There shall be no further development of this site without further site plan approval as required under Section 7.4 of the By-Law. The Board, in accordance with M.G.L., Ch. 40A, S.9 and said Section 7.4, hereby retains jurisdiction to (after hearing) modify and/or amend the conditions to, or otherwise modify, amend or supplement, this Decision and to take other action necessary to determine and ensure compliance with the Decision.

- 4.3 This Decision applies only to the requested Special Permits and Site Plan Review. Other permits or approvals required by the By-Law, other governmental boards, agencies or bodies having jurisdiction shall not be assumed or implied by this Decision.
- 4.4 The conditions contained within this Decision are limited to this specific application and are made without prejudice for any further modification or amendment.
- 4.5 No approval of any indicated signs or advertising devices is implied by this Decision.
- 4.6 The foregoing restrictions are stated for the purpose of emphasizing their importance but are not intended to be all-inclusive or to negate the remainder of the By-Law.
- 4.7 This Site Plan Special Permit shall lapse on March 15, 2013, if substantial use thereof has not sooner commenced, except for good cause. Any requests for an extension of the time limits set forth herein must be in writing to the Board at least 30 days prior to March 15, 2013. The Board herein reserves its rights and powers to grant or deny such extension without a public hearing. The Board, however, shall not grant an extension as herein provided unless it finds that the use of the property in question or the construction of the site has not begun, except for good cause.
- 4.8 Reference to this Decision shall be entered upon the Plan, and this approval shall be recorded in the Norfolk District Registry of Deeds. This Special Permit shall not take effect until a copy of this Decision bearing the certification of the Town Clerk that twenty(20) days have elapsed after the Decision has been filed in the Town Clerk's office or that if such appeal has been filed, that it has been dismissed or denied is recorded with Norfolk District Registry of Deeds and until the Petitioner has delivered a certified copy of the recorded document to the Board.

The provisions of this Special Permit shall be binding upon every owner or owner of the lots and the executors, administrators, heirs, successors and assigns of such owners, and the obligations and restrictions herein set forth shall run with the land, as shown of the Plan, as modified by this Decision, in full force and effect for the benefit of and enforceable by the Town of Needham.

Any person aggrieved by this Decision may appeal pursuant to General Laws, Chapter 40A, Section 17, within twenty (20) days after filing of this Decision with the Needham Town Clerk.

Witness our hands this 15 th day of March, 2011.	
NEEDHAM PLANNING BOARD	
16 Blellit	
Ronald W. Ruth, Chairman	
(15/11)	
Jeanne S. McKnight, Vice Chairman	
Jeanne S. McKingili Vice Chamban)
- due Vian	
Bruce T. Eisenhut	
Mark	
Martin Jacobs	
Jam Was Warns	
Sam Bass Warner	
COMMONWEALTH OF MASSACHUSETTS	
Norfolk, ss	March 15, 2011
Needham, Massachusetts, proved to me through in the form of a state issued drivers license,	the undersigned notary public, personally appeared nembers of the Planning Board of the Town of a satisfactory evidence of identification, which was to be the person whose name is signed on the edged the foregoing to be the free act and deed of Notary Public My Commission Expires:
TO WHOM IT MAY CONCERN: This is to certify that the 20-day appeal period on the Decision on Wingate Senior Living, Inc., 63 Kendrick Street, Needham, Massachusetts 02494, has passed, and there have been no appeals made to this office. (All Judicial Appeals taken from this Decision have been dismissed.)	
Data	Theodora K. Eaton, Town Clerk
Date	Theodora R. Laton, Town Clork
Copy sent to:	D 1 (C) 1 - 4
Petitioner - Certified Mail # Town Clerk	Board of Selectmen Engineering
Building Inspector	Fire Department
Director, PWD	Police Department
Board of Health	Roy Cramer
Conservation Commission	Parties in Interest



TOWN OF NEEDHAM, MA 02492 PLANNING AND COMMUNINE DHAM, MA 02492

DEVELOPMENT DEPARTMENT, OCT 28 PH 00 Dedham Ave

Needham, MA 02492 781-455-7500

PLANNING

DECISION SPMP No. 2011-01 October 20, 2014

Amendment to Major Project Site Plan Special Permit Wingate Senior Living at Needham, Inc.

(Original Decision dated March 15, 2011, revised October 4, 2011, November 9, 2011, October 23, 2012, April 2, 2013 and May 21, 2013)

DECISION of the Planning Board (hereinafter referred to as the Board) on the petition of Wingate Senior Living at Needham, Inc., 63 Kendrick Street, Needham, Massachusetts 02494 (hereinafter the Petitioner), for property located at 235 Gould Street and 0 Gould Street. The property is shown on Assessor's Map No. 77 as Parcels 25 and 61 containing 200,679 square feet in the Elder Services Zoning District.

This Decision is in response to an application submitted to the Board on August 7, 2014 by the Petitioner for an Amendment to Major Project Site Plan Special Permit under Section 7.4 of the Needham Zoning By-Law (hereinafter the By-Law), and associated special permits.

The requested Amendment to Major Project Site Plan Special Permit would, if granted, permit the Petitioner to consolidate Lots A and C by the reconveyance of Lot C from WHC Needham II, Limited Partnership, back to WHC Needham I, Limited Partnership, so that the entire Property (comprising approximately 4.6 acres) will be in single ownership, and to construct an addition to the existing building that will contain 52 independent living units. The "addition" is proposed to have three stories and a basement, a building footprint of approximately 23,518 sq. ft. and to contain approximately 79,310 sq. ft. of floor area. The Petitioner also proposes to construct fifteen new surface parking spaces (including one van accessible handicapped space). The Petitioner further proposes associated landscaping, as more particularly shown on the plans filed with this application.

In accordance with the By-Law, Section 3.12.4, a special permit is required for independent living units in the Elder Services Zoning District. In accordance with the By-Law Section 5.1.1.5, a special permit is required to waive strict adherence with the requirements of Section 5.1.2 (Required Parking). In accordance with the By-Law Section 5.1.1.5, a special permit is required to waive strict adherence with the requirements of Section 5.1.3 (Parking Plan Design Requirements) of the By-Law, more specifically, in Section 5.1.3(j), to waive a four-foot minimum setback from the lot line to parking spaces, maneuvering aisles and driveways, and in Section 5.1.3(k), to waive the landscape requirements requiring that the four-foot setbacks be landscaped. In accordance with the By-Law, Section 7.4, a Major Project Site Plan Review is required.

After causing notice of the time and place of the public hearing and of the subject matter thereof to be published, posted and mailed to the Petitioner, abutters and other parties in interest as required by law, the hearing was called to order by the Chairperson, Martin Jacobs on Tuesday, September 16, 2014 at 8:00 p.m. in the Charles River Room, First Floor, Public Services Administration Building, 500 Dedham Avenue, Needham, Massachusetts. The hearing was continued to October 7,

2014, at 8:30 p.m., in the Charles River Room, First Floor, Public Services Administration Building, 500 Dedham Avenue, Needham, Massachusetts. Board members, Martin Jacobs, Jeanne S. McKnight, Bruce T. Eisenhut, Sam Bass Warner and Elizabeth J. Grimes were present throughout the September 16, 2014 and October 7, 2014 proceedings. The record of the proceedings and the submission upon which this Decision is based may be referred to in the office of the Town Clerk or the office of the Board.

Submitted for the Board's deliberation prior to the close of the public hearing were the following exhibits:

- Exhibit 1 Application Form for Site Plan Review completed by the applicant dated August 7, 2014 with Exhibit A.
- Exhibit 2 Two letters from Attorney Roy A. Cramer to the Needham Planning Board dated August 4, 2014.
- Plans entitled, "Site Development Plans for Wingate Senior Living (Lots A & C), Needham, MA" prepared by Kelly Engineering Group, Inc., 0 Campanelli Drive, Braintree, MA, 02184, consisting of 10 sheets: Sheet 1 of 10, Sheet 1, Cover Sheet, dated August 1, 2014; Sheet 2 of 10, Sheet 2, entitled "Overall Layout Plan, Phase 2" dated August 1, 2014; Sheet 3 of 10, Sheet 3, entitled "Existing Conditions Layout Plan, Lot C, 235 Gould Street Wingate Needham" dated May 28, 2014; Sheet 4 of 10, Sheet 4, entitled "Existing Conditions Utility Plan, Lot C, 235 Gould Street Wingate Needham," dated May 28, 2014; Sheet 5 of 10, Sheet 5, entitled "Layout Plan, Phase 2" dated August 1, 2014; Sheet 6 of 10, Sheet 6, entitled "Site Plan, Phase 2," dated August 1, 2014; Sheet 7 of 10, Sheet 7, entitled "Detail Sheet, Phase 2," dated August 1, 2014; Sheet 8 of 10, Sheet 8, entitled "Detail Sheet, Phase 2," dated August 1, 2014; Sheet 9 of 10, Sheer L9, entitled "Landscape Plans," dated August 1, 2014; and Sheet 10 of 10, Sheet L10, entitled "Lighting Photometrics," dated August 1, 2014.
- Exhibit 4 Architectural Plan entitled "The Residences at Wingate II," prepared by The Architectural Team Inc., 50 Commandant's Way at Admiral's Hill, Chelsea, MA, 02150, consisting of 6 sheets: Sheet 1 of 6, Sheet A1.00, entitled "Basement and First Floor Plans," dated August 1, 2014; Sheet 2 of 6, Sheet A1.01, entitled "Second and Third Floor Plans," dated August 1, 2014; Sheet 3 of 6, Sheet A1.02, entitled "Roof Plan," dated August 1, 2014; Sheet 4 of 6, Sheet A4.01, entitled "Exterior Building Elevations," dated August 1, 2014; Sheet 5 of 6, Sheet A4.02, entitled "Exterior Building Elevations," dated August 1, 2014; and Sheet 6 of 6, Sheet A4.03, entitled "Exterior Building Elevations," dated August 1, 2014.
- Exhibit 5 Traffic Impact and Access Study, Proposed Assisted Living/Independent Living Facility, Needham, MA", prepared by Vanesse & Associates, Inc., Transportation Engineers and Planners, 10 New England Business Center Drive, Suite 314, Andover, MA 01810, dated June, 2014.
- Exhibit 6 Supplemental Stormwater Management Report, 235 & 0 Gould Street, Needham, MA prepared by Kelly Engineering Group, Inc., 0 Campanelli Drive, Braintree, MA, 02184, dated May 28, 2014.
- Exhibit 7 Two letters from Brandon Li, Kelly Engineering Group, Inc. to the Needham Planning Board both dated September 29, 2014.

- Exhibit 8 -Plans entitled, "Site Development Plans for Wingate Senior Living (Lots A & C), Needham, MA" prepared by Kelly Engineering Group, Inc., 0 Campanelli Drive, Braintree, MA, 02184, consisting of 10 sheets: Sheet 1 of 10, Sheet 1, Cover Sheet, dated August 1, 2014, revised September 29, 2014; Sheet 2 of 10, Sheet 2, entitled "Overall Layout Plan, Phase 2" dated August 1, 2014, revised September 29, 2014; Sheet 3 of 10, Sheet 3, entitled "Existing Conditions Layout Plan, Lot C, 235 Gould Street Wingate Needham" dated May 28, 2014; Sheet 4 of 10, Sheet 4, entitled "Existing Conditions Utility Plan, Lot C, 235 Gould Street Wingate Needham," dated May 28, 2014; Sheet 5 of 10, Sheet 5, entitled "Layout Plan, Phase 2" dated August 1, 2014, revised September 29, 2014; Sheet 6 of 10, Sheet 6, entitled "Site Plan, Phase 2," dated August 1, 2014, revised September 29, 2014; Sheet 7 of 10, Sheet 7, entitled "Detail Sheet, Phase 2," dated August 1, 2014, revised September 29, 2014; Sheet 8 of 10, Sheet 8, entitled "Detail Sheet, Phase 2," dated August 1, 2014, revised September 29, 2014; Sheet 9 of 10, Sheer L9, entitled "Landscape Plans," dated August 1, 2014, revised September 29, 2014; Sheet 10 of 10, Sheet L10, entitled "Lighting Photometrics," dated August 1, 2014, revised September 24, 2014 (received October 7, 2014).
- Exhibit 9 Plan entitled, "Consolidation Plan, 235 Gould Street, Needham, Mass." prepared by R.E. Cameron & Associates, Inc., 681 Washington Street, Norwood MA, 02062, dated September 16, 2014.
- Exhibit 10 Addendum to Supplemental Stormwater Management Report, 235 & 0 Gould Street, Needham, MA prepared by Kelly Engineering Group, Inc., 0 Campanelli Drive, Braintree, MA, 02184, dated September 29, 2014.
- Exhibit 11 Plans entitled, "Site Development Plans for Wingate Senior Living (Lots A & C), Needham, MA" prepared by Kelly Engineering Group, Inc., 0 Campanelli Drive, Braintree, MA, 02184, Sheet L10, entitled "Lighting Photometrics," dated August 1, 2014, revised September 24, 2014 (received October 1, 2014.
- Exhibit 12 Interdepartmental Communication (IDC) to the Board from Chief Paul Buckley, Needham Fire Department, dated September 11, 2014; IDC to the Board from Lt. John H. Kraemer, Needham Police Department, dated September 11, 2014; IDC from Anthony Del Gaizo, Assistant Director, DPW, dated September 11, 2014 and October 7, 2014.

Exhibits 1, 2, 4, 5, 6, 7, 8, 9, and 10 are referred to hereinafter as the Plan.

FINDINGS AND CONCLUSIONS

Based upon its review of the exhibits and the record of the proceedings, the Board found and concluded that:

- 1.1 The subject property is located in the Elder Services Zoning District. The subject property is located at 235 Gould Street and 0 Gould Street. The property is shown on Assessor's Map No. 77 as Parcels 25 and 61 containing 200,679 square feet. The property is presently owned by the WHC Needham II, Limited Partnership.
- 1.2 The first phase of the project (the "Project") was to divide the property (the "Property") into two lots (labeled Lots A and C on the approved plans), and to construct on Lot A, a three-story building containing 91 living units (12 independent living units, 42 regular assisted living units, and 37 assisted living units specializing in Alzheimer's and other

memory loss related conditions). The building also included a basement garage containing 67 parking spaces and Lot A contained 19 surface parking spaces, for a total parking supply of 86 parking spaces. 8 surface parking spaces were dedicated to the exclusive use of the adjacent nursing home, so 78 parking spaces are available for the Petitioner's use. Lot C remained vacant, pending the second phase of the Project, which is the subject of this application.

- 1.3 The Petitioner proposes to consolidate Lots A and C by the reconveyance of Lot C from WHC Needham II, Limited Partnership, back to WHC Needham I, Limited Partnership, so that the entire Property (comprising approximately 4.6 acres) will be in single ownership, and to construct an addition to the existing building that will contain 52 independent living units comprising 11 one-bedroom units, 29 one-bedroom units with a den, and 12 two-bedroom units. The "addition" is proposed to have three stories and a partial basement, a building footprint of approximately 23,518 sq. ft. and to contain approximately 79,310 sq. ft. of floor area. The Petitioner also proposes to construct fifteen new surface parking spaces (including one van accessible handicapped space). The Petitioner further proposes associated landscaping, as more particularly shown on the plans filed with this application. At the completion of this phase two of the Project, the Property will be comprised of 64 independent living apartment units, 42 regular assisted living units, and 37 assisted living units specializing in Alzheimer's and other memory related conditions. The total floor area of the building after completion of the addition will be approximately 162,096 square feet.
- 1.4 As indicated in the Zoning Table shown on the Plan, the lot conforms to zoning requirements as to area and frontage. As indicated in the Zoning Table shown on the Plan, the proposed building will comply with all applicable dimensional and density requirements of the Elder Services Zoning District for an institutional use namely, front, side and rear setback, maximum building height, maximum number of stories, and floor area ratio.
- 1.5 The maximum number of employees at the site, including both the existing facility and the proposed addition, on the largest shift will be 44. The evening shift (11:00 p.m. to 7:00 a.m.) will be substantially less than 44 employees.
- 1.6 Under the By-Law, Section 5.1.2, the parking requirement for the project is 98.5 parking spaces, rounded up to 99 parking spaces, calculated as follows:

Phase One: the parking requirement was 70 parking spaces, calculated as follows: (a) 12 Independent Living Apartment units x 0.5 spaces per unit equals six spaces, plus (b) 89 assisted living beds x 0.5 spaces equals 44.5 spaces, plus (c) 39 employees on the largest shift at one space per two employees equals 19.5 spaces. A total of 86 spaces were provided which is in excess of 16 spaces over what is required by the Zoning By-Law. The November 9, 2011 amendment dedicated eight surface parking spaces for the exclusive use of the adjacent nursing home, for a total available parking supply of 78 parking spaces, leaving an excess of eight parking spaces over what is required by the By-Law.

Phase Two: The parking requirement for 52 Independent Living Apartments is 0.5 spaces per unit, equaling 26 parking spaces. A maximum of five additional employees is anticipated for the Project. The addition of five employees in the parking calculation results in an additional parking requirement of 2.5 spaces (one space per two employees on the largest shift). The additional parking requirement caused by phase two of the Project is therefore 28.5 parking spaces. The sum of 70 parking spaces (the total requirement for phase one of the Project) and 28.5 spaces (the total for phase two of the Project) equals 98.5 parking spaces, rounded up to 99 parking spaces. The proposed parking supply for the

Project (including Phases 1 and 2) is 93 parking spaces. Accordingly a waiver of 6 parking spaces is required.

- 1.7 The project complies with all of the parking area design criteria set forth in Section 5.1.3 except that the Petitioner is seeking a waiver from Section 5.1.3(j) and 5.1.3 (k). The Petitioner is seeking a waiver from the 5.1.3(j) requirement of a four-foot minimum setback from the lot line to parking spaces, maneuvering aisles and driveways, with respect to the driveway constructed connecting the Property with the adjacent Wingate at Needham Nursing Home, as well as to accommodate the driveway constructed from the Property to Gould Street, which accesses Gould Street over a portion of Lot B (the Wingate at Needham Nursing Home parcel) via an easement created as shown on the Plan, the 4-foot minimum setback is proposed to be 0. The Petitioner is also seeking a waiver from Section 5.1.3(k) insofar as the waivers requested from Section 5.1.3(j) described above, require that the four-foot minimum setback be landscaped.
- 1.8 Vanasse & Associates, Inc. (VAI) conducted a Traffic Impact and Access Study (TIAS) to determine the traffic impacts associated with the construction the proposed assisted living/independent living facility. The study reviewed existing traffic operating parameters on key roadways and intersections, estimated the anticipated traffic volume increases as a result of the proposed project, and analyzed the projects traffic-related impacts.
- Pursuant to Section 3.12.10 of the Zoning By-Law, at least 10% of the Independent Living Apartments shall be Affordable Housing Units. Since after completion of the proposed addition, the Project will contain 64 Independent Living Apartments, a total of seven of said apartments shall be Affordable Housing Units. Two Affordable Housing Units have already been designated in the existing building and an additional five Affordable Housing Units will be designated in the building addition. The five additional affordable units will be proportionately distributed throughout the new building in terms of both unit size and type consistent with Local Initiative Guidelines, Section VI.B.5.d.
- 1.10 The addition of project-related traffic to the adjacent roadways is not anticipated to significantly impact traffic operations over the no-build condition. During peak commuter periods, it is anticipated that the project-related traffic increase would amount to less than one percent during the peak hours. Under 2014 existing conditions, the Highland Avenue at Gould Street and Hunting Road intersections will continue to operate at LOS D during the weekday morning peak hour; under both 2021 No-Build conditions and 2021 Build conditions, these intersections are predicted to operate at E and F levels of service for morning and evening peak commutes respectively. The proposed project has very little impact at this location. Finally, the critical movements at the Gould Street site driveway are projected to operate at LOS A in the morning peak and LOS C in the evening peak during the weekday peak hours under all analysis conditions. It is recommended that a STOP-sign be installed at the internal site driveway.
- The project will connect to the Town's sewer system by means of connecting to the sewer main located across Gould Street in TV Place. An analysis of that sewer system has been performed and it has been determined that there is sufficient capacity in that line to service the development. The Applicant had also worked with the Town's Department of Public Works to reduce inflow and infiltration (I&I) into the Town's municipal sewer pump station. The work significantly reduced sewage flows to their station at a rate greater than twice the sewage flows from the proposed project.
- 1.12 The Petitioner appeared before the Design Review Board on August 18, 2014, and obtained approval for the project. The facility will have a minimal impact on neighboring streets.

- 1.13 Adequate parking has been provided for staff, deliveries, visiting professionals, family and friends of residents.
- 1.14 Adjoining premises will be protected against seriously detrimental uses on the site by provision of surface water drainage, sound and sight buffers and preservation of views, light and air.

The site has been designed to ensure that there will be no off site drainage impacts. An extensive stormwater management system has been designed and constructed on the property that will comply with the Town of Needham requirements and the Massachusetts Department of Environmental Protection Stormwater Management Standards. The system was approved, designed and constructed during phase one of the Project, which included the construction of the existing independent living/assisted living facility located on the Property. The system was designed with the additional development of phase two of the Project (the present proposed development) in mind. The system incorporated Best Management Practices that include deep sump catch basins with oil separating elbows, proprietary stormwater quality structures, surface and subsurface recharge/detention systems and an operation and maintenance program. The system will ensure that stormwater will continue to be mitigated within the site and will not leave the site, that recharge to the groundwater is achieved and that water quality will be enhanced.

A detailed landscaping plan has been proposed which will provide sound and sight buffers and preservation of views, light and air. The neighbors to the north will be protected by means of the existing buffering provided by the MBTA railbed. The development to the south is the Wingate at Needham Nursing Home. A thoughtful landscaping plan has been provided to screen as much as practical the proposed phase two of the Project from Gould Street. The building itself has been designed to be consistent with the existing facility and will be an attractive addition to the property.

- 1.15 The convenience and safety of vehicular and pedestrian movement within the site and on adjacent streets, the location of driveway openings in relation to traffic or to adjacent streets and, when necessary, compliance with other regulations for the handicapped, minors and the elderly, have been adequately provided for. The primary access and egress to the property will continue to be via the driveway on Gould Street that will provide access to both the proposed addition, the existing facility and the existing skilled nursing facility on the adjacent property to the south. The driveway has been designed and constructed so as to align with the Muzi Motors property located across Gould Street, therefore providing for safer access and egress to both properties. Sidewalks and walkways are provided within the site to allow easy pedestrian passage between the properties and to connect the site to the sidewalk that exists on Gould Street.
- 1.16 The arrangement of parking and loading spaces in relation to the proposed uses of the premises is adequate. The proposed project has been designed to fully comply with the parking and loading requirements (except as waived). The main parking area is located under the existing facility and additional surface parking is available. Fifteen new surface parking spaces (including one van accessible handicapped space) are proposed adjacent to the proposed addition to assure efficient operation of the facility. The main entrance to the addition has been designed to maximize convenience for residents and their guests.
- 1.17 Adequate methods for disposal of refuse and waste will be provided. The project's wastewater system will be connected to the municipal sewer system. A dumpster presently exists in the subsurface parking garage with the refuse removed by a licensed hauler on a

regular basis. A second dumpster will be located in the loading dock area between the original existing facility and the proposed addition out of sight of neighbors and accessible for trash removal.

- The relationship of structures and open spaces to the natural landscape, existing buildings and other community assets in the area are in compliance with other requirements of this By-law and have been adequately addressed by this project. The project has been designed to maximize the landscaped area and limit impervious areas. This is accomplished by providing a subsurface parking garage in the existing facility that will accommodate 67 parking spaces. Additionally, the natural slope of the site has been utilized so that the building addition will appear to be smaller as viewed from Evelyn Road. Finally, the MBTA right of way and vegetation at the rear of the property will provide a buffer.
- 1.19 The Project will not have an adverse effect on the Town's resources, including the Town's water supply and distribution system, sewer collection and treatment, fire protection and streets. The facility will not generate large numbers of motor vehicles and the Project has been designed to accommodate fire and other emergency services. The Project will connect to the Town's water system that is located in Gould Street. This area of the Town has good pressure and flow characteristics sufficient to meet the needs of this Property. The project will connect to the Town's sewer system by means of connecting to the sewer main located across Gould Street in TV Place. Finally, the addition of a facility comprised of independent living, assisted living and a memory loss center in the Town of Needham will have a positive impact on the Town, both from a financial point of view as well as providing a resource for people to age in a familiar environment.
- 1.20 Under Section 7.4 of the By-Law, a Major Project Site Plan Special Permit may be granted in the Elder Services Zoning District, if the Board finds that the proposed development complies with the standards and criteria set forth in the provisions of the By-Law. On the basis of the above findings and conclusions, the Board finds that the proposed development Plan, as conditioned and limited herein for the site plan review, to be in harmony with the purposes and intent of the By-Law, to comply with all applicable By-Law requirements, to have minimal adverse impact and to have promoted a development which is harmonious with the surrounding area.
- 1.21 Under Section 3.12.4 of the By-Law, a special permit to operate independent living units in the Elder Services Zoning District may be granted if the Board finds that the proposed development complies with the standards and criteria set forth in the provisions of the By-Law. On the basis of the above findings and conclusions, the Board finds that the proposed development Plan, as conditioned and limited herein, to be in harmony with the purposes and intent of the By-Law, to comply with all applicable By-Law requirements, to have minimal adverse impact and to have promoted a development which is harmonious with the surrounding area.
- 1.22 Under Section 5.1.1.5 of the By-Law, a Special Permit to waive strict adherence with the requirements of Section 5.1.2 (Required Parking) of the By-Law (Off-Street Parking Requirements) may be granted provided the Board finds that owing to special circumstances, the particular use, structure or lot does not warrant the application of certain design requirements and that the project demonstrates that it is providing the maximum number of off-street parking spaces practicable. On the basis of the above findings and conclusions, the Board finds that there are special circumstances for a reduction in the number of required parking spaces and design requirements, as conditioned and limited herein, which will also be consistent with the intent of the By-Law and which will not increase the detriment to the Town's and neighborhood's inherent use.

1.23 Under Section 5.1.1.5 of the By-Law, a Special Permit to waive certain parking plan and design requirements as set forth in Section 5.1.3, more specifically, in Section 5.1.3(j), to waive the four (4) foot parking setback requirement from the property line and in Section 5.1.3(k), to waive the associated four (4) foot wide landscaped area requirements pertaining to the relief requested from Section (j), if the Board finds that owing to special and unique circumstances, the particular use, structure or lot does not warrant the application of certain design requirements, and that a reduction in the four (4) foot landscaped parking setback requirement are warranted. On the basis of the above findings and conclusions, the Board finds that there are special and unique circumstances justifying the reduction in the landscaping and parking setback requirements, as conditioned and limited herein, which will also be consistent with the intent of the By-Law and which will not increase the detriment to the Town's and neighborhood's inherent use.

THEREFORE, the Board voted 5-0 to GRANT (1) the requested Amendment to Major Project Site Plan Special Permit under Section 7.4 of the By-Law, (2) the requested Special Permit under 3.12.4 for independent living units and assisted living and/or Alzheimer's/memory loss facilities in the Elder Services Zoning District, and (3) the requested Special Permit under Section 5.1.1.5, to waive strict adherence with the requirements of Section 5.1.2 (Required Parking) and Section 5.1.3 (Parking Plan Design Requirements) of the Zoning By-Law, more specifically, Section 5.1.3(j), to waive a four-foot minimum setback from the lot line to parking spaces, maneuvering aisles and driveways, and in Section 5.1.3(k), to waive the landscape requirements requiring that the four-foot setbacks be landscaped; subject to the following plan modifications, conditions and limitations.

PLAN MODIFICATIONS

Prior to the issuance of a building permit or the start of any construction on the site, the Petitioner shall cause the Plan to be revised to show the following additional, corrected, or modified information. The Building Inspector shall not issue any building permit nor shall he permit any construction activity on the site to begin on the site until and unless he finds that the Plan is revised to include the following additional corrected or modified information. Except where otherwise provided, all such information shall be subject to the approval of the Building Inspector. Where approvals are required from persons other than the Building Inspector, the Petitioner shall be responsible for providing a written copy of such approvals to the Building Inspector before the Inspector shall issue any building permit or permit for any construction on the site. The Petitioner shall submit nine copies of the final Plans as approved for construction by the Building Inspector to the Board prior to the issuance of a Building Permit.

- 2.0 The Plan shall be modified to include the requirements and recommendations of the Board, Department of Public Works and Fire Department for review and comment, and to the Board for approval and endorsement. All requirements and recommendations of the Department of Public Works, Fire Department and Board, set forth below, shall be met by the Petitioner.
 - a. The Plan shall be modified to eliminate the 6 "landbanked" parking spaces as well as the proposed driveway access at the northerly corner of the lot.

CONDITIONS

3.0 The following conditions of this approval shall be strictly adhered to. Failure to adhere to these conditions or to comply with all applicable laws and permit conditions shall give the Board the rights and remedies set forth in Section 3.44 hereof.

- This permit is issued for the operation of an 143-unit facility comprised of 64 independent living units (70 bedrooms), 42 regular assisted-living units (45 beds) and 37 Alzheimer's related assisted-living units (43 beds) specializing in Alzheimer's and other memory loss related conditions. Notwithstanding the above, the Petitioner may reallocate the 88 assisted living beds to either the regular assisted living classification or the Alzheimer's assisted living classification as authorized under Section 3.4 below.
- 3.2 No administrative use, other than that needed for operation of the independent living units regular assisted living units, Alzheimer's assisted living units or other community activity incidental to the facility being conducted on the site, shall be allowed.
- 3.3 The building, parking areas, driveways, walkways, landscape areas, and other site and offsite features shall be constructed in accordance with the Plan, as modified by this Decision. Any changes, revisions or modifications to the Plan, as modified by this Decision, shall require approval by the Board.
- 3.4 The proposed building and support services shall contain the dimensions and shall be located on that portion of the locus exactly as shown on the Plan, as modified by this Decision, and in accordance with the applicable dimensional requirements of the By-Law. Notwithstanding the above, the Petitioner may revise the floor plans without the need for additional hearings or approvals, provided that the total square footage of the building does not increase, the total number of independent living units does not exceed 64 units (70 bedrooms), the total number of assisted-living units does not exceed 79, and the total number of assisted living beds (whether they be regular assisted living beds or Alzheimer's related assisted living beds) does not exceed 88.
- 3.5 All buildings and land constituting the premises shall remain under a single ownership.
- 3.6 The staffing for the 79 regular assisted living units and Alzheimer's related units shall be limited to 44 employees on-site during the largest shift, including both assisted living employees, and other assisted living affiliated employees. The evening shift (11:00 p.m. to 7:00 a.m.) shall have substantially less than 44 employees.
- 3.7 Sufficient parking shall be provided on the locus at all times in accordance with the Plan, as modified by this Decision, and there shall be no parking of motor vehicles off the locus at any time.
- A total of 101 parking spaces (67 garage spaces and 34 surface parking spaces) shall be provided on the site at all times in accordance with the Plan, as modified by this Decision. A total of 93 of the 101 parking spaces (67 garage spaces and 26 surface parking spaces) shall be available to serve the Wingate at Needham facility. All off-street parking shall comply with the requirements of Section 5.1.3 of the By-Law, except as otherwise waived by this Decision.
- 3.9 All required handicapped parking spaces shall be provided including above-grade signs at each space that include the international symbol of accessibility on a blue background with the words "Handicapped Parking Special Plate Required Unauthorized Vehicles May Be Removed At Owners Expense". The quantity & design of spaces, as well as the required signage shall comply with the M.S.B.C. 521 CMR Architectural Access Board Regulation and the Town of Needham General By-Laws, both as may be amended from time to time.
- 3.10 All shift changes shall be staggered and the Petitioner shall use best efforts to prevent shift changes during the a.m. and p.m. peak-hour traffic periods.

- 3.11 The emergency gas generator installed at the front of the building shall be operated so as to comply with all applicable Federal, state and local regulations addressing sound attenuation to protect adjoining properties and the nearest inhabited residence from excessive noise, as defined in said regulations. The emergency gas generator shall also be screened as far as practical so as to minimize the visibility of the emergency generator.
- 3.12 Normal maintenance and testing of the emergency generator shall be limited to one occurrence per month between the weekday hours of 9:00 a.m. and 5:00 p.m. for a period not to exceed 2 hours. The emergency generator shall not operate more than 300 hours per rolling 12 month period, including the normal maintenance and testing procedure as recommended by the manufacturer and periods when the primary power source for Wingate Senior Living at Needham, Inc., has been lost during an emergency, such as a power outage, an on-site disaster or an act of God.
- 3.13 This Special Permit to operate an 143-unit facility as described in this Decision is issued to Wingate Senior Living at Needham, Inc., 63 Kendrick Street, Needham, Massachusetts, and the operation may not be transferred, set over, or assigned by Wingate Senior Living at Needham, Inc., to any other person or entity without the prior written approval of the Board following such notice and hearing, if any, as the Board, in its sole and exclusive discretion, shall deem due and sufficient. Notwithstanding the above, this permit may be transferred to an affiliated entity (under common control with Wingate Senior Living at Needham, Inc.,) without Board approval or action, provided the Board is provided with a copy of the name and address of such entity.
- 3.14 The assisted living units residents' shall not have any kitchen facilities; all dining activities are to be communal; Non-Alzheimer's and memory loss assisted living units may have a refrigerator, microwave and sink in the unit. The Petitioner shall maintain a charcoal filtration ventilation system for cooking exhaust and shall operate the kitchen without negative impact on the abutting properties from cooking odors.
- 3.15 As described in the Traffic Impact Access Study (Exhibit 5), the Petitioner shall install a Stop-sign at the Gould Street exiting driveway. Additionally, a STOP sign and a "Right Turn Only" sign shall be maintained at the driveway approach to Highland Avenue. The left-turn out movement at Highland Avenue shall be restricted during all times of the day. To ensure compliance with the "Right Turn Only" requirement at Highland, the Petitioner shall advise its employees of this condition and shall secure its enforcement. Any new signage or vegetation shall be set back sufficiently so as not to obstruct any sight lines exiting the driveways.
- 3.16 Prior to the issuance of the occupancy permit, the Petitioner shall make good faith efforts to secure permission from the MBTA for the installation of the plantings located within the MBTA right-of-way as shown on the Plan as modified by this Decision. Should said permission be denied by the MBTA the subject plantings shall be installed on the property of the Petitioner in the alternative. In either event the landscaping shall be installed prior to the issuance of the Permanent Occupancy Permit for the Project.
- 3.17 All utilities, including telephone and electrical service, shall be installed underground from the street line.
- 3.18 The Petitioner shall secure from the Needham Department of Public Works a Sewer Connection Permit or impact fee, if applicable.

- 3.19 The Petitioner shall secure from the Needham Department of Public Works a Street Opening Permit and any grants of location that are required from the utility companies.
- 3.20 The Petitioner shall secure from the Needham Department of Public Works a Water Main and Water Service Connection Permit per Town requirements.
- 3.21 The Petitioner shall seal all abandoned drainage connections and other drainage connections where the developer cannot identify the sources of the discharges. Sealing of abandoned drainage facilities and abandonment of all utilities shall be carried out per Town requirements.
- 3.22 The Petitioner shall connect the sanitary sewer line only to known sources. All known sources that cannot be identified shall be disconnected and properly sealed.
- 3.23 The construction, operation and maintenance of any subsurface infiltration facility, on-site catch basins and pavement areas, shall conform to the requirements outlined in the EPA's Memorandum of Understanding signed by the Needham Board of Selectmen.
- 3.24 The Petitioner shall implement the following maintenance plan:
 - a. Parking lot sweeping sweep twice per year; once in spring after snowmelt, and early fall.
 - b. Catch basin cleaning inspect basins twice per year; in late spring and fall. Clean basins in spring.
 - c. Proprietary Devices inspect and maintain per manufacturing recommendations.
- 3.25 The maintenance of site and parking lot landscaping shall be the responsibility of the Petitioner and the site and parking lot landscaping shall be maintained in good condition.
- 3.26 The Storm Water Management Policy form shall be submitted to the Town of Needham signed and stamped and shall include construction mitigation and an operation and maintenance plan as described in the policy. A copy of the inspection reports for the Operations and Maintenance Program of the Stormwater Management Report shall be provided to the Planning Board on an annual basis.
- 3.27 All solid waste shall be removed from the site by a private contractor. Snow shall also be removed or plowed by private contractor. All snow shall be removed or plowed such that the total number and size of parking spaces are not reduced.
- 3.28 All deliveries and trash dumpster pick up shall occur only between the hours of 8:00 a.m. and 6:00 p.m., Monday through Saturday, not at all on Sundays and holidays. The trash shall be picked up no less than two times per week. The dumpster shall be screened with a wooden fence, which shall be maintained in good condition. The dumpster shall be maintained in a locked condition with the key controlled by management so as to ensure compliance with the trash removal conditions of this permit. The dumpster shall be emptied, cleaned and maintained to meet Board of Health standards.
- 3.29 All lights shall be shielded and adjusted during the evening hours to prevent any annoyance to the neighbors. The Petitioner shall adjust its parking lights during the night and early morning. Between the hours of 10:00 p.m. and 11:00 p.m., the Petitioner shall shut off most of the parking lot lights using the lights on the building to shine down and provide basic

- security. The building lights shall be set at a low light level to prevent any annoyance to the neighbors.
- 3.30 The Petitioner shall make available to all staff shuttle service to the Needham Heights MBTA train stop whenever such train service is available.
- 3.31 In constructing and operating the proposed building on the locus pursuant to this Special Permit, due diligence shall be exercised and reasonable efforts shall be made at all times to avoid damage to the surrounding areas or adverse impact on the environment.
- Excavation material and debris, other than rock used for walls and ornamental purposes and fill suitable for placement elsewhere on the site, shall be removed from the site.
- 3.33 All construction staging shall be on-site. No construction parking shall be on public streets. Construction parking shall be all on site or a combination of on-site and off-site parking at locations in which the Petitioner can make suitable arrangements. Construction staging plans shall be included in the final construction documents prior to the filing of a Building Permit and shall be subject to the review and approval of the Building Inspector.
- 3.34 The following interim safeguards shall be implemented during construction:
 - a. The hours of construction shall be 7:00 a.m. to 5:00 p.m. Monday through Saturday.
 - b. The Petitioner's contractor shall provide temporary security chain-link or similar type fencing around the portions of the project site, which require excavation or otherwise pose a danger to public safety.
 - c. The Petitioner's contractor shall designate a person who shall be responsible for the construction process. That person shall be identified to the Police Department, the Department of Public Works, the Building Inspector and the abutters and shall be contacted if problems arise during the construction process. The designee shall also be responsible for assuring that truck traffic and the delivery of construction material does not interfere with or endanger traffic flow on Highland Avenue and Gould Street.
 - d. The Petitioner shall take appropriate steps to minimize, to the maximum extent feasible, dust generated by the construction including, but not limited to, requiring subcontractors to place covers over open trucks transporting construction debris and keeping Highland Avenue and Gould Street clean of dirt and debris and watering appropriate portions of the construction site from time to time as may be required.
- 3.35 No building permit shall be issued in pursuance of the Special Permit and Site Plan Approval until:
 - a. The final plans shall be in conformity with those approved by the Board, and a statement certifying such approval shall have been filed by this Board with the Building Inspector.
 - b. A construction management and staging plan shall have been submitted to the Police Chief and Building Inspector for their review and approval.
 - c. The Petitioner shall prepare and file with the Board and the Norfolk County Registry of Deeds a plan which shows assessor's Plan 77, Parcels 25 and 61 merged, using customary surveyor's notation.

- d. The Petitioner shall have recorded with the Norfolk County Registry of Deeds a certified copy of this Decision granting this Special Permit and Site Plan Approval with the appropriate reference to the book and page number of the recording of the Petitioner's title deed or notice endorsed thereon.
- 3.36 No building or structure, or portion thereof, subject to this Special Permit and Site Plan Approval shall be occupied until:
 - a. An as-built plan, supplied by the engineer of record certifying that the on-site and off-site project improvements were built according to the approved documents, has been submitted to the Board and Department of Public Works. The as-built plan shall show the building, all finished grades and final construction details of the driveways, parking areas, drainage systems, utility installations, and sidewalk and curbing improvements on-site and off-site, in their true relationship to the lot lines. In addition to the engineer of record, said plan shall be certified by a Massachusetts Registered Land Surveyor.
 - b. There shall be filed with the Building Inspector and Board a statement by the Department of Public Works certifying that the finished grades and final construction details of the driveways, parking areas, drainage systems, utility installations, and sidewalks and curbing improvements on-site and off-site, have been constructed to the standards of the Town of Needham Department of Public Works and in accordance with the approved Plan.
 - c. There shall be filed with the Board and Building Inspector a Final Construction Control Document signed by a registered architect upon completion of construction.
 - d. There shall be filed with the Board and Building Inspector an as-built Landscaping Plan showing the final location, number and type of plant material, final landscape features, parking areas, and lighting installations. Said plan shall be prepared by the landscape architect of record and shall include a certification that such improvements were completed according to the approved documents.
 - e. Notwithstanding the provisions of Sections a, b, and d hereof, the Building Inspector may issue one or more certificates for temporary occupancy of all or portions of the buildings prior to the installation of final landscaping and other site features, provided that the Petitioner shall have first filed with the Board in an amount not less than 135% of the value of the aforementioned remaining landscaping or other work to secure installation of such landscaping and other site and construction features.
- 3.37 There shall be five new affordable units within the proposed addition for a total of seven affordable units in the entire building, as expanded pursuant to this decision. The seven affordable housing units in the project shall be as defined in Section 1.3 of the By-Law. The five new affordable units shall be distributed as follows: (a) one affordable 1-bedroom unit shall be located in the proposed addition; (b) three affordable one-bedroom units with dens shall be located in the proposed addition; and (c) one affordable 2-bedroom unit shall be located in the proposed addition. Said units shall be proportionately distributed throughout the proposed addition in terms of both unit size and type consistent with Local Initiative Guidelines, Section VI.B.5.d. All units shall comply with all applicable provisions of the Department of Housing and Community Development's (DHCD) Chapter 40B Guidelines, dated February 22, 2008, as amended, and shall be eligible for the Chapter 40B Subsidized Housing Inventory as "Local Action Units" under the DHCD Local

Initiative Program. It shall be the Petitioner's responsibility to prepare any and all applications, exhibits, and supporting documentation that DHCD requires in order to approve the unit for the Subsidized Housing Inventory and to record a DHCD-approved affordable housing restriction with the Norfolk Registry of Deeds or the Land Court.

- 3.38 Subject to DHCD approval, the Petitioner shall set aside up to 70% of the affordable units as local preference units, i.e. offered first to Needham residents or persons with a connection to the Town, in accordance with a local preference policy determined by the Board of Selectmen consistent with DHCD directives and applicable state and federal laws. The Town will provide reasonable assistance to the Petitioner in designing an affirmative marketing plan for the Affordable Units. The Town may delegate oversight of an affirmative marketing plan and local preference selection procedures to the Needham Housing Authority or another organization deemed appropriate by the Board to represent the Town interests. All costs associated with preparing and implementing the affirmative marketing plan and local preference procedures shall be paid by the Petitioner.
- 3.39 The Town of Needham intends to enter into an agreement with a person or entity selected by the Town Manager and approved by DHCD to monitor the Petitioner's compliance with the affordability restriction on an annual basis and to provide an annual report of its monitoring to the Town (the "Monitoring Agent"). The Petitioner shall pay for the cost of the Monitoring Agent pursuant to a separate agreement between the Town and the Petitioner. The Petitioner shall cooperate with the monitoring agent by providing all documentation necessary to demonstrate that the affordable housing units comply with Section 1.3 of the Zoning By-Law and this Decision, and are occupied by income-eligible households.
- Within 60 days of the issuance of the building permit for the project, the Petitioner shall 3.40 deliver an executed Local Initiative Program application to the Board for its review and approval. Said application shall meet the requirements of 760 CMR and Local Initiative Program Guidelines. The Petitioner shall make good faith efforts to obtain DHCD approval of the LIP application and to record the DHCD-approved housing restriction in a prompt manner. Notwithstanding the above, the DHCD-approved housing restriction shall be recorded with the Norfolk Registry of Deeds of the Land Court within 6 months of the issuance of a Permanent Certificate of Occupancy, unless otherwise extended by the Board or the Planning Director. The Board delegates to the Planning Director the authority to grant such extensions administratively, while retaining the right to grant such extensions itself. Provided that the Petitioner continues to make good faith efforts to obtain and record said DHCD-approved housing restriction, the Board and/or the Planning Board shall grant said extensions for periods of not less than 3 months." A permanent certificate of occupancy for the full occupancy of the addition and commencement of operation of the addition to the facility (including occupancy by residents) is authorized to be issued prior to the completion of the requirements set forth in Sections 3.37, 3.38 and 3.39 of the Decision, including the recording of the DHCD-Approved Affordable Housing Restriction described in the Decision. The permanent certificate of occupancy that has been issued for the existing building shall remain in full force and effect.
- 3.41 In addition to the provisions of this approval, the Petitioner must comply with all requirements of all state, federal, and local boards, commissions or other agencies, including, but not limited to, the Board of Selectmen, Building Inspector, Fire Department, Department of Public Works, Conservation Commission, Police Department, and Board of Health.

- 3.42 That the portion of building or structure authorized for construction by this permit shall not be occupied or used, and no activity except the construction activity authorized by this permit shall be conducted within said area until a Certificate of Occupancy and Use or a Certificate of Temporary Occupancy and Use has been issued by the Building Inspector.
- 3.43 The Petitioner, by accepting this permit Decision, warrants that the Petitioner has included all relevant documentation, reports, and information available to the Petitioner in the application submitted, that this information is true and valid to the best of the Petitioner's knowledge.
- Violation of any of the conditions of this Decision shall be grounds for revocation 3.44 of any building permit or certificate of occupancy granted hereunder as follows: In the case of violation of any conditions of this Decision, the Town will notify the owner of such violation and give the owner reasonable time, not to exceed thirty (30) days, to cure the violation. If, at the end of said thirty (30) day period, the Petitioner has not cured the violation, or in the case of violations requiring more than thirty (30) days to cure, has not commenced the cure and prosecuted the cure continuously, the permit granting authority may, after notice to the Petitioner, conduct a hearing in order to determine whether the failure to abide by the conditions contained herein should result in a recommendation to the Building Inspector to revoke any building permit or certificate of occupancy granted hereunder. This provision is not intended to limit or curtail the Town's other remedies to enforce compliance with the conditions of this Decision including. without limitation, by an action for injunctive relief before any court of competent jurisdiction. The Petitioner agrees to reimburse the Town for its reasonable costs in connection with the enforcement of the conditions of this Decision if the Town prevails in such enforcement action.

LIMITATIONS

- 4.0 The authority granted to the Petitioner by this permit is limited as follows:
- 4.1 This permit applies only to the site and off-site improvements, which is the subject of this petition. All construction to be conduced on-site and off-site shall be conducted in accordance with the terms of this permit and shall be limited to the improvements on the Plan, as modified by this Decision.
- 4.2 There shall be no further development of this site without further site plan approval as required under Section 7.4 of the By-Law. The Board, in accordance with M.G.L., Ch. 40A, S.9 and said Section 7.4, hereby retains jurisdiction to (after hearing) modify and/or amend the conditions to, or otherwise modify, amend or supplement, this Decision and to take other action necessary to determine and ensure compliance with the Decision.
- 4.3 This Decision applies only to the requested Special Permits and Site Plan Review. Other permits or approvals required by the By-Law, other governmental boards, agencies or bodies having jurisdiction shall not be assumed or implied by this Decision.
- 4.4 The conditions contained within this Decision are limited to this specific application and are made without prejudice for any further modification or amendment.

- 4.5 No approval of any indicated signs or advertising devices is implied by this Decision.
- 4.6 The foregoing restrictions are stated for the purpose of emphasizing their importance but are not intended to be all-inclusive or to negate the remainder of the By-Law.
- 4.7 This Site Plan Special Permit shall lapse on October 20, 2016, if substantial use thereof has not sooner commenced, except for good cause. Any requests for an extension of the time limits set forth herein must be in writing to the Board at least 30 days prior to October 20, 2016. The Board herein reserves its rights and powers to grant or deny such extension without a public hearing. The Board, however, shall not grant an extension as herein provided unless it finds that the use of the property in question or the construction of the site has not begun, except for good cause.
- 4.8 Reference to this Decision shall be entered upon the Plan, and this approval shall be recorded in the Norfolk District Registry of Deeds. This Special Permit shall not take effect until a copy of this Decision bearing the certification of the Town Clerk that twenty (20) days have elapsed after the Decision has been filed in the Town Clerk's office or that if such appeal has been filed, that it has been dismissed or denied is recorded with Norfolk District Registry of Deeds and until the Petitioner has delivered a certified copy of the recorded document to the Board.

The provisions of this Special Permit shall be binding upon every owner or owner of the lots and the executors, administrators, heirs, successors and assigns of such owners, and the obligations and restrictions herein set forth shall run with the land, as shown of the Plan, as modified by this Decision, in full force and effect for the benefit of and enforceable by the Town of Needham.

Any person aggrieved by this Decision may appeal pursuant to General Laws, Chapter 40A, Section 17, within twenty (20) days after filing of this Decision with the Needham Town Clerk.

Witness our hands this 20 th day of October, 201	14.	
NEEDHAM PLANNING BOARD		
Martin Jacobs, Chairman Jeanne S. McKnight, Vice Chairman		
Bruce T. Eisenhut School Common Sam Bass Warner		
COMMONWEALTI	H OF MASSACHUSETTS	
Norfolk, ss	OCA- ZO 2014	
of Needham, Massachusetts, proved to me the was	ore me, the undersigned notary public, personally to of the members of the Planning Board of the Town through satisfactory evidence of identification, which to be the person whose name ment, and acknowledged the foregoing to be the free	
	Notary Public My Commission Expires: April 2, 2	015
on Wingate Senior Living at Needham, Inc., 6	certify that the 20-day appeal period on the Decision 63 Kendrick Street, Needham, Massachusetts 02494, nade to this office. (All Judicial Appeals taken from	
Date	Theodora K. Eaton, Town Clerk	
Copy sent to: Petitioner - Certified Mail # Town Clerk Building Inspector Director, PWD Board of Health Conservation Commission	Board of Selectmen Engineering Fire Department Police Department Roy Cramer Parties in Interest	

The following testimony related to the proposal at 1688 Central Avenue was previously distributed and is being distributed again for convenience.

Exhibits received for 1688 Central Avenue

All testimony received between March 1, 2021 and December 20, 2021

(hearing closed on December 8, 2021 with the exception of allowing specific limited information to be received as detailed in the vote to close the hearing)

Applicant submittals. Application, Memos, Plans, Traffic Studies, Drainage. Etc.

- 1. Properly executed Application for Site Plan Review for: (1) A Major Project Site Plan under Section 7.4 of the Needham By-Law, dated May 20, 2021.
- 2. Letter from Matt Borrelli, Manager, Needham Enterprises, LLC, dated March 16, 2021.
- 3. Letter from Attorney Evans Huber, dated March 11, 2021.
- 4. Letter from Attorney Evans Huber, dated March 12, 2021.
- 5. Letter from Attorney Evans Huber, dated March 16, 2021.
- 6. Architectural plans entitled "Needham Enterprises, Daycare Center, 1688 central Avenue," prepared by Mark Gluesing Architect, 48 Mackintosh Avenue, Needham, MA, consisting of 4 sheets: Sheet 1, Sheet A1-0, entitled "1st Floor Plan, dated Mach 8, 2021; Sheet 2, Sheet A1-1, entitled "Roof Plan," dated March 8, 2021; Sheet 3, Sheet A2-1 showing "Longitudinal Section," "Nursery/Staff Room Section," "Toddler 1/ Craft Section at Dormer," and "Playspace/Lobby Section," dated March 8, 2021; and Sheet 4, Sheet A3-0, showing "North Elevation," "West Elevation," "East Elevation," and "South Elevation," dated March 8, 2021.
- 7. Plans entitled "Site Development Plans, Daycare, 1688 Central Avenue, Needham, MA," consisting of 10 sheets, prepared by Glossa Engineering, Inc., 46 East Street, East Walpole, MA, 02032, Sheet 1, Cover Sheet, dated June 22, 2020; Sheet 2, entitled "Existing Conditions Plan of Land in Needham, MA," dated June 22, 2020; Sheet 3, entitled "Site Plan," dated June 22, 2020; Sheet 4, entitled "Grading and Utilities Plan of Land," dated June 22, 2020; Sheet 5, entitled "Landscaping Plan," dated June 22, 2020; Sheet 6, entitled "Construction Details," dated June 22, 2020; Sheet 7, entitled "Construction Details," dated June 22, 2020; Sheet 8, entitled "Sewer Extension Plan and Profile," dated November 19, 2020; Sheet 9, entitled "Construction Period Plan," dated June 22, 2020; Sheet 10, entitled "Appendix, Photometric and Site Lighting," dated June 22, 2021, all plans stamped January 21, 2021.
- 8. Traffic Impact Assessment, prepared by Gillon Associates, Traffic and Parking Specialists, dated March 2021.
- 9. Stormwater Report prepared by Glossa Engineering, Inc., 46 East Street, East Walpole, MA, 02032, dated June 22, 2020, stamped January 26, 2021.
- 10. Traffic Impact Assessment, prepared by Gillon Associates, Traffic and Parking Specialists, revised March 2021.

- 11. Plans entitled "Site Development Plans, Daycare, 1688 Central Avenue, Needham, MA," consisting of 9 sheets, prepared by Glossa Engineering, Inc., 46 East Street, East Walpole, MA, 02032, Sheet 1, Cover Sheet, dated June 22, 2020, revised April 15, 2021; Sheet 2, entitled "Existing Conditions Plan of Land in Needham, MA," dated June 22, 2020, revised April 15, 2021; Sheet 3, entitled "Site Plan," dated June 22, 2020, revised April 15, 2021; Sheet 4, entitled "Grading and Utilities Plan of Land," dated June 22, 2020, revised April 15, 2021; Sheet 5, entitled "Landscaping Plan," dated June 22, 2020, revised April 15, 2021; Sheet 6, entitled "Construction Details," dated June 22, 2020, revised April 15, 2021; Sheet 7, entitled "Construction Details," dated June 22, 2020, revised April 15, 2021; Sheet 8, entitled "Sewer Extension Plan and Profile," dated November 19, 2020, revised April 15, 2021; Sheet 9, entitled "Construction Period Plan," dated June 22, 2020, revised April 15, 2021, all plans stamped April 15, 2021.
- 12. Architectural plans entitled "Needham Enterprises, Daycare Canter, 1688 central Avenue," prepared by Mark Gluesing Architect, 48 Mackintosh Avenue, Needham, MA, consisting of 2 sheets: Sheet 1, Sheet A3-0, showing "North Elevation," "West Elevation," "East Elevation," and "South Elevation," dated March 8, 2021, revised March 30, 2021; Sheet 2, Sheet A1-0, entitled "1st Floor Plan, dated March 8, 2021, revised March 30, 2021.
- 13. Letter from Attorney Evans Huber, dated April 21, 2021.
- 14. Memorandum from Attorney Evans Huber, dated May 5, 2021.
- 15. Letter from Attorney Evans Huber, dated May 14, 2021.
- 16. Plans entitled "Site Development Plans, Daycare, 1688 Central Avenue, Needham, MA," consisting of 9 sheets, prepared by Glossa Engineering, Inc., 46 East Street, East Walpole, MA, 02032, Sheet 1, Cover Sheet, dated June 22, 2020, revised April 15, 2021 and June 2, 2021; Sheet 2, entitled "Existing Conditions Plan of Land in Needham, MA," dated June 22, 2020, revised April 15, 2021 and June 2, 2021; Sheet 3, entitled "Site Plan," dated June 22, 2020, revised April 15, 2021 and June 2, 2021; Sheet 4, entitled "Grading and Utilities Plan of Land," dated June 22, 2020, revised April 15, 2021 and June 2, 2021; Sheet 5, entitled "Landscaping Plan," dated June 22, 2020, revised April 15, 2021 and June 2, 2021; Sheet 6, entitled "Construction Details," dated June 22, 2020, revised April 15, 2021 and June 2, 2021; Sheet 7, entitled "Construction Details," dated June 22, 2020, revised April 15, 2021 and June 2, 2021; Sheet 8, entitled "Sewer Extension Plan and Profile," dated November 19, 2020, revised April 15, 2021 and June 2, 2021; Sheet 9, entitled "Construction Period Plan," dated June 22, 2020, revised April 15, 2021 and June 2, 2021, all plans stamped June 2, 2021.
- 17. Architectural plans entitled "Needham Enterprises, Daycare Canter, 1688 central Avenue," prepared by Mark Gluesing Architect, 48 Mackintosh Avenue, Needham, MA, consisting of 2 sheets: Sheet 1, Sheet A1-0, entitled "1st Floor Plan, dated March 8, 2021, revised March 30, 2021 and May 30, 2021; Sheet 2, Sheet A3-0, showing "North Elevation," "West Elevation," "East Elevation," and "South Elevation," dated March 8, 2021, revised March 30, 2021 and May 30, 2021.
- 18. Traffic Impact Assessment, prepared by Gillon Associates, Traffic and Parking Specialists, revised June 2021.
- 19. Letter from Attorney Evans Huber, dated June 14, 2021.

- 20. Presentation shown at the July 20, 2021 hearing.
- 21. Memorandum from Attorney Evans Huber, dated August 4, 2021.
- 22. Plans entitled "Site Development Plans, Daycare, 1688 Central Avenue, Needham, MA," consisting of 9 sheets, prepared by Glossa Engineering, Inc., 46 East Street, East Walpole, MA, 02032, Sheet 1, Cover Sheet, dated June 22, 2020, revised April 15, 2021, June 2, 2021 and July 28, 2021; Sheet 2, entitled "Existing Conditions Plan of Land in Needham, MA," dated June 22, 2020, revised April 15, 2021, June 2, 2021 and July 28, 2021; Sheet 3, entitled "Site Plan," dated June 22, 2020, revised April 15, 2021, June 2, 2021 and July 28, 2021; Sheet 4, entitled "Grading and Utilities Plan of Land," dated June 22, 2020, revised April 15, 2021, June 2, 2021 and July 28, 2021; Sheet 5, entitled "Construction Details," dated June 22, 2020, revised April 15, 2021 and June 2, 2021; Sheet 6, entitled "Construction Details," dated June 22, 2020, revised April 15, 2021, June 2, 2021 and July 28, 2021; Sheet 7, entitled "Sewer Extension Plan and Profile," dated November 19, 2020, revised April 15, 2021, June 2, 2021 and July 28, 2021; Sheet 8, entitled "Construction Period Plan," dated June 22, 2020, revised April 15, 2021, June 2, 2021 and July 28, 2021; Sheet 9, entitled "Landscaping Plan," dated June 22, 2020, revised April 15, 2021, June 2, 2021 and July 28, 2021, all plans stamped July 28, 2021.
- 23. Traffic Impact Assessment, prepared by Gillon Associates, Traffic and Parking Specialists, dated August 11, 2021.
- 24. Technical Memorandum, from John Gillon, prepared by Gillon Associates, Traffic and Parking Specialists, dated September 2, 2021.
- 25. Letter from Attorney Evans Huber, dated September 30, 2021.
- 26. Plans entitled "Site Development Plans, Daycare, 1688 Central Avenue, Needham, MA," consisting of 9 sheets, prepared by Glossa Engineering, Inc., 46 East Street, East Walpole, MA, 02032, Sheet 1, Cover Sheet, dated June 22, 2020, revised April 15, 2021, June 2, 2021, July 28, 2021 and September 28, 2021; Sheet 2, entitled "Existing Conditions Plan of Land in Needham, MA," dated June 22, 2020, revised April 15, 2021, June 2, 2021, July 28, 2021 and September 28, 2021; Sheet 3, entitled "Site Plan," dated June 22, 2020, revised April 15, 2021, June 2, 2021, July 28, 2021 and September 28, 2021; Sheet 4, entitled "Grading and Utilities Plan of Land," dated June 22, 2020, revised April 15, 2021, June 2, 2021, July 28, 2021 and September 28, 2021; Sheet 5, entitled "Construction Details," dated June 22, 2020, revised April 15, 2021, June 2, 2021, July 28, 2021 and September 28, 2021; Sheet 6, entitled "Construction Details," dated June 22, 2020, revised April 15, 2021, June 2, 2021, July 28, 2021 and September 28, 2021; Sheet 7, entitled "Sewer Extension Plan and Profile," dated November 19, 2020, revised April 15, 2021, June 2, 2021, July 28, 2021 and September 28, 2021; Sheet 8, entitled "Construction Period Plan," dated June 22, 2020, revised April 15, 2021, June 2, 2021, July 28, 2021 and September 28, 2021; Sheet 9, entitled "Landscaping Plan," dated June 22, 2020, revised April 15, 2021, June 2, 2021, July 28, 2021 and September 28, 2021, all plans stamped September 29, 2021.
- 27. Plan entitled "Appendix, Photometric and Site Lighting Plan, 1688 Central Ave in Needham," dated June 22, 2020, revised April 15, 2021, June 2, 2021, July 28, 2021 and September 28, 2021.
- 28. Memorandum from Attorney Evans Huber, dated October 13, 2021.

- 29. Email from Evans Huber, dated October 14, 2021 with two attachments: Vehicle Count for September 2019 and Vehicle Count for February 2020.
- 30. Memorandum from Attorney Evans Huber, dated October 28, 2021.
- 31. Plans entitled "Site Development Plans, Daycare, 1688 Central Avenue, Needham, MA," consisting of 9 sheets, prepared by Glossa Engineering, Inc., 46 East Street, East Walpole, MA, 02032, Sheet 1, Cover Sheet, dated June 22, 2020, revised April 15, 2021, June 2, 2021, July 28, 2021, September 28, 2021 and October 28, 2021; Sheet 2, entitled "Existing Conditions Plan of Land in Needham, MA," dated June 22, 2020, revised April 15, 2021, June 2, 2021, July 28, September 28, 2021 and October 28, 2021; Sheet 3, entitled "Site Plan," dated June 22, 2020, revised April 15, 2021, June 2, 2021, July 28, 2021, September 28, 2021 and October 28, 2021; Sheet 4, entitled "Grading and Utilities Plan of Land," dated June 22, 2020, revised April 15, 2021, June 2, 2021, July 28, 2021, September 28, 2021 and October 28, 2021; Sheet 5, entitled "Construction Details," dated June 22, 2020, revised April 15, 2021, June 2, 2021, July 28, 2021, September 28, 2021 and October 28, 2021; Sheet 6, entitled "Construction Details," dated June 22, 2020, revised April 15, 2021, June 2, 2021, July 28, 2021, September 28, 2021 and October 28, 2021; Sheet 7, entitled "Sewer Extension Plan and Profile," dated November 19, 2020, revised April 15, 2021, June 2, 2021, July 28, 2021, September 28, 2021 and October 28, 2021; Sheet 8, entitled "Construction Period Plan," dated June 22, 2020, revised April 15, 2021, June 2, 2021, July 28, 2021, September 28, 2021 and October 28, 2021; Sheet 9, entitled "Landscaping Plan," dated June 22, 2020, revised April 15, 2021, June 2, 2021, July 28, 2021, September 28, 2021 and October 28, 2021, all plans stamped October 28, 2021.
- 32. Plan entitled "Appendix, Photometric and Site Lighting Plan, 1688 Central Ave in Needham," dated June 22, 2020, revised April 15, 2021, June 2, 2021, July 28, 2021, September 28, 2021 and October 28, 2021.
- 33. Technical Memorandum, from John Gillon, prepared by Gillon Associates, Traffic and Parking Specialists, dated October 27, 2021.
- 34. Email from Evans Huber, dated November 8, 2021, regarding "1688 Central Ave request for additional peer review fees."
- 35. Memorandum from Attorney Evans Huber, dated November 10, 2021.
- 36. Plans entitled "Site Development Plans, Daycare, 1688 Central Avenue, Needham, MA," consisting of 9 sheets, prepared by Glossa Engineering, Inc., 46 East Street, East Walpole, MA, 02032, Sheet 1, Cover Sheet, dated June 22, 2020, revised April 15, 2021, June 2, 2021, July 28, 2021, September 28, 2021, October 28, 2021 and November 8, 2021; Sheet 2, entitled "Existing Conditions Plan of Land in Needham, MA," dated June 22, 2020, revised April 15, 2021, June 2, 2021, July 28, September 28, 2021, October 28, 2021 and November 8, 2021; Sheet 3, entitled "Site Plan," dated June 22, 2020, revised April 15, 2021, June 2, 2021, July 28, 2021, September 28, 2021, October 28, 2021 and November 8, 2021; Sheet 4, entitled "Grading and Utilities Plan of Land," dated June 22, 2020, revised April 15, 2021, June 2, 2021, July 28, 2021, September 28, 2021, October 28, 2021 and November 8, 2021; Sheet 5, entitled "Landscaping Plan," dated June 22, 2020, revised April 15, 2021, July 28, 2021, September 28, 2021 and November 8, 2021; Sheet 6, entitled "Construction Details," dated June 22, 2020, revised April 15, 2021, July 28, 2021, October 28, 2021 and November 8, 2021; Sheet 7, entitled "Construction Details," dated June 22, 2020, revised April 15, 2021, June 2, 2021, June 2, 2020, revised April 15, 2021, June 2, 2021, June 2, 2020, revised April 15, 2021, June 2, 2021, June 2, 2020, revised April 15, 2021, June 2, 2021, June 2, 2020, revised April 15, 2021, June 2, 2021, June 2, 2020, revised April 15, 2021, June 2, 2021, June 2, 2020, revised April 15, 2021, June 2, 2021, June 2, 2020, revised April 15, 2021, June 2, 2021, June 2, 2020, revised April 15, 2021, June 2, 2021, June 2, 2020, revised April 15, 2021, June 2, 2021, June 2, 2020, revised April 15, 2021, June 2, 2021, June 2, 2020, revised April 15, 2021, June 2, 2021, June 2, 2020, revised April 15, 2021, June 2, 2021, June 2, 2020, revised April 15, 2021, June 2, 2021, June 2, 2020, revised April 15, 2021, June 2, 2021, June 2, 2020, revised April 15, 2021, June

- 2, 2021, July 28, 2021, September 28, 2021, October 28, 2021 and November 8, 2021; Sheet 8, entitled "Sewer Extension Plan and Profile," dated November 19, 2020, revised April 15, 2021, June 2, 2021, July 28, 2021, September 28, 2021, October 28, 2021 and November 8, 2021; Sheet 9, entitled "Construction Period Plan," dated June 22, 2020, revised April 15, 2021, June 2, 2021, July 28, 2021, September 28, 2021, October 28, 2021 and November 8, 2021; Sheet 10, entitled "Appendix, Photometric and Site Lighting Plan, 1688 Central Ave in Needham," dated June 22, 2020, revised April 15, 2021, June 2, 2021, July 28, 2021, September 28, 2021, October 28, 2021 and November 8, 2021, all plans stamped November 8, 2021.
- 37. Plan entitled "1688 Central Turning Radius," consisting of 3 sheets, prepared by Glossa Engineering, Inc., 46 East Street, East Walpole, MA, 02032: sheet 1, showing "20' Delivery Van," dated October 6, 2021; Sheet 2, showing "30' Trash Truck," dated October 6, 2021; sheet 3, showing "30' Trash Truck," dated October 6, 2021.
- 38. Email from Evans Huber, dated November 11, 2021, regarding "Traffic Peer Review: 1688 Central Avenue."
- 39. Letter from Attorney Evans Huber, dated December 2, 2021 with attached minutes from Canton Zoning Board of Appeals from March 25, 2021.
- 40. Memorandum from Attorney Evans Huber, dated December 2, 2021.
- 41. Plans entitled "Site Development Plans, Daycare, 1688 Central Avenue, Needham, MA," consisting of 9 sheets, prepared by Glossa Engineering, Inc., 46 East Street, East Walpole, MA, 02032, Sheet 1, Cover Sheet, dated June 22, 2020, revised April 15, 2021, June 2, 2021, July 28, 2021, September 28, 2021, October 28, 2021, November 8, 2021 and November 22, 2021; Sheet 2, entitled "Existing Conditions Plan of Land in Needham, MA," dated June 22, 2020, revised April 15, 2021, June 2, 2021, July 28, , September 28, 2021, October 28, 2021, November 8, 2021 and November 22, 2021; Sheet 3, entitled "Site Plan," dated June 22, 2020, revised April 15, 2021, June 2, 2021, July 28, 2021, September 28, 2021, October 28, 2021, November 8, 2021 and November 22, 2021; Sheet 4, entitled "Grading and Utilities Plan of Land," dated June 22, 2020, revised April 15, 2021, June 2, 2021, July 28, 2021, September 28, 2021, October 28, 2021, November 8, 2021 and November 22, 2021; Sheet 5, entitled "Landscaping Plan," dated June 22, 2020, revised April 15, 2021, June 2, 2021, July 28, 2021, September 28, 2021, October 28, 2021, November 8, 2021 and November 22, 2021; Sheet 6, entitled "Construction Details," dated June 22, 2020, revised April 15, 2021, June 2, 2021, July 28, 2021, September 28, 2021, October 28, 2021, November 8, 2021 and November 22, 2021; Sheet 7, entitled "Construction Details," dated June 22, 2020, revised April 15, 2021, June 2, 2021, July 28, 2021, September 28, 2021, October 28, 2021, November 8, 2021 and November 22, 2021; Sheet 8, entitled "Sewer Extension Plan and Profile," dated November 19, 2020, revised April 15, 2021, June 2, 2021, July 28, 2021, September 28, 2021, October 28, 2021, November 8, 2021 and November 22, 2021; Sheet 9, entitled "Construction Period Plan," dated June 22, 2020, revised April 15, 2021, June 2, 2021, July 28, 2021, September 28, 2021, October 28, 2021, November 8, 2021 and November 22, 2021; Sheet 10, entitled "Appendix, Photometric and Site Lighting Plan, 1688 Central Ave in Needham," dated June 22, 2020, revised April 15, 2021, June 2, 2021, July 28, 2021, September 28, 2021, October 28, 2021, November 8, 2021 and November 22, 2021, all plans stamped November 22, 2021.
- 42. Letter from Attorney Evans Huber, dated December 16, 2021, with two attachments: (1) Letter from Attorney Evans Huber dated September 30, 2021; and (2) estimated cost to relocate daycare provided by Glossa Engineering, dated December 15, 2021.

Peer Review on Traffic

- 43. Letter from John W. Diaz, Greenman-Pedersen, Inc., dated July 15, 2021, regarding traffic impact peer review.
- 44. Memo prepared by John T. Gillon, Gillon Associates, Traffic and Parking Specialists, dated August 21, 2021, transmitting Response to Greenman-Pedersen, Inc. peer review.
- 45. Letter from John W. Diaz, Greenman-Pedersen, Inc., dated August 26, 2021, regarding traffic impact peer review.
- 46. Letter from John W. Diaz, Greenman-Pedersen, Inc., dated October 18, 2021, regarding traffic impact peer review.
- 47. Email thread between John Glossa and John Diaz, most recent email dated October 28, 2021.
- 48. Letter from John W. Diaz, Greenman-Pedersen, Inc., dated November 1, 2021, regarding traffic impact peer review, with accompanying marked up site plans from October 28, 2021.
- 49. Email from John Diaz, dated November 16, 2021.
- 50. Letter from John W. Diaz, Greenman-Pedersen, Inc., dated November 16, 2021, regarding traffic impact peer review.
- 51. Letter from John W. Diaz, Greenman-Pedersen, Inc., dated December 17, 2021, regarding traffic impact peer review.

Staff/Board Comments.

- 52. Memorandum from the Design Review Board, dated March 22, 2021.
- 53. Memorandum from the Design Review Board, dated May 14, 2021.
- 54. Memorandum from the Design Review Board, dated August 13, 2021.
- 55. Interdepartmental Communication (IDC) to the Board from Tara Gurge, Health Department, dated March 24, 2021, April 27, 2021, August 9, 2021, August 16, 2021 (with attachment "Environmental Risk Management Review," prepared by PVC Services, LLC dated March 17, 2021), November 18, 2021 (with attachment of Board of Health 11/16/21 agenda), November 18, 2021 and December 16, 2021 (with attached Board of Health 12/14/21 agenda).
- 56. IDC to the Board from David Roche, Building Commissioner, dated March 22, 2021.

- 57. IDC to the Board from Chief Dennis Condon, Fire Department, dated March 29, 2021, April 27, 2021 and August 9, 2021
- 58. IDC to the Board from Chief John J. Schlittler, Police Department, dated May 6, 2021.
- 59. IDC to the Board from Thomas Ryder, Assistant Town Engineer, dated March 31, 2021, May 12, 2021, August 12, 2021, September 3, 2021, November 16, 2021 and December 6, 2021.

Abutter Comments.

- 60. Neighborhood Petition Regarding Development of 1688 Central Avenue in Needham, submitted by email from Holly Clarke, dated March 22, 2021, with excel spreadsheet of signatories.
- 61. Email from Robert J. Onofrey, 49 Pine Street, Needham, MA, dated March 26, 2021.
- 62. Email from Norman MacLeod, Pine Street, dated March 31, 2021.
- 63. Letter from Holly Clarke, 1652 Central Avenue, Needham, MA, dated April 3, 2021, transmitting "Comments of Neighbors of 1688 Central Avenue for Consideration During the Planning Board's Site Review Process for that Location," with 3 attachments.
- 64. Email from Meredith Fried, dated Sunday April 4, 2021.
- 65. Letter from Michaela A. Fanning, 853 Great Plain Avenue, Needham, MA, dated April 5, 2021.
- 66. Email from Maggie Abruzese, dated April 5, 2021.
- 67. Letter from Sharon Cohen Gold and Evan Gold, dated April 5, 2021.
- 68. Email from Matthew Heidman, dated May 10, 2021.
- 69. Email from Matthew Heidman, dated May 11, 2021 with attachment Letter directed to members of the Design Review Board, from Members of the Neighborhood of 1688 Central Avenue, undated.
- 70. Email from Rob DiMase, sated May 12, 2021.
- 71. Email from Eileen Sullivan, dated May 12, 2021.
- 72. Two emails from Eric Sockol, dated May 11 and May 12.
- 73. Email from Rob DiMase, sated May 13, 2021.
- 74. Email from Sally McKechnie, dated May 13, 2021.
- 75. Letter from Holly Clarke, dated May 13, 2021, transmitting "Response of Abutters and Neighbors of 1688 Central Avenue Project to the Proponent's Letter of April 16, 2021," with Attachment 1.
- 76. Email from Joseph and Margaret Abruzese dated May 17, 2021 transmitting the following:

Letter from Joseph and Margaret Abruzese, titled "Objection to Any Purported Agreement to Waive Major Project Review and/or Special Permit requirements with Regard to Proposed Construction at 1688 Central Avenue," undated.

- 77. Letter directed to Kate Fitzpatrick, Town Manager, from Joseph and Margaret Abruzese, dated April 5, 2021.
- 78. Email from Lee Newman, Director of Planning and Community Development, dated May 17, 2021, replying to email from Sharon Cohen Gold, dated May 15, 2021.
- 79. Email from Meredith Fried, dated May 18, 2021.
- 80. Email from Lori Shaer, Bridle Trail Road, dated May 18, 2021.
- 81. Email from Sandra Jordan, 219 Stratford Road, dated May 18, 2021.
- 82. Email from Khristy J. Thompson, 50 Windsor Road, dated May 18, 2021.
- 83. Email from Henry Ragin, dated May 18, 2021.
- 84. Email from David G. Lazarus, 115 Oxbow Road, dated May 18, 2021.
- 85. Email from John McCusker, 248 Charles River Street, dated May 18, 2021.
- 86. Email from Laurie and Steve Spitz, dated May 18, 2021.
- 87. Email from Randy Hammer, dated May 18, 2021.
- 88. Letter from Holly Clarke, dated May 24, 2021, transmitting comments concerning the Planning Board meeting of May 18, 2021.
- 89. Email from Robert Onofrey, 49 Pine Street, dated May 25, 2021, with attachment (and follow up email May 26, 2021).
- 90. Email from Maggie and Joe Abruzese, 30 Bridle Trail Road, dated June 8, 2021, transmitting document entitled "Needham Enterprise, LLC Application for Major Site Review Must be Rejected Because the Supporting Architectural Drawings are Filed in Violation of the State Ethics Code," with Exhibit A.
- 91. Email from Barbara Turk, 312 Country Way, dated April 3, 2021, forwarded from Holly Clarke on June 14, 2021.
- 92. Email from Patricia Falacao, 19 Pine Street, dated April 4, 2021, forwarded from Holly Clarke on June 14, 2021.
- 93. Email from Leon Shaigorodsky, Bridle Trail Road, dated April 4, 2021, forwarded from Holly Clarke on June 14, 2021.
- 94. Letter from Peter F. Durning, Mackie, Shae, Durning, Counselors at Law, dated June 11, 2021.

- 95. Revised list of signatories to earlier submitted petition, received on June 11, 2021.
- 96. Email from Maggie and Joe Abruzese, 30 Bridle Trail Road, dated June 11, 2021.
- 97. Email from Karen and Alan Langsner, Windsor Road, dated June 13, 2021.
- 98. Email from Stanley Keller, 325 Country Way, dated June 13, 2021. Email from Sean and Marina Morris, 48 Scott Road, dated June 14, 2021.
- 99. Letter from Holly Clarke, dated June 14, 2021, transmitting "Comments of Neighbors of 1688 Central Avenue for Consideration During the Planning Board's Site Review Process for that Location Concerning the Traffic Impact Assessment Reports."
- 100. Email from Pete Lyons, 1689 Central Avenue, dated June 14, 2021.
- 101. Email from Maggie and Joe Abruzese, 30 Bridle Trail Road, dated June 14, 2021.
- 102. Email from Ian Michelow, Charles River Street, dated June 13, 2021.
- 103. Email from Nikki and Greg Cavanagh, dated June 14, 2021.
- 104. Email from Patricia Falacao, 19 Pine Street, dated June 14, 2021.
- 105. Email from Maggie and Joe Abruzese, 30 Bridle Trail Road, dated July 6, 2021.
- 106. Email from David Lazarus, Oxbow Road, dated July 12, 2021.
- 107. Email from Maggie Abruzese, dated July 12, 2021.
- 108. Letter directed to Marianne Cooley, Select Board, and Attorney Christopher Heep, from Maggie and Joe Abruzese, 30 Bridle Trail Road, dated July 12, 2021.
- 109. Email from Barbara and Peter Hauschka, 105 Walker Lane, dated July 13, 2021.
- 110. Email from Rob DiMase, dated July 14, 2021.
- 111. Email from Lee Newman, Director of Planning and Community Development, dated July 14, 2021, replying to email from Maggie Abruzese, dated July 14, 2021.
- 112. Email from Leon Shaigorodsky, dated July 17, 2021.
- 113. Letter directed to Members of the Planning Board, from Maggie and Joe Abruzese, 30 Bridle Trail Road, dated July 28, 2021, regarding "Suspending Hearings Pending a Resolution of the Ethics Questions."
- 114. Letter directed to Members of the Planning Board, from Maggie and Joe Abruzese, 30 Bridle Trail Road, dated July 28, 2021, regarding "Objection to the Hearing of July 20, 2021."

- 115. Letter from Holly Clarke, dated August 12, 2021, transmitting "The Planning Board Must Deny the Application as the Needham Zoning Bylaws Prohibit More than One Non-Residential Use or Building On a Lot in Single Residence A."
- 116. Email directed to the Planning Board from Maggie and Joe Abruzese, 30 Bridle Trail Road, dated August 12, 2021, transmitting "The Authority of the Planning Board to Address Ethical Issues in the 1688 Central Matter."
- 117. Email directed to the Select Board from Maggie and Joe Abruzese, 30 Bridle Trail Road, dated August 13, 2021, transmitting "The Power and Duty of the Select Board to Address Ethical Issues in the 1688 Central Matter."
- 118. Letter from Holly Clarke, dated August 13, 2021, transmitting "The Planning Board's Authority to Regulate the Proposed Development of 1688 Central Avenue Includes the Authority to Reject the Plan."
- 119. Letter from Patricia Falcao, dated August 30, 2021.
- 120. Email directed to the Planning Board from Maggie and Joe Abruzese, 30 Bridle Trail Road, dated August 25, 2021, with attachment regarding Special Municipal Employee status.
- 121. Email from Patricia Falcao, dated August 30, 2021.
- 122. Email from Daniel Gilmartin, 111 Walker Lane, dated August 30, 2021.
- 123. Email from Dave S., dated September 4, 2021.
- 124. Letter from Holly Clarke, dated September 7, 2021, transmitting "Neighbors' Comments on the Traffic Impact Analysis," with 2 attachments.
- 125. Email from Elizabeth Bourguignon, 287 Warren Street, dated September 5, 2021.
- 126. Letter from Amy and Leonard Bard, 116 Tudor Road, dated September 5, 2021.
- 127. Email from Mary Brassard, 267 Hillcrest Road, dated September 28, 2021.
- 128. Email from Christopher K. Currier, 11 Fairlawn Street, dated September 28, 2021.
- 129. Email from Stephen Caruso, 120 Lexington Avenue, dated September 28, 2021.
- 130. Email from Emily Pugach, 42 Gayland Road, dated September 29, 2021.
- 131. Email from Robin L. Sherwood, dated September 29, 2021.
- 132. Email from Sarah Solomon, 21 Otis Street, dated September 29, 2021.
- 133. Email from Lee Ownbey, 27 Powderhouse Circle, dated September 29, 2021.
- 134. Email from Emily Tow, dated September 29, 2021.

- 135. Email from Leah Caruso, dated September 29, 2021.
- 136. Email from Jennifer Woodman, dated September 29, 2021.
- 137. Email from Nancy and Chet Yablonski, dated September 29, 2021.
- 138. Email from Pamela and Andrew Freedman, 17 Wilshire Park, dated September 29, 2021.
- 139. Email from Dr. Jennifer Lucarelli, 58 Avalon Rd, dated September 29, 2021.
- 140. Email from Maija Tiplady, dated September 30, 2021.
- 141. Email from Ashley Schell, dated September 30, 2021.
- 142. Email from Kristin Kearney, 11 Paul Revere Rd, dated September 30, 2021.
- 143. Email from Dave Renninger, dated September 30, 2021.
- 144. Letter from Brad and Rebecca Lacouture, dated September 30, 2021.
- 145. Email from Kerry Cervas, 259 Hillcrest Road, dated September 30, 2021.
- 146. Letter from Holly Clarke, dated October 1, 2021, transmitting "The Past Use of the Property for Automobile Repairs and Other Non-Residential Purposes Merit Environmental Precautions to Insure the Safe Development and Use of the Property."
- 147. Email from Carolyn Walsh, 202 Greendale Avenue, dated September 30, 2021.
- 148. Email from Robert DiMase, 1681 Central Avenue, dated October 6, 2021.
- 149. Email from Elyse Park, dated October 6, 2021.
- 150. Email from R.M. Connelly, dated October 6, 2021.
- 151. Email from Eric Sockol, 324 Country Way, undated, received October 6, 2021.
- 152. Email from R.M. Connelly, dated October 9, 2021.
- 153. Email from Robert James Onofrey, 49 Pine Street, dated October 12, 2021 with attachment.
- 154. Letter from Holly Clarke, dated October 16, 2021, transmitting "Neighbor's Comments on the Application of Needham Zoning By-Law 3.2.1."
- 155. Email from R.M. Connelly, dated October 18, 2021.
- 156. Email from David Lazarus, Oxbow Road, dated October 19, 2021.
- 157. Email directed to the Planning Board from Maggie and Joe Abruzese, 30 Bridle Trail Road, dated October 27, 2021, transmitting "Objection to Use of Architectural Plans and Testimony 1688

Central Avenue."

- 158. Email directed to the Planning Board from Maggie and Joe Abruzese, 30 Bridle Trail Road, dated November 1, 2021, transmitting "The Applicant Cannot Keep both the Barn and the New Building."
- 159. Letter to the Planning Board from Denise Linden, undated, received November 10, 2021.
- 160. Email to the Planning Board from Khristy J. Thompson, Ph.D., dated November 10, 2021 with the following attachments discussing the impact of lead and other metals on the neurodevelopment of young children.
- 161. Letter from Holly Clarke, dated November 13, 2021, transmitting "The Proponent's October 27,2021 Report Again Changes the Data Used to Assess the Impact of the Project on Central Avenue."
- 162. Letter from Holly Clarke, dated November 14, 2021, transmitting "Photographs and Video of Traffic on Central Avenue"
- 163. Letter from Holly Clarke, dated November 14, 2021, transmitting "Commercial Child Care Facilities Do Not Customarily Have Accessory Buildings"
- 164. Email from Joseph and Margaret Abruzese dated November 15, 2021 accompanying the following attachment:
 - Town of Canton, Massachusetts, Zoning Board of Appeals Decision, dated August 13, 2020, with Exhibits A, B, C and D.
- 165. Letter from Sharon Cohen Gold and Evan Gold, dated November 16, 2021.
- 166. Letter to the Planning Board from Elizabeth Bourguignon, 287 Warren St, dated, November 16, 2021
- 167. Letter to the Planning Board from Carolyn Day Reulbach, 12 Longfellow Road, dated, December 2, 2021.
- 168. Email directed to the Planning Board from Maggie and Joe Abruzese, 30 Bridle Trail Road, dated December 6, 2021.
- 169. Email directed to the Planning Board from Maggie and Joe Abruzese, 30 Bridle Trail Road, dated December 6, 2021, transmitting "Parking Requirements of Needham Zoning Bylaw."
- 170. Letter from Pat Falacao, 19 Pine Street, received December 7, 2021.
- 171. Email from Rick Hardy, 1347 South Street, dated December 8, 2021.
- 172. Email from Laurie and Steve Spitz, dated December 7, 2021, transmitting video of traffic on Central Avenue.

- 173. Letter from Joe Abruzese, dated December 12, 2021 regarding his presentation from December 8, 2021 public hearing.
- 174. Email from Maggie Abruzese, dated December 12, 2021, transmitting the following as discussed at the December 8, 2021 public hearing:
 - "Lighting at 1688 Central Avenue" with Exhibits
 - Talking Points from December 8, 2021 hearing.
- 175. Letter from M. Patrick Moore Jr., and Johanna W. Schneider, Hemenway & Barnes, LLP, dated December 20, 2021.
- 176. Letter from Holly Clarke, dated December 18, 2021, transmitting comments from neighbors.

Misc.

- 177. Email from Attorney Christopher H. Heep, dated June 9, 2021.
- 178. Two Emails from Attorney Christopher Heep, dated July 16, 2021.
- 179. Letter from Attorney Christopher H. Heep, dated September 2, 2021.
- 180. Letter from Attorney Christopher H. Heep, dated September 8, 2021.
- 181. Letter from Stephen J. Buchbinder, Schlesinger and Buchbinder, LLP, dated October 1, 2021.
- 182. Letter from Eve Slattery, General Counsel, Commonwealth of Massachusetts, State Ethics Commission, dated September 30, 2021.
- 183. Email from Evans Huber, dated October 7, 2021.
- 184. Email from Lee Newman directed to Evans Huber, dated October 8, 2021.
- 185. Letter from Eve Slattery, General Counsel, Commonwealth of Massachusetts, State Ethics Commission, dated October 4, 2021.
- 186. Email from Lee Newman directed to and replying to R.M. Connelly, dated October 19, 2021.
- 187. Letter from Brian R. Falk, Mirick O'Connell, Attorneys at Law, dated October 27, 2021.
- 188. Letter from Attorney Christopher H. Heep, dated November 2, 2021.
- 189. Letter directed to Evans Huber from Lee Newman, Director, Planning and Community Development, dated November 10, 2021.
- 190. Letter from David Roche, Building Commissioner, dated December 7, 2021.

ZONING LEDGEND:	SUBLIC OF U. BURLIO OF INSTITUT	TIONIAL LICE		
SINGLE RESIDENCE A, PROPOSED I			PROPOSED	COMPLIANCE
	REQUIRED/ALLOWED	EXISTING		
MIN. AREA	43,560 S.F.	146,003 S.F.	146,003 S.F.	YES
MIN. FRONTAGE	150'	250.05'	250.05'	YES
MIN. SETBACK FRONT	35'	*105.0' **211.2' ***276.3'	64.0'	YES
MIN. SETBACK SIDE	25'	*67.5' **65.0' ***54.2'	52.3'	YES
MIN. SETBACK REAR	25'	*864.9' **763.4' ***677.0'	811.0'	YES
MAXIMUM STORIES	2-1/2	*2 **1 ***2	1	YES
MAXIMUM HEIGHT	35'	*30.7' **15.3' ***31.2'	24.7'	YES
LOT COVERAGE	15%	NR	9.0%	YES
FLOOR AREA RATIO	.30	NR	.09	YES
DRIVEWAY OPENINGS	18' - 25'	19'	24'	YES

*EXISTING HOUSE (TO BE DEMOLISHED)

**OUT BUILDING -1 (TO BE DEMOLISHED)

***OUT BUILDING -2 (TO REMAIN)

ZONING BYLAW 6.1.3 PARKING PLAN AND DESIGN REQUIREMENTS

	REQUIRED/ALLOWED	EXISTING	PROPOSED	COMPLIANCE
A) PARKING ILLUMINATION	AVG. 1 FOOT CANDLE	N/A	AVG. 1 FOOT CANDLE	YES
B) LOADING REQUIREMENTS	N/A	N/A	N/A	YES
C) HANDICAPPED REQUIREMENTS	2	N/A	2	YES
D) DRIVEWAY OPENINGS	1	1	1	YES
E) COMPACT CARS	50% (8'X16')	N/A	N/A	YES
F) PARKING SPACE SIZE	9'X18.5'	N/A	9'X18.5'	YES
G) BUMPER OVERHANG	1' OVERHANG	N/A	NONE REQUIRED	YES
H) PARKING SPACE LAYOUT	N/A	N/A	N/A	YES
I) WIDTH OF MANEUVERING AISLE	24' (90' STALL)	N/A	24' (90° STALL)	YES
J) PARKING SETBACK				
-FRONT	10'	N/A	*207.5'	YES
-SIDE	4'	N/A	26.9'	YES
-REAR	4'	N/A	609.6	YES
-BUILDING	5'	N/A	5'	YES
K) LANDSCAPE AREA	10%	N/A	10%	YES
L) TREES	1 PER 10 SPACES (3)	N/A	3	YES
M) LOCATION	WITHIN LOT	N/A	WITHIN LOT	YES
N) BICYCLE RACKS	NONE REQUIRED	N/A	NONE REQUIRED	YES

REVISION

REV. BUILDING LOCATION

REV. BUILDING LOCATION

REV. CATCH BASIN AT ACCESS

PER PEER REVIEW COMMENTS

REV. ACCESS DRIVE

PER TOWN COMMENTS

PER TOWN COMMENTS

* TO LOADING AREA

REQUIRED PARKING TO BE DETERMINED BY BUILDING INSPECTOR PARKING PROVIDED SPACES INCLUDING 2 HANDICAP SPACES

DATE

4-15-21

6-2-21

7-28-21

9-28-21

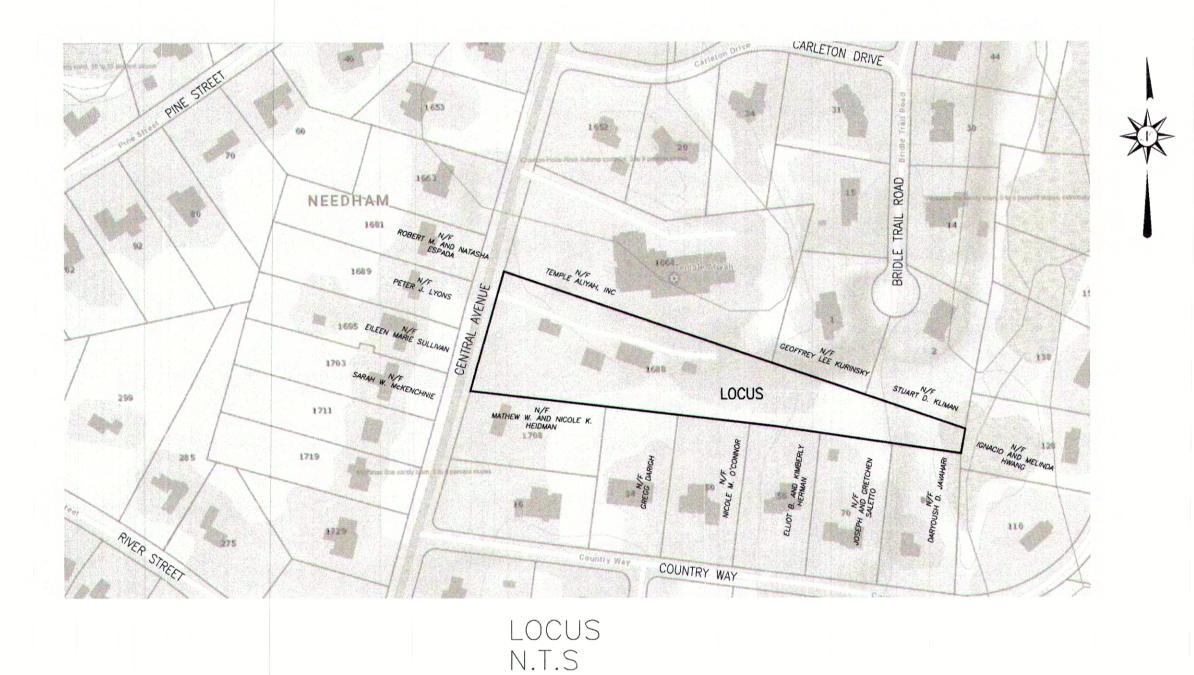
10-28-21

11-8-21

11-22-21

LANDSCAPE AREA REQUIREMENT IS 10% OF REQUIRED SET BACK AREA. SET BACK AREA IS 3,939 S.F. 10% OF 3,939 IS 394 S.F. OF MAINTAINED LANDSCAPE AREA REQUIRED 25% OF THAT OR 98 S.F. TO BE LOCATED WITHIN THE INTERIOR OF THE PARKING AREA. 860 S.F. PROVIDED WITHIN PARKING AREA

SITE DEVELOPMENT PLANS DAYCARE 1688 CENTRAL AVENUE NEEDHAM, MA JUNE 22, 2020



PLAN INDEX

SHEET	1:	COVER SHEET
SHEET	2:	EXISTING CONDITIONS PLAN
SHEET	3:	SITE PLAN
SHEET	4:	GRADING AND UTILITIES PLAN
SHEET	5:	LANDSCAPE PLAN
SHEET	6 & 7:	DETAILS
SHEET	8:	SEWER PLAN AND PROFILE
SHEET	9:	CONSTRUCTION PERIOD PLAN
APPENDIX		PHOTOMETRIC AND SITE LIGHTING PLAN

OWNER:

NEEDHAM ENTERPRISES LLC 105 CHESTNUT STREET SUITE 28 NEEDHAM, MA 02492

APPLICANT:

NEEDHAM ENTERPRISES LLC 105 CHESTNUT STREET SUITE 28 NEEDHAM, MA 02492

ASSESSORS PARCELS:

MAP 199, LOT 213

DEED REFERENCE:

BOOK 37770 PAGE 308

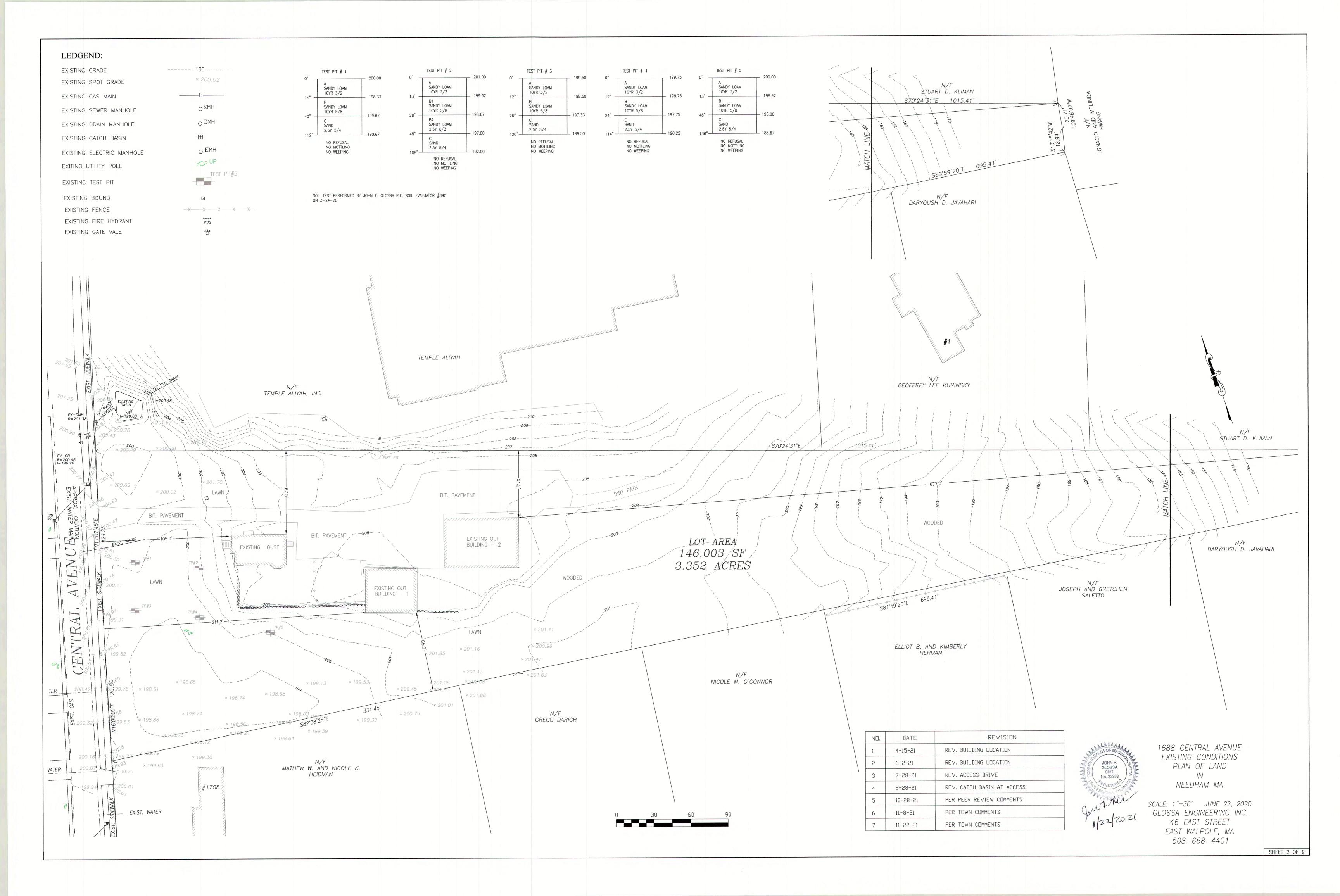
PLAN REFERENCE:

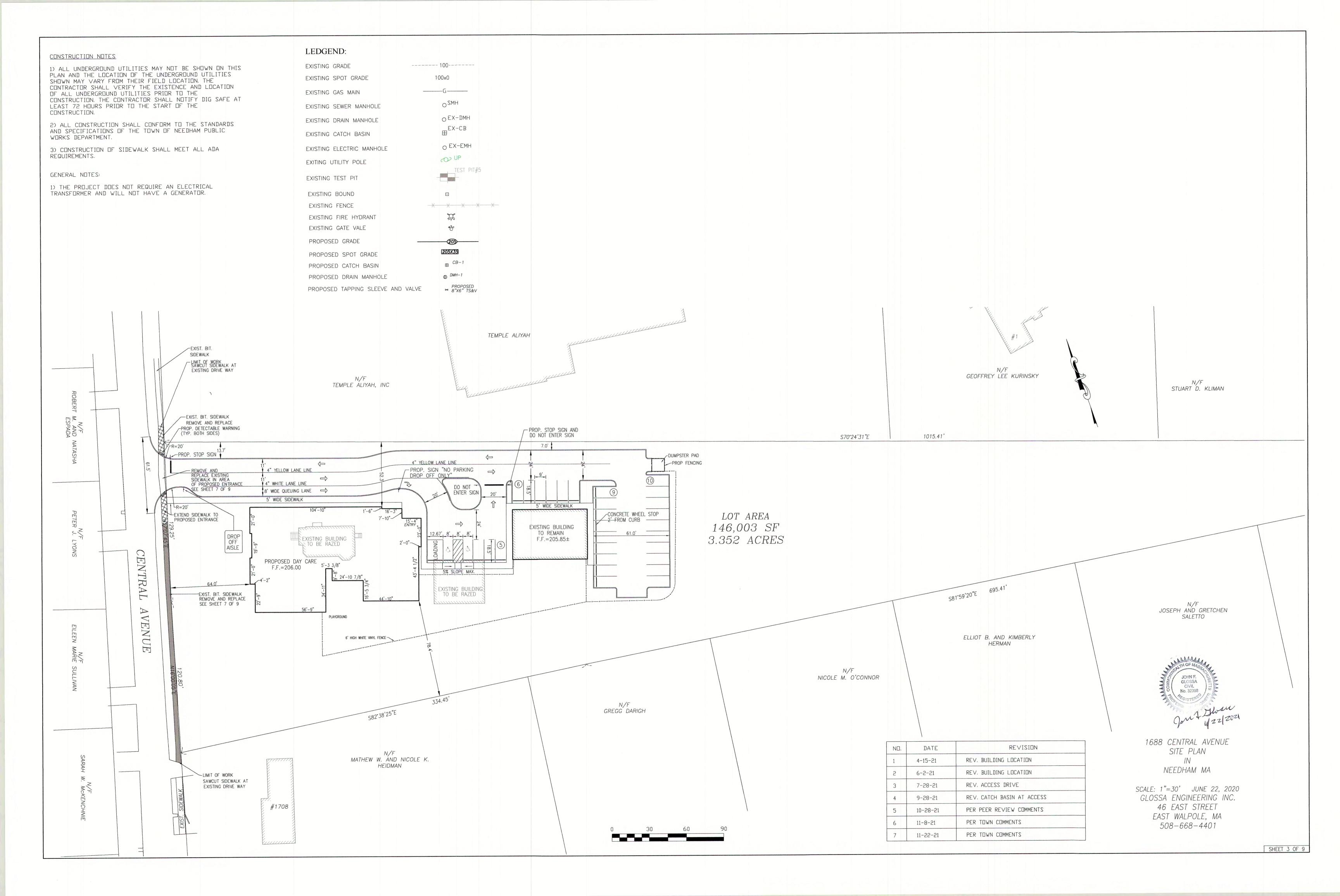
PLAN OF LAND DATED SEPTEMBER 28, 1933 BY P.D.G. HAMILTON, CIVIL ENGINEER

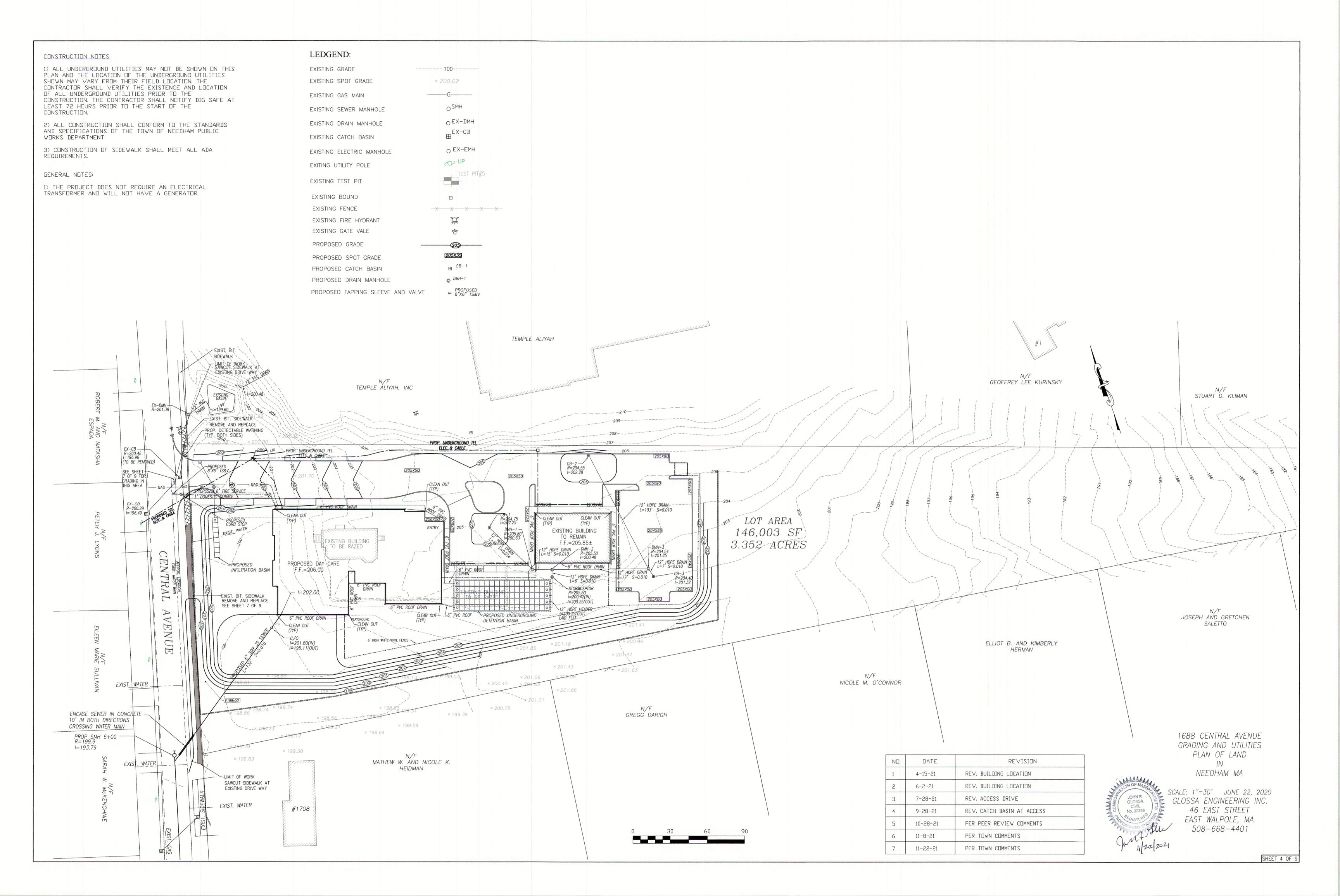


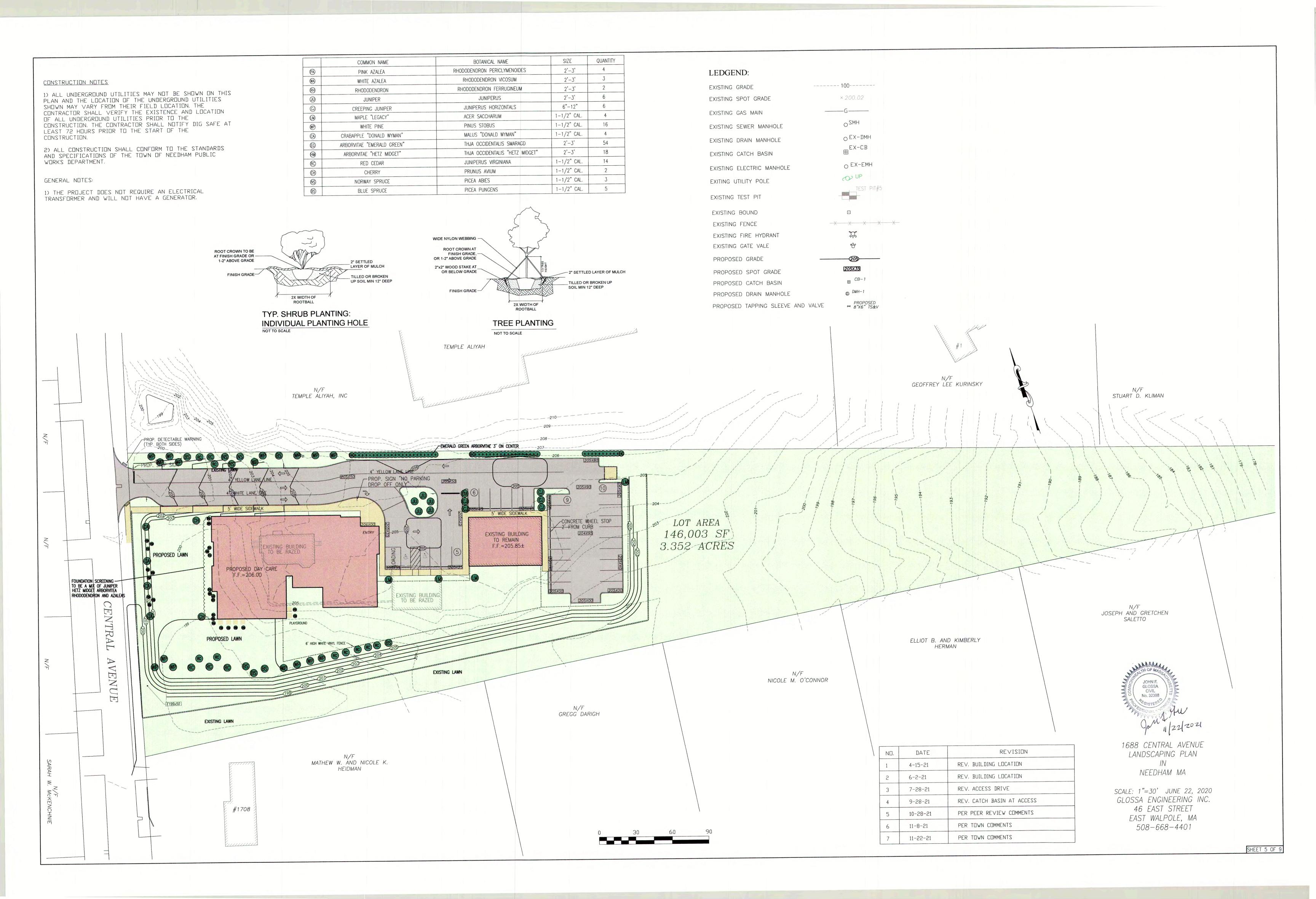
PREPARED BY
GLOSSA ENGINEERING, INC.
46 EAST ST
EAST WALPOLE, MA 02032
(508) 668-4401

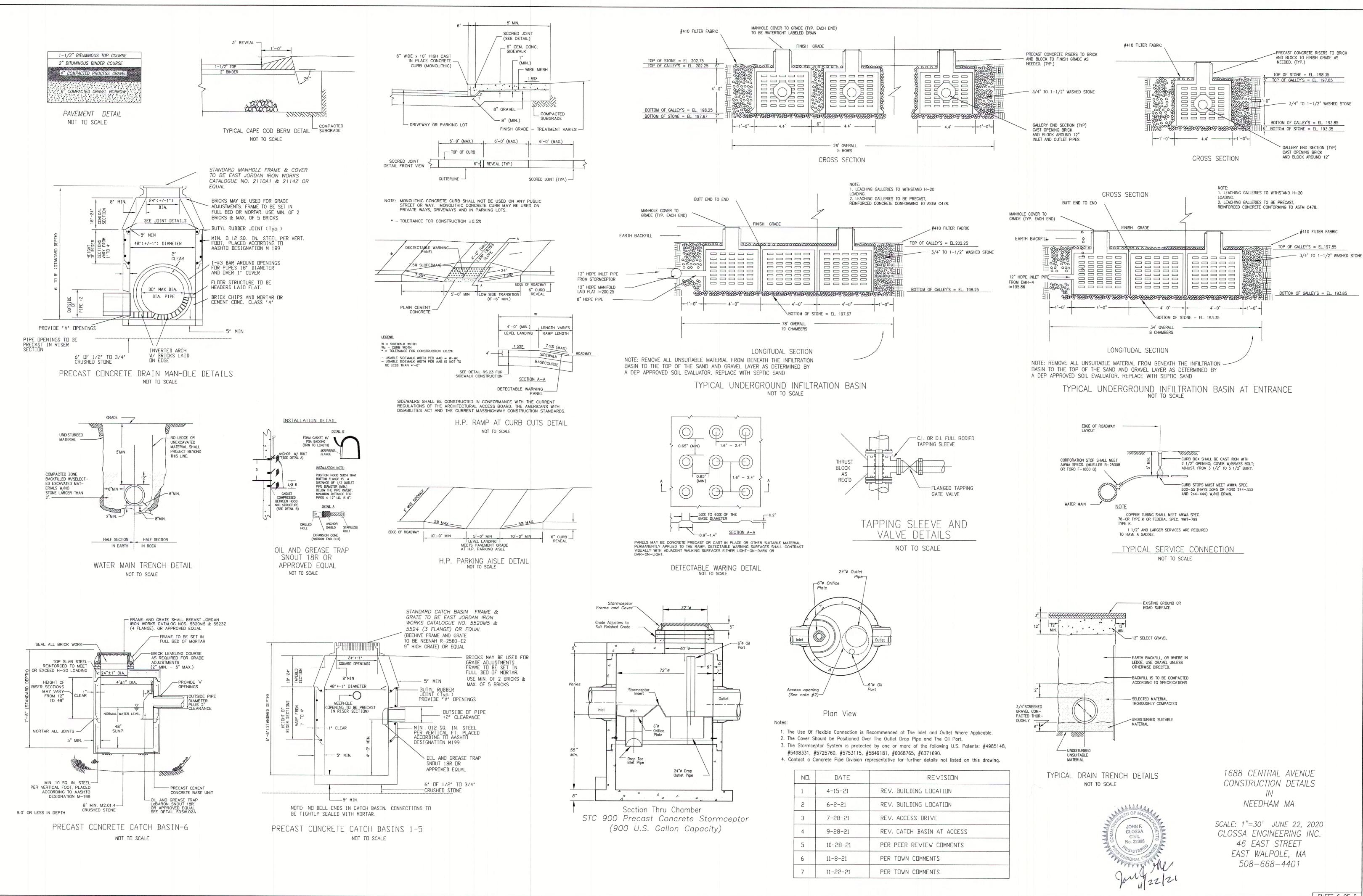
SHEET 1 OF 9

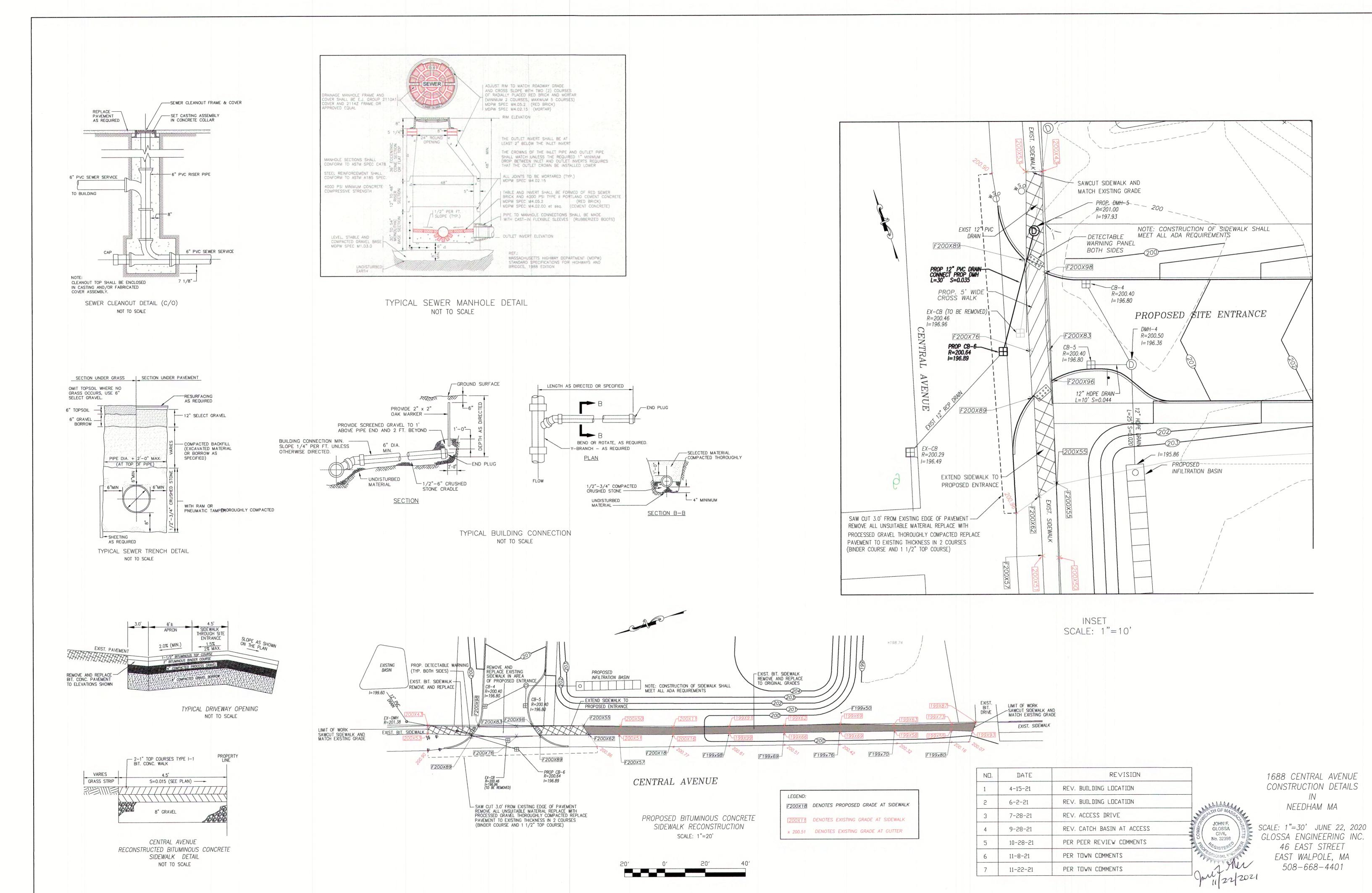












SHEET 7 OF 9

1688 CENTRAL AVENUE

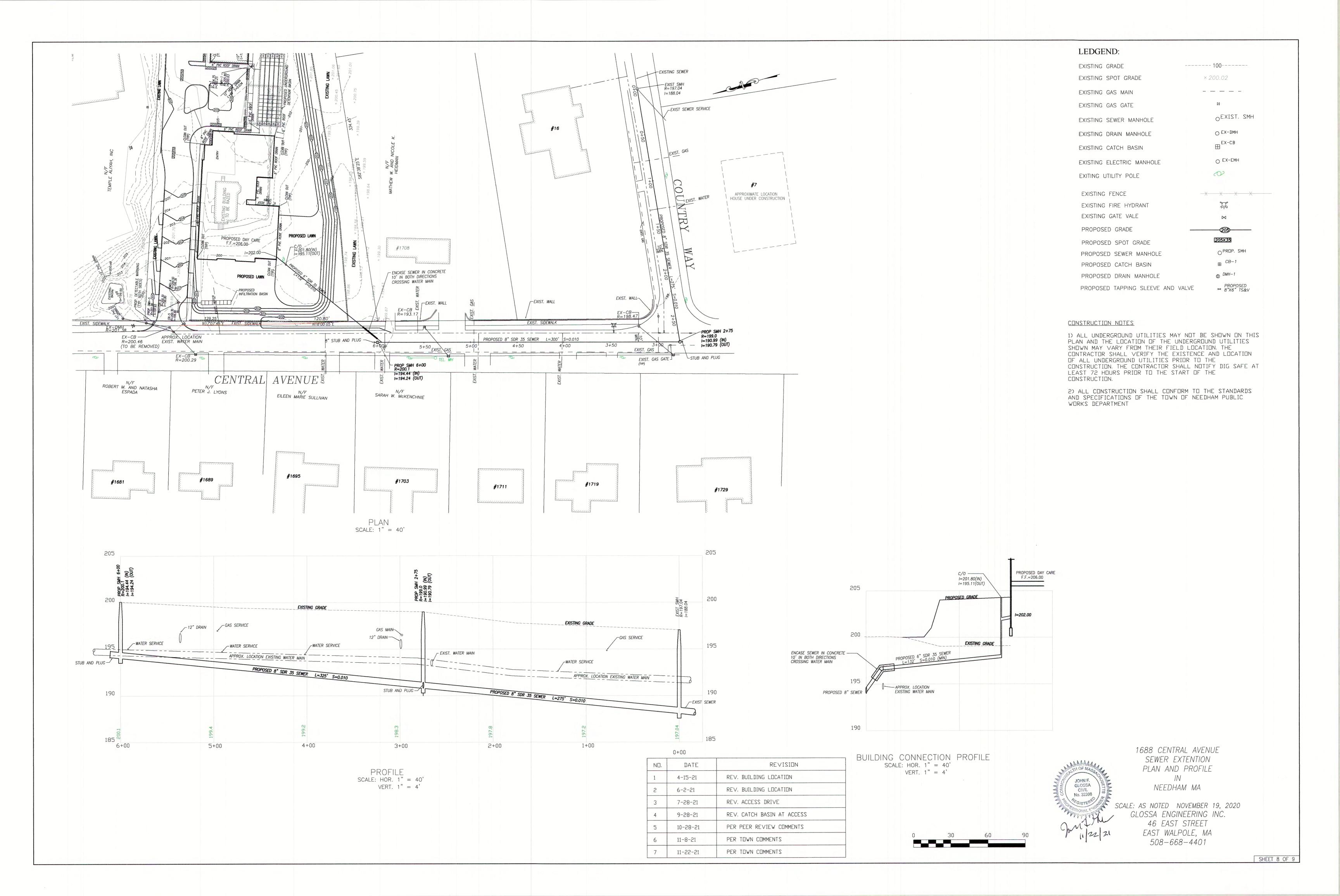
CONSTRUCTION DETAILS

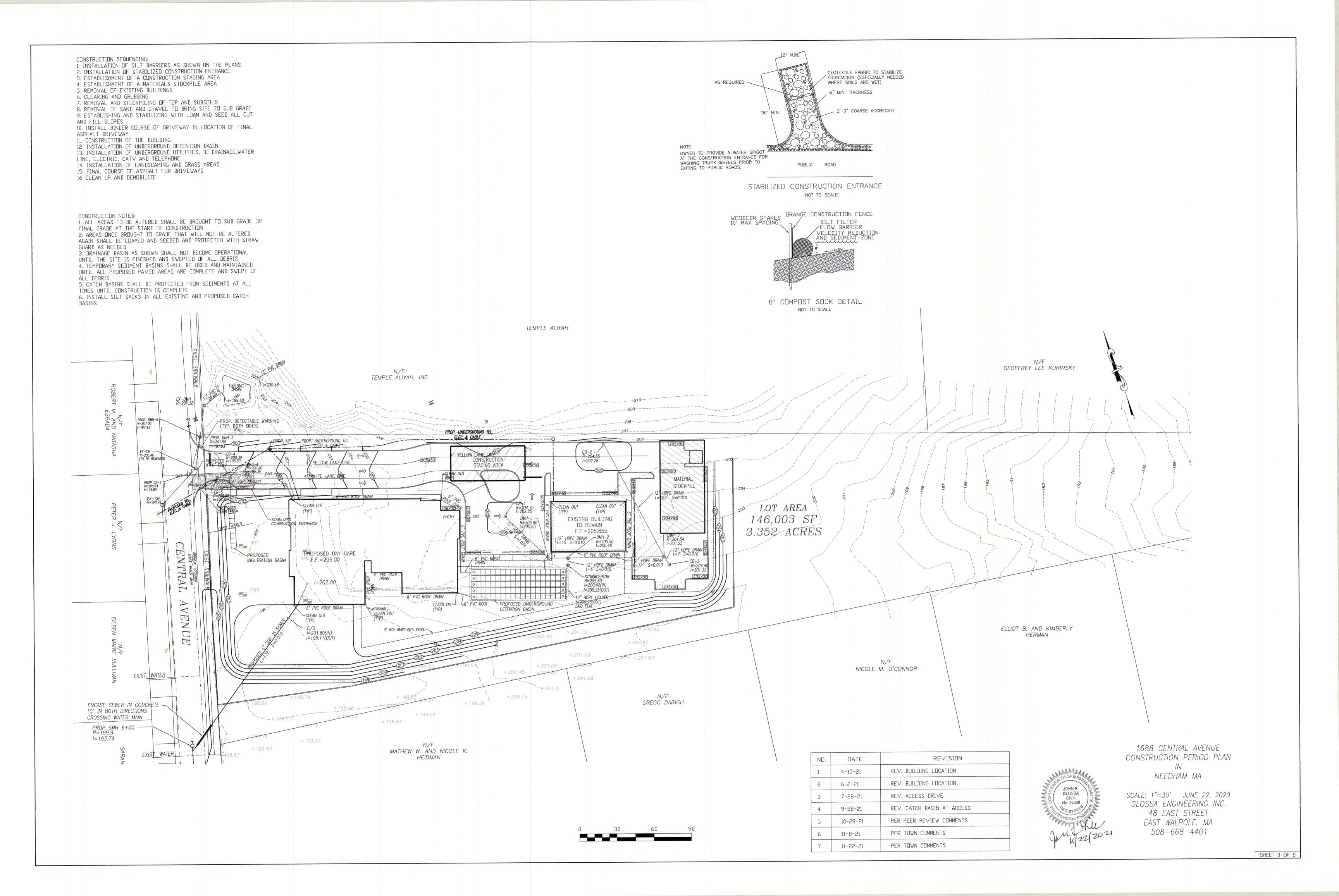
IN

NEEDHAM MA

EAST WALPOLE, MA

508-668-4401







WALL PACK

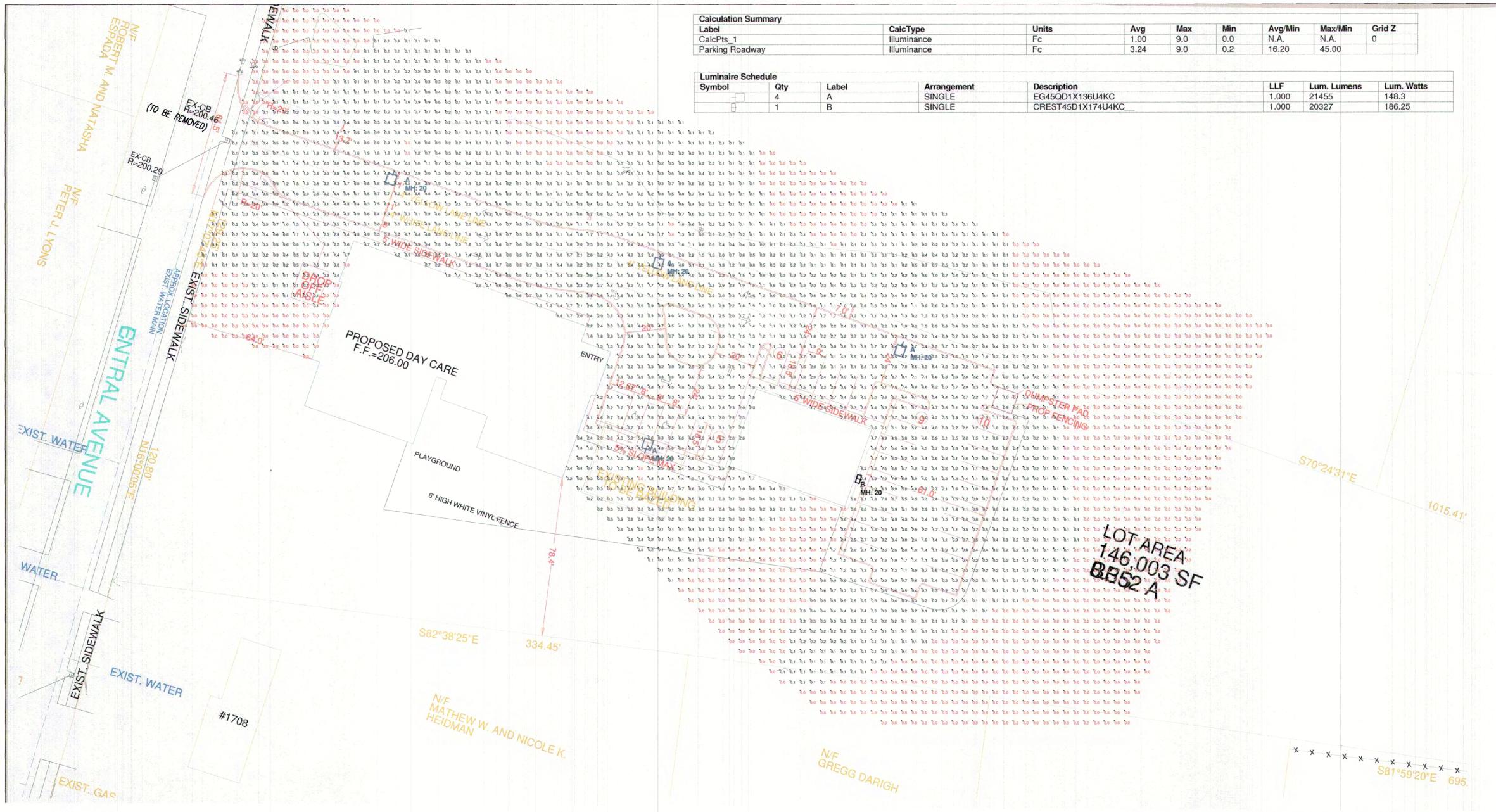
| Total Control Con

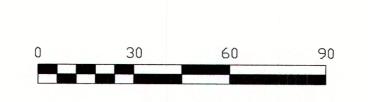
CREST45D1X174UU4KC
AS MANUFACTURED BY PEMCO LIGHTING PRODUCTS

NOTE: LIGHT POLES ARE 20' HIGH

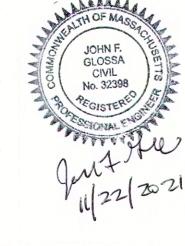
LIGHT FIXURE MODEL NUMBER
EG45QD1X136U4KC
AS MANUFACTURED BY PEMCO LIGHTING PRODUCTS

20' POLE HEIGHT BY WJM, SERIES SS NON TAPERED STEEL POLE

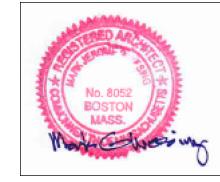


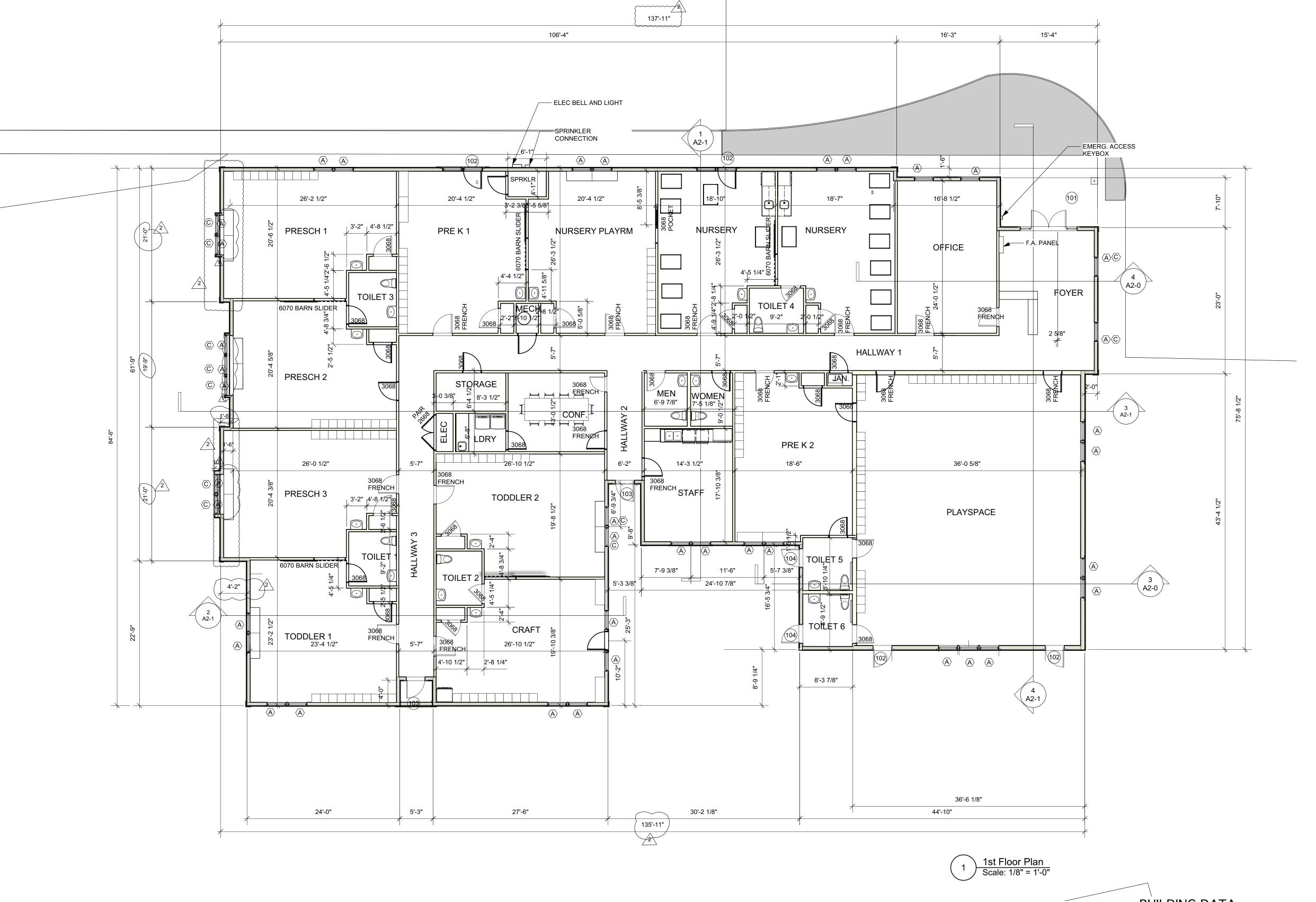


ND.	DATE	REVISION
1	4-15-21	REV. BUILDING LOCATION
2	6-2-21	REV. BUILDING LOCATION
3	7-28-21	REV. ACCESS DRIVE
4	9-28-21	REV. CATCH BASIN AT ACCESS
5	10-28-21	PER PEER REVIEW COMMENTS
6	11-8-21	PER TOWN COMMENTS
7	11-22-21	PER TOWN COMMENTS



APPENDIX
PHOTOMETRIC AND SITE LIGHTING
PLAN
1688 CENTRAL AVENUE
IN
NEEDHAM MA
SCALE 1"=30' JUNE 22, 2020





BUILDING DATA

LOT SIZE

9,966 SF NEW BUILDING SIZE

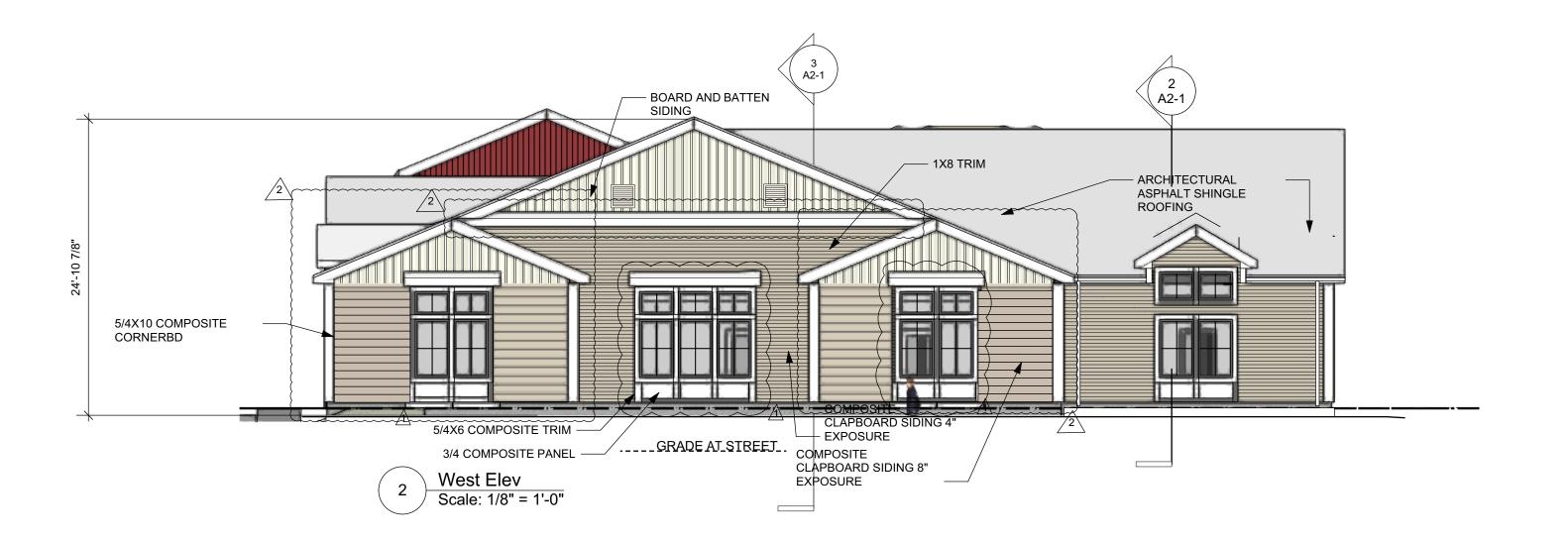
146,003 SF

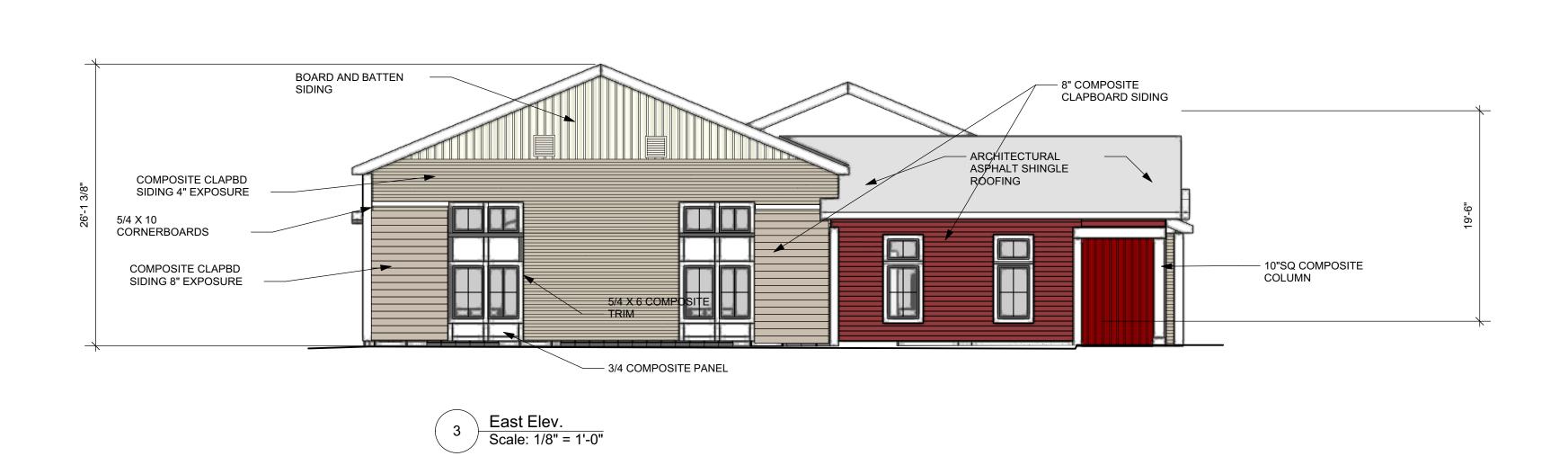
PARKING SPACES: OPERATIONAL OCCUPANCY 100 CHILDREN: 8 SPACES+1/40 (3)=

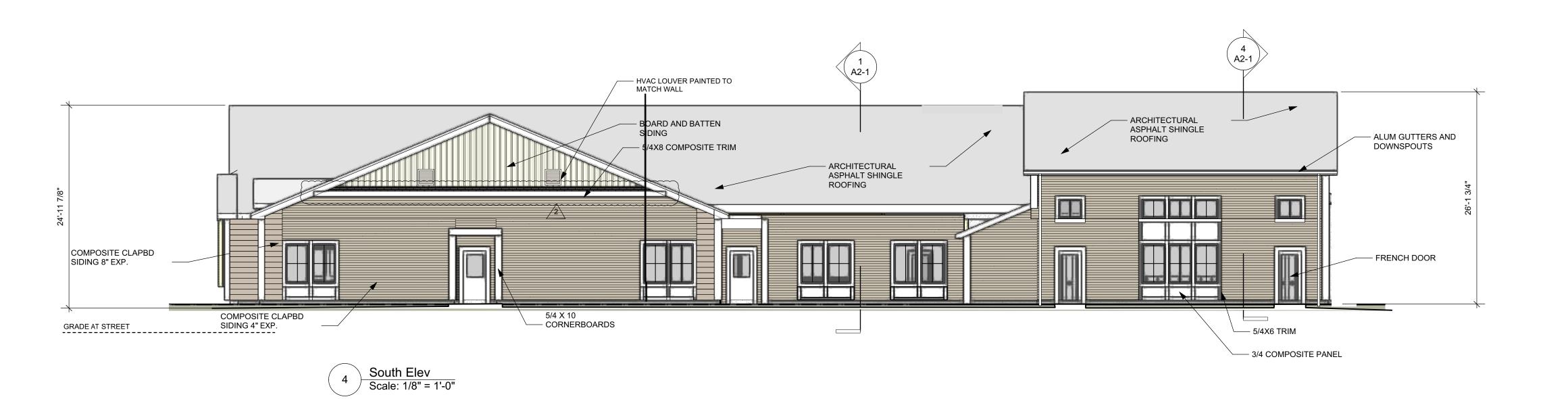
13 STAFF TOTAL 13 24

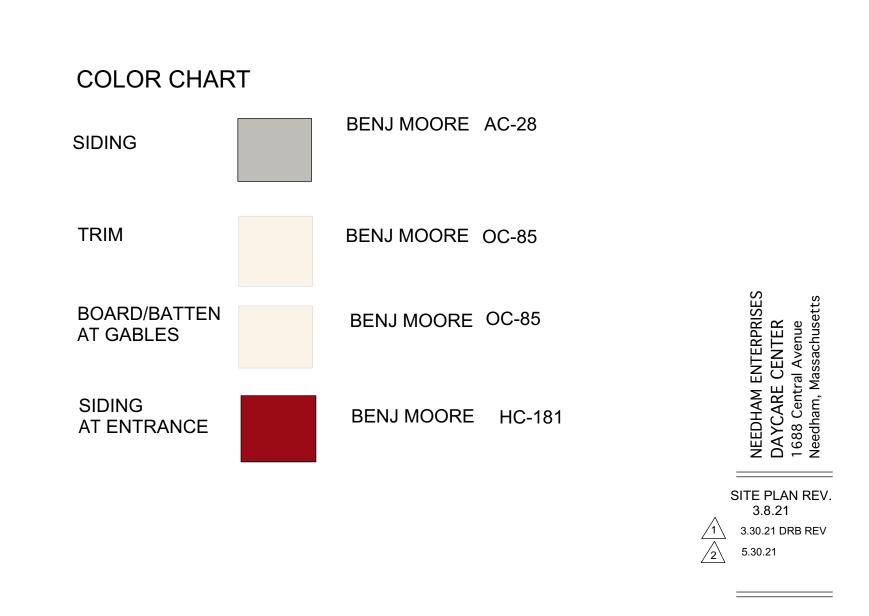














Needham Public Health Division

178 Rosemary Street, Needham, MA 02494 www.needhamma.gov/health

781-455-7940 ext. 504 781-455-7922(fax)



Memo

To: Lee Newman, Planning Board

Alex Clee, Planning Board

From: Tara Gurge, Public Health Division

Tiffany Zike, Public Health Division

Date: 12/16/2021

Re: #1688 Central Ave. – Recommendation to the Planning Board

The Needham Board of Health had their monthly meeting on Tuesday evening (12/14), which all five members of the Board were present in-person at the meeting. The Board heard all the citizens comments and at the end of that 30-minute comment session, the Board continued their discussion of the #1688 Central Ave. project and all were unanimous on this recommendation (see attached agenda.) As you requested, we have typed up the following recommendation below.

The Needham Board of Health has the following recommendation to the Planning Board re: the project located at #1688 Central Avenue –

The Board of Health would like the Town to hire an independent third party, licensed site professional to conduct an independent evaluation only. This professional must oversee this project and confirm that the soil testing work, along with the proposed capping work to be conducted, meets all local, state and Federal requirements. Rob, the Board of Health chair, stressed the need for an independent and qualified evaluator. They must conduct a complete site assessment, give their recommendations on whether soil testing is required and what types of testing need to be conducted due to the history of this site. This licensed site professional must also determine what type of barrier or capping measures may be necessary on this site. Also need to offer their guidance on what mitigations to the new building will be required to ensure the building air quality is adequate and safe. Then they must offer their guidance on what will be required going forward to ensure the site is deemed safe for the children at this pending new Daycare facility.

Please let us know if you have any follow-up questions for us on that recommendation.

Please contact me if you have any additional questions on these requirements. You can reach me at (781) 455-7940, Ext. 211.



Needham Board of Health



REVISED AGENDA

Tuesday December 14, 2021 7:00 p.m. to 9:15 p.m.

Multipurpose Conference Room Rosemary Recreational Complex Building 178 Rosemary Street, Needham MA 02494

Or via Zoom

To listen/view this meeting, download the "Zoom Cloud Meeting" app in any app store or at www.zoom.us. At the above date and time, click on "Join a Meeting" and enter the meeting ID 851-8968-0264 or click the link below to register: https://us02web.zoom.us/j/88548277940?pwd=RC9zVXdYZithYVBGckxKby9EV3NIUT09

- 7:00 to 7:05 Welcome & Review of Minutes (November 16th)
- 7:05 to 7:40 Staff Reports (November)
- 7:40 to 8:00 COVID-19 Update
- 8:00 to 8:15 Discussion of Tobacco Free Generation Policy
- 8:15 to 8:30 Controlled Substance Decriminalization presentation/discussion
- 8:30 to 9:00 Continued discussion of #1688 Central Avenue Citizens
 Comments
- 9:00 to 9:15 BOH Discussion/Recommendation to Planning Board for #1688 Central Ave. project
- Topics for Upcoming BOH Meetings
 - Continued Discussion about Sira Naturals Staff Request for Modifications to Operating Permit and Underlying Regulations
 - o Status Update on BOH FY 21-22 Goals
 - Discussion on NEW 314 CMR 16.00: Notification Requirements to Promote Public Awareness of Sewage Pollution/Combined Sewer Overflow Notifications
- Next BOH meetings

Regular Monthly Meeting January 20, 2022 9:00 a.m.
Regular Monthly Meeting February 10, 2022 5:00 p.m.

Adjournment

(Please note that all times are approximate)

781-455-7940 (tel); 781-455-7922 (fax)

Web: www.needhamma.gov/health

178 Rosemary Street, Needham, MA 02494 E-mail: healthdepartment@needhamma.gov



TOWN OF NEEDHAM

TOWN HALL 1471 Highland Avenue Needham, MA 02492-2669

Design Review Board

Memo: Project Site Plan Review, 1688 Central Ave., Needham Enterprises LLC

Meeting Date: August 9, 2021 Memo Date: August 13, 2021

By: Deborah Robinson

The Board reviewed the design drawings for the new building proposed for this site, and the project was discussed at the DRB meetings on March 22 and May 10. Since that time this project has been discussed at Planning Board meetings, and there was a peer review of the documents by Greenman-Petersen, Inc. (GPI) that focused on traffic issues.

Representing and presenting for the Applicant was Evans Huber, the attorney for the project. Present for the Design Review board were Deborah Robinson (vice-chair), Bob Dermody, Len Karan and Chad Reilly. Mark Gluesing (chair) recused himself due to his involvement as architect for the project.

The proposed building is a day care facility of 9,966 SF to be located on a 146,003 SF lot in a residential neighborhood. The site plan for the proposed one-story building would be set back 64 FT (increased from 50 FT and the originally submitted 35 FT) from the street. The site would include 30 parking spaces (increased from 24). While the existing residential building on the site and smaller out-building (garage) would be demolished, the barn structure is shown to remain. The project application indicated that the new building will be "designed to look like a large single-family home...".

The materials submitted with the application for this meeting included a revised drawing set. The revised colored site plan was dated 7/28/21 and architectural drawings were dated 5.30.21. The package also include a memorandum from Evans Huber, Esq., dated August 4, 2021, summarizing the changes included. On August 9 the Planning Board forwarded to DRB members a copy of the GPI review document as well as a letter (dated August 9, 2021) from Holly Clarke that included comments from neighbors.

The following are the previous comments from our memos of March 26, 2021 and May 14, 2021 (now in *italics*), with updated comments in **bold**:

Site Plan

The Board has concerns regarding the siting of the building so close to the street. This is not in keeping with the character of Central Ave. We understand the parking and building access requirements, but those could be retained while adjusting the building away from central avenue, either by reconfiguring the building footprint or by demolishing the barn and moving the proposed building and parking further to the east. There is unused area to the east.

The Board appreciates that the site plan was adjusted to move the building back some, and this involved reconfiguring parking as well as adding spaces. It is an improvement, and the parking layout looks acceptable from a circulation standpoint.

There is still some concern that a relatively large building is sited closer to the street than other buildings in the neighborhood. An option to be considered still could be the removal of the barn and moving the building and site design elements further to the east of the property.

The Applicant did not include a site plan or street-view renderings to show the relationship of the proposed building to the street, to adjacent houses and to the synagogue next door. Those drawings would be helpful moving forward as the site plan and building issues are reviewed.

It is an improvement that the building has moved back some, to align with the house to the south. Nevertheless, as the relative change is fairly minimal in the context of Central Ave., our comments regarding the proposed building placement relative to the rest of the neighborhood remain.

While we appreciate the effort that went into the "setback ratio" narrative and table included in the neighbors' comments, our thought is that for this site the most critical factors are the setback at the street and the street-facing façade, and the overall footprint is not a critical factor for this site.

The Applicant could look at alternate site plans (building location and shape, attaching to the barn or removing it, outdoor space, parking, etc.), even if only to show how other options would be infeasible. We do not know why that has not been done, particularly given the nature of the ongoing discussions.

Building Design

The Board has concerns regarding the building exterior. The building is not residential in appearance. The west façade is the most important façade, and is too institutional in design. It is very flat. A residential-looking building would have more modulation of the massing, possibly including more three-dimensional window areas, a porch or overhang, etc. While the Applicant responded to this by indicating that the truss system for the roof structure is a limiting factor for the massing, we do not agree that that is a driving force for the architecture.

The Applicant's screenshare presentation included a 3-D drawing of the building that was not in the package submitted to the Design Review Board.

The rendered elevations received just prior to the meeting showed a minor change to the windows on the west façade. As described by the Applicant, this involved having the windows now project 8" from the façade, with an overhang of 5" beyond that. The Applicant did not include the drawings from the previous meeting to show the change more clearly. The Board had little comment on this change. While one member (someone who had not been present at the March meeting) indicated the design of the building in general "looks good", that was not a specific acknowledgement that the comments at the previous meeting had been successfully addressed. To some, a lack of comment was a response to a lack of changes to the overall massing, and the initial comments from 3/22/21 stand. Members of the Board do not

necessarily have the same reaction to the building design and its suitability for this location. As this was not a vote, there was no "yes" or 'no' required from each member.

The change to the west façade in the updated documents, with the addition of more residentially-scaled gable elements, is definitely an improvement over the previous drawings. As the projections are only two feet in depth, however, the façade is still overall without overhangs, porches, etc. that would have made the street-facing façade even more residential in scale. We do appreciate the fact that the building presents itself as a single story.

There has been no change to the plan of the building. When this has come up a few times, the Applicant's response implied the only option would be to take the plan as designed and turn 90 degrees, thus presenting an even longer façade to Central Ave. The intent of our comments has been to ask if other plan options were or could be considered. We did not intend to imply that room sizes and amenities for the facility should be compromised.

Barn

The applicant's representative stated that the barn would be retained without any renovation, there is no intended use for the time being, and that it is being retained because it is "historic". As noted above, the Board questioned whether keeping the barn is the best solution given the site plan issues. The Applicant did not know if the barn has any local or other historic designation that might affect a decision to retain or not retain the barn.

As there was no further clarification regarding the intentions for the barn, the option of removing it for the benefit of other site plan issues could still be considered. The Applicant did not comment when this was brought up again.

We now understand that the Applicant's evaluation is that the barn is in good condition, and that it will be used for needed storage and potential future "accessory" use. This seems to be quite a large volume for storage use, though we have no knowledge of the specific program needs of the facility for which the building is being designed.

Previously there was an explanation related to historic value. Assuming now that the 1989 date for the barn's construction as identified in the Holly Clarke document is correct, the building is not "historic". If the building is in good condition, why was it not incorporated into one larger new building, for example, as part of the overall plan? Another option could be to move it on site. The DRB did not state that we think it "should" be torn down, and we are not advocating any particular approach. The intent for the barn still is a question.

Lighting

The 24' high lights at the north side of the proposed driveway have a long distance between them, which would result in bright and dim spots. Better would be four rather than three pole lights at the north side, with 20' high poles. Lower fixtures would create less light trespass onto Temple property.

The site plan presented did not show lighting at the entry, as required by code. The applicant did clarify that there would be lighting at the entry canopy.

The lighting at the north does not look to have been addressed, so that comment stands.

As long as exterior lighting complies with building code and zoning requirements, and the original comment about height and spacing of poles at the north side is addressed, we see no issue. As noted, the facility will shut down and site lights will be off in the early evening.

Fence

The fence at the south of the building is intended to be white vinyl. The Board comment was that this is very bright relative to the rest of the built elements, and another color would be preferable so as to not be as visible. Vinyl is also available in tan and gray, or another material could be used.

Another suggestion is a dark green vinyl, which would look more "natural".

Wood is preferable from an aesthetic standpoint. Vinyl fencing looks shiny, regardless of the color. We do understand the maintenance issues, so our prior comments were trying to work with that.

Trees

The north edge of the site, at the Temple Aliyah side, will indeed benefit from trees to screen the site, but the 15' spacing of white pines will not be satisfactory to form a true screen for several (5-10) years. The Board's recommendation is that additional species be added in this area, located in groupings of different species and staggered. The front (west) of the site would benefit from foundation plantings/trees at the building as well.

The sidewalk at the south of the building shows some trees very close to the walk. These would be too low and conflict with people. Either provide bigger/taller trees or move them away from the sidewalk.

Arborvitae are an acceptable selection as shown to the north of the parking.

The white pines shown to the south of the proposed building would also benefit from the same treatment as commented on for the north.

The addition of more trees is definitely helpful to the design, and the Applicant has addressed the items brought up at the first meeting. The added trees at the southeast will help screen the building massing for vehicles and others approaching from the south. The suggestion is that evergreen trees at the west would help with screening the building in a way that could offset the perceived negative aspects of the building size and proximity to the street.

The Applicant should look more closely at the expected size of trees that are adjacent to the walks and the building as the design is developed. It was noted, for example, that the Legacy Maple at the far left of the row is too close to the building and would grow into the building in five years.

Another comment was that plants adjacent to parking stalls should be durable enough to withstand people stepping, etc. Prostrate Juniper instead of the Azeleas that are shown was one suggestion.

Retaining the large maple tree would be desirable. We understand this is just outside the building footprint, so this should be looked at relative to building footing issues. The Applicant agreed to look at this and retain the tree is possible.

Parking

The dumpster enclosure at the east end of the parking limits the ability of the user of the end parking space to easily back out. Moving the dumpster enclosure to the east could easily provide more turning space for that vehicle.

There was some confusion due to the presented documents not matching what the DRB had received. This parking item is another example of a discrepancy.

The increased number of parking spaces and added length to the drive (fitting 10 cars) will help with potential congestion on the site. As noted above, the revised circulation around to the east looks acceptable.

It was noted that 3 1/2 FT width is required for accessibility at sidewalks, and the 5 ft sidewalk as shown adjacent to parking spaces might not be adequate once cars park. The sidewalk could be made wider, or a grass strip added. Simply adding tire stops would be less desirable as that limits maneuverability.

The Board cannot comment on whether or not the number of parking spaces is adequate, more than adequate, etc. for this proposed use and occupancy.

The added drop-off lane looks to be something that will help with the potential issue of cars backed up and spilling onto Central Ave. We consider this a positive addition to the scheme. We defer to others for the traffic volume issues.

Car-management with the assistance of staff will help with this layout. We note that consideration should be given to how people will walk from the east parking to the building. A monitored crosswalk at the east of the building might be a good idea if the expectation that people will use the perimeter sidewalk is not realistic.

The Board presents these comments for Planning Board consideration. These comments summarize and are limited to the comments made at the meeting, and are intended to relay the Board's thoughts in seeing this project for the first time. This is not intended to be minutes of the meeting. These comments do not document comments and explanations made by the Applicant in response to the Board's comments and questions. Any lack of comment on the Board's part in response to the Applicant's justifications or in response to comments made by the public does not constitute agreement.

These comments on the revised information show improvement relative to what was presented in March. We understand this project will continue to be reviewed, next at a Planning Board meeting on May 18. The Board is available to review this project again, if additional design development is done, at future meetings.

We hope our comment are useful to the Planning Board. There has been significant progress since the first review by the DRB in March. We understand the Planning Board

will proceed per the Needham Zoning By-Laws. We are available for further review and discussion if there are changes to the proposed project.

End of Notes



Town of Needham Building Department 500 Dedham Ave. Needham, MA 02492

Tel.781-455-7550 x 308

December 7, 2021

Town of Needham Planning Board 500 Dedham Ave. Needham, MA. 02492

Re: 1688 Central Ave. / Accessory Use

Dear Planning Board Members,

I have been asked to comment on the Special Permit application for 1688 Central Ave. specifically the use of the existing barn on the property. Section **1.3 Definitions** of the Needham Zoning By-Law has the following definitions:

Accessory Building – a building devoted exclusively to a use subordinate to and customarily incidental to the principal use.

Accessory Use – a use subordinate to and customarily incidental to the principal use.

The following is a section from Chapter 40A Section 3 that states:

No Zoning ordinance or bylaw in any city or town shall prohibit, or require a Special Permit for, the use of land or structures, or the expansion of existing structures, for the primary, accessory or incidental purpose of operating a child care facility; provided, however, that such land or structures may be subject to reasonable regulations concerning the bulk and height of structures and determining yard sizes, lot area, setbacks, open space, parking and building coverage requirements. As used in this paragraph, the term "child care facility" shall mean a child care center or a school-aged child care program, as defined in section 1A of chapter 15D.

Based on the definitions in the By-Law and the section from 40A I believe that the use of the barn if used specifically by the child care facility would be a permitted use and not a violation of Zoning.

Any questions please contact my office.

Building Commissioner Town of Needham The Needham Police have reviewed the materials related to the proposed daycare facility located at 1688 Central Ave. As part of this review, I have spoken with Holly Clarke who is involved with a neighborhood group that is concerned with the project. I also spoke with Pat Day who is the owner of the daycare facility.

I have also reviewed the two traffic impact assessment reports.

As we look at most projects the police department is primarily concerned with traffic, safety, and parking. All three of these issues are relevant in this review. Traffic congestion and flow are a concern, but I feel that several measures have been taken to mitigate some of the concerns raised. The first from an overall perspective is that the center will be staggering drop-off and pick-up times as they currently do and will continue post covid. The ability to stagger drop-offs will limit vehicles that are stacked within the back parking area which will prevent vehicles from stacking on Central Ave. This will also prevent an influx of vehicles at one drop off limiting the impact to traffic on Central Ave and within the parking area. The change to 30 parking spaces will alleviate any concern of adequate parking or vehicles stacking within the lot during drop-off and pick-up.

Several adjustments or improvements related to traffic flow have been improved to address some traffic concerns. The addition of traffic lights at Central and Charles River St allows for an interrupted traffic flow which allows for breaks in the traffic which may assist with entering and exiting the site. The Needham Police have adjusted traffic mitigation within the Newman School parking lot that will have a positive impact on traffic along Central Ave near the school. We continue to monitor the Newman site and will adjust as needed.

A check of accidents at the Central Ave and Charles River St shows 1 accident between 2016-3/2/21.

A check of accidents on Central Ave between Pine St and Charles River St shows 11 accidents between 1/1/16-4/13/2021.

I do not envision the neighboring streets being used as a cut-through for commuter traffic as the layout of these roads does not provide a route that would circumvent Central Ave traffic that would save time.

I do anticipate that neighboring residents could potentially have a tougher time getting into and out of their driveways. The staggered drop-off times and intermittent traffic due to the traffic lights may provide some relief for these concerns. The owner of the facility has mentioned the willingness to have a police officer present during the opening week or so to mitigate and recommend changes to traffic, parking, and overall site safety.

Based on the information provided I do not believe that this project would impact the police or fire department's ability to respond promptly to emergencies.

If the facility continues to stagger drop-offs and manages the internal parking circulation, I feel the traffic will be manageable and not a safety concern.

Chief John J. Schlittler

From: Dennis Condon
To: Alexandra Clee

Subject: RE: Request for comment - 1688 Central Avenue - revised plans

Date: Monday, August 9, 2021 9:52:43 AM

Attachments: image001.png

image002.png

Hi Alex.

Fire has no additional comments.

Thanks, Dennis

Dennis Condon Chief of Department Needham Fire Department Town of Needham (W) 781-455-7580 (C) 508-813-5107

Dcondon@needhamma.gov



Follow on Twitter: Chief Condon@NeedhamFire



Watch Needham Fire Related Videos on YouTube @ Chief Condon



From: Alexandra Clee <aclee@needhamma.gov>

Sent: Wednesday, August 4, 2021 2:39 PM

Subject: Request for comment - 1688 Central Avenue - revised plans

Dear all,

I have received the attached revised plans from the applicant for 1688 Central. The Planning Board hearing on this matter has been continued to August 17, 2021. If you wish to comment on the revised plans, please send your comments by Wednesday August 11 at the latest.

The documents attached for your review are as follows:

- 1. Memorandum from Attorney Evans Huber dated August 4, 2021 describing changes.
- 2. Plan set entitled "Site Development Plans, Daycare, 1688 Central Avenue, Needham MA," prepared by Glossa Engineering Inc., 46 East Street, East Walpole, MA, consisting of 9 sheets: Sheet 1, Cover Sheet, dated June 22, 2020; Sheet 2, entitled "Existing Conditions Plan of Land in Needham, MA," dated June 22, 2020, revised April 15, 2021, June 2, 2021 and July 28, 2021; Sheet 3, entitled "Site Plan," dated June 22, 2020, revised April 15, 2021, June 2, 2021 and July 28, 2021; Sheet 4, entitled "Grading and Utilities," dated June 22, 2020, revised April 15, 2021, June 2, 2021 and July 28, 2021; Sheet 5, entitled "Construction Details," dated June 22, 2020, revised April 15, 2021, June 2, 2021 and July 28, 2021; Sheet 6, entitled "Construction Details," dated June 22, 2020, revised April 15, 2021, June 2, 2021 and July 28, 2021; Sheet 7, entitled "Sewer Extension Plan and Profile," dated "scale: as noted November 19, 2020", revised April 15, 2021, June 2, 2021 and July 28, 2021; Sheet 8, entitled "Construction Period Plan," dated June 22, 2020, revised April 15, 2021, June 2, 2021 and July 28, 2021; Sheet 10, entitled "Landscaping Plan," dated June 22, 2020, revised April 15, 2021, June 2, 2021 and July 28, 2021 and July 28, 2021; Sheet 10, entitled "Landscaping Plan," dated June 22, 2020, revised April 15, 2021, June 2, 2021 and July 28, 2021 and July 28, 2021.
- 3. Plan set entitled "Needham Enterprises Daycare Center," prepared by Mark Gluesing Architects, consisting of 2 sheets: Sheet 1, Sheet A 1-0, entitled "1st Floor Plan," dated March 8, 2021, revised March 30, 2021 and May 30, 2021; Sheet 2, Sheet A 3-0, showing elevations, dated March 8, 2021, revised March 30, 2021 and May 30, 2021.

Thank you, alex.

Alexandra Clee Assistant Town Planner Needham, MA www.needhamma.gov

From: Alexandra Clee

Sent: Friday, May 7, 2021 12:01 PM

To: David Roche < droche@needhamma.gov>; Anthony DelGaizo < ADelgaizo@needhamma.gov>; Timothy McDonald < tmcdonald@needhamma.gov>; John Schlittler < JSchlittler@needhamma.gov>; Dennis Condon < DCondon@needhamma.gov>; Carys Lustig < clustig@needhamma.gov>

Cc: Lee Newman <<u>LNewman@needhamma.gov</u>>; Elisa Litchman <<u>elitchman@needhamma.gov</u>>;

Thomas Ryder < tryder@needhamma.gov >; Tara Gurge < TGurge@needhamma.gov >

Subject: RE: Request for comment - 1688 Central Avenue - revised plans

Dear all,

We have received a memo from the attorney for this project detailing the changes that were made between the original plans and the revised plans (the revised plans as sent to you by email dated April 27, 2021). I am sending it in case it assists you. We also did receive a newly revised Landscape Plan, which I have attached.

If you have already submitted updated comments (and the attached info does not change those), or do not wish to submit additional comments, totally fine. If you wish to submit any additional comments, please do so by Wed May 12 if you can.

Thanks!

Alexandra Clee Assistant Town Planner Needham, MA www.needhamma.gov

From: Alexandra Clee

Sent: Tuesday, April 27, 2021 9:31 AM

To: David Roche < droche@needhamma.gov>; Anthony DelGaizo < ADelgaizo@needhamma.gov>; Timothy McDonald < tmcdonald@needhamma.gov>; John Schlittler < JSchlittler@needhamma.gov>; Dennis Condon < DCondon@needhamma.gov>; Carys Lustig < clustig@needhamma.gov>

Cc: Lee Newman@needhamma.gov>; Elisa Litchman@needhamma.gov>;

Thomas Ryder < tryder@needhamma.gov >; Tara Gurge < TGurge@needhamma.gov >

Subject: Request for comment - 1688 Central Avenue - revised plans

Dear all,

We received an updated letter and updated plan set for the noted project; both are attached for your review. This matter is currently scheduled for May 18 in front of the Planning Board. As there is a lot of interest in this proposal, we would welcome any new/additional comments you may have as soon as you are able (but at the latest, by Wednesday May 12).

Thanks, alex.

Alexandra Clee Assistant Town Planner Needham, MA www.needhamma.gov

From: Alexandra Clee

Sent: Monday, March 22, 2021 2:50 PM

To: David Roche < droche@needhamma.gov>; Anthony DelGaizo < ADelgaizo@needhamma.gov>;

Timothy McDonald < tmcdonald@needhamma.gov >; John Schlittler < JSchlittler@needhamma.gov >; Dennis Condon < DCondon@needhamma.gov >; Carys Lustig < clustig@needhamma.gov >

Cc: Lee Newman < LNewman@needhamma.gov >; Elisa Litchman < elitchman@needhamma.gov >; Thomas Ryder < tryder@needhamma.gov >; Tara Gurge < TGurge@needhamma.gov >

Dear all,

The Planning Board will be hearing about a proposal for a new daycare at 1688 Central Avenue on April 6, 2021. More information is included in the submitted documents, detailed below, which can be attached to this email (with the exception of the Stormwater Report) and can also be found at this location K:\Planning Board Applications\Planning_1688 Central Avenue_2021. Some of the application documents are attached, as noted, but not all, as the files were too large to include all. (some of you will receive a hard copy in the inter-office mail as well).

The documents attached for your review are:

Subject: Request for comment - 1688 Central Avenue

- 1. Application submitted by Needham Enterprises, LLC with Exhibit A. attached
- 2. Letter from Evans Huber Attorney, dated March 11, 2021. Attached
- 3. Letter from Evans Huber Attorney, dated March 12, 2021. attached
- 4. Letter from Evans Huber Attorney, dated March 16, 2021. attached
- 5. Plan set entitled "Needham Enterprises Daycare Center," prepared by Mark Gluesing Architects, consisting of 4 sheets: Sheet 1, Sheet A 1-0, entitled "1st Floor Plan," dated March 8, 2021; Sheet 2, Sheet A 1-1, entitled "Roof Plan," dated March 8, 2021; Sheet 3, Sheet A 2-1, showing Building Sections, dated March 8, 2021; Sheet 4, Sheet A 3-0, showing elevations, dated March 8, 2021. Attached.
- 6. Plan set entitled "Site Development Plans, Daycare, 1688 Central Avenue, Needham MA," prepared by Glossa Engineering Inc., 46 East Street, East Walpole, MA, consisting of 10 sheets: Sheet 1, Cover Sheet, dated June 22, 2020; Sheet 2, entitled "Existing Conditions Plan of Land in Needham, MA," dated June 22, 2020; Sheet 3, entitled "Site Plan," dated June 22, 2020; Sheet 4, entitled "Grading and Utilities," dated June 22, 2020; Sheet 5, entitled "Landscaping Plan," dated June 22, 2020; Sheet 6, entitled "Construction Details," dated June 22, 2020; Sheet 7, entitled "Construction Details," dated June 22, 2020; Sheet 8, entitled "Sewer Extension Plan and Profile," dated "as noted November 19, 2020"; Sheet 9, entitled "Construction Period Plan," dated June 22, 2020; Sheet 10, entitled "Appendix, Photometric and Site Lighting Plan," dated June 22, 2020.
- 7. Traffic Impact Study, dated March, 2021. Attached
- 8. Stormwater Report, dated June 22, 2020.

I also have attached a letter from Abutters that we received today that I am sharing in case you wish to note the neighborhood concerns while you conduct your review.

The meeting where this topic will be presented to the Planning Board is April 6, 2021. If you wish to comment, please submit your comment by Wednesday March 31, 2021, so that the Petitioner has time to address any concerns or questions in advance of the hearing.

Thanks, alex.

Alexandra Clee Assistant Town Planner Town of Needham 500 Dedham Avenue Needham, MA 02492 781-455-7550 Ext 271 Needhamma.gov



TOWN OF NEEDHAM, MASSACHUSETTS PUBLIC WORKS DEPARTMENT 500 Dedham Avenue, Needham, MA 02492 Telephone (781) 455-7550 FAX (781) 449-9023

December 6, 2021

Needham Planning Board Public Service Administration Building Needham, MA 02492

RE: Project Site Plan Follow up Review of revised submittals

Needham Enterprises Childcare Facility-1688 Central Avenue

Dear Members of the Board,

The Department of Public Works has completed a follow up review for the above referenced site Planning Board plan permit application. The applicant proposes to construct a new 9,966 square foot building as a childcare facility. The childcare facility will have a maximum of 100-children. The support staff will be 13-employees.

The most recent submittals for review consist of an update plan set by Glossa Engineering, Inc dated November 22, 2021, and a response memo from Evans Huber, Esq. dated December 2, 2021.

Our comments and recommendations are as follows:

• The Department of Public Works has reviewed and discussed the sidewalk reconstruction plans with the Applicant's Engineer. The Applicant's Engineer has agreed to modify and resubmit the plans to meet the Town of Needham specifications. The DPW does not object that the revised plans be provided as part of a plan modification to the Planning Board's Decision.

If you have any questions regarding the above, please contact our office at 781-455-7538.

Truly yours,

Thomas Ryder Assistant Town Engineer



111 River Street Weymouth, MA 02191-2104 Telephone: (781) 589-7339 e-mail: jt.gillon@comcast.net

TECHNICAL MEMORANDUM

To: John Glossa, P.E., Glossa Engineering

Date: October 27, 2021 From: John T. Gillon, P.E.

Re: New Day Care Facility at 1688 Central Avenue Response 3

At your request, I have re-visited the Central Avenue corridor by obtaining new morning and evening peak hour counts at the Central Avenue / Charles River Street intersection. As can be seen on Figure 1, although that intersection is approximately 925 feet from the site access driveway, the southbound Central Avenue STOP LINE is only about 885 feet away. The new peak hour turning movements are provided separately but are provided on Figure 2 of this Memorandum. As detailed on Figure 3, those counts were increased by 30.4% as evidenced by MassDOT Station ID #6161 to identify 2021 roadway network volumes had Covid-19 not occurred. The adjusted 2021 morning and evening peak hour turning movement volumes are shown on Figure 4. These volumes were further inflated by one percent per year over seven years for a total of seven percent to account for normal growth which may occur between 2021 and 2028, our Base analysis year as provided on Figure 5. The site generation traffic volumes based on ITE projections for a 10,034 square-foot facility are provided on Figure 6. The projected peak hour traffic volumes comprised of the 2028 Base-year volumes and the projected site generated traffic volumes are shown on Figure 7.

We have utilized the following signal timing for existing, base and build conditions:

 \emptyset 2 = 50 sec split \emptyset 5 = 20 sec split

 \emptyset 6 = 30 sec split

 $\emptyset 4 \& \emptyset 8 = 40 \text{ sec split}$

All Yellow = 3.0 sec, All Red = 2.0 sec.

Synchro 11 software was utilized and the roadway link length between the site and Charles River Street was identified as 885 feet. Both of these nodes were analyzed on the same roadway network. The electronic files will be made available to the Town and their consultant.

Levels of Service

As can be seen on Figure 8, (first two columns) the Central Avenue / Charles River Street intersection currently operates at overall levels of service of "E" during the morning peak hour (7:15 a.m. to 8:15 a.m.) and "D" during the evening peak hour (5:00 p.m. to 6:00 p.m.), assuming roadway network volumes adjusted upwards as described above.

The third and fourth columns in Figure 8 (Base 2028 AM and PM) show level of service projections for this intersection, that are anticipated for 2028 with no development at 1688 Central. These columns project that overall levels of service will worsen somewhat compared to current non-Covid conditions, again, assuming that there is no development at 1688 Central Avenue

The fifth and sixth columns in Figure 8 (entitled Projected Exist. Splits AM and PM) show the projected levels of service in 2028 at this intersection assuming that 1688 Central Ave is developed as Child Care Facility as proposed by the Applicant, but also assuming that no change in the timing of the signalization at the intersection is implemented.

Even if no change in the signal timing is implemented, these columns show that the development of this site as proposed will have essentially no impact on the projected levels of service on Charles River street during peak hours, and will have only a modest impact on Central Avenue Northbound levels of service during those hours. The only significant impact from the development of this site is projected to be on Central Avenue Southbound during the evening peak hour. Again, however, this assumes that no change to the intersection signal timing is made.

The last two columns on Figure 8 show the projected levels of service at this intersection in 2028 if this site is developed as proposed, and if the timing of the signals is optimized from the perspective of the intersection as a whole. As shown in these two columns, if the changed timing used for these calculations were to be implemented, the overall levels of service (and delays) on Central Ave during peak hours would become significantly better, while the delays and levels of service on Charles River Street would become worse.

However, it is not necessary to use this particular timing change in order to meaningfully mitigate the impact of traffic to and from this site on the overall level of service on Central Ave during peak hours. Less significant changes to the timing could be made which would improve traffic flow (and queueing) on Central Ave, without such a substantial impact on Charles River Street. The exact signal timing change decided upon should be based on a combination of traffic engineering and policy decisions as to how to best improve traffic at this intersection in all four directions.

Queueing at the Central Ave/Charles River Street Intersection

The sixth row of data on Figure 8 shows that the 95th percentile queue on Central Avenue southbound during the evening peak hour will increase from 830 feet today (with non-Covid traffic volumes) to 907 feet in 2028 without the proposed development of 1688 Central and 950 feet with the proposed development. Thus, comparing 2028 "build" to "no build" conditions projects an increase in the length of the queue during the evening peak hour of about 43 feet (approximately 2-3 vehicles) if this project is developed as proposed.

However since the length of the queue in 2028 is projected to extend past the site driveway under either "build" or "no build" conditions, a change to the timing of the signals at the intersection is called for. As shown on Figure 8 (last row, last column) if traffic signal timing is optimized for the entire intersection, the southbound queue could shorten from 830 feet today to only 670 feet, which is more than 200 feet south of the site driveway. These distances are summarized below:

Central Ave Evening Peak Hour Queueing from Central Ave/Charles River Intersection on Central Ave Southbound

Projected 2028

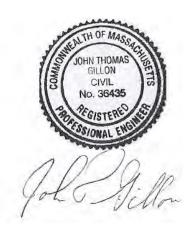
Existing Base 2028 (no build) Existing Timing Improved Timing

830 Feet 907 Feet 950 Feet 670 Feet

As noted above, it is not necessary to implement this particular timing change in order to significantly improve the queueing on Central Ave southbound, such that the queue from the intersection will not back up as far as the site driveway. It is clear that even a less substantial change to the signal timing can provide significant mitigation of the queueing from the intersection back towards the site.

Thank you for the opportunity to provide this additional information.

John T. Gillon, P.E.





N: Central Avenue S: Central Avenue Location:

E: Charles River Street W: Charles River Street

City, State: Needham, MA Client: Gillon/J. Gillon

TBA Site Code:

Class:

Count Date: Wednesday, October 13, 2021

7:00 AM Start Time: End Time: 9:00 AM



157 Washington Street, Suite 2 Hudson, MA 01749 Office: 508-875-0100 Fax: 508-875-0118

Cars and Heavy Vehicles (Combined)

		Cen	tral Ave	enue			Charle	s River	Street			Cen	tral Ave	nue			Charle	s River	Street		
		fro	om Nor	th			fı	rom Eas	st			fr	om Sou	ıth			fr	om We	st		
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Total
7:00 AM	3	19	1	0	23	4	14	1	0	19	1	172	10	0	183	5	25	50	0	80	305
7:15 AM	2	31	2	0	35	6	20	2	0	28	1	158	12	0	171	5	35	68	0	108	342
7:30 AM	3	29	6	0	38	3	27	2	0	32	1	162	15	0	178	9	58	51	0	118	366
7:45 AM	3	51	1	0	55	4	33	3	0	40	0	150	25	0	175	9	44	70	0	123	393
Total	11	130	10	0	151	17	94	8	0	119	3	642	62	0	707	28	162	239	0	429	1406
8:00 AM	3	39	2	0	44	4	30	1	0	35	2	139	16	0	157	17	32	64	0	113	349
8:15 AM	4	31	1	0	36	8	34	3	0	45	0	115	20	0	135	8	34	64	0	106	322
8:30 AM	5	47	4	0	56	7	23	4	0	34	1	125	15	0	141	19	27	39	0	85	316
8:45 AM	6	41	5	0	52	5	22	1	0	28	2	106	9	0	117	5	31	46	0	82	279
Total	18	158	12	0	188	24	109	9	0	142	5	485	60	0	550	49	124	213	0	386	1266
Grand Total	29	288	22	0	339	41	203	17	0	261	8	1127	122	0	1257	77	286	452	0	815	2672
Approach %	8.6	85.0	6.5	0.0		15.7	77.8	6.5	0.0		0.6	89.7	9.7	0.0		9.4	35.1	55.5	0.0		l
Total %	1.1	10.8	0.8	0.0	12.7	1.5	7.6	0.6	0.0	9.8	0.3	42.2	4.6	0.0	47.0	2.9	10.7	16.9	0.0	30.5	
Exiting Leg Total					1620					316					382					354	2672
Cars	25	276	21	0	322	37	194	16	0	247	8	1079	118	0	1205	74	276	434	0	784	2558
% Cars	86.2	95.8	95.5	0.0	95.0	90.2	95.6	94.1	0.0	94.6	100.0	95.7	96.7	0.0	95.9	96.1	96.5	96.0	0.0	96.2	95.7
Exiting Leg Total					1550					305					366					337	2558
Heavy Vehicles	4	12	1	0	17	4	9	1	0	14	0	48	4	0	52	3	10	18	0	31	114
% Heavy Vehicles	13.8	4.2	4.5	0.0	5.0	9.8	4.4	5.9	0.0	5.4	0.0	4.3	3.3	0.0	4.1	3.9	3.5	4.0	0.0	3.8	4.3
Exiting Leg Total					70					11					16					17	114

7:15 AM		Cent	ral Ave	nue			Charle	s River	Street			Cen	tral Ave	nue			Charle	s River	Street		
		fro	m Nor	th			fr	om Eas	it			fr	om Sou	th			fr	om We	st		
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Total
7:15 AM	2	31	2	0	35	6	20	2	0	28	1	158	12	0	171	5	35	68	0	108	342
7:30 AM	3	29	6	0	38	3	27	2	0	32	1	162	15	0	178	9	58	51	0	118	366
7:45 AM	3	51	1	0	55	4	33	3	0	40	0	150	25	0	175	9	44	70	0	123	393
8:00 AM	3	39	2	0	44	4	30	1	0	35	2	139	16	0	157	17	32	64	0	113	349
Total Volume	11	150	11	0	172	17	110	8	0	135	4	609	68	0	681	40	169	253	0	462	1450
% Approach Total	6.4	87.2	6.4	0.0		12.6	81.5	5.9	0.0		0.6	89.4	10.0	0.0		8.7	36.6	54.8	0.0		
PHF	0.917	0.735	0.458	0.000	0.782	0.708	0.833	0.667	0.000	0.844	0.500	0.940	0.680	0.000	0.956	0.588	0.728	0.904	0.000	0.939	0.922
Cars	1 10	142	10	0	162	1.0	105	0	0	120	4	F01	68	0	cral	40	165	244	0	446	1201
Cars %	10	143	10	0	163	16	105	100.0	0	129	100.0	581 95.4		0.0	653	40	165 97.6	241	0.0	446	1391
Heavy Vehicles	90.9	95.3 7	90.9	0.0	94.8	94.1	95.5 5	100.0	0.0	95.6	100.0		100.0		95.9	100.0		95.3		96.5	95.9
Heavy Vehicles %	9.1	4.7	9.1	0.0	5.2	5.9	4.5	0.0	0.0	4.4	0.0	28 4.6	0.0	0.0	28 4.1	0.0	4 2.4	12 4.7	0.0	16 3.5	59 4.1
neavy venicles /6	9.1	4.7	9.1	0.0	5.2	5.9	4.5	0.0	0.0	4.4	0.0	4.0	0.0	0.0	4.1	0.0	2.4	4.7	0.0	3.5	4.1
Cars Enter Leg	10	143	10	0	163	16	105	8	0	129	4	581	68	0	653	40	165	241	0	446	1391
Heavy Enter Leg	1	7	1	0	9	1	5	0	0	6	0	28	0	0	28	0	4	12	0	16	59
Total Entering Leg	11	150	11	0	172	17	110	8	0	135	4	609	68	0	681	40	169	253	0	462	1450
Cars Exiting Leg					838					179					191					183	1391
Heavy Exiting Leg					41					5					7					6	59
Total Exiting Leg					879					184					198					189	1450

Location: N: Central Avenue S: Central Avenue

E: Charles River Street W: Charles River Street Location:

City, State: Needham, MA Gillon/J. Gillon Client:

TBA Site Code:

Count Date: Wednesday, October 13, 2021

7:00 AM Start Time: End Time: 9:00 AM



157 Washington Street, Suite 2 Hudson, MA 01749 Office: 508-875-0100 Fax: 508-875-0118

Class:										ırs											
		Cent	ral Ave	nue			Charle	s River	Street			Cen	tral Ave	enue			Charle	s River	Street		
		fro	m Nor	th			fr	om Eas	t			fr	om Sou	ıth			fr	om We	st		
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Total
7:00 AM	2	18	1	0	21	2	11	1	0	14	1	168	9	0	178	4	25	48	0	77	290
7:15 AM	1	29	2	0	32	6	18	2	0	26	1	154	12	0	167	5	35	60	0	100	325
7:30 AM	3	28	6	0	37	2	27	2	0	31	1	150	15	0	166	9	58	50	0	117	351
7:45 AM	3	50	0	0	53	4	32	3	0	39	0	143	25	0	168	9	42	68	0	119	379
Total	9	125	9	0	143	14	88	8	0	110	3	615	61	0	679	27	160	226	0	413	1345
8:00 AM	3	36	2	0	41	4	28	1	0	33	2	134	16	0	152	17	30	63	0	110	336
8:15 AM	4	30	1	0	35	7	33	2	0	42	0	113	18	0	131	6	32	63	0	101	309
8:30 AM	5	47	4	0	56	7	23	4	0	34	1	118	15	0	134	19	26	36	0	81	305
8:45 AM	4	38	5	0	47	5	22	1	0	28	2	99	8	0	109	5	28	46	0	79	263
Total	16	151	12	0	179	23	106	8	0	137	5	464	57	0	526	47	116	208	0	371	1213
Grand Total	25	276	21	0	322	37	194	16	0	247	8	1079	118	0	1205	74	276	434	0	784	2558
Approach %	7.8	85.7	6.5	0.0		15.0	78.5	6.5	0.0		0.7	89.5	9.8	0.0		9.4	35.2	55.4	0.0		
Total %	1.0	10.8	0.8	0.0	12.6	1.4	7.6	0.6	0.0	9.7	0.3	42.2	4.6	0.0	47.1	2.9	10.8	17.0	0.0	30.6	
Exiting Leg Total			·	·	1550		·			305				·	366				·	337	2558

					-0 -																
7:15 AM		Cent	ral Ave	nue			Charle	s River	Street			Cen	tral Ave	nue			Charle	s River	Street		Ì
		fro	m Nort	th			fr	om Eas	t			fr	om Sou	th			fr	om We	st		
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Total
7:15 AM	1	29	2	0	32	6	18	2	0	26	1	154	12	0	167	5	35	60	0	100	325
7:30 AM	3	28	6	0	37	2	27	2	0	31	1	150	15	0	166	9	58	50	0	117	351
7:45 AM	3	50	0	0	53	4	32	3	0	39	0	143	25	0	168	9	42	68	0	119	379
8:00 AM	3	36	2	0	41	4	28	1	0	33	2	134	16	0	152	17	30	63	0	110	336
Total Volume	10	143	10	0	163	16	105	8	0	129	4	581	68	0	653	40	165	241	0	446	1391
% Approach Total	6.1	87.7	6.1	0.0		12.4	81.4	6.2	0.0		0.6	89.0	10.4	0.0		9.0	37.0	54.0	0.0		Ì
PHF	0.833	0.715	0.417	0.000	0.769	0.667	0.820	0.667	0.000	0.827	0.500	0.943	0.680	0.000	0.972	0.588	0.711	0.886	0.000	0.937	0.918
Entering Leg	10	143	10	0	163	16	105	8	0	129	4	581	68	0	653	40	165	241	0	446	1391
Exiting Leg					838					179					191					183	1391
Total					1001					308					844					629	2782

N: Central Avenue S: Central Avenue Location:

E: Charles River Street W: Charles River Street

City, State: Needham, MA Gillon/J. Gillon Client:

TBA Site Code:

Class:

Count Date: Wednesday, October 13, 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

Heavy Vehicles-Combined (Buses, Single-Unit Trucks, Articulated Trucks)

		Cen	tral Ave	enue			Charle	s River	Street			Cen	tral Av	enue			Charle	es River	Street		ī
		fr	om Noi	th			fı	om Eas	st			fr	om So	uth			fr	om We	est		
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Total
7:00 AM	1	1	0	0	2	2	3	0	0	5	0	4	1	0	5	1	0	2	0	3	15
7:15 AM	1	2	0	0	3	0	2	0	0	2	0	4	0	0	4	0	0	8	0	8	17
7:30 AM	0	1	0	0	1	1	0	0	0	1	0	12	0	0	12	0	0	1	0	1	15
7:45 AM	0	1	1	0	2	0	1	0	0	1	0	7	0	0	7	0	2	2	0	4	14
Total	2	5	1	0	8	3	6	0	0	9	0	27	1	0	28	1	2	13	0	16	61
8:00 AM	0	3	0	0	3	0	2	0	0	2	0	5	0	0	5	0	2	1	0	3	13
8:15 AM	0	1	0	0	1	1	1	1	0	3	0	2	2	0	4	2	2	1	0	5	13
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	7	0	0	7	0	1	3	0	4	11
8:45 AM	2	3	0	0	5	0	0	0	0	0	0	7	1	0	8	0	3	0	0	3	16
Total	2	7	0	0	9	1	3	1	0	5	0	21	3	0	24	2	8	5	0	15	53
Grand Total	4	12	1	0	17	4	9	1	0	14	0	48	4	0	52	3	10	18	0	31	114
Approach %	23.5	70.6	5.9	0.0		28.6	64.3	7.1	0.0		0.0	92.3	7.7	0.0		9.7	32.3	58.1	0.0		ì
Total %	3.5	10.5	0.9	0.0	14.9	3.5	7.9	0.9	0.0	12.3	0.0	42.1	3.5	0.0	45.6	2.6	8.8	15.8	0.0	27.2	ì
Exiting Leg Total					70					11					16					17	114
Buses	0	2	0	0	2	3	0	1	0	4	0	2	0	0	2	2	0	4	0	6	14
% Buses	0.0	16.7	0.0	0.0	11.8	75.0	0.0	100.0	0.0	28.6	0.0	4.2	0.0	0.0	3.8	66.7	0.0	22.2	0.0	19.4	12.3
Exiting Leg Total					9					0					5					0	14
Single-Unit Trucks	2	9	1	0	12	1	8	0	0	9	0	43	3	0	46	1	8	10	0	19	86
% Single-Unit	50.0	75.0	100.0	0.0	70.6	25.0	88.9	0.0	0.0	64.3	0.0	89.6	75.0	0.0	88.5	33.3	80.0	55.6	0.0	61.3	75.4
Exiting Leg Total					54					9					10					13	86
Articulated Trucks	2	1	0	0	3	0	1	0	0	1	0	3	1	0	4	0	2	4	0	6	14
% Articulated	50.0	8.3	0.0	0.0	17.6	0.0	11.1	0.0	0.0	7.1	0.0	6.3	25.0	0.0	7.7	0.0	20.0	22.2	0.0	19.4	12.3
Exiting Leg Total					7					2					1					4	14

7:00 AM		Cent	ral Ave	nue			Charle	s River	Street			Cent	tral Ave	nue			Charle	s River	Street		
		fro	m Nor	th			fr	om Eas	t			fr	om Sou	ıth			fr	om We	st		
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Total
7:00 AM	1	1	0	0	2	2	3	0	0	5	0	4	1	0	5	1	0	2	0	3	15
7:15 AM	1	2	0	0	3	0	2	0	0	2	0	4	0	0	4	0	0	8	0	8	17
7:30 AM	0	1	0	0	1	1	0	0	0	1	0	12	0	0	12	0	0	1	0	1	15
7:45 AM	0	1	1	0	2	0	1	0	0	1	0	7	0	0	7	0	2	2	0	4	14
Total Volume	2	5	1	0	8	3	6	0	0	9	0	27	1	0	28	1	2	13	0	16	61
% Approach Total	25.0	62.5	12.5	0.0		33.3	66.7	0.0	0.0		0.0	96.4	3.6	0.0		6.3	12.5	81.3	0.0		ł
PHF	0.500	0.625	0.250	0.000	0.667	0.375	0.500	0.000	0.000	0.450	0.000	0.563	0.250	0.000	0.583	0.250	0.250	0.406	0.000	0.500	0.897
				_			_	_	_	_1		_	_	_	-1		_	_	_	- r	1 _
Buses	0	1	0	0	1	2	0	0	0	2	0	0	0	0	0	1	0	3	0	4	7
Buses %	0.0	20.0	0.0	0.0	12.5	66.7	0.0	0.0	0.0	22.2	0.0	0.0	0.0	0.0	0.0	100.0	0.0	23.1	0.0	25.0	
Single-Unit Trucks	1	3	1	0	5	1	6	0	0	7	0	25	1	0	26	0	2	8	0	10	_
Single-Unit %	50.0	60.0	100.0	0.0	62.5	33.3	100.0	0.0	0.0	77.8	0.0	92.6	100.0	0.0	92.9	0.0	100.0	61.5	0.0	62.5	
Articulated Trucks	1	1	0	0	2	0	0	0	0	0	0	2	0	0	2	0	0	2	0	2	6
Articulated %	50.0	20.0	0.0	0.0	25.0	0.0	0.0	0.0	0.0	0.0	0.0	7.4	0.0	0.0	7.1	0.0	0.0	15.4	0.0	12.5	9.8
Buses	0	1	0	0	1	2	0	0	0	2	0	0	0	0	0	1	0	3	0	4	7
Single-Unit Trucks	1	3	1	0	5	1	6	0	0	7	0	25	1	0	26	0	2	8	0	10	48
Articulated Trucks	1	1	0	0	2	0	0	0	0	0	0	2	0	0	2	0	0	2	0	2	6
Total Entering Leg	2	5	1	0	8	3	6	0	0	9	0	27	1	0	28	1	2	13	0	16	61
Buses	1				5					0					2					0	7
Single-Unit Trucks					34					3					3					8	48
Articulated Trucks					4					0					1					1	6
Total Exiting Leg					43					3					6					9	61

N: Central Avenue S: Central Avenue Location:

E: Charles River Street W: Charles River Street Location:

City, State: Needham, MA Gillon/J. Gillon Client:

TBA Site Code:

Count Date: Wednesday, October 13, 2021

7:00 AM Start Time: End Time: 9:00 AM



157 Washington Street, Suite 2 Hudson, MA 01749 Office: 508-875-0100 Fax: 508-875-0118

Class:										Bu	ses										
		Cent	ral Ave	nue			Charle	s River	Street			Cen	tral Ave	nue			Charle	s River	Street		
		fro	m Nor	th			f	rom Eas	st			fr	om Sou	th			fr	om We	st)
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Total
7:00 AM	0	1	0	0	1	2	0	0	0	2	0	0	0	0	0	1	0	1	0	2	5
7:15 AM	0	0	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	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	1	0	1	1
Total	0	1	0	0	1	2	0	0	0	2	0	0	0	0	0	1	0	3	0	4	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	1	0	2	0	1	0	0	1	1	0	0	0	1	4
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	1	0	1	2
8:45 AM	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Total	0	1	0	0	1	1	0	1	0	2	0	2	0	0	2	1	0	1	0	2	7
Grand Total	0	2	0	0	2	3	0	1	0	4	0	2	0	0	2	2	0	4	0	6	14
Approach %	0.0	100.0	0.0	0.0		75.0	0.0	25.0	0.0		0.0	100.0	0.0	0.0		33.3	0.0	66.7	0.0		
Total %	0.0	14.3	0.0	0.0	14.3	21.4	0.0	7.1	0.0	28.6	0.0	14.3	0.0	0.0	14.3	14.3	0.0	28.6	0.0	42.9	
Exiting Leg Total			•	•	9				•	0		•		•	5		•	•		0	14

reak Hour Allalysis	11011107	.UU AIVI	10 05.0	JU AIVI L	egiiis a	ι.															
7:00 AM		Cent	tral Ave	nue			Charle	s River :	Street			Cent	ral Ave	nue			Charle	s River	Street		İ
		fro	om Nor	th			fr	om Eas	t			fr	om Sou	th			fr	om Wes	st		
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Total
7:00 AM	0	1	0	0	1	2	0	0	0	2	0	0	0	0	0	1	0	1	0	2	5
7:15 AM	0	0	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	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	1	0	1	1
Total Volume	0	1	0	0	1	2	0	0	0	2	0	0	0	0	0	1	0	3	0	4	7
% Approach Total	0.0	100.0	0.0	0.0		100.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0		25.0	0.0	75.0	0.0		
PHF	0.000	0.250	0.000	0.000	0.250	0.250	0.000	0.000	0.000	0.250	0.000	0.000	0.000	0.000	0.000	0.250	0.000	0.750	0.000	0.500	0.350
Entering Leg	0	1	0	0	1	2	0	0	0	2	0	0	0	0	0	1	0	3	0	4	7
Exiting Leg					5					0					2					0	7
Total					6					2					2					4	14

N: Central Avenue S: Central Avenue Location:

E: Charles River Street W: Charles River Street Location:

City, State: Needham, MA Gillon/J. Gillon Client:

TBA Site Code:

Count Date: Wednesday, October 13, 2021

7:00 AM Start Time: End Time: 9:00 AM



157 Washington Street, Suite 2 Hudson, MA 01749 Office: 508-875-0100 Fax: 508-875-0118

Class:

Single-Unit Trucks

									_	J											
		Cent	tral Ave	nue			Charle	s River	Street			Cen	tral Ave	enue			Charle	s River	Street		
		fro	om Nor	th			f	rom Eas	st			fr	om Sou	ıth			fr	om We	st)
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Total
7:00 AM	0	0	0	0	0	0	3	0	0	3	0	4	1	0	5	0	0	1	0	1	9
7:15 AM	1	1	0	0	2	0	2	0	0	2	0	3	0	0	3	0	0	5	0	5	12
7:30 AM	0	1	0	0	1	1	0	0	0	1	0	11	0	0	11	0	0	1	0	1	14
7:45 AM	0	1	1	0	2	0	1	0	0	1	0	7	0	0	7	0	2	1	0	3	13
Total	1	3	1	0	5	1	6	0	0	7	0	25	1	0	26	0	2	8	0	10	48
8:00 AM	0	3	0	0	3	0	2	0	0	2	0	5	0	0	5	0	0	1	0	1	11
8:15 AM	0	1	0	0	1	0	0	0	0	0	0	1	1	0	2	1	2	0	0	3	6
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	5	0	0	5	0	1	1	0	2	7
8:45 AM	1	2	0	0	3	0	0	0	0	0	0	7	1	0	8	0	3	0	0	3	14
Total	1	6	0	0	7	0	2	0	0	2	0	18	2	0	20	1	6	2	0	9	38
	1 _	_			1	l .	_		_	_1	1 _		_			l .			_		1
Grand Total	2	9	1	0	12	1	8	0	0	9	0	43	3	0	46	1	8	10	0	19	86
Approach %	16.7	75.0	8.3	0.0		11.1	88.9	0.0	0.0		0.0	93.5	6.5	0.0		5.3	42.1	52.6	0.0		
Total %	2.3	10.5	1.2	0.0	14.0	1.2	9.3	0.0	0.0	10.5	0.0	50.0	3.5	0.0	53.5	1.2	9.3	11.6	0.0	22.1	
Exiting Leg Total					54					9					10					13	86

Teak Hour Analysis	11011107	.00 AIVI	10 05.0	O AIVI D	egiiis a	ι.															
7:15 AM		Cent	ral Ave	nue			Charle	s River	Street			Cen	tral Ave	nue			Charle	es River	Street		
		fro	m Nor	th			fr	om Eas	t			fr	om Sou	ıth			fr	om We	st		
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Total
7:15 AM	1	1	0	0	2	0	2	0	0	2	0	3	0	0	3	0	0	5	0	5	12
7:30 AM	0	1	0	0	1	1	0	0	0	1	0	11	0	0	11	0	0	1	0	1	14
7:45 AM	0	1	1	0	2	0	1	0	0	1	0	7	0	0	7	0	2	1	0	3	13
8:00 AM	0	3	0	0	3	0	2	0	0	2	0	5	0	0	5	0	0	1	0	1	11
Total Volume	1	6	1	0	8	1	5	0	0	6	0	26	0	0	26	0	2	8	0	10	50
% Approach Total	12.5	75.0	12.5	0.0		16.7	83.3	0.0	0.0		0.0	100.0	0.0	0.0		0.0	20.0	80.0	0.0		
PHF	0.250	0.500	0.250	0.000	0.667	0.250	0.625	0.000	0.000	0.750	0.000	0.591	0.000	0.000	0.591	0.000	0.250	0.400	0.000	0.500	0.893
Entering Leg	1	6	1	0	8	1	5	0	0	6	0	26	0	0	26	0	2	8	0	10	50
Exiting Leg					35					3					6					6	50
Total					43					9					32					16	100

N: Central Avenue S: Central Avenue Location:

E: Charles River Street W: Charles River Street Location:

City, State: Needham, MA Gillon/J. Gillon Client:

TBA Site Code:

Count Date: Wednesday, October 13, 2021

7:00 AM Start Time: End Time: 9:00 AM



157 Washington Street, Suite 2 Hudson, MA 01749 Office: 508-875-0100 Fax: 508-875-0118

Articulated Trucks

Class:									Arti	iculat	ed Tru	cks									
		Cent	ral Ave	nue			Charle	s River	Street			Cen	tral Ave	enue			Charle	s River	Street		
		fro	m Nor	th			fr	om Eas	t			fr	om Sou	ıth			fr	om We	st		·
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Total
7:00 AM	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
7:15 AM	0	1	0	0	1	0	0	0	0	0	0	1	0	0	1	0	0	2	0	2	4
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	1
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	1	1	0	0	2	0	0	0	0	0	0	2	0	0	2	0	0	2	0	2	6
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	2	2
8:15 AM	0	0	0	0	0	0	1	0	0	1	0	0	1	0	1	0	0	1	0	1	3
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	1	0	1	2
8:45 AM	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Total	1	0	0	0	1	0	1	0	0	1	0	1	1	0	2	0	2	2	0	4	8
	ī					Ì				ı	Ì				ı	Ì				ı	
Grand Total	2	1	0	0	3	0	1	0	0	1	0	3	1	0	4	0	2	4	0	6	14
Approach %	66.7	33.3	0.0	0.0		0.0	100.0	0.0	0.0		0.0	75.0	25.0	0.0		0.0	33.3	66.7	0.0		
Total %	14.3	7.1	0.0	0.0	21.4	0.0	7.1	0.0	0.0	7.1	0.0	21.4	7.1	0.0	28.6	0.0	14.3	28.6	0.0	42.9	
Exiting Leg Total					7					2					1					4	14

Teak Hour Analysis	11011107	.00 AIVI	10 05.0	O AIVI D	egiiis a	ι.															
8:00 AM		Cent	ral Ave	nue			Charle	s River :	Street			Cent	ral Ave	nue			Charle	s River	Street		
		fro	m Nort	th			fr	om Eas	t			fr	om Sou	th			fr	om We	st		
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Total
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	2	2
8:15 AM	0	0	0	0	0	0	1	0	0	1	0	0	1	0	1	0	0	1	0	1	3
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	1	0	1	2
8:45 AM	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Total Volume	1	0	0	0	1	0	1	0	0	1	0	1	1	0	2	0	2	2	0	4	8
% Approach Total	100.0	0.0	0.0	0.0		0.0	100.0	0.0	0.0		0.0	50.0	50.0	0.0		0.0	50.0	50.0	0.0		
PHF	0.250	0.000	0.000	0.000	0.250	0.000	0.250	0.000	0.000	0.250	0.000	0.250	0.250	0.000	0.500	0.000	0.250	0.500	0.000	0.500	0.667
Entering Leg	1	0	0	0	1	0	1	0	0	1	0	1	1	0	2	0	2	2	0	4	8
Exiting Leg					3					2					0					3	8
Total					4					3					2					7	16

Location: N: Central Avenue S: Central Avenue

E: Charles River Street W: Charles River Street Location:

City, State: Needham, MA Gillon/J. Gillon Client:

TBA Site Code:

Count Date: Wednesday, October 13, 2021

7:00 AM Start Time: End Time: 9:00 AM



157 Washington Street, Suite 2 Hudson, MA 01749 Office: 508-875-0100 Fax: 508-875-0118

Bicycles (on Roadway and Crosswalks)

Class:										Bicy	cles	(on	Roa	ıdw	ay ar	nd C	ross	walk	s)										
			Centr	al Ave	nue				Ch	arles	River	Stree	et				Centra	al Ave	nue				Cł	arles	River	Stre	et		
			fror	n Nor	th					fro	m Ea	st					fron	n Sou	th					froi	n We	est			
	Right	Thru	Left	U-Turn	CW-EB	CW-WB	Total	Right	Thru	Left	U-Turn	CW-SB	CW-NB	Total	Right	Thru	Left	U-Turn (CW-WB	CW-EB	Total	Right	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	0	0	1	0	0	0	0	0	1	1
7:15 AM	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	2	3
7:30 AM	0	2	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
7:45 AM	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Total	0	4	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	2	0	0	0	0	3	7
8:00 AM	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
8:15 AM	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
8:30 AM	0	0	1	0	0	0	1	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0	1	0	0	0	0	1	3
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1
Total	0	1	1	0	0	0	2	0	1	1	0	0	0	2	0	0	0	0	0	0	0	0	2	0	0	0	0	2	6
Grand Total	0	5	1	0	0	0	6	0	1	1	0	0	0	2	0	0	0	0	0	0	0	1	4	0	0	0	0	5	13
Approach %	0.0	83.3	16.7	0.0	0.0	0.0		0.0	50.0	50.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0		20.0	80.0	0.0	0.0	0.0	0.0		
Total %	0.0	38.5	7.7	0.0	0.0	0.0	46.2	0.0	7.7	7.7	0.0	0.0	0.0	15.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	7.7	30.8	0.0	0.0	0.0	0.0	38.5	
Exiting Leg Total						•	0							5	•						7							1	13

•																													
7:00 AM			Centi	ral Av	enue	!			Cł	narles	Rive	r Stre	et				Centi	ral Av	enue				Cł	arles	Rive	Stre	et		
			fro	m No	rth					fro	om Ea	ist					fro	m So	uth					fro	m We	est			
	Right	Thru	Left	U-Turn	CW-EB	CW-WB	Total	Right	Thru	Left	U-Turn	CW-SB	CW-NB	Total	Right	Thru	Left	U-Turn	CW-WB	CW-EB	Total	Right	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	0	0	1	0	0	0	0	0	1	1
7:15 AM	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	2	3
7:30 AM	0	2	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
7:45 AM	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Total Volume	0	4	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	2	0	0	0	0	3	7
% Approach Total	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	0.0	0.0	0.0	0.0	0.0		33.3	66.7	0.0	0.0	0.0	0.0		
PHF	0.000	0.500	0.000	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	0.000	0.000	0.000	0.000	0.250	0.250	0.000	0.000	0.000	0.000	0.375	0.583
	i							i							i							i							
Entering Leg	0	4	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	2	0	0	0	0	3	7
Exiting Leg							0							2							5							0	7
Total							4							2							5							3	14

Location: N: Central Avenue S: Central Avenue

E: Charles River Street W: Charles River Street Location:

City, State: Needham, MA Gillon/J. Gillon Client:

Site Code: TBA

Count Date: Wednesday, October 13, 2021

7:00 AM Start Time: End Time: 9:00 AM



157 Washington Street, Suite 2 Hudson, MA 01749 Office: 508-875-0100 Fax: 508-875-0118

Pedestrians

Class:													Pe	des	triar	าร													
			Centr	al Ave	nue				Cł	arles	River	Stre	et				Centr	al Ave	enue				Cł	narles	River	Stre	et		
			fror	n Nor	th					fro	om Eas	st					fror	n Sou	th					fror	n We	st			
	Right	Thru	Left	U-Turn (:W-EB C	W-WB	Total	Right	Thru	Left	U-Turn	CW-SB	CW-NB	Total	Right	Thru	Left	U-Turn (CW-WB	CW-EB	Total	Right	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	0	0	0	0	0	0	0	1	1	1
7:15 AM	0	0	0	0	0	0	0	0	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	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	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	1	1	1
8:00 AM	0	0	0	0	0	0	0	0	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	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
8:45 AM	0	0	0	0	0	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	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Grand Total	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	1	1	2
Approach %	0	0	0	0	0	0		0	0	0	0	0	100		0	0	0	0	0	0		0	0	0	0	0	100		
Total %	0	0	0	0	0	0	0	0	0	0	0	0	50	50	0	0	0	0	0	0	0	0	0	0	0	0	50	50	
Exiting Leg Total							0							1							0							1	2

	,			•				8																						
7:00 A	AΜ			Cent	ral Av	enue/	:			Cł	narles	Rive	r Stre	et				Centi	ral Av	enue				Ch	arles	Rive	r Stre	et		
	Ī			fro	m No	rth					fro	m Ea	ist					fro	m Soı	uth					fro	m W	est			
		Right	Thru	Left	U-Turn	CW-EB	CW-WB	Total	Right	Thru	Left	U-Turn	CW-SB	CW-NB	Total	Right	Thru	Left	U-Turn	CW-WB	CW-EB	Total	Right	Thru	Left	U-Turn	CW-NB	CW-SB	Total	Total
7:00 A	AΜ	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1
7:15 A	AΜ	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 A	AΜ	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 A	AΜ	0	0	0	0	0	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 Vol	ume	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1
% Approach T	Γotal	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	100.0		
	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	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.250	0.250	0.250
	. 1	_	_	_	_	_	_	اء	۱ .	_		_	_	_	_		_	_	_	_		اء		_	_	_	_		1	
Entering	-	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1
Exiting	Leg							0							0							0							1	1
Т	otal							0							0							0							2	2

Location: N: Central Avenue S: Central Avenue

Location: E: Charles River Street W: Charles River Street

Client: Needham, MA
Client: Gillon/J. Gillon

Site Code: TBA

Count Date: Wednesday, October 13, 2021

Start Time: 4:00 PM End Time: 6:00 PM PRECISION
D A T A
INDUSTRIES, LLC

157 Washington Street, Suite 2
Hudson, MA 01749
Office: 508-875-0100 Fax: 508-875-0118

Concond

Class:

Cars and Heavy Vehicles (Combined)

		Cent	ral Ave	enue			Charle	s River	Street			Cen	tral Ave	enue			Charle	s River	Street		
		fro	m Nor	th			fr	om Eas	st			fr	om Sou	ıth			fr	om We	st		
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Total
4:00 PM	5	164	4	0	173	1	38	2	0	41	0	44	5	0	49	15	36	22	0	73	336
4:15 PM	4	134	6	0	144	8	47	3	0	58	4	46	15	0	65	18	38	22	0	78	345
4:30 PM	5	133	19	0	157	2	37	3	0	42	1	57	13	0	71	9	29	22	0	60	330
4:45 PM	10	145	5	0	160	7	32	3	0	42	1	41	16	0	58	9	32	28	0	69	329
Total	24	576	34	0	634	18	154	11	0	183	6	188	49	0	243	51	135	94	0	280	1340
5:00 PM	8	148	5	0	161	2	20	5	0	27	0	50	4	0	54	12	36	22	0	70	312
5:15 PM	4	158	3	0	165	2	41	0	0	43	1	57	5	0	63	14	40	24	0	78	349
5:30 PM	6	141	6	0	153	10	45	7	0	62	1	55	11	0	67	13	26	33	0	72	354
5:45 PM	7	151	5	0	163	13	35	1	0	49	0	55	13	0	68	14	34	25	0	73	353
Total	25	598	19	0	642	27	141	13	0	181	2	217	33	0	252	53	136	104	0	293	1368
Grand Total	49	1174	53	0	1276	45	295	24	0	364	8	405	82	0	495	104	271	198	0	573	2708
Approach %	3.8	92.0	4.2	0.0		12.4	81.0	6.6	0.0		1.6	81.8	16.6	0.0		18.2	47.3	34.6	0.0		ĺ
Total %	1.8	43.4	2.0	0.0	47.1	1.7	10.9	0.9	0.0	13.4	0.3	15.0	3.0	0.0	18.3	3.8	10.0	7.3	0.0	21.2	<u> </u>
Exiting Leg Total	J				648					332					1302					426	2708
Cars	48	1154	52	0	1254	43	287	23	0	353	8	396	81	0	485	99	266	196	0	561	2653
% Cars	98.0	98.3	98.1	0.0	98.3	95.6	97.3	95.8	0.0	97.0	100.0	97.8	98.8	0.0	98.0	95.2	98.2	99.0	0.0	97.9	98.0
Exiting Leg Total					635					326					1276					416	2653
Heavy Vehicles	1	20	1	0	22	2	8	1	0	11	0	9	1	0	10	5	5	2	0	12	55
% Heavy Vehicles	2.0	1.7	1.9	0.0	1.7	4.4	2.7	4.2	0.0	3.0	0.0	2.2	1.2	0.0	2.0	4.8	1.8	1.0	0.0	2.1	2.0
Exiting Leg Total					13					6					26					10	55

5:00 PM		Cent	ral Ave	nue			Charle	s River	Street			Cen	tral Ave	nue			Charle	s River	Street		
		fro	m Nor	th			fr	om Eas	t			fr	om Sou	th			fr	om We	st		
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Total
5:00 PM	8	148	5	0	161	2	20	5	0	27	0	50	4	0	54	12	36	22	0	70	312
5:15 PM	4	158	3	0	165	2	41	0	0	43	1	57	5	0	63	14	40	24	0	78	349
5:30 PM	6	141	6	0	153	10	45	7	0	62	1	55	11	0	67	13	26	33	0	72	354
5:45 PM	7	151	5	0	163	13	35	1	0	49	0	55	13	0	68	14	34	25	0	73	353
Total Volume	25	598	19	0	642	27	141	13	0	181	2	217	33	0	252	53	136	104	0	293	1368
% Approach Total	3.9	93.1	3.0	0.0		14.9	77.9	7.2	0.0		0.8	86.1	13.1	0.0		18.1	46.4	35.5	0.0		
PHF	0.781	0.946	0.792	0.000	0.973	0.519	0.783	0.464	0.000	0.730	0.500	0.952	0.635	0.000	0.926	0.946	0.850	0.788	0.000	0.939	0.966
Cars	۱ ۵-	504	40		625	27	420	42		470		246	22	•	250		424	404		200	4252
Cars %	25 100.0	591 98.8	19 100.0	0.0	635 98.9	27 100.0	138 97.9	13	0.0	178 98.3	100.0	216 99.5	32 97.0	0.0	250 99.2	52 98.1	134	104 100.0	0.0	290 99.0	1353 98.9
Heavy Vehicles	100.0	96.6 7	100.0	0.0	96.9	100.0	37.9	100.0	0.0	96.5	100.0	99.5	97.0	0.0	99.2	96.1	98.5	100.0	0.0	99.0	98.9
Heavy Vehicles %	0.0	1.2	0.0	0.0	1.1	0.0	2.1	0.0	0.0	1.7	0.0	0.5	3.0	0.0	0.8	1.9	1.5	0.0	0.0	1.0	1.1
•																					
Cars Enter Leg Heavy Enter Leg	25 0	591	19 0	0	635	27	138 3	13	0	178	2	216	32	0	250	52	134	104	0	290	1353
Total Entering Leg	25	598	19	0	642	0 27	141	13	0	181	2	217	33	0	252	53	136	104	0	293	15 1368
	23	336	13	U		21	141	13	U		2	217	33	U		33	130	104	U		
Cars Exiting Leg					347					155					656					195	1353
Heavy Exiting Leg					1					2					8					4	15
Total Exiting Leg					348					157					664					199	1368

Location: N: Central Avenue S: Central Avenue

E: Charles River Street W: Charles River Street Location:

City, State: Needham, MA Gillon/J. Gillon Client:

Site Code: TBA

Count Date: Wednesday, October 13, 2021

4:00 PM Start Time: End Time: 6:00 PM



157 Washington Street, Suite 2 Hudson, MA 01749 Office: 508-875-0100 Fax: 508-875-0118

Class:										Ca	ırs										
		Cent	ral Ave	nue			Charle	s River S	Street			Cen	tral Ave	nue			Charle	s River	Street		
		fro	m Nort	:h			fr	om Eas	t			fr	om Sou	ith			fr	om We	st		
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Total
4:00 PM	5	159	4	0	168	1	35	2	0	38	0	42	5	0	47	15	35	22	0	72	325
4:15 PM	4	131	6	0	141	6	47	3	0	56	4	43	15	0	62	17	37	22	0	76	335
4:30 PM	4	129	18	0	151	2	35	3	0	40	1	54	13	0	68	9	29	22	0	60	319
4:45 PM	10	144	5	0	159	7	32	2	0	41	1	41	16	0	58	6	31	26	0	63	321
Total	23	563	33	0	619	16	149	10	0	175	6	180	49	0	235	47	132	92	0	271	1300
5:00 PM	8	145	5	0	158	2	20	5	0	27	0	50	3	0	53	12	35	22	0	69	307
5:15 PM	4	157	3	0	164	2	40	0	0	42	1	56	5	0	62	14	39	24	0	77	345
5:30 PM	6	139	6	0	151	10	43	7	0	60	1	55	11	0	67	12	26	33	0	71	349
5:45 PM	7	150	5	0	162	13	35	1	0	49	0	55	13	0	68	14	34	25	0	73	352
Total	25	591	19	0	635	27	138	13	0	178	2	216	32	0	250	52	134	104	0	290	1353
Grand Total	48	1154	52	0	1254	43	287	23	0	353	8	396	81	0	485	99	266	196	0	561	2653
Approach %	3.8	92.0	4.1	0.0		12.2	81.3	6.5	0.0		1.6	81.6	16.7	0.0		17.6	47.4	34.9	0.0		
Total %	1.8	43.5	2.0	0.0	47.3	1.6	10.8	0.9	0.0	13.3	0.3	14.9	3.1	0.0	18.3	3.7	10.0	7.4	0.0	21.1	
Exiting Leg Total					635					326					1276					416	2653

						-0																
	5:00 PM		Cent	ral Ave	nue			Charle	s River	Street			Cent	ral Ave	nue			Charle	s River	Street		
			fro	m Nort	th			fr	om Eas	t			fr	om Sou	th			fr	om Wes	st		•
		Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Total
	5:00 PM	8	145	5	0	158	2	20	5	0	27	0	50	3	0	53	12	35	22	0	69	307
	5:15 PM	4	157	3	0	164	2	40	0	0	42	1	56	5	0	62	14	39	24	0	77	345
	5:30 PM	6	139	6	0	151	10	43	7	0	60	1	55	11	0	67	12	26	33	0	71	349
_	5:45 PM	7	150	5	0	162	13	35	1	0	49	0	55	13	0	68	14	34	25	0	73	352
	Total Volume	25	591	19	0	635	27	138	13	0	178	2	216	32	0	250	52	134	104	0	290	1353
_	% Approach Total	3.9	93.1	3.0	0.0		15.2	77.5	7.3	0.0		0.8	86.4	12.8	0.0		17.9	46.2	35.9	0.0		
	PHF	0.781	0.941	0.792	0.000	0.968	0.519	0.802	0.464	0.000	0.742	0.500	0.964	0.615	0.000	0.919	0.929	0.859	0.788	0.000	0.942	0.961
	Entering Leg	25	591	19	0	635	27	138	13	0	178	2	216	32	0	250	52	134	104	0	290	1353
_	Exiting Leg					347					155					656					195	1353
	Total					982					333					906					485	2706

N: Central Avenue S: Central Avenue Location:

E: Charles River Street W: Charles River Street Location:

City, State: Needham, MA Gillon/J. Gillon Client:

Site Code:

Class:

Wednesday, October 13, 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

Heavy Vehicles-Combined (Buses, Single-Unit Trucks, Articulated Trucks)

		Cent	ral Ave	enue	_		Charle	s River	Street		_	Cen	tral Av	enue			Charle	es River	Street		
		fro	m Nor	th			fr	om Eas	st			fr	om Sou	uth			fr	om We	st		·
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Total
4:00 PM	0	5	0	0	5	0	3	0	0	3	0	2	0	0	2	0	1	0	0	1	11
4:15 PM	0	3	0	0	3	2	0	0	0	2	0	3	0	0	3	1	1	0	0	2	10
4:30 PM	1	4	1	0	6	0	2	0	0	2	0	3	0	0	3	0	0	0	0	0	11
4:45 PM	0	1	0	0	1	0	0	1	0	1	0	0	0	0	0	3	1	2	0	6	8
Total	1	13	1	0	15	2	5	1	0	8	0	8	0	0	8	4	3	2	0	9	40
5:00 PM	0	3	0	0	3	0	0	0	0	0	0	0	1	0	1	0	1	0	0	1	5
5:15 PM	0	1	0	0	1	0	1	0	0	1	0	1	0	0	1	0	1	0	0	1	4
5:30 PM	0	2	0	0	2	0	2	0	0	2	0	0	0	0	0	1	0	0	0	1	5
5:45 PM	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Total	0	7	0	0	7	0	3	0	0	3	0	1	1	0	2	1	2	0	0	3	15
Grand Total	1	20	1	0	22	2	8	1	0	11	0	9	1	0	10	5	5	2	0	12	55
Approach %	4.5	90.9	4.5	0.0		18.2	72.7	9.1	0.0		0.0	90.0	10.0	0.0		41.7	41.7	16.7	0.0		
Total %	1.8	36.4	1.8	0.0	40.0	3.6	14.5	1.8	0.0	20.0	0.0	16.4	1.8	0.0	18.2	9.1	9.1	3.6	0.0	21.8	
Exiting Leg Total					13					6					26					10	55
Buses	1	2	0	0	3	0	2	0	0	2	0	1	0	0	1	0	1	0	0	1	7
% Buses	100.0	10.0	0.0	0.0	13.6	0.0	25.0	0.0	0.0	18.2	0.0	11.1	0.0	0.0	10.0	0.0	20.0	0.0	0.0	8.3	12.7
Exiting Leg Total					1					1					2					3	7
Single-Unit Trucks	0	17	1	0	18	2	4	1	0	7	0	6	1	0	7	5	4	2	0	11	43
% Single-Unit	0.0	85.0	100.0	0.0	81.8	100.0	50.0	100.0	0.0	63.6	0.0	66.7	100.0	0.0	70.0	100.0	80.0	100.0	0.0	91.7	78.2
Exiting Leg Total					10					5					23					5	43
Articulated Trucks	0	1	0	0	1	0	2	0	0	2	0	2	0	0	2	0	0	0	0	0	5
% Articulated	0.0	5.0	0.0	0.0	4.5	0.0	25.0	0.0	0.0	18.2	0.0	22.2	0.0	0.0	20.0	0.0	0.0	0.0	0.0	0.0	9.1
Exiting Leg Total					2					0					1					2	5

4:00 PM		Cent	tral Ave	nue			Charle	s River	Street			Cen	tral Ave	enue			Charle	s River	Street		
		fro	om Nor	th			fr	om Eas	it			fr	om Sou	ıth			fr	om We	st		
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Total
4:00 PM	0	5	0	0	5	0	3	0	0	3	0	2	0	0	2	0	1	0	0	1	11
4:15 PM	0	3	0	0	3	2	0	0	0	2	0	3	0	0	3	1	1	0	0	2	10
4:30 PM	1	4	1	0	6	0	2	0	0	2	0	3	0	0	3	0	0	0	0	0	11
4:45 PM	0	1	0	0	1	0	0	1	0	1	0	0	0	0	0	3	1	2	0	6	8
Total Volume	1	13	1	0	15	2	5	1	0	8	0	8	0	0	8	4	3	2	0	9	40
% Approach Total	6.7	86.7	6.7	0.0		25.0	62.5	12.5	0.0		0.0	100.0	0.0	0.0		44.4	33.3	22.2	0.0		
PHF	0.250	0.650	0.250	0.000	0.625	0.250	0.417	0.250	0.000	0.667	0.000	0.667	0.000	0.000	0.667	0.333	0.750	0.250	0.000	0.375	0.909
_			_	_	_ [_					_	. 1		_	_	_	- 1	
Buses	1	1	0	0	2	0	1	0	0	1	0	1	0	0	1	0	0	0	0	0	4
Buses %	100.0	7.7	0.0	0.0	13.3		20.0	0.0	0.0	12.5	0.0	12.5	0.0		12.5	0.0	0.0	0.0	0.0	0.0	10.0
Single-Unit Trucks Single-Unit %	0	11	100.0	0	12	2	3	1	0	7F 0	0	5	0	0	5	100.0	100.0	2	0	9	32
Articulated Trucks	0.0	84.6	100.0	0.0	80.0	100.0	60.0	100.0	0.0	75.0	0.0	62.5	0.0		62.5	100.0	100.0	100.0	0.0	100.0 0	80.0 4
Articulated %	0.0	1 7.7	0.0	0.0	6.7	0.0	20.0	0.0	0.0	12.5	0.0	25.0	0.0	0.0	25.0	-	0.0	0.0	0.0	0.0	10.0
	0.0	7.7	0.0	0.0	0.7	0.0	20.0	0.0	0.0	12.5	0.0	23.0	0.0	0.0	25.0	0.0	0.0	0.0	0.0	0.0	10.0
Buses	1	1	0	0	2	0	1	0	0	1	0	1	0	0	1	0	0	0	0	0	4
Single-Unit Trucks	0	11	1	0	12	2	3	1	0	6	0	5	0	0	5	4	3	2	0	9	32
Articulated Trucks	0	1	0	0	1	0	1	0	0	1	0	2	0		2	0	0	0	0	0	4
Total Entering Leg	1	13	1	0	15	2	5	1	0	8	0	8	0	0	8	4	3	2	0	9	40
Buses					1					0					1					2	4
Single-Unit Trucks					9					4					16					3	32
Articulated Trucks					2					0					1					1	4
Total Exiting Leg					12					4					18					6	40

N: Central Avenue S: Central Avenue Location:

E: Charles River Street W: Charles River Street Location:

City, State: Needham, MA Gillon/J. Gillon Client:

TBA Site Code:

Count Date: Wednesday, October 13, 2021

4:00 PM Start Time: End Time: 6:00 PM



157 Washington Street, Suite 2 Hudson, MA 01749 Office: 508-875-0100 Fax: 508-875-0118

Class:										Bu	ses										_
		Cent	ral Ave	nue			Charle	s River	Street			Cen	itral Ave	enue			Charle	s River	Street		
		fro	m Nor	th			fr	om Eas	t			fr	rom Sou	ıth			fr	om We	st		
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	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	1	1	0	0	2	0	1	0	0	1	0	1	0	0	1	0	0	0	0	0	4
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	1	1	0	0	2	0	1	0	0	1	0	1	0	0	1	0	0	0	0	0	4
5:00 PM	0	0	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	1	0	0	1	0	0	0	0	0	0	1	0	0	1	2
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	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Total	0	1	0	0	1	0	1	0	0	1	0	0	0	0	0	0	1	0	0	1	3
	_				_						_										_
Grand Total	1	2	0	0	3	0	2	0	0	2	0	1	0	0	1	0	1	0	0	1	7
Approach %	33.3	66.7	0.0	0.0		0.0	100.0	0.0	0.0		0.0	100.0	0.0	0.0		0.0	100.0	0.0	0.0		
Total %	14.3	28.6	0.0	0.0	42.9	0.0	28.6	0.0	0.0	28.6	0.0	14.3	0.0	0.0	14.3	0.0	14.3	0.0	0.0	14.3	
Exiting Leg Total					1					1					2					3	7

reak Hour Analysis	11011104	.UU FIVI	10 00.0	O FIVI D	egiiis a	ι.															
4:30 PM		Cent	ral Ave	nue			Charle	s River	Street			Cent	tral Ave	nue			Charle	s River	Street		ì
		fro	om Nor	th			fr	om Eas	t			fr	om Sou	th			fr	om Wes	st		
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Total
4:30 PM	1	1	0	0	2	0	1	0	0	1	0	1	0	0	1	0	0	0	0	0	4
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	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	1	0	0	1	2
Total Volume	1	1	0	0	2	0	2	0	0	2	0	1	0	0	1	0	1	0	0	1	6
% Approach Total	50.0	50.0	0.0	0.0		0.0	100.0	0.0	0.0		0.0	100.0	0.0	0.0		0.0	100.0	0.0	0.0		
PHF	0.250	0.250	0.000	0.000	0.250	0.000	0.500	0.000	0.000	0.500	0.000	0.250	0.000	0.000	0.250	0.000	0.250	0.000	0.000	0.250	0.375
Entering Leg	1	1	0	0	2	0	2	0	0	2	0	1	0	0	1	0	1	0	0	1	6
Exiting Leg					1					1					1					3	6
Total					3					3					2					4	12

N: Central Avenue S: Central Avenue Location:

E: Charles River Street W: Charles River Street Location:

City, State: Needham, MA Gillon/J. Gillon Client:

TBA Site Code:

Count Date: Wednesday, October 13, 2021

4:00 PM Start Time: End Time: 6:00 PM



157 Washington Street, Suite 2 Hudson, MA 01749 Office: 508-875-0100 Fax: 508-875-0118

Class:

Single-Unit Trucks

										,											
		Cen	tral Ave	enue			Charle	s River	Street			Cen	tral Ave	enue			Charle	s River	Street		
		fro	om Nor	th			f	rom Eas	st			fr	om Sou	ıth			fr	om We	st		
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Total
4:00 PM	0	4	0	0	4	0	2	0	0	2	0	1	0	0	1	0	1	0	0	1	8
4:15 PM	0	3	0	0	3	2	0	0	0	2	0	3	0	0	3	1	1	0	0	2	10
4:30 PM	0	3	1	0	4	0	1	0	0	1	0	1	0	0	1	0	0	0	0	0	6
4:45 PM	0	1	0	0	1	0	0	1	0	1	0	0	0	0	0	3	1	2	0	6	8
Total	0	11	1	0	12	2	3	1	0	6	0	5	0	0	5	4	3	2	0	9	32
5:00 PM	0	3	0	0	3	0	0	0	0	0	0	0	1	0	1	0	1	0	0	1	5
5:15 PM	0	1	0	0	1	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	2
5:30 PM	0	2	0	0	2	0	1	0	0	1	0	0	0	0	0	1	0	0	0	1	4
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	6	0	0	6	0	1	0	0	1	0	1	1	0	2	1	1	0	0	2	11
Grand Total	0	17	1	0	18	2	4	1	0	7	0	6	1	0	7	5	4	2	0	11	43
Approach %	0.0	94.4	5.6	0.0		28.6	57.1	14.3	0.0		0.0	85.7	14.3	0.0		45.5	36.4	18.2	0.0		
Total %	0.0	39.5	2.3	0.0	41.9	4.7	9.3	2.3	0.0	16.3	0.0	14.0	2.3	0.0	16.3	11.6	9.3	4.7	0.0	25.6	
Exiting Leg Total			•	•	10				•	5				•	23		•	•		5	43

Peak Hour Arialysis	11011104	.UU PIVI	10 00.0	JU PIVI D	egiiis a	ι.															
4:00 PM		Cent	tral Ave	nue			Charle	s River	Street			Cent	ral Ave	nue			Charle	s River	Street		
		fro	om Nor	th			fr	om Eas	t			fr	om Sou	th			fr	om Wes	st		
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Total
4:00 PM	0	4	0	0	4	0	2	0	0	2	0	1	0	0	1	0	1	0	0	1	8
4:15 PM	0	3	0	0	3	2	0	0	0	2	0	3	0	0	3	1	1	0	0	2	10
4:30 PM	0	3	1	0	4	0	1	0	0	1	0	1	0	0	1	0	0	0	0	0	6
4:45 PM	0	1	0	0	1	0	0	1	0	1	0	0	0	0	0	3	1	2	0	6	8
Total Volume	0	11	1	0	12	2	3	1	0	6	0	5	0	0	5	4	3	2	0	9	32
% Approach Total	0.0	91.7	8.3	0.0		33.3	50.0	16.7	0.0		0.0	100.0	0.0	0.0		44.4	33.3	22.2	0.0		
PHF	0.000	0.688	0.250	0.000	0.750	0.250	0.375	0.250	0.000	0.750	0.000	0.417	0.000	0.000	0.417	0.333	0.750	0.250	0.000	0.375	0.800
Entoring Log				•	4.5		2			۰		-		•	-1		2	2		اء	22
Entering Leg	0	11	1	0	12	2	3	1	0	6	0	5	0	0	5	4	3	2	0	9	32
Exiting Leg					9					4					16					3	32
Total					21					10					21					12	64

Location: N: Central Avenue S: Central Avenue

E: Charles River Street W: Charles River Street Location:

City, State: Needham, MA Gillon/J. Gillon Client:

Site Code: TBA

Count Date: Wednesday, October 13, 2021

4:00 PM Start Time: End Time: 6:00 PM



157 Washington Street, Suite 2 Hudson, MA 01749 Office: 508-875-0100 Fax: 508-875-0118

Articulated Trucks

Class:									Arti	iculat	ed Tru	cks									_
		Cent	ral Ave	nue			Charle	s River	Street			Cen	tral Ave	enue			Charle	s River	Street		
		fro	m Nor	th			fr	om Eas	t			fr	om Sou	ıth			fr	om We	st		
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Total
4:00 PM	0	1	0	0	1	0	1	0	0	1	0	1	0	0	1	0	0	0	0	0	3
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	1	0	0	1	0	0	0	0	0	1
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	1	0	0	1	0	1	0	0	1	0	2	0	0	2	0	0	0	0	0	4
5:00 PM	0	0	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	0	0
5:30 PM	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	1
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	1	0	0	1	0	0	0	0	0	0	0	0	0	0	1
Grand Total	0	1	0	0	1	0	2	0	0	2	0	2	0	0	2	0	0	0	0	0	5
Approach %	0.0	100.0	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		
Total %	0.0	20.0	0.0	0.0	20.0	0.0	40.0	0.0	0.0	40.0	0.0	40.0	0.0	0.0	40.0	0.0	0.0	0.0	0.0	0.0	
Exiting Leg Total					2					0					1					2	5

																					_
4:00 PM		Cent	ral Ave	nue			Charle	s River	Street			Cen	ral Ave	nue			Charle	s River	Street		
		fro	m Nort	th			fr	om Eas	t			fr	om Sou	th			fro	om Wes	st		
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Total
4:00 PM	0	1	0	0	1	0	1	0	0	1	0	1	0	0	1	0	0	0	0	0	3
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	1	0	0	1	0	0	0	0	0	1
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 Volume	0	1	0	0	1	0	1	0	0	1	0	2	0	0	2	0	0	0	0	0	4
% Approach Total	0.0	100.0	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		
PHF	0.000	0.250	0.000	0.000	0.250	0.000	0.250	0.000	0.000	0.250	0.000	0.500	0.000	0.000	0.500	0.000	0.000	0.000	0.000	0.000	0.333
			_	_	. 1				_	. 1		_	_	_	_1		_		_	_	
Entering Leg	0	1	0	0	1	0	1	0	0	1	0	2	0	0	2	0	0	0	0	0	4
 Exiting Leg					2					0					1					1	4
Total					3					1					3					1	8

Location: N: Central Avenue S: Central Avenue

E: Charles River Street W: Charles River Street Location:

City, State: Needham, MA Client: Gillon/J. Gillon

Site Code: TBA

Class:

Count Date: Wednesday, October 13, 2021

4:00 PM Start Time: End Time: 6:00 PM



157 Washington Street, Suite 2 Hudson, MA 01749 Office: 508-875-0100 Fax: 508-875-0118

Bicycles (on Roadway and Crosswalks)

												, -		_	- , -			_	-,										
		(Centra	al Ave	enue				Ch	arles	River	Stree	et			(Centra	al Ave	nue				Ch	arles	River	Stree	t		
			fror	n Nor	th					fro	m Eas	st					fron	n Sou	th					fror	n We	st			
	Right	Thru	Left	U-Turn	CW-EB	CW-WB	Total	Right	Thru	Left	U-Turn	CW-SB	CW-NB	Total	Right	Thru	Left	U-Turn (CW-WB	CW-EB	otal	Right	Thru	Left	J-Turn (W-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	0	0	0	0	1	0	0	0	1	1
4:15 PM	0	4	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	3	0	0	0	5	9
4:30 PM	0	0	0	0	0	0	0	0	3	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
4:45 PM	0	0	0	0	0	0	0	0	1	0	0	0	0	1	0	1	0	0	0	0	1	0	0	0	0	0	0	0	2
Total	0	4	0	0	0	0	4	0	4	0	0	0	0	4	0	1	0	0	0	0	1	2	0	4	0	0	0	6	15
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	0	0	0	0	4	0	0	0	0	0	0	0	4
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	2	2	2	0	0	0	0	0	2	0	0	2	0	0	0	2	6
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	1
5:45 PM	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	1	0	0	0	0	1	0	2	0	0	0	0	2	4
Total	0	0	0	0	0	0	0	0	0	1	0	0	2	3	2	5	0	0	0	0	7	0	2	3	0	0	0	5	15
Grand Total	0	4	0	0	0	0	4	0	4	1	0	0	2	7	2	6	0	0	0	0	8	2	2	7	0	0	0	11	30
Approach %	0.0	100.0	0.0	0.0	0.0	0.0		0.0	57.1	14.3	0.0	0.0	28.6		25.0	75.0	0.0	0.0	0.0	0.0		18.2	18.2	63.6	0.0	0.0	0.0		
Total %	0.0	13.3	0.0	0.0	0.0	0.0	13.3	0.0	13.3	3.3	0.0	0.0	6.7	23.3	6.7	20.0	0.0	0.0	0.0	0.0	26.7	6.7	6.7	23.3	0.0	0.0	0.0	36.7	
Exiting Leg Total							13							6							7							4	30

•																													
4:15 PM			Centi	ral Av	enue	!			Ch	narles	Rive	r Stre	et				Centi	ral Av	enue				Cł	narles	Rive	r Stre	et		
			fro	m No	rth					fro	om Ea	st					fro	m So	uth					fro	m We	est			
	Right	Thru	Left	U-Turn	CW-EB	CW-WB	Total	Right	Thru	Left	U-Turn	CW-SB	CW-NB	Total	Right	Thru	Left	U-Turn	CW-WB	CW-EB	Total	Right	Thru	Left	U-Turn	CW-NB	CW-SB	Total	Total
4:15 PM	0	4	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	3	0	0	0	5	9
4:30 PM	0	0	0	0	0	0	0	0	3	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
4:45 PM	0	0	0	0	0	0	0	0	1	0	0	0	0	1	0	1	0	0	0	0	1	0	0	0	0	0	0	0	2
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	0	0	0	0	4	0	0	0	0	0	0	0	4
Total Volume	0	4	0	0	0	0	4	0	4	0	0	0	0	4	0	5	0	0	0	0	5	2	0	3	0	0	0	5	18
% Approach Total	0.0	100.0	0.0	0.0	0.0	0.0		0.0	100.0	0.0	0.0	0.0	0.0		0.0	100.0	0.0	0.0	0.0	0.0		40.0	0.0	60.0	0.0	0.0	0.0		
PHF	0.000	0.250	0.000	0.000	0.000	0.000	0.250	0.000	0.333	0.000	0.000	0.000	0.000	0.333	0.000	0.313	0.000	0.000	0.000	0.000	0.313	0.250	0.000	0.250	0.000	0.000	0.000	0.250	0.500
- · · ·	١ .		_	_		_				_	_	_	_			_	_	_		_	_1		_	_	_	_	_	-1	
Entering Leg	0	4	0	0	0	0	4	0	4	0	0	0	0	4	0	5	0	0	0	0	5	2	0	3	0	0	0	5	18
Exiting Leg							8							0							6							4	18
Total							12							4							11							9	36

N: Central Avenue S: Central Avenue Location:

E: Charles River Street W: Charles River Street Location:

City, State: Needham, MA Gillon/J. Gillon Client:

Site Code: TBA

Count Date: Wednesday, October 13, 2021

4:00 PM Start Time: End Time: 6:00 PM



157 Washington Street, Suite 2 Hudson, MA 01749 Office: 508-875-0100 Fax: 508-875-0118

Pedestrians

Class:													Pe	des	triar	าร													
			Centi	ral Ave	enue				Ch	arles I	River	Stre	et				Centr	al Av	enue				Cl	narles	Rive	r Stre	et		
			fro	m Nor	th					fro	m Ea	st					froi	n Soı	uth					fro	m W	est			
	Right	Thru	Left	U-Turn	CW-EB	CW-WB	Total	Right	Thru	Left (J-Turn	CW-SB	CW-NB	Total	Right	Thru	Left	U-Turn	CW-WB	CW-EB	Total	Right	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	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
4:15 PM	0	0	0	0	0	0	0	0	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	2	0	2	0	0	0	0	0	0	0	0	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	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	2	1	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
5:00 PM	0	0	0	0	0	0	0	0	0	0	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	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	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	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
	Ī																												
Grand Total	0	0	0	0	0	0	0	0	0	0	0	2	1	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
Approach %	0	0	0	0	0	0		0	0	0	0	66.7	33.3		0	0	0	0	0	0		0	0	0	0	0	0		
Total %	0	0	0	0	0	0	0	0	0	0	0	66.7	33.3	100	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Exiting Leg Total							0							3							0							0	3

	. ,							0																						
	4:00 PM			Cent	ral Av	enue	:			Cł	harles	Rive	r Stre	et				Centi	ral Av	enue				Ch	arles	Rive	r Stre	et		
				fro	m No	rth					fro	om Ea	st					fro	m Sou	uth					fro	m W	est			
		Right	Thru	Left	U-Turn	CW-EB	CW-WB	Total	Right	Thru	Left	U-Turn	CW-SB	CW-NB	Total	Right	Thru	Left	U-Turn	CW-WB	CW-EB	Total	Right	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	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
	4:15 PM	0	0	0	0	0	0	0	0	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	2	0	2	0	0	0	0	0	0	0	0	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	0	0	0	0	0	0	0	0	0	0
	Total Volume	0	0	0	0	0	0	0	0	0	0	0	2	1	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
%	Approach Total	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	66.7	33.3		0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0		
	PHF	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.250	0.250	0.375	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	0.375
	Entering Leg	0	0	0	0	0	0	О	0	0	0	0	2	1	3	0	0	0	0	0	0	0	0	0	0	0	0	0	О	3
	Exiting Leg							0							3							0							0	3
	Total							0							6							0							0	6

	*	-	*	1	+	*	1	1	-	1	1	1
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	7	1>			4			4			4	
Traffic Volume (vph)	330	220	52	10	143	22	88	794	5	14	195	14
Future Volume (vph)	330	220	52	10	143	22	88	794	5	14	195	14
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	10	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			-3%	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.971			0.983			0.999			0.991	
Flt Protected	0.950				0.997			0.995			0.997	
Satd. Flow (prot)	1652	1845	0	0	1857	0	0	1855	0	0	1873	0
FIt Permitted	0.329				0.968			0.936			0.938	
Satd. Flow (perm)	572	1845	0	0	1803	0	0	1745	0	0	1762	0
Right Turn on Red			No			Yes			No			Yes
Satd. Flow (RTOR)					8						4	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		787			760			563			885	
Travel Time (s)		17.9			17.3			12.8			20.1	
Peak Hour Factor	0.94	0.94	0.94	0.85	0.85	0.85	0.96	0.96	0.96	0.80	0.80	0.80
Heavy Vehicles (%)	2%	0%	0%	0%	0%	2%	0%	2%	0%	0%	2%	0%
Adj. Flow (vph)	351	234	55	12	168	26	92	827	5	18	244	18
Shared Lane Traffic (%)												
Lane Group Flow (vph)	351	289	0	0	206	0	0	924	0	0	280	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		10	3		10			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.09	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.98	0.98	0.98
Turning Speed (mph)	15	1.00	9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	2		1	2	
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	
Leading Detector (ft)	20	100		20	100		20	100		20	100	
Trailing Detector (ft)	0	0		0	0		0	0		0	0	
Detector 1 Position(ft)	0	0		0	0		0	0		0	0	
Detector 1 Size(ft)	20	6		20	6		20	6		20	6	
Detector 1 Type	CI+Ex	CI+Ex		CI+Ex	CI+Ex		CI+Ex	CI+Ex		CI+Ex	CI+Ex	
Detector 1 Channel	OITEX	OI · LX		J			4000					
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
The state of the s	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	94		0.0	94		0.0	94			94	
Detector 2 Position(ft)		6			6			6			6	
Detector 2 Size(ft)		CI+Ex			CI+Ex			CI+Ex			CI+Ex	
Detector 2 Type		OLEX			OI. LA			O1 =/(
Detector 2 Channel		0.0			0.0			0.0			0.0	
Detector 2 Extend (s)	nm int	NA		Perm	NA		Perm	NA		Perm	NA	
Turn Type	pm+pt			Femi	6		1 01111	4		, 51111	8	
Protected Phases	5	2		G	0		4	7		8		
Permitted Phases	2	6		6			4			0		

	1	-	*	1	-	*	1	1	1	1	+	1
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector Phase	5	2		6	6		4	4		8	8	
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	
Minimum Split (s)	10.0	20.0		20.0	20.0		20.0	20.0		20.0	20.0	
Total Split (s)	20.0	50.0		30.0	30.0		40.0	40.0		40.0	40.0	
Total Split (%)	22.2%	55.6%		33.3%	33.3%		44.4%	44.4%		44.4%	44.4%	
Maximum Green (s)	15.0	45.0		25.0	25.0		35.0	35.0		35.0	35.0	
Yellow Time (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
All-Red Time (s)	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	
Lost Time Adjust (s)	0.0	0.0			0.0			0.0			0.0	
Total Lost Time (s)	5.0	5.0			5.0			5.0			5.0	
Lead/Lag	Lead			Lag	Lag							
Lead-Lag Optimize?	Yes			Yes	Yes							
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	None	Min		Min	Min		None	None		None	None	
Act Effct Green (s)	33.6	33.6			13.8			35.1			35.1	
Actuated g/C Ratio	0.43	0.43			0.18			0.45			0.45	
v/c Ratio	0.79	0.37			0.64			1.19			0.36	
Control Delay	30.8	16.7			38.4			121.5			16.7	
Queue Delay	0.0	0.0			0.0			0.0			0.0	
Total Delay	30.8	16.7			38.4			121.5			16.7	
LOS	C	В			D			F			В	
Approach Delay		24.4			38.4			121.5			16.7	
Approach LOS		С			D			F			В	
Queue Length 50th (ft)	121	93			91			~558			86	
Queue Length 95th (ft)	#202	149			147			#856			139	
Internal Link Dist (ft)		707			680			483			805	
Turn Bay Length (ft)												
Base Capacity (vph)	450	1058			579			778			788	
Starvation Cap Reductn	0	0			0			0			0	
Spillback Cap Reductn	0	0			0			0			0	
Storage Cap Reductn	0	0			0			0			0	
Reduced v/c Ratio	0.78	0.27			0.36			1.19			0.36	
Intersection Cummary	- V-						100					

Intersection Summary

Area Type: Other

Cycle Length: 90

Actuated Cycle Length: 78.7

Natural Cycle: 90

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 1.19

Intersection Signal Delay: 68.5

Intersection Capacity Utilization 111.5%

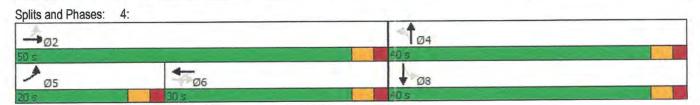
Intersection LOS: E
ICU Level of Service H

Analysis Period (min) 15

Volume exceeds capacity, queue is theoretically infinite.

Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.



	*	→	*	1	-	*	1	†	1	1	1	4
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	M	B			4			4			4	
Traffic Volume (vph)	135	176	69	16	183	35	43	282	3	24	779	32
Future Volume (vph)	135	176	69	16	183	35	43	282	3	24	779	32
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	10	12	12	12	12	12	12	12	12	12	12	12
Grade (%)	SETTING.	0%			0%			0%			-3%	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt	23.41	0.958			0.980			0.999			0.995	
FIt Protected	0.950				0.997			0.994			0.999	
Satd. Flow (prot)	1652	1820	0	0	1851	0	0	1855	0	0	1882	0
Flt Permitted	0.284				0.964			0.810			0.984	
Satd. Flow (perm)	494	1820	0	0	1790	0	0	1511	0	0	1854	0
Right Turn on Red	101	1020	No			Yes			No			Yes
Satd. Flow (RTOR)			110		10	100					3	
Link Speed (mph)		30			30			30			30	
and the state of the property of the state o		787			760			563			885	
Link Distance (ft)		17.9			17.3			12.8			20.1	
Travel Time (s)	0.94	0.94	0.94	0.80	0.80	0.80	0.93	0.93	0.93	0.97	0.97	0.97
Peak Hour Factor	2%	0.94	0.94	0.00	0.80	2%	0%	2%	0%	0%	2%	0%
Heavy Vehicles (%)		187	73	20	229	44	46	303	3	25	803	33
Adj. Flow (vph)	144	107	13	20	225	77	40	500		20	000	
Shared Lane Traffic (%)	411	000	0	0	293	0	0	352	0	0	861	0
Lane Group Flow (vph)	144	260				No						
Enter Blocked Intersection	No	No	No	No	No		Left	Left	Right	Left	Left	Right
Lane Alignment	Left	Left	Right	Left	Left	Right	Leit	0	Night	Lon	0	rugin
Median Width(ft)		10			10			0			0	
Link Offset(ft)		0			0			16			16	
Crosswalk Width(ft)		16			16			10			10	
Two way Left Turn Lane				4.00	4.00	4.00	4.00	4.00	1.00	0.98	0.98	0.98
Headway Factor	1.09	1.00	1.00	1.00	1.00	1.00	1.00	1.00		15	0.50	0.30
Turning Speed (mph)	15		9	15		9	15	^	9	10	2	
Number of Detectors	1	2		1	2		1	2		Left	Thru	
Detector Template	Left	Thru		Left	Thru		Left	Thru			100	
Leading Detector (ft)	20	100		20	100		20	100		20	0	
Trailing Detector (ft)	0	0		0	0		0	0		0		
Detector 1 Position(ft)	0	0		0	0		0	0		0	0	
Detector 1 Size(ft)	20	6		20	6		20	6		20		
Detector 1 Type	CI+Ex	CI+Ex		CI+Ex	CI+Ex		CI+Ex	CI+Ex		CI+Ex	CI+Ex	
Detector 1 Channel										0.0	0.0	
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		CI+Ex			CI+Ex			CI+Ex			CI+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases	5	2			6			4			8	
Permitted Phases	2	6		6			4			8		

Gillon Associates JTG

	1	-	7	1	-	*	1	1	1	1	1	1
_ane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector Phase	5	2		6	6		4	4		8	8	
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	
Minimum Split (s)	10.0	20.0		20.0	20.0		20.0	20.0		20.0	20.0	
Total Split (s)	20.0	50.0		30.0	30.0		40.0	40.0		40.0	40.0	
Total Split (%)	22.2%	55.6%		33.3%	33.3%		44.4%	44.4%		44.4%	44.4%	
Maximum Green (s)	15.0	45.0		25.0	25.0		35.0	35.0		35.0	35.0	
Yellow Time (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
All-Red Time (s)	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	
Lost Time Adjust (s)	0.0	0.0			0.0			0.0			0.0	
Total Lost Time (s)	5.0	5.0			5.0			5.0			5.0	
Lead/Lag	Lead			Lag	Lag							
Lead-Lag Optimize?	Yes			Yes	Yes							
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	None	Min		Min	Min		None	None		None	None	
Act Effct Green (s)	33.6	33.6			17.2			35.3			35.3	
Actuated g/C Ratio	0.43	0.43			0.22			0.45			0.45	
v/c Ratio	0.38	0.34			0.74			0.52			1.04	
Control Delay	16.7	16.0			39.7			21.2			66.5	
Queue Delay	0.0	0.0			0.0			0.0			0.0	
Total Delay	16.7	16.0			39.7			21.2			66.5	
LOS	В	В			D			С			E	
Approach Delay		16.2			39.7			21.2			66.5	
Approach LOS		В			D			С			E	
Queue Length 50th (ft)	43	82			130			121			~466	
Queue Length 95th (ft)	77	132			190			248			#830	
Internal Link Dist (ft)		707			680			483			805	
Turn Bay Length (ft)											024	
Base Capacity (vph)	432	1047			578			676			831	
Starvation Cap Reductn	0	0			0			0			0	
Spillback Cap Reductn	0	0			0			0			0	
Storage Cap Reductn	0	0			0			0			0	
Reduced v/c Ratio	0.33	0.25			0.51	- 4		0.52			1.04	
Intersection Summary	in the second				3							
Area Type:	Other											
Cycle Length: 90												

Cycle Length: 90
Actuated Cycle Length: 79

Natural Cycle: 70

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 1.04 Intersection Signal Delay: 43.4 Intersection Capacity Utilization 91.5%

Intersection LOS: D
ICU Level of Service F

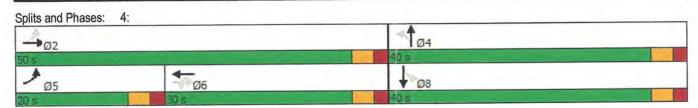
Analysis Period (min) 15

Volume exceeds capacity, queue is theoretically infinite.

Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.

Evening Peak Hour



	*	-	*	1	-	*	1	†	1	1	+	1
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	7	1>			4			4			4	
Traffic Volume (vph)	353	235	55	11	153	23	94	849	5	15	208	15
Future Volume (vph)	353	235	55	11	153	23	94	849	5	15	208	15
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	10	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			-3%	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.971			0.983			0.999			0.991	
Flt Protected	0.950				0.997			0.995			0.997	
Satd. Flow (prot)	1652	1845	0	0	1858	0	0	1855	0	0	1873	0
FIt Permitted	0.317				0.966			0.932			0.929	
Satd. Flow (perm)	551	1845	0	0	1800	0	0	1738	0	0	1745	0
Right Turn on Red			No			Yes			No			Yes
Satd. Flow (RTOR)					8						4	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		787			760			563			885	
Travel Time (s)		17.9			17.3			12.8			20.1	
Peak Hour Factor	0.94	0.94	0.94	0.85	0.85	0.85	0.96	0.96	0.96	0.80	0.80	0.80
Heavy Vehicles (%)	2%	0%	0%	0%	0%	2%	0%	2%	0%	0%	2%	0%
Adj. Flow (vph)	376	250	59	13	180	27	98	884	5	19	260	19
Shared Lane Traffic (%)												
Lane Group Flow (vph)	376	309	0	0	220	0	0	987	0	0	298	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)	770	10	3		10			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.09	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.98	0.98	0.98
Turning Speed (mph)	15	1100	9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	2		1	2	
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	
Leading Detector (ft)	20	100		20	100		20	100		20	100	
Trailing Detector (ft)	0	0		0	0		0	0		0	0	
Detector 1 Position(ft)	0	0		0	0		0	0		0	0	
Detector 1 Size(ft)	20	6		20	6		20	6		20	6	
Detector 1 Type	CI+Ex	CI+Ex		CI+Ex	CI+Ex		CI+Ex	CI+Ex		CI+Ex	CI+Ex	
Detector 1 Channel	01.24			CONTRACT.								
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(ft)	0.0	94		0.0	94		ESFI	94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		CI+Ex			CI+Ex			CI+Ex			CI+Ex	
Detector 2 Channel		OI LX			O. LA							
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases	5	2		1 01111	6		. 51111	4			8	
Permitted Phases	2	6		6	V		4			8		

Lane Group Detector Phase Switch Phase Minimum Initial (s) Minimum Split (s) Total Split (s) Total Split (%) Maximum Green (s) Yellow Time (s) All-Red Time (s)	1	-	-	1	-	*	1	†	1	1	+	1
Detector Phase Switch Phase Minimum Initial (s) Minimum Split (s) Total Split (s) Total Split (%) Maximum Green (s) Yellow Time (s) All-Red Time (s)	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Minimum Initial (s) Minimum Split (s) Total Split (s) Total Split (%) Maximum Green (s) Yellow Time (s) All-Red Time (s)	5	2		6	6		4	4		8	8	
Minimum Initial (s) Minimum Split (s) Total Split (s) Total Split (%) Maximum Green (s) Yellow Time (s) All-Red Time (s)												
Minimum Split (s) Total Split (s) Total Split (%) Maximum Green (s) Yellow Time (s) All-Red Time (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	
Total Split (s) Total Split (%) Maximum Green (s) Yellow Time (s) All-Red Time (s)	10.0	20.0		20.0	20.0		20.0	20.0		20.0	20.0	
Total Split (%) Maximum Green (s) Yellow Time (s) All-Red Time (s)	20.0	50.0		30.0	30.0		40.0	40.0		40.0	40.0	
Maximum Green (s) Yellow Time (s) All-Red Time (s)	22.2%	55.6%		33.3%	33.3%		44.4%	44.4%		44.4%	44.4%	
Yellow Time (s) All-Red Time (s)	15.0	45.0		25.0	25.0		35.0	35.0		35.0	35.0	
All-Red Time (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	
Lost Time Adjust (s)	0.0	0.0			0.0			0.0			0.0	
Total Lost Time (s)	5.0	5.0			5.0			5.0			5.0	
Lead/Lag	Lead			Lag	Lag							
Lead-Lag Optimize?	Yes			Yes	Yes							
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	None	Min		Min	Min		None	None		None	None	
Act Effct Green (s)	34.5	34.5			14.5			35.1			35.1	
Actuated g/C Ratio	0.43	0.43			0.18			0.44			0.44	
v/c Ratio	0.84	0.39			0.66			1.29			0.39	
Control Delay	36.0	16.8			39.0			164.2			17.5	
Queue Delay	0.0	0.0			0.0			0.0			0.0	
Total Delay	36.0	16.8			39.0			164.2			17.5	
LOS	D	В			D			F			В	
Approach Delay		27.3			39.0			164.2	30.5		17.5	
Approach LOS		С			D			F			В	
Queue Length 50th (ft)	132	101			99			~633			94	
Queue Length 95th (ft)	#239	159			156			#948			152	
Internal Link Dist (ft)		707			680			483			805	
Turn Bay Length (ft)											2000	
Base Capacity (vph)	446	1045			572			765			771	
Starvation Cap Reductn	0	0			0			0			0	
Spillback Cap Reductn	0	0			0			0			0	
Storage Cap Reductn	- 0		e ton treams — 1	TE TOURSE	0			0			0	
Reduced v/c Ratio	0.84				0.38			1.29			0.39	
Intersection Summary	0.04	0.30			0.50							
Area Type: Cycle Length: 90	Other	0.30			0.30							

Cycle Length: 90

Actuated Cycle Length: 79.6

Natural Cycle: 100

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 1.29

Intersection Signal Delay: 88.9

Intersection Capacity Utilization 117.5%

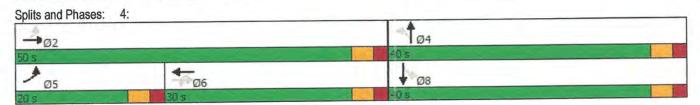
Intersection LOS: F
ICU Level of Service H

Analysis Period (min) 15

Volume exceeds capacity, queue is theoretically infinite.

Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.



	1	→	7	-	←	*	1	†	-	1	1	1
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	79	1			4			4			4	
Traffic Volume (vph)	144	188	73	17	195	37	46	301	3	25	833	34
Future Volume (vph)	144	188	73	17	195	37	46	301	3	25	833	34
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	10	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			-3%	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt	- 1100	0.958			0.980			0.999			0.995	
Flt Protected	0.950	0.000			0.997			0.994			0.999	
Satd. Flow (prot)	1652	1820	0	0	1851	0	0	1855	0	0	1882	0
Flt Permitted	0.274	1020			0.963			0.773			0.983	
Satd. Flow (perm)	476	1820	0	0	1788	0	0	1442	0	0	1852	0
Right Turn on Red	410	1020	No			Yes			No			Yes
			110		10	100					3	
Satd. Flow (RTOR)		30			30			30			30	
Link Speed (mph)		787			760			563			885	
Link Distance (ft)		17.9			17.3			12.8			20.1	
Travel Time (s)	0.94	0.94	0.94	0.80	0.80	0.80	0.93	0.93	0.93	0.97	0.97	0.97
Peak Hour Factor	TO P TO THE	0.94	0.34	0.00	0%	2%	0%	2%	0%	0%	2%	0%
Heavy Vehicles (%)	2%	200	78	21	244	46	49	324	3	26	859	35
Adj. Flow (vph)	153	200	10	21	244	40	40	02-1				
Shared Lane Traffic (%)	450	070	0	0	311	0	0	376	0	0	920	0
Lane Group Flow (vph)	153	278	No	No	No	No	No	No	No	No	No	No
Enter Blocked Intersection	No	No		Left	Left	Right	Left	Left	Right	Left	Left	Right
Lane Alignment	Left	Left	Right	Leit	10	Rigitt	Leit	0	ragin	Lon	0	
Median Width(ft)		10			0			0			0	
Link Offset(ft)		0			16			16			16	
Crosswalk Width(ft)		16			10			10				
Two way Left Turn Lane	4.00	4.00	4.00	4.00	1.00	1.00	1.00	1.00	1.00	0.98	0.98	0.98
Headway Factor	1.09	1.00	1.00	1.00	1.00	9	1.00	1.00	9	15	0.00	9
Turning Speed (mph)	15		9	15	2	9	1	2	J	1	2	
Number of Detectors	1	2		1			Left	Thru		Left	Thru	
Detector Template	Left	Thru		Left	Thru			100		20	100	
Leading Detector (ft)	20	100		20	100		20			0	0	
Trailing Detector (ft)	0	0		0	0		0	0		0	0	
Detector 1 Position(ft)	0	0		0	0		0 20	6		20	6	
Detector 1 Size(ft)	20	6		20	6			CI+Ex		CI+Ex	CI+Ex	
Detector 1 Type	CI+Ex	CI+Ex		CI+Ex	CI+Ex		CI+Ex	CITEX		CITEX	CITEX	
Detector 1 Channel					0.0		0.0	0.0		0.0	0.0	
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0			0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	94	
Detector 2 Position(ft)		94			94			94			6	
Detector 2 Size(ft)		6			6			6				
Detector 2 Type		CI+Ex			CI+Ex			CI+Ex			CI+Ex	
Detector 2 Channel											0.0	
Detector 2 Extend (s)		0.0			0.0		11-2-23	0.0			0.0	
Turn Type	pm+pt	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases	5	2			6		100	4			8	
Permitted Phases	2	6		6			4			8		

	*	-	-	1	-	1	1	†	-	1	+	1
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector Phase	5	2		6	6		4	4		8	8	
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	
Minimum Split (s)	10.0	20.0		20.0	20.0		20.0	20.0		20.0	20.0	
Total Split (s)	20.0	50.0		30.0	30.0		40.0	40.0		40.0	40.0	
Total Split (%)	22.2%	55.6%		33.3%	33.3%		44.4%	44.4%		44.4%	44.4%	
Maximum Green (s)	15.0	45.0		25.0	25.0		35.0	35.0		35.0	35.0	
Yellow Time (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
All-Red Time (s)	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	
Lost Time Adjust (s)	0.0	0.0			0.0			0.0			0.0	
Total Lost Time (s)	5.0	5.0			5.0			5.0			5.0	
Lead/Lag	Lead			Lag	Lag							
Lead-Lag Optimize?	Yes			Yes	Yes							
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	None	Min		Min	Min		None	None		None	None	
Act Effct Green (s)	34.6	34.6			17.9			35.3			35.3	
Actuated g/C Ratio	0.43	0.43			0.22			0.44			0.44	
v/c Ratio	0.41	0.35			0.76			0.59			1.12	
Control Delay	16.9	16.1			41.3			23.6			96.6	
Queue Delay	0.0	0.0			0.0			0.0			0.0	
Total Delay	16.9	16.1			41.3			23.6			96.6	
LOS	В	В			D			С			F	
Approach Delay		16.4			41.3			23.6			96.6	
Approach LOS		В			D			С		Complete Complete	F	mer see
Queue Length 50th (ft)	46	89			141			139			~548	
Queue Length 95th (ft)	81	142			202			277			#907	
Internal Link Dist (ft)		707			680			483			805	
Turn Bay Length (ft)											040	
Base Capacity (vph)	428	1033			570			636			819	
Starvation Cap Reductn	0	0			0			0			0	
Spillback Cap Reductn	0	0			0			0			0	
Storage Cap Reductn	0	0			0			0			0	
Reduced v/c Ratio	0.36	0.27			0.55			0.59			1.12	
Intersection Summary	for S											
Area Type:	Other											
Ouala Lanath, OO												

Cycle Length: 90

Actuated Cycle Length: 80

Natural Cycle: 80

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 1.12

Intersection Signal Delay: 57.7

Intersection Capacity Utilization 96.3%

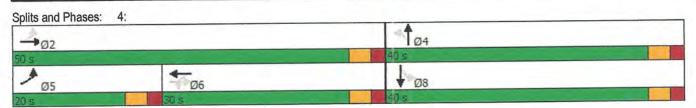
Intersection LOS: E
ICU Level of Service F

Analysis Period (min) 15

~ Volume exceeds capacity, queue is theoretically infinite.

Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.



	*	→	*	1	-	*	1	1	1	1	+	1
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	7	1>			4			4			4	
Traffic Volume (vph)	357	235	55	11	153	23	94	857	5	15	215	18
Future Volume (vph)	357	235	55	11	153	23	94	857	5	15	215	18
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	10	12	12	12	12	12	12	12	12	12	12	12
Grade (%)	Dell'Art	0%			0%			0%			-3%	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.971			0.983			0.999			0.990	
Fit Protected	0.950				0.997			0.995			0.997	
Satd. Flow (prot)	1652	1845	0	0	1858	0	0	1855	0	0	1871	0
Flt Permitted	0.317				0.966			0.930			0.930	
Satd. Flow (perm)	551	1845	0	0	1800	0	0	1734	0	0	1745	0
Right Turn on Red	001		No			Yes			No			Yes
Satd. Flow (RTOR)					8						5	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		787			760			563			885	
Travel Time (s)		17.9			17.3			12.8			20.1	
Peak Hour Factor	0.94	0.94	0.94	0.85	0.85	0.85	0.96	0.96	0.96	0.80	0.80	0.80
Heavy Vehicles (%)	2%	0%	0%	0%	0%	2%	0%	2%	0%	0%	2%	0%
Adj. Flow (vph)	380	250	59	13	180	27	98	893	5	19	269	23
Shared Lane Traffic (%)												
Lane Group Flow (vph)	380	309	0	0	220	0	0	996	0	0	311	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)	Lon	10	9		10			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.09	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.98	0.98	0.98
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	2		1	2	
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	
Leading Detector (ft)	20	100		20	100		20	100		20	100	
Trailing Detector (ft)	0	0		0	0		0	0		0	0	
Detector 1 Position(ft)	0	0		0	0		0	0		0	0	
Detector 1 Size(ft)	20	6		20	6		20	6		20	6	
Detector 1 Type	CI+Ex	CI+Ex		CI+Ex	CI+Ex		CI+Ex	CI+Ex		CI+Ex	CI+Ex	
Detector 1 Channel	OI. LX	OI LX			THE REAL PROPERTY.							
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(ft)	0.0	94		0.0	94			94			94	
		6			6			6			6	
Detector 2 Size(ft)		CI+Ex			CI+Ex			CI+Ex			CI+Ex	
Detector 2 Type Detector 2 Channel		OITEX			OI. LX							
		0.0			0.0			0.0			0.0	
Detector 2 Extend (s)	pm+pt	NA		Perm	NA		Perm	NA		Perm	NA	
Turn Type Protected Phases	5	2		7 01111	6			4			8	
Permitted Phases	2	6		6			4			8		

	1	-	*	1	-	*	1	†	1	1	+	4
_ane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBF
Detector Phase	5	2	4	6	6		4	4		8	8	
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	
Minimum Split (s)	10.0	20.0		20.0	20.0		20.0	20.0		20.0	20.0	
Total Split (s)	20.0	50.0		30.0	30.0		40.0	40.0		40.0	40.0	
Total Split (%)	22.2%	55.6%		33.3%	33.3%		44.4%	44.4%		44.4%	44.4%	
Maximum Green (s)	15.0	45.0		25.0	25.0		35.0	35.0		35.0	35.0	
Yellow Time (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
All-Red Time (s)	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	
Lost Time Adjust (s)	0.0	0.0			0.0			0.0			0.0	
Total Lost Time (s)	5.0	5.0			5.0			5.0			5.0	
Lead/Lag	Lead			Lag	Lag							
Lead-Lag Optimize?	Yes			Yes	Yes							
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	None	Min		Min	Min		None	None		None	None	
Act Effct Green (s)	34.5	34.5			14.5			35.1			35.1	
Actuated g/C Ratio	0.43	0.43			0.18			0.44			0.44	
v/c Ratio	0.85	0.39			0.66			1.30			0.40	
Control Delay	36.9	16.8			39.0			170.4			17.7	
Queue Delay	0.0	0.0			0.0			0.0			0.0	
Total Delay	36.9	16.8			39.0			170.4			17.7	
LOS	D	В			D			F			В	
Approach Delay		27.9			39.0			170.4			17.7	
Approach LOS		С			D			F			В	
Queue Length 50th (ft)	134	101			99			~643			99	
Queue Length 95th (ft)	#244	159			156			#959			159	
Internal Link Dist (ft)		707			680			483			805	
Turn Bay Length (ft)												
Base Capacity (vph)	446	1044			572			764			771	
Starvation Cap Reductn	0	0			0			0			0	
Spillback Cap Reductn	0	0			0			0			0	
Storage Cap Reductn	0	0			0			0			0	
Reduced v/c Ratio	0.85	0.30			0.38			1.30			0.40	

Intersection Summary

Area Type: Other

Cycle Length: 90

Actuated Cycle Length: 79.6

Natural Cycle: 120

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 1.30

Intersection Signal Delay: 91.6

Intersection Capacity Utilization 118.7%

Intersection LOS: F
ICU Level of Service H

Analysis Period (min) 15

Volume exceeds capacity, queue is theoretically infinite.

Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.



	*	-	7	1	-	*	1	†	1	1	1	1
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	7	7>			4			4			4	
Traffic Volume (vph)	147	188	73	17	195	37	46	309	3	25	842	57
Future Volume (vph)	147	188	73	17	195	37	46	309	3	25	842	57
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	10	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			-3%	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt	11.00	0.958			0.980			0.999			0.992	
Flt Protected	0.950	-,			0.997			0.994			0.999	
Satd. Flow (prot)	1652	1820	0	0	1851	0	0	1855	0	0	1877	0
Flt Permitted	0.271				0.963			0.764			0.983	
Satd. Flow (perm)	471	1820	0	0	1788	0	0	1425	0	0	1847	0
Right Turn on Red		1020	No			Yes			No			Yes
Satd. Flow (RTOR)					10						4	
Link Speed (mph)		30			30			30			30	
Link Opeca (mph) Link Distance (ft)		787			760			563			(885)	
Travel Time (s)		17.9			17.3			12.8			20.1	
Peak Hour Factor	0.94	0.94	0.94	0.80	0.80	0.80	0.93	0.93	0.93	0.97	0.97	0.97
Heavy Vehicles (%)	2%	0%	0%	0%	0%	2%	0%	2%	0%	0%	2%	0%
Adj. Flow (vph)	156	200	78	21	244	46	49	332	3	26	868	59
Shared Lane Traffic (%)	100	200										
Lane Group Flow (vph)	156	278	0	0	311	0	0	384	0	0	953	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)	Lon	10			10	0		0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.09	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.98	0.98	0.98
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	2		1	2	
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	
Leading Detector (ft)	20	100		20	100		20	100		20	100	
Trailing Detector (ft)	0	0		0	0		0	0		0	0	
Detector 1 Position(ft)	0	0		0	0		0	0		0	0	
Detector 1 Size(ft)	20	6		20	6		20	6		20	6	
Detector 1 Type	CI+Ex	CI+Ex		CI+Ex	CI+Ex		CI+Ex	CI+Ex		CI+Ex	CI+Ex	
Detector 1 Channel	OITEX	OI LX										
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(ft)	0.0	94			94			94			94	
ALCOHOLOGICAL PROPERTY OF THE PARTY OF THE P		6			6			6			6	
Detector 2 Size(ft)		CI+Ex			CI+Ex			CI+Ex			CI+Ex	
Detector 2 Type		OLILA			OI. LA							
Detector 2 Channel		0.0			0.0			0.0			0.0	
Detector 2 Extend (s)	nm±n4	NA		Perm	NA		Perm	NA		Perm	NA	
Turn Type	pm+pt	2		1 CIIII	6		, 01111	4			8	
Protected Phases Permitted Phases	5 2	6		6	U		4			8		

	*	-	*	1	-	*	1	†	1	1	1	1
_ane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector Phase	5	2		6	6		4	4		8	8	
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	
Minimum Split (s)	10.0	20.0		20.0	20.0		20.0	20.0		20.0	20.0	
Total Split (s)	20.0	50.0		30.0	30.0		40.0	40.0		40.0	40.0	
Total Split (%)	22.2%	55.6%		33.3%	33.3%		44.4%	44.4%		44.4%	44.4%	
Maximum Green (s)	15.0	45.0		25.0	25.0		35.0	35.0		35.0	35.0	
Yellow Time (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
All-Red Time (s)	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	
Lost Time Adjust (s)	0.0	0.0			0.0			0.0			0.0	
Total Lost Time (s)	5.0	5.0			5.0			5.0			5.0	
Lead/Lag	Lead			Lag	Lag							
Lead-Lag Optimize?	Yes			Yes	Yes							
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	None	Min		Min	Min		None	None		None	None	
Act Effct Green (s)	34.8	34.8			17.9			35.3			35.3	
Actuated g/C Ratio	0.43	0.43			0.22			0.44			0.44	
v/c Ratio	0.41	0.35			0.76			0.61			1.17	
Control Delay	17.0	16.0			41.4			24.4			113.9	
Queue Delay	0.0	0.0			0.0			0.0			0.0	
Total Delay	17.0	16.0			41.4			24.4			113.9	
LOS	В	В			D			С			F	
Approach Delay		16.4			41.4			24.4			113.9	
Approach LOS		В			D			С			FOO	1
Queue Length 50th (ft)	47	89			142			144			~588)
Queue Length 95th (ft)	82	142			202			286			#950	/
Internal Link Dist (ft)		707			680			483			805	
Turn Bay Length (ft)											040	
Base Capacity (vph)	427	1031			569			627			816	
Starvation Cap Reductn	0	0			0			0			0	
Spillback Cap Reductn	0	0			0			0			0	
Storage Cap Reductn	0	0			0			0			0	
Reduced v/c Ratio	0.37	0.27			0.55			0.61			1.17	
Intersection Summary			(10) E									
Area Type:	Other					18 3						
Cycle Length: 90												
Actuated Cycle Length: 80	.2											
Natural Cycle: 90												

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 1.17

Intersection Signal Delay: 66.2

Intersection Capacity Utilization 98.2%

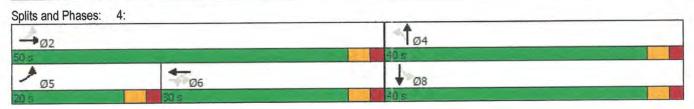
Intersection LOS: E ICU Level of Service F

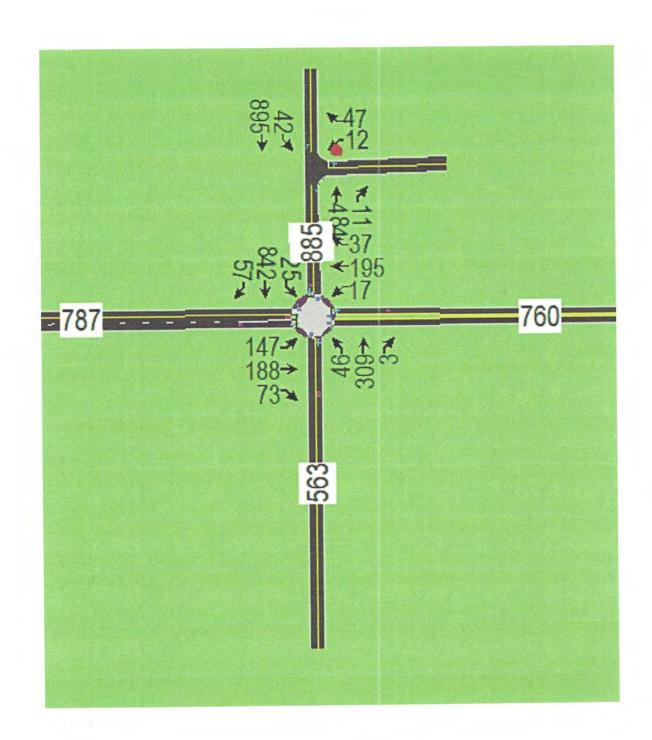
Analysis Period (min) 15

Volume exceeds capacity, queue is theoretically infinite.

Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.





ntersection						1.	
nt Delay, s/veh	1.6						
Movement	WBL	WBR	NBT	NBR	SBL	SBT	
ane Configurations	W		B			4	
raffic Vol, veh/h	10	42	1226	12	46	239	
future Vol, veh/h	10	42	1226	12	46	239	
Conflicting Peds, #/hr	0	0	0	0	0	0	
Sign Control	Stop	Stop	Free	Free	Free	Free	
RT Channelized	Ctop	None	-			None	
Storage Length	0	-		-		-	
/eh in Median Storage		100	0		-	0	
Grade, %	0	-	0	-		-3	
Peak Hour Factor	96	96	95	95	80	80	
Heavy Vehicles, %	2	0	2	0	0	0	
Mymt Flow	10	44	1291	13	58	299	
WIVIIIET IOW	10		1201				
Major/Minor N	Winor1	N	Major1	Λ	/lajor2		
Conflicting Flow All	1713	1298	0	0	1304	0	
Stage 1	1298	-	SITE	NEW P		I THE	
Stage 2	415		_	-	-	-	
Critical Hdwy	6.42	6.2		_	4.1		
Critical Hdwy Stg 1	5.42	-	-	-	-	_	
Critical Hdwy Stg 2	5.42	1000	1	1 11 5	-	1	
Follow-up Hdwy	3.518	3.3	-	-	2.2	-	
Pot Cap-1 Maneuver	99	200		- 11/2	538	-	
Stage 1	256	-	-	-	-	_	
Stage 2	666	_	- 2		14	We Day	
Platoon blocked, %			-	-		-	
Mov Cap-1 Maneuver	86	200	-	-	538	-	
Mov Cap-2 Maneuver	86	-	-	-	-		
Stage 1	256	-		-		-	
Stage 2	580	-	-	-	-	-	
Olago 2							
Approach	WB		NB		SB		
HCM Control Delay, s	38.9		0		2		
HCM LOS	E						
Minor Lane/Major Mvn	nt	NBT	NBR	WBLn1	SBL	SBT	
Capacity (veh/h)		1		159	538		
HCM Lane V/C Ratio			-	0.341			
HCM Control Delay (s)			38.9	12.5		
HCM Lane LOS		-			В		
HCM 95th %tile Q(veh	1)	-	15.1	1.4	0.4		

Intersection						
Int Delay, s/veh	1					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
	WAL	VVDIN	1	NON	ODL	र्व
Lane Configurations	12	47	484	11	42	895
Traffic Vol, veh/h	12	47	484	11	42	895
Future Vol, veh/h	0	0	0	0	0	0
Conflicting Peds, #/hr			Free	Free	Free	Free
Sign Control	Stop	Stop	riee -	REAL PROPERTY.		None
RT Channelized	-	THE PERSON NAMED IN	5	None -	0.750	NONE -
Storage Length	0	an even	0			0
Veh in Median Storage		*	0			-3
Grade, %	0	-	0	-	-	
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	13	49	509	12	44	942
Major/Minor	Minor1	N	Major1	1	Major2	41 A 22
Conflicting Flow All	1545	515	0	0	521	0
	515	313	-	-	021	_
Stage 1	1030	- C		-	Wayne Co.	_
Stage 2	6.42	6.22			4.12	
Critical Hdwy		No. of Concession, Name of Street, or other Designation, Name of Street, or other Designation, Name of Street,			4.12	
Critical Hdwy Stg 1	5.42		-	_		
Critical Hdwy Stg 2	5.42		•		0.040	
Follow-up Hdwy		3.318	-	-	2.218	
Pot Cap-1 Maneuver	126	560	•	-	1045	
Stage 1	600	-	-	-	-	SECTION .
Stage 2	344				•	
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver		560	-	3.21.2	1045	-
Mov Cap-2 Maneuver	115	-	-	-	-	-
Stage 1	600		-		-	*
Stage 2	314	-	-	-	19	-
Anneach	WB		NB		SB	
Approach	10.0		0		0.4	
HCM Control Delay, s			U		0.4	
HCM LOS	С					
Minor Lane/Major Mv	mt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)				313	1045	
HCM Lane V/C Ratio		-			0.042	
HCM Control Delay (s			ATT.	19.3		
	9)			^		
HCM Lane LOS	hl			- 0.7		
HCM 95th %tile Q(ve	11)	-	-	0.7	0.1	-

	*	-	*	1	←	*	4	1	-	1	1	1
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	7	1			4			4			4	
Traffic Volume (vph)	357	235	55	11	153	23	94	857	5	15	215	18
Future Volume (vph)	357	235	55	11	153	23	94	857	5	15	215	18
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	10	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			-3%	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.971			0.983			0.999			0.990	
Fit Protected	0.950				0.997			0.995			0.997	
Satd. Flow (prot)	1652	1845	0	0	1858	0	0	1855	0	0	1871	(
FIt Permitted	0.200				0.963			0.928			0.922	
Satd. Flow (perm)	348	1845	0	0	1794	0	0	1730	0	0	1730	- (
Right Turn on Red			No			Yes			No			Yes
Satd. Flow (RTOR)					5						6	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		787			760			563			885	
Travel Time (s)		17.9			17.3			12.8			20.1	
Peak Hour Factor	0.94	0.94	0.94	0.85	0.85	0.85	0.96	0.96	0.96	0.80	0.80	0.80
Heavy Vehicles (%)	2%	0%	0%	0%	0%	2%	0%	2%	0%	0%	2%	0%
Adj. Flow (vph)	380	250	59	13	180	27	98	893	5	19	269	23
Shared Lane Traffic (%)		-										
Lane Group Flow (vph)	380	309	0	0	220	0	0	996	0	0	311	
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Righ
Median Width(ft)		10			10			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.09	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.98	0.98	0.9
Turning Speed (mph)	15		9	15		9	15		9	15		
Number of Detectors	1	2		1	2		1	2		1	2	
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	
Leading Detector (ft)	20	100		20	100		20	100		20	100	
Trailing Detector (ft)	0	0		0	0		0	0		0	0	
Detector 1 Position(ft)	0	0		0	0		0	0		0	0	
Detector 1 Size(ft)	20	6		20	6		20	6		20	6	
Detector 1 Type	CI+Ex	CI+Ex		CI+Ex	CI+Ex		CI+Ex	CI+Ex		CI+Ex	CI+Ex	
Detector 1 Channel	OI - EX	01 - 11										
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(ft)	0.0	94		0.0	94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		CI+Ex			CI+Ex			CI+Ex			CI+Ex	
Detector 2 Type Detector 2 Channel		OIILX			OI, LX							
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases	5	2		. 01111	6			4			8	
Permitted Phases	2	6		6			4			8		

Gillon AAssociates JTG

Synchro 11 Report 1688 Central Avenue

	1	-	1	1	-	*	1	1	1	1	+	1
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector Phase	5	2		6	6		4	4		8	8	
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	
Minimum Split (s)	10.0	20.0		20.0	20.0		20.0	20.0		20.0	20.0	
Total Split (s)	27.0	47.0		20.0	20.0		73.0	73.0		73.0	73.0	
Total Split (%)	22.5%	39.2%		16.7%	16.7%		60.8%	60.8%		60.8%	60.8%	
Maximum Green (s)	22.0	42.0		15.0	15.0		68.0	68.0		68.0	68.0	
Yellow Time (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
All-Red Time (s)	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	
Lost Time Adjust (s)	0.0	0.0			0.0			0.0			0.0	
Total Lost Time (s)	5.0	5.0			5.0			5.0			5.0	
Lead/Lag	Lead			Lag	Lag							
Lead-Lag Optimize?	Yes			Yes	Yes							
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	None	Min		Min	Min		None	None		None	None	
Act Effct Green (s)	42.0	42.0			15.0			68.0			68.0	
Actuated g/C Ratio	0.35	0.35			0.12			0.57			0.57	
v/c Ratio	1.06	0.48			0.96			1.02			0.32	
Control Delay	96.9	33.5			102.7			59.6			14.5	
Queue Delay	0.0	0.0			0.0			0.0			0.0	
Total Delay	96.9	33.5			102.7			59.6			14.5	
LOS	F	С			F			E			В	
Approach Delay		68.4			102.7			59.6			14.5	
Approach LOS		E			F			E			В	
Queue Length 50th (ft)	~274	186			168			~780			118	
Queue Length 95th (ft)	#471	272			#299			#1067			151	
Internal Link Dist (ft)		707			680			483			805	
Turn Bay Length (ft)												
Base Capacity (vph)	360	645			228			980			982	
Starvation Cap Reductn	0	0			0			0			0	
Spillback Cap Reductn	0	0			0			0			0	
Storage Cap Reductn	0	0			0			0			0	
Reduced v/c Ratio	1.06	0.48			0.96		- 4	1.02			0.32	
Intersection Summary												
Area Tuno:	Other											

Area Type: Other

Cycle Length: 120 Actuated Cycle Length: 120

Natural Cycle: 120

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 1.06 Intersection Signal Delay: 60.3

Intersection Capacity Utilization 118.7%

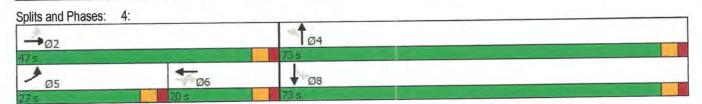
Intersection LOS: E
ICU Level of Service H

Analysis Period (min) 15

~ Volume exceeds capacity, queue is theoretically infinite.

Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.



	1	-	*	1	-	*	1	1	1	1	+	1
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	ሻ	1			4			4			4	
Traffic Volume (vph)	147	188	73	17	195	37	46	309	3	25	842	37
Future Volume (vph)	147	188	73	17	195	37	46	309	3	25	842	37
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	10	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			-3%	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.958			0.980			0.999			0.994	
Flt Protected	0.950				0.997			0.994			0.999	
Satd. Flow (prot)	1652	1820	0	0	1851	0	0	1855	0	0	1880	0
Flt Permitted	0.232				0.961			0.842			0.984	
Satd. Flow (perm)	403	1820	0	0	1784	0	0	1571	0	0	1852	0
Right Turn on Red			No			Yes			No			Yes
Satd. Flow (RTOR)					10						4	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		787			760			563			885	
Travel Time (s)		17.9			17.3			12.8			20.1	
Peak Hour Factor	0.94	0.94	0.94	0.80	0.80	0.80	0.93	0.93	0.93	0.97	0.97	0.97
Heavy Vehicles (%)	2%	0%	0%	0%	0%	2%	0%	2%	0%	0%	2%	0%
Adj. Flow (vph)	156	200	78	21	244	46	49	332	3	26	868	38
Shared Lane Traffic (%)												
Lane Group Flow (vph)	156	278	0	0	311	0	0	384	0	0	932	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		10			10			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.09	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.98	0.98	0.98
Turning Speed (mph)	15		9	15		9	15		9	15		5
Number of Detectors	1	2		1	2		1	2		1	2	
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	
Leading Detector (ft)	20	100		20	100		20	100		20	100	
Trailing Detector (ft)	0	0		0	0		0	0		0	0	
Detector 1 Position(ft)	0	0		0	0		0	0		0	0	
Detector 1 Size(ft)	20	6		20	6		20	6		20	6	
Detector 1 Type	CI+Ex	CI+Ex		CI+Ex	CI+Ex		CI+Ex	CI+Ex		CI+Ex	CI+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(ft)	0.0	94		0.3	94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		CI+Ex			CI+Ex			CI+Ex			CI+Ex	
Detector 2 Channel		OI - LA			700							
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases	5	2		. 01111	6			4			8	
Permitted Phases	2	6		6			4			8		

Gillon ssociates JTG

	*	-	7	1	-	*	1	1	1	1	1	1
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector Phase	5	2	3/16/2	6	6		4	4		8	8	
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	
Minimum Split (s)	10.0	20.0		20.0	20.0		20.0	20.0		20.0	20.0	
Total Split (s)	10.0	31.0		21.0	21.0		49.0	49.0		49.0	49.0	
Total Split (%)	12.5%	38.8%		26.3%	26.3%		61.3%	61.3%		61.3%	61.3%	
Maximum Green (s)	5.0	26.0		16.0	16.0		44.0	44.0		44.0	44.0	*
Yellow Time (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
All-Red Time (s)	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	
Lost Time Adjust (s)	0.0	0.0			0.0			0.0			0.0	
Total Lost Time (s)	5.0	5.0			5.0			5.0			5.0	
Lead/Lag	Lead			Lag	Lag							
Lead-Lag Optimize?	Yes			Yes	Yes		1					
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	None	Min		Min	Min		None	None		None	None	
Act Effct Green (s)	25.3	25.3			15.3			41.5			41.5	
Actuated g/C Ratio	0.33	0.33			0.20			0.54			0.54	
v/c Ratio	0.73	0.46			0.86			0.45			0.93	
Control Delay	43.3	24.2			54.1			12.9			34.1	
Queue Delay	0.0	0.0			0.0			0.0			0.0	
Total Delay	43.3	24.2			54.1			12.9			34.1	
LOS	D	C			D			В			C	
Approach Delay		31.1			54.1			12.9			34.1	
Approach LOS		С			D			В			C	
Queue Length 50th (ft)	57	109			146			106			390	
Queue Length 95th (ft)	#138	180			#232			172			#670	
Internal Link Dist (ft)		707			680			483			805	
Turn Bay Length (ft)											4000	
Base Capacity (vph)	215	620			381			906			1069	
Starvation Cap Reductn	0	0			0			0			0	
Spillback Cap Reductn	0	0			0			0			0	
Storage Cap Reductn	0	0			0			0			0	
Reduced v/c Ratio	0.73	0.45	-31		0.82	The's		0.42			0.87	
Intersection Summary					12 7,44							

Other Area Type:

Cycle Length: 80

Actuated Cycle Length: 76.9

Natural Cycle: 80

Control Type: Actuated-Uncoordinated

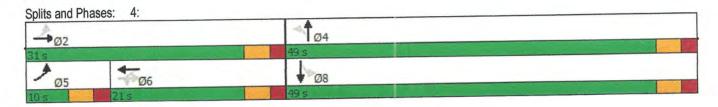
Maximum v/c Ratio: 0.93 Intersection Signal Delay: 32.5

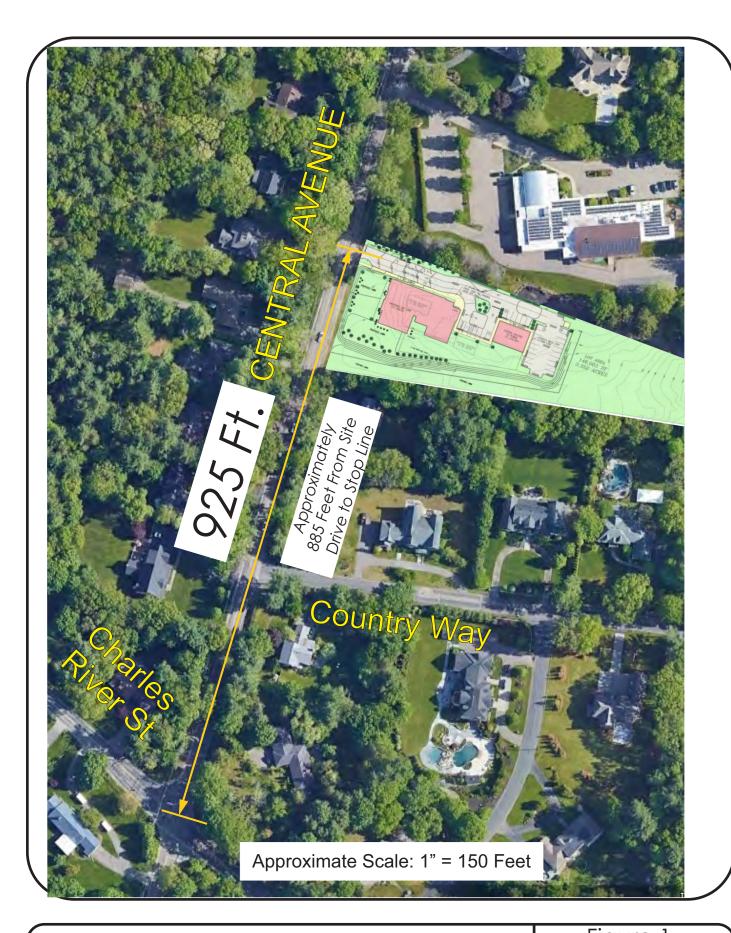
Intersection Capacity Utilization 97.0%

Analysis Period (min) 15

Intersection LOS: C ICU Level of Service F

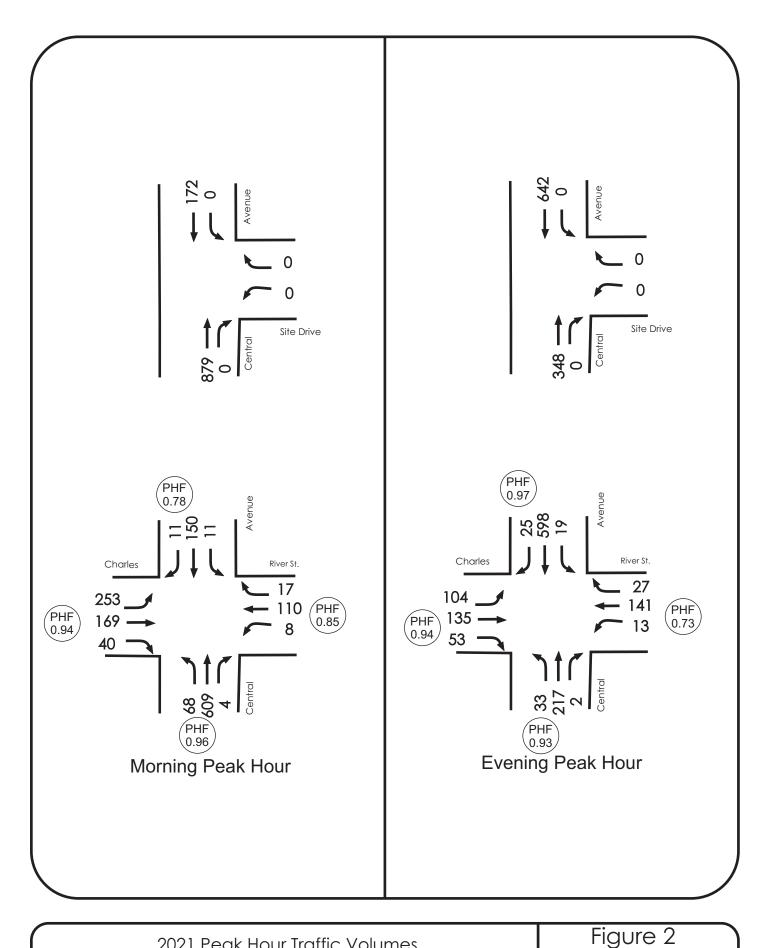
95th percentile volume exceeds capacity, queue may be longer.





Locus Map

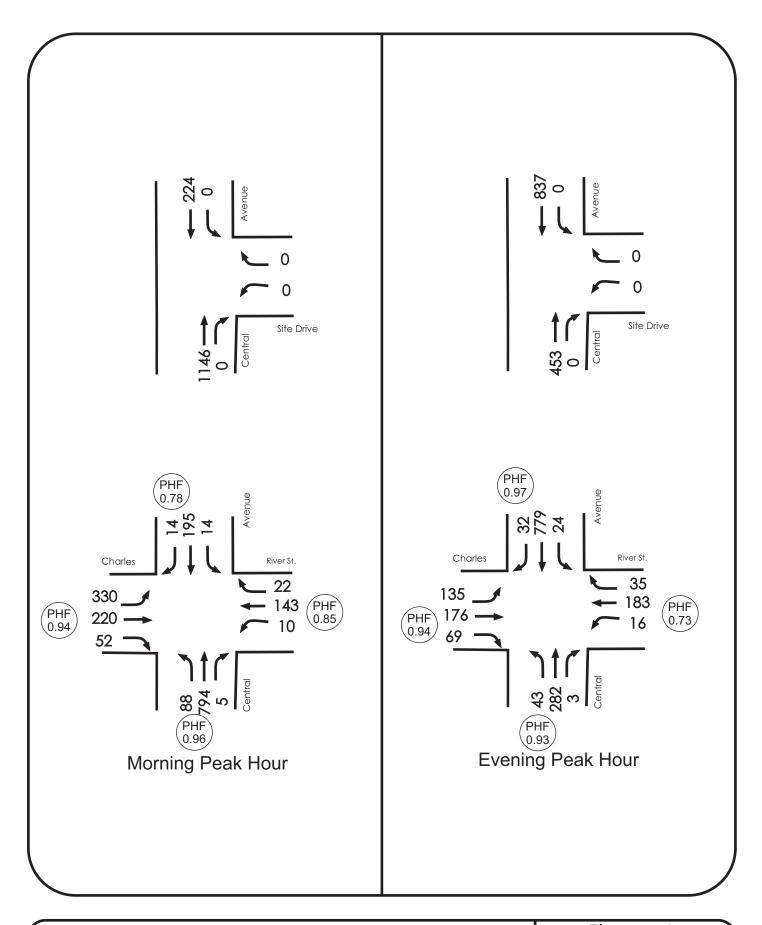




2021 Peak Hour Traffic Volumes From New PDI Counts (October 2021)

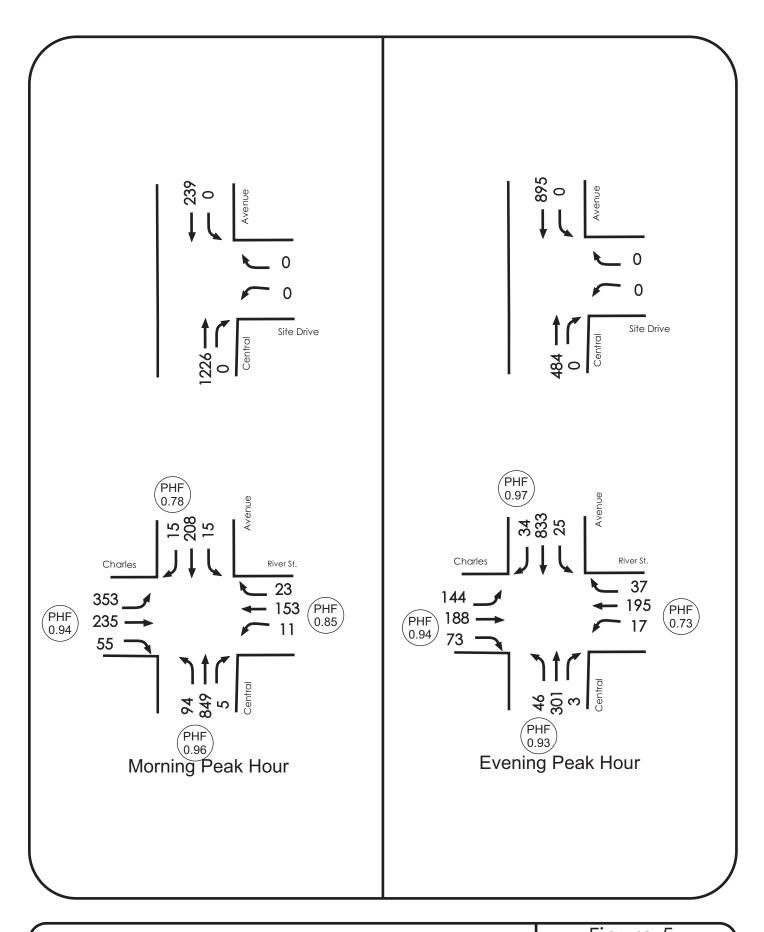


	COMPARISON OF BASELINE APPROACH TRAFFIC VOLUMES									
	Central Avenue					Charles	River St			
	N. Bd.		S. Bd.		E. Bd.		W. Bd.			
	AM	PM	AM	PM	AM	PM	AM	PM		
Existing October 2021	681	252	172	642	462	292	135	181		
Correct for Covid (+130.3%)	888	329	224	837	602	381	176	236		
Increase by 1% per yr. Growth Factor to 202:	950	352	240	896	645	407	188	253		
Current Assessment	950	352	240	896	645	407	188	253		
Previous Assessment*	-	412	-	1084	-	327	-	232		
An actual turning movement count was incre	eased b	y 139% t	o reach	an ADT o	ount pr	ovided b	y Needh	am Eng	ineering for	2016.
The 2016 counts were increased by 5% to es	timate 2	2021 cou	nts. The	2021 co	unts we	re incre	ased by	7% to es	taablish no l	build in 2028.
MassDOT Station #6161 shows a two-way co	unt in 2	020 of 14	41,295 w	hich was	184,21	3 in 2019	, a 30.4%	differe	nce	
To account for Covid-19, the Existing Octobe	r 2021 d	ounts w	er incre	ased by	130.4%					
To identify 2028 Baseline volumes, Covid-A	djusted	Counts	were in	creased	by 7% o	ver 7 yea	ırs.			

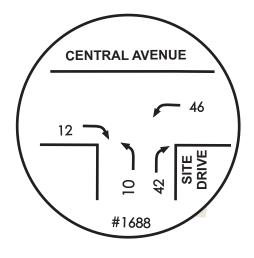


2021 Covid-Adjusted Peak Hour Traffic Volumes (130.4%) From New PDI Counts & MassDOT Station # 6161





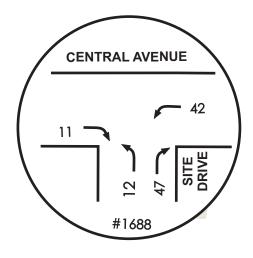




2028 MORNING PEAK HOUR IN OUT TOTAL 58 52 110

BASED ON ITE 10, 034 Sq. Ft.

.....

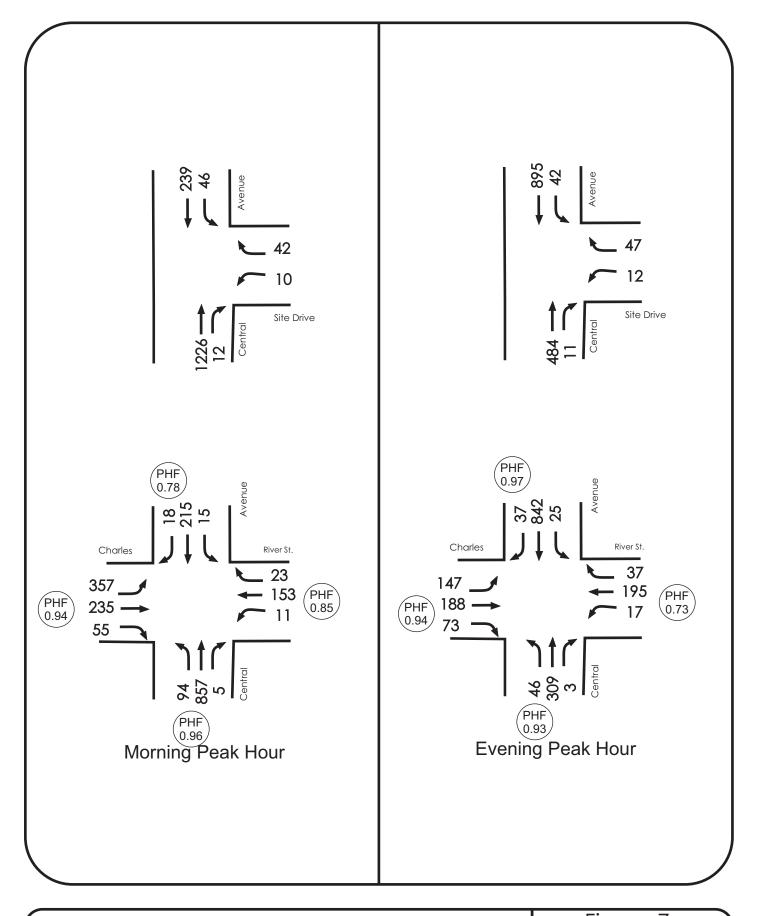


2028 EVENING PEAK HOUR IN OUT TOTAL 53 59 112

BASED ON ITE 10, 034 Sq. Ft.

Projected Site Generated Peak Hour Traffic Volumes Central Avenue at Site Drive



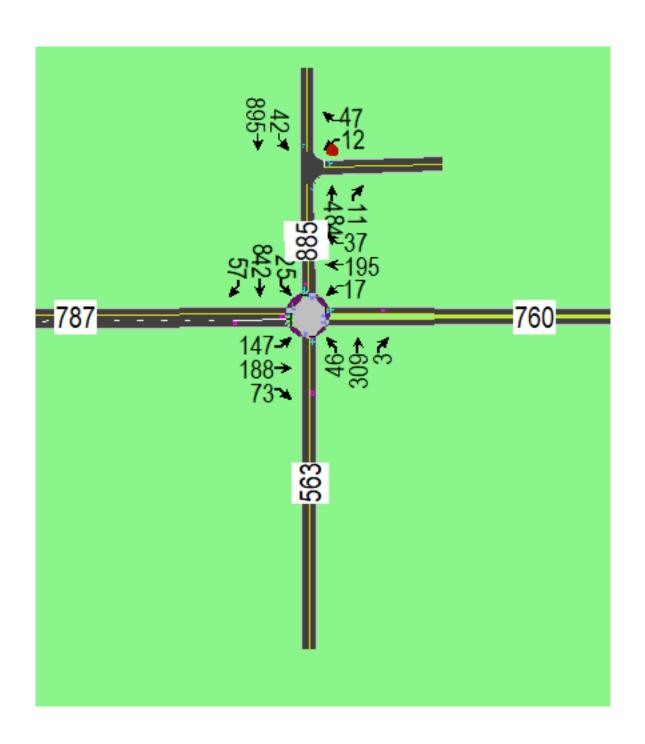


	Existing Covid-Adjusted 2021			Base		Projected			
				2028		Exist. Splits		mum	
	AM	PM	AM	PM	AM	PM	AM	PM	
Central Ave at Charles River St									
Traffic Control Signal									
Overall Level of Service	Е	D	F	Е	F	F	Е	С	
Overall Delay (Seconds)	68.5	43.4	88.9	57.7	91.6	66.2	60.3	32.5	
Charles River St East Bd.	С	В	С	В	С	В	Е	С	
(Overall Delay (Seconds)	24.4	16.2	27.3	16.4	27.9	16.4	68.4	31.1	
Avg./95th % Queue Length (ft)	93/149	82/132	101/159	89/142	101/159	89/142 1	86/272	109/180	
Charles River St West Bd.	D	D	D	D	D	D	F	D	
(Overall Delay (Seconds)	38.4	39.7	39.0	41.3	39.0	41.4	102.7	54.1	
Avg./95th % Queue Length (ft)	91/147 1	30/190	99/156 1	41/202 9	99/156 14	12/202 16	58/299 1	46/232	
Central Ave. North Bd.	F	С	F	С	F	С	Е	В	
(Overall Delay (Seconds)	121.5	21.2	164.2	23.6	170	24.4	59.6	12.9	
Avg./95th % Queue Length (ft)	558/856	121/248	633/948	139/277	643/959 1	44/28678	80/1067 1	06/172	
Central Ave. South Bd.	В	Е	В	F	В	F	В	С	
(Overall Delay (Seconds)	16.7	66.5	17.5	96.6	17.7	113.9	14.5	34.1	
Avg./95th % Queue Length (ft)	86/139	466/830	94/152	548/90	7 99/15	9 588/950	118/15	1 390/670	

Distance Between STOP LINE and Driveway ≈ 885 Feet

Central Avenue at Site Driveway	Projec <u>AM</u>	ted LOS <u>PM</u>
Stop Sign Controlled		
Central Ave. Northbound (All Moves)	A	A
Central Ave. Southbound Through Movement Left-Turn Movement	A B	A A
Site Drive West Bound (All Moves)	E	С





APPENDIX

Signalized Intersections

LOS	Control Delay per Vehicle (s./veh)
- A	≤ 10
В	> 10-20
C	> 20–35
D	> 35-55
E	> 55-80
F	> 80

Un-Signalized Intersections

Level of Service	Average Control Delay (s/veh)
A	0-10
В	> 10-15
C	> 15-25
D	> 25-35
E	> 35-50
F	> 50



draft

November 16, 2021

NEX-2021238.00

Town of Needham Planning Board Town Hall 1471 Highland Avenue Needham, MA 02492

SUBJECT: 1688 Central Avenue

Proposed Child Care Facility - Peer Review 3

Dear Ms. Newman:

The following items were submitted by the proponent on November 10, 2021.

- Site Plans dated June 22, 2020 rev. 11-08-2021
- 168 8Central Turning Maneuver Supply Van and Trash Truck Templates

In addition, GPI conducted a site visit during the morning, afternoon and evening peak periods to observe traffic operations on November 3, 20121.

The above materials have been reviewed against typical engineering practices, standards, and industry guidelines. We offer the following comments. (

SITE PLANS

The following highlights GPI's original comments from the July 15, 2021 Peer Review letter and our responses based on the revised site plan.

 What is the purpose of the 12.67' loading zone? What size vehicle is expected to need access to the loading area. Truck turning templates should be provided showing access and egress from the loading area as well as the dumpster pad.

Comment has been addressed

2. The proponent should construct fully compliant ADA sidewalks along the property frontage and tie into existing sidewalks at the property limits.

GPI 11-11-21 response

The proponent has not indicated any sidewalk work on the plans.

3. The proponent should ensure that the construction of the site drive does not impact the drainage, particularly with the existing catch basin on the NW corner of the existing driveway.

It appears the existing CB will be in the center of the driveway on the gutter line. With the introduction of two wheelchair ramps the construction plans should consider relocating or providing additional drainage to ensure ponding in the vicinity of the wheelchair ramps does not occur.

GPI - 11-1-21 response

The proponent has modified the drainage as requested above. However, we still have comments as noted on the plans:

Needham Planning Board November 16, 2021 Page 2

- a) Sheet 4 Proposed grades of the centerline of the driveway apron do not make sense. It appears to slope DOWN from the edge of road to the front of crosswalk by more than 2% and then slope up to the back of the crosswalk by more than 4%
- b) <u>Sheet 4 The spot grades 200x68 and 200x74 indicate the apron slope of about 1% UP at the sidewalk openings and a 1.8%-2.0% slope across the sidewalk/crosswalk, the apron portion should be sloped greater than the crosswalk portion.</u>
- c) Provide grades on sidewalk approaching driveway. It is unclear if the sidewalk slopes to the driveway or is level with the crossing.
- d) Sheet 4 Limit of work on the sidewalks should be indicated (also relates to Comment 2)
- e) Sheet 6 Detail should be provided for the proposed driveway apron.
- f) Sheet 8 & 9 Proposed CBs should be labeled and Existing CB to be removed should be labeled
- g) Sheet 10 Either delete labels on CBs (not relevant for lighting) or correctly label the Existing CB to be Removed

GPI - 11-11-21 response

The comments highlighted in green have not been addressed and there are still concerns over the grading. It appears that the cross slope of the crossing across the driveway exceeds 2% in some areas. The maximum slope should be 1.5% with a 0.5% +/- tolerance.

TRAFFIC ANALYSIS

On November 3, 2021, I went out with a GOPRO in the car in the morning from about 7:45-8:00, in the afternoon around 3:30 and then again from about 4:45-5:15. I also talked with a police officer who was monitoring traffic at the Transfer Station driveway around 5 to get his sense on traffic levels returning to normal.

Over the course of the 3 periods, I made left turns in and out of the driveway at least 7 or 8 times. The only time I saw any queue was at 5PM and while I crawled to the driveway, I didn't wait more than 5 seconds to make the left into the site.

While making a left out took a bit longer, it was actually easier to do at 5 when the traffic was queued past the driveway. Since there was no one traveling NB, SB vehicles gave a courtesy gap. By 5:15, the queue had dissipated.

Based on the updated Traffic Memo and previous discussions, the following traffic mitigation is recommended:

- 1. The proponent should commit to a follow up traffic study after the site is open and operational to at least 80% of the student capacity.
- 2. The proponent should commit to provide police details during the peak morning and afternoon hours of arrivals and dismissals. The detail should remain in place, until the Police Chief believes the site is operating without significantly impacting operations along Central Ave.
- 3. The proponent should provide detailed traffic signal timing plans for optimized operations during the weekday morning and evening peak hours. The proponent should coordinate with Needham DPW on how to implement the revised signal times

Should you have any questions, or require additional information, please do not hesitate to contact me at (978) 570-2953 or via email at jdiaz@gpinet.com.

Sincerely,

GREENMAN-PEDERSEN, INC.

John W. Diaz, PE, PTOE Vice President/Director of Innovation

Joe Abruzese 30 Bridle Trail Road Needham, MA 02492 jabruzese@yahoo.com

December 12, 2021

Needham Planning Board planning@needhamma.gov

Re: Presentation Points from Needham Planning Board Hearing, December 8, 2021

Dear Chair Alpert and Needham Planning Board Members,

Thank you again for allowing me the opportunity to speak during the public hearing on December 8, 2021. As discussed, I am sharing the materials I presented for your reference.

Many issues have been raised by residents regarding the proposed daycare center plan at 1688 Central Avenue. My comments during the December 8 hearing focused on three of those issues to explain them in a clear, factual manner.

Disharmony with the Existing Area

One of the key questions for the Planning Board is to assess how the applicant's plan – both the building and the property layout – align to the rest of the developed properties in the area. A practical and logical way to look at this is to examine the setbacks in relation to the size of the buildings.

In many neighborhoods that have large property sizes, larger buildings are usually set back further on the property than smaller buildings. In the area of 1688, it is nearly all residential, with the one exception of Temple Aliyah.

The chart I presented is an objective comparison of the size of existing buildings to the setbacks. The horizontal axis is the size of the building, and the vertical axis is the ratio of building square footage to the setback. This ratio normalizes the setback based on the size of the building.

As I mentioned, most of the buildings in the area are residential homes. The chart on page 6 shows they all have similar size and have similar setbacks. The Temple is a significantly larger building and as such it is set back much further. It makes sense that larger buildings, especially those that run commercial operations are set back further on the property. However the Temple's setback, given its size, is generally in line with the rest of the neighborhood. See the neighborhood range shown on page 7.

We plotted 1688's plans on the same chart. As you know, 1688 is either a 10,000 sq ft operation or a 14,800 sq ft operation if you include the barn. This property is proposed to be built at a 64 ft setback on

a 3.3 acre property that over 1000 feet long (deep). The front of the building will be on the first 6% of the total depth of the property.

1688 is a significant building or a building complex that – as planned – is nowhere near the rest of the neighborhood. See the chart on page 8.

To be in alignment and be harmonious with the neighborhood, the setbacks that should be used are:

- Between 148 and 228 feet, if the barn is eliminated where the total square footage is 10,000 square feet
- Between 171 and 235 feet, if the barn is retained where total square footage is 14,800 square feet

This Board has stated multiple times that the building needs to be setback 200 feet. The chart on page 9 illustrates why this is the case. Please consider these facts. This is the actual objective data, not a subjective opinion.

Require a plan that is congruent with the area.

Traffic Analysis is Based on Faulty Data and Incorrect Math

To date, the applicant has submitted five traffic assessments, each with different basis of data and different methods of analysis. The constant shifting and inconsistencies are concerning. Regardless, we examined the most recent traffic analysis and projections. The data they use for their analysis is extremely flawed, and those flaws are compounded by erroneous math calculations. I explained this in my presentation.

The one-hour peak times that are often referenced in the applicant's traffic reports are 7:30-8:30am and 4:45-5:45pm. The Town of Needham measured traffic in 2016 during these times using an automatic traffic recorder. This information is shown in the first row of the chart on page 10. The Town measured 1353 (273+1080) vehicles in the morning hour and 1430 (1028+402) in the evening hour.

The applicant's March traffic assessment references the Town data stating, "the ATR count obtained in 2016... proved to be the most useful."

Yet instead of using this data, the applicant's latest report uses a manual observation from a single day on October 13, 2021. The observations are **40% less** than the Town of Needham measurements. This is shown at the bottom of the chart on page 10. Any data analyst would question why there is such a big difference and resolve this difference before using the data as a basis for projections.

However, there are more significant problems with their projections.

The report projects traffic seven years in the future using a 1% annual growth rate. In addition, the report applied a 30% factor to account for COVID. There are three issues with this:

- 1. Applying a 30% adjustment is not aligned with the actual difference of 40%
- 2. The report does not mathematically apply the 30% adjustment correctly. They simply apply a 30% increase to their figures, when in fact the correct math is to apply 43%¹
- 3. The report does not apply 1% growth using compounding as required

The mathematical errors were also pointed out by Mr. Rob DiMasi during the hearing on November 2, 2021.

The incorrect basis and the mathematical errors result in traffic projections that are significantly lower than they should be. The 2028 projections that should be used are in bold at the bottom of the chart on page 11. Yet the applicant's projections have 335 fewer vehicles in the morning hour and 363 fewer vehicles in the afternoon hour.

The underestimating is significant and material. They are off by hundreds of vehicles. Their analysis of what Central Avenue traffic will look like, what the queue would be to turn into the property, and what the queue would be to turn out of the property is founded on faulty data and faulty math.

Do not take the projections in the traffic report as fact. Look at the underlying information, look at the methods used, look at the assumptions, look at their math. A traffic study and its conclusions need to be based on quality foundational information. The applicant's report does not do this.

Plans and Projections Must be Based on the Legal Capacity of the Building

The applicant has stated that the proposed tenant will have a maximum of 115 children, plus 18 staff and administrators. This is shown in the chart on page 12.

We looked at the regulations defined by the Massachusetts Department of Early Education and Care (EEC) to determine the rules about how many children can be accommodated in a facility such as this. In addition, we looked at the layout and rooms that are in the applicant's drawings. We also reviewed the proposed tenant's child care programs to understand how they may use the rooms.

The EEC legally allows either 199 children or 219 children to occupy the proposed building, depending on whether the childcare offers a half-day service. This is shown in the chart on page 13.

The Needham Planning Board needs to plan for up to 219 capacity, not 115. 219 is what the building is able to support and it is what is legally allowed.

115 is an artificial limit, and if this limit is set via conditions, it is not permanently binding.

Conditions can be easily revisited and/or removed due to a changing tenant, a changing environment or other circumstances. We recently saw this with the Cogswell building. This building was approved with the condition that the building would be unstaffed to alleviate traffic concerns. However, this condition was subsequently removed due to COVID, allowing 16 people to drive, park, and work from there. On October 19, this removal was extended through Aug 2022 as a de minimis change. A hearing was not required nor offered to the public.

¹ To illustrate, if 100 is reduced by 30%, the result is 70. In order for 70 to get back to 100, it would need to increase by 43%, not 30%. In other words, an increase of 30 on a basis of 70 is a 43% increase.

It is reasonable to assume that the same process would happen for 1688. The condition to limit capacity to 115 children can simply be revisited at anytime and be removed, potentially as a de minimis change. The building can legally handle up to 219 children. This is the legal fact.

The Planning Board and this application (including the traffic study) needs to plan for the actual physical capacity of the structure being built. A condition is a temporary measure that ignores the actual potential and actual legal limits.

Furthermore, conditions set by the Planning Board are vulnerable to be challenged as an impermissible regulation of the daycare use under the Dover Amendment, should the tenant decide that they do not wish to agree to the condition anymore.

In closing, I discussed these aforementioned issues in the December 2 hearing. These issues are not the only ones that are unremedated. Other material issues include:

- Whether the barn is allowed to remain as a second building; Why the barn is needed for storage and storage was not designed into the main building
- Whether the barn is a customary element of a daycare center
- Incomplete plans for sidewalk construction and integration with existing horse trails
- Absence of analysis of soil for toxic contamination from previous use (pending Board of Heath review)
- Incomplete plan to manage lighting & car headlight trespass (latest plan has not been reviewed by DRB)
- Incomplete water drainage plan (latest plan has not been reviewed by DPW)
- Unaddressed parking deficiencies; Parking requirements must be based on the actual building size, not on a particular tenant's plan

I ask that the Planning Board require the applicant to create an appropriate, reasonable design that directly resolves these issues. The Planning Board must look at the details of the proposed solutions so that the Board can make sound judgements.

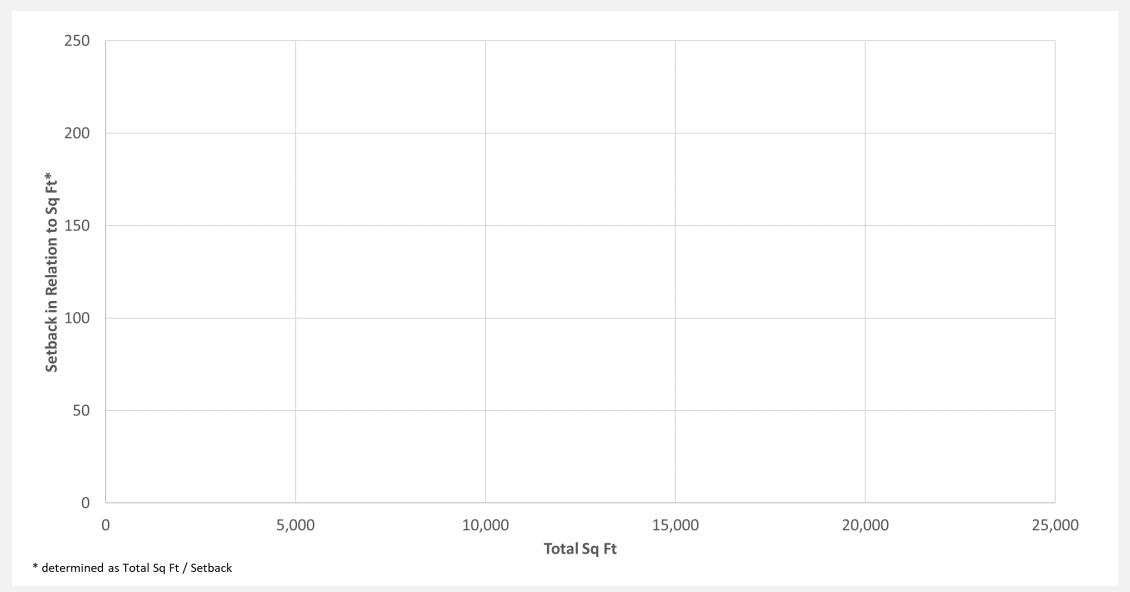
Moreover, the Board should mandate the applicant submit a final comprehensive design that this Board and the public can see and review. It is unreasonable to issue a permit based on generalities with details to be figured out later with less public transparency.

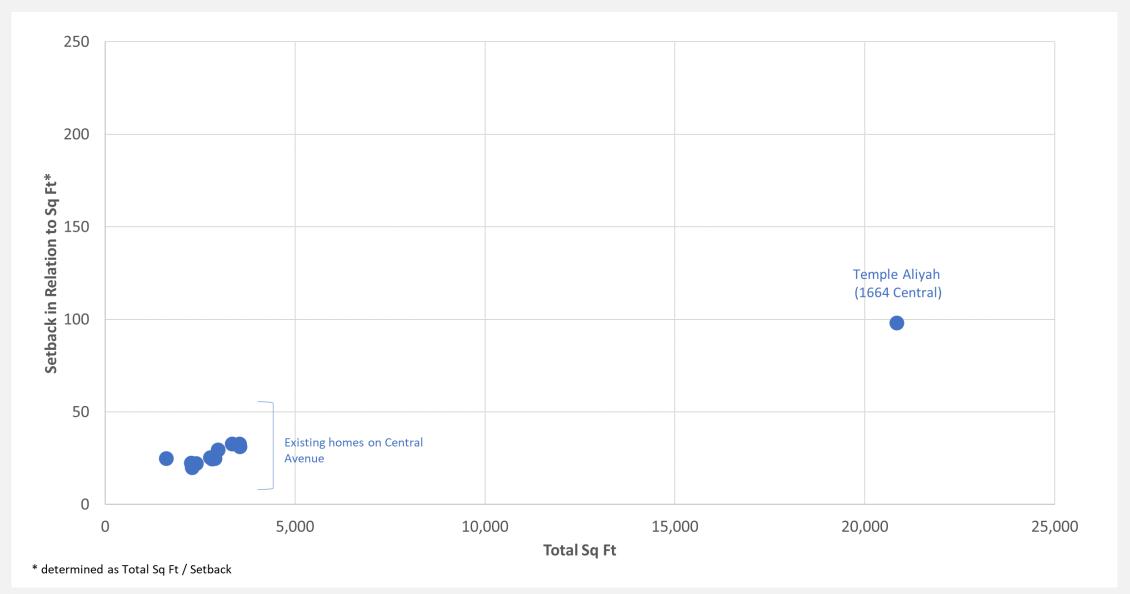
We are in the planning process. This is the time to work through the issues and get specific resolutions.

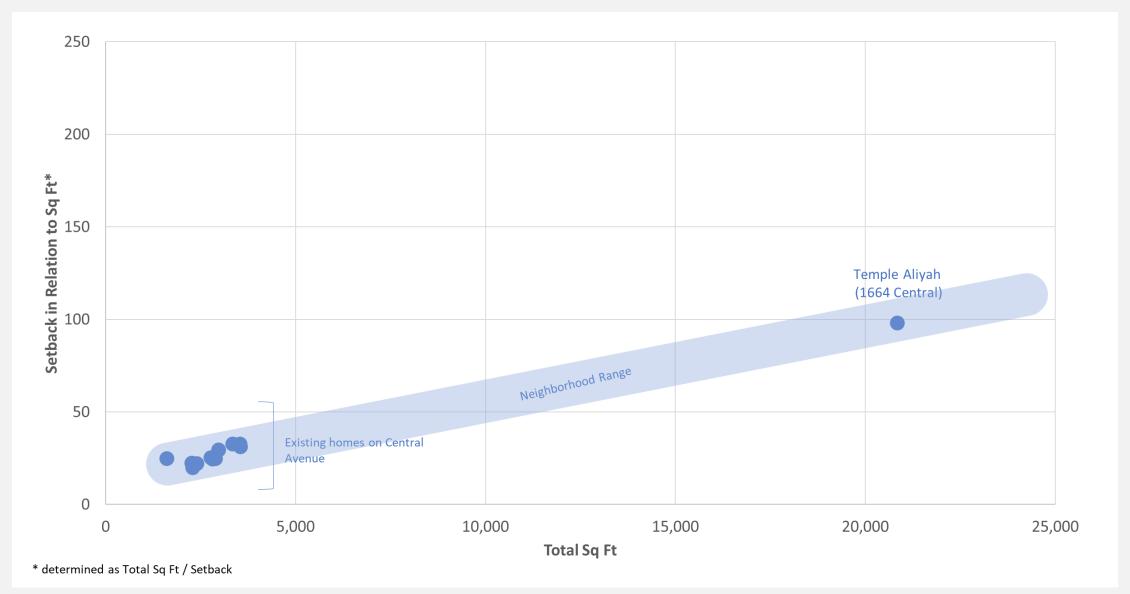
Sincerely,

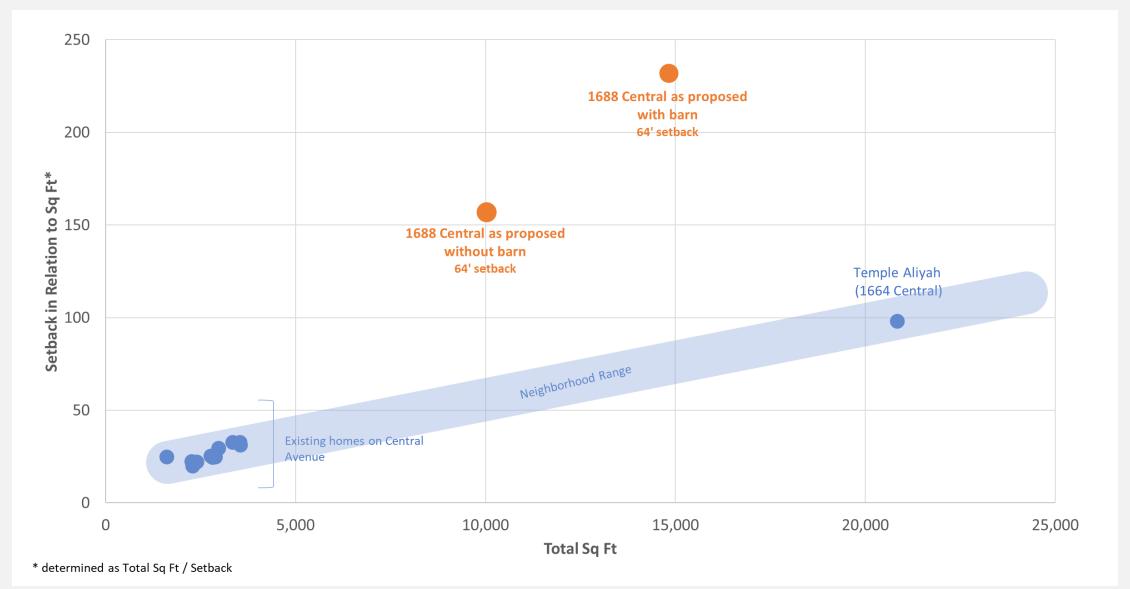
Joe Abruzese

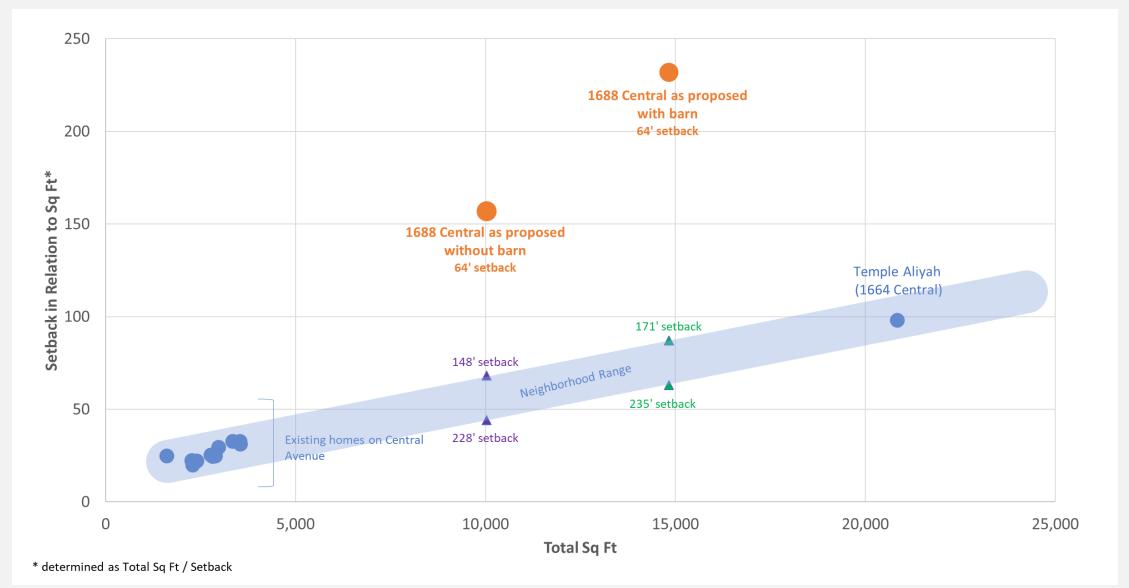
cc: Lee Newman, Inewman@needhamma.gov
Alex Clee, aclee@needhamma.gov











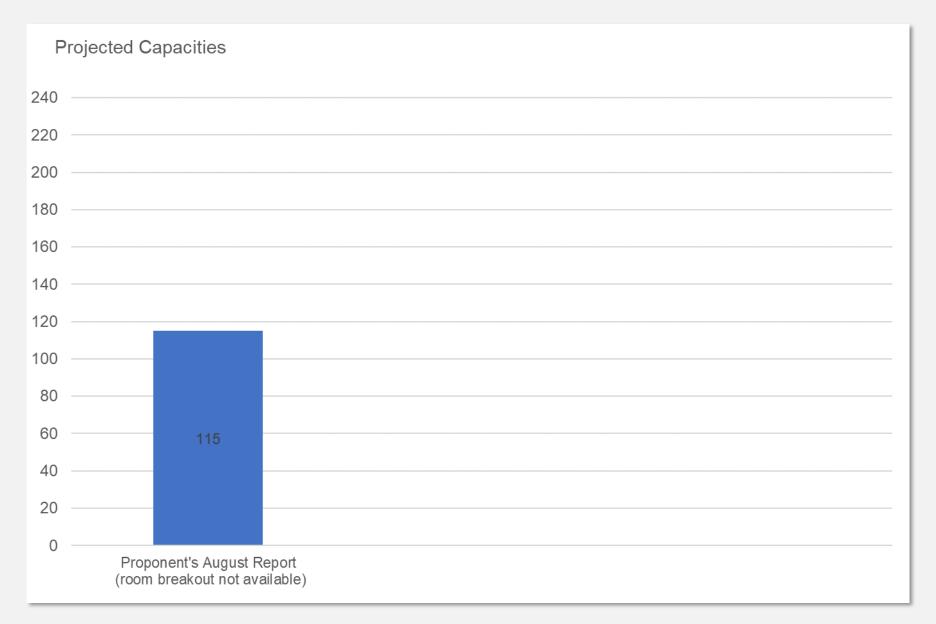
Why the Traffic Projections are Unfounded

	# of vehicles 7:	30am-8:30am	# of vehicles 4:45pm-5:45pm			
	Central Avenue Central Avenue Southbound Northbound		Central Avenue Southbound	Central Avenue Northbound		
Town of Needham Traffic Count 5/19/16	273	1080	1028	402		
Town Count scaled to 2021 using 1% annual growth	287	1135	1080	423		
Proponent's Traffic Count						
10/13/21	172	681	642	252		

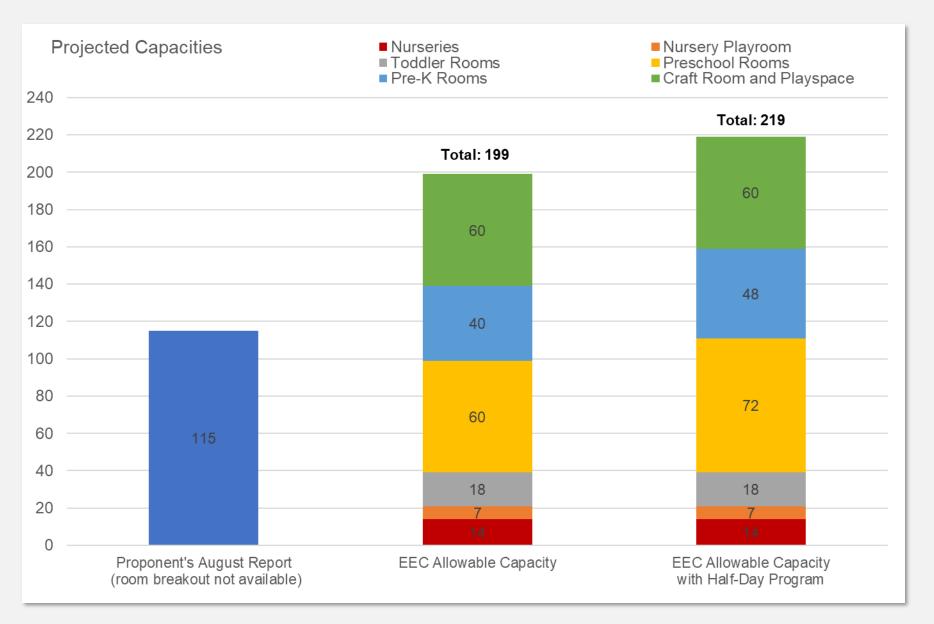
Why the Traffic Projections are Significantly Unfounded

	# of vehicles 7:	:30am-8:30am	# of vehicles 4:45pm-5:45pm			
	Central Avenue Southbound	Central Avenue Northbound	Central Avenue Southbound	Central Avenue Northbound		
Proponent's Traffic Count 10/13/21	172	681	642	252		
Proponent's Count adjusted for COVID & scaled to 2028 using 1% annual growth	240	950	896	352		
Town Count scaled to 2028 using 1% annual growth	308	1217	1158	453		
Proponent underestimated by:	(68)	(267)	(262)	(101)		

Planning for the Legally Allowable Capacity



Planning for the Legally Allowable Capacity



Unremediated Issues

- Disharmony with the Area
- Traffic: projections, analysis, queues, turns, sidestreets...
- Planning for the Allowable Physical Capacity
- Barn / 2 Buildings(?) / What does a customary daycare center require?
- Public Safety / Sidewalk construction plan
- Soil Contamination & Remediation (pending Board of Heath review)
- Lighting & Car Headlight trespass (should be reviewed by DRB)
- Water Drainage plan (should be reviewed by DPW)
- Parking: requirements for the actual building size, not a tenant's plan

From: <u>Maggie Abruzese</u>

To:Planning: Alexandra Clee; Lee NewmanSubject:1688 Central Avenue - December 8 followupDate:Sunday, December 12, 2021 11:57:27 PM

Attachments: LIGHTING 1688 submission.pdf

MMA talking points december 8.pdf

Dear Chair and Members of the Planning Board,

Thank you for the opportunity to speak and express my concerns about the building proposal for 1688 Central Avenue.

Attached please find the requested submission on Lighting and a copy of my presentation from December 8, 2021.

Sincerely,

Maggie Abruzese 30 Bridle Trail Rd

LIGHTING at 1688 Central Avenue

The Design Review Board wanted to review the lighting at its August meeting. You can see the exchange between DRB member Bob Dermody and Attorney Evans Huber at this link: https://youtu.be/S8iEpIZMgiU?t=2694 (DRB meeting of August 9, 2021 at 44:54)

The DRB wanted to follow up on its March comments on the partial lighting plan that was submitted at that time. The developer's attorney couldn't discuss lighting with the DRB because the developer didn't have a lighting plan (even though it is a required aspect of the application). The developer wants to downplay the importance of lighting, saying the lights will be shut off in the early evening. New England has dark mornings and dark afternoons for much of the year. This center is going to be open for staff early in the morning and at night after the last pick up. Presumably a cleaning crew would service the center after hours each night. Lighting is not an insignificant issue.

Despite the fact that the bylaws require the developer to submit a lighting plan for site review (see bylaw 7.4.4), the developer did not submit a formal lighting plan until November 8, 2021, six months after his application for Major Project review. Even then, it did not incorporate the DRB's comments into its design, submit the plan to the DRB, or address the concerns the DRB raised. You can view the DRB discussion of the first partial lighting plan at this link: https://youtu.be/4K1Ad1TK3I8?t=3484 (DRB meeting of March 22, 2021 at 58:04)

The new plan still does not show any **lighting at the entrance** which was one of the deficiencies that the DRB pointed out.

Uniformity of the lighting was another area of concern expressed by the DRB. When the lighting is not uniform, you have bright spots and dark spots and that is not good for visibility and safety. Uniformity of lighting is measured by the max/min ratio (i.e. how big a difference there is between the maximum footcandle and the minimum footcandle). You can find the max/min ratio in the Calculation Summary of the lighting plan. A copy of the lighting plan is attached as Exhibit A. The higher the ratio number the spottier the lighting. The November 8 lighting plan has a max/min ratio of 45, meaning the maximum footcandle (9 fc) is 45 times higher than the minimum footcandle (.2). This is a very high ratio and shows that DRB's concerns about lack of uniformity were not resolved with this plan.

The DRB was also concerned about the fact there was **light trespass** onto the Temple property. This plan still shows significant light trespass onto the Temple property. It also shows trespass onto the Darish property.

Needham's zoning bylaws at 5.1.3 require there to be an average of 1 fc in the parking area. The developers lighting plan has an average of **3.24 fc**. This can be seen in the Calculation Summary of the lighting plan.

Another important aspect of lighting is the **BUG rating**. The BUG rating measures backlight, uplight and glare. "B" Backlight is how much light is thrown behind the fixture which can lead to light trespass, as it does in this plan. "U" Uplight is how much light is thrown into the sky. "G" Glare is the sensation of seeing a too bright light which causes annoyance, discomfort or loss in visual performance and visibility. The scale goes from 0-5. The lower the number the better. A few different articles about BUG ratings are attached as Exhibit B.

The developer's lighting plan calls for 4 fixtures with a BUG rating of **B3 U1 G4**. It also calls for a fixture on the barn with a BUG rating of **B3 U0 G3**. The information sheets for the two different fixtures the developer proposes are attached as Exhibit C. These are very high BUG ratings and are not appropriate for a residential area, especially when the lighting is placed so close to the property line as it is on the Temple side. Those high ratings are more appropriate for a large city business district or a high-intensity industrial zone as you can see on the chart on page 3 of the Lighting Fundamentals article in Exhibit B.

I would ask that the Planning Board submit the lighting plan to the DRB for comment. I request lighting (and all other aspects of the plan) not be left to be "worked out" out of sight of the public.

The Planning Board should seek guidance and comment on the lighting plan and any feedback or guidance given should be <u>written and public</u>. The applicant should be required to submit a new plan in accordance with the guidance and comments, and the public should have the opportunity to review and comment on that new lighting plan as a part of the public hearing process before any permit is issued.

While the developer may consider the details of lighting, sidewalks, parking layout, landscaping, setback, emergency vehicle, delivery truck and trash truck access, snow removal and the like to be insignificant, they are not insignificant to those who live in this area. The developer is focused on building quickly and economically for his own financial interest. He is not focused on the impact that each of these plan decisions with have on the neighbors.

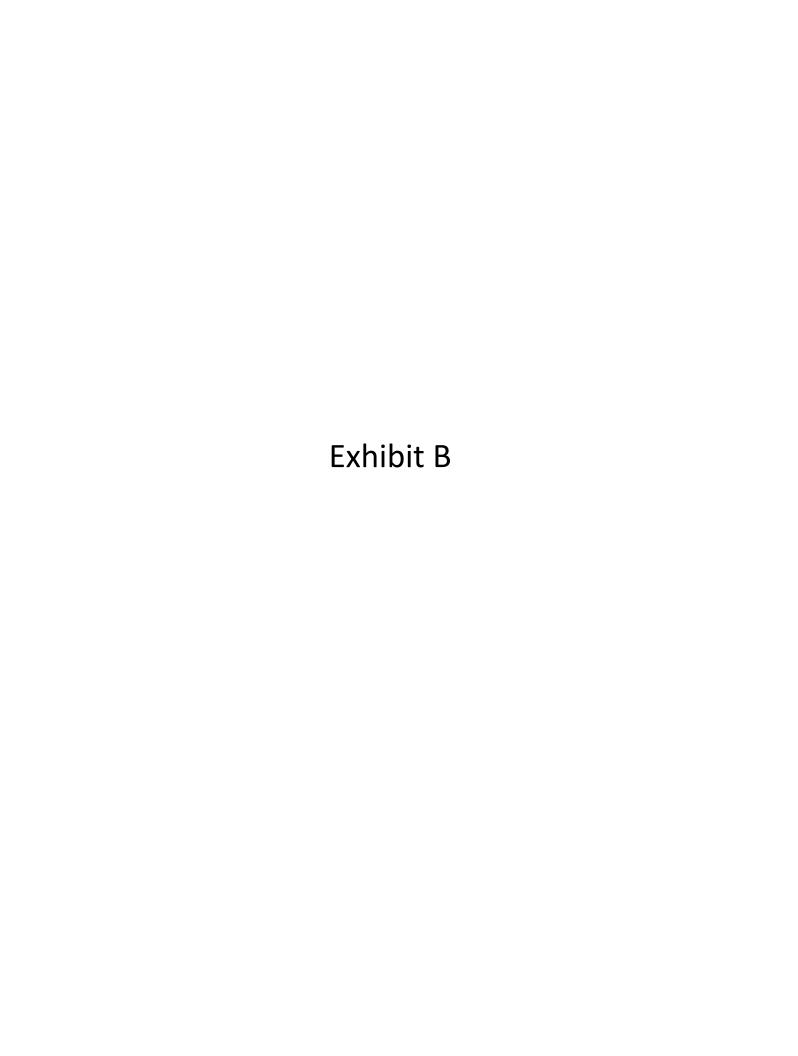
Please do not take away the public's role in scrutinizing each aspect of the plan for how it will affect the neighborhood. Please do not allow the developer to work out details "off-line" with town departments out of view of the public eye. The Planning Board is permitted to take the time it needs to review this application and the developer can hardly claim delay when it is he who has not submitted sufficient information about details required to be reviewed by the Planning Board.

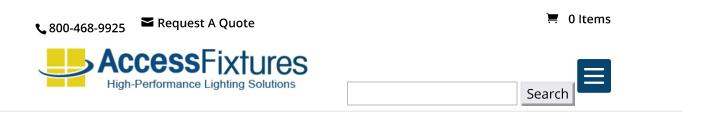
Sincerely,

Maggie Abruzese 30 Bridle Trail Rd



APPENDIX
PHOTOMETRIC AND SITE LICHTING
1688 CEWIRAL AVENUE
MED IN
MED IN
SCALE 1"=30' JUNE 22, 2020 LLF Lum. Lumens Lum. Watts 1,000 21455 148.3 1,000 20027 186.25 AvyMin MarMin Grid Z N.A. N.A. 0 16.20 45.00 0.0 0.2 Max 9.0 9.0 Avg 1.00 3.24 S S S CalcType Iluminance Iluminance LIGHT FRUNE MOJEL NIMBER EGASOD XY ISBUCZ AS MANUFACTURED BY "SENCO LIGHTING FRODUCTS 20" PCLE-HEGAT BY WAM, SERIES SS NON TAPPERED STEEL POLE NOTE: LIGHT POLES ARE 20' HIGH





What Does BUG Rating Mean?

To the untrained ear, hearing the words "BUG rating" may bring to mind swarms of insects or bad reality TV. However, the BUG rating has nothing to do with either, and everything to do with lighting. BUG is simply an acronym coined by the Illuminating Engineering Society (IES) and the International Dark Sky Association to better explain how light trespass can be measured. The BUG rating of a luminaire determines how much light trespass that a light fixture produces. The BUG rating replaced the old measuring system known as the "cutoff system" around 2005 and is more comprehensive, taking **B**acklight, **U**plight, and **G**lare into account (the B, U, and G, of BUG).

Send message

1 of 10

- **Backlight** This category takes into account the light that is spilled from *behind* the fixture into areas where it is unwanted. This is the opposite area to the area where light is intended to be. Backlight is mostly a problem regarding light trespass on adjacent sites and areas.
- **Uplight** Uplight is the resulting light spill above the top of the fixture. Uplight
 - contributes greatly to light pollution, sky glow, and is generally not "dark-sky friendly." Minimizing uplight in commercial lighting fixtures can make the stars more visible at night.
- Glare Have you ever driven past a really bright streetlight that almost seemed to blind you for a moment? That's glare. Light glare is the amount of front light in the forward zones but happens when the light is too strong or concentrated. Glare is a safety



issue as well as a light trespass issue near adjacent properties.

Request a Photometric Analysis

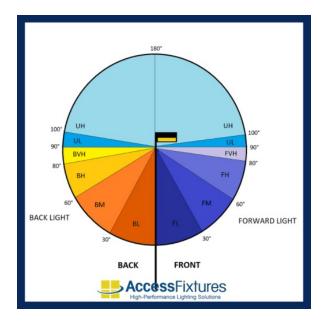
Why Does it Matter?

BUG rating is a system that allows luminaires with photometric data to be measured. It works in tandem with the International Dark Sky Association's light zones, which are accepted levels of light, or light limitations, in certain outdoor areas. The following light zones represent all the possible degrees of ambient light in an outdoor area, ranging from complete darkness (LZ0) to very bright municipal areas (LZ4).

2 of 10 12/11/2021, 11:30 AM

- LZ0: No Ambient Lighting
- LZ1: Low Ambient Lighting
- LZ2: Moderate Ambient Lighting
- **LZ3:** Moderately High Ambient Lighting
- LZ4: High Ambient Lighting

Different luminaires have different BUG ratings. Obviously, the BUG rating for an outdoor luminaire in a LZO no ambient lighting zone will need to be much lower than that of a fixture in a LZ4 high ambient lighting zone. BUG rating and light zone requirements work together to ensure that local and municipal codes are met when installing outdoor light fixtures. Certain levels



A diagram depicting backlight, uplight, and glare zones of a light fixture.

of glare are more permissible in some locations over others.

Overall, the lower the BUG rating, the fewer light trespass problems the fixture will cause. It is best to aim for the least amount of light trespass possible while still maintaining the required amount of footcandles for your project. BUG rating can be a helpful determinant in both commercial and residential outdoor lighting projects to reduce light trespass and uplight glow.

In order to determine the BUG rating of your outdoor lighting project, request a photometric analysis from Access Fixtures. Contact your local building code department to find out what the light trespass requirements are in your jurisdiction and we can design a lighting plan to fit those parameters.

3 of 10 12/11/2021, 11:30 AM

MENU **≡**



Lighting Fundamentals – BUG Ratings



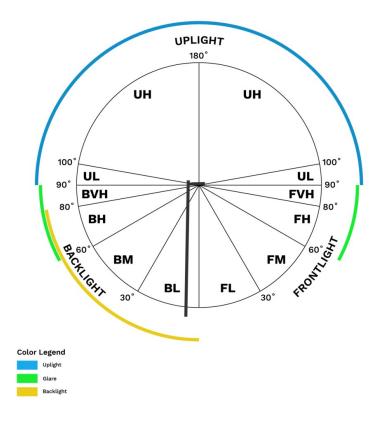
A BUG Rating stands for backlight, uplight, and glare. **Backlight (B)** is the light directed behind the fixture, **uplight (U)** is any light directed upward above the horizontal plane of the luminaire, and **glare (G)** is the amount of light emitted from the luminaire at high angles.

The backlight, uplight, and glare ratings are assigned a value between 0 and 5 (with lower of the scale being more desirable) depending on the maximum amount of light in these zones based on thresholds defined by the Illuminating Engineering Society (IES) and enforced by the International Dark-Sky Association (IDA).

A BUG Rating gives a simple way to quantify where the light goes in a light. In most cases, you want lower numbers as an indicator that light goes where it's supposed to versus unintended areas. When

1 of 7

you don't control the light well you get into situations where there may be consequences – such as in sensitive wildlife areas or residential neighbourhoods.



So What BUG Rating Should I Look For?

The short answer is that the lower the value, the better the rating. The IES and Dark-Sky Association's Model Lighting Ordinance has clear definitions outlined below for what recommended rating levels should be. Each area may also have their own requirements that can supersede these standards.

Below is the detailed information around BUG Ratings however the ratings in the zones defined by this system are intended to be just one of the metrics used to evaluate luminaire distribution and the potential for light pollution and obtrusive light.

2 of 7 12/11/2021, 11:27 AM

Maximum Allowable BUG Ratings (Defined by the Model Lighting Ordinance)

	Lighting Zone				
	LZ0	LZ1	LZ2	LZ3	LZ4
BACKLIGHT					
> 2 mounting heights from lighting boundary	B1	В3	B4	B5	B5
1 to 2 mounting heights from lighting boundary and properly oriented	B1	B2	В3	B4	B4
0.5 to 1 mounting height to lighting boundary and properly oriented	В0	B1	B2	В3	В3
< 0.5 mounting height to lighting boundary and properly oriented	В0	В0	В0	B1	B2
UPLIGHT					
Allowed uplight ratings	U0	U1	U2	U3	U4
GLARE					
Allowed uplight ratings	G0	G1	G2	G3	G4

- **LZ0:** No ambient lighting Areas such as wilderness areas, parks and preserves, and undeveloped rural areas.
- LZ1: Low ambient lighting Areas such as rural and low-density residential areas.
- LZ2: Moderate ambient lighting Areas such as light commercial business districts and high density or mixed-use residential districts
- LZ3: Moderately high ambient lighting Areas such as large cities' business districts
- **LZ4:** High ambient lighting Special case areas such as high-intensity business or industrial zone districts.

A detailed evaluation of the lighting should also consider the overall system design, including luminaire locations, utilization of light

3 of 7

where it is needed, lighting quality, visual tasks, aesthetics, safety requirements, and security issues.

Our IPL series, SCL series, and SCL2 series luminaires are all intentionally designed for optimum light performance taking all aspects of good lighting design into account – one of these being keeping the BUG Rating as low as possible. All of our lights have a BUG Rating of 2 or less. In addition, all of our luminaires have an uplight rating of U0, in compliance with the International Dark-Sky Association (IDA) recommendations to reduce light pollution by only lighting the area needed.

We are here to help with any lighting project, and we can create lighting layouts and provide product recommendations that ensures your project is lit in the most efficient way keeping your BUG Rating the lowest level possible.

Need Help on Your Project?

Contact Us Now!

Search	
	Search

Sign Up for Our Newsletter!

4 of 7

CART 0 Item(s)





Home » Resources » BUG Rating System & Nighttime LED Lighting

BUG Rating System & Nighttime LED Lighting



Quality lighting becomes even more important when you're outdoors. When the sun goes down, it is the only thing separating you from total darkness. But that lighting needs to be usable, as excessive amounts of stray light will send illumination every place except where you need it. Using the BUG exterior system can help you choose the best exterior lighting for street lights, area lights, walkway lights, wall packs, and other systems while reducing wasted light and light pollution.

What is a BUG Rating?

The BUG lighting classification system is a useful measurement of nighttime luminaire performance. The system was developed by the Illuminating Engineering Society (IES) and the International Dark Sky Association as a way of evaluating any outdoor light fixture. It was first added to the Luminaire Classification System (LCS) in 2009, replacing the previous system that was mainly geared toward street lights.

In the case of these ratings, the word "BUG" is an acronym for **Backlight, Uplight and Glare**. All three are forms of stray light that can be emitted from a fixture. Although each does have positive uses in certain applications, they are generally considered "bad" light, as they often are not light you can practically use. But each is noticeably worse for some tasks than others, and the BUG rating helps to quantify this.

LED Fixture Backlight (B)

Backlight, also known as light trespass, refers to the light emitting from behind a fixture. This light usually protrudes outwards or towards the ground, illuminating an area that is not intended to be illuminated. Backlight is great when you're talking about improving the visibility of wristwatches or viewing your smartphone. But when you can't sleep at night because of the light shining out from behind a streetlight into your room, you might think twice about enjoying backlight. In order to get more light to head towards the front, manufacturers can use optics, reflectors, or glare shields to redirect it.

Luminaire Uplight (U)

Uplight is the light that shines upwards from a fixture towards the sky — hence the alternate term "skyglow". This stray light is responsible for the light pollution often seen in large cities. In exterior lighting, any uplight is wasted light, as it is not going towards where people are. It will also block out the view of the stars and moon. Skyglow can be cut down by fully shielding your fixture and by making sure it's pointed towards the ground. This will also reduce energy use and cost. The IDA is particularly concerned with limiting uplight so more people can enjoy the stars at night.

Nighttime Glare (G)

Glare, or forward light, is sometimes called "offensive light" because that's exactly what it does for most people. This light, which can be reflected or directed, makes it very difficult for people to see — especially when it shines directly into their eyes. It is especially dangerous when operating a motor vehicle at night. Glare can be reduced by using lights that aren't as bright or by selecting a light with a distribution pattern that's appropriate for your intended use.

How to Calculate a BUG Rating

The BUG system might seem complicated at first, but it actually has an intuitive setup. Every zone of stray light is divided into subzones as follows:

Backlight Subzones

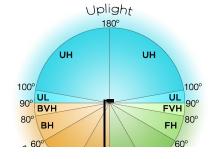
- BVH: Backlight Very High (80-90 degrees)
- . BH: Backlight High (60-80 degrees)
- BM: Backlight Mid (30-60 degrees)
- BL: Backlight Low (0-30 degrees)

Uplight Subzones

- UH: Uplight High (100-180 degrees)
- UL: Uplight Low (90-100 degrees)

Glare Subzones

- FVH: Forward light Very High (80-90 degrees)
- FH: Forward light High (60-80 degrees)
- FM: Forward light Mid (30-60 degrees)
- FL: Forward light Low (0-30 degrees)



1 of 3 12/12/2021, 7:42 PM





IES ROAD REPORT

PHOTOMETRIC FILENAME: EG45QD1X136U4KC.IES

DESCRIPTIVE INFORMATION (From Photometric File)

IESNA:LM-63-1995

[TEST] s17050021h-01 - scaled from 167w 5K improved 101819

[TESTLAB] LEADING TESTING LABORATORIES

[ISSUEDATE] 2017-07-21 17:02:23

[MANUFAC] PEMCO

[LUMCAT] EG45QD1X136U4KC

[LUMINAIRE] EG45 WITH ONE 136W QSSI LED ARRAY, TYPE IV OPTICS, CLEAR GLASS LENS

N.A. (absolute)

CHARACTERISTICS

IES Classification	Type IV
Longitudinal Classification	Short
Lumens Per Lamp	N.A. (absolute)
Total Lamp Lumens	N.A. (absolute)
Luminaire Lumens	21455
Downward Total Efficiency	N.A. (absolute)
Total Luminaire Efficiency	N.A. (absolute)
Luminaire Efficacy Rating (LER)	145
Total Luminaire Watts	148.3
Ballast Factor	1.00
Upward Waste Light Ratio	0.00
Maximum Candela	14878.229
Maximum Candela Angle	32.5H 65V
Maximum Candela (<90 Degrees Vertical)	14878.229
Maximum Candela Angle (<90 Degrees Vertical)	32.5H 65V
Maximum Candela At 90 Degrees Vertical	5.519 (0.0% Luminaire Lumens)
Maximum Candela from 80 to <90 Degrees Vertical	2170.22 (10.1% Luminaire Lumens)

Cutoff Classification (deprecated) LUMINAIRE CLASSIFICATION SYSTEM (LCS)

FL - Front-Low (0-30) FM - Front-Medium (30-60) FH - Front-High (60-80) FVH - Front-Very High (80-90) BL - Back-Low (0-30) BM - Back-Medium (30-60) BH - Back-High (60-80) BVH - Back-Very High (80-90) UL - Uplight-Low (90-100) UH - Uplight-High (100-180)	Lumens 1017.7 8327.6 8506.2 117.1 551.6 1415.9 1384.5 134.2 0.1	% Lamp N.A. N.A. N.A. N.A. N.A. N.A. N.A. N.A	% Luminaire 4.7 38.8 39.6 0.5 2.6 6.6 6.5 0.6 0.0 0.0
Total	21454.9	N.A.	100.0

BUG Rating B3-U1-G4



CREST 45





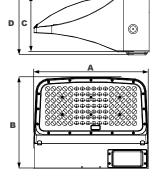
POWERPACK FULL CUTOFF WALL PACK





Dimensions

Width (A) 15" (380mm)
Length (B) 12" (302mm)
Height 1 (C) 534" (146mm)
Height 2 (D) 6" (154mm)



Specifications and Features:

Housing:

Die Cast Aluminum Housing with Full Cutoff Front Frame, Integral Heat Sinking and Driver Compartment. UV-Stabilized Polycarbonate Vandal-Resistant Lens Area on Housing for Use with Microwave Sensors. Twist-Lock Photocell/Smart Controls Adaptable. Nickel-Plated Stainless Steel Hardware.

Listing & Ratings:

CSA: Listed for Wet Locations, ANSI/UL 1598, 8750; IP66 Sealed LED Compartment.

Finish:

Textured Architectural Bronze Powdercoat Finish Over a Chromate Conversion Coating. Custom Colors Available Upon Request.

Lens:

Clear One-Piece Molded Type IV UV-Stabilized Polycarbonate Lens.

Mounting Options:

Mount Directly Over a 4" Recessed Outlet Box, Includes Easy-Hang "Two Hands Free" Wall Mounting Bracket with Built-In Level. Optional Trim Plate is Available for Use in Retrofit Applications to Cover Wall Surface Blemishes.

EasyLED LED:

Aluminum Boards

Wattage:

81w: Array: 80.8w, System: 92.8w (175w HID Equivalent) 112w: Array: 111.9w, System: 131w (250w HID Equivalent) 174w: Array: 174.1w, System: 187.5w (400w HID Equivalent)

Driver:

Electronic Driver, 120-277V, 50/60Hz or 347-480V, 50/60Hz; Less Than 20% THD and PF>0.90. Standard Internal Surge Protection 6kV. 0-10V Dimming Standard for a Dimming Range of 100% to 10%; Dimming Source Current is 150 Microamps.

Controls:

Fixtures Ordered with Factory-Installed Photocell or Motion Sensor Controls are Internally Wired for Switching and/or 1-10V Dimming Within the Housing. Remote Direct Wired Interface of 1-10V Dimming is Not Implied and May Not Be Available, Please Consult Factory. Fixtures are Tested with LEPG Controls and May Not Function Properly With Controls Supplied By Others. Fixtures are NOT Designed for Use with Line Voltage Dimmers.

Warranty:

5-Year Warranty for -40°C to +50°C Environment.

See Page 2 for Projected Lumen Maintenance Table.

Order Informat	tion Exan	nple:	CREST45	5D1X174U	J5KCZSP		
CREST45	D				C		
Model	Optics	Wattage	Driver	ССТ	Lens	Color	Options
CREST45= PowerPack Wall Mount	D =Type IV	1X81=81W 1X112=112W 1X174=174W	U=120-277V H=347-480V	4K =4000K 5K =5000K	C=Clear Molded UV-Stabilized Polycarbonate Lens	Z=Bronze C=Custom (Consult Factory)	SF=Single Fuse* DF=Double Fuse* SP=Surge Protection R3=3-Pin Twist Lock Photocell Receptacle R5=5-Pin Twist Lock Photocell Receptacle R7=7-Pin ANSI C136.41—2013 Twist Lock Photocell Receptacle PC3=Photocell, 120-277VAC S2=Microwave Sensor with Dimming for Mounting Heights of 8' to 40'.* S4=Microwave On/Off Motion Sensor for Mounting Heights of 8' to 19'.* BU=Battery Backup, 90 Minutes (81w only)* BUC=Cold Start Battery Backup, -20°C, 90 Minutes (81w only)* *120-277V Models Only.









CREST 45





FULL CUTOFF WALL PACK Accessories & Replacement Parts:





WPC45TPZ





P18131 Twist Lock Non-Shorting (Open) Cap Disconnects Service to Fixture for Temporary or Permanent Disabling (Fixture Always Off). IP65, 480V P18132 Twist Lock Shorting Cap Provides Fixed Service to Fixture (Fixture Always on). IP65, Rated Load 7200w Tungsten. P18140 110-120VAC Instant Twist Lock Photocell P18150 120VAC Time Delay Twist Lock Photocell P18152 277VAC Time Delay Twist Lock Photocell P18156 120-277VAC Universal Twist Lock Photocell P18157 480VAC Time Delay Twist Lock Photocell. For 480V use only

Aluminum Two-Piece Trim Plate, Bronze Powdercoat Finish, 161/2" W x 85/6" H

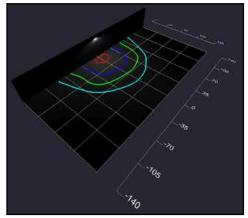
Replacement Parts (Order Separately, Field Installed)

P18103	120-277VAC Photocell
P17117	Internal Microwave Sensor with Dimming for Mounting Heights of 8 to 40'. 120-277VAC, 50/60Hz.

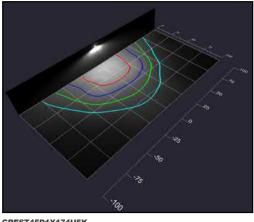
Internally Mounted Microwave On/Off Motion Sensor for Mounting Heights of 8' to 19', 120-277VAC, 50/60Hz P17123

For Replacement Battery Backup, see the LEPG LED Battery Backup Specification Sheet.

Photometric Data







CREST45D1X174U5K Type IV Grid in MH MH=25 Feet

WPC45TP7

Photometric Performance

				5	000 CCT 80	CRI			4	000 CCT 80	CRI		
LED Board Watts	Drive Current (mA)	Input Watts	Optics	Lumens	LPW	В	U	G	Lumens	LPW	В	U	G
EasyLED 81w		93		10,402	112	3	3	3	9,700	104	3	3	3
EasyLED 112w	525	131	Type IV	14,049	107	3	0	3	13,636	104	3	0	3
EasyLED 174w		188		20,704	110	3	0	3	20,327	108	3	0	3

Projected Lumen Maintenance

Data shown for 5000 CC	г		Compare to MH			
TM-21-11	Input Watts	Initial	25,000 Hrs	50,000 Hrs	100,000 Hrs	Calculated LED Life
L70 Lumen Maintenance @ 25°C / 77°F		1.00	0.99	0.98	0.95	646,000
L70 Lumen Maintenance @ 50°C / 122°F	All wattages up to and including 188w	1.00	0.98	0.97	0.93	455,000
L80 Lumen Maintenance @ 40°C / 104°F		1.00	0.98	0.97	0.94	320,000

NOTES:

1. Projected per IESNA TM-21-11. Data references the extrapolated performance projections for the 525mA base model in a 25°C ambient, based on 10,000 hours of LED testing per IESNA LM-80-08.

^{*}Shown Mounted.

Margaret Abruzese – December 8, 2021

SETBACK

This is a large commercial building. If it is built this close to the street, it will become the most prominent thing in the neighborhood. It will significantly alter the character of the area, changing it from a semi-rural quaint residential road into a more urban commercial-looking area.

The change that this building will bring in the neighborhood will be forever.

The prominence of the commercial aspect of this building is accentuated by the massive amount of pavement that is called for in this plan. Instead of a quaint driveway heading back into the property, this current design has a 22 foot wide driveway abutted by an additional 8 foot wide drop off area – that is a 30 foot wide swath of pavement stretching up from Central Avenue. Central Avenue itself is only 25' wide according to Mr. Gillan. This amount of pavement so close to the road is hardly in keeping with the residential character of the neighborhood.

In fact the bylaws that pertain to commercial uses in a SRA zone (bylaw 4.2.4) prohibit having this type of drop off area within the front setback of the property. The bylaw provides that the setback area shall be kept open and landscaped with grass or other plant materials and that it shall be unpaved, except for walks and driveways. The drop off lane is not a driveway. It should not be in the front setback.

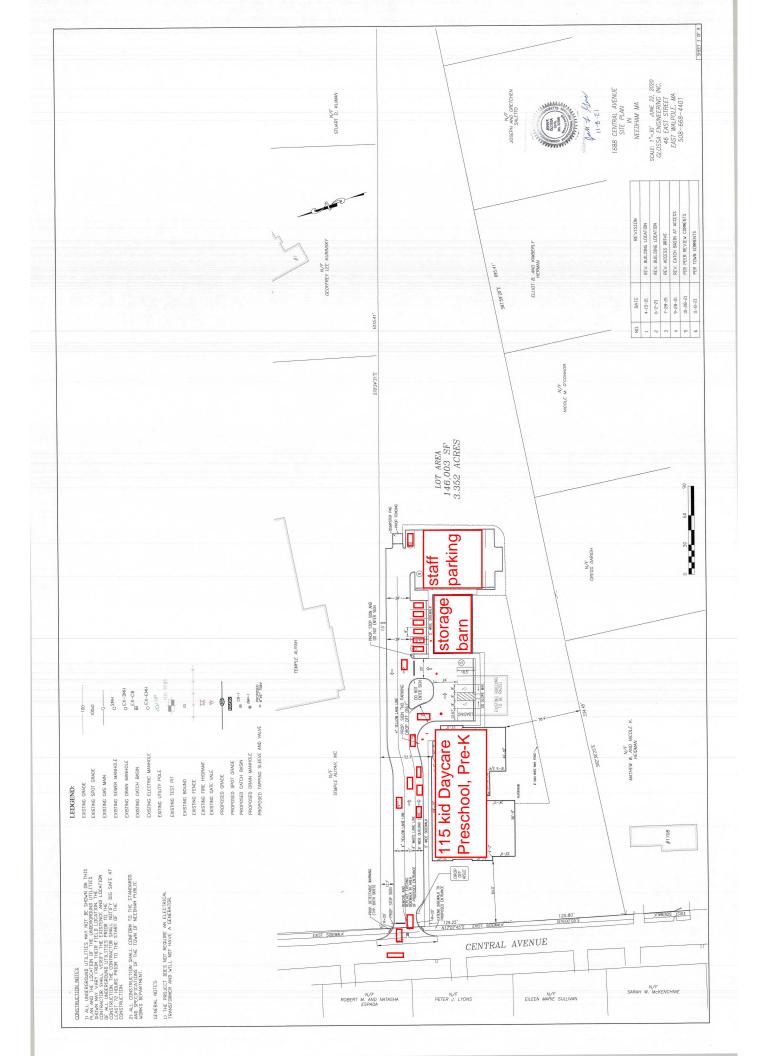
The only way to lessen the impact of putting a large commercial building in a residential neighborhood is to require the building to be set back from the street at least as far as the temple and for there to be significant natural screening put in place to reduce the building's prominence. Additionally, the parking and drop off area must be moved out of the setback, away from the street and designed to be shielded from Central Avenue like Temple Aliyah.

The board must be careful to implement these requirements in a way that ensures that any new designs are fully vetted by the planning board review process and that the public has the opportunity to see and comment on any new plans. The board should not give final approval to the project unless and until is sees final plans that comply with all of the requirements of site plan review and special permit.

ONSITE PARKING

This piece of property has more than 3 acres of land. There is no space crunch or other reason to crowd the street with the large building or to skimp on parking.

The only access to this property is by car. There is no public transportation out this way. There are no crosswalks or sidewalks – only narrow, uneven, unmaintained walking paths.



Furthermore, there is no "on-street" parking available at this property. It would be very dangerous for someone to park on Central or Country Way or Carlton and try to navigate with their children to get to or from the daycare. The daycare site **itself** has to be designed so that it can handle the fact that every family and every staff member will be arriving by car.

The applicant proposes a model that skimps on on-site parking and instead relies heavily on a live drop off line where the front car drops off its infant or child and the rest of the cars wait behind it, moving up one car at a time until it is their turn at the head of the line. This is not a tenable model for two reasons:

- 1. the emissions generated by parents idling in the drop off queue waiting to make it to the front of the line will be bad for the neighborhood and terrible for the developing minds of the babies and children at the child care center. The applicant is proposing having a ten car queue that will keep refilling with cars idling while they wait to drop-off their child or pick them up. The ITE numbers which are based on the size of the building and not on the peculiarities of the proposed tenant's program, show that you can expect 58 cars to arrive at the property within a 60 minute period in the morning. If they are using the drop off queue, those cars will have to wait their turn in line and they will be idling the whole time. The emissions output from all those cars idling is an unacceptable pollutant and hazard for the neighbors and for the children.
- 2. it is not realistic to think that live drop off daycare model will be utilized after COVID.

Live drop off works during COVID because it had to, state law did not allow parents to enter the childcare building. But this building will be operational after covid is over. Children are not suitcases that can be drop off at a steady pace without a hiccup. Daycare teachers and parents are people who are supposed to be a partnership working together for the best interests of the child.

Separation can be hard for parents, for toddlers, babies and preschoolers. The parents want to make sure their child is settled. The child wants one more hug, one more kiss, one more reassurance. They want to feel the snow on the ground on the way in, or stomp in a puddle. Parents want to communicate special concerns they might have for their child that day or snag a few minutes with a fellow parent. They may want to follow up on questions they have about their child's care. Daycares are communities and communities require communication. A model that depends on a drop off line that was described by the applicant at a previous hearing - with a harried daycare provider taking your child from the car, grabbing your child's stuff and running them into the building like a football to pass them off to another provider so they can run out and grab the next kid and the parent can hightail it out of the drop off line, all in 60 seconds or less, is not a successful model. The daycare that runs that model will not be able to compete with the many loving, open and warm daycares in the area and it will quickly change its practices to be more open to parents.

Even if Needham Children's Center promises that they will always stick to a live drop off model, they are not the applicant here. The planning board must **plan** based on what the building allows, not on the promises of a potential tenant.

The Building must be able to accommodate a daycare that allows parents to park and go in to the daycare to drop off and pick up their child.

There has been some confusion about the amount of parking that the bylaws require in Needham for daycares.

The applicant has told the traffic engineer and the peer reviewer that Needham only requires a small number of parking spaces for daycares. This is incorrect. The Needham zoning bylaws set forth off street parking requirements in Section 5.1.

In section 5.1.2 there is a schedule of uses and associated parking requirements. Daycares are not listed. It states that when a use is not listed, the Building Commissioner should use the most similar use or the planning board should designate the required number of spots according to the ITE parking manual, 2nd edition or a different technical manual determined by the Planning Board to be equally or more applicable.

Twenty four years ago, in 1997, the building commissioner asked the planning board to tell it how many parking spaces to require for the application of After School Inc. at 72 School Street. The 2nd edition of the ITE parking manual didn't have guidelines for that so the board used guidelines suggested for daycares in a 1996 article from the ITE journal. That is the guideline that Needham Enterprises seeks to use today.

However, in giving that opinion in 1997 and telling the Building Commissioner to use that calculation for After School Inc, the planning board specifically stated that the guideline should only be used for that project and that it was not a universal standard. What the planning board recommended for After School Inc in 1997 is NOT what the bylaw requires today.

It is now almost a quarter century later. The ITE parking manual has been updated. It now includes parking information for daycare facilities. The zoning bylaws direct the board to use the ITE parking manual to calculate the required parking.

It is industry standard to design a site's parking supply to match the 85% peak parking rate.

ITE requires: 3.7 spots for every 1000 square feet of building. For a 10,034 square foot building, that comes out to 38 parking spaces. If the applicant keeps the barn, that means the square footage is 14,834 which works out to 55 parking spaces.

In the traffic report, the applicant acknowledges that this is what the ITE standards require, but goes on to say that they don't really need that many spaces because of the specific way that Mrs. Day has structured her programs in the past.

You cannot regulate this building based on the unique specifics of any one program. You have to regulate based on what the building holds. The zoning bylaws require you to go with the ITE standards which are **38 parking spaces** for the new building and **55 parking spaces total** if they are keeping the barn.

THE CONVENIENCE AND SAFETY OF VEHICULAR AND PEDESTRIAN MOVEMENT ON THE SITE

The interior roadway has many chokepoints and opportunities for conflicts or accidents. It doesn't allow parents to enter and exit freely. All cars are corralled together, cars can get stuck with no place to go because it is a dead-end design. There is no open parking lot or circular design.

The back lot will be filled with teacher and administrator parking. The few spots available to parents at morning drop off or evening pick up essentially will be the 6 spots next to the barn. The spots closest to the door are only going to be accessible if you wait in the drop off line.

If you don't wait to get through the drop off line, there is no easy way to turn around and exit this property. You can't access the circle, except by going through the drop off lane. If you tried to go in the thru lane and then cut into the circle, that would create a dangerous situation for the staff, parents and children trying to enter and exit their car at the drop off spot. To turn around without going through the drop off line, you either have to pull into a parking space and back out into the exit lane or you have to do a three point turn somewhere.

If the spots next to the barn are full, parents will have to wait for a spot to open. They can't wait in the roadway directly behind the parked cars because the cars need that space to back out of their spots. They can't pull forward beyond the barn spots because they'll miss their opportunity to park and then they'll be stuck in a dead-end.

The cars will naturally stop before the barn spots and wait for someone to leave. While the cars are sitting there waiting, they will be blocking people at the stop sign who have gone around the island and are trying to make a left to exit.

Also, as the DRB pointed out, the people from these cars are unlikely to take the long way around to the door. They are going to take the most logical, direct route which with this design increases the likelihood of pedestrian accidents.

Apart from all these areas of conflict and restricted flow, there are several things that this proposal does not account for:

- It does not account for fire trucks coming to the property. Where would a fire truck turn around. Particularly if there is a dumpster fire, a fire in the barn, or an emergency in the back lot. How would a fire truck access those areas or extricate itself once it goes up there.
- It is a poor plan for the dumpster to be emptied. According to the turning patterns the developer submitted, the developer is planning for the trash truck to drive up to the dumpster, empty it and then to back up all the way past the barn, back into oncoming traffic and into parking spaces where cars may be parked, to then pull forward and exit. Why is the design making it so complicated? There are more than 3 acres on this lot. There is no shortage of room for a sensible design that allows cars to circulate and trash trucks and emergency vehicles to have adequate, unimpeded access.

- The plan also doesn't account for school van parking. Needham Children's Center has three school vans. The plan does not provide any information about where those vans would park and where they would be kept on site.
- The plan also doesn't include unimpeded access to the loading zone as is required by bylaw 5.1.3(b). If Amazon, or UPS or another delivery service comes during the day when parents are in the drop off/pick up line, the truck will not have access to the loading zone without waiting in line. And it would be unsafe to have delivery trucks backing out of the loading zone right where kids are dropped off and picked up.
- Snow. There is no provision on this plan for snow removal. The dead-end design makes it very difficult to clear snow. Where will the snow be put? How will a snow plow turn around, particularly if it snows during the day and there are cars in the parking lot.

For all of these reasons, the parking plan needs to be reworked.

LIGHTING

The design review board wanted to review the lighting at its August meeting. It wanted to see how the developer took into account its March comments on an old lighting plan. But the developer didn't have a lighting plan. The developer wants to downplay the importance of lighting saying the lights will be shut off in the early evening. But, New England has dark mornings and dark afternoons for much of the year. This center is going to be open for staff early in the morning. Lighting is not an insignificant issue.

The developer did not submit their lighting plan until November 8. And It did not incorporate the DRB's comments into its design or address the concerns the DRB raised. The new plan still does not show any lighting at the entrance which was one of the deficiencies that the DRB pointed out.

Uniformity of the lighting was another one of the things that the DRB was concerned about. When the lighting is not uniform, you have bright spots and dark spots and that is not good for visibility and safety. Uniformity of lighting is measured by the max/min ratio. You can find the max/min ratio in the Calculation Summary of the lighting plan. The higher the number the spottier the lighting. The November 8 lighting plan has a max/min ratio of 45 which is very high and shows that DRB's concerns were not resolved with this plan.

The DRB was also concerned about the fact there was light trespass onto the temple property and this plan still shows significant light trespass onto the temple property. It also shows trespass onto the Darish property.

Needham's zoning bylaws at 5.1.3 require there to be an average of 1 fc in the parking area. The developers lighting plan has an average of 3.24 fc.

Another important aspect of lighting is the BUG rating. The BUG rating measures backlight, uplight and glare. "B" Backlight is how much light is thrown behind the fixture. "U" Uplight is

how much light is thrown into the sky. "G" Glare is the sensation of seeing a too bright light which causes annoyance, discomfort or loss in visual performance and visibility. The scale goes from 0-5. The lower the number the better.

The developer's lighting plan calls for 4 fixtures with a BUG rating of B3 U1 G4. And a fixture on the barn with a BUG rating of B3 U0 G3. These are very high ratings and are not appropriate for a residential area. They are more appropriate for a large city business district.

I would ask that the Planning Board submit the lighting plan to the DRB for comment.

ARCHITECT

It is a real problem here that the developer is not making the architect available to answer questions about design. It is his seal on the drawings, if the developer wants to use those drawings to support his application, the architect is obligated by virtue of sealing the drawings, to be answerable for questions about them.

The inquiry in this matter has suffered because the architect cannot answer for his drawings.

The design review board had important questions about these drawings. They wanted to know how this building footprint came to be, exactly what other footprints were considered and what the architect's decision making process was that led to this design. The DRB never got satisfactory answers because the architect was not there to testify.

Now the developer is suddenly claiming that the child care center needs the barn for storage. At the first hearing, much ado was made of the fact that Mrs. Day sat down with Mr. Gluesing so that he could design the building specifically to meet her needs. I would think if the architect were here, this board would have some pretty pointed questions about how and why Mr. Gluesing designed a building that Mrs. Day is already saying is inadequate to meet her needs. Why is there a lack of storage in the building design? Are there alterations of the drawings, like adding a basement that could remedy the problem? These are some of the questions that the Board naturally would be asking of the architect if he were here. Vice Chair Adam Block requested at the close of the July 20 hearing that the developer have all of his consultants at all of the remaining hearings on this matter.

Needham has the right to have this application be thoroughly examined. The developer short circuited that inquiry by using an architect that cannot answer for his work. This is not acceptable and the Board should not allow that to happen. The Board should disregard the architectural drawings of Mark Gluesing and consider this application incomplete in that regard.

BARN

I submitted a written brief on the barn that is the packet from November 2.

I will not go through that filing in detail. I will say here merely that the zoning bylaw is clear.

It prohibits more than one non-residential building on a residential lot, even if one of those buildings is considered an accessory building.

40A s. 3 does not apply here. The developer has made it exceedingly clear that the intent regarding the barn is to keep it. Period. Not because they need it for child care purposes. The reason they want to keep the barn is not disclosed, but clearly it has some impact the developer's investment in this property. They have admitted on the record that it is their DESIRE TO KEEP THE BARN that causes them to say that they will only use it for child care storage. While Mrs. Day now professes a need for storage, the developer has not shown ANY need for the child care to have storage in this particular configuration. There is no reason that the developer could not incorporate adequate storage into a single building with the child care center. There is no need for storage to be separate and apart from the daycare center.

The bylaw that prohibits more than one non-residential building on the lot does not impact in any way the establishment of a child care center at this property.

For these reasons, the planning board should enforce the zoning bylaw and require the developer to have only one non-residential building on the lot.

MAJOR PROJECT SPECIAL PERMIT

The bylaws require the developer to get a major project special permit based on the bulk of the building he seeks to build. I have submitted filings on this issue and I would ask you to consider those. I won't repeat my arguments here.

The zoning bylaws give you, the Planning Board, the responsibility and the authority to protect the interests of the Town of Needham. We beseech you to fully and appropriately wield all of your regulatory authority in this case.

FRIEZE CRAMER ROSEN & HUBER LLP

COUNSELLORS AT LAW

60 Walnut Street, Wellesley, Massachusetts 02481 781-943-4000 • FAX 781-943-4040

EVANS HUBER
781-943-4043
EH@128LAW.COM

December 16, 2021

Via Electronic Mail
Members of the
Needham Planning Board
c/o

Lee Newman
Director of Planning and Community Development
Public Services Administration Building
500 Dedham Ave
Needham, MA 02492

Re: 1688 Central Avenue, Needham

Dear Planning Board Members and Ms. Newman:

I am writing on behalf of Needham Enterprises LLC, to provide (as discussed at the last meeting of the Board) some additional information regarding the barn, and to submit my "closing argument" regarding Needham Enterprises' application.

I. The Barn.

As this Board is well aware, opponents of this project have urged this Board to require the applicant to demolish the barn and move the primary building back to the area currently occupied by the barn (or even further back). These arguments are legally and factually untenable.

A. Legal Issues:

The legal arguments why this Board does not have the authority to require demolition of the Barn (independent of the setback issue) are set forth at length in my letter to the Board of September 30. I will not repeat those arguments in detail here, but in light of the importance of this issue, I am forwarding to the Board, with this letter, a copy of that letter. If the Board has not yet had an opportunity to read the arguments on that subject on pages 4 and 5 of the enclosed letter, I urge the Board to do so.

In brief, those arguments are (1) the language of M.G.L. c. 40A, § 3 explicitly prohibits this Board from requiring the demolition of the barn as a condition of approving this

application, as long as the barn is being used for purposes relating to the child care facility; and (2) the Appeals Court decision in *Petrucci v. Bd. of Appeals of Westwood*, 45 Mass. App. Ct. 818 (1998) compels the conclusion that the Needham zoning bylaw that would otherwise preclude more than one non-residential structure on a lot in this district is superseded by M.G.L. c. 40A, § 3. In addition, since the date of the attached letter, the Board has received a letter from the Building Commissioner, Mr. Roche, dated December 7, 2021, in which he opines that, in his view, "the use if the barn if used specifically by the child care facility would be a permitted use and not a violation of zoning."

I would also note that to my knowledge, this Board has not been provided with a single case in which a town board required the demolition of a <u>permitted</u> accessory structure that was going to be used solely for purposes related to child care facility, much less a decision where a town board imposed such a requirement and was upheld on appeal.

If this Board has any doubt on this issue, I respectfully reiterate my request conveyed to the Board by email dated October 7, 2021:

In an effort to resolve this disagreement, the Applicant respectfully requests that the Board seek an opinion from Town Counsel on the following questions:

"Where the Applicant intends to use the existing barn on the property at 1688 Central Ave solely for purposes relating to the proposed child care facility, (1) does the Board have the authority, as a condition of issuing the special permit in this case, to directly or indirectly require the Applicant to demolish the barn for any reason, including but not limited to in order to implement a Board-imposed front setback requirement for the proposed new building, and (2) relatedly, does the Board have the authority to indirectly require demolition of the barn by imposing a setback requirement for the proposed new building that cannot be complied with unless the existing barn is demolished?"

As has been previously acknowledged, if the Board does not have the authority to require demolition of the Barn, then the question of requiring, as has been urged, a 200-foot setback for the building, or anything like that, is moot.

B. Factual Issues

If, notwithstanding all of the foregoing, the Board is of the view that it does, at least in principle, have the legal authority to require demolition of the barn, there are myriad factual reasons why it cannot and should not do so. At the hearing on December 8, Mr. Alpert, noting that the Board's authority under M.G.L. c. 40A, § 3 is limited to imposing "reasonable restrictions" with respect to matters such as setback, asked whether there were factual reasons why the imposition of requirements that the barn be demolished and the building moved back to a setback comparable to that of the Temple Aliyah would be unreasonable.

Submitted herewith is an estimate from the applicant's engineer, Mr. Glossa, that provides a partial answer to that question. If the Board were to impose such requirements, that would mean that the applicant would incur an estimated additional \$540,000 to \$604,000 in costs on this project for (1) additional site preparation, engineering and construction costs resulting from demolishing the barn and simply moving the currently proposed building back from Central Ave another 140 to 160 feet, (2) additional fees for engineers, architects, landscape design, peer review fees (including but not limited to fees for all these professionals to appear at multiple additional hearings¹), and property carrying costs; and (3) duplicating the loss of 2000 s.f. of storage elsewhere on the property, either in the form of another accessory storage building or enlarging the proposed main building. In this regard it is worth noting that building an accessory storage building elsewhere on the property would certainly be less expensive than enlarging the building to replace the lost storage, but could only be accomplished if the Board agrees that the applicant has the right to have a separate accessory structure on the property.

In addition to these costs, requiring such a substantial redesign of the project would essentially mean "going back to the drawing board," to create a new site design and either an enlarged building design or a new storage facility elsewhere on the property. Simply sliding the entire current design back another 150 feet (which is not plausible given the shape of the property) would also place the parking and drop off areas directly behind the abutters on Country Way; to avoid this outcome the parking areas would have to be moved to the front of the building, which would not only be unsightly, but require a complete redesign of parking and vehicular site circulation. And regardless of whether the parking is placed in front of or behind the new building location, increasing the setback by this much will require new engineering and architectural design work, a new landscaping plan; new review by town boards, and presumably multiple additional public hearings. In short, requiring a change of this magnitude would constitute a *de facto* denial of the current application which, even if it were not prohibited by M.G.L. c. 40A, § 3, would result in at least 3-4 months of additional delay on this project.

It is the applicant's position that imposing additional costs of an estimated \$540,000 to \$604,000 on the applicant, and imposing at least 3-4 months of additional delay to redesign the project and get the new design approved, is *per se* unreasonable, simply to achieve 140 to 150 feet of additional setback of the building. In addition to these monetary burdens on the applicant, however, there are other reasons why the imposition of a requirement to demolish the barn and move the building back another 140-150 feet would be unreasonable. These include:

- 1. The project is already set back almost twice the minimum required by the bylaw, and set back the same distance as the adjacent property to the south.
- 2. The comparison to Temple Aliyah is not appropriate. The footprint of the Temple is more than twice as large as the proposed building for this project. The side of

¹ The additional legal fees that Needham Enterprises will incur if it is forced to go through this type of reddesign and a new set of hearing are not included in this estimate.

the Temple facing Central Ave is considerably wider and higher than the proposed building. The sanctuary roof portion of the Temple is higher than the peak of the proposed building roof. And, the base elevation of the Temple is higher than the proposed building, which adds to its visual impact on the neighborhood, in a way that the proposed new building will not.

- 3. To the extent the concern about setback is driven by the visibility of the building from Central Avenue, additional landscaping can mitigate the visual impact of the proposed new building. The current landscaping plan has the approval of the Design Review Board, but if the Board is concerned that the current landscaping plan does not sufficiently screen the building, the landscaping plan can but further increased to provide additional screening. This would be a far more reasonable requirement than requiring the demolition of the barn and moving the proposed structure back another 140 to 150 feet.
- 4. Moving either a larger building or the current building plus a new storage building, and at least some of the parking areas, will place significant elements of this project directly behind the properties on Country Way. It is reasonable to assume that these neighbors would be opposed to revising the design and site plan in this way.
- 5. If the new parking areas are not placed directly behind the neighbors on Country way, they will have to be moved to a location between the building and Central Ave, where the cars will be parked every day, and more visible than with the current design. This would degrade the aesthetics of the design and reinforce the non-residential nature and appearance of the building.
- 6. Moving the principal building back 140 to 140 feet, and possibly another storage structure and parking areas behind it, will require the destruction of many tall, mature trees on the rear of the property. These are healthy trees that do not otherwise need to be removed. The Board has already heard from one neighbor commenting negatively on the removal of trees (which were diseased) from the front of the property, on the boundary with the Temple property.

For all of these reasons, the applicant submits that it would be legally improper and factually unreasonable for the Board to require the demolition of the barn, and moving the main building back another 140 to 150 feet, as conditions of approving this application.

II. Closing Argument

The Planning Board's permitting process on this project began in March of 2021, when Needham Enterprises submitted an application for Minor Project Site Plan Review. At that time, the site layout and proposed parking area was considerably different, with only 24 parking spaces. The building was proposed to be set back 40 feet from Central Ave; the

façade of the building was different (more plain); and the landscaping plan was much simpler. There was no plan to change the sidewalk along the front of the property.

Since that time, it is an understatement to say that this project has been extensively reviewed and commented upon. The project has been before the Design Review Board three times. There have been two different traffic analyses, both of which have been peer reviewed by a traffic engineer selected by the Board. There have been two hearings before the Board of Health concerning potential soil contamination issues at the property, and how those should be addressed. This Board has had the benefit of review and comment from numerous Town boards and departments, including the DRB and BoH, and the Engineering, Building, Police, and Fire Departments. The Board has received input and advice from Town Counsel and outside counsel. This matter has been scheduled for hearings before this Board at least none time, and public hearings have been conducted on at least seven of those occasions.

In response to comments, concerns and the peer review process, the Applicant has made numerous changes to the proposed project, including:

- a. Increasing the proposed setback twice, to the current proposal of 64 feet;
- b. Adding a drop-off and pick-up lane to the site entrance drive;
- c. Increasing the number of parking spaces and adding a new parking area behind the barn
- d. Improving the site circulation design;
- e. Changing the façade of the building facing Central Ave;
- f. Substantially increasing the proposed landscaping; and
- g. Adding an ADA-compliant sidewalk along the entire frontage of the property.

In addition, while Needham Enterprises respectfully does not agree that the Board has the authority to impose some of the conditions and restrictions that have been discussed during this process, Needham Enterprises is willing to agree to the following conditions:

- The building can only be used for the purpose of operating a child care facility.
- No more than 115 children can be enrolled at the facility at any given time.
- The barn can only be used for purposes ancillary to the operation of the child care facility.
- An ADA-compliant sidewalk will be installed with the final design and installation to be determined in conjunction with the Engineering Department.
- The traffic mitigation measures recommended by the Town's peer reviewer in his letter dated November 16, can be included, as written, as conditions. In this regard, please note that the applicant's position is that the Town's peer reviewer has recommended that the end point for the police detail on Central Ave during peak traffic hours should be determined by the Police Department. The applicant would further agree that this could be determined by the Police Department working in conjunction with GPI. The applicant does not agree that it is either necessary or reasonable that the police detail continue in place until this Board (presumably after additional public hearings) determines that the police detail should be discontinued.

- The exterior lighting plan will be modified and installed based on input from the Engineering Department.
- A wooden or brown vinyl fence will be used to enclose the play area on the south side of the property.
- A snow storage plan approved by the Engineering Department will be implemented.
- The recommendation of the Board of Health submitted by letter dated December 15, 2021, can be incorporated -- as written in that letter -- as a condition of approval, and the applicant will comply with any reasonable requirements regarding soil testing and remediation that are consistent with industry norms and practices.

In all of the materials and arguments that have been presented to this Board, it bears remembering that the project before this Board already more than complies with all existing Needham Zoning Bylaws, including all bylaws relating to the topics listed in M.G.L. c. 40A, § 3 as to which this Board is authorized to impose "reasonable regulations," namely, "the bulk and height of structures and [...] yard sizes, lot area, setbacks, open space, parking and building coverage requirements." The applicant is not before this Board asking for a waiver of any of the current requirements of the Needham Zoning Bylaw, as the project as proposed already complies with all such requirements, including front, side, and rear setbacks, frontage, FAR, lot coverage, lot size, building height, number of stories, and parking.

That is why the argument advanced by attorney Moore on behalf of Mr. Darish, one of the abutters of this project, is misplaced. In his remarks to this Board on December 8, Attorney Moore cited Trustees of Tufts Coll. v. City of Medford, 415 Mass. 753 (1993) for the proposition that an applicant challenging the application of an existing town bylaw to its "Dover amendment" project will bear the burden of proving that the local requirements are unreasonable as applied to its proposed project. That statement, while true, is inapplicable here. Trustees of Tufts College and other subsequent cases relying on that proposition involve fact patterns where the applicant was challenging the application of an existing dimensional bylaw, arguing that by virtue of the Dover amendment, the dimensional requirements of the bylaw in question were unreasonable as applied to the project in question. Nothing in Trustees of Tufts College and its progeny suggests, much less holds, that if this Board chooses to impose additional or more stringent requirements than those already in the Needham Zoning Bylaw, concerning "the bulk and height of structures and determining yard sizes, lot area, setbacks, open space, parking and building coverage requirements," it will still be the applicant's burden to demonstrate that such additional or more stringent requirements are unreasonable.

This is not to argue the question of whether the Board has the right to impose restrictions more stringent than those imposed by the Bylaw. The Board may have that right as a general proposition, in non-Dover amendment cases involving site plan review, but not necessarily in a Dover Amendment case, in which any restriction or regulation imposed on this project must be reasonable. The existing bylaws certainly provide guidance as to what is reasonable. To the extent this Board considers imposing restrictions or conditions beyond what the Needham Zoning Bylaw requires, beyond what Needham Enterprises has set forth above as conditions to which it will agree, and/or beyond what M.G.L. c. 40A, section 3 and

FRIEZE CRAMER ROSEN & HUBER LLP

Needham Planning Board December 16, 2021 Page 7

the cases decided thereunder allow, we ask that the Board keep this closely in mind.

In conclusion, Needham Enterprises asks that the Board approve this application with the conditions listed above. I appreciate your attention to the points raised in this letter.

/

Evans Huber

FRIEZE CRAMER ROSEN & HUBER LLP

COUNSELLORS AT LAW

60 WALNUT STREET, WELLESLEY, MASSACHUSETTS 02481 781-943-4000 • FAX 781-943-4040

EVANS HUBER
781-943-4043
EH@128LAW.COM

September 30, 2021

<u>Via Electronic Mail</u> Members of the Needham Planning Board

And

Lee Newman
Director of Planning and Community Development
Public Services Administration Building
500 Dedham Ave
Needham, MA 02492

Re: 1688 Central Avenue, Needham

Dear Planning Board Members and Ms. Newman:

I am writing on behalf of Needham Enterprises LLC, to address certain issues that have been raised at the most recent hearing on this matter. We recognize that the process has, at times, become contentious and has raised a number of questions about the impact of M.G.L. c. 40A, Section 3 (the so-called "Dover Amendment") on the Town's zoning procedures and Bylaws that might otherwise be applicable to this project. We appreciate the Board's careful attention to these matters, but we feel it is important to keep in mind, throughout the remainder of this hearing process, that this project falls squarely within the protections afforded to child care facilities by the Dover Amendment, which, as this Board has previously acknowledged, limits this Board's ability to impose conditions on the project.

In particular, we would like to draw the Board's attention to the following:

1. Allegations of Violations of the State Ethics Law.

There are obviously strongly differing views on (1) whether there have been violations of M.G. L. c. 268A in connection with this application; and, (2) if any such violations are found to exist, what the appropriate consequences, if any, should be. It is not the purpose of this letter to attempt to persuade the Planning Board of the merits of the Applicant's position on those two issues.

What is abundantly clear, however, is that it is not within the jurisdiction or expertise of the Planning Board to consider, much less resolve, these alleged violations of M.G. L. c. 268A. As stated on the Planning Board's page on the Town website, "the Board is legally mandated to carry out certain provisions of the Subdivision Control Law (M.G.L., c. 41, s. 81K-81GG) and of the Zoning Act (M.G.L., c. 40A)." Nothing in either of those statutes even discusses potential violations of M.G.L. c. 268A, much less suggests that the Planning Board has the authority and jurisdiction to consider and resolve such issues.

On the contrary, the statute establishing the State Ethics Commission, M.G.L. c. 268B, specifically states in Section 3(i) that the State Ethics Commission "shall . . . act as the primary civil enforcement agency for violations of all sections of chapter two hundred and sixty-eight A and of this chapter." Indeed, even the Needham residents actively pursuing this issue have, citing the Board, Commission and Committee Member Handbook for the Town of Needham, argued to the Select Board that it is the Select Board that has the authority and responsibility to address this issue ("The Select Board is an overseeing entity for the Town of Needham. It has general supervision over all matters that are not specifically delegated by law or vote to some other officer or board." (emphasis added)). Whatever the merits of that argument may be as applied to the facts of this case (and the Select Board has taken no action in response to the assertion that it has the authority and responsibility to address these alleged violations), this argument by the opponents of the application is a clear acknowledgement that the responsibility for addressing this issue has not been "specifically delegated by law or vote to some other officer or board," i.e., the Planning Board.

It is not surprising, then, that by email dated July 16, 2021, Town Counsel, attorney Christopher Heep, advised this Board that "as previously discussed, I don't believe that Mrs. Abruzese's arguments relative to the *State Ethics Law* provide a basis for the Board to stop, or postpone, its hearing on a zoning application." And while the Board has nominally allowed the hearing to move forward on the merits, at the last hearing an inordinate amount of time was spent listening to and discussing these allegations, and then concluding that the Board needed to hire outside counsel to further advise it on these issues.

It is unfortunate that by the time of the last hearing, the Board did not have the benefit of the written opinion of attorney Heep issued pursuant to M.G.L. c. 268A section 22, to Mr. Borrelli (on the same date as the hearing) to the effect that Mr. Borrelli's ongoing connection to the Applicant, Needham Enterprises LLC, did not mean that Mr. Borrelli was "acting as an agent of Needham Enterprises LLC," and that, based on the facts recited in that letter, by continuing to pursue this application, Mr. Borrelli is "not acting in violation of M.G.L. c. 268A, section 17(c)." Perhaps having that written opinion would have expedited discussion of this issue at the last hearing.

In any event, for the reasons stated above, this is not a topic that the Board should be spending any additional time on, particularly where the hearing on this application has been rescheduled/postponed, and continued multiple times already.

Furthermore, as the Board is well aware, certain opponents of this project continue to insist that, while it may not be this Board's responsibility to address the merits of these allegations, this Board should nevertheless suspend this hearing while it awaits resolution of these allegations before the State Ethics Commission, and/or further opinions from outside counsel. The applicant wishes to clearly state its position on this point, that any further delay in the hearing(s) as a result of, or for reasons related to, this issue, including but not limited to spending any meaningful time discussing it during the remainder of the hearing; continuances or delays to await the results of the opinion of outside counsel; or suspending the hearing to await the outcome of action by the State Ethics Commission, will constitute an unreasonable delay in the completion of the hearing, raising the possibility of constructive grant of the Special Permit pursuant to M.G.L. c. 40A, section 9. See, e.g., Merrimac Plan. Bd. v. Moran, 2009 WL 191840 (Mass. Land Ct. Jan. 28, 2009), in which the Land Court affirmed the decision of the local Zoning Board of Appeals, which had ruled that the failure of the local Planning Board to act within the time required resulted in constructive approval of the application for Site Plan Review. In doing so, the Court specifically rejected the argument that the necessity of seeking an opinion of counsel on an issue raised by the applicant justified an extension of the time within which the Planning Board had to act:

It is clear that the application was constructively approved. Accordingly, I rule that the decision of the Merrimac Zoning Board of Appeals is affirmed. Plaintiffs argue that the circumstances surrounding the Planning Board's review of the application merit an extension of time set for review. Specifically, plaintiffs argue that applicant's consulting engineer informed the Planning Board that the town's designated consulting engineer had a conflict of interest. The Planning Board, therefore, had to seek a new engineering firm for consultation. Plaintiffs also argue that because Defendant L.T. was questioning whether a special permit was required, the Town sought legal counsel. These matters not having been resolved in time for a public hearing scheduled for September 26, 2006, the Planning Board continued the hearing. The Court is not persuaded by these excuses for inaction. The timing requirements of town bylaws for municipal action on review applications are strict and stringently adhered to by the Courts.

Merrimac Plan. Bd., supra, 2009 WL 191840, at 6. See also Pheasant Ridge Assocs. Ltd. P'ship v. Town of Burlington, 399 Mass. 771, 783 (1987)(the period within which the Board must act "runs from the date of the last session at which interested persons presented information and argument. [citations omitted] The date may be even earlier if a board of appeals has not conducted the public hearing expeditiously, scheduling adjourned sessions at reasonable intervals in the circumstances.")

Accordingly, we urge the Board to forego any further discussion of the alleged ethical violations, and to conduct and complete the remainder of the hearing "expeditiously," focusing only on the remaining issues that relate to the project itself.

2. The Existing Barn.

Several arguments have recently been raised to support the idea that the applicant should be required to take down the existing barn and move the proposed new building to the location where the barn used to be. First, it has been argued that Section 3.2.1 of the Town Bylaw prohibits more than one non-residential structure on a lot in this zoning district, and that the barn, even if used solely for purposes relating to the child care facility, is prohibited by this portion of the Bylaw. This argument is incorrect, and was explicitly rejected by the Appeals Court in *Petrucci v. Bd. of Appeals of Westwood*, 45 Mass. App. Ct. 818 (1998). In that case, the property had an existing residence and a separate barn that the applicant sought to convert to a child care facility. The application was rejected on the grounds, among others, that the town Bylaw prohibited more than one primary use on a lot. The Appeals Court stated: "Even were the board correct in its assertion that the Westwood by-law does not permit multiple primary uses on a single lot, such a prohibition is exactly what the statute [c.40A sec. 3] declares impermissible with respect to child care facilities." *Id.*, 45 Mass. App. Ct. at 822. Similarly, in this case the portion of the Needham Bylaw that prohibits more than one non-residential structure on a lot is overridden by M.G.L. c. 40A, section 3, which states:

No zoning ordinance or bylaw in any city or town shall prohibit, or require a special permit for, the use of land or structures, or the expansion of existing structures, for the primary, accessory or incidental purpose of operating a child care facility; provided, however, that such land or structures may be subject to reasonable regulations concerning the bulk and height of structures and determining yard sizes, lot area, setbacks, open space, parking and building coverage requirements. (emphasis added).

In sum, this Board cannot prohibit the Applicant from using the barn for purposes relating to the child care facility, on the grounds that Section 3.2.1 of the Town Bylaw prohibits more than one non-residential structure or use on a lot in the SRA district.

Second, it has been suggested that the Board has the authority to require the applicant to demolish the barn because (a) demolishing the barn will allow the main building to be moved further back from Central Ave; and/or (b) the barn is "too big" to be used as a storage facility. Again, this is incorrect. The statutory language quoted above clearly prevents the Town from "prohibit[ing], or requir[ing] a special permit for, the use of land or structures, or the expansion of existing structures, for the primary, accessory or incidental purpose of operating a child care facility." Particularly given that the statute repeatedly refers to the use of *structures* (plural), it is hard to think of a more clear example of violating that statutory prohibition than if the Town were to say "we will give you a special permit to operate a child care facility in structure A, but only if you demolish structure B and locate structure A where

¹ As a preliminary matter, before even considering the argument that follows this footnote, this Board would have to conclude that the prohibition against "more than one non-residential structure or use on a lot" found in Section 3.2.1 applies to accessory structures. In this context, the barn would meet the definition of an accessory structure, and the proponents of this argument would need to demonstrate that the Bylaw has been interpreted to prohibit non-residential accessory structures in this zoning district.

B was previously located" (where structure B is also intended to be use for accessory purposes relating to operating a child care facility).

In addition, with respect to the barn, it is worth noting that it has been argued to this Board that because the main building will be new construction, the Board has the authority to require the Applicant to apply for a Special Permit, notwithstanding the language of M.G.L. c. 40A, Section 3 quoted above. This argument clearly does not apply to the use of *existing* structures for purposes relating to a child care facility, meaning that with respect to the barn, the Board does not even have the authority to require a Special Permit in order for the Applicant (or the tenant) to use the barn for purposes relating to the child care facility, much less require the Applicant to demolish it.

Nor is the view that the barn is "too big" to be used as a storage facility a valid basis to require the Applicant to tear it down. *Rogers v. Town of Norfolk*, 432 Mass. 374 (2000) is instructive on this point. In *Rogers*, the applicant proposed to use a 3200 s.f. home as a child care facility, even though the town had a Bylaw limiting child care facilities to 2500 s.f., The SJC held that while the 2500 s.f. limitation might be "facially valid," it was invalid as applied to that case, because there was no practical way to use the house as a child care facility if the 2500 s.f. limit on child care facilities were to be enforced. The *Rogers* Court even noted that it would be possible to make the structure comply with the 2500 s.f. limit set forth in that town's bylaw, by demolishing certain portions of the building, but that doing so would weaken the structure, and serve no valid municipal interest. Accordingly, the applicant in that case was not required to comply with the town's "facially valid" limit of 2500 s.f. for child care facilities.

In this case, Needham does not even have a Bylaw limitation on the size of child care facilities (much less for accessory structures used for child care facilities) but even if such a limitation existed, and the barn exceeded it, there is no practical way to make the barn smaller without destroying it. As applied to the facts of this case, then, *Rogers* stands for the proposition that this Board cannot require the demolition of the barn on the grounds that it is "too big" for storage for the proposed facility.

Furthermore, "storage" is only one of the uses relating to operating a child care facility to which the barn can be put. The roof provides a good platform for the installation of solar panels. Equipment used to maintain the property could also be stored there. In the future, other uses relating to operating the child care facility can be imagined. As long as the barn is used solely for purposes relating to operating the child care facility, it is protected by M.G.L. c. 40A, section 3, and this Board cannot require the applicant to take it down.

3. Moving Forward With This Application

This process began with the Applicant's initial request for Minor Project Site Plan Review in March of this year. Since that time, the applicant has made multiple revisions to the project in an effort to address concerns that have been raised by this Board, by the Design Review Board, by neighbors, and by the peer reviewer hired by the town, whose services the

applicant has agreed to pay for, even though there is clear authority for the proposition that that traffic and vehicular access are not among the matters as to which this Board may issue "reasonable regulations." See *Primrose Sch. Franchising Co. v. Town of Natick*, 2015 WL 3477072, at 9 (Mass. Land Ct. May 29, 2015)("Based upon the clear language of G.L. c. 40A, § 3, ¶ 3, this court, in Land Court Decision 1, noted that imposing reasonable frontage and lot size requirements was within the authority of the ZBA. *However, G.L. c. 40A, § 3, ¶ 3 is silent as to issues relating to site access and vehicular traffic.* Moreover, the statute is clear that such regulations may apply only to the "land and structures" to be used in connection with the Dover Amendment facility. *Id.* Thus, Defendants' broad suggestion that this court "endorsed the imposition of access related conditions under the aegis of the Dover Amendment" is mistaken" (emphasis added)).

The revisions that the applicant has made to the initial proposal, in order to address the concerns raised by various interested parties, include:

- 1. Increasing the setback from Central Ave twice, from 40 feet to 50 feet, and then to 64 feet;
- 2. Making the landscaping plan significantly more robust;
- 3. Increasing the number of parking spaces from 24 to 30;
- 4. Adding a new parking area behind the barn;
- 5. Redesigning and widening the access drive to include a drop-off and pick-up lane;
- 6. Redesigning, while retaining, the pick-up and drop-off area adjacent to the main entrance to the building, to maximize the smooth flow of traffic into and out of the site:
- 7. Changing the design of the side of the building facing Central Ave to include multiple gabled and projecting front surfaces and bayed windows, in order to break up the overall façade and provide more architectural interest; and
- 8. Agreeing to accommodate other changes suggested by the Design Review Board.

As noted above, the applicant has also agreed to pay for the peer review process, and has spent considerable time, effort, and money to address the concerns and issues raised by the town's peer reviewer, John Diaz of GPI. The applicant has also agreed to a cap on the number of children at the facility (115) even though (1) under applicable Massachusetts regulations the size of the proposed building would allow a higher number of children at this facility, and (2) it is our position that this Board does not have the authority to impose **any** limit on the number of children at the facility. See Primrose Sch. Franchising Co. v. Town of Natick, supra ("While local zoning authorities may apply limited restrictions to the "land and structures" used in connection with a Dover Amendment facility, authority to regulate the actual use of said facility is vested in the Massachusetts Department of Early Education Care ("MassEEC"). See G.L. c. 15D, §§ 2(c), 6(a). . . . In view of the foregoing, G.L. c. 40A, § 3, ¶ 3 did not give the ZBA authority to limit the amount of students that the Facility may house as a means of reducing vehicular traffic to and from Locus. As such, I find that Condition 4 is unreasonable to the extent that it purports to condition approval of the Project upon a cap in the maximum number of enrollees in the Facility.").

In sum, we believe that throughout this process the Applicant has acted in good faith in an effort to address neighborhood and Board concerns, and, as part of addressing those concerns, has agreed to things that it is not legally obligated to agree to, and which this Board does not, in light of M.G.L. c. 40A, section 3, have the authority to require. These changes and accommodations have significantly lengthened this process, which is now in its seventh month. In light of the foregoing points, we ask that the Board make every effort to conduct the upcoming hearing as expeditiously as possible, and, if possible, complete the public hearing portion of this process at the upcoming meeting on October 5.

I appreciate your attention to the points raised in this letter.

· · · · ·

GLOSSA ENGINEERING INC 46 EAST STREET EAST WALPOLE,MA 02032 PHONE 508-668-4401

FAX 508-668-4406 EMAIL glossaeng@AOL.com

DATE: December 15, 2021

At the request of Needham Enterprises, LLC, I am providing the following estimates for the additional costs that will be incurred if the barn is demolished and the existing building is moved to approximately match the setback of the adjacent Temple. Two alternative costs are shown below.

RE: Estimated additional costs to relocate Proposed Daycare Building to match adjacent non-residential building (Temple) setback. These costs are in addition to current anticipated construction costs.

Additional site construction cost (see attached breakdown)

- \$215,500

2)Additional Professional fees for site redesign (engineering, architect, landscape design, peer review fees) and 3-4 Month estimate for carrying costs

- \$115,000

3) Cost to add 1800- 2,000 s.f. storage to proposed building

- \$270,000

TOTAL ESTIMATED ADDITONAL COST TO INCREASE SETBACK AND ENLARGE BUILDING TO REPLACE LOST STORAGE

- \$604,500

NOTE: The cost to build a new storage facility at site in lieu of creating storage in the proposed childcare building (Item 3 above) is as follows:

New building cost

- \$190,000 to \$210,000

Professional fees to design and engineer new structure

- \$21,000

TOTAL ESTIMATED ADDITONAL COST TO MOVE EXISTING DESIGN BACK AND CREATE NEW STORAGE ELSEWHERE

- \$541,500-\$561,500

SUBMITTED - JOHN F. GLOSSA P.E.

n I Hossa

12/15/2021

DATE

						DATE:	12/15/2021	
GLOSSA E	GLOSSA ENGINEERING INC JOB:	1688 Central St.	The second secon			OWNER:		
	The second secon	And the second s		And the second s		PAGE:		to define we have a first to the
ITEM	DESCRIPTION	QTY. UNIT	COST T	TOT. COST	LABOR	TOT. LAB	BID \$	TOT. BID
	WORK NEEDED FOR SITE CHANGE	E 12/15/21					i	
		Account to the same of the sam		time to the highest property continues to the second section of the	0	0	0	
T	Buiding Demo	1 Ls.		The second secon	0	0	-	
2	Site Fill	1000 cy.	-		0	0		-
3	Bit, Conc, Pavement	480 sy.			0	0		16800
4	Pre - Engineered Block Ret. Wall	150 sf.			0	0		
ഹ	5' Wide Conc. Sidewalk	1000 sf.			0	0	10	
9	6" Sewer Connection	180 If,			0	0		
7	Sewer Manhole	2 ea,			0	0		
8	1" Copper Water Service	180 If,	-		0	0		
ര	6" Water Main	180 lf,	,		0	0		
10	Elec. Tel. Cable Service	180 If,			0	0		
	Gas Trench Sand / E&B	180 If,			0	0		3600
12	Ledge Removal	1 Ls,			0	0		50000
and the same of th					0	0		Anna may and Department .
					0	0		
					0	0		
					0	0		
The state of the s					0	0		
To the state of th					0	0		
	Commission 1417 (Millian Commission Company) and the property of the Commission of the Commission C	A CONTRACTOR OF THE PROPERTY O			0	0	0	0
					0	0		-
					0	0		
					0	0		
					0	0		
						0		
					0	Ö		
The state of the s			**************************************			0		
					0	0		
					0	0		
			-		0	0		
					0	0		



December 17, 2021

NEX-2021238.00

Town of Needham Planning Board Town Hall 1471 Highland Avenue Needham, MA 02492

SUBJECT: 1688 Central Avenue

Proposed Child Care Facility - Peer Review 4

Dear Ms. Newman:

The following items were submitted by Joe Abruzese.

December 12, 2021, Presentation Points from Needham Planning Board Hearing, December 8, 2021

As requested by the Board, GPI is responding to the section entitled *Traffic Analysis is Based on Faulty Data and Incorrect Math.*

As previously mentioned, at the direction of the board, GPI met with John Gillon, the proponent's Traffic Engineer, to determine how to best represent realistic traffic levels along Central Avenue, as a result of the impacts of Covid on traffic flows and patterns. As such, we discussed a number of alternatives, including procedures in place by Mass DOT to utilize older traffic levels to project where traffic normally would be without Covid.

These procedures include using a number of factors and comparisons to evaluate the data. As such, the traffic levels used in the report were based on prior 2006, 2016 and new 2021 volumes both at the intersection of Central Avenue at Charles River Street and data collected along Central Avenue nearly a mile away from the site near the Transfer Station. The results were reviewed by GPI and found to be reasonable.

As there may be some concerns about the proponent's methodology, GPI has undertaken an independent assessment of the available traffic volumes, MassDOT procedures and a review of the streets and neighborhoods surrounding the area.

The following outlines this procedure.

- 1. There are 3 data sets that were compared
 - a. Turning Movement Counts at Central Ave and Charles River St
 - i. October 2006 PM
 - b. Turning Movement Counts at Central Ave and Charles River St
 - i. October 2021 AM
 - ii. October 2021 PM
 - c. ATR Counts on Central Ave south of Transfer Station
 - i. May 2016
- 2. Based on MassDOT's April 2020 "Guidance on Traffic Count Data" the following procedures should be used to estimate precovid (2019) volumes.

Procedures for Estimating Average Annual Daily Traffic (AADT)

To estimate existing AADT from an historical count, the count location should be classified by Geographic Area Type, Functional Class, and Region per the descriptions from the previous section. Once the classification has been completed, the following steps are required.

1. Axle Correction

(Please note this step is required only if the original count did not include vehicle classification data, typically a single pneumatic tube. If classification data has been included, please proceed directly to Step 2.)

- · Identify the year the count was taken.
- Open the Weekday Seasonal Axle Correction file for the year that corresponds to the raw count data.
- Multiply the average daily traffic (ADT) taken from the raw count data by the Axle Factor for the corresponding Factor Group.

2. Seasonal Factor

- Identify the month and year the count was taken.
- Open the Weekday Seasonal Axle Correction file for the year that corresponds to the raw count data.
- Multiply the number obtained in Step 1 (or the raw count data if it contains vehicle classification data) by the Monthly Factor for the corresponding Factor Group.

3. Yearly Growth

- · Identify the year the count was taken.
- Open the Yearly Growth Rate file. <u>Note that MassDOT considers 2019 data to be existing.</u>
- The Growth Factors are set up to factor count data to the year shown in the header column
 from the previous year. Therefore, using the appropriate Factor Group, multiply the number
 obtained in Step 2 by the growth factor for the year after it was taken. Repeat the factoring
 until it is grown to 2019.
 - o A count taken in 2018 will only need the 2019 factor applied to it.
 - A count taken in 2015 will need to go through four steps of factoring: the 2016 factor, then the 2017 factor, then the 2018 factor, and finally the 2019 factor.

Once these steps have been completed, the existing AADT may be estimated.

- a. Based on Central Avenue being a Rural Principal Arterial and the cited growth rates, 2016 volumes would be multiplied by and overall factor of 0.99. Essentially indicating that volumes from 2016 to 2019 pre-covid are basically equal.
- 3. It's important to understand that the intersection of Charles River Street is approximately 4,200 feet south of the Transfer Station. There are several neighborhoods and roadways, including Pine Street that cuts from Central Ave to Charles River St SB, between the intersection and the location of the 2016 ATR count. In addition, there are more than 125 homes (Pine Street, Carleton Drive neighborhood, Country Way neighborhood) with access to and from Central Avenue between the intersection and the ATR count location. Therefore, it would be expected that the traffic levels in general would be higher near the transfer station, than at the intersection of Charles River St at Central Ave.
- 4. Since the site is approximately 900 feet north of the signalized intersection of Central Avenue/Charles River Street intersection, the volumes recorded at the intersection are more relevant than those collected nearly a mile north.
- 5. Therefore, since there were already turning movement counts available at the Central Avenue/Charles River Street intersection for the PM period from 2006, GPI requested that the proponent conduct new traffic counts in October 2021 to see if traffic movement trends were similar at the intersection.
- 6. The 2016 ATR counts at the Transfer Station were then simply used as a reference to assist with the Covid adjustments.
- 7. Below is a comparison of the PM Turning Movement Count data compared between October 2006 and October 2021.

		Oc	:t-06					Oct	-21	
	L	Т	R	Total			L	Т	R	Total
NB	30	227	8	265	NE	3	33	217	2	252
SB	30	636	30	696	SB		19	598	25	642
EB	82	88	40	210	EB		104	136	53	293
WB	3	119	27	149	WI	В	13	141	27	181
	145	1070	105	1320			169	1092	107	1368

		% C	hange	
	L	Т	R	Total
NB	110%	96%	25%	95%
SB	63%	94%	83%	92%
EB	127%	155%	133%	140%
WB	100%	100%	100%	100%
	110%	100%	102%	101%

8. Based on the volumes above, the evening traffic passing the site is reflected below

	Oct-06	Oct-21	% Change
NB Passing Site	336	348	104%
SB Passing Site	696	642	92%
TOTAL	1032	990	96%

9. If we were to factor the 2006 volumes by 15 years at 1% annual growth rate, the equivalent multiplier would be 1.16.

		Oc	t-06	
	L	T	R	Total
NB	30	227	8	265
SB	30	636	30	696
EB	82	88	40	210
WB	3	119	27	149
_	145	1070	105	1320

	Octob	er 2006 Facto	red to Octob	er 2021
	L	T	R	Total
NB	35	264	9	308
SB	35	738	35	808
EB	95	102	46	244
WB	3	138	31	173
	168	1242	122	1532

10. A comparison between the As-Counted 2021 volumes and the 2021 volumes projected from 2006 values shows that the As-Counted 2021 volumes are lower than would be expected.

		% Change								
	L	Т	R	Total						
NB	95%	82%	22%	82%						
SB	55%	81%	72%	79%						
EB	109%	133%	114%	120%						
WB	373%	102%	86%	105%						
	100%	88%	88%	89%						

11. GPI therefore recommended increasing the current 2021 Counts by 30% to account the impacts of Covid on traffic volumes.

	October 2021 factored by 30%								
	L	L T R Total							
NB	43	282	3	328					
SB	25	777	33	835					
EB	135	177	69	381					
WB	17	183	35	235					
	220	1420	139	1778					

12. Comparing the 2006 counts projected to 2021 against the as counted 2021 volumes factored by 30%, the 2021 factored volumes are extremely conservative.

Octob	October 2006 Factored to October 2021				October 2021 factored by 30%			
L	T	R	Total		L	Т	R	Total
35	264	9	308	NB	43	282	3	328
35	738	35	808	SB	25	777	33	835
95	102	46	244	EB	135	177	69	381
3	138	31	173	WB	17	183	35	235
168	1242	122	1532		220	1420	139	1778

		% Change									
	L	L T R Total									
NB	123%	107%	28%	106%							
SB	71%	105%	93%	103%							
EB	142%	173%	148%	156%							
WB	485%	133%	112%	136%							
	131%	114%	114%	116%							

- 13. Therefore, factoring the 2021 counts by 30% provided an overly conservative estimate of traffic during the evening peak hour. The same methodology (a 30% increase in the 2021 as counted volumes) was used to factor the morning peak hour counts to account for covid.
- 14. As a result, the following volumes were used for the analysis.

AM Peak Hour October 2021 factored by 30% (2021 Base Conditions)						l	ber 2021 f	ak Hour actored by Conditions	
	L T R Total					L	Т	R	Total
NB	88	792	5	885	NB	43	282	3	328
SB	14	195	14	223	SB	25	777	33	835
EB	329	220	52	601	EB	135	177	69	381
WB	13	141	27	181	WB	17	183	35	235
	444	1348	98	1890		220	1420	139	1778

15. As a final check, the volumes at the Transfer Station were used to check the assumptions.

2016 Transfer Station AM Peak		2016 Tra	nsfer Statio	n PM Peak		
NB Past Site	1080	NB Past S	NB Past Site			
SB Past Site	273	SB Past S	SB Past Site			
Total Past Site	1353	Total Pas	Total Past Site		tal Past Site 143	
2021 AM Peak	Hour	202	2021 PM Peak Ho			
NB Past Site	1138	NB Past S	NB Past Site			
SB Past Site 223		SB Past S	SB Past Site			
Total Past Site	1361	Total Pas	t Site	1287		

- 16. As discussed in Item 2, based on MassDOT procedures, the 2016 volumes are representative of pre-covid traffic levels.
 - a. During the morning peak hour the total volumes are nearly identical, with the projected volumes used in the analysis, slightly higher (i.e. more conservative).
 - b. During the evening peak hour, the volumes in front of the site are approximately 143 vehicles lower than at the transfer station, with about 193 fewer southbound vehicles and actually an increase of 50 vehicle NB.
 - c. Given that Pine Street is a one-way southbound connection between Central Avenue and Charles River Street and the fact that there are over 125 homes off Central Avenue between the Transfer Station and Charles River Street, it would be expected that the SB approach volumes at the intersection of Charles River Road would be several hundred vehicles lower than at the transfer station.
- 17. Therefore, given the impacts of Covid, the methodology used to project the base 2021 traffic levels by utilizing newer data collected at the closest major intersection and using a combination of factoring and MassDOT methodology, provides the best estimate of "normal" traffic along Central Avenue in front of the proposed site.
- 18. The 2021 volumes noted above were factored by a compounded 1% annual growth rate, which mathematically is equivalent to a 1.072135 multiplier over 7 years.
- 19. Therefore, the following values represent the 2028 conditions that are appropriate for the analysis. (note these were all calculated independently by GPI)

		AM Pea	AM Peak Hour				PM Peak Hour				
	Oc	tober 2021 fa	ectored to 2028		Octo	ber 2021 f	actored to	2028			
	L	T	R	Total		L	Т	R	Total		
NB	94	849	5	949	NB	46	302	3	351		
SB	15	209	15	239	SB	26	833	35	895		
EB	353	236	56	644	EB	145	190	74	408		
WB	14	151	29	194	WB	18	197	38	252		
	476	1445	105	2026		236	1522	149	1907		

When compared against Figure 3 in the 10-27-2021 Traffic Memo, the results are virtually the same.

	-				PI Calcula	tions					•
		N	IB	S	В	E	ЕВ	V	VB		PM TOTAL
		AM	PM	AM	PM	AM	PM	AM	PM	AM TOTAL	
Existing October 2021		681	252	172	642	462	293	135	181	1450	1368
30% Covid Factor		885	328	223	835	601	381	181	235	1890	1778
1% Compunded growth	for 7 years	949	351	239	895	644	408	194	252	2026	1907
				Traffi	c Study Ca	lculations					
		l N	IB		ъв В		ЕВ	V	VB		
		AM	PM	AM	PM	AM	PM	AM	PM	AM TOTAL	PM TOTAL
Existing October 2021		681	252	172	642	462	292	135	181	1450	1367
30% Covid Factor		888	329	224	837	602	381	176	236	1890	1783
1% Compunded growth	for 7 years	950	352	240	896	645	407	188	253	2023	1908
Discre	pancy (Traffic S	Study vs GP	l) (+) = Trai	ffic Study V	/olumes hi	gher than	GPI/(-) = Ti	raffic Study	/ Volumes	lower than GPI	
		N	IB	S	В		ЕВ	V	VB		
		AM	PM	AM	PM	AM	PM	AM	PM	AM TOTAL	PM TOTAL
Existing October 2021		0	0	0	0	0	-1	0	0	0	-1
30% Covid Factor		3	1	1	2	1	0	-5	1	0	5
1% Compunded growth	for 7 years	1	1	1	1	1	-1	-6	1	-3	1

Therefore, we again feel that the methodology used to estimate the "normal" existing and future traffic levels along Central Avenue is valid.

Should you have any questions, or require additional information, please do not hesitate to contact me at (978) 570-2953 or via email at jdiaz@gpinet.com.

Sincerely,

Greenman-Pedersen, Inc.

John W. Diaz, PE, PTOE

Vice President/Director of Innovation

December 18, 2021

Paul Alpert
Chair of Needham Planning Board,

Members of the Needham Planning Board,

Lee Newman
Director of Planning and Community Development
500 Dedham Avenue
Public Services Administration Building
Suite 118
Needham, MA 02492

RE: Site Review of Proposed Project at 1688 Central Avenue

Dear Chair Alpert and All Planning Board Members,

Attached please find the detailed comments of neighbors of 1688 Central Avenue for consideration during the Planning Board's site review process of the proposed project at that location. The submission answers the legal arguments offered in the proponent's December 16, 2021 letter.

We ask that you give careful consideration to these comments and enter them, along with their attachments, into the formal record of your meeting should there need to be further proceedings on the matter. Thank you for your consideration.

Yours truly,

Holly Clarke

The proponent's December 16, 2021 letter does nothing to address the fundamental deficiencies of the project identified in detail in the neighbors' prior submissions and presentations. The letter does recast five arguments in ways entirely inconsistent with applicable law which we address briefly here.

First, as we have pointed out before, the applicant's plan does not comply with the requirements of Needham Zoning By Law (NZBL) s.3.2.1, which prohibits two non-residential buildings or uses on a single residential lot in this district. The developer is free to choose if he wants to keep the barn or build another building. But he may not have two non-residential buildings or uses on a single lot. The developer tries to navigate that rule by arguing that the barn is an "accessory building" to the child care facility. The bylaw still requires there be only one non-residential building, even if one were an accessory building (which it is not). The Planning Board invited him to make a factual showing under 40A, s.3 that having a second non-residential building on the lot is essential to the child care operations and that the application of the bylaw to this project would not protect legitimate municipal interests. The developer chose to ignore that invitation and the letter is notable in its failure to point to any facts that would support a 40A s.3 showing. For that reason, as well as those stated in prior submissions and presentations, the Planning Board must conclude that NZBL s.3.2.1 applies and requires the rejection of the proposal to both build a new building and retain the barn.

Second, the applicant argues that *Petrucci v. Bd. of Appeals of Westwood*, 45 Mass. App. Ct. 818 (1998) supports the conclusion that the barn is exempt from Needham Zoning By Law 3.2.1 because of its intended use as storage for a child care facility. *Petrucci* neither says nor supports anything of the sort. *Petrucci* did not declare s.3 superseded local bylaws. In fact, the court applied the fact-specific balancing test established in *Tufts v. Medford*, 415 Mass. 753 (1993) and found that in the circumstances of that case – where the pre-existing barn itself was to be the child care facility — moving the barn was not justified as it would harm rather than protect municipal interests. *Petrucci* did not involve a request both to build a new building and to keep the barn on a single lot in the face of a bylaw which prohibits multiple non-residential buildings in a single lot in a residential district.

Third, the applicant argues that the Planning Board cannot order a setback greater than the minimal dimensional set back requirements in the town's bylaws. That is not the law. "That the by-law contains minimum dimensional requirements is not dispositive of whether, in accordance with site plan approval criteria set forth in the by-law, the board may impose reasonable conditions that result in stricter dimensional requirements than would otherwise be the case." *Muldoon v. Planning Board of Marblehead,* 72 Mass. App. Ct. 372 (2008). The instant project is subject to site plan review under NZBL s.7.4 and 7.5 as well as Design Review under 7.7 because of its bulk. The proponent conceded as much when he filed his initial application for site plan review and claimed to meet the site plan criteria set forth in NZBL. Each of the Design Review Board's (DRB) three reviews concluded, largely- but not solely- because the project's setback is so out of keeping with the neighborhood, that the project is not in harmony with the

surrounding area, as required by the bylaws. The DRB also pointed out that an appropriate setback could be obtained even while keeping the barn, and invited any presentation to show why this could not be done. No such presentation has ever been shared. The barn does not control the setback.

Fourth, there is no legal or equitable basis for the applicant's complaint that he will incur substantial costs to bring the project into compliance with the requirements of the Needham Zoning Bylaws. Neither M.G.L. ch. 40a s.3 nor the NZBL contain any provision protecting a developer's economic interests in this fashion. Most fundamentally, this is a problem of the developer's own making. He designed the proposal. He chose not to consult with the Planning Board at a public meeting or to solicit community input prior to submission. He largely ignored the neighbors' input, going as far as to object to their participation at the DRB, ignored significant comments by the DRB itself, and ignored concerns about the design raised by members of the Planning Board and the public during the hearing process. He instead chose to press forward with this design. Assuming that the proposal is even permitted to go forward at all, the cost of rectifying the deficiencies in the proposal are properly and equitably borne by the developer. The complaint that the changes will take time to make falls by the same logic. Having chosen to ignore earlier feedback, the developer should not be heard to complain that incorporating the requirements of the bylaws will take two to four months.

Finally, the proponent suggests that it does not have the burden of proof when he objects to the application of bylaws to this project. This is incorrect as a matter of law. *Rogers v. Norfolk*, 432 Mass. 374 (2000) and *Tufts v. Medford* set the test for evaluating the reasonableness of town bylaws: Bylaws are presumed valid, and apply to all projects under the uniformity requirements of MGL ch 40a s.4. Proponents seeking protection under s.3 bear the burden of proving the application of any challenged bylaw would obviate the protected use without protecting a legitimate municipal bylaw. There is no case that even remotely suggests otherwise. There is no blanket zoning exception for a developer seeking to build a child care facility, and the proponent is incorrect when he suggests otherwise. Simply put, the Planning Board is charged with and authorized to protect the municipal interests in this and every other project.

Thank you for your consideration of these issues.



75 State Street 16th Floor Boston, MA 02109-1466 £617 227 7940 £617 227 0781 www.hembar.com M. Patrick Moore, Jr. Direct Dial (617) 557-9715 pmoore@hembar.com

December 20, 2021

Trustees

Counselors at Law

Michael J. Puzo Edward Notis-McConarty Stephen W. Kidder Arthur B. Page Joan Garrity Flynn Nancy B. Gardiner Kurt F. Somerville Teresa A. Belmonte Brian C. Broderick Charles Fayerweather Nancy E. Dempze Joseph L. Bierwirth, Jr. Dennis R. Delaney Mark B Flefante John J. Siciliano Sarah M. Waelchli M. Bradford Bedingfield Charles R. Platt M. Patrick Moore, Jr. Ryan P. McManus Kevin M. Ellis

> Michael E. Porter Eleanor A. Evans Johanna W. Schneider Jennifer Grace Miller

Donna A. Mizrahi Paul M. Cathcart, Jr. Vanessa A. Arslanian Steven L. Mangold Meaghan E. Borys Keirsa K. Johnson Leni B. Nulsen Emma Wright Clinton R. Prospere Shannon M. Nelson

Lawrence T. Perera George T. Shaw Michael B. Elefante Susan Hughes Banning Frederic J. Marx Deborah J. Hall R. Robert Woodburn Thomas L. Guidi Diane C. Tillotson Town of Needham Planning Board Needham Town Hall 1471 Highland Avenue Needham, MA 02492

Re: 1688 Central Avenue (the "Site")

Dear Members of the Board:

I write on behalf of Gregg Darish, owner of the property located at 34 Country Way, which abuts the Site on which Needham Enterprises LLC (the "Applicant" or the "Proponent") has proposed to develop a 9,996 sf child care center with a 4,800 sf accessory barn (the "Project").

Throughout the application process, the Applicant has asserted that the Board is constrained by the Dover Amendment, G.L. c. 40A, § 3, para. 3, to a greater degree than the law provides. The purpose of this letter is to clarify the scope of the Board's review—and the extent of its power—as it acts on this application.

In addition, the Board should be mindful of the anomaly of this application. The Proponent is not a daycare operator. Nor does the Proponent have a lease in place with any such operator; nor, even, a memorandum of understanding with an operator relating to how the property will be used if the sought-after permit is granted. Typically, when an applicant seeks the benefit of G.L. c. 40A, § 3, they do so as the operator of the Dover-protected program or, at minimum, in a contractual relationship with the operator. Where a question arises as to how a particular part of the proposed structure will be used by the operator, the question is not theoretical. The Board is presented with detailed plans concerning the proposed program and the expected uses. As addressed below, those are missing here, which inhibits the Board's review, and, importantly, precludes the Proponent from meeting its burden to show that it should be excused from conditions that otherwise



would be imposed on this parcel by the Board pursuant to the Town's Zoning By-law.

I. Legal Framework

As this Board knows, G.L. 40A, § 3 provides that:

No zoning ordinance or bylaw in any . . . town shall prohibit, or require a special permit for, the use of land or structures, or the expansion of existing structures, for the primary . . . purpose of operating a child care facility; provided, however, that such land or structures may be subject to reasonable regulations concerning the bulk and height of structures and determining yard sizes, lot area, setbacks, open space, parking and building coverage requirements.

Interpreting this language, the Massachusetts Land Court has recognized that while a proposal to use or renovate *existing* structures for day care use may not require a special permit, the construction of a *new* day care facility may be conditioned on receipt of a special permit (where, as in Needham, a special permit otherwise would be required for the construction). *Primrose School Franchising Co. v. Town of Natick*, 2013 WL 3057432 (Mass. Land Ct. Jun. 17, 2013); *see Prime v. Zoning Board of Appeals of Norwell*, 42 Mass. App. Ct. 796, 802-803 (1997) (board may require special permit for new construction of building housing a Dover-protected agricultural use).

Where an applicant proposing a child care facility seeks exceptions from otherwise applicable local zoning requirements, that applicant bears "the burden of proving that the local requirements are unreasonable as applied to its proposed project." See Rogers v. Town of Norfolk, 432 Mass. 374, 383 (2000), quoting Trustees of Tufts College v. Medford, 415 Mass. 753, 759 (1993). This burden may be met by a demonstrating that compliance would substantially diminish or detract from the usefulness of the proposed structure, or significant impede the use without appreciably advancing the municipality's legitimate concerns. Campbell v. City Council of Lynn, 415 Mass. 772, 784-85 (1993). When an applicant fails to sustain this burden, a town may require a child care facility to comply with local zoning requirements.

This analysis extends to special permit requirements for construction of new child care facilities. Most recently, in *Primrose School Franchising Co. v. Town of Natick*, 2013 WL 3057432 (Mass. Land Ct. Jun. 17, 2013), Judge



Sands found that the Town of Natick appropriately required a special permit for construction of a new structure to be used as a child care facility within a residential zoning district and, moreover, that such special permit could impose conditions on both the structure and the use that "bear a reasonably direct relation to significant considerations of public health, safety and welfare based on findings justified by substantial evidence."

Based on the foregoing legal framework, it is clear that, contrary to the assertions of the Applicant's counsel, it is both permissible and appropriate for this Board to evaluate the Project in reference to the review criteria applicable to any Major Project pursuant to Sections 7.4.6 and 7.5.2 of the Zoning By-law.

II. The Board's Review

The Applicant, my client, and this Board all concur that the Project is a Major Project under Section 7.4.3 of the By-law. As a Major Project, the Project requires both a special permit and site plan review. *See* By-law, Section 7.4.3 ("No building, use or occupancy permit for any improvement to real property which constitutes a Major Project […] shall be issued, except in accordance with the terms of a special permit for such project, after site plan review as further set forth herein"). Thus, the Project must meet both the site plan review criteria set forth in Section 7.4.6 and the special permit criteria set forth in Section 7.5.2.2.

A. Site Plan Review

As this Board knows well, Section 7.4.6 of the Zoning By-law provides that "in conducting site plan review, the Planning Board shall consider the following matters:

- (a) Protection of adjoining premises against seriously detrimental uses by provision for surface water drainage, sound and sight buffers and preservation of views, light, and air;
- (b) Convenience and safety of vehicular and pedestrian movement within the site and on adjacent streets, the location of driveway openings in relation to traffic or to adjacent streets and, when necessary, compliance with other regulations for the handicapped, minors and the elderly;
- (c) Adequacy of the arrangement of parking and loading spaces in relation to the proposed uses of the premises;



- (d) Adequacy of the methods of disposal of refuse and other wastes resulting from the uses permitted on the site;
- (e) Relationship of structures and open spaces to the natural landscape, existing buildings and other community assets in the area and compliance with other requirements of this By-Law; and
- (f) Mitigation of adverse impacts on the Town's resources including the effect on the

Town's water supply and distribution system, sewer collection and treatment, fire protection, and streets[....]"

The record before the Board is rife with examples of the Project's deficiencies in each of these review categories, all of which "bear a reasonably direct relation to significant considerations of public health, safety and welfare." *Primrose School Franchising Co.*, 2013 WL 3057432 at *8. For example:

- The Design Review Board ("DRB") in its August 13, 2021 memorandum raised concerns that the Project proposes a relatively large building sited closer to the street than other buildings in the neighborhood and, moreover, made specific requests regarding the location and height of light poles to mitigate light trespass onto neighboring properties. These are matters that go directly to criteria (a) and (e) of Section 7.4.6.
- Like the DRB, neighboring property owners also have raised the issue of the Project's inadequate setback, which is inconsistent with the development pattern of the neighborhood and further, creates hazards for pedestrians and cyclists by reducing site line visibility. These are legitimate municipal concerns¹ falling within the scope of Section 7.4.6(b) and (e).
- Evidence in the record further indicates that new traffic generated by the Project warrants careful scrutiny by this Board consistent with Section 7.4.6(b). Drop off and pick up for 115 children, plus employees going to and from the site by at least one estimate, generating 480 daily vehicle trips will have a material impact on the surrounding street network in an area that already has a high volume of accidents.

_

¹ The Supreme Judicial Court has expressly held that a town's interest in preserving the residential appearance of its neighborhoods is legitimate for purposes of a Dover Amendment analysis. *Rogers*, 432 Mass. at 384.



- Serious questions have been raised by residents of the surrounding neighborhood regarding the adequacy of parking in terms of number and arrangement, which bear on the Board's review of criterion 7.4.6(c). Rather than providing 38 spaces (the number suggested by review of ITE parking data), the Project proposes only 30 spaces, which may result in queuing of cars on Central Avenue as parents await open parking spaces and/or parents of the facility parking on nearby residential streets.
- Evidence in the record also indicates that the Project will require significant regrading a nearly six foot increase on the southern side of the site, close to a residential abutter. This grade change should be considered by this Board in its evaluation of review criterion 7.4.6 (e), in that it is a key component of the relationship of this project to both the natural landscape and existing residential buildings. Moreover, to the extent that the grade change will have an impact on surface water drainage which may be detrimental to adjoining properties, it is within the purview of criterion 7.4.6(a) and incumbent upon this Board to review.

B. Special Permit Criteria

Section 7.5.2.1 of the By-Law sets forth the findings and determinations that must be made in order for any special permit to issue. Among these are the following findings, which the Project cannot meet:

- The proposal must be "designed in a manner that is compatible with the existing natural features of the site and is compatible with the characteristics of the surrounding area." Section 7.5.2.1(c). As detailed above, the current proposal requires a change in the existing grade of the Site and, by failing to provide an adequate front yard setback, is wholly inconsistent with the development pattern and character of the surrounding neighborhood.
- The circulation patterns for motor vehicles and pedestrians which would result from the use or structure which is the subject of the special permit will not result in conditions that unnecessarily add to traffic congestion or the potential for traffic accidents on the site or in the surrounding area. Section



7.5.2.1(c). The Project as proposed will create a substantial number of new vehicle trips on a roadway network that is already congested and has been the site of numerous accidents. In addition, by failing to provide adequate parking, the Project risks creating problems with vehicular queuing on Central Avenue at pick up and drop off times and burdening the surrounding neighborhood with overflow parking on residential streets.

The proposed use, structure or activity will not constitute a demonstrable adverse impact on the surrounding area resulting from, inter alia, emission or discharge of noxious or hazardous materials or substances, or pollution of water ways or ground water. Section 7.5.2.1(e). This Site has a long history of industrial use (including the building, maintenance and repair of race cars, antique vehicles, and other automobiles), and lacks clean bill of health with respect to its current environmental condition. As such, it is unknown whether the Site poses a hazard to surrounding properties and, perhaps more critically, to the young children who would occupy the proposed day care facility. To that end, on December 16, 2021, the Needham Board of Health voted to recommend to this Board that the Town hire an independent, third party licensed site professional to conduct a site assessment and evaluate whether further environmental investigation of the Site is warranted. A special permit that is not conditioned to ensure that this analysis is completed and that any recommendations arising from such analysis are implemented will not withstand judicial scrutiny.

C. Conditions of Approval of a Special Permit

Section 7.5.2.2 of the By-Law specifically provides that a special permit may impose conditions or limitations including but not limited to:

(a) screening or landscaping of structures or of principal or accessory uses from view from adjoining lots or from a street, by planting, walls, fences or other devices; planting of larger planting strips, with more or larger plant



materials or higher walls or fences than that required in Sections 4.2.14 and 4.4.8.5;

- (b) modification of the exterior features or appearance of a building or structure to ensure compatibility with surrounding buildings and uses;
- (c) limitations on the size, number of occupants or employees, method or hours of operation, extent of facilities or other operating characteristics of a use;
- (d) regulation of the number, design and location of access drives or other traffic features of the proposed use; and
- (e) provision of a greater number of parking spaces or loading bays with estimates based on the ITE Parking Generation Manual, 2nd Edition [...].

The foregoing conditions are reflective of the legitimate municipal concerns – including health, safety, and the preservation of neighborhoods – that the courts consistently have said may be brought to bear when a town imposes zoning regulations on child care facility uses pursuant to G.L. c. 40A, § 3.

In the matter before the Board, reasonable conditions could require the Project to increase the proposed building's setback from the street, take steps to reduce the number of vehicle trips, and increase site parking to alleviate impacts to the neighborhood. Acceptable conditions might also include requirements that any site lighting not create undue impacts on adjacent properties and that the Applicant increase landscaping in order to provide meaningful buffers between the Project and its residential neighborhood. A condition that the Applicant investigate and remediate hazardous environmental conditions is critically necessary and appropriate here.

Massachusetts case law is clear that the Board has the authority to impose reasonable conditions on this Project in its special permit/site plan review decision. Should the Applicant claim that any such conditions have the effect of prohibiting or unreasonably impeding the proposed child care use, it must provide to the Board evidence to support such contention.

D. The Applicant's Burden & the Missing Daycare Operator

In the typical application for a Dover-protected use, the Board would have before it the actual daycare operator; or, at minimum, a developer who has formally agreed to develop a daycare for a specified operator should the



requisite permit be obtained. In rare cases, we are aware of a developer presenting a proposal to a planning board without an operator under contract, but in those limited circumstances the developer's application demonstrates why industry standards require that the proposal meet certain requirements (e.g., a drop-off area, adequate indoor play space).

None of the above have been presented to the Board. We implore the Board to consider (and possibly probe with Town counsel): (i) why is it that the Needham Children's Center is identified as the likely tenant, but there is no agreement in place with that entity?; (ii) when is the last time Needham recognized a Dover-protected use without formal documentation of the operator of the use? The answers to these questions will not reflect well on the application.

These are substantive matters—as the absence of an operator affects the Board's analysis. Each time the Board considers a requirement that otherwise would apply to this project or a condition that otherwise would be placed on it, the Board must consider whether the Applicant has adequately demonstrated that the operation of *any* daycare would be unreasonably impeded by that requirement or condition. That is broad inquiry and a difficult burden to meet, particularly given that the Applicant has provided the board with scant information. The analysis would be different if a specific program—or a specific operator—were before the Board, with detailed plans as to how the proposed structure will be used. That simply has not occurred, by the Developer's own choice. The Applicant, not the Board, must bear the consequences of that choice.

Take the barn on the parcel, for example. Initially, the Applicant indicated that the barn would not be used in connection with the daycare; indeed, the Applicant planned to exclude the barn from the lease entirely. Now, however, the Board is told that the daycare requires the barn—a structure that is more than twice the size of the average residence in Needham—to be available for storage, even though there is still no evidence the barn will be included in any future daycare lease. The Applicant's most recent submission goes so far as to claim that unless the barn is allowed to remain on the site, the Board will have "de facto deni[ed]" a permit. Letter of Evans Huber (Dec. 16, 2021) at 3. These evolving narratives are atypical for a Dover proposal. How is it that applying the Town's By-law (specifically, § 3.2.1) prohibiting two non-residential structures on this residentially zoned property unreasonably impedes the operation of a daycare, particularly when the daycare, as initially proposed, would not have used the barn at all?



For a project under review for many months, these should not be open questions. Indeed, the Board has invited the Developer to come forward with some evidence to demonstrate that the barn is integral to the proposed daycare use; the Developer has declined that invitation. That failure is demonstrative of the Applicant's general inability to meet its burden to show that requirements or conditions that otherwise would apply somehow unreasonably impede its proposed use.²

Last, we noted that in its closing letter, the Applicant has asserted that removing the barn from the parcel would have a substantial estimated cost, including costs of demolition and redesign of the parcel. Letter of Evans Huber (Dec. 16, 2021) at 3. This, of course, is a factual assertion, and the Board closed the record to further factual development on December 7, 2021, at the Applicant's own request. It also does not square with prior representations concerning said costs, which we understand were multiples lower. Regardless, the Dover Amendment is not a magic wand that allows the Applicant to: (i) propose a 10,000 sq. ft. new building; (ii) irrespective of existing By-laws that preclude the new structure and the barn on the same parcel; and (iii) then claim that the cost of removing the barn and redesigning the plan is an unreasonable impediment, when that cost derives from the Applicant's own initial planning choices.

Conclusion

Under G.L. c. 40A, § 3, the use proposed by the Applicant is protected. But, on this record, the Board is uninhibited from imposing the conditions it otherwise would require of a project of this size. The Applicant bears the

It does, however, demonstrate why the Applicant is so keen to preserve the barn. No matter the conditions imposed on this project by the Board, the Applicant could be right back before the Board when the new structure is complete, asserting the Dover-protected right to use the barn as a second daycare on the parcel. The Board's tools in that setting—where it would be evaluating the proposed use of an existing structure, rather than new construction—would be substantially more limited than they are today. That fact assuredly is not lost on the Applicant.

² We note that the Applicant has cited *Petrucci v. Board of Appeals of Westwood*, 45 Mass. App. Ct. 818 (1998) for the proposition that the barn must be allowed to remain on the parcel. Letter of Evans Huber (Dec. 16, 2021) at 2; Letter of Evans Huber (Sept. 30, 2021) at 4. That case involved an entirely different issue, specifically whether a family could use an accessory structure to their residence as a daycare. The answer was yes, because daycare is a protected use under Dover, and the change in use of an *existing structure* receives more deferential review under G.L. c. 40A, § 3, para. 3. The case does not answer the question of whether a Dover-applicant can build an entirely new 10,00 sq. ft. daycare and preserve an existing barn.



burden to demonstrate those conditions unreasonably impede its use. Because that use has not been formalized by agreement with any operator, any alleged impediment is no more than unsupported and undocumented speculation, just like the Developer's relationship with the Needham Children's Center.

Sincerely,

M. Patrick Moore, Jr.

Johanna W. Schneider

From: Thomas Ryder

To: <u>Lee Newman</u>; <u>Alexandra Clee</u>

Cc: Robert Wilson; Paul Ciesluk; Carys Lustig
Subject: Follow up Questions 1688 Central Avenue MPSP

Date: Monday, January 3, 2022 6:16:03 PM

HI Lee,

You asked us to follow up on two questions that were asked through the Planning Board application review for the above reference site.

1. The applicant is proposing a sewer extension in order to connect their facility to town sewer. What will the DPW's requirements be for paving?

The proposed sewer extension design has already been reviewed, a street permit has not been issued or requested yet. The proposed sewer plan shows a connection at the existing sewer on Country Way, then heads in the westerly direction about 250-feet to the intersection of Central Avenue, then turns in the northerly direction for approximately 400-feet to allow a connection in front of the property in question.

Discussions with Highway and other Divisions in the DPW, we will require a mill and gutter to gutter street paving on Central Avenue as this top course of the road was recently upgraded last summer.

2. How many potential parking spots may be lost due to the design when it snows? In review of the plan, if the snow is only to be pushed by a plow truck within the pavement areas, it looks like potentially 4-parking spots and the loading area could lose function for a 4 to 6-inch snow event.

However, potential loss of parking spaces is an operational matter during Snow events. With the right equipment and management (i.e. hand crew, vehicle with loader capabilities), snow can be removed off the pavement and no losses of parking spaces (given an appropriate amount of time during and after a snow event).

I hope this helps answer your questions.

Thomas A Ryder, PE Acting Town Engineer

Needham Department of Public Works 500 Dedham Avenue Needham, MA 02492 Telephone: 781-455-7538

Fax: 781-449-9023

E-mail: <u>Tryder@needhamma.gov</u>

Website: www.needhamma.gov



M. Patrick Moore, Jr. Direct Dial (617) 557-9715 pmoore@hembar.com

75 State Street 16th Floor Boston, MA 02109-1466 £617 227 7940 £617 227 0781 www.hembar.com

January 4, 2022

VIA EMAIL

Trustees

Counselors at Law

Michael J. Puzo Edward Notis-McConarty Stephen W. Kidder Arthur B. Page Joan Garrity Flynn Nancy B. Gardiner Kurt F. Somerville Teresa A. Belmonte Brian C. Broderick Nancy E. Dempze Joseph L. Bierwirth, Jr. Dennis R. Delaney Mark B. Elefante Johanna W. Schneider John J. Siciliano Sarah M. Waelchli M. Bradford Bedingfield Charles R. Platt M. Patrick Moore, Jr. Ryan P. McManus Kevin M. Ellis

> Michael E. Porter Eleanor A. Evans Jennifer Grace Miller

Donna A. Mizrahi Paul M. Cathcart, Jr. Vanessa A. Arslanian Steven L. Mangold Meaghan E. Borys Keirsa K. Johnson Leni B. Nulsen Emma Wright Clinton R. Prospere Shannon M. Nelson

Lawrence T. Perera Frederic J. Marx R. Robert Woodburn Thomas L. Guidi Diane C. Tillotson Charles Fayerweather Christopher Heep Miyares & Harrington LLP 40 Grove Street, Suite 190

Wellesley, MA 02482

Re: Needham Planning Board's Consideration of 1688

Central Avenue (the "Parcel")

Dear Mr. Heep:

We represent Gregg Darish, owner of the property located at 34 Country Way, which abuts the Parcel on which Needham Enterprises (the "Proponent") has proposed to develop a child care center (the "Project").

At its December 21, 2021 meeting, the Planning Board deliberated on the Project's application for a major project permit. At several points, the Board referenced forthcoming guidance from you concerning the scope of its authority to evaluate and condition the Project. We ask that, in putting together that guidance, you include the following points; and provide this correspondence to the Board so that they may understand Mr. Darish's legal position.

First, as multiple members of the Board indicated, the controlling and most comprehensive distillation of the Board's authority to review and condition the Project is set forth in *Trustees of Tufts College v. City of Medford*, 415 Mass. 753 (1993). In *Tufts*, the Supreme Judicial Court expressly held that local zoning requirements "which serve legitimate municipal purposes . . . such as promoting public health or safety, preserving the character of an adjacent neighborhood, or one of the other purposes sought to be achieved by local zoning . . . may be permissibly enforced, consistent with the Dover Amendment," against a protected use. *Id.* at 758-59. The *Tufts* case involved an educational use, protected under the second paragraph of G.L. 40A, § 3. Seven years later, the Supreme Judicial Court clarified that the same standard applies to child care uses protected under the third paragraph of G.L. c. 40A, § 3. *Rogers v. Town of Norfolk*, 432 Mass. 374, 378 (2000) (adopting and quoting the above-cited language in *Tufts*). Consistent with the Supreme

2098980v1 1



Christopher Heep January 4, 2022 Page 2

Judicial Court's direction in *Tufts*, the Proponent bears the burden of proving that local conditions are unreasonable as applied to the Project. 415 Mass. at 759. The burden requires a showing that the condition would "substantially diminish or detract" from the proposed use; or create "[e]xcessive cost of compliance . . . without a significant gain in terms of municipal concerns." *Id.* See also *Campbell v. City Council of Lynn*, 415 Mass. 772, 778 (1993) (conditions reviewed through lens of whether they "improperly nullif[ied] the protection granted to the use" or otherwise "significantly impede[d]" the use "without appreciably advancing municipal goals embodied in the local zoning law.")

Second, we believe it would be useful to clarify that the Proponent bears the burden to establish that *each* condition imposed by the Board on the Project would be unreasonable. Any condition proven to be unreasonable to the satisfaction of a reviewing court would be stricken; all others would remain. It is not the case that if one condition falls, all others fall with it; rather, only the unreasonable condition is stricken. This point is demonstrated by extensive case law, including decisions of the Supreme Judicial Court and the Appeals Court. *See Campbell*, 415 Mass. at 784-85 (striking one municipal requirement related to dimensions and remanding to consider imposition of another related to parking); *Trustees of Boston College v. Bd. of Aldermen of Newton*, 58 Mass. App. Ct. 794 (2003) (striking municipal requirements related to floor area ratio and remanding to consider imposition of another related to parking). This legal backdrop may increase the Board's comfort as it contemplates conditioning multiple aspects of the Project.

Third, the Board has expressed concern: (1) that it has insufficient information to determine how conditions warranted under the Town's Zoning Bylaw might change the Project as shown on the plans currently before it; and (2) whether certain conditions it might impose would unreasonably impede the Parcel's use as a child care facility in contravention of the Dover Amendment. On the first point, the Board has the authority to include as a condition of any approval a requirement that the Proponent submit an updated site plan for its review to demonstrate compliance with the conditions in the decision. As noted at the last hearing, this was the approach taken by the Board when it reviewed the TripAdvisor project some years ago, which can serve as a useful precedent in the instant case. To the extent that the Board feels the record is insufficient to allow it to gauge whether potential conditions might be inappropriate under the Dover amendment, such information gaps are failings of the Proponent, not of the Board. As *Tufts* instructs, the burden to establish unreasonableness lies with the Proponent. 415 Mass. at 758-59. For example, the Board has openly considered whether the proposed new structure is sufficiently set back from Central Avenue for months; the Proponent has had every opportunity to come forward with



Christopher Heep January 4, 2022 Page 3

evidence that an increased setback would unreasonably impede its Project. The Board bears no responsibility for the Proponent electing not to do so.

Last, the Board inquired as to the standard of review applied to its decision in the event of a judicial appeal. As was noted in the discussion, a reviewing court will "find the facts de novo," regardless of the facts found by the Board. See Britton v. Zoning Bd. of Appeals of Gloucester, 59 Mass. App. Ct. 68, 72 (2003). That inquiry will include matters that have somewhat inexplicably remained unresolved by the Proponent, including the Proponent's relationship with the proposed operator (the Needham Children's Center); how the daycare center plans to use the barn, if at all; and whether the suggested use of the barn as daycare storage came from the developer or the daycare operator. These are issues that, in our view, will not favor the Proponent, particularly as a reviewing court probes the relationship between the Proponent and the Town in connection with this Project in an effort to understand these unresolved matters.

We appreciate your attention to this matter.

Sincerely,

M. Patrick Moore, Jr.

Johanna W. Schneider

cc: Evans Huber (VIA EMAIL)

From: Christopher Heep

To: Lee Newman; Alexandra Clee; Adam Block; Jeanne McKnight (jeannemcknight@comcast.net); "Paul S. Alpert";

mj@jacobs-thomas.com

Subject: FW: Needham Planning Board's Consideration of 1688 Central Avenue

Date: Tuesday, January 4, 2022 3:28:02 PM

Hello all: I have received another communication concerning 1688 Central Avenue.

Chris

Christopher H. Heep

MiyaresHarrington - Local options at work

Miyares and Harrington LLP

40 Grove Street • Suite 190

Wellesley, MA 02482

Direct: 617.804.2422 | Main: 617.489.1600

www.miyares-harrington.com

This e-mail and any attachments contain attorney-client privileged material and are not subject to disclosure

pursuant to the *Public Records Law*, M.G.L. c. 4, § 7, cl. 26th and c. 66, § 10. If you are not the intended recipient, please note that any review, disclosure, distribution, use or duplication of this message and its attachments is prohibited. Please notify the sender immediately if you have received this e-mail in error. Thank you for your cooperation.

From: Evans Huber <eh@128law.com>

Date: Tuesday, January 4, 2022 at 1:12 PM

To: Christopher Heep <cheep@miyares-harrington.com>

Cc: Schneider, Johanna W. <jschneider@hembar.com>, Moore, M. Patrick

<pmoore@hembar.com>, Hasib, Shaikh <shasib@hembar.com>

Subject: RE: Needham Planning Board's Consideration of 1688 Central Avenue

Mr. Heep:

I am writing on behalf of Needham Enterprises in response to the letter from attorneys Schneider and Moore, on behalf of Mr. Darish, that was emailed to you earlier today.

Most importantly, the submission of this letter to you as an apparent means of circumventing a deadline for submission of materials and arguments directly to the Planning Board, is procedurally improper. The attorneys for Mr. Darish understand that as counsel for the Board, it is not up to you to decide what materials -- that are nominally addressed to you -- should be forwarded with the Board. For this reason, they know that anything they send to you will, presumably, be submitted to the Board.

If this method of continuing to make submissions to the Board is permitted, there will be no end to

the materials and arguments submitted to the Board. Needham Enterprises requests that you forward this email to the Board, requesting that the Board clarify/reiterate that it is no longer accepting, and will not consider, materials or legal arguments from abutters (or the applicant).

If the Board is nevertheless inclined to consider the arguments made in the letter submitted on behalf of Mr. Darish, then it is appropriate to ask you and the Board to consider the following responses:

- A. First, we agree with the premise of the letter that you will and should be providing guidance to the Board on various legal issues relating to this application. We hope that the Board sees fit to ask you to attend tonight's meeting, and to seek your guidance on a number of the issues that Board members seem to be struggling with, most notably including (although certainly not limited to) whether the Board has the authority to require demolition of the barn, or a wholesale redesign of the project (such as leaving the barn in place but requiring that the entire building be moved behind the barn). To date, the Board has not been provided with a single case in which a municipal board successfully required the demolition of a structure proposed to be used for purposes ancillary to a use protected by the Dover amendment.
- B. Second, the repeated citation to *Trustees of Tufts College* does not support the argument that the Board has the authority in this case to impose a setback requirement beyond what the applicant is proposing. In *Tufts*, there were express dimensional, setback, and parking requirements already in the Medford Bylaw, some of which Tufts College unsuccessfully argued could not be applied to its proposed buildings because of the Dover Amendment. The rationale for the *Tufts* decision would only be applicable here if Needham Enterprises was arguing, for example, that Needham's existing setback requirement -- 35 feet -- was unreasonable as applied to this project, and was proposing a setback of *less than* 35 feet. In fact, this project more than complies with all dimensional, bulk, setback, height and parking requirements of the Town bylaw.
- C. Third, it is not correct that the Board is laboring under "gaps in information" that are the "failing" of the applicant. With respect to the concept of demolishing the barn as a means of facilitating increased setback of the main building, for example, the Board has been provided with evidence of very significant additional costs if such a course, and the attendant redesign, were to be required. Nor is it accurate that there are matters that remain "inexplicably unresolved" such as the relationship between NCC and the applicant, or how NCC plans to use the barn. NCC is the proposed, planned-for, and expected tenant in the building. As has been repeatedly noted, there is no lease between the applicant and NCC, but, given the course of these hearings and all the material and testimony that has been submitted, it strains credulity to the breaking point to suggest that Needham Enterprises actually intends to install some other tenant in the building. And, as has been repeatedly stated, the barn will be used for storage for NCC, a use which can be enforced by a condition of approval of this application.

Thank you for your attention to this matter.

Evans Huber
Frieze Cramer Rosen & Huber, LLP
60 Walnut Street
Wellesley, MA 02481
781-943-4000 (main)
781-943-4043 (direct)
781-799-9272 (cell)
eh@128law.com
www.128law.com

From: Hasib, Shaikh <shasib@hembar.com> Sent: Tuesday, January 4, 2022 10:10 AM

To: cheep@miyares-harrington.com

Cc: Evans Huber <eh@128law.com>; Schneider, Johanna W. <jschneider@hembar.com>; Moore, M.

Patrick <pmoore@hembar.com>

Subject: Needham Planning Board's Consideration of 1688 Central Avenue

Mr. Heep,

Please see the attached letter on behalf of abutter Gregg Darish, from attorneys Johanna Schneider and Pat Moore.

Regards, Shaikh

Shaikh Hasib | Administrative Assistant

Hemenway & Barnes LLP | 75 State Street | Boston, MA 02109 Office: 617.619.8233 | e-mail | website | Hemenway Trust Company

Case	Court	Year	Facts	Ruling	Relevance
Berlin Landing Realty Trust v.	Land	2021	Property owner sought to construct childcare on their	The 100-foot setback was unreasonable	If a childcare facility
Northborough	Court		property that would be leased to an unidentified "properly licensed operator." Property was located in an Industrial zone, and next to a Residential zone. The Zoning Bylaw required 100-foot setback to the boundary line of the Residential zoning district. The daycare could not	as applied to the daycare use. The Land Court noted that the 100-foot setback was intended to reduce the impacts of industrial uses on residential properties. That municipal interest was not advanced by application of the	cannot does not comply with a dimensional requirement, the Town must carefully evaluate whether that requirement must be
			comply with the 100-foot setback. If that setback was applied, the lot contained 50 square feet of buildable area. The Building Inspector said the 100-foot setback was reasonable and should be applied to the facility, the ZBA agreed, and the owner appealed to Land Court.	setback in this case.	adjusted as "unreasonable." But as noted in <i>Rogers</i> , the burden of proof is on the owner. No childcare provider was involved in this case.
Primrose School Franchising Co. v. Town of Natick ("Primrose II")	Land Court	2015	Developer proposed a 12,000 square foot childcare facility to serve 189 children and 40 staff. The facility complied with all dimensional requirements re: height, setbacks and building coverage; the lot did not satisfy frontage or lot width requirements. The ZBA initially denied the application (see discussion below) and the Land Court ruled in <i>Primrose I</i> that a special permit could be required for new construction, but not denied. In this second decision, the Land Court considered the Developer's challenge to conditions requiring construction of a new left-turn lane on Route 27, and a limit on the number of students.	 The Land Court upheld the ZBA's condition requiring developer to construct a new left-turn lane on Route 27. The Land Court ruled that the ZBA could not limit the number of students that could be enrolled at the facility. 	Site access and vehicular traffic did not provide a basis for limiting the number of children that could be enrolled at the facility.

Walker Realty, LLC v. Town of Acton	Land Court	2014	Developer proposed 23,085 square foot childcare facility. The Town's Zoning Bylaw imposed a net floor area ("NFA") limit of 2,500 for childcare facilities.	1. The Town's 2,500 "NFA" limit was unreasonable as applied to this use. The Land Court did, however, suggest that the developer reduce the size of the building. 2. Town failed to prove that traffic was sufficient to deny the project (the Town's expert opined that area would operate at LOS F; the Developer's expert opined it would be LOS C). The Land Court nonetheless instructed the developer to propose additional traffic mitigation. The Land Court noted that traffic mitigation and screening are "reasonable regulation."	"A more thorough proposal for traffic alleviation is necessary before any more work is conducted by [the Developer], but the traffic issue does not ultimately preclude [the Developer] from construction [of] the Amended Project because the Dover Amendment disallows the Town from forbidding the construction of a childcare facility subject to reasonable regulations."
Primrose School Franchising Co. v. Town of Natick ("Primrose I")	Land Court	2013	Developer proposed a new 12,000 square foot childcare facility to serve 189 children and 40 staff. The ZBA denied a special permit for the facility, and the developer appealed that denial.	The Land Court ruled that the Town could permissibly require a special permit for construction of a new childcare facility (as opposed to one located in an existing structure). The ZBA could not deny the special permit, however, as a denial would invalidate the protection that M.G.L. c.40A, §3 affords to the use. The ZBA could only impose reasonable conditions.	A special permit can be required for childcare facilities in newly constructed structures, but cannot be denied.
Jewish Cemetery Ass'n v. Wayland	Land Court	2010	Town attempted to apply special permit and site plan review to construction of a cemetery, which is a religious purpose under Dover. <u>Note</u> : This is not a childcare facility case.	Special permit could not be required for protected religious use, but site plan review was appropriate provided that it was limited to "reasonable regulations."	"I find that uses protected by the Dover Amendment may be subject to site plan review as long as such review is limited to 'reasonable regulations.'"

Calhoun v. Wellesley ZBA	Appeals Court	2005	Property owner bought two lots, and proposed to demolish the house on one lot, and expand the house on the second lot for purpose of operating a childcare facility. ZBA determined that site plan approval (which in Wellesley was effectively a special permit process) could not be required of this childcare use. Abutters appealed.	The Appeals Court agreed that where site plan approval under the Wellesley Zoning Bylaw "constitutes the granting of a special permit," it could not be required pursuant to M.G.L. c.40A, §3.	This case can likely be distinguished from <i>Primrose I</i> on the ground that it did not involve entirely new construction.
Teddy Bear Club, Inc. v. City of Newton	Land Court	2004	Property owner proposed to operate a day care in an existing single-family home. The Zoning Bylaw allowed the use by right, without the need for site plan approval, but it did require submission to the Planning Director of a "parking and drop off management plan." Abutters appealed the issuance of the building permit to the ZBA, and the ZBA ordered the building permit revoked because the parking plan would present serious traffic hazards.	The Land Court reinstated the building permit for the proposed day care, and ruled that the ZBA acted beyond its authority in rescinding that building permit. The Land Court stated that denying the use "based on general traffic safety issues would certainly violate the Dover Amendment."	
Rogers v. Norfolk	SJC	2000	Property owners wanted to establish childcare facility in their existing residence. The Zoning Bylaw set a maximum footprint of 2,500 square feet for childcare facilities. The existing house had a footprint of 3,169 square feet, and the Town informed the owners that the use was therefore not allowed.	The SJC ruled that the 2,500 maximum was facially valid, but that it could not be applied to the proposed childcare in this case. "The central question is whether application of the footprint requirement to the plaintiff's proposed project furthers a legitimate municipal concern to a sufficient extent to warrant requiring the plaintiff to alter her plans." In this case, the SJC found the regulation would "significantly impede" the use without advancing a valid municipal goal.	The question of whether a specific regulation is unreasonable "as applied" will depend on the facts of each case, and the property owner bears the burden of proof.

Petrucci v. Westwood	Appeals Court	1998	Property owner proposed to convert an existing barn, on a residential property into a childcare facility to serve 47 children and 6 staff. Town denied building permits on the grounds that facility was not accessory to the principal residential use, and because the existing barn violated setbacks and maximum height limit in bylaw.	1. Whether or not childcare was "accessory" or not was irrelevant. It was allowed. 2. Owner was not required to comply with dimensional requirements, which "would levy excessive costs of compliance on [owner] and effectively deny the use of the premises for a childcare facility."	This was not a site plan or special permit case, but it did concern the question of whether the Town could require the owner to move an existing barn (the site of the proposed use) in order to comply with setback requirements contained in the Zoning Bylaw.
Trustees of Tufts College v. Medford	SJC	1993	Tufts proposed an addition to its campus that would not comply with parking, loading and setback requirements contains in the Zoning Ordinance, and sought a declaration that they could construct its project notwithstanding these zoning violations. This case concerned generally applicable zoning requirements; there was no site plan or special permit review being applied by the City. Note: This was not a childcare facility case.	Tufts failed to demonstrate that the parking, loading and setback requirements could not be applied to the project. Those requirements could properly be applied to the proposed project.	When claiming that a zoning requirement is unreasonable "as applied" to a protected use, the owner bears the burden of proof.

To: Select Board and Planning Board Members

From: Amy Haelsen, Economic Development Manager

Date: November 15, 2021

Re: Breweries

Background

In the Fall of 2020, I was contacted by a gentleman who was interested in opening a brewery at a vacant property located in the Mixed-Use 128 District where he could brew craft beer, have on-site consumption of the beer as well as conduct retail sales of the beer and branded merchandise. He was also seeking to have live programming (music, trivia nights, etc.) and allow for food trucks and/or an outside catering company to provide food for patrons. The current zoning in Needham does not allow for all of these uses at one location.

Breweries in Massachusetts

Following this inquiry, I began to research breweries throughout the state and the zoning regulations in the towns and cities in which they were located. There are currently 210 operating breweries across the Commonwealth including brewpubs, farm-breweries, and manufacturers. Of these, 174 are open to the public and 170 have tap rooms where visitors can order a pint or flight onsite. Another 20 new breweries are expected to open by the end of 2021 and there are an additional 10 plus more breweries in the planning stages.

Why a brewery in Needham?

- Breweries continue to rise in popularity and according to the Massachusetts Brewers Guild, there is no indication that the market will be oversaturated with them anytime soon.
- They are a destination business and help draw visitors from a wide geographic area which will benefit other local businesses
- A brewery would add to the diversity of our business inventory and sends a message that we are a town that is welcoming to new/unique business types
- A brewery would help infuse new energy into a commercial or industrial area in town
- A brewery would potentially generate thousands of dollars in meals tax for the Town
- There are currently no breweries located in the surrounding communities of Newton, Dedham, Wellesley, Dover/Sherborn

Where in town should a brewery be located?

Based on the research I have done, for a brewery to manufacture and sell beer on the same site, they will need a minimum of 3,000 square feet. High ceilings, proper venting, access to high-pressure water and proper drainage are also features that are highly sought after when choosing a site for a brewery. In Needham, these types of properties are most prevalent in the following Use Districts: Mixed-Use 128, Industrial, Industrial-1,

Highland Commercial-128, and New England Business Center. Generally speaking, these locations would also allow for more parking and flexibility for multiple uses.

How other towns handle zoning for breweries

Cambridge recently changed its retail zoning to allow "craft manufacturing" of both beverages and food, which includes breweries. It's allowed by right in four zoning districts and by special permit in five zoning districts. Anything over 10,000 SF would be considered light manufacturing.

Natick added microbreweries/wineries/cideries/distilleries with accessory indoor/outdoor dining space to their allowed/permitted uses. They are allowed by right in more highway-oriented commercial areas and by special permit in downtown and industrial districts.

Medfield approved two breweries in its Industrial Extensive zoning district under a 'manufacturing' special permit as well as an 'establishment selling food' special permit. They also have a brewery in a business zone which includes a brewery, tap room and a retail store. They have food trucks come to the parking lot which are permitted separately by site plan approval from the planning board because they are in a plaza with shared parking.

Norwood allowed two breweries by special permit under the use 'food processing, bottling or packaging' which is allowed in four of their zoning districts which are light manufacturing and industrial.

Steps to obtain licensing to brew on site

To open a brewery in Massachusetts, the business entity must first seek federal approval from the Alcohol and Tobacco Tax and Trade Bureau (ATTTB) to manufacture alcohol. After this federal permit is obtained, the business must then apply to the state for a brewer's license through the Massachusetts Alcoholic Beverages Control Commission (ABCC). On the ABCC's license application, the business must indicate the physical address where the brewery will be located so a site needs to be selected before they can even apply for a license. After the business has obtained a license from the ATTTB and the ABCC they can then apply for a pouring license from the Town of Needham.

It would be prudent for the Town to amend its zoning bylaws now as a prospective brewery can't seek federal and state licensing to operate a brewery until a site has been selected. These licensing authorities require proof that the zoning at the site allows for such use.

<u>Issues to consider</u>

- Is this a use which the Town wishes to pursue? If the answer is affirmative, in which zoning districts should it be permitted and under what zoning regulatory framework (i.e. by right or by special permit) should it be administered?
- In response to an inquiry as to whether or not the Select Board can issue a pouring license to a brewery if it is outsourcing the food service to a third-party (i.e. food trucks) Town Counsel determined that the Select Board has the statutory authority to issue a Farmer Series Pouring Permit to allow a brewery to sell alcohol for on-premises consumption. However, he added that if the Board is inclined to support this new use, it should amend its regulations before issuing a license, for the purposes of consistency.

Town of Needham



500 Dedham Avenue Public Services Administration Building Needham, Massachusetts 02492 781-455-7550 ext. 255



November 17, 2021

Needham Select Board Needham Town Hall 1471 Highland Ave. Needham MA 02492

Dear Members of the Select Board,

Re: Brewery Operations in Needham

The Council of Economic Advisors (the "Council") discussed brewery operations in Needham at its November 10, 2021 meeting. This discussion focused on different brewery concepts including brewing, tasting, retailing and eating onsite.

One concept, in which a variety of beers are brewed, consumed and packaged for sale onsite might require a larger footprint and therefore better suited in industrial districts such as Needham Crossing, Mixed Use 128 or Highland Commercial 128. Such a concept may attract food trucks if there is no onsite or nearby restaurant or other food service. This type of location may also better active additional uses, perhaps entertainment uses, as part of the venue during reasonable hours and contribute towards community 'place making.'

Another concept, better suited for the Center Business district, would enable a smaller brewing facility with onsite consumption and retailing. This concept could support local restaurants by allowing take-out food to be consumed onsite.

The product of these new uses is believed to be an area amenity, having a positive impact by adding a new layer of destination retail to the commercial mix in Town.

The Council voted unanimously in support of allowing brewery operations in Needham.

Sincerely,

Adam Block

Dolern Block

Chair

Council of Economic Advisors

This draft Agenda is for Planning Board Usage Only

NEEDHAM ZONING BOARD OF APPEALS AGENDA

THURSDAY, January 20, 2022 - 7:30PM Zoom Meeting ID Number: 869-6475-7241

To view and participate in this virtual meeting on your computer, at the above date and time, go to www.zoom.us, click "Join a Meeting" and enter the Meeting ID: 869-6475-7241

Or joint the meeting at link: https://us02web.zoom.us/j/86964757241

AGENDA

Minutes Review and approve Minutes from December 16, 2021 meeting.

Case #1 – 7:30PM

646 Webster Street - Silva Development, LLC, applicant, has applied for a Special Permit under Sections 1.4.7.4, 3.5.2 and any other applicable Sections of the By-Law to allow the demolition, extension, alteration, enlargement and reconstruction of the lawful, pre-exiting, non-conforming two-family dwelling and garage located at 646 Webster Street and replacing it with a new two-family dwelling with two new single-car detached garages. The property is located at 646 Webster Street, Needham, MA in the Single Residence B (SRB) District. (continued from December 16, 2021)

Case #2 - 7:30PM

1132 Highland Avenue- Needham ACE, applicant, has applied to the Board of Appeals for a Special Permit under Sections 3.2.1, 5.1.1. 5.1.1.5 and any other applicable Sections of the Zoning By-Law to establish an after-school, enrichment program for 25 students, kindergarten to 5th grade with two staff persons and to waive strict adherence to parking and parking design requirements. The program will be in operation September through June, 3:00 to 6:00 pm on regular school days and 12:30pm to 6:00pm on early release on Wednesdays. The subject property is located at **1132 Highland Avenue, Needham MA** in the Single Residence B (SRB) District.

Case #3 - 7:45PM

32 Mark Lee Road - Wes and Lauren Soper, owners, have appealed a decision of a Building Inspector dated December 17, 2021 determining that a proposed addition and garage do not comply with setback requirements of the Zoning By-law. The subject property is a corner lot located at **32 Mark Lee Road, Needham MA** in the Single Residence B (SRB) District.

Next Meeting: Thursday, February 17, 2022 at 7:30pm



2021 DEC 16 PM 2: 07

** **	licants must consult with the Building Inspector prior to filing this plication. Failure to do so will delay the scheduling of the hearing.							
Applica	nt Info	rmation						
Applicant Name	Ne	edham ACE	Guang F	2ong)	Date: 12/15			
Applicant Address	10 (NOVINION ROOM, 10 DECENSION, 194 02472							
Phone	803-	-319-5508	email GLOR	IA RONG®HO	TMAIL. COU			
Applicant i	s 🗆 Owne	r; DTenant; □Purchaser; □Othe	er					
If not the c	wner, a l	etter from the owner certifying	gauthorization to	apply must be inc	luded			
Representa Name	ative							
Address								
Phone			email					
Representa	ative is 🗆	Attorney; □Contractor; □Archite	ect; Other					
Contact □	Me □Rep	resentative in connection with this	s application.					
Subject	Prope	rty Information						
Property A	- Address	1132 Highland	Ave	1				
Map/Pard Number								
Is property within 100 feet of wetlands, 200 feet of stream or in flood Plain?								
ls proper	ty 🗷 Re	sidential or □Commercial						
If residen □Yes □I		ovation, will renovation cor $\mathcal{W} / \mathcal{A}$	nstitute "new c	onstruction"?				
If comme	If commercial, does the number of parking spaces meet the By-Law							
requirem				NIA				
Do the spaces meet design requirements? Yes No								



ZBA Application For Hearing

Application Type (select one): Despecial Permit Despecia		prehensive					
Existing Conditions:							
Church, Lenused. This space	is to be use	ed for					
Church, lenused. This space is to be used for an after school program, with up to 25 student and 2 staff members.							
and 2 staff members.							
Statement of Relief Sought:							
Get special permit for private	after School	meet					
Get special permit for private parking requirement and para	king design	walver					
	9						
Applicable Section(s) of the Zoning By-Law:		(6)					
3.2.1, 5.1.1, 5.11.5 and any who	en applicable	By-law					
If application under Zoning Section 1.4 above, lis							
	Existing	Proposed					
· ·	Conditions	Conditions					
Use							
# Dwelling Units							
Lot Area (square feet)							
Front Setback (feet)							
Rear Setback (feet)							
I to Call a d. (Call							
Left Setback (feet)							
Right Setback (feet)							



ZBA Application For Hearing

FAR (Floor area divided by the lot area)	
Numbers must match those on the certified plot p	lan and supporting materials
Date Structure Constructed including additions:	Date Lot was created:
1914	6 (28/1913

Submission Materials	Provided
Certified Signed Plot Plan of Existing and Proposed Conditions (Required)	
Application Fee, check made payable to the Town of Needham Check holders name, address, and phone number to appear on check and in the Memo line state: "ZBA Fee – Address of Subject Property" (Required)	
If applicant is tenant, letter of authorization from owner (Required)	
Electronic submission of the complete application with attachments (Required)	V
Elevations of Proposed Conditions (when necessary)	
Floor Plans of Proposed Conditions (when necessary)	

Feel free to attach any additional information relative to the application. Additional information may be requested by the Board at any time during the application or hearing process.



I hereby request a hearing before the Needham Zoning Board of Appeals. I have reviewed the Board Rules and instructions.

I certify that I have consulted with the Building Inspector $\frac{12/06/202/}{\textit{date of consult}}$

Date: 12/15/2021 Applicant Signature

Roge

Parking Plan by Needham ACE

Program enrollment and staff:

- Needham ACE plans to enroll up to 25 students, from Kindergarten to 5th grade. Based on the initial survey, 19 families each sign up 1 student and 3 families each sign up 2 students. Thus, there are around 22 families.
- Two staff members will be on site.

School Hours of Operation:

- The program runs from September to June, following the Needham public school calendar.
- 3:00 pm -6:00 pm, regular school days.
- 12:30 pm -6:00 pm, early release Wednesdays.
- \cdot 5:30 pm 6:00 pm, parents pick up.

Location and parking availability:

- The location of Needham ACE is 1132 Highland Ave., Needham, Christ Episcopal Church. It owns the parking lot across the street, adjacent to the Needham library.
- The church leases 65 out of 85 parking spaces to the Needham library and still has 20 spaces available for parking.

Needham regulation on parking:

- For enrollment with 45 or few children, require one parking space for every five students, plus employee parking.
- Therefore, five parking spaces for students pick up and two for employees are needed. In total, the program needs seven parking spaces.

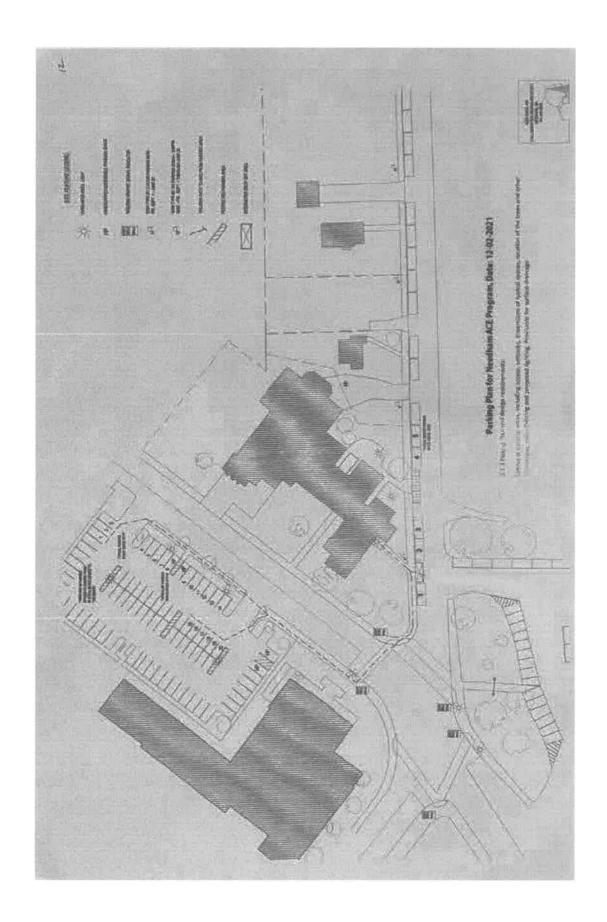
Transportation and parking plan:

For drop-off, students arrive by cars that pick them up at five Needham public elementary schools. Newman's dismissal time is 25 minutes later than the other four schools.

- o Two staff members will pick students from Broadmeadow, Mitchell, Elliot, and Sunita Williams. The cars will arrive with a 3-5 minutes time difference because of the distance and dismissal routine. The cars will drop off kids and park on the side of the Rosemary St. and the third staff on site will escort the students to the program.
- o Then two driver staff members will then pick up students from Newman and drop off them at the afterschool location. Then, one driver staff member is done with the duty and does not require parking onsite. The other driver staff and the third staff will supervise the kids at afterschool till dismissal. Altogether, the ACE program only requires two parking spots for staff on site.

For parent pick-up,

- o Before 5:30 pm, parents can do live parking at the 5 spaces on Rosemary St. as marked on the map. They are required to text upon arriving and one staff will bring the student/students to the car. If no space is available on Rosemary St., parents are required to follow the same routine as below.
- o After 5:30 pm, all parents are required to park in the 20 spaces in the parking lot adjacent to the library as marked on the map. Parents and students are required to use crosswalk to and from the program, following traffic signals.
- o Parking map and walking route will be included in the parent handbook for registered parents before the program starts.





December 14, 2021

Needham Board of Appeals Needham Town Hall 1492 Highland Avenue Needham, MA 02492

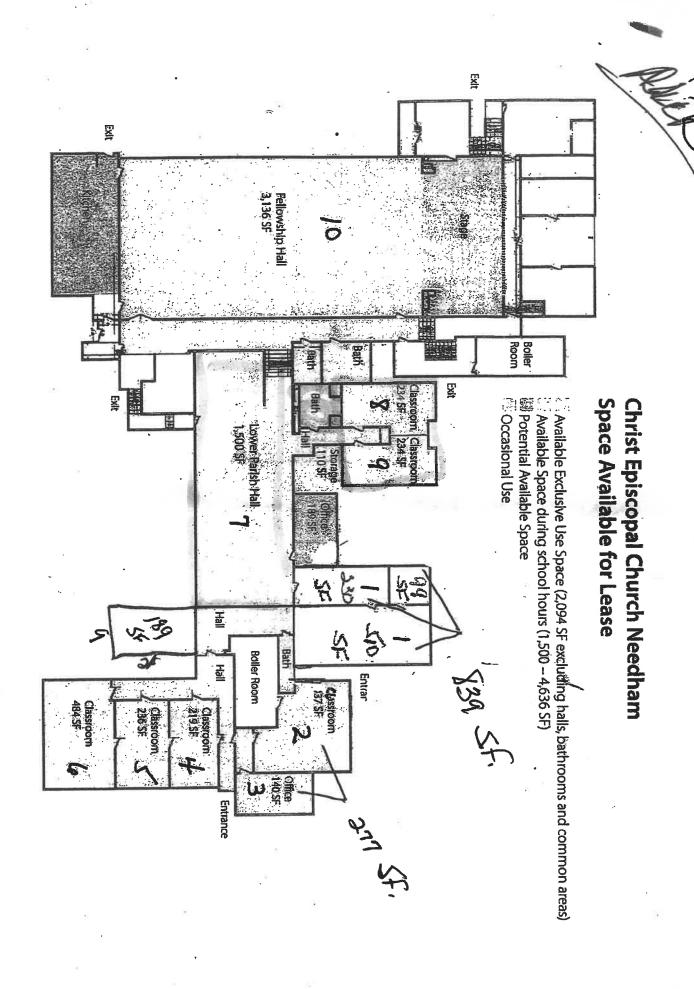
Dear Members,

Please be advised that Needham Afterschool Comprehensive Enrichment (ACE) Program has the permission of Christ Episcopal Church, 1132 Highland Avenue, Needham, Massachusetts, to apply for a ZBA Special Permit in association with the program and to use the parking lot owned by the Church for staff parking and customer pick-up/drop-off as indicated in the parking plan.

The parking lot is located on Highland Ave, Needham, Massachusetts, directly opposite the church and situated between 1111 Highland Avenue and the Needham Public Library.

Sincerely

Woody Hughes Facilities Manager



P. 17 PM 1.- 31

Applicants must consult with the Building inspector prior to filing this innification. Fallers to do so will delay the exhabition of the bassing

Appl	lication	n Fallure	to do so w	ill delay	the sch	edulin	g of the her	erin.	9
Applica	nt Inf	ormation	1						
Applicant Name	Lav	irent '	Wes S	oper					Date:
Applicant Address	32 1	Mark Li	ee Rd	Needh	rain	Ma	02494	(
Phone	207	653 90	658		email	laure	en eilber	900	zmail a
Applicant i	s S Own	er; 🗆 Tenant	; □Purchase	r; 🗆 Other					
If not the c	wner, a	letter from	the owner	certifying :	authoriza	ition to	apply must be	e inc	luded
Representa Name	ative								1
Address	-					,			
Phone					email				
Represent	ative is [□Attorney; [□Contractor;	□Archited	t; □Oth	er			
Contact 🗆	Me □Re	presentative	in connectio	n with this	applicatio	n.			
				U				,	
Subject	Prop	erty Info	rmation						
Property A	Address	32	Mark	lee R	d Ne	edha	m Ma	OS	494
Map/Par Number	cel	Map	69 cel 43		Zone of		Single R	enic	ding
ls proper □Yes 🖼	•	nin 100 fee	t of wetla	nds, 200	feet of	stream	or in flood	Plai	n?
Is proper	ty 🗵 R	esidential	or □Com	mercial					
	If residential renovation, will renovation constitute "new construction"?								
☐Yes ☑No If commercial, does the number of parking spaces meet the By-Law									
1		does the n ⊒Yes □No		parking s	paces n	neet th	e By-Law		
		neet desig		nents? [∃Yes □	No			

Application Type (select one): □Special Permit □Variance □Comprehensive
Permit □Amendment ☑Appeal Building Inspector Decision
Existing Conditions: Detached garage to be demolished for
permitted renovation of 2 story addition.
+ phase see attached

Statement of Relief Sought:	*
To be granted use of our rear set back of	109+
as given in 4.2.1 for Single Roidence B	
* please see attached	

Applicable Section(s) of the Zoning By-Law:

1.3, 7.5.1, 4.2.1 and any other applicable sections of thebylar

If application under Zoning Section 1.4 above, list non-conformities:

	Existing Conditions	Proposed Conditions
Use		
# Dwelling Units		
Lot Area (square feet)		
Front Setback (feet)		202
Rear Setback (feet)		Canada
Left Setback (feet)		8
Right Setback (feet)		7
Frontage (feet)		₩ 3
Lot Coverage (%)		55

Application Type (select one): □Special Permit □Variance □Comprehensive Permit □Amendment ♥Appeal Building Inspector Decision
Permit Mamendment Osappear Building Inspector Decision
Existing Conditions: Detached garage to be demolished for
permitted renovation of 2 story addition.
→ please see attached

Statement of Relief Sought:	
To be granted use of our rear set back of 10	F+
as given in 4.2.1 for Single Roidence B	
* please see attached	

Applicable Section(s) of the Zoning By-Law:

1.3, 7.5.1, 4.2.1 and any other applicable sections of the below

If application under Zoning Section 1.4 above, list non-conformities:

	Existing Conditions	Proposed Conditions	
Use			
# Dwelling Units			
Lot Area (square feet)			
Front Setback (feet)			
Rear Setback (feet)		200	
Left Setback (feet)			
Right Setback (feet)			
Frontage (feet)		tendita tendita	
Lot Coverage (%)		: 55	

FAR (Floor area divided by the lot area)	0.174	0.176
Numbers must match those on the certified pl	ot plan and suppo	rting materials
Date Structure Constructed including additio		t was created:

Submission Materials	Provided
Certified Signed Plot Plan of Existing and Proposed Conditions (Required)	
Application Fee, check made payable to the Town of Needham Check holders name, address, and phone number to appear on check and in the Memo line state: "ZBA Fee – Address of Subject Property" (Required)	
If applicant is tenant, letter of authorization from owner (Required)	
Electronic submission of the complete application with attachments (Required)	
Elevations of Proposed Conditions (when recessary)	
Floor Plans of Proposed Conditions (when be cassary)	

Feel free to attach any additional information relative to the application. Additional information may be requested by the Board at any time during the application or hearing process.



I hereby request a hearing before the Needham Zoning Board of Appeals. I have reviewed the Board Rules and instructions.

I certify that I have consulted with the Building Inspector	December	17,2021
	date of cons	

Date: 12 17 2021 Applicant Signature

Dear Mrs. Collins and to whom it may concern,

Please see this letter as an amendment to the completed application for the Zoning Board of Appeals hearing.

Existing Premises: 32 Mark Lee Rd is identified as Parcel # 43 on Town of Needham Assessor's Map No. 69 and is located in the Single Residence B (SRB) Zoning District. Wes and Lauren Soper ("we") currently reside there along with their 3 children (5, 3, and 1).

The existing home at 32 Mark Lee is the William Carter House built in 1903. While it has a lot of character, it can at times feel cramped with various quirks. The house sits on a very large lot (1/3 of an acre) and could be rebuilt to use up the land much more efficiently to accommodate a bigger home (current home at approximate 2,700 SF). We are committed to preserving the character of the home, while making it more accommodating for our expanding family (expecting twins to be born in May 2022).

As such, we are planning (not related to this special permit) a 2-floor addition at the rear of the house which will expand the kitchen and mudroom, add an additional 1st floor bathroom, add an additional 2nd floor bathroom, and add a room for laundry. We will also be able to relocate our bedroom to the 2nd floor so we are on the same floor as their children (current bedroom is on the 3rd floor/attic). Note again that the permitting for these improvements is submitted separately as nothing is contested with this.

In order to accommodate the modest 2 floor addition (approximately 15ft by 10 ft), we must knock down our detached garage as the addition would be approximately 7 feet from the garage. The plan is to rebuild the garage by attaching it to the house; however the garage is on the south facing side of the house and simply attaching the two would effectively block the natural flow of sunlight into the home. The solution is to build a small connector/breezeway, to lighten the look of the attached garage, as well as increase more sunlight into the home. The garage will be kept to 1.5 stories to keep the look from being too obtrusive.

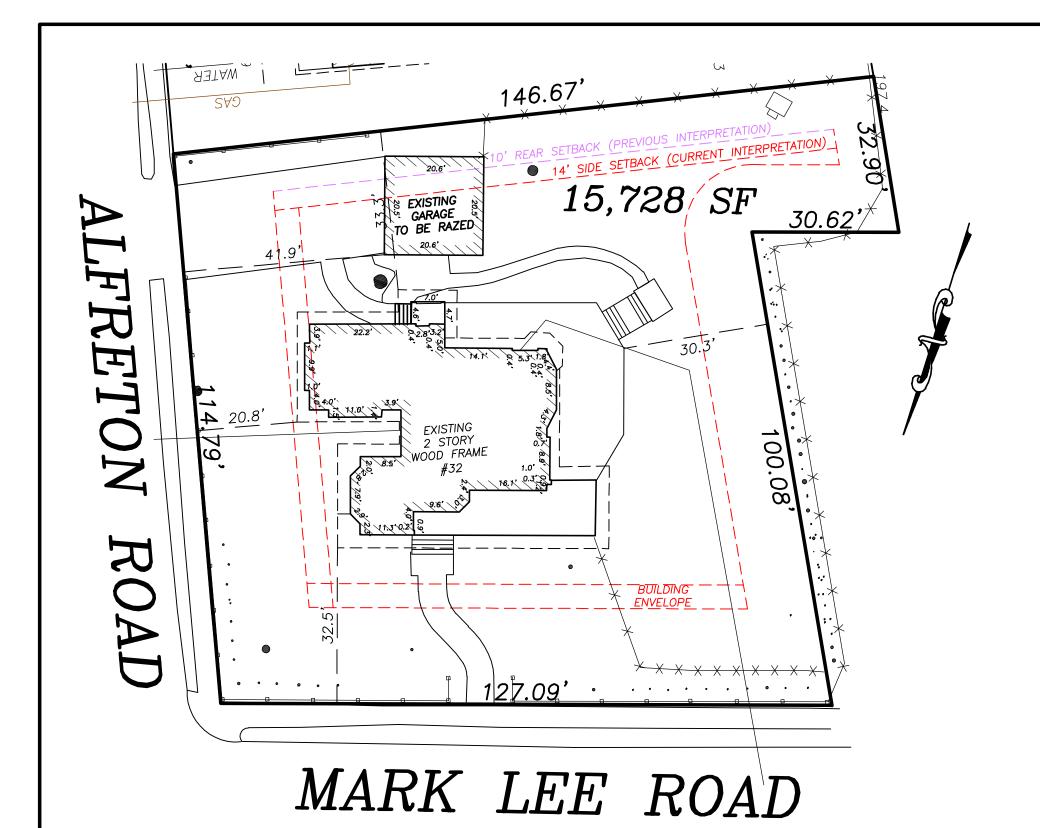
However, it was discovered after meeting with the Needham Building Commissioner (BC) that the BC interprets corner lots to have only side setbacks in addition to their two front setbacks. When asked where this was described in the bylaws, the BC pointed to section 1.3. Definitions, specifically Frontage, as follows: "a continuous portion of a sideline of a way, public or private, between the sidelines of a lot in common ownership and in the case of a corner lot, between a sideline of such sidelines. No lot shall be required to have frontage on more than one way. No lot shall be deemed to have frontage unless there exists safe and convenient vehicular access from said lot to a street or way."

As can be seen above, there is nothing that would indicate a corner lot definitively does or does not have a rear setback. In fact, the prior Needham BC interpreted the bylaws to assume that corner lots do have a rear set back, as indicated by the included prior plot plan from when the prior owners at 32 Mark Lee completed construction (included and referenced in current plot plan)

Therefore, our request today is for the ZBA to honor the language within the Needham Zoning Bylaws that grant Single Residence B homes a 10-foot rear setback. As is clearly shown, the rear of the house is opposite from the true front, and the bylaws discussed above should be applied appropriately. This would result in us being able to modestly expand our home and create a garage plan that is not imposing and preserve the look of the historic home.

Thank you for your consideration and time.

Best, Lauren and Wes Soper 32 Mark Lee Rd Needham, MA 02494



EXISTING SITE

33.3 FEET......10.0 FEET*

CURRENT RULING
MINIMUM REAR YARDN/A

*MAXIMUM OF 32 LINEAR FEET OF THE BUILDING MAY BE BUILT AT MINIMUM SETBACK THE REMAINDER MUST BE AT LEAST 2 ADDITIONAL FEET.

BASED UPON THE 16.7% INCREASE IN FOOTPRINT THE ADDITIONAL FOOTPRINT WILL BE INFILTRATED FOR WITH

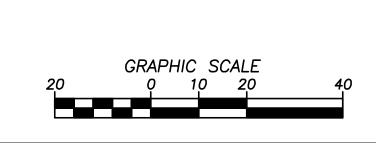
PROPOSED INCREASED FOOTPRINT = 333 SF

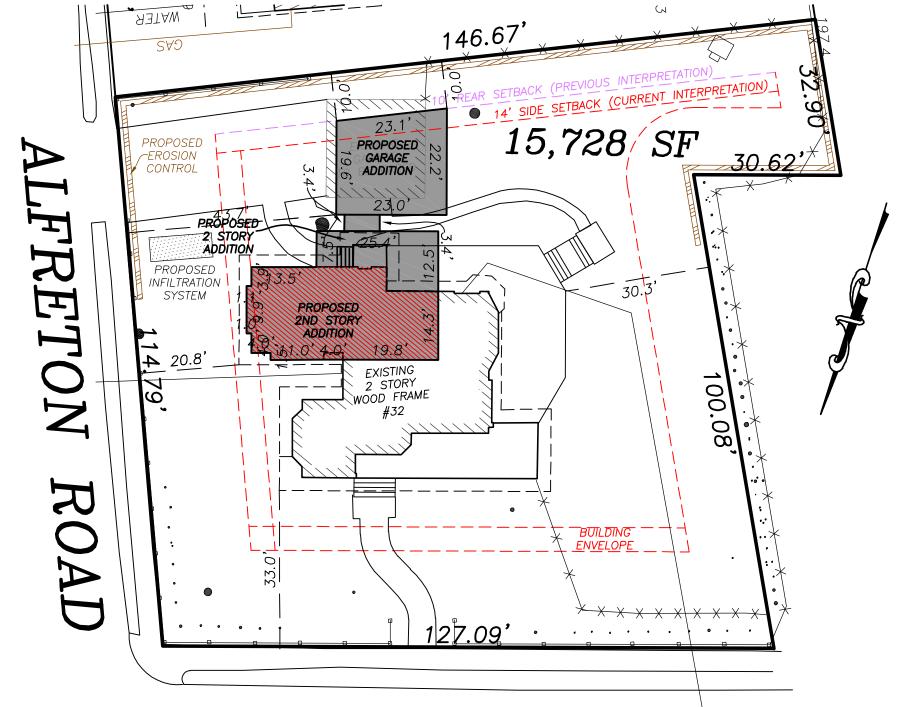
MAXIMUM BUILDING HEIGHT...... 2 1/2 STORIES...... 2 STORIES...... NO CHANGE

(333 S.F. X 1") / 12 = 27.75 Cu. Ft.

MITIGATED WITH 1 CULTEC CONTRACTOR 150 HDXL RECHARGER DRYWELL CHAMBERS (OR SUITABLE REPLACEMENT) CAPACITY OF 53.79 CU FT EACH.(11 x 4.89 CU FT) RECHARGE WILL MITIGATE COMPLETELY FOR A 1" STORM FOR THE PROPOSED FOOTPRINT SEE DRYWELL DETAIL FOR SPECIFICATIONS

AND PLAN FOR LOCATIONS. LOCATIONS AS SHOWN.





MARK LEE ROAD

PROPOSED SITE

JOB NO. 155-21

RECHARGER 150HD BY CULTEC, INC. OF BROOKFIELD, CT.
STORAGE PROVIDED = 4.89 C/FT PER DESIGN UNT.
REFER TO CULTEC, INC. S CURRENT RECOMMENDED
INSTALLATION GUIDELINES.
USE RECHARGER 150HD HEAVY-DUTY FOR TRAFFIC AND/OR H20
APPLICATIONS.

1 - 2 INCH DIA, WASHED,
CRUSHED STONE
CULTEC RECHARGER 150HD DIA, WASHED,
CRUSHED STONE
CULTEC RECHARGER 150HD DIA, WASHED,
CRUSHED STONE
CULTEC RECHARGER 150HD DIA, WASHED,
CRUSHED STONE
DETERMINED BY ENGINEER
(MAX, INLET = 12 INCHES)

ALL RECHARGER 150HD HEAVY-DUTY UNITS ARE MARKED WITH COLOR STRIPE FORMED INTO THE PART ALONG THE LENGTH COLOR STRIPE FORMED INTO THE PART ALONG THE LENGTH COLOR STRIPE FORMED INTO THE PART ALONG THE LENGTH COLOR STRIPE FORMED INTO THE PART ALONG THE LENGTH COLOR STRIPE FORMED INTO THE PART ALONG THE LENGTH COLOR STRIPE FORMED INTO THE PART ALONG THE LENGTH COLOR STRIPE FORMED INTO THE PART ALONG THE LENGTH COLOR STRIPE FORMED INTO THE PART ALONG THE LENGTH COLOR STRIPE FORMED INTO THE PART ALONG THE LENGTH COLOR STRIPE FORMED INTO THE PART ALONG THE LENGTH COLOR STRIPE FORMED INTO THE PART ALONG THE LENGTH COLOR STRIPE FORMED INTO THE PART ALONG THE LENGTH COLOR STRIPE FORMED INTO THE PART ALONG THE LENGTH COLOR STRIPE FORMED INTO THE PART ALONG THE PART

INFILTRATION SYSTEM DETAILS

NOT TO SCALE

ZONING BOARD OF APPEALS
PLAN OF LAND
32 MARK LEE ROAD
NEEDHAM, MASS.

Field Resources, Inc. LAND SURVEYORS

DECEMBER 17, 2021

SCALE 1"=20'
281 CHESTNUT ST.

P.O. BOX 324 AUBURN, MA 508 832 4332

NEEDHAM, MA. 781 444 5936

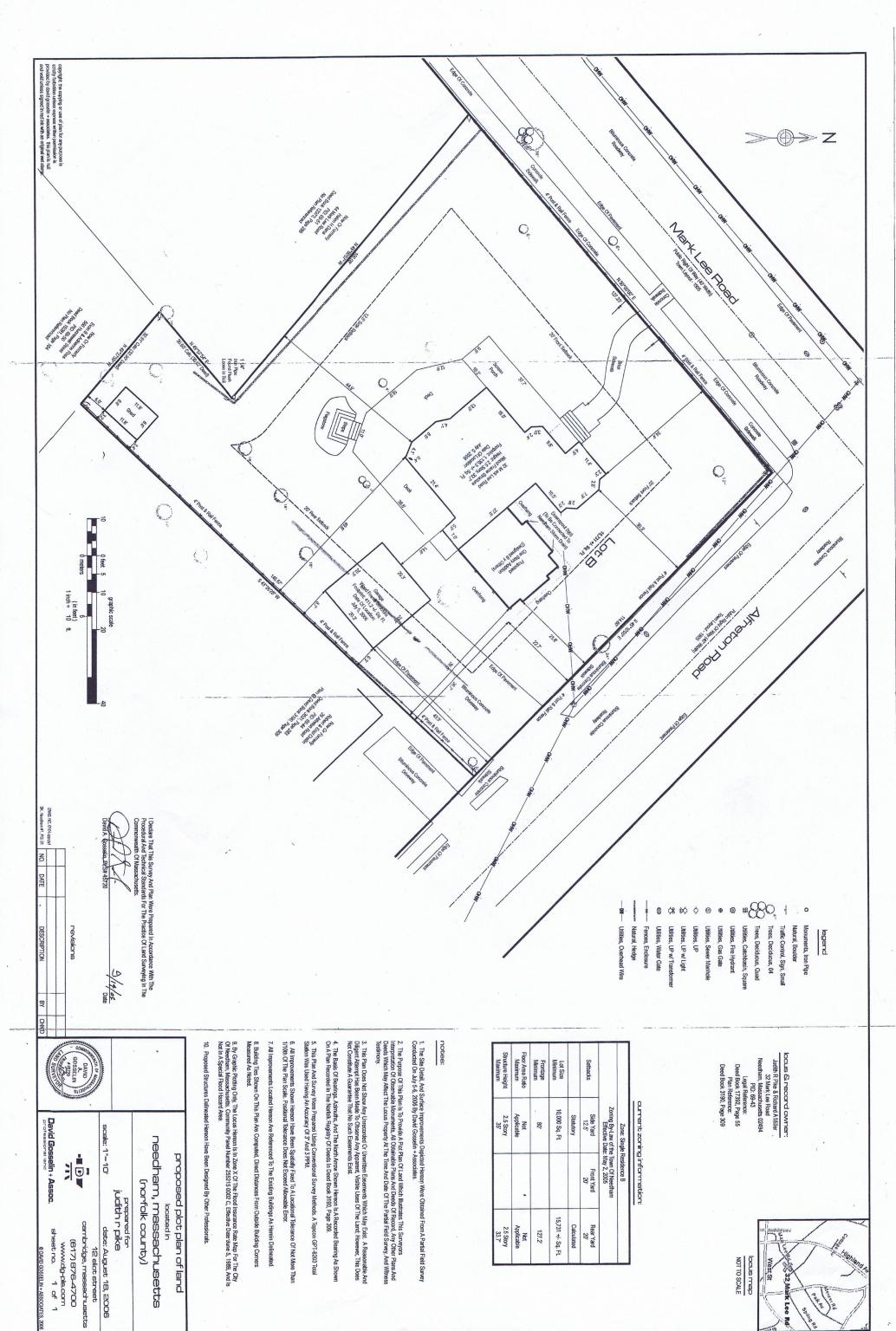
revised fieldresources@hotmail.com

BRADLEY

SIMONELLI

#47581

SURVE





Town of Needham Building Department 500 Dedham Ave Needham, MA 02492

Tel.781-455-7550 x 308

December 17, 2021

Lauren & Wes Soper 32 Mark Lee Road Needham, MA. 02492

Re: Proposed addition

Dear Mr. & Mrs. Soper,

I have reviewed the proposed plot plan dated December 17, 2021 from Field Resources for your renovations and have the following comments. This lot is a corner lot fronting on Alfreton Road and Mark Lee Roads, it has been my interpretation of the Bylaws that corner lots have two front lot-lines and in most cases the remaining lot-lines are side lot-lines.

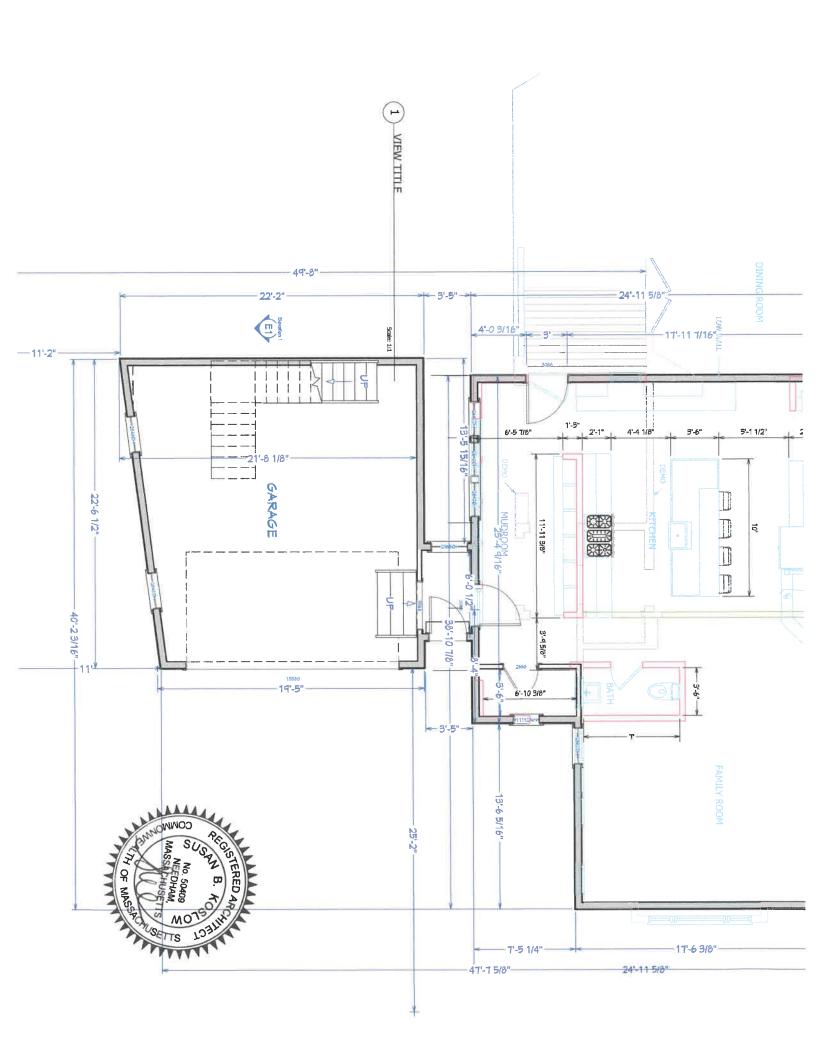
This is also a conforming lot which means the front setback would be 20' to the front of the structure 25' to the front of an attached garage and 14' to the side of the structure with an additional 2' jog in the sidewall after 32' in this case 16' for the remainder of the wall.

The proposed plan shows the new garage addition at 10'from the side-line where 14' is required for new construction. Therefore, the application for this proposed addition is denied.

Under Section 7.5.1 Appeals, if you are aggrieved by my interpretation of the Zoning By-Law you may file an Appeal to the Zoning Board of Appeals.

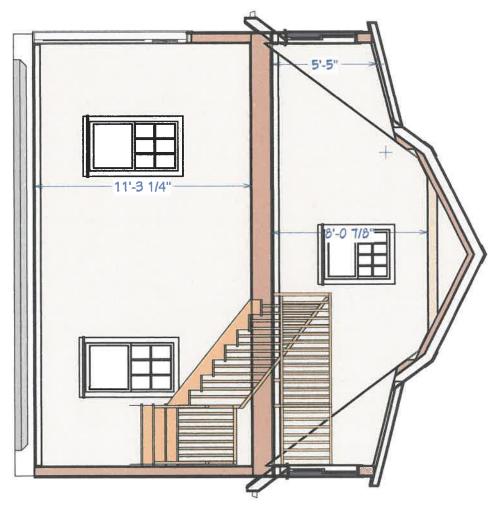
Any Questions please contact my office,

David A Roche Building Commissioner Town of Needham









Support Letters Received:

1. Subject Line: Soper Renovation Plan

Date: December 16, 2021

To Whom it May Concern,

We've seen the Soper's renovation plans and believe it will be an excellent, valuable addition to our neighborhood. As neighbors with a vested interest in the quality of the street and broader neighborhood, we are 100% fully in support of their renovation plans.

Thanks,

Jennifer Palan Sherman 566 Hunnewell Road, Needham, MA 02494

2. Subject Line: Soper support letter 12-16-2021

December 16, 2021

To whom it may concern,

Sending a quick note in support of Wes and Lauren Soper's plans to renovate their home next door to mine on Mark Lee Rd. I have seen the plans, think the renovation will be good for the neighborhood, and support the project, for what it's worth.

Best regards,

Vars stand

Tyler Young

44 Mark Lee Rd, Needham Ma 02494

3. Subject Line: 32 Mark Lee Road Date: December 16, 2021

To Whom it May Concern,

We've seen the Soper's renovation plans and believe it will be an excellent, valuable addition to our neighborhood. As neighbors (we live at 12 Mark Lee Road, just a few houses down) with a vested interest in the quality of the street and broader neighborhood, we are 100% fully in support of their renovation plans.

Thanks,
Alex & Anna Weiss
12 Mark Lee Rd, Needham Heights, MA 02494

4. No Subject Line
Date: December 17, 2021

I'm a neighbor of Lauren and Wes and I want to support their building plans. I live in <u>18 mark Lee Rd, Needham Heights</u> and think it's a great idea.

Joe makee

NEEDHAM PLANNING BOARD MINUTES

November 8, 2021

The Needham Planning Board Virtual Meeting using Zoom was remotely called to order by Paul Alpert, Chairman, on Monday, November 8, 2021, at 7:00 p.m. with Messrs. Jacobs and Block and Ms. McKnight, as well as Planning Director, Ms. Newman and Assistant Planner, Ms. Clee.

Mr. Alpert took a roll call attendance of the Board members and staff. He noted this is an open meeting that is being held remotely because of Governor Baker's executive order on March 12, 2020 due to the COVID Virus. All attendees are present by video conference. He reviewed the rules of conduct for zoom meetings. He noted this meeting does not include any public hearings so there will be no public comment allowed. If any votes are taken at the meeting the vote will be conducted by roll call. All supporting materials are posted on the town's website. He noted the Board will take a vote to go into Executive session. After the Executive session the Board will vote to adjourn the meeting.

<u>Vote to increase Project Peer Review Fee: Major Project Site Plan: Needham Enterprises, LLC, 105 Chestnut Street, Suite 28, Needham, MA, Petitioner (Property located at 1688 Central Avenue, Needham, MA).</u>

Mr. Alpert turned this item over to Mr. Block to Chair. Mr. Block stated there is a \$5,100 increase for the GPI peer review due to more meetings than originally anticipated and an additional traffic review. There was communication from the applicant that they are not going to pay that \$5,100. The Board needs to discuss this and see what remedies and what obligations we have to inform the applicant how much is spent to date and to provide an estimate to complete this work. Ms. Newman stated the Planning Board gives written notice of the selection of an outside consultant and the fee to be charged and gets a check for the fees in its entirety. The Planning Board can increase fees after notice to the applicant. Failure by the applicant to pay can be a cause for the Planning Board to deny the application.

Mr. Block asked if there have been projects when outside experts have been used rather than our own experts. Ms. Newman stated there have been outside experts hired for some projects the Board thinks are necessary ie: the Children's Hospital. The Board members all felt they needed the extra expertise on this project. All agreed a third party independent review was necessary. Mr. Alpert stated his recollection is part of the reason for the independent review was because some neighbors raised a concern that, given the applicant's status as a company managed by the Chair of the Select Board, there was concern regarding the independence of the town employees to review the traffic study. He noted Mr. Jacobs requested an outside peer review. Mr. Jacobs confirmed that and noted that was a concern of his.

Mr. Block asked how much of the \$5,100 is for additional meetings. Ms. Newman noted there are at least 3 additional meetings. Mr. Block asked if they have spent that much to date. Ms. Newman noted they are at the end of the funds available as of the last meeting. There needs to be an add on to the contract. If there are <u>fewerless</u> meetings the money will be returned. Mr. Block clarified this money is for future work. Mr. Alpert asked if it is in GPI's contract <u>that</u> they can stop working. The town has a contract and GPI has agreed to a certain obligation under the contract. GPI is asking the Board to amend the contract to increase the fee. <u>Mr. Alpert said Hh</u>e needs to review the contract and is not prepared to vote tonight.

Mr. Alpert noted Attorney Evans Huber emailed this afternoon and that is part of the public record. He raises 2 objections to increasing the fee. 1) GPI exceeded the scope of their authority on the peer review of traffic study and they also reviewed the engineering plans. This raised questions that had nothing to do with the traffic. He is concerned the Town Engineer did not do that work and GPI did. He feels GPI did go beyond the scope. 2) GPI is billing by the hour and spends time at meetings where other than traffic was discussed. Mr. Alpert stated he is not sympathetic to that. The contract needs to be reviewed and the developer needs to find a way to pay for extra time if needed. He noted the developer paid \$1.25 million for the project site and will pay another \$1.5 to \$2 million dollars for the project and they are quibbling over \$15,000 extra in fees. He finds that disturbing since it is a relatively small amount.

Ms. McKnight noted the engineering department reviewed the overall drainage and gave an opinion. GPI's input had to do with the driveway and traffic concerns. She feels all those comments were within the framework of traffic. Mr. Jacobs

stated he had read Mr. Huber's letter and he makes some interesting points. The Board does not need to make a decision tonight. Mr. Block stated it is in everyone's interest to have GPI present at the next meeting. The Planning Director needs to make GPI aware they should be present. Ms. Newman stated there is no money to pay them. Ms. McKnight stated it is uncalled for that for Mr. Huber's client will to not pay for this. The neighbor's comments allegedwere a lack of faith in the developers traffic studies. The only way to assuage is to have an independent consultant and to satisfy the Board. She commented it is unbelievable the cost is being objected to.

Ms. Newman stated Children's Hospital was going to go over <u>budget</u>, and she had to amend their contract. The scope has changed and there is additional work. There needs to be a new scope of work and the contract needs to be amended. Mr. Block stated all members should review the contract. He wants to see if there is work not contemplated in the original scope. Mr. Alpert asked Ms. Newman to send copies of the contract to all 4 members and to Mr. Heep. He would ask Mr. Heep to look at the rules of the Planning Board regarding this so if the developer refuses to pay it does the Board have any remedies against the developer. Could the Planning Board go to the Town Manager to see if there are funds? Mr. Block stated there are 2 options – if the applicant refuses to pay, they have the legal authority to deny the application or effectively pay for this in a request to the Finance Committee. Mr. Heep stated a refusal to pay fees would be the basis to deny. It is never a good practice to incur fees from a developer without getting the money in advance. The Planning Board is in a good position to get the funds from the developer. Ms. McKnight asked if the original contract with GPI requires them to continue working until the Board is satisfied the job is done. Is there an unforeseen circumstance clause?

A motion was made to demand additional money to be paid by the developer unless, after review of the contract with GPI, it is clear the Board has the right to demand work be done free of charge by GPI. Mr. Alpert asked Mr. Heep to send the citation of the state law. Mr. Heep stated state law authorizes the Town to adopt the regulation. Mr. Jacobs suggested amending the motion to say the Planning Board, after discussion, decides the Planning Board's sense is to not proceed further in this hearing without the services of GPI. The proposed amended contract with GPI is reasonable and the Planning Board will not proceed with this hearing until such time as satisfactory payment has been secured for the payment of GPIs amended contract. Ms. McKnight stated this does not address the opportunity to have GPI do the work under the price quoted. She is concerned with any further delays. Mr. Jacobs withdrew his amendment.

Upon a motion made by Ms. McKnight, and seconded by Mr. Alpert, it was by a roll call vote of the four members present unanimously:

VOTED: to demand additional money to be paid by the developer unless, after review of the contract with GPI, it is clear the Board has the right to demand work be done free of charge by GPI.

Mr. Alpert noted the Board will proceed to Executive session. He noted all members need to be in a secure location. Mr. Block took a poll of all to be sure of their secure location. Mr. Alpert asked Mr. Heep to explain why the Board has the ability to go into Executive session and why there will be an Executive session and not an open meeting. Mr. Heep stated one reason for Executive session is to discuss complaints brought against the Board. There was an open meeting law complaint for the 10/19/21 meeting. It is not a legal requirement to go into Executive session but possible under the open meeting law. The Board needs to announce before going into executive session if they will return or not.

Mr. Jacobs stated it should be included in the motion the Board does intend to return to open session and they will not discuss the executive session. Ms. McKnight agreed. Mr. Alpert stated he is in favor of including that the adjournment of the executive session will be the end of the open meeting. Mr. Block is inclined to return to the open session.

Upon a motion made by Mr. Alpert, and seconded by Ms. McKnight, it was by a roll call vote of the four members present unanimously:

VOTED:

to note the Planning Board shall enter into executive session at 8:00 p.m. under MGL Ch. 30A, Section 21(a)(1) to discuss the open meeting law complaint filed by Mr. Abruzese alleging the Planning Board violated the open meeting law and to vote on response to same and allow Planning Director Ms. Newman, Assistant Planner Ms. Clee, Notetaker Ms. Kalinowski and Town Counsel Mr. Heep to attend the executive session and to return to open session after.

The Planning Board adjourned the Executive Session and returned to the regular meeting of the Planning Board at 9:30 p.m.

Upon a motion unanimously: VOTED:	made by Ms. McKnight, and seconded by Mr. Jacobs, it was by a roll call vote of the four members present to adjourn the open session meeting at 9:30 p.m.
Respectfully su Donna J. Kalin	owski, Notetaker
Adam Block, V	Vice-Chairman and Clerk

From: Jim Flanagan
To: Planning

Subject: Proposed development at 888 Great Plain Ave (formerly Hillcrest Gardens)

Date: Tuesday, December 21, 2021 10:01:25 AM

Dear Needham Planning Board Members -

Thank you for your service to our community. I am writing on behalf of my fellow members of the Housing Working Group of Equal Justice Needham. We are an informal group with a mission to *Remedy past discrimination and current housing crisis by increasing housing choice & accessibility of affordable housing in Needham.* In service of the mission, we seek to better understand challenges and opportunities by collaboratively working with town leadership and other representative groups. It is in that spirit that I write today.

The purpose of the letter is to share some ideas and feedback related to the proposed development at 888 Great Plain Ave. Here is our current understanding based on documents and discussion shared at the <a href="https://doi.org/10.1007/journal.o

- All ideas presented are preliminary and were shared by the new property owner to inform the community and encourage input.
- J. Derenzo Properties, LLC, the new owner of the property at 888 Great Plan Ave. shared preliminary interest in 1) developing the property for mixed use purposes and 2) seeking approval for the zoning to be changed from single family to central business district or a special permit to allow for such a development.
- A concept was shared of a mixed use development to include "a three-story building with underground parking, commercial and residential uses on the first floor (there are two residential units in the back) and residential use on the second and third floors." The initial estimate is for 3 retail units; 24 residential units (mix of one to three bedrooms); and 39 below grade parking spaces.

We strongly support development of additional housing units in the CBD but only if they add significant numbers of truly affordable units. At first blush, the preliminary proposal does neither. Based on the current affordable housing unit target of 12.5%, only 2-3 units would be available and it is doubtful they'd be truly affordable. For example, a recent presentation by housing experts hosted by the Needham League of Women Voters highlighted how few of Needham public employees and school personnel can afford to live here without spending significantly more than 30% of household income. And market rents for Chapter 40B developments range from \$2,600-\$4,200 for Charles River Landing and \$2,200-\$5,000 at The Kendrick. The one-and two-bedroom units at the Modera Needham are starting at \$3,200 and \$3,600, respectively. Two-bedroom units in older buildings are at least \$1,900 which would require an income of approximately \$84,000.

We believe that at least 10 units of affordable housing should be created at the 888 Great Plain sight with an affordability index that is more realistic and accurate such as 65% of AMI. We also ask the Planning Board to consider that site in the context of nearby properties such as the First Baptist Church which recently voted to develop a plan to close. Alternatively, you might encourage a development similar to the 6 townhomes built at 17 High Street (but made more affordable for rent or purchase.) We are also asking the Housing Plan Working Group to consider this type of property as part of the new affordable housing plan and suggest that the Planning Board not act on this property without sufficient input from that group.

Thank you for considering our initial input. We look forward to working with you on this and other planning/zoning considerations in support of your responsibilities to guide the physical growth and development of Needham in a coordinated and equitable manner.

Sincerely, (and wishing you all safe, happy and restful holidays!)

Jim Flanagan (in collaboration with the EJN Housing Working Group) 863 Webster Street

jimdflanagan@gmail.com

978-994-9451

Cc:

Lee Newman, Director of Planning & Community Development Alex Clee, Assistant Planner From: <u>Douglas Simon</u>
To: <u>Planning</u>

Subject: 888 Great Plain Avenue

Date: Wednesday, December 22, 2021 11:55:34 AM

Planning Board c/o Lee Newman, Planning Director Town of Needham 1471 Highland Avenue Needham, MA 02492

Members of the Board,

My wife and I live at 90 Dedham Avenue in town. We recently became aware of the development proposal at 888 Great Plain Avenue and wanted to express our concern over the scope of this project.

Although we are in favor of the town's attempt to produce more affordable housing, we feel the proposed plan is too big for the given lot size and will in effect eliminate all of the existing green, open space.

We are also concerned with the traffic generated from this new, mixed-use, especially with the proposed crossing of a heavily-trafficked walkway.

We hope that it's not too late for you to consider our concerns.

Thank you for caring for our neighborhood.

Sincerely,

Anna and Douglas Simon

Transportation Planning & Review Committee

COMMITTEE CHARGE

COMMITTEE CHARGE				
Туре:	Ad hoc			
Legal Reference:	Select Board	Goals		
Appointing Authority:	Select Board			
Number of Voting Members:	Eleven (11)			
Term of Appointment:	six (6) months			
Special Municipal Employee:	Special Municipal Employee			
Staff Support:	Town Manager/Designee, Director of Public Works/Designee, Director of Planning & Community Development/Designee			
Members		Year Appointed	Term Expiration	

Composition: Nine (9) voting members:

- Two (2) current Select Board Members
- One (1) current member of the Transportation Committee
- One (1) current member of the Rail Trail Advisory Committee
- One (1) current member of the Traffic Management Advisory Committee
- One (1) representative appointed by the Planning Board
- The Town's Designated Representative to the MBTA Advisory Board
- The Town's Designated Representative to the Regional Transportation Advisory Council
- The Town Moderator or Designated Representative

Two Community Members at Large

Purpose:

The Transportation Planning & Review Committee (TPRC) shall guide the Town evaluating the existing structure in place for transportation planning and make recommendations to the Select

Board.

Charge: The TPRC shall:

1) Review the Town's existing committee structure including the Transportation Committee, Traffic Management Advisory Committee, and Rail Trail Advisory Committee, and identify

areas of need not presently covered like Complete Streets.

2) Recommend for adoption to the Select Board and/or Town Meeting a new committee

structure, if appropriate.

3) If a new committee structure is recommended, the TPRC will recommend a charge and

composition for any structure that is proposed.

Charge Adopted: [DATE] **Charge Revised:**

SME Status Voted: TBD

Per M.G.L. Ch. 268A Sec. 1(n), the Select Board Members serving on TPRC cannot claim SME

status, even though the TPRC Committee, as an entity, is designated as such.