AGENDA Lexington Planning Board

Wednesday, March 15, 2023 Held virtually through Zoom link available here: https://www.lexingtonma.gov/377/Access-Virtual-Meetings 6:00 PM

Development Administration

- 1. 0 Cambridge St./Concord Turnpike Tracer Lane Solar Project Public hearing for site plan review continued from 12/7/22, & 2/15. Tracer Lane II Realty. Applicant requested continuance to May 3. Board will vote to postpone this hearing without testimony.
- 2. 75 Outlook Drive Lot Release, Tree Mitigation, and Minor Modification Request for Gross Floor Area reallocation of Site Sensitive Development special permit residential development

Board Administration

1. Presentation and consideration of updated Transportation Management Overlay District Plan for TMO-1 (Hartwell Avenue) Area

Board Administration

- 1. Staff Updates
- 2. Board Member Updates -Review and discuss any other Annual Town Meeting Articles 1-32
- 3. Upcoming Meetings: 3/29
- 4. Review of Meeting Minutes: 2/8, 2/15, 3/1

Adjourn

1. The meeting will continue until all items are finished. The estimated adjournment time is 7:45 pm



Meeting broadcast by LexMedia

AGENDA ITEM SUMMARY

LEXINGTON PLANNING BOARD

AGENDA ITEM TITLE:

Staff Updates

PRESENTER:

<u>ITEM</u> NUMBER:

SUMMARY:

SUGGESTED MOTION:

FOLLOW-UP:

DATE AND APPROXIMATE TIME ON AGENDA:

3/15/2023

AGENDA ITEM SUMMARY

LEXINGTON PLANNING BOARD

AGENDA ITEM TITLE:

0 Cambridge St./Concord Turnpike Tracer Lane Solar Project – Public hearing for site plan review continued from 12/7/22, & 2/15. Tracer Lane II Realty. – Applicant requested continuance to May 3. Board will vote to postpone this hearing without testimony.

PRESENTER:

<u>ITEM</u> NUMBER:

Staff

SUMMARY:

The Lexington Planning Board opened the public hearing in December for this application from Tracer Lane II Realty LLC for approval of a major site plan review under §135-6.11 and 9.5 of the Zoning Bylaw for a solar energy system. The property is located at 0 Cambridge/Concord Turnpike, Map 19, Lots 1A in the CM Zoning District. The Applicant is proposing to install a ±1.0- megawatt (MW) ground-mounted large scale solar energy system, with emergency and maintenance access from Sherbourne Place in Waltham. February 15, the Planning Board continued the public hearing without discussion at the request of the Applicant to Wednesday, March 15, 2023 at 6:00 pm on Zoom to allow more time for revised material to be submitted. Access the virtual Zoom meeting. - *APPLICANT REQUESTS FURTHER CONTINUANCE TO BOARD'S MAY 3 MEETING*

New material uploaded on 2/17/23. Application materials may be viewed online - on the "files" tab. The Board should vote on the request to continue and announce the new date, time, and place.

SUGGESTED MOTION:

Move to continue the public hearing to Wednesday, May 3 at 7:00 pm in Battin Hall in the Cary Memorial Building, 1605 Massachusetts Avenue and on Zoom.

Important Note: Please check with the Planning Office for final location details a few days prior as meeting may turn to fully remote all on Zoom.

FOLLOW-UP:

DATE AND APPROXIMATE TIME ON AGENDA:

3/15/2023

ATTACHMENTS:

Description

Continuance Request

Туре

Cover Memo



Town of Lexington
PLANNING BOARD

1625 Massachusetts Avenue Lexington, MA 02420 Tel (781) 698-4560 planning@lexingtonma.gov www.lexingtonma.gov/planning Robert D. Peters, Chair Michael Schanbacher, Vice Chair Melanie Thompson, Clerk Robert Creech, Member Charles Hornig, Member Michael Leon, Associate Member

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Date: __March 8, 2023_____

2023 08 Mar, 4:16 pm

TOWN CLERK

Lexington Planning Board

LEXINGTON MA

Town Office Building 1625 Massachusetts Avenue Lexington, MA 02420

Re: Request for Continuance of Public Hearing/ Extension of Constructive Approval Date:

Project Address: <u>0 Cambridge St./Concord Turnpike Map 19, Lot 19A Tracer Lane Solar Project</u> <u>Site Plan Review application</u>

To the Lexington Planning Board:

Applicant requests the continued public hearing scheduled for <u>March 15, 2023</u>, to be further continued to the Planning Board's <u>Wednesday</u>, <u>May 3, 2023</u> meeting.

Therefore, I am hereby requesting to extend the decision approval date to _____June 23, 2023______

Respectfully,

MANGGEV Signature

Manager Harald VANIXIAN Print Name: /

Applicant or Applicant's Representative: Iracer Lane I

AGENDA ITEM SUMMARY

LEXINGTON PLANNING BOARD

AGENDA ITEM TITLE:

75 Outlook Drive - Lot Release, Tree Mitigation, and Minor Modification Request for Gross Floor Area reallocation of Site Sensitive Development spec permit residential development

PRESENTER:

Eduardo Alvarez, Applicant

SUMMARY:

Site Sensitive Special Permit Development Approved in April 2022. Applicant requests a lot release from the Covenant, requests tree mitigation and replacement approval, and re-al of the allowable gross floor area. Staff memo is attached.

Access the virtual meeting.

The project application is posted in VPC as PLAN-23-2 https://lexingtonma.viewpointcloud.com/records/73674

SUGGESTED MOTION:

Suggested Motion:

Move to *approve* the Minor Modification to the landscape plan by requiring the Applicant to plant 8 trees (on the approved planting list) with a minimum of 3 inch caliper at DBH to r the cluster of six trees removed at the rear of the property and two trees removed from the no disturb area in the front of the property as approved by staff around the same general location. The trees shall be planted by June 30, 2023.

Move to *approve* the Minor Modification request to reallocate the allowed GFA by reducing the GFA in the historic homes' basement and increasing the GFA of the three other home that the new allowed GFA is 7,799 sq.ft. for 2 Effie Place 7,602 sq.ft. for 3 Effie Place 7,602 sq.ft. for 3 Effie Place

7,602 sq.ft. for 5 Effie Place

Move to **release** Lot B also known as 75 Outlook Drive from the Covenant dated July 25, 2022 for the Definitive Plan set titled "Site Sensitive Development Definitive Plan 75 Outlo Drive dated November 15, 2021 and revised through May 23, 2022 and authorize the Planning Board Chair person to sign on the Planning Board's behalf. The lot release shall not b issued until the limit of work line is placed in the field.

FOLLOW-UP:

DATE AND APPROXIMATE TIME ON AGENDA:

3/15/2023

ATTACHMENTS:

	Description	Туре
Ľ	Planning Board Approval Decision	Exhibit
Ľ	Approved Plans Outlook Dr	Exhibit
Ľ	Covenant	Exhibit
Ľ	75 OUTLOOK 5 additional trees removed in the unprotected area reduced	Exhibit
Ľ	75 Outlook Dr Lot Release	Cover Memo
Ľ	75 Outlook Dr. additional tree removal report signed by Lanscape Architect	Cover Memo
Ľ	alpha echo 75 Outlook LLC Request for lot B Release Signed	Exhibit
D	75 outlook memo 3_8_23	Cover Memo

ITEM NUMBER:



Date: July 19, 2022

Town of Lexington Town Clerk's Office

Mary de Alderete, Town Clerk

Tel: (781) 698-4558 Fax: (781) 861-2754



Bk: 80557 Pg: 483 Doc: DECIS Page: 1 of 13 08/09/2022 03:24 PM

I hereby certify that twenty days have elapsed since the decision of the Planning Board on 4/6/2022:

Special Permit Site Sensitive Residential Development & Street Adequacy Determination

75 Outlook Dr

Which was filed on 4/12/2022, in the office of the Town Clerk. No appeal was filed in the office of the Town Clerk within the 20-day period.

BIL - 77840 19 - 85

Daydealdure

Mary de Alderete Town Clerk

1625 MASSACHUSETTS AVENUE • LEXINGTON, MASSACHUSETTS 02420

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LEXINGTON PLANNING BOARD 1625 MASSACHUSETTS AVENUE, LEXINGTON, MACELVED

MEMBERS OF THE PLANNING BOARD: 2022 AFR 12 APR 10: 41 CHARLES HORNIG, CHAIR - ROBERT PETERS, VICE-CHAIR - MICHAEL SCHANBACHER, CLERK - ROBERT CREECH - MELANIE THOMPSON

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DECISION OF THE LEXINGTON PLANNING BOARD ON A SPECIAL PERMIT SITE SENSITIVE RESIDENTIAL DEVELOPMENT AND STREET ADEQUACY DETERMINATION FOR THE PROPERTY LOCATED AT 75 OUTLOOK DRIVE DECISION GRANT DATE: APRIL 6, 2022

Cieneral Property Information

Property Address: 75 Outlook Drive Assessor's Information: Map 41, Lot 49A Zoning District: One-Family Dwelling (RS)

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Application Information

Application(s): Special Permit Site Sensitive Development, pursuant to § 135-6.9 and § 135-9.4 of the Zoning Bylaw, Street Adequacy Determination, pursuant to § 176-7.3, Accessory Structure Apartment pursuant to § 6.9.16 and § 6.7.7

Date application(s) were filed with the Town Clerk: December 6, 2021

General Project Contact Information

Applicant and Property Owner Name: Alpha Echo 75 Outlook LLC Project Contact: Eduardo Alvarez Civil Engineer: Michael Novak, No. 50696, Patriot Engineering Land Surveyor: Matthew Lowry, No. 49825, RJ O'Connell & Associates, Inc. Landscape Architect: Jeffrey A. Thoma, No. 1377, J Thoma Land Design Studios

Public Hearing Information

Date legal ad was published in the Minuteman Newspaper: December 30, 2021 and January 6, 2022 Date of opening public hearing: January 19, 2022

Dates of continued public hearings: March 2, 2022 and March 16, 2022

All Planning Board meetings and the public hearings were held remotely via Zoom, pursuant to the Governor's March 12, 2020 Executive Order suspending certain provisions of the Open Meeting Law M.G.L. c. 30 §18, c. 20 of the Acts of 2021, and c. 22 of the Acts of 2022 further extending the remote provisions until July 15, 2022. The Planning Board accepted public comments via Zoom.

Site Sensitive Development Special Permit 75 Outlook Drive - April 6, 2022 Page 1 of 12

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PLANNING BOARD PLAN APPROVAL INFORMATION

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Plan set titled "75 Outlook Drive (Assessors Map 41 Lot 49A) Site Sensitive Development Plan Set" prepared by Patriot Engineering, Lexington, Massachusetts, prepared for Alpha Echo 75 Outlook LLC, dated November 15, 2021, revised to February 25, 2022 consisting of 12 sheets.

PROJECT DESCRIPTION

The proposed development will subdivide the 2.1-acre lot into four distinct lots. As a site-sensitive development, the existing house and detached garage will be preserved and three additional single-family homes will be added in a manner that will not detract or compromise the historic home. Three of the houses will be accessed by a common driveway in the same general location as the existing driveway. In addition, much of the existing vegetation will be maintained and preserved.

PUBLIC HEARING

The Lexington Planning Board opened the public hearing for the project located at 75 Outlook Drive on January 19, 2022. After hearing testimony, the Board continued the public hearing to March 2, 2022. On March 2, 2022, the public hearing was opened and continued to March 16, 2022 without testimony. On March 16, 2022 the Planning Board opened the continued hearing and after hearing further testimony voted to close the public hearing.

FINDINGS

During the course of the public hearing process, the Planning Board took under advisement all information received from various municipal departments; comments made by members of the public; in addition to information submitted by the Applicant. The Planning Board arrived at this Decision based on the Special Residential Development Zoning Bylaws and makes the following findings specifically for the project at 75 Outlook Drive.

- A. <u>Property, Historic Preservation and Neighborhood Characteristics</u>: The proposed Site Sensitive Development includes four lots each to be improved with one single-family dwelling unit. This is consistent with the surrounding residential uses on similar-sized lots. On August 18, 2021, the Historical Commission held a public hearing on the request for a building demolition permit for 75 Outlook Drive and voted to impose a one-year demolition delay expiring on August 18, 2022. On February 16, 2022, the Historical Commission held a public hearing and approved the request for a partial building demolition permit and modification to the structure at 75 Outlook Drive. The existing historic house and the detached garage containing the accessory structure apartment will be preserved with minor exterior changes as approved by the Historical Commission. The owner has agreed to place a preservation restriction on the property, to be accepted by the Lexington Historical Commission, to ensure that the existing house, garage, and their setting is appropriately preserved.
- B. <u>Building Disposition</u>. The proposed dwellings are generally sited in a manner similar to the abutting neighborhood.
- C. <u>Traffic and Parking</u>: The Planning Board reviewed the existing conditions of the road as part of this special permit and the street adequacy determination. The proposed development utilizes

Site Sensitive Development Special Permit 75 Outlook Drive – April 6, 2022 Page 2 of 12

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the existing driveway and curb cut to access three of the four houses in the development. One additional curb cut off of Outlook Drive will be required to access the new house on Proposed Lot B. The Applicant has proposed access and utility easements to facilitate the use of the common driveway by all of the residents of the development. The Applicant has also agreed to implement required roadway improvements to Outlook Drive, an unaccepted street, for the entire length of the subject property's frontage. The Planning Board has determined that Outlook Drive along the frontage is not currently of adequate grade and construction but will be upon completion of the proposed improvements. The Applicant will request that the Town install signage along that same section of Outlook Drive to discourage speeding along the newly improved roadway.

D. <u>Dwelling Unit Count and Limitations on Unit Size</u>: The proposed development complies with the provisions of § 135.6.9.3.1. The submitted proof plan depicts four (4) fully-compliant building lots. The proposed development includes four (4) distinct lots each improved with one single-family dwelling unit as well as one accessory structure apartment within the existing detached garage on proposed lot A. The proposed project also complies with the maximum Gross Floor Area requirements in § 135.6.9.6.1 as follows:

Lot	Proof Plan lot size	Proof Plan allowed GFA per §135.4.4.2	SSD proposed lot size	SSD proposed GFA
A	15,500 sf	7,030 sf	28,064 sf	9,131 sf (includes Principal & Accessory Structure)
В	25,732 sf	8,667 sf	21,434 sf	7,146 sf
с	20,818 sf	7,881 sf	20,416 sf	7,146 sf
D	15,500 sf	7,030 sf	23,537 sf	7,146 sf
Totals		30,608 sf		30,569 sf

E. <u>Stormwater and Environmental Impact</u>: The proposed development meets the Town's standards and requirements with respect to stormwater management. Stormwater management facilities to handle run off from the impervious surfaces and structures on the three lots accessed by the common driveway will be directed to a subsurface infiltration system located within access and utility easement A on proposed Lot A. A separate stormwater infiltration system for run off generated by the improvements on Lot B will be located directly on that lot. The existing environmentally sensitive natural areas and landscaping on the site will be protected through the establishment of several "no-build" zones on the proposed lots.

Site Sensitive Development Special Permit 75 Outlook Drive – April 6, 2022 Page 3 of 12

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- F. <u>Common Facilities & Utilities</u>: Utilities will be provided to all of the lots through proposed access and utility easements along the common driveway and across Lot B in order to connect to Outlook Drive. Applicant has agreed to establish a Home Owner's Association that will be responsible for the maintenance of the common drive and its infrastructure such as drainage snow management, and trash removal.
- G. <u>Visual Impacts</u>: Much as of the existing, mature landscape will be preserved on the site surrounding the homes along the buffers at the entrance to the new drive and behind lots C & D. Adequate native plantings will be added to the site after construction to replace what was removed during site development. The Applicant has also agreed to include appropriate existing landscape features as part of a Preservation Restriction on the property to ensure that the historic house and its setting are not compromised by the new construction.

CONDITIONS OF APPROVAL

The Planning Board finds that the Application and Site Plans submitted by the Applicant comply with all applicable provisions of Lexington's Zoning Bylaw and applicable regulations, relevant to this review, except those waived by the Planning Board during the public review of the project. Accordingly, the Planning Board votes to approve the plan subject to the following conditions:

A. General Provisions.

- 1. This approval is limited to four (4) dwellings and one (1) accessory structure apartment not to exceed 1,000 square feet within the detached garage on Lot A as shown on the site plan entitled "75 Outlook Drive (Assessors Map 41 Lot 49A) Site Sensitive Development Plan Set" prepared by Patriot Engineering, Lexington, Massachusetts, prepared for Alpha Echo 75 Outlook LLC, dated November 15, 2021, revised to February 25, 2022, except that the height of the new buildings may deviate from the approved elevations as necessary to limit hammering and or other techniques to eliminate ledge.
- 2. Applicant shall update the plan set "75 Outlook Drive (Assessors Map 41 Lot 49A) Site Sensitive Development Plan Set" prepared by Patriot Engineering last revised February 25, 2022 sheet 5 of 12 titled Site Construction Plan to include a notation in the gross floor area chart detailing the GFA for the principal dwelling, the garage apartment, and the rest of the garage. The final revised plan set shall be submitted to the Planning Department.
- 3. No material corrections, additions, substitutions, alterations, or any changes shall be made in any plans, proposals, and supporting documents approved and endorsed by the Planning Board without the prior written approval of the Planning Board, or their designee. Any request for a material modification of this approval shall be made in writing to the Planning Department for review and approval by the Planning Board, or their designee and shall include a description of the proposed modification, reasons the modification is necessary, and any supporting documentation. Upon receipt of such a request, the Planning Department may, in the first instance, decide in writing authorizing a minor modification to the site plans, or the Planning Director may refer the matter to the Planning Board, which may consider and approve minor modifications at a regularly scheduled Planning Board public meeting. In the event the Planning

Site Sensitive Development Special Permit 75 Outlook Drive – April 6, 2022 Page 4 of 12

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Board determines the change is major in nature (e.g., resulting in material changes, newly identified impacts, etc.), the Planning Board shall consider the modification at a noticed public hearing.

4. In the event that the permit is not exercised or substantial use thereof has not commenced within three (3) years of the date of recording, except for good cause as determined by the Planning Board, the permit shall be deemed null and void.

B. Before the start of any site work:

- 5. The Applicant shall record this Decision with any exhibit(s) at the Middlesex South Registry of Deeds prior to the commencement of authorized site activity and shall submit proof of recording to the Planning Office. Failure to record this Decision prior to the commencement of authorized site activity may result in rescission of this Decision.
- 6. The Property Rights and Dimensional Standards Plan (Sheet 4 of the approved plan set), shall be revised to include street name and house numbers, and locations of bounds demarcating the "no build" open space and then endorsed by the Planning Board and recorded at the South Middlesex Registry of Deeds. A mylar copy of the recorded plans bearing the date of recording and the book and page number shall be delivered to the Planning Department before any building permits are issued.
 - 7. Applicant is responsible for coordinating address assignments. "Effie Place" has been approved by public safety and the Planning Board. Any new names must be reviewed by both public safety and the Planning Board.
 - 8. Before endorsement of the Property Rights and Dimensional Standards Plan, the Planning Board must receive a performance guarantee, in accordance with the provisions of §135-9.4.5 of the Zoning Bylaw, to secure the construction of the common drive and the installation of utility and services. Said form of guarantee may be varied from time to time by the Applicant subject to agreement on the adequacy and the amount of said guarantee by the Board.
 - 9. A minimum of fourteen (14) days prior to the commencing construction the Applicant or designee shall contact the Planning Department Office to schedule a pre-construction meeting.
 - 10. At the pre-construction meeting, the project team shall provide the name, address, and emergency contact telephone number of the individual or individuals who shall be responsible for all activities on site and who can be reached twenty-four (24) hours a day, seven days a week. In the event project management changes, all new contact information shall be submitted to the Planning Board within (24) twenty-four hours.
 - 11. The provisions of Chapter 120 (Tree Bylaw) apply to this project as no waivers were requested. Applicant is responsible for filing a tree removal permit with the Tree Warden. The existing trees and vegetation to remain shall be protected in the field from damage during construction according to the Town's tree bylaw. The limits of work and trees to be removed and trees to be preserved shall be clearly identified in the field.

C. Prior to Partial Demolition Permit for Historic Structure:

Site Sensitive Development Special Permit 75 Outlook Drive – April 6, 2022 Page 5 of 12

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12. The final executed historic restrictive covenant executed by the Applicant/Owner and the Lexington Historical Commission and proof of recorded at the South Middlesex Registry of Deeds shall be submitted to the Planning Office and Building Office.

D. Before the issuance of the first Building Permit:

- 13. The Applicant shall draft a Homeowner's Association Operations and Maintenance (O&M) Plan and submit such to the Planning Office for preliminary review as to form and content. The O&M Plan shall at a minimum include the Association's responsibilities, in perpetuity, with respect to:
 - a. Maintenance of all stormwater management facilities, roadways, trash and waste removal, snow removal, preservation of the existing trees, and other infrastructure improvements;
 - b. Enforcement of the "no build" areas with access and utility easements and on individual lots; and
 - c. Maintenance of the landscaping in accordance with the landscape plan, which shall be amended to include only plants that are native to Middlesex County per The Vascular Plans of Massachusetts: A Count Checklist, latest editions.
 - d. A clear description of the no-clear sections of Lots A, B, C and D where existing trees will remain and are not to be cleared by the new homeowners. These sections are delineated by the "Proposed Filtermit" and the "Proposed Limit of Work" on Sheet 5 of 12 of the Plan Set dated Feb 25, 2022. These sections must also be delineated on the ground in a permanent fashion. Removal of dead and unhealthy trees are allowed from these sections by agreement of the HOA and the Lexington Tree Warden. The HOA agreement must make the new homeowners aware of this condition.

E. During Construction and Site Development

- 9. A copy of this Decision shall be kept on the Site in a location that is highly visible and accessible during construction.
- 10. All construction activities relative to this decision shall comply in all respects to all applicable Zoning Bylaw, Planning Board Zoning Regulations, and other municipal requirements unless specifically waived by a vote of the Planning Board and recorded in writing.
- 11. Any work in the roadway on the property of 75 Outlook Drive right-of way and utility work is subject to the Department of Public Works Rules and Regulations. Agents of the Planning Board shall have the right, with prior notice to Applicant, to enter the site and to gather all information, measurements, photographs, or other materials needed to ensure compliance with this approval. Agents of the Planning Board entering onto the site for these purposes shall comply with all safety rules, regulations and directives of the Applicant and the Applicant's contractors.

Site Sensitive Development Special Permit 75 Outlook Drive – April 6, 2022 Page 6 of 12

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- 12. No equipment on-site shall be started and allowed to warm up prior the start of the allowed construction hours or hours outlined in the Lexington Noise Control Bylaw. No vehicles are to arrive at the construction Site before the designated construction hours, which includes no vehicle parking, standing or idling on adjacent public or private streets. Oversized deliveries of construction materials shall occur before or after peak traffic hours.
- 13. The limits of clearing of land or grading for the installation of any improvements relative to the project, including, but not limited to the driveways, stormwater management system, and utilities, shall be the limits of the grading shown on the site plans. Prior to any clearing of the land, the limits of such clearing and grading as shown on the approved plan shall be clearly marked in the field and shall remain in place until the completion of the project construction.
- 14. The Applicant shall perform daily cleanup of construction debris, including soil on streets within two-hundred (200) yards from the entrance of the site driveways caused by construction relative to the project.
- 15. All stormwater and erosion control management shall be checked prior to the start and finish of each workday.
- 16. The Applicant shall check all stormwater features prior to and at the end of each construction day. In the event a multiple day storm event occurs, the project manager shall check on the stormwater features to ensure they are functioning properly and have not exceeded their capacity. Any repairs, adjustments, or deficiencies shall be made immediately.
- 17. The Applicant shall provide appropriate erosion control methods such as silt fences and straw wattle/organic hessian fabric burlap filled with compost around the stockpiles in case of a storm event, in addition to the temporary dust control requirements.
- 18. The use of hay bales shall be prohibited on-site.
- 19. The Applicant shall be responsible for ensuring that runoff and eroded material does not run on to Outlook Drive.
- 20. The Applicant shall comply with the Stormwater Management Plan, prepared for Alpha Echo 75 Outlook, LLC, Lexington, Massachusetts, Prepared by Patriot Engineering, Lexington Massachusetts, dated November 15, 2022, revised to February 25, 2022.
- 21. All utilities shall employ energy efficient devices and techniques in accordance with the State Building Code.
- 22. All utilities will be located underground. Overhead electric and telecommunications services will be extended underground to service the project.
- 23. When blasting is required, the Applicant shall comply with the Massachusetts Comprehensive Fire Code: 527 CMR 1.00 seq and any related Town bylaws.
- 24. No parking or standing of construction vehicles is permitted on Outlook Drive.
- F. Prior to the request for the final Certificate of Occupancy:

Site Sensitive Development Special Permit 75 Outlook Drive – April 6, 2022 Page 7 of 12

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- 25. Prior to requesting an occupancy permit for the last of the three new homes to be constructed, the Applicant is responsible for completing the road reconstruction for Outlook Drive as required by the Street Adequacy Determination. Reconstruction work shall be consistent with the revised Street Adequacy Determination Plan entitled "75 Outlook Drive Street Adequacy Determination Plan entitled "75 Outlook Drive Street Adequacy Determination, Massachusetts", prepared by Michael Novak of Patriot Engineering, dated November 15, 2021 and revised on January 14, 2022. All work shall be to the Town's engineering department standards. Applicant shall coordinate with the Engineering Departments and obtain any necessary permits prior to any roadway construction.
- 26. The Applicant shall work with the Town to take the steps necessary for the Town to accept the portion of Outlook Drive in front of 75 Outlook Drive, if the Engineering Division determines road acceptance is appropriate.
- 27. All deeds and easements shall be prepared for review and approval by the Town. The deeds must include a specific reference to this special permit as well as a narrative and/or diagram, as necessary, to explain the preservation restrictions and/or limit of work areas. Upon approval by the Town, the applicant shall file the appropriate deeds and easements with Middlesex South District Registry of Deeds or Middlesex South Registry District of the Land Court. Proof of such recording shall be provided to the Planning Department, which includes the date of recording, along with the book and page number of executed legal documents.
- 28. The Applicant shall establish a Homeowner's Association or Trust, recorded with the Middlesex South District Registry of Deeds, which shall be approved as to form and content by both the Planning Board and Town Counsel, for the purposes of the operation and maintenance in perpetuity of the roadway, stormwater and drainage infiltration system, trash and waste removal, infrastructure and street lights, and snowplowing, in addition to associated improvements.
- 29. The Applicant shall provide the following performance guarantees for the Project.
 - a. Upon completion of the Project and prior to the request for a Certificate of Occupancy, the Applicant shall provide the Planning Board with an "As Built Plan" stamped by a Professional Engineer registered in the Commonwealth of Massachusetts certifying that all improvements are completed in accordance with the approved Site Plans in a form acceptable to the Lexington Engineering Division.
 - b. The as-built plan shall be submitted in both hard copy and electronic formats (PDF and AutoCAD) to the Lexington Engineering Division for certification. The AutoCAD file must conform to the current form of the Mass GIS Standard for Digital Plan Submission to Municipalities or other standard requested by the Lexington Engineering Division. The plan shall include, but not be limited to, site utility improvements and tie-in dimensions to all pipes and connection points. The as-built information shall be delivered to Planning Division a minimum of five (5) business days in advance of the Applicant seeking a Certificate of Occupancy sign-off to allow time for the Town Engineer, or designee to review and approve the submitted information. The Applicant shall also

Site Sensitive Development Special Permit 75 Outlook Drive – April 6, 2022 Page 8 of 12

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submit a statement certifying that all conditions of approval of this decision have been met and site improvements are complete.

G. Request for a Certificate of Occupancy

30. Prior to the issuance of the first Certificate of Occupancy for the Project, the Applicant shall install permanent bounds, monuments, or markers that have been physically installed by a Land Surveyor registered in the Commonwealth of Massachusetts and reviewed by the Department of Public Works. Said Land Surveyor registered in the Commonwealth of Massachusetts shall provide a written summary regarding the installation of all permanent bounds, monuments, or markers, along with a site plan showing the exact location of each permanent bound, monument, or marker. The permanent bounds and monuments shall be installed according to the Planning Boards Subdivision Regulations.

H. Roadway and Public Infrastructure

- 31. The Applicant or Homeowners Association/Trust shall remain responsible for the plowing of snow in the driveway, trash and recycling removal, the maintenance of the common driveway, infrastructure within or under the proposed roadway, and all surface and subsurface storm drains and infrastructure through, or under the roadway.
- 32. The proposed roadway within the property of 75 Outlook Drive, shown on the plans as Effie Place, shall remain private in perpetuity.

Traffic/Transportation

33. The Applicant shall provide a "Stop" sign at the intersection of 75 Outlook Drive and the property of 75 Outlook Drive. Such sign shall be located appropriately to allow for vehicles exiting the site to stop and see vehicles from all directions.

Off-street Parking Spaces

34. The paving of front lawns for additional off-street parking shall not be permitted. The only offstreet parking provided and allowed for the residential units is the garage and the driveway leading to the garage.

Landscaping and Streetscape

- 35. All ground utility equipment shall be screened with landscaping, fencing, and other visually appealing materials. Efforts shall be made to buffer noise and decrease the visual impacts of such infrastructure.
- 36. Snow storage shall not obstruct sight lines to preserve public safety or interfere with site circulation. Snow storage shall be on the Applicant's property and not in the Outlook Drive right-of-way.

Site Sensitive Development Special Permit 75 Outlook Drive – April 6, 2022 Page 9 of 12

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RECORD OF VOTE

On April 6, 2022, the Planning Board voted number (5) in favor, none (0) opposed, and none (0) in abstention to grant an approval with conditions for the Definitive Residential, Site Sensitive Special Permit Residential Development Application and Street Adequacy Determination for the property at 75 Outlook Drive.

Special Permit – Site Sensitive Development

Charles Hornig - yes Robert Peters - yes Robert Creech - yes Michael Schanbacher - yes Melanie Thompson – yes

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Signature of the Chair: Date:

EXHIBITS (Not attached unless indicated)

The Applicant has filed with the Planning Board various plans and reports required under the requirements of the Lexington Zoning Bylaws and Planning Board Zoning Regulations. During the review process, the Applicant and its professional consultants also submitted revisions to plans in response to requests by the Planning Board and by the various municipal departments that reviewed the Project. All of these plans, reports and correspondence are contained in the Planning Board's files and are hereby incorporated into this Decision by reference.

- Form B General Application for Approval of a Plan for Development for the property known as 75 Outlook Drive, dated November 15, 2021, and stamped in with the Town Clerk on December 6, 2021
- Form G-CE Designer's Certificate Civil Engineer, Michael Novak, No.50696, dated November 15, 2021
- 3. Form G-LA Designer's Certificate Landscape Architect, No.1377, dated November 15, 2021
- Plan set titled "75 Outlook Drive (Assessors Map 41 Lot 49A) Site Sensitive Development Plan Set" prepared by Patriot Engineering, Lexington, Massachusetts, prepared for Alpha Echo 75 Outlook LLC, dated November 15, 2021, revised to February 25, 2022
 - Page 1: titled "Cover Sheet" prepared for Alpha Echo 75 Outlook, LLC, prepared by Patriot Engineering, signed and stamped by Michael J. Novak, Civil No.50696, and also

Site Sensitive Development Special Permit 75 Outlook Drive – April 6, 2022 Page 10 of 12

LEXINGTON, MA TOWN CLERK COPY ATTES

prepared by J Thoma Land Design Studios, stamped and signed by Jeffrey A. Thoma, Landscape Architect No.1377, dated November 15, 2021, revised to February 25, 2022

- Page 2: titled "Record Conditions Plan" prepared for Alpha Echo 75 Outlook, LLC, prepared by RJ O'Connell & Associates, INC., stamped and signed by Matthew Lowry, Land Surveyor No.49825 Civil, dated July 13, 2021
- Page 3: titled "Site Analysis Plan" prepared for Alpha Echo 75 Outlook, LLC, prepared by Patriot Engineering, stamped and signed by Michael J. Novak, Civil No.50696, dated November 15, 2021, revised to February 25, 2022
- Page 4: titled "Property Rights Plan" prepared for Alpha Echo 75 Outlook, LLC, prepared by Patriot Engineering, dated November 15, 2021, revised to February 25, 2022
- Page 5: titled "Site Construction Plan" prepared for Alpha Echo 75 Outlook, LLC, prepared Patriot Engineering, stamped and signed by Michael J. Novak, Civil No.50696, dated November 15, 2021, revised to February 25, 2022
- Page 6: titled "Site Utility Plan" prepared for Alpha Echo 75 Outlook, LLC, prepared by Patriot Engineering, stamped and signed by Michael J. Novak, Civil No.50696, dated November 15, 2021, revised to February 25, 2022
- Page 7: titled "Landscape Planting Plan" prepared for Alpha Echo 75 Outlook, LLC, prepared by J Thoma Land Design Studios, stamped and signed by Jeffrey A. Thoma, Landscape Architect No.1377, dated November 15, 2021, revised to February 25, 2022
- Page 8: titled "Tree Protection & Removal Plan" prepared for Alpha Echo 75 Outlook, LLC, prepared by J Thoma Land Design Studios, stamped and signed by Jeffrey A. Thoma, Landscape Architect No.1377, dated November 15, 2021, revised to February 25, 2022
- Page 9: titled "Site Details" prepared for Alpha Echo 75 Outlook, LLC, prepared by prepared by Patriot Engineering, Lexington, Massachusetts, stamped and signed by Michael J. Novak, Civil No.50696, dated November 15, 2021
- Page 10: titled "Site Details" prepared for Alpha Echo 75 Outlook, LLC, prepared by Patriot Engineering, Lexington, Massachusetts, stamped and signed by Michael J. Novak, Civil No.50696, dated November 15, 2021
- Page 11: titled "Site Details" prepared for Alpha Echo 75 Outlook, LLC, prepared by Patriot Engineering, Lexington, Massachusetts, stamped and signed by Michael J. Novak, Civil No.50696, dated November 15, 2021
- Page 12: titled "Geometric Proof Plan" prepared for Alpha Echo 75 Outlook, LLC, prepared by Patriot Engineering, Lexington, Massachusetts, stamped and signed by Michael J. Novak, Civil No.50696, dated November 15, 2021
- 5. Model House Elevation Plans titled "Briggs Estate Cul-de Sac" 75 Outlook Drive, Lexington, Massachusetts 02421
 - Page 1: Front Elevations, dated November 30, 2021
 - Page 2: Right Elevations, dated November 30, 2021
 - Page 3: Back Elevations, dated November 30. 2021
 - o Page 4: Left Elevations, dated November 30, 2021
- Historic Home Elevation Plans titled "Briggs Hill House 1" 75 Outlook Drive, Lexington Massachusetts 02421

Site Sensitive Development Special Permit 75 Outlook Drive – April 6, 2022 Page 11 of 12

LEXINGTON, MA

TOWN CLERK

COPY ATTES

- Page 1: Front Elevations, dated August 6, 2021
- Page 2: Left and Right Elevations, dated August 6, 2021
- Page 3: Back Elevations, dated August 6, 2021
- Page 4: Back Elevations, dated August 6, 2021
- 7. Historic Commission decision, dated February 17, 2022
- 8. Draft Declaration of Briggs Hill Covenant and Restrictions of Homeowners Association
- 9. Stormwater Report, prepared for Alpha Echo 75 Outlook, LLC, Lexington, Massachusetts, Prepared by Patriot Engineering, Lexington Massachusetts, dated November 15, revised February 25, 2022
- 10. Applicant's response letter to Planning Board Comments, dated February 25, 2022
- 11. Staff Memo to the Planning Board, dated January 12, 2022, revised to March 14, 2022

AM BOOMBRAD THEREBY CERTIFY THE FOREGOING IS A TRUE COPY OF A PAPER RECORDED IN BOOK

RECEIVED

TRUE COPY ATTEST udilloute

Site Sensitive Development Special Permit 75 Outlook Drive – April 6, 2022 Page 12 of 12

TOWN CLERK LEXINGTON, MA

<u>NOTES:</u>

- 1. THE INFORMATION DEPICTED ON THIS PLAN HAS BEEN COMPILED FROM THE TOWN OF LEXINGTON ONLINE GEOGRAPHIC INFORMATION SYSTEM.
- 2. LAND USE WITHIN 500 FEET OF THE SUBJECT PROPERTY IS PRIMARILY SINGLE FAMILY DWELLINGS.

MAP - LOT 42-16

33-247

41-36

33-209

33-205

33-193

41-64

41-32

41-56

41-46

33-199

33-248

41-37

33-214

33-204

41-30

33-210

33-245

33-201A

41-129

33-217

41-77

33-243A

41-34

41-78

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41-83

33-249

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33-212

33-144 41-50

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33-196 41-57

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33-183

33-186

41-84

41-35

33-189

33-215

41-74 42-1

33-181A

33-187

33-142A

33-184

41-53

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41-49B 41-48

41-62

33-211

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33-188

41-63

33-246

41-44

41-47

41-81

33-213

33-192

33-194

33-200

41-51A

33-198 42-17A

33-182 41-58

33-218

33-244

41-79-79A

33-141

41-75

41-39A

JTTERS

ADDRESS	OWNER NAME
MIDDLEBY RD	TOWN OF LEXINGTON
PROSPECT HILL RD	TOWN OF LEXINGTON
FAIR OAKS TER	VON HOYNINGEN-HUENE NIKOLAUS C & VON
	FEHM MICHAEL
102 OUTLOOK DR	SAGER ALAN
103 OUTLOOK DR	JENSEN KLAVS F & JENSEN CHRISTINE B TRS
OUTLOOK DR	WILLIAMS JOHN R & WILLIAMS BARBARA A TRS
OUTLOOK DR	TOWN OF LEXINGTON
12 FAIR OAKS DR	THIBODEAU PAUL
2 WACHUSETT CIR	MINUTTI PAUL G
16 FAIR OAKS TER	XIAO LANLAN
17 FAIR OAKS DR	BROOKS CHRISTOPHER S
22 FAIR OAKS DR	
18 FAIR OAKS DR	BROWN DENNIS A
34 FAIR OAKS DR	MOORE MICHAEL J & ELLEN M
37 WACHUSETT DR	ROY CHRISTOPHER B
45 BASKIN RD	MARASCA ROBERT A
38 WACHUSETT DR	REYNOLDS BRADLEY S
41 FAIR OAKS DR	GU HONG
43 BASKIN RD	GRIFFITH STANLEY N
46 BASKIN RD	CHANG KUANG CHOU
47 WACHUSETT DR	
48 BASKIN RD 3 WACHLISETT CIR	
35 WACHUSETT DR	ATKINSON CHARLES N & DELILAH C
25 FAIR OAKS DR	BAKER CATHERINE L & HERBERT P TRUSTEES
49 OUTLOOK DR	MONTGOMERY ALBERT G & DEE ANN
67 OUTLOOK DR	BERG MATTHEW & SARA
68 OUTLOOK DR	RYMES MARGARET A L/E & SMITH JULIE A
7 FAIR OAKS DR	MARTINEZ FAMILY REVOCABLE TRUST
72 PROSPECT HILL RD	KERAMATY HAMID
53 BASKIN RD	SCHAPFEL FRANK T
45 WACHUSETT DR	HENOCH GARY
	TRAIMAN DAN S & DORIT
61 PROSPECT HILL RD	KVAAL ANDREW R
64 PROSPECT HILL RD	LING YIHUI
65 OUTLOOK DR	VANDERHOOFT DAVID S & VANERHOOFT SHANNON
54 BASKIN RD	CHAIT MANYA R
6 FAIR OAKS TER	CHIM GUNG-WEI
69 PROSPECT HILL RD	WEISBERG ROBERT J
9 FAIR OAKS DR	
51 BASKIN RD	
58 PROSPECT HILL RD	FISHER DOUGLAS A
59 OUTLOOK DR	CEMENSKA MARCI J
54 OUTLOOK DR	LUM VICTOR
66 PROSPECT HILL RD	BEARD VIVIAN C
66 OUTLOOK DR	COSTELLO JOSEPH E
90 OUTLOOK DR	MACQUEEN DUNCAN A JR & MACQUEEN ELEANOR
43 WACHUSETT DR	LIBBY BRAD W
47 BASKIN RD	HEIDARI SANAZ
60 OUTLOOK DR	ENGELWARD BEVIN PAGE
91 OUTLOOK DR	PATEL JIGAR & SEJAL
93 OUTLOOK DR	ROY SWAPAN & LIPIKA
96 OUTLOOK DR	EDWARDS ROBERT E & EDWARDS FRA
7 FAIR OAKS TER	LANG PHILIPP
70 OUTLOOK DR	WILLIAMS JOHN R & WILLIAMS BARBARA A TRS
75 PROSPECT HILL RD	GATZKE RONALD D & GATZKE LINDA M TRS
98 OUTLOOK DR	CULYER GARY & FISHER DEBORAH TRUSTEES
4 WACHUSETT CIR	GILLMOR REGINALD B & PLUNKETT LINDA TRS
40 FAIR OAKS DR	
19 FAIR OAKS DR	GREEN ROBERT W
51 WACHUSETT DR	SHAW PHILLIP R & SANDRA J
WACHUSETT DR	LOWELL HARVEY D
14 FAIR OAKS DR	FRIED RICHARD P
58 OUTLOOK DR	CALEB P HAL 2013 REVOCABLE TRUST
6 FAIR OAKS DR	TWEEDDALE JOHN R
170 MIDDLEBY RD	HURLEY MARYBETH & HURLEY JILL & HURLEY
62 PROSPECT HILL RD	FRENCH ANDREW H
78 OUTLOOK DR	
35A WACHUSETT DR	
	FAINFELLEN GODERET ANDERSON JR
49 BASKIN RD	KONIJNENBERG ARDJAN G
24 FAIR OAKS DR	CHARNOCK JOSEPH

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42 BASKIN RD	
19 FAIR OAKS DR	
WACHUSETT DR	
14 FAIR OAKS DR 58 OUTLOOK DR	
6 FAIR OAKS DR	
170 MIDDLEBY RD 62 PROSPECT HILL RE)
78 OUTLOOK DR	
35A WACHUSETT DR 40 WACHUSETT DR	
41 BASKIN RD	
48 OUTLOOK DR 49 BASKIN RD	



75 OUTLOOK DRIVE (ASSESSORS MAP 41 LOT 49A) SITE SENSITIVE DEVELOPMENT **DEFINITIVE PLAN SET**

LOCATED IN LEXINGTON, MA NOVEMBER 15, 2021 REVISED FEBRUARY 25, 2022, MAY 23, 2022

RECORD OWNER / APPLICANT:

ALPHA ECHO 75 OUTLOOK LLC 30 WHIPPLE ROAD LEXINGTON, MA 02420 - DEED BOOK 77840 PAGE 85

PREPARED BY:



PATRIOT Engineering 35 BEDFORD STREET, SUITE 4 LEXINGTON, MASSACHUSETTS 02420 (978) 726-2654 vww.patriot-eng.com



J THOMA LAND DESIGN STUDIOS 141 HAGGETTS POND ROAD ANDOVER, MA 01810



SHEET INDEX

- 1. COVER SHEET
- 2. RECORD CONDITIONS PLAN
- 3. SITE ANALYSIS PLAN
- 4. PROPERTY RIGHTS PLAN
- 5. SITE CONSTRUCTION PLAN
- 6. SITE UTILITY PLAN
- 7. LANDSCAPE PLANTING PLAN
- 8. TREE PROTECTION & REMOVAL
- 9. SITE DETAILS
- 10. SITE DETAILS
- 11. SITE DETAILS
- 12. PROOF PLAN

CLERK OF THE TOWN OF LEXINGTON. MASSACHUSETTS HEREBY CERTIFY THAT THE NOTICE OF APPROVAL OF THIS PLAN BY THE LEXINGTON PLANNING BOARD HAS BEEN RECEIVED AND RECORDED AT THE OFFICE AND NO NOTICE OF APPEAL WAS RECEIVED DURING TWENTY DAYS NEXT AFTER SUCH RECEIPT AND RECORDED OF SAID NOTICE.

LEXINGTON PLANNING BOARD

DA TE:

TOWN CLERK



wing Name: G:\MA\Lexington\Novak\75 Outlook Dr\Survey\DWG\21034_survey.dwg





TEST PIT INFORMATION TEST PITS WERE PERFORMED BY MICHAEL C OF RJ O'CONNELL & ASSOCIATES, ON 06/23/2 TEST PIT: TP-01

ELEV.=289.2 1	:
BOTTOM OF	HOLE ELEV.=283.2
0"-8"	TOPSOIL
6"-24"	B: LOAMY SAND
16"-72"	HORIZON C: LOAMY SAND W
NO E.S.H.G.V	V. OBSERVED
TEST PIT: TP	-02
ELEV.=287.4±	<u>+</u>
BOTTOM OF	HOLE ELEV.=277.4
0"-8"	TOPSOIL
8"-26"	B: LOAMY SAND
26"-120"	HORIZON C: LOAMY SAND W

8"-26" B: LOAMY SAND 26"-120" HORIZON C: LOAMY SAND W NO E.S.H.G.W. OBSERVED

TEST PIT: TP-03 ELEV.=299.6± BOTTOM OF HOLE ELEV.=293.1

0"-12" Ap 12"-24" B: LOAMY SAND 24"-78" HORIZON C: LOAMY SAND W NO E.S.H.G.W. OBSERVED

TEST PIT: TP-04 ELEV.=278.0± BOTTOM OF HOLE ELEV.=272.0

0"-6" Ap 6"-24" B: LOAMY SAND 24"-72" HORIZON C: LOAMY SAND W NO E.S.H.G.W. OBSERVED

LEXINGTON PLANNING BO

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ELECTRIC HAND HOLE	BCB BITUMINOUS CONCRETE	ECURB	NON NO.
SEWER MANHOLE	HPDE HIGH DENSITY POLYETH	IYLENE	COMMONNOS
	CONC. CONCRETE		
CATCH BASIN WATER VALVE	LSA LANDSCAPE AREA		
FIRE HYDRANT	SIGN		
SPRINKLER CONNECTION POST INDICATOR VALVE	8/8C PARKING COUNT / COMP	'ACT	
BOLLARD	DECIDUOUS TREE		
ROOF DRAIN	(REC) FROM RECORD PLANS		
	CONCRETE WALK / PATIC)	
IRRIGATION CONTROL VALVE	RETAINING WALL		
RETAINING WALL	DETECTABLE WARNING F	PAD	U.
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	SITE ANALYSIS	<u>S LEGEND:</u>	
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			DATE:
	I, CLI MASSACHUSETTS HERERY CERTIEV TUV	ERK OF THE TOWN OF LEXINGTON, AT THE NOTICE OF APPROVAL OF	11/15/2021
	THIS PLAN BY THE LEXINGTON PLANNI AND RECORDED AT THE OFFICE AND N	NG BOARD HAS BEEN RECEIVED NO NOTICE OF APPFAL WAS	SCALE: 1"=20'
	RECEIVED DURING TWENTY DAYS NEXT RECORDED OF SAID NOTICE	AFTER SUCH RECEIPT AND	SHEET No.
			3 OF 19
_	TOWN OFRK		PROJECT NO
	JOHN OLLINA		91021
			~1004



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TEST PIT INFORMATION

TEST PITS WERE PERFORMED BY MICHAEL CAPACHIETTI OF RJ O'CONNELL & ASSOCIATES, ON 06/23/2021.

TEST PIT: TP-01 ELEV.=289.2± BOTTOM OF HOLE ELEV.=283.2 TOPSOIL 0"-8" B: LOAMY SAND 6"-24" 16"-72" HORIZON C: LOAMY SAND W/ COBBLES NO E.S.H.G.W. OBSERVED TEST PIT: TP-02 ELEV.=287.4± BOTTOM OF HOLE ELEV.=277.4 0"-8" TOPSOIL B: LOAMY SAND 8"-26" HORIZON C: LOAMY SAND W/ COBBLES 26"-120" NO E.S.H.G.W. OBSERVED TEST PIT: TP-03 ELEV.=299.6± BOTTOM OF HOLE ELEV.=293.1 0"-12" Ap B: LOAMY SAND 12"-24" 24"-78" HORIZON C: LOAMY SAND W/ COBBLES NO E.S.H.G.W. OBSERVED TEST PIT: TP-04 ELEV.=278.0± BOTTOM OF HOLE ELEV.=272.0 0"-6" Ap

B: LOAMY SAND 6"-24" HORIZON C: LOAMY SAND W/ COBBLES 24"-72"

NO E.S.H.G.W. OBSERVED

SPECIAL PERMIT SUBDIVISION CALCULATIONS

TYPE OF SPECIAL PERMIT RESIDENTIAL DEVELOPMENT	MAXIMUM GRO
SITE SENSITIVE	30,608
SITE SENSITIVE	< 30,608

GROS	SS FLOO	R AREA	(GFA) Cl
SITE S	ENSITIV	E DEVEL	OPMEN
	107#	MAX. GFA	PROPOSED
	LOT #	ALLOWED*	GFA
	LOT A	7,030 SF	9,131 SF
	LOT B	8,667 SF	7,146 SF
	LOT C	7,881 SF	7,146 SF
	LOT D	7,030 SF	7,146 SF
	TOTAL	30,608 SF	30,569 SF
*CALCU	LATED GFA	FROM CONV	ENTIONAL P

NOTE:

THE ACCESSORY APARTMENT WILL NOT EXCEED 1,000 SF GFA

PARKING NOTE:

ALL DRIVEWAYS PROVIDE A MINIMUM OF TWO (2) VISITOR PARKING SPACES PER LOT.

LEXINGTON PLANNING BOARD

DA TE:







PLANT LIST

NCAL NAME	COMMON NAME	QTY	SIZE	NOTES
ES				
_ADUS DIOCUS	KENT. COFFEE TREE	5	3"-3.5" CAL.	B&B
s rubra	RED OAK	3	3"-3.5" CAL.	B&B
REES				
CHIER CANADENSIS	SHADBLOW SERV.BERRY	9	12', 3"C	B&B
FLORIDA	FLORIDA DOGWOOD	8	12', 3"C	B&B
a virginiana	SWEETBAY MAGNOLIA	3	12', 3"C	B&B
ES				
TROBUS	WHITE PINE	21	8'-10', 3"C	B&B
CCIDENTALIS 'NIGRA'	DARK AMERICAN ARB.	9	8 ['] -10',2.5"C	B&B

NTHUS FLORIDUS'	CAROLINA ALLSPICE	3	# 5	C.G.
ABRA 'SHAMROCK'	INKBERRY	24	# 5	C.G.
LATIFOLIA	MOUNTAIN LAUREL	13	3'-3.5'	B&B
ENDRON VISCOSUM	SWAMP AZALEA	6	7-8'	B&B
IM OPULUS TRILOBUM	CRANBERRY BUSH VIB.	7	3'-3.5'	B&B
RGINICA	SWEETSPIRE	14	2.5' - 3'	B&B
US HORIZONTALLIS B.H.	BAH HARBOR JUNIPER	31	#3	C.G.

NOTE: THE ABOVE PLANT LIST WAS DEVELOPED USING THE LEXINGTON PREFERRED PLANT LIST AS ADOPTED ON OCTOBER 6, 2021. THE LARGE SHADE TREES WERE SELECTED FROM THE RECOMMENDED LARGE SHADE TREES LIST OF THE LEXINGTON TREE MANUAL SECTION V.B.5 AS REFERENCED IN CHAPTER 120 OF THE LEXINGTON GENERAL BYLAWS, ENTITLED "TREES". 100% OF THE TOTAL DBHs OF ALL PROPOSED TREES ARE NATIVE TREES FROM THE LEXINGTON PREFERRED PLANT LIST. 100% OF THE SHRUBS ARE NATIVE SPECIES FROM THE LEXINGTON PREFERRED PLANT LIST. RED OAK, KENTUCKY COFFEE TREE AND WHITE PINE ARE TREE SPECIES SELECTED FROM THE RECOMMENDED LARGE SHADE TREES LIST IN THE LEXINGTON

LANDSCAPE NOTES:

- 1. SEE SHEET 4 FOR GENERAL NOTES AND LEGEND
- 2. THE LOCATIONS OF EXISTING UNDERGROUND UTILITIES ARE SHOWN IN AN APPROXIMATE WAY ONLY AND HAVE NOT BEEN INDEPENDENTLY VERIFIED BY THE OWNER OR ITS REPRESENTATIVE. THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION OF ALL EXISTING UTILITIES BEFORE COMMENCING WORK, AND AGREES TO BE FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES WHICH MAY BE OCCASIONED BY THE CONTRACTOR'S FAILURE TO EXACTLY LOCATE AND PRESERVE ALL UNDERGROUND UTILITIES.
- 3. CONTRACTOR SHALL BEGIN MAINTENANCE IMMEDIATELY AFTER PLANTING AND WILL CONTINUE UNTIL FINAL WRITTEN ACCEPTANCE OF PLANT MATERIAL.
- 4. ALL MATERIALS SHALL CONFORM TO THE GUIDELINES ESTABLISHED BY THE AMERICAN NURSERY AND LANDSCAPE ASSOCIATION.
- 5. ALL PLANTS SHALL BEAR THE SAME RELATIONSHIP TO FINISH GRADE AS TO ORIGINAL GRADES BEFORE DIGGING.
- 6. ALL PLANTS TO BE BALLED IN BURLAP OR CONTAINERIZED.
- 7. ALL PLANTED AREAS TO BE EDGED AND MULCHED WITH AGED PINE BARK: PARTIALLY DECOMPOSED, JET BLACK IN COLOR AND FREE OF WOOD CHIPS THICKER THAN 1/4 INCH.
- 8. PLANTING SOIL MIX: UTILIZE EXISTING SITE LOAM FROM STOCKPILES. THOROUGHLY INCORPORATE WITH COMPOST AS NEEDED PER SOILS ANALYSIS. FERTILIZE PER RECOMMENDED RATES IN SOIL ANALYSIS.
- 9. THE LANDSCAPE CONTRACTOR SHALL GUARANTEE ALL PLANT MATERIALS FOR ONE (1) FULL YEAR FROM DATE OF ACCEPTANCE.
- 10. ALL PLANT MATERIALS ARE SUBJECT TO THE APPROVAL OF THE LANDSCAPE ARCHITECT, AT THE NURSERY, AND AT THE SITE.
- 11. ALL AREAS OF THE SITE WHICH HAVE BEEN DISTURBED AND NOT OTHERWISE DEVELOPED SHALL BE LOAMED AND SEEDED WITH A MINIMUM DEPTH OF 6" DEPTH TOPSOIL UNLESS OTHERWISE NOTED.

LEGEND

+	PROP. SHADE TREE
	PROP. EVERGREEN TREE
	PROP. ORNAMENTAL TREE
\odot	PROPOSED SHRUB PLANTING
	ex. Shrub planting
	EX.TREE T.B.R
	EX.TREE T.B. PROTECTED

20	0) 1	0 2	20	40
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GRAPHIC SCALE IN FEET					

REVISIONS	02.25.22 TOWN /STAFF COMMENTS	05.23.22 NO REVISIONS TO THIS SHEET		DATE DESCRIPTION BY		
		SACHU REYA 7 (ANDSG	GN STUDIC DS Work Pla	of the second se		
75 OITTLOOK DRIVE	75 OUTLOOK DRIVE LANDSCAPE PLANTING PLAN LANDSCAPE PLANTING PLAN LANDSCAPE PLANTING PLAN LANDSCAPE PLANTING PLAN LANDSCAPE PLANTING PLAN LOCATED IN LEXINGTON, MASSACHUSETTS (SOUTHERN MIDLESEX COUNTY) PREPARED FOR PREPARED FOR PLPH ECHO - 75 OUTLOOK, LLC.					
	J I noma Land Design Studios	141 Haggetts Pond Rd Andover. MA 01810	978.409.9815 - www.jthomalds.com	DESIGNED BY: JAT CHECKED BY: JAT		
DA SC	ATE: CALE	11.15. 1"=2	.21 0'			
St		No. 7	of 1	2		

21034



List of Protected Trees To Be Removed (Trees 6" DBH or greater within setback area)						
Tre	ee #		Tree Size - DBH (in inches)	Description	Reqd. Replacement Inches	
	1		16	Coniferous Evergreen	16	
	2		16	Coniferous Evergreen	16	
	3		24	Coniferous Evergreen	96	
	4		12	Deciduous Shade Tree	12	
	5		12	Deciduous Shade Tree	12	
	6		20	Deciduous Shade Tree	20	
	7		11	Coniferous Evergreen	11	
	8		18	Deciduous Shade Tree	18	
	9		12	Coniferous Evergreen	12	
	10		10	Deciduous Shade Tree	10	
Total No.	10	Total Caliper Inches	151	Total Reqd. Replacement Inches	223	

Additional Tree Removal & Mitigation Information (Trees 6" DBH or greater on entire site)

	Quantity	DBH (In Inches)	Replacement Rate	Proposed Replacement Inches
TOTAL NUMBER OF TREES REMOVED	81	1198		
TOTAL NUMBER OF TREES SAVED	98	1415		
PROPOSED 3" CALIPER SHADE TREES	29	87	1:4	348
(FROM RECOMMENDED LARGE SHADE TREE LIST)				
PROPOSED 3" CALIPER TREES	20	60	1:1	60
PROPOSED 2.5" CALIPER TREES	9	22.5	1:1	22.5
		Total Proposed. Replacement Inches		430.5

PROTECTION REQUIREMENTS FOR EXISTING TREES

- Barrier Protection Protect all trees to be saved before demolition and land clearing begins. Install barriers at the critical root zone, the outer edge of the area under the leaf canopy. This may be modified to a location agreed on during an on-site visit by the Tree Warden and/or a Tree Committee representative. Construct barriers of 6' steel T Posts and 4' orange snow fence (highly visible plastic mesh). This protection will prohibit heavy equipment from compacting soil, damaging roots, breaking branches and scarring the tree trunk. See Detail #1 - Tree Protection Fencing this sheet.
- Weights under Tree Park vehicles, equipment, or stockpile earth, fill and other materials ONLY OUTSIDE the tree root zone.
- 3. Chemical Damage Dispose of all debris properly (rubble, cement, asphalt, petroleum products, herbicides, all chemicals) away from the tree root zone.
- 4. Leaf Mulch Allow fallen leaves from the trees within the root zone to remain on the ground as mulch. If leaves are on the lawn, they can be raked up or mowed.
- 5. Flooding Provide proper drainage so that roots of trees are free of standing water.
- 6. **Fasteners -** Use separate posts instead of trees for fastening signs, fences, electrical wires and pulley stays.
- Utility Lines Locate all new underground utility lines outside the critical root zone of trees to be saved. If not possible, tunnel under roots as an alternative.
- Watering During dry spells in the growing season, water trees once a week so that the water penetrates 12 to 18 inches into the soil.



LEGEND



EX.TREE T.B.R



PROPOSED TREE PROTECTION FENCE

- NOTES: 1. ALL PLANTS DESIGNATED TO BE SAVED SHALL BE PROTECTED BY FENCING, AS ILLUSTRATED. INSTALL TREE PROTECTION FENCE AT TREE DRIP LINE OR AT EDGE OF DISTURBED AREA, AS SHOWN ON PLANS, PRIOR TO COMMENCEMENT OF CONSTRUCTION. 3. SIGNAGE IS OPTIONAL. IF APPROVED BY OWNER SPACE TREE PROTECTION ZONE SIGNS A MINIMUM
- OF ONE EVERY 300 FEET. THE SIZE OF EACH SIGN MUST BE A MINIMUM OF $2' \times 2'$ AND BE VISIBLE FROM BOTH SIDES OF THE FENCE. THE SIGN MUST CONTAIN THE FOLLOWING LANGUAGE "TREE PROTECTION ZONE, KEEP OUT".
- THERE SHALL BE NO STORAGE OF MATERIAL WITHIN THE BOUNDARIES OF THE TREE PROTECTION FENCING.
- 4. TREE PROTECTION FENCING SHALL BE MAINTAINED THROUGHOUT THE DURATION OF THE PROJECT.

TREE PROTECTION FENCING

SCALE: N.T.S.



















<u>LE</u>	GEND:	-				
	APPROXIMATE EXISTING PROPERTY LINES					
	PROOF CIRCLE	SIONS				
	PROPOSED CENTERLINE	EWS				
(¹) _O _C	RADIUS	R				
ТҮР	TYPICAL					
PEOP	PROPOSED EDGE OF PAVEMENT					
SF	SQUARE FEET					
ROW	RIGHT OF WAY					
DIA	DIAMETER					
	PROPOSED PAVEMENT					
	PROPOSED DRIVEWAY APRON					
(+ ;;) (+ ;;) (2;)	DECIDUOUS TREE					
	CONIFEROUS TREE					
	DECIDUOUS TREE PROPOSED TO BE REMOVED				•••	
	CONIFEROUS TREE PROPOSED TO BE REMOVED	A A A A A A A A A A A A A A A A A A A	ALANTH MIC	OF MA	STORIES	
MENTAL DATA		COM	N (No.	OVAK CIVIL 5069	96	

93,597. (MAP 41, LOTS 49A) TOTAL CALCULATED LAND AREA OF DEVELOPMENT 93,597± SF (MAP 41, LOT 49A) (SEE NOTE BELOW)

SITE AREA	93,597± SF
DROW	15,900± SF
SURFACES WITHIN	10,858± SF

(TOTAL AREA OF LOTS IN PROOF PLAN = TOTAL CALCULATED LAND AREA OF DEVELOPMENT - TOTAL AREA WITHIN PROPOSED ROW = (93,597 - 15,900) = 77,697 SF

15,539 SF + (TOTAL IMPERVIOUS AREA WITHIN ROW OF PROOF PLAN) = (15,539 + 10,858) = 26,397 SF

MAXIMUM GROSS FLOOR AREA (SF)	NO. OF DWELLINGS	MAXIMUM AMOUNT OF IMPERVIOUS SURFACES (SF)	MAXIMUM SITE COVERAGE (SF)	MINIMUM COMMON OPEN SPACE REQUIRED (SF)
30,608	4	26,397	11,633	NOT REQUIRED
< 30,608	4	<26,397	< 11,633	NOT REQUIRED

- 1. THE SOLE PURPOSE OF THIS PLAN SET IS TO COMPLY WITH SECTION 135-6.9.3 OF THE TOWN OF LEXINGTON ZONING BY LAW.
- 2. THE TOPOGRAPHY, SITE DETAIL & SURFACE IMPROVEMENTS DEPICTED HEREON WERE OBTAINED FROM AN ONSITE SURVEY PERFORMED BY RJ O'CONNELL & ASSOCIATES, INC.
- 3. THE SUBJECT PROPERTY DEPICTED IS LOCATED WITHIN THE RS ZONING DISTRICT.
- 4. THE SUBJECT PROPERTY IS DEPICTED AS LOT 49A ON THE TOWN OF LEXINGTON
- 5. THIS PLAN DOES NOT SHOW ANY UNRECORDED OR UNWRITTEN EASEMENTS WHICH
- 6. THE LOCUS PROPERTY IS LOCATED IN FLOOD ZONE X (UNSHADED), AREAS DETERMINED TO BE OUTSIDE THE 0.2% ANNUAL CHANCE FLOODPLAIN, PER FEMA FLOOD INSURANCE RATE MAP NUMBER 25017C0403E DATED JUNE 4, 2010.







Bk: 80557 Pg: 474 Doc: COV Page: 1 of 9 08/09/2022 03:24 PM

19- 85

COVENANT

This Covenant is submitted following the Lexington, Ma Planning Board ("Board") approval Special Permit granted on April 6, 2022 and submitted to the Town Clerk on April 12, 2022 (The "Decision") for the Definitive Plan Set entitled "Site Sensitive Development Definitive Plan 75 Outlook Drive" prepared for the property at 75 Outlook Dr. (Assessors Map 31 Lot 49A) Lexington, Ma 02421 (the "Property"), prepared by Patriot Engineering, dated November 15, 2021, revised through May 23, 2022, consisting of 12 sheets.

In consideration of the Board approving said Plan without requiring a performance bond or other surety, the Applicant/Property owner covenants and agrees with Town of Lexington ("Town") as follows:

That the applicant will meet any conditions of approval specified in the Decision as follows: $B \kappa = 7.7840$

- 1. That the Property shall not be built upon or conveyed until the construction of the Effie Place common drive serving the three new residences have been provided to serve such Properties in accordance with any covenants, conditions, agreements, terms and conditions specified in the following:
 - a. The improvements specified in the Decision and on the approved Plan.
 - b. The Board's Development Regulations governing this development.
 - c. The Decision and any conditions of approval specified therein.
- 2. This Covenant shall be binding upon and insure to the benefit of the executors, administrators, devises, heirs, successors and assigns of the Applicant. It is the intention of the undersigned, and it is hereby understood and agreed that this instrument shall constitute a covenant running with the land consisting of the Property and shall operate as a restriction upon said Property.

Ju # 539. 2020

- 3. Notwithstanding any provision herein to the contrary, a mortgagee who acquires title to the mortgaged premises, or part thereof, by foreclosure or otherwise may sell the Property subject to the terms and conditions of this Covenant.
- 4. The undersigned warrants and represents that he is the owner in fee simple of all the land consisting of the Property.
- 5. This Covenant shall take effect upon the endorsement of said Plan and shall promptly be recorded with Decision and Plan at the Middlesex South Registry of

Page 1 of 8

morer: Alpha Echo 75 detlock ile

Deeds with the appropriate marginal reference to this Covenant placed on the Plan.

- 6. Upon final completion of the construction of the common driveway shown as Effie Place on the approved Plan and the instillation of municipal utilities and upon completion of the conditions of approval specified in the Decision, the Board shall release this Covenant by an appropriate instrument duly acknowledged. The improvements shown on the Plan must be completed no later than two (2) years from the date of endorsement of the Plan. Failure to complete improvements may result in rescission of the approval of the Plan by the Board, unless the Board extends said period for good cause shown after the written request of the Applicant.
- 7. Property references:

Property Address: 75 Outlook Drive, Lexington, Ma 02421 Assessors Information Map 41, Lot 49A Application Filing Date: Dec 6, 2021 Special Permit Site Sensitive Development pursuant to 135-6.9 and 135-9.4 of Zoning Bylaw, Street Adequacy Determination pursuant to 176-7.3, Accessory Apartment pursuant to 6.9.16 and 6.7.7

Executed under seal as of the July 25 day of July, 2022.

Sean Kelly-Rind

Lender's Representative's Name Printed

Signature of Applicant

Eduardo Alvarez

Applicant's Name Printed

EXANDER SIGMAN NOTARY PUBLIC Commonwealth of Massachusetts My Commission Expires On 12/08/2028

11g- 12

Signature of Authorized Lender's Representative

Helauce Um

Signature of Planning Board Member

Melanie hompson

Board Member's Name Printed

Signature of Planning Board Member

MICHAEL SCHANBACHER

Board Member's Name Printed

hh

Signature of Planning Board Member

Charles ornia

Board Member's Name Printed

Signature of Planning Board Member

Roberts K. (Reer,

Board Member's Name Printed

Signature of Planning Board Member

l.c

Board Member's Name Printed

Signatures of a Majority of the Members of the Planning Board of the Town of Lexington

COMMONWEALTH OF MASSACHUSETTS

MIDDLESEX COUNTY, ss

On this (8^{++}) day of $J_{2}(\gamma) = 20 \frac{2}{2}$, before me, the undersigned notary public, personally appeared Lexington Planning Board member Robert D. Peters proved to me through satisfactory evidence of identification, which were license (privers) to be the persons whose names are signed on the proceeding or attached document, and acknowledged to me that (he) (she) signed it voluntarily for its stated purpose.

Anigail Micabe, Notary Public 7/18/2022 My Commission Expires 7/14/202?



COMMONWEALTH OF MASSACHUSETTS

MIDDLESEX COUNTY, ss

On this <u>19</u> day of <u>July</u> 20<u>22</u>, before me, the undersigned notary public, personally appeared Lexington Planning Board member Michael Schanbacher proved to me through satisfactory evidence of identification, which were <u>Driver's License</u>, to be the persons whose names are signed on the proceeding or attached document, and acknowledged to me that (he) (she) signed it voluntarily for its stated purpose.

7/19/2022____ Notary Public My Commission Expires <u>1/14/20</u>28


COMMONWEALTH OF MASSACHUSETTS

MIDDLESEX COUNTY, ss

On this 18^{th} day of 5014 2022, before me, the undersigned notary public, personally appeared Lexington Planning Board member Robert Creech proved to me through satisfactory evidence of identification, which were <u>Driver's license</u>, to be the persons whose names are signed on the proceeding or attached document, and acknowledged to me that (he) (she) signed it voluntarily for its stated purpose.

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<u>ブルネーン</u>, Notary Public My Commission Expires <u>ブルリースの</u>8

Bk: 80557 Pg: 480

COMMONWEALTH OF MASSACHUSETTS

MIDDLESEX COUNTY, ss

On this 18^{++} day of 3.44 20.32, before me, the undersigned notary public, personally appeared Lexington Planning Board member Charles Hornig proved to me through satisfactory evidence of identification, which were <u>Drivers License</u>, to be the persons whose names are signed on the proceeding or attached document, and acknowledged to me that (he) (she) signed it voluntarily for its stated purpose.

-/18/22 **Notary Public**

My Commission Expires July 14,2028



COMMONWEALTH OF MASSACHUSETTS

MIDDLESEX COUNTY, ss

On this <u>18</u> day of <u>JUY</u> 2022, before me, the undersigned notary public, personally appeared Lexington Planning Board member Melanie Thompson proved to me through satisfactory evidence of identification, which were <u>Driver's</u> <u>licence</u>, to be the persons whose names are signed on the proceeding or attached document, and acknowledged to me that (he) (she) signed it voluntarily for its stated purpose.

Libiges

7/18/2022____ Notary Public My Commission Expires JULY 14, 2028



COMMONWEALTH OF MASSACHUSETTS

MIDDLESEX COUNTY, ss

On this 25 day of 500 2022, before me, the undersigned notary public, personally appeared Lexington Planning Board member Eduardo Alvarez proved to me through satisfactory evidence of identification, which were <u>Davids Uctase</u>, to be the persons whose names are signed on the proceeding or attached document, and acknowledged to me that (he) (she) signed it voluntarily for its stated purpose.

COMMONWEALTH OF MASSACHUSETTS

NGTRY OF DEEDS

FOREGOING

Notary Public

My Commission Expires 7/14/2028





(Space above this Line Reserved for Registry of Deeds)

RELEASE OF LOT(S)

The undersigned Chair of the Lexington Planning Board, by a majority vote of the Planning Board, certify that in accordance with the provisions of the Covenant dated July 25th 2022 recorded in Middlesex South Registry of Deeds, Book 80557, Page 474, the requirements for the construction of ways and municipal services has been completed to the satisfaction of the Board to adequately serve the lots enumerated on the plan described below.

Lot(s) <u>B</u>, as shown on the plan entitled "Site Sensitive Development Definitive Plan 75 Outlook Drive" dated November 15, 2021 (revised through May 23, 2022) recorded in said Registry of Deeds as Plan 539 of 2022, is/are hereby released from the restrictions as to building and sale specified in the covenant.

Executed under seal as of the _____ day of _____, ____.

On _____voted by a majority of the Planning Board in the Town of Lexington:

Signature of the Planning Board Chair:

Robert D. Peters

RECORD OF VOTE

On , _____ moved that the Planning Board vote to allow the Planning Board Chair sign this lot release for the Planning Board. _____ seconded the motion. The Planning Board voted in favor of the motion

MOTION PASSED

COMMONWEALTH OF MASSACHUSETTS

COMMONWEALTH OF MASSACHUSETTS

Middlesex County, ss.

On this _____ day of _____, 2022, before me, the undersigned notary public, personally appeared Robert D. Peters, who proved to me through satisfactory evidence of identification, which was Massachusetts Driver's License, to be the person whose name is signed on the preceding document, and acknowledged to me that he/she signed it voluntarily and for its stated purpose as the voluntarily act of the Town of Lexington.

Notary Public:

Notary Name Printed:

My Commission Expires:

alpha echo design & development

2/27/2023

Lexington, Ma Planning Department

RE: Additional Tree Removal Report at Site Sensitive Subdivision at 75 Outlook Dr. Lexington, Ma 02421

Dear Planning Board,

We submit this report to document the removal of a cluster of 5 coniferous trees measuring 6", 8", 12", 12", and 10" marked green in the accompanying existing conditions SSD-2 plan by RJO'Connell & Associates, Inc.

This cluster of trees located in the unprotected area (beyond the 15' perimeter buffer) was removed because the trees were growing entangled with a large dead tree that presented a risk. The cluster had to be removed along with the dead tree for safety.

Regards, Eduardo Alvarez

alpha echo 75 Outlook LLC Developer of the Site Sensitive Subdivision at 75 Outlook Dr. Lexington, Ma 02421

Reviewed

Frey A. Thomas

Jeff Thoma Landscape Architect J Thoma Land Design Studios

alpha echo design & development

2/14/2023

Planning Board Lexington, Ma

This letter is submitted to request a lot release at 75 Outlook Dr. Lexington, Ma 02421 (Assessors Map 31 Lot 49A) subdivision titled "Site Sensitive Development Definitive Plan 75 Outlook Drive" with special permit granted on April 6, 2022. The approved subdivision resulted in 4 lots marked as A, B, C, and D in the plans. We are requesting the release of lot B provided that this lot has its main frontage and access directly on Outlook Dr. and all its utilities connect directly to Outlook Drive. Our proposed plan is to start work on the development's common site work including storm water management system, utilities, and private road in parallel to the construction of house on lot B.

Sincerely,

2

Eduardo Alvarez CEO alpha echo 75 Outlook LLC 75 Outlook Dr. Lexington, Ma 02421



Town of Lexington **Planning Office**

1625 Massachusetts Avenue Lexington, Massachusetts 02420 781-698-4560 planning@lexingtonma.gov www.lexingtonma.gov/planning

Abby McCabe, AICP, Planning Director Sheila Page, Assistant Planning Director Molly Belanger, Planner Kiruthika Ramakrishnan, Department Assistant

Date: March 9, 2023

- To: Planning Board
- Fr: Sheila Page, Assistant Planning Director
- RE: 75 Outlook Site Sensitive Special Permit Residential Development GFA re-allocation, tree mitigation, Lot Release for Lot B

At the March 15 Planning Board meeting the Applicant is requesting a re-allocation of GFA, a revised tree mitigation, and a lot release.

Re-allocation of GFA

This project proposes four new house lots. One lot contains the existing house with a GFA of 9,131sqft and three house lots with a GFA of 7,146 sqft. each. The Applicant is proposing to make the new houses bigger than originally proposed by using some of the basement GFA of the original house. Below is a comparison the originally proposed GFA and newly proposed GFA. The submitted GFA forms for the four lots total 30,614 sqft. The Applicant will need to adjust the proposed GFA's to be within the approved limit.

Original Approved GFA			Newly Proposed GFA						
GROSS FLOOR AREA (GFA) CHART					Lot	Address	GFA (Ft2)		
SITE S	SENSITIV	'E DEVEL		T (SSD)		Α	2 Effie Pl.	7,799	
	LOT#	MAX. GFA	PROPOSED			В	75 Outlook Dr	7,602	
	LOTA	7,030 SF	9,131 SF			С	3 Effie Pl.	7,602	
	LOT B	8,667 SF	7,146 SF			D	5 Effie Pl.	7.602	
	LOT C	7,881 SF	7,146 SF					.,	
	LOT D	7,030 SF	7,146 SF				Totals:	30,606	
	TOTAL	30,608 SF	30,569 SF				10(015)	30,000	
*CALCU	ILATED GFA	FROM CONV	ENTIONAL P	ROOF LOT					

Each new house will have more GFA than originally approved. The Applicant should explain how this GFA is being created. Are the building foot prints changing? If so, the Planning Board will need to consider the effect on the site coverage. The Applicant should provide documentation stamped by an

engineer or architect that confirms that site coverage is still within the approved site coverage limits and that the stormwater water mitigation works with these changes.

The re-allocation and its potential impact on site coverage should be reviewed by the Planning Board.

Tree mitigation

Site work began before the limit of work line was inspected. A cluster of six trees that was to be protected were removed. The Applicant states that the trees were entangled by a hazardous tree. Typically, the hazard tree would have been confirmed by staff or a certified arborist before removal. The trees were removed without this confirmation.



In addition, a portion of the no disturb zone was cleared at least two trees of approximately 4-6" DBH and other vegetation. The vegetation was small enough they were not on the survey.



The Applicant is correcting the Limit of Work line installation. This will be re-inspected prior to the March 15 meeting.

The Applicant should propose a remedial mitigation.

Lot Release

The Applicant is requesting the release of Lot B which fronts on Outlook Drive. The Applicant plans to build this house first. It is recommended that the lot be released pending the proper Limit of Work line installation.

AGENDA ITEM SUMMARY

LEXINGTON PLANNING BOARD

AGENDA ITEM TITLE:

Presentation and consideration of updated Transportation Management Overlay District Plan for TMO-1 (Hartwell Avenue) Area

PRESENTER:

ITEM NUMBER:

Sheila Page, Assistant Planning Director

SUMMARY:

The Planning Board will be reviewing the draft TMO-1 Hartwell Area Plan for adoption. In order to mitigate the traffic impacts associated with the potential increase in development from recent rezoning, this TMO-1 District Plan update sets three primary goals as follows:

1. Define policies, programs, and services to promote greater use of non-automobile travel modes to, from, and within the Hartwell TMO District.

 Define the transportation infrastructure needs to support the multi-modal travel demands expected from the potential new development while minimizing impacts to adjacent residential areas.
 Identify the sources and mechanisms to fund goals #1 and #2.

This plan outlines the district's mode shift goals, strategies to achieve the goals and mitigation fees to help offset the development impact on traffic. The plan will then inform the regulation which will be amended once the Plan is adopted.

SUGGESTED MOTION:

FOLLOW-UP:

DATE AND APPROXIMATE TIME ON AGENDA:

3/15/2023

ATTACHMENTS:

	Description	Туре
D	3.13.23 rev 3 presentation slides	Cover Memo
D	Hartwell Area TMO-1 Plan Update - Background Information	Cover Memo
D	Hartwell Area TMO-1 District Plan Update	Presentation
D	Parking numbers of recently permitted developments	Cover Memo
D	Parking numbers of recently permitted developments	Cover Memo

TMO-1 Hartwell Area Plan Update

Presentation of Draft Update Plan

March 15, 2023 – Planning Board Meeting

Meeting Purpose

- TMOD Background
- Plan Update Highlight
- Discussion
 - o mode shift target
 - o basis of mitigation fee
 - o purpose of the mitigation fee
 - separate/parallel TDM application
 - PTDM plan points

Transportation Demand Overlay District





The purpose of the TMOD is to facilitate multimodal transportation networks and improve traffic management and mitigation in a streamlined and predictable process.

TMO-1 Hartwell Area District Plan Update: Goals

- Create a policy and regulatory framework that reflects the Town's desire to reduce single-occupancy vehicle trips and automobile emissions town wide;
- Improve mobility and accessibility of all users of the circulation and transportation systems including public and private transit, pedestrians, cyclists and motor vehicles;
- Improve safety and comfort-level for all commuters, customers, and clients of area businesses, as well as local residents and visitors;
- Help in expanding the pool of potential employees who can reach places of work in the Hartwell area more easily and economically; and
- Minimize and mitigate negative impacts on residential streets

TMO-1 Hartwell Area District Plan Update

- First plan in 2010 coincided with the Floor Area Ratio increase.
- Time for a Plan Update
 - Planning for complete streets reconstruction
 - Actual development activity on the corridor
 - Actual costs of infrastructure improvements and transit operations
 - Recent amendments to the zoning bylaws

TMO-1 Hartwell Area District Plan Update vs. Bedford Hartwell Reconstruction 25% Design

- 25% Design: improve transportation infrastructure
- Focus on programs and policies
- Update regulations to encourage strong TDM strategies and raise expectations.
- Near-term infrastructure improvements

Parking Supply

5,710 spaces required in corridor by current zoning and buildout.

7,925 spaces are provided in the corridor

4 parking spaces per 1,000 square feet required for office land uses

2 parking spaces per 1,000 square feet required for lab/research use

5.15 spaces per 1,000 square feet built compared to minimum requirements

Corridor parking minimums are frequently higher than national standards for office, service, and retail.



Parking Demand

Several parking lots in the study area near full occupancy, but 24 out of 35 parking facilities in the corridor are less than 70% full.

Parking Subarea	Supply	Occupancy	Occupancy Rate
Bedford	678	364	54%
East Hartwell	1027	649	62%
Mid Hartwell	1,430	792	55%
West Hartwell 1	1534	647	42%
West Hartwell 2	748	394	53%
Hartwell End	1,411	683	48%
Tennis Club	201	154	77%
MIT LL	896	833	93%

DATA FROM PRE-PANDEMIC TYPICAL WEEKDAY WORKDAY: A COMBINATION OF HIGHEST OBSERVED OCCUPANCY OF EITHER OCT 15TH, 2019 OR APRIL 28TH, 2018.



Survey Results: Commute Programs



Plan Highlights: Drive Alone Rate - SOV Reduction

current drive alone rate: 92%

Requires 85%

 10% less than the American Community Survey.

• Today = 82%

- Dynamic adjusted every five years
 - Next adjustment = 2023

Plan Update

Plan Highlights: Parking

- §135-5.1 Off-Street
 Parking and Loading parking minimum
- Lab/research = 2 per 1000 sq. ft.
- Office = 4 per 1000 sq. ft.

- Parking requirements are the maximum allowed for District
- Amend zoning to create higher parking ratio
- \$10,000 per parking space over maximum

Plan Update

Plan Highlights: Transportation Mitigation Fee

\$5 per net new net floor area

- \$5 per net new net floor area
- \$2 per square foot of interior renovation
- \$10,000 per parking space over maximum.

Plan Highlights: Parking & Transportation Demand Management Plan

Land Use Category	Minimum Requirement				
	Small Scale Project	Large Scale Project			
Residential, Uses	10 points	12 points			
Office, Lab, Manufacturing, School, or Medical Uses	12 points	16 points			
Service, Retail, or Visitor Uses	6 points	8 points			
Other Uses	4 points	5 points			

Components: Points System – supporting a biking culture

- Building Sidewalks; Lighting Sidewalks
- Onsite Wayfinding
- Bicycle Parking
- Bicycle Repair Station
- End-of-trip Facilities showers lockers
- Bike Share/Fleet
- Bus Stops/Shelters
- Subsidize Transit Passes



Components: Point System

- Real-time Transit Tracking
- Unbundle Parking
- Parking Cash-out
- Shared Parking



Plan Highlights: Measuring performance

- Permit tracking
- Report monitoring
- At C of O, 2 years, 5 years then every 5, if compliant

Plan Highlights: District-wide

- Travel Training
- Bike Share Program
- District-wide Communications
- On-Street Shuttle Stops
- Coordinate with Lincoln Labs & Hanscom Air Force Base

Plan Highlights: Near-term Infrastructure Improvements

- Sidewalks
- Advanced warning/safety signs at the Jughandle
- Pedestrian improvements at Wood / Hartwell intersection
- Pedestrian improvements at Westview
- MMBW improvements at Westview crossing

Administration

- Parking and Transportation Demand Management Plan Approval Parallel to Site Plan Review
- Required Reporting
- Measuring Performance
- Adjusting as Required



Implementation: Next Steps

- Plan & Regulations Approval by the Planning Board
- Application and Reporting in Viewpoint Cloud
- ATM 2023 Article 12b Measuring performance
- Parking Ratio Zoning Amendment

Feedback – Mode Shift & Administration

- Mode Shift Target 10% less than Census
- Separate but parallel approval by the Planning Board
- Monitoring and Adjustments by staff
- Adjust Parking Ratios zoning amendment

Feedback – Parking

- Parking requirements are the maximum allowed for District
 - Lab/research = 2 per 1000 sq. ft.
 - Office = 4 per 1000 sq. ft.
 - Minimum floor (20% less than maximum?)
- Amend zoning to create higher parking ratio
- \$10,000 per parking space over maximum

Feedback – Mitigation Fee & Purpose

- Purpose of Mitigation Fee
 - Reconstruction Project
- Basis of Mitigation Fee building size and per parking space over maximum
 - \$5 per net new net floor area
 - \$2 per square foot of interior renovation
 - \$10,000 per parking space over maximum.


Recently Permitted Developments						
Project	12-18 Hartwell	440 Bedford	91 Hartwell	1050 Waltham	97/99 Hayden 128 Spring	
Required parking	720	564	589	416	1,391	
Proposed parking	720	631 Revised 752	502	416 Up to 475	1,664	

Why People Come to the Hartwell Area?



46.5% OF ALL TRIPS ENDING IN THE STUDY AREA ARE FOR WORK PURPOSES

Trip Origins

Average trip distance 14.15 mi

Median trip distance 12.02 mi

Some employees in the corridor drive 50+ miles to Hartwell Avenue every day



Commute Mode Share



81% OF ALL WORK TRIPS ENDING IN THE STUDY AREA ARE DONE BY CAR

Survey Results: Public Transit



Survey Results: Biking

Which of the following would encourage you to bike more often to/from the corridor?



Survey Results: Pedestrians

Which of the following would encourage you to walk more often to/from your destination and along the corridor?



Survey Results: Public Transit

How willing would you be to make this trip by public bus or public shuttle, assuming the service existed and were well-run?





Town of Lexington **Planning Office**

1625 Massachusetts Avenue Lexington, Massachusetts 02420 781-698-4560 planning@lexingtonma.gov www.lexingtonma.gov/planning

Abby McCabe, AICP, Planning Director Sheila Page, Assistant Planning Director Molly Belanger, Planner Kiruthika Ramakrishnan, Department Assistant

Date: March 9, 2023

To: Planning Board

Fr: Sheila Page, Assistant Planning Director

RE: Hartwell Area TMO-1 Plan Update – Background Information

In 2009, when the Town of Lexington upzoned the Hartwell Avenue Corridor, allowing for an increase in development in the CM Zoning District, the Town also created the Transportation Management Overlay District (TMOD). The purpose of the TMOD is to facilitate multi-modal transportation networks and improve traffic management and mitigation in a streamlined and predictable process.

How the TMOD works

As is typical in most municipal zoning, our zoning requires new developments of a certain size to meet traffic and parking standards outlined in c.135§5.1 and 5.5. of the zoning. In particular, the development has to show they can meet adequate traffic capacity and if not, the application shall be denied. Because the level of service is poor at the Bedford/Hartwell intersection, adequate capacity in the Hartwell area is almost impossible to achieve without a major reconstruction project which is beyond any one development's capability or within their control.

Instead of meeting these requirements applicants can opt into the TMOD and participate in the mitigation outlined in the District Area Plan. A mitigation plan is required for proper implementation of the TMOD. While the zoning requires a mitigation fee and a parking and transportation demand management plan, the plan specifies the expectations of the mitigation and measures to reduce single occupancy vehicle trips, increase multimodal safety and outlines projects and strategies of how to use the mitigation.

TMO-1 Hartwell Area Update

The Hartwell Area TMO-1 mitigation plan was developed in 2010. The mitigation fees have been used to fund pedestrian safety improvements at the Hartwell / Bedford intersection, intersection design at the Maguire / Hartwell intersection, and the Bedford / Hartwell Corridor 25% Design Project. Many of the projects laid out in the 2010 TMO-1 Hartwell Area Plan have either been completed or are part of the Bedford/Hartwell 25% Design project currently underway. In addition, given the expected growth in the area due to the new zoning passed at STM 2020-2, it is prudent that we upgrade the mitigation plan to match the current market and innovative management techniques. The Town will need to require strong transportation demand management techniques, programs and performance measures to ensure that we are reducing single occupancy vehicle trips.

Process

At the July 13 Planning Board meeting - the consultants NelsonNygaard introduced the project and presenting their existing conditions analyses. At a second Planning Board meeting in the fall - NelsonNygaard presented their recommendations in a draft plan. From that meeting, revisions were made. The Planning Board will need to formally adopt the TMO-1 Plan. The Plan will then inform how to revise the regulations.

There are three areas included in the TMOD: TMO-1 Hartwell Area; TMO-2 Forbes Marrett; and TMO-3 South Lexington. We are updating the existing TMO-1 plan now and will be creating the first plans for TMO-2 and TMO-3 next year.

Town of Lexington, MA

Hartwell Area TMO-1 District Plan Update





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TMO-1 DISTRICT PLAN UPDATE FOR HARTWELL AVENUE AREA

The purpose of this document is to present the updated Hartwell Avenue Area Transportation Management District Plan (TMO-1 District Plan) for the Hartwell Avenue corridor. The TMO-1 District covers the entire Hartwell Avenue area, including portions of Maguire Road, Westview Street, Wood Street, and the south side of Bedford Street. The Hartwell TMO-1 District is shown in Figure 1.

The previous Hartwell TMO-1 District Plan was adopted by the Lexington Planning Board on November 3, 2010. This plan update for the TMO-1 District is developed to help mitigate the negative transportation effects of projected additional development growth along the Hartwell Avenue and Bedford Street corridors, enabled by zoning reforms in 2020.

This TMO-1 District Plan update document includes the following sections:

- 1. Plan Purpose
- 2. Existing Mobility Conditions
- 3. Future Development Growth and Expected Impacts
- 4. Recommended TDM Measures and Infrastructure Improvements
- 5. Implementation Plan

The Existing Mobility Conditions section of this report describes the comprehensive transportation network and system of supportive policies available in 2022 intended to provide adequate access to the Hartwell TMO District. While the plan's bounds evaluate specific streets, the transportation impacts generated by anticipated development extend beyond the borders and the recommended transportation demand management (TDM) and capital infrastructure improvements in Section 4 this plan reflect this.

Figure 1 Hartwell TMO District (TMO-1) Map



TMOD PLAN PURPOSE

Described in Section 7.2, Transportation Management Overlay District, Chapter 135 of the Code of the Town of Lexington¹ the Town "may create Transportation Management Overlay (TMO) Districts that allow greater opportunity for facilitating effective multi-modal transportation networks that increase the quality of life in Lexington through improved traffic management and mitigation."

¹ Chapter 135 of the Code of the Town of Lexington, 2020. <u>https://www.lexingtonma.gov/planning-office/files/zoning-bylaw</u>. Accessed May 10, 2022.

The Planning Board requires a TMOD Plan for each TMO District, containing the following elements:

- "Assessment of the impacts of reasonably anticipated future development in the TMO District considering current zoning bylaws and other legal and physical constraints;
- 2. Analysis of existing capital improvement plans or the facilities element of a plan adopted under MGL c. 41, § 81D;
- Cost projections for transportation infrastructure improvements required to address the impacts generated by the anticipated development in the TMO District, including the potential impact on nearby residential streets and neighborhoods;
- 4. Analysis of other reasonably anticipated sources of funding;
- 5. Required transportation mitigation fees in accordance with a methodology determined pursuant to this study;
- 6. Off-street parking and loading requirements for the TMO District;
- Parking and Transportation Demand Management techniques reasonably calculated to reduce the number of vehicle trips generated by developments in the TMO District and to ensure the long term stability of the transportation system;
- 8. An implementation program that defines and schedules the specific municipal actions necessary to achieve the objectives of the plan; and
- 9. A plan to encourage voluntary participation in TDM programs by those not required to participate.
- 10. The plan shall be updated periodically to reflect actual development activity, actual costs of infrastructure improvements completed or underway, plan changes, or amendments to the zoning bylaws."²

Policies and Plans Influencing TMOD Plan Update

Additional relevant documents and construction initiatives that help inform this TMOD plan update include the Planning Board's TDM Policy, amended zoning and the future Bedford/Hartwell Complete Street Reconstruction Project.

1998 TDM Policy

The Transportation Demand Management (TDM) Policy was first adopted in 1998 and was directed towards Preliminary Site Development and Use Plans (PSDUP), part of the Planned Development process. The TDM policy focuses on meeting the transportation needs of Lexington through a variety of suggested measures that affect the demand for,

² Chapter 135 of the Code of the Town of Lexington, Page 76. 2020. <u>https://www.lexingtonma.gov/planning-office/files/zoning-bylaw</u>. Accessed May 10, 2022.

and use of, various modes of travel, including reducing the use of single-occupancy vehicles.

The 1998 TDM Policy requires that each PSDUP has a TDM Plan which shall "provide a program of transportation services, drawn from each of the nine categories below. The Plan shall generally include each of the numbered services in each of the nine categories except that the Planning Board may permit exceptions on a case by case basis. These new transportation services shall be a parallel program to any proposed intersection improvements to mitigate traffic congestion as required by[Subsection 5.5 Traffic Standards of the Zoning Bylaw]."³

A TDM Policy update drafted by Nelson/Nygaard in 2020 included reforms to update Lexington's TDM framework to better determine when TDM plans are necessary; update the TDM regulatory process; and create a broader list of TDM measures that can be applied to individual developments in a more context-sensitive manner. TDM measures provided would be awarded points towards a target TDM threshold based on level of effectiveness and level of investment. Strategy categories included pedestrian amenities, bicycle network amenities, transportation information, smart parking management, transit network improvements, and commuter incentive or benefit programs.

Hartwell Rezoning

In 2009, the Town of Lexington approved an increase in the amount of development allowed in the Hartwell Avenue Corridor. To offset expected traffic impacts from this development, the Town also created the Hartwell Area TMO-1 Overlay District. The TMO-1 District allows properties within the district to elect a method of providing the Town with traffic mitigation other than meeting the current Off-Street Parking and Loading and Traffic Standards outlined in by Chapter 135 Sections 5.1 and 5.5 of Lexington's Zoning. The Overlay District regulations require contributions to a traffic mitigation fund which will be then appropriated by Town Meeting towards meaningful traffic mitigation infrastructure and services. A Parking and Transportation Demand Management Plan outlining trip reduction measures is also required. Then, Special Town Meeting 2020 expanded the dimensional requirements to allow efficient permitting and increased development opportunities for landowners and developers.

Bedford/Hartwell Complete Streets Reconstruction Project

The Town launched a study to develop 25% design level plans for a complete streetsoriented reconstruction of the Bedford Street and Hartwell Ave area to address safety concerns, assist traffic flow, and support pedestrian, bicycle, and transit modes of transportation. Based on surveys of environmental, land use, traffic engineering, and roadway safety existing conditions, the redesign effort aims to improve mobility and

³ Town of Lexington, 2021. Section 5.5.8 Trip Reduction Requirements. Available at: https://ecode360.com/27630044

accessibility of all users of the circulation and transportation systems including public transit, pedestrians, cyclists and motor vehicles.

The 25% design work includes plans for a complete reconstruction of the roadways, incorporating new cross-sections, streetscape elements, and placemaking amenities. As such, the capital infrastructure recommendations have a long-term focus. The recommended infrastructure improvements included in this TMO-1 District plan update, therefore, are focused primarily on short-term infrastructure and programmatic improvements that can be made prior to the larger-scale reconstruction begins.

Hartwell TMO District Plan Guiding Principles

Plan update guiding principles build on the LexingtonNext Guiding Principles⁴ and 2010 TMO-1 District Plan goals.⁵ The update to this TMO-1 District plan was guided by the following principles:

- Create a policy and regulatory framework that reflects the Town's desire to reduce single-occupancy vehicle trips and automobile emissions townwide;
- Improve mobility and accessibility of all users of the circulation and transportation systems including public and private transit, pedestrians, cyclists and motor vehicles;
- Help in expanding the pool of potential employees who can reach places of work in the Hartwell area more easily and economically;
- Improve safety and comfort-level for all commuters, customers, and clients of area businesses, as well as local residents and visitors;
- Minimize and mitigate negative impacts on residential streets; and
- Mitigate traffic and speeds

Hartwell TMO-1 District Plan Goals

In order to mitigate the traffic impacts associated with the potential increase in development from recent rezoning, this TMO-1 District Plan update sets three primary goals as follows:

- 1. Define policies, programs, and services to promote greater use of nonautomobile travel modes to, from, and within the Hartwell TMO District.
- 2. Define the transportation infrastructure needs to support the multi-modal travel demands expected from the potential new development while minimizing impacts to adjacent residential areas.
- 3. Identify the sources and mechanisms to fund goals #1 and #2.

⁴ LexingtonNext is Lexington's Comprehensive Plan update. The current draft was published in March 2022. <u>https://www.lexingtonma.gov/sites/q/files/vyhlif7101/f/uploads/lexnext-comprehensive_plan-draft-2-10-2022-updated_3-4-2022.pdf</u>.

⁵ Goals of the 2010 Hartwell TMOD District Plan, the overall transportation mitigation plan when the Hartwell TMOD District was first created after increased development was approved in 2009.

1 EXISTING TRANSPORTATION AND LAND USE CONDITIONS

Development

As of April 2022, within the TMO-1 District, there are 30 buildings hosting primarily office and lab space totaling 3,762,000 square feet of commercial real estate. There are a few amenity uses such as restaurants. Land uses are included in the table below.

Category	Number of Buildings	Square Footage
Hotel	1	108,810
Institutional*	1	1,378,199
Lab/Office	27	2,061,323
Medical Office**	3	99,053
Recreation	1	57,468
Retail/Restaurant	1	6,226
Social Services***	1	26,472
Residential***	1	24,712

Table 1: Hartwell TMO District Land Use

*Institutional uses include the Russian School of Math

- **Medical office uses include the Boston Children's Hospital and Beth Israel Deaconess Healthcare facilities and the Lexington-Bedford Veterinary Hospital
- *** Social Services uses include the Lurie Center
- **** Residential is adjacent to District

Mobility/Parking

Vehicle Traffic

Today, travel to the largely office and lab buildings in the TMO-1 District is dominated by single-occupancy vehicle travel. The number of vehicles driving through and to destinations on the corridor creates significant congestion during the traditional morning and evening commuting periods. Based on counts conducted on April 3, 2018, 1,300 vehicles travel southwest-bound on Hartwell Avenue during the AM peak between Bedford Street and Maguire Road, and 514 vehicles from Maguire add to this traffic volume headed towards the Hanscom Air Force Base gate and Wood Street. At the intersection of Hartwell Avenue and Wood Street, 595 vehicles turn onto Wood Street and 735 vehicles continue southbound on Hartwell Avenue. 369 vehicles travel away from Hartwell Avenue on Maguire Road during this peak period. 2021 counts indicate that 1280 vehicles travel southbound on Hartwell Avenue. 275 vehicles turn onto

Westview Street, 155 turn onto Maguire Road. 500 vehicles turn onto Hartwell Avenue southbound from Maguire Road. The majority of this traffic is heading towards the Hanscom Air Force Base and MIT's Lincoln Labs campus.

In the PM peak period in 2018, 1,158 vehicles travel northeast-bound on Hartwell Avenue, and an additional 842 vehicles headed towards Town of Bedford on Maguire Road add to this traffic volume. These vehicles are traveling away from Hanscom Air Force Base. In the PM peak period in 2021, 815 vehicles travel northbound on Hartwell Avenue away from the Hanscom gate. 480 vehicles turn onto Hartwell Avenue from Wood Street. 640 vehicles turn onto Maguire Avenue off of Hartwell Avenue. 1,045 vehicles travel towards Bedford Street on Hartwell Avenue. Both AM and PM peak period traffic volumes are much higher than the surrounding areas.

Survey responses to the 2022 Hartwell Area Transportation Survey align with these traffic counts. The highest number of trips made by survey respondents are on Bedford Street, Wood Street, and Hartwell Avenue. This pattern can be seen in Figure 6 below.

Hanscom Air Force Base, Lincoln Labs, and the businesses in the TMO-1 District are major employers. There was severe congestion during commute periods in 2018, but COVID-19's impact on congestion is unknown. Some employers, including Hanscom Air Force Base, are not yet (and potentially may never again) requiring staff to return to the office full time, so congestion impacts may differ from 2018. There may be less severe congestion during commute periods. This congestion can be seen below in Figures 2-5.

Figure 2: 2018 Hartwell Avenue AM Peak Traffic Diagram (Source: VHB)

















Figure 6: Hartwell Area Transportation Survey Vehicle Traffic Volumes

Trip Origins

People primarily come to the TMO-1 District for work. The average trip distance for people traveling to the TMO-1 District is 14.15 miles, and the median trip distance is 12.02 miles. However, some employees in the corridor drive over 50 miles one-way to the Hartwell Avenue area every day. Survey respondents drive from Gloucester, Plainville, and locations in Worcester County. However, most survey respondents drive to the TMO-1 District from Bedford, Carlisle, Westford, Groton, Chelmsford, Billerica, and Arlington.

Figure 7: Trip Origins to the TMO-1 District



Parking

The Hartwell TMO-1 District contains 7,925 parking spaces in the entire district while only 5,710 spaces are required in the area by current zoning requirements.

There are 35 parking facilities in the corridor, either structured parking garages or surface parking lots, ranging in size from 11 spaces at the American Camping Association (80 Westview) to 896 spaces at MIT Lincoln Labs with the average parking facility containing 220 spaces. No properties share parking.

Today, the district has a parking supply of approximately 5.15 spaces per 1,000 square feet of commercial space, compared to the minimum zoning requirement of 4 spaces per 1,000 square feet of office use and 2 spaces per 1000 square feet of Manufacturing and Research Laboratory Uses.

The Russian School has the lowest parking ratio, at 0.22 spaces per 1000 square feet. Craft Food Hall has the highest parking ratio, at 24 spaces per 1000 square feet. 83 Hartwell Avenue, Copious Imaging/Northeast Energy Efficiency, has the highest parking ratio of a lab or office use, excluding Lincoln Labs, at 5.49 spaces per 1000 square feet.

This abundance of parking is what attracts developers to the area, but it also encourages employees to drive to work creating much of the traffic seen in the area. Even so, utilization of parking spaces in the TMO-1 District is much lower than the parking supply. On an average weekday morning in April 2019, before the COVID-19 pandemic, the district had an average occupancy rate of 49% overall. MIT Lincoln Labs provides 896 parking spaces, with an average occupancy of 93%, the highest occupancy rate of the TMO-1 District. The Quality Inn provides 217 parking spaces with an average occupancy of 14%, the lowest occupancy rate of the TMO-1 District. In terms of the parking subareas, the Tennis Club parking subarea had the highest occupancy rate of all parking subareas. The West Hartwell 1 subarea had the lowest occupancy rate of all subareas, at 33%.

Figure 8: Hartwell TMO-1 District Parking Supply





Figure 9 Hartwell TMO-1 District Parking Occupancy



Figure 10: Hartwell TMO-1 District Parking Subarea

Table 2 Hartwell TMO-1 District Parking Subareas Occupancy⁶

Parking Subarea	Supply	Occupancy	Occupancy Rate
Bedford	678	364	54%
East Hartwell	1,027	649	62%
Mid Hartwell	1,430	792	55%
West Hartwell 1	1,534	647	42%
West Hartwell 2	748	394	53%
Hartwell End	1,411	683	48%
Tennis Club	201	154	77%
MIT LL	896	833	93%

⁶ Counts done using Nearmap data. Data from April 24, 2018.

Transit

The MBTA and the 128 Business Council serve the TMO-1 District and surrounding areas with limited and infrequent transit services for those seeking or requiring alternatives to a personal automobile. The Middlesex 3 TMA shuttle routes do not extend to the TMO-1 District today. The northern loop of Lexpress Route A1 and A2 reaches Grove Street, near the Estabrook School, before returning to Depot Square, close to Eldred Street, but does not serve the TMO-1 District directly.

Figure 11: Hartwell TMO-1 District Transit Map



MBTA

The MBTA 62/76 bus route operates between Bedford VA Hospital and Alewife on weekdays and averages a headway (time to wait between buses) every 30 minutes at peak hours. MBTA routes are shown in green in Figure 8. Prior to COVID-19, MBTA operated two separate routes for Route 62 and Route 76. These have been combined into the MBTA 62/76. These routes, prior to the COVID-19 pandemic, averaged a daily ridership of 1,363 passengers in 2018. Route 62/76 runs between the Alewife Station and the Bedford VA Hospital with two different route alignments, one that stops at Hanscom Airforce Base and one that does not. The 62/76 operates 60-minute headways during regular service Monday-Friday and every 20 minutes during peak times Monday-Friday. Saturday service operates 70-minute headways until 3pm and then 60-minute headways until the end of service at 9pm. There is no Sunday service.

MBTA is currently working on a Bus Network Redesign project. MBTA's service area has changed significantly in recent years, with shifting demographics, new employment areas, increased traffic congestion, and changing travel patterns. The Bus Network Redesign will update MBTA's bus network to reflect these changes. As a result, the MBTA routes that run through the Town of Lexington may see future changes to the schedule and to the routes.

TMA Shuttles

The 128 Business Council operates the REV Shuttle between Alewife Station and Hartwell Avenue. The 128 Business Council Shuttle is shown in red in Figure 8. It operates Monday-Friday in peak periods only and averages a headway (time to wait between buses) every 1 hour and 20 minutes at peak times for a total of three morning trips and three evening trips per weekday. These shuttles are funded through contributions from employers and member organizations of the area who ask for service to support alternative transportation access options. REV shuttle stops are located at:

- 40 Wiggins Ave (Patriots Park, Bedford);
- Preston Court (Alexandria RE Equities);
- 10 Maguire Rd (Greatland Realty Partners);
- 29/35 Hartwell Ave (Alexandria RE Equities);
- 91 Hartwell Ave (North River Company LLC);
- 101 Hartwell Ave (King Street Properties);
- 131 Hartwell Ave (AZAD Legacy Partners);
- 44 Hartwell Ave (Alexandria RE Equities);
- 32 Hartwell Ave (Boston Properties);
- 420/430 Bedford Rd (Boston Properties);
- Lexington Town Center and
- Alewife Station along the corridor.

REV Shuttle buses enter private parking lots to pick up passengers, rather than remain along the roadway as the MBTA route does. These slight deviations increase the travel

time of the bus significantly and limit the operational ability to add service without the Transportation Management Association (TMA) purchasing and maintaining another bus.

Town of Lexington

The Town of Lexington operates the LexPress bus with three routes, the A, B, and C. These are shown in yellow in Figure 8. The A route reaches the closest to the Hartwell Avenue area. Buses depart from Depot Square and riders can hail the bus anywhere along the route. There are no set stops other than Depot Square. Buses have 60-minute headways on all routes. LexPress runs Monday-Friday from 7:30am to 7:15pm. LexPress has a \$2 general fare for all routes, with discounted options for children, older adults, or persons with disabilities.

Bicycle Accommodations

The Minuteman Commuter Bikeway runs through the TMO-1 District. The Minuteman Commuter Bikeway connects Bedford, Lexington Center, Arlington Center, and the Alewife Station at the end of the MBTA Red Line. This bikeway is an off-street multiuse path for cyclists and pedestrians used for commuting and recreation. Bikes lanes exist on the entire length of Hartwell Avenue and sharrows on Wood Street. In a survey of community members as part of the corridor redesign planning process, 23% of respondents indicated they bike to the area.

The Town of Lexington adopted the West Lexington Greenway Master Plan in 2009. Lexington's Greenways Corridor Committee is currently working to implement trails envisioned as part of the West Lexington Greenway Proposal. The Greenways Corridor Committee has 13 proposed trail projects that will support the West Lexington Greenway plan and ACROSS Lexington trail routes. A proposed route relevant to the study area is a north-south multi-use path connecting Marrett Road with Bedford Street. The path is expected to run parallel to Hartwell Avenue between the Minuteman Bikeway and Bedford Street.



Figure 12 Hartwell TMO-1 District Bike Facilities - needs revisions

Pedestrian Accommodations

While there are some pedestrian accommodations in the TMO-1 District, they vary widely between streets and do not provide consistent safe connections for pedestrians traveling from bus stops to buildings or between buildings in the area.

On Hartwell Avenue five-foot-wide sidewalks exists on the south-bound and north-bound sides of Hartwell Avenue between Bedford Street and Westview Street. The existing multi-use path on the north-bound side of Hartwell Ave between Westview Street and the Minuteman trail is 10 feet wide.

After the multi-use path ends at the Minuteman trail, there are no sidewalks on Hartwell Avenue until the Hanscom Airforce Base gate. There are also no designated pedestrian crossings across Hartwell Avenue between Bedford Street and the Hanscom AFB gate to provide a continuous safe route for pedestrians. The only marked pedestrian crosswalk across Hartwell Avenue is located across the jughandle at the intersection of Hartwell Avenue at Bedford Street, approximately 1.3 miles northeast of the Hanscom AFB gate. There is a crosswalk for the Minuteman Commuter Bikeway where it bisects Hartwell Avenue, but there are no sidewalks for pedestrians.

Sidewalks are provided on the northern side of Bedford Street starting from the highway ramps and extending past the town border. South of the intersection of Hartwell Ave and Bedford Street, sidewalks on the south side of Bedford Street extend to the driveway of 482 Bedford Street, also serving the MBTA bus stop. Sidewalks are approximately five feet in width. There are standard crosswalks painted across Bedford Street at the Hartwell Avenue signalized intersection.

On Westview Street, there are no sidewalks or crosswalks, nor a road shoulder, except for where the Minuteman Commuter Bikeway crosses the road. This continental-striped crosswalk is also marked by a pedestrian and bicyclist safety sign to alert drivers. There are no sidewalks on Maguire Road, but there is a continental-striped crosswalk between Revolution Hall and the 10 Maguire complex. There is a four-foot-wide sidewalk along the northbound side of Wood Street and no pedestrian accommodation on the southbound side. The MBTA Better Bus Network plans for four RRFB's crossings across Wood Street to provide safe access to bus stops. These have not been built.

TDM Programs Offered

Individual companies in the TMO-1 District offer the following TDM measures, as documented in Transportation Demand Management Reports submitted by developments. Additional details on which strategies are offered by companies in the study area are included in a matrix in the Appendices. These strategies are not currently being monitored, so some may not be available at this time.

Category	Strategy	Companies Offering Strategy
Parking	Parking reduction	7
Parking	Off-street parking*	2
Parking	Dedicated rideshare (carpool/vanpool) parking	2
Parking	Cash-out parking program	1
Parking	Preferential spaces for rideshare	1
Parking	EV parking	1
Parking	Parking management	1
Bike/Ped	Bikeshare Program	7
Bike/Ped	Bicycle amenities - bike parking	3
Bike/Ped	Bicycle amenities - showers and lockers for employees	3
Bike/Ped	New pedestrian connections - new sidewalks	2
Bike/Ped	Bicycle and pedestrian route maps	1
Bike/Ped	Sidewalk repairs	1
Education/ Outreach/ Support	Membership to the 128 Business Council	10
Education/ Outreach/ Support	Transportation coordinator	6
Education/Outreach/Support	Rideshare program	2
Education/ Outreach/ Support	Mode split monitoring program	1
Education/ Outreach/ Support	Telecommuting	1
Incentives	Financial incentives	1
Incentives	Flexible shift hours	1
Incentives	Guaranteed ride home	1
Incentives	Alternative mode promotions and incentives	2
Transit	Public transportation	11
Transit	Shuttle services	5
Transit	Transit passes for employees	3
Transit	NuRide	1
Transit	Bus stop infrastructure	1
Other	Transportation mitigation fee	5
Other	Access/Egress improvements	1

Table 3: TDM Measures Used by Businesses in the Hartwell TMO-1 District as of April 2022

*Not an effective TDM measure

The 128 Business Council and the Middlesex 3 TMA are both transportation management associations (TMAs) in the area. TMAs are organizations that provide transportation services in a particular area, such as a commercial district, mall, medical center or industrial park.

128 Business Council TMA

The 128 Business Council provides two levels of membership:

- 1. Membership (does not include shuttle service)
 - a. In-house expertise for member companies including commuter surveying, data collection, green building (LEED), DEP rideshare regulation compliance, and Clean Air Act compliance
 - b. Resources including service area maps, emergency ride home services, commuter calculator, and bike, walk, and ride-share services
 - c. Mapmaking, including maps of routes, demographics, housing, income, and origin and destination of employees and residents
 - d. Wayfinding and design including research, design, and installation, bus, shelter, map, and signage design, and full-scope project planning
 - e. Transportation research and analysis
 - f. TDM regulation development, including drafting grant proposals for state or federal funding of transportation programs
- 2. Membership and Shuttle Participation
 - a. Shuttle service. Shuttles are open to the general public unless the route is marked "employees only" or "residents only".

Middlesex 3 TMA

The Middlesex 3 TMA currently provides services to members in Bedford, but the service area does not extend to the TMO-1 District today. The TMA is an affiliated organization of the Middlesex 3 Coalition. The Town of Lexington is a municipal member, and the Lexington Chamber of Commerce and Hanscom Air Force Base are Partner Organizations of the Middlesex 3 Coalition. The TMA's services include:

- 1. Shuttle service from the Haymarket Station in Downtown Boston via Alewife Station in Cambridge to destinations on Crosby Drive in Bedford and E-Ink in Billerica.
- 2. This <u>shuttle service</u>, operated by TransAction Corporate Shuttles, consists of one outbound trip in the morning at 6:30am from Haymarket and another outbound trip from Alewife at 8:50am. Two inbound trips in the evening drop-off passengers at Alewife Station.
- 3. Access to the ride-matching database eCommuter run by TransAction Associates, an online regional program where employees can look for carpool and vanpool riders, as well as a Bike Buddy
- 4. Emergency ride home program, which guarantees participants a ride home if they have an emergency on a day when they use alternatives to driving alone. Members are equipped with a complete instruction packet when they register describing how to request a ride to be arranged within 30 minutes.
- 5. Promoting active commuting options like biking and walking to members
- 6. Vanpool formation assistance
- 7. Marketing programs
- 8. Support to set up transit benefits or subsidize transit as a qualified transportation fringe benefit
- 9. Miscellaneous custom services such as: a survey to determine travel patterns before implementing an element of a commuter benefits program or shuttle; maps of employee zip codes to create a visual tool for planning; help identifying off-site parking locations for use when there isn't enough parking on-site; designing a shuttle route to meet a specific need, and identifying partners to share the cost of a shuttle.

2 FUTURE DEVELOPMENT GROWTH AND EXPECTED IMPACTS

Development

VHB, lead consultants for the Town of Lexington's Bedford Hartwell Corridor Complete Street 25% Design project, are developing expected future development build-out scenarios for the TMO-1 District based on the current zoning and potential mixed-use residential scenario. Each scenario considers sensitive wetlands and navigation easements that may limit buildable area.

Because this work is ongoing, the land use scenario results and associated trip generation and transportation impacts are not yet available. Evaluation of future development and expected impacts will be completed through this separate planning effort.

3 DISTRICT TRANSPORTATION GOAL

The mode share goal set in the 2010 TMO-1 District Plan is an 85% drive-alone rate.

With proposed development coming to the TMO-1 District, the mode share goal should be updated to better reflect the goals of the TMO-1 District today and adjust over time. The updated mode share goal will be set as 10% less than the latest Census Transportation Planning Products (CTPP) workplace geography table results. This allows for the mode share goal to be dynamic and both aspirational and realistic with the current conditions of the Town. The most recent available 5-year CTPP data (2012-2016) shows a drive-alone workplace mode share of 92% for the TMO-1 District. The updated drive-alone mode share goal for the TMO-1 District is 82%.

The Hartwell/Bedford TMO-1 District aims to achieve a drive-alone mode share for commuters of 10% less than the latest 5-year American Community Survey. This drive-alone mode share goal is 82%.

The following recommendations and TDM measures are in support of this drive-alone mode share goal. The TDM measures included will incentivize mode shift away from drive-alone modes to other modes.

4 PARKING AND TRANSPORTATION DEMAND MANAGEMENT MEASURES TO REDUCE VEHICLE TRIPS IN THE DISTRICT

This section notes the necessary parking and transportation demand management strategies, traffic calming measures, and transit amenities that fit contextually with the Town of Lexington and the TMO-1 District, selected to help ensure the long-term stability of the transportation system. They intend to reduce the number of vehicle trips generated by developments in the TMO-1 District and encourage private sector participation in relieving the Town's traffic problems. The TDM measures included focus on the TMO-1 District and are largely programmatic and regulatory strategies.

OFF-STREET PARKING AND LOADING REQUIREMENTS

Off-street parking and loading requirements for developments in the TMO-1 District are governed by the approved TMO-District Plan and Regulations. In the 2010 Plan and Regulations, the parking and loading standards in the TMO-1 District were calculated and applied per Section 5.1 of the Zoning Bylaw for the underlying district.

The parking requirements set forth in the zoning should be considered the maximum allowed in the TMO-1 district. In a subsequent zoning change the Board and Town Meeting should consider reducing the parking requirements.

Any for each parking space built over the allowed maximum, the applicant or subsequent property owner shall provide a parking mitigation fee of \$10,000 per parking space matching cost required in the 2017 PILOP Policy adopted by the Board of Selectmen for Lexington Center.

REGULATORY

Participation Requirements in the TMO-1 District

The provisions of the TMO-1 District apply to "developments located within a TMO District that elect to comply with the requirements of Section 7.2 of the Zoning Bylaw and the specific requirements of the TMO-1 District Plan, instead of the special permit process outlined in Sections 5.1 and 5.5 of the Zoning Bylaw."

The parking and loading requirements per §5.1 apply to the TMO Districts unless otherwise provided in the Regulations.

The TMO-1 Overlay District provides an alternative to §5.5. As such the threshold for compliance of §5.5 is then the threshold for TMO-1 District requirement should the

developer choose to opt into the overlay district. The applicability of §5.5 and then the need for compliance TMO-1 District is:

§135-5.5 Applicability. No building permit shall be granted for the erection of a new building or the enlargement or renovation of an existing building other than in the CB District with the result that:

- 1. There are 10,000 square feet or more of gross floor area on the lot, including any existing floor area, but not including any floor area devoted to residential use or to off-street parking; or
- 2. There are 50 or more dwelling units, or their equivalent, in a development, including any existing dwelling units; or
- 3. The number of parking spaces is increased by 25 or more and there are 50 or more parking spaces, including any existing parking spaces, on the lot

Applicability of the TMO-1 District can be clarified in the \$176 - 10.2. The Consultant suggests a combination of the following:

- All new structures adding over <u>10,000 square feet</u> (including space for parking) or more, or,
- All change of the zoning use category for 10,000 square feet or more that also needs a building permit, or,
- Construction of at least 25 parking spaces, projects generating at least 15 peak hour trips, or,
- Projects that include at least 10 dwelling units are required to participate in PTDM development and approval.

A Full PTDM Plan is required for development proposed at a scale that meets or surpasses the following thresholds:

- A. ≥30,000 square feet of new construction or renovation, or
- B. ≥30 new or added housing units, or
- C. ≥40,000 square feet of changed land uses, or
- D. ≥30 new or additional parking spaces, or
- E. ≥30 new or additional peak hour trips⁷

Small Project PTDM plans "must provide a description of the specific demand management techniques that will be used to achieve a reduction in single occupancy

⁷ Trip generation shall use standards and methodologies promulgated by the most recent editions of the Institute of Transportation Engineers or Urban Land Institute manuals, or another appropriate source approved by the Town.

vehicle use."⁸ A Small Project PTDM plan is required for development proposed at a scale that meets or surpasses the following thresholds before triggering a Full Project PTDM Plan:

- A. ≥10,000 square feet of new construction or renovation, or
- B. ≥10 new or added housing units, or
- C. ≥20,000 square feet of changed land uses, or
- D. ≥15 new or additional parking spaces, or
- E. ≥15 new or additional peak hour trips⁹

TMO-1 district participants must not exceed the maximum district SOV goal of 82%. The SOV goal will be adjusted every five years in accordance with census survey results.

Parking and Transportation Demand Management (PTDM) Plan Requirements

PTDM plans must include several PTDM measures chosen from the menu of TDM measures included in Appendix B to reach a point target based on the size of the project and the type of the project. The Town will determine under which category a project fits.

PTDM Plans in the TMO-1 District must follow the point system listed in the TMO-1 Regulations §176-10.2. such as the example below to ensure that a variety of effective TDM options are used. The point structure can be amended separate from the District Plan. Each strategy in Appendix B includes point values. One point must be obtained from each category of TDM measures in Appendix B to ensure that effort is made to promote multiple modes.

Land Use Category	Minimum Requirement					
	Small Scale Project	Large Scale Project				
Residential, Uses	10 points	12 points				
Office, Lab, Manufacturing, School, or Medical Uses	12 points	16 points				
Service, Retail, or Visitor Uses	6 points	8 points				
Other Uses	4 points	5 points				

Compliance with the submitted and approved PTDM Plan is a condition of any permit approvals. PTDM Plans must be submitted for review prior to application for a building permit, site plan review, or special permit, whichever comes first. The Town will issue draft comments and guidance for revisions should the proposed Plan not meet the minimum required point threshold.

⁸ Town of Lexington. <u>https://ecode360.com/32930494</u>

⁹ Trip generation shall use standards and methodologies promulgated by the most recent editions of the Institute of Transportation Engineers or Urban Land Institute manuals, or another appropriate source approved by the Town.

The PTDM Plan shall be designed to minimize the amount of parking demand associated with the project and reduce single-occupant vehicle trips in and around the TMO-1 District. A compliant PTDM plan must include:

- Name and address of property owner and property manager;
- Description of the nature of the development and property use;
- A description of the combination of TDM measures that will meet the minimum points requirements as outlined above, including a site plan map of where infrastructural elements will be placed;
- Total number of existing or proposed parking spaces (broken down by residential, employee, visitor/guest spaces to the extent possible)
- Review and approval by Town Staff or designee

PTDM Plan approvals issued by the Town shall be automatically transferrable by and among private parties, provided that the proposed new owner (the "Transferee") shall continue to operate under the submitted and approved PTDM Plan or seek and be granted approval of a replacement PTDM plan by Town Staff or designee.

Post-occupancy ongoing monitoring and reporting will be required to ensure that developers, property owners, and tenants are actively participating in their TDM program commitments and working to meet the district mode split goal. Details on reporting requirements can be found in Section 6 of this Plan. Penalties for noncompliance will be assessed per Chapter 135-9.1 of the Zoning Bylaws.

PROGRAMMATIC

The District currently lacks coordinated TDM programs that support the shift away from single occupancy vehicle travel, beyond the REV shuttle provided by members of the 128 Business Council TMA. The Town is a member and sponsors a stop in the center. The Rev and other 128 Business Council shuttle are open to the public.

Many TDM programs and services are most efficiently operated at the district-wide scale, rather than piecemeal by property. These can be offered by the 128 Business Council, the Lexington Chamber of Commerce, the Town or other overarching institutional entity. They are detailed in the recommendations below.

However, there are some TDM recommendations that are more effective at a town-wide level or can be implemented in all of the TMO districts. For additional programmatic recommendations that apply to all three of the TMO Districts in the Town, see the Policy and Administrative Technical Memo.

Travel Training

The Town of Lexington or TMAs with service in the TMO-1 District will bi-annually provide district-wide travel training to employers and employees, businesses, and tenants to raise awareness of non-single occupancy vehicle modes. This travel training will consist of educational programs and skill/safety training programs to help employees

and residents of the area bridge gaps and become more familiar with, and therefore more likely to take advantage of, transit, shuttle, bicycle, and other carpooling options. Educational programs will include information on MBTA routes, the 128 TMA shuttle, the Minuteman Bikeway, other services provided by the 128 Business Council, and any other new or existing public transportation services. The training may cover trip planning software, how to read route maps and schedules, locations of bus stops, fare calculation, how to obtain transit passes, how to obtain service updates, and more. Skill and safety programs will include programs like training on how to use MBTA bus services, how to use commuter benefit programs, and bicycle safety trainings.

Bikeshare Program

The Town of Lexington continues to track the possibility of a BlueBikes bikeshare expansion to the TMO-1 District.

Carshare Program

The Town of Lexington and the TMA will evaluate carsharing options for the TMO-1 District. Similarly, an evaluation of carshare options would include a review of recent trends in carshare (especially amid employment districts), review of potential business models (including ownership structure, operating structure, technology, and funding), and an implementation plan. A carsharing program should feature a partnership with ZipCar, GetAround, or another short-term vehicle rental company. Zipcars and accompanying parking spaces would be provided at different locations around the TMO-1 District. These vehicles could be available for employees or others in the TMO-1 District to use for short trips during their workday. This would be an incentive for employees to take transit to the TMO-1 District, understanding that they could use ZipCars for short trips during the workday.

Communications Strategy

The Town of Lexington or the TMA will create a communications strategy for communication about the TMO-1 District, transportation options, and TDM programs offered. This will include a TMO-1 District website with information on all businesses within the district, TDM programs available in the TMO-1 District, and information and alerts on transportation services; social media engagement; and newsletters.

5 INFRASTRUCTURE IMPROVEMENTS REQUIRED TO ADDRESS THE IMPACTS FROM DEVELOPMENT IN THE DISTRICT AND ENCOURAGE NON-DRIVING TRIPS

The Town's 25% design level plans for a complete streets-oriented reconstruction of the Bedford Street and Hartwell Ave area includes a longer-term vision for multimodal infrastructure improvements within the TMO-1 District. The plans for a complete reconstruction of the roadways will include cross-sections, streetscape elements, and other infrastructure amenities to address safety concerns, assist traffic flow, and support pedestrian, bicycle, and transit modes of transportation.

The recommended infrastructure improvements included in this Plan Update are focused primarily on short-term infrastructure and programmatic improvements that can be made prior to the larger-scale reconstruction begins. Nevertheless, the Road Safety Audit (RSA) for Hartwell Avenue at Bedford Street and Westview Street completed as part of the 25% Design Plan process and submitted to the Massachusetts' Department of Transportation's Highway Safety Improvement Program identifies infrastructure improvement needs that can occur prior to full reconstruction.

Key safety issues seen in the RSA that can be addressed in the short-term include:

- Substandard pedestrian accommodations
- Lack of pavement markings and signage at the Hartwell Avenue and Westview Street intersection
- Limited signage and poor visibility of existing signage for Hanscom Airforce Base on Hartwell Avenue;
- Intersection visibility at the intersection of Hartwell Avenue and Westview Street;
- An MBTA transit stop on westbound Bedford Street in a location that could impact operations and cause increased crashes;
- Northbound and southbound permissive phase conflicts at the intersection of Hartwell Avenue and Bedford Street; and
- Lack of signal pre-emption.

The following transportation infrastructure improvements constitute elements of an areawide plan that can address the short-term impacts of anticipated future development in the area and future system deficiencies prior to the full reconstruction of the corridor. Roadway, pedestrian, and bicycle infrastructure needs include:

1. Pavement markings to distinguish through lanes, turning lanes, and bike lanes

- 2. Wayfinding signage, including signage for MIT Lincoln Labs and Hanscom Air Force Base
- 3. Advanced signage for the Hartwell-Bedford intersection
- 4. Intersection daylighting at all intersections in the TMOD District to increase pedestrian safety
- 5. Bus stop improvements to meet MBTA design guidelines, including provision of bus shelters
- 6. Sidewalk provision on both sides of streets
- 7. Improvements to the Minuteman Path crossing on Westview and Hartwell
- 8. Addition of a crosswalk at Wood Street and Hartwell
- 9. Additional traffic calming strategies such as separated bike lanes, speed bumps, or a lower speed limit.

Specific infrastructure needs include: (note: bike lanes have been provided - need to revise this section

- 1. Hartwell Avenue (from Maguire Road and to Bedford Street):
 - a. Provide bike lanes and sidewalks on both sides of the road along Hartwell Avenue. Sidewalks should connect to other sidewalks on Bedford Street and connect to the proposed sidewalk on Maguire Road.
 - b. Provide traffic calming measures or lower the speed limit on Hartwell Avenue to encourage cyclists and pedestrians
 - c. Provide bus shelters and signage for all transit, including shuttles, along Hartwell Avenue
 - d. Provide street lighting along sidewalks to increase pedestrian safety and comfort

2. Westview Street

- a. Provide crosswalks at the intersection of Hartwell Avenue and Westview Street
- b. Provide bike lanes on Westview Street to connect to the Minuteman Path and proposed bicycle facilities on Hartwell Avenue.

1. Minuteman Bikeway

- c. Provide wayfinding signage for cyclists and for drivers' awareness of the Minuteman Bikeway
- d. Provide street lighting at the intersection of Hartwell Avenue and the Minuteman Bikeway Intersection
- 3. Hartwell Ave South of Maguire Road to the Hanscom AFB Gate
 - a. Provide marked bike lanes and sidewalks on both sides of Hartwell Avenue. Bike lanes should connect to the Minuteman Bikeway. Sidewalks should connect to existing and proposed sidewalks.
- 4. Hartwell Place Intersection

a. Provide crosswalks at the intersection of Hartwell Place and Hartwell Avenue

5. Maguire Road:

a. Provide sidewalks on both sides of the street, with the northeast sidewalk connecting to the Minuteman Bikeway crossing of Hartwell Ave

6. Wood Street

- a. Reconstruct corners to reduce the turning radius at the intersection with Hartwell Ave to reduce speeds and improve bike safety on shoulder bike lanes.
- b. Introduce crosswalk with HAWK signal on eastern side of the intersection where Wood Street sidewalk ends.

Transit infrastructure and service needs include:

- Bus stop improvement to create an accessible concrete landing pad and boarding zone where riders wait for, board, and alight a bus. An accessible path of travel that is four feet wide, stable, and of slip resistant pathway clear of obstructions and of slope less than 2% should be installed at existing or relocated stops, matching the <u>MBTA's Bus Stop Planning and Design Guide</u>. The Town should work with the MBTA's Better Bus Network program so that each stop has a bus shelter with weather protection overhead and on either side at every MBTA stop along Wood Street, Hartwell Avenue, and Bedford Street.
- Coordinate with the 128 Business Council to relocate bus stops from individual property parking lots and building front entrances to co-locate with improved MBTA stops along Hartwell Ave. This removal of spurs onto private property will reduce trip travel times and potentially allow for a reduction of headway enough to add an additional trip outbound in the morning and inbound in the evening.
- Work with the 128 Business Council and the Middlesex 3 TMA to provide service from the TMO-1 District to the closest MBTA commuter rail stop, as well as Alewife Station. Create a one-seat ride option if possible so commuters do not need to transfer between shuttle routes.

Costs Projections for Transportation Infrastructure Improvements

To be provided

6 IMPLEMENTATION PLAN

MONITORING PARKING AND TDM PLANS

For all developments within the TMO-1 District that submit either Large Project or Small Project Parking and Transportation Demand Management Plans to the Town, the Town requires post-construction monitoring to understand whether the implemented TDM programs are working as intended to reduce single-occupancy vehicle trips. The intention of the performance monitoring reviews is to both explore the impact of the development on the transportation network, taking into special consideration the TDM conditions placed on the site, and learn which strategies are most effective in the TMO-1 District for consideration of inclusion in the next plan update.

Basic Requirements

Basic monitoring and reporting requirements are noted in §10.2-5¹⁰ of the zoning code and will be outlined in greater detail here. A monitoring report template can be found in Appendix C of this document. This template will allow you to clearly document:

- Performance metrics (as outlined in the next section)
- Compliance with TDM measures identified in your submitted TDM Plan
- Ongoing progress in meeting the district's mode share goals

Monitoring reports are required:

- Prior to initial occupancy (or certificate of occupancy)
 - This report must document confirmation that all TDM measures identified in submitted TDM Plan are in place.
- Two years after occupancy (or certificate of occupancy) the first instance of data collection and documenting performance metrics
- Five years after occupancy (or certificate of occupancy)
- Ten years after occupancy (or certificate of occupancy):
- Every five years into perpetuity, starting at 10 years after occupancy

Property managers and/or developers will be responsible for 100% of the cost of the monitoring report, including necessary data collection. It is recommended that data collection be conducted by a local transportation management association/organization or transportation planning/engineering firm.

¹⁰ <u>https://ecode360.com/32930494</u>

Performance Metrics to Report

Each report must include the following performance metrics:

- Mode split calculation based on data collected from annual monitoring report
- Average peak weekday parking (car and bicycle) facility occupancy
- Peak period (6am 10am and 3pm 7pm) vehicle trips to and from the site
- Peak period (6am 10am and 3pm 7pm) bicycle trips to and from the site
- Percentage of daily trips taken during peak periods
- Average daily weekday combined MBTA and TMA shuttle ridership

In addition, the report will include the following back-up information:

- Results from online survey of residents/ employees and intercept survey of visitors. Surveys must meet a response rate of 50% or will need to be readministered.¹¹
 - Typical transportation access mode (mode share)
 - Percent of employees working from home, by day of week
 - Receptiveness to and use of provided TDM options*
 - Receptiveness to alternative TDM options
 - Zip code origins of employees and zip code destinations of residents
- Summary notes from an interview with the property manager about parking and TDM program provision.

As with the issuance of a building occupancy permit, each monitoring report will include a site visit. The site visit as part of the monitoring report must include a sit-down meeting and walkaround tour of the property to review each component of the approved PTDM Plan.¹² During the tour portion of the site visit, Town staff or designee will check that elements of the building's physical infrastructure (e.g., pedestrian accommodations, bike parking, showers, lockers, EV chargers, carpool/vanpool parking, and transportation information kiosks) are in good shape and meet the TDM plan requirements. Property managers should be prepared to provide backup material about program provision and use, if necessary.

Not Meeting Mode Share Targets

If the monitoring report indicates that mode share targets are not met, the following actions will be taken:

¹¹ Surveys must utilize unique ID numbers or other method to ensure that each employee fills out only one survey.

¹² Virtual site visits and photographs of physical infrastructure are an alternative to in-person site tours during public health emergencies to allow for work continuity. These virtual site tours must be conducted between the property owner or manager and Town staff member or designee by using a video call on a smartphone or tablet. Acceptable video call platform will be determined by the Town prior to scheduling a virtual visit. Property owner or manager interviews can also be conducted virtually.

- The Town will set up a meeting with the property owner and/or manager to discuss the monitoring report results and how adjustments to the PTDM Plan can better meet the transportation needs of their building tenants.
 - Property manager and/or developer will submit an updated PTDM plan detailing what changes are being made to support the site becoming compliant with TMO-1 District regulations and TDM goals.
 - Property manager and/or developer will also confirm with the Town that all existing TDM measures documented in their PTDM Plan are being implemented.
 - Sites not meeting mode-share target goals fall back to annual reporting requirements

Non-Compliance

If any TMO-1 District Plan monitoring report requirements are not being met, the property will be considered in non-compliance and non-compliance steps will be implemented. The goal of non-compliance steps is intended to be collaborative, and only punitive when necessary. Non-compliance may include, but are not limited to:

- Failure to submit monitoring reports by deadlines indicated in the monitoring report template
- Failure to maintain TDM measures documented in existing PTDM plan
- Failure to meet with the Town within 60 days of submittal of a monitoring report not meeting mode share targets
- Failure to submit an updated PTDM plan within 120 days of submittal of a monitoring report not meeting mode share targets

Non-compliance will lead to penalties outlined in §135-9.1 of the Zoning Bylaw.

ENGAGE CONSISTENTLY WITH KEY PARTNERS

The Town is not in charge of transit service to the district and cannot directly make improvements desired as part of the District Plan or included as part of TDM Plans. REV shuttle improvements require collaboration with the 128 Business Council TMA. Shuttle service or other public transit further north and west along Rte. 3 where many employees of the area originate does not exist today and would require an expansion of the Middlesex 3 TMA service, LRTA service, MART service, or MWRTA service. The MBTA Bus Network Redesign may also change the 62/76 routes and service schedules. Staff time should be dedicated to routinely engage with the local TMAs in addition to the 128 Business Council. The local TMAs can serve as regional advocates and help with collaboration amongst municipalities on shared transportation goals. Coordinate with the 128 Business Council to relocate bus stops from individual property parking lots and building front entrances to co-locate with improved MBTA stops along Hartwell Ave. This

change could potentially allow for a reduction of headway enough to add an additional trip outbound in the morning and inbound in the evening.

Staffing can also be dedicated to collaboration amongst municipalities to ensure that development incentives and disincentives are all aligned to meet shared congestion and sustainability goals. Staff should collaborate with Arlington, Bedford, Belmont, Burlington, Concord, Lincoln, Waltham, and Winchester nearby, and Cambridge and Watertown which are slightly further in the process of ongoing monitoring programs. Staff should also work with regional stakeholders, like the Boston Region MPO, for help with regional TDM coordination.

Staff should work to increase communication and collaboration with Hanscom Air Force Base and MIT Lincoln Labs. Hanscom Air Force Base and Lincoln Labs are two of the highest trip generators in the TMO-1 District and surrounding areas. While Hanscom Air Force Base and MIT Lincoln Labs may not be subject to municipal regulations, they may be willing to collaborate on TDM efforts.

Where appropriate, staff should create a TMO-1 District stakeholder working group to collaborate on transportation efforts. This working group should include developers, tenants, residents, and contacts from Hanscom Air Force Base and MIT Lincoln Labs.

ALLOCATE STAFF

The Town of Lexington is supported by a variety of staff and working group members to oversee transportation and site plan review, but more time should be dedicated to managing TDM plans. Managing TMO-1 PTDM plans is currently done by Planning Office staff. Vacancies in several departments have significantly reduced the staff time dedicated TDM monitoring. Specific staff time should be allocated or additional staff should be hired to focus on monitoring TDM plan performance across developments in the District to understand what measures are working, working the best, or what could be changed in future required TDM Plans and administration of recommended programs, routine engagement with the 128 Business Council, the Middlesex 3 TMA, and neighboring municipalities, coordination with MIT Lincoln Labs and the Hanscom Air Force Base.

MITIGATION FEE STRUCTURE

In varying degrees, each element of the proposed transportation infrastructure improvements below and the proposed PTDM measures in Appendix B will contribute to mitigation of new development in the TMOD area. The total funds derived by anticipated new development are roughly proportionate to the impacts created by the development, reasonably benefit the development, and will not produce funds in excess of those necessary to mitigate the impacts that can be attributed solely to the new development.

Each project is required to pay an PTDM Review application fee (of at least \$50) to support an expanded and more robust monitoring and compliance program to ensure that TDM commitments are being met and working to achieve goals.

For commercial uses, one-time fee will be \$5 per square foot of net new construction, and \$2 per square foot of floor area of interior renovation, or change in the zoning use category. For developers building new parking spaces or utilizing existing or new parking spaces above the zoning minimum, an add-on fee will be required. This fee will or \$10,000 per new parking space over the zoning minimum.

For residential properties, instead of a mitigation fee paid to the Town, the developer will instead provide two 6-month transit passes per dwelling unit each time the unit turns over. This provision is subject to other zoning and state laws. Check with Town Counsel

OTHER REASONABLY ANTICIPATED SOURCES OF FUNDING

The Boston Region MPO typically requires that member municipalities undertake the planning and engineering design of transportation improvement projects, while federal, state and local money is distributed via 5-year Transportation Improvement Programs for construction. The usual breakdown of federal/state government TIP funding remains 80% federal and 20% state.

However, significant infrastructure funding is available from the American Rescue Plan Act of 2021 (ARPA). Lexington received \$9.9 million in ARPA funding and the <u>remaining</u> <u>funds</u> will be allocated by the Town Manager working with the Select Board. The Town must expend the remaining ARPA funding within three calendar years.

External programs, with revenue sources:

- Federal/state/local/private funding of several TMO-1 projects through multiple program sources that qualify for inclusion on the MPO's Transportation Improvement Plan (TIP);
- Commonwealth legislation and/or appropriation in support of efforts to keep the U.S. Air Force Hanscom Air Base off of future Defense Base Realignment and Closure (BRAC) lists;
- MassDOT's Complete Streets Funding Program's Tier 3 Construction Project grants;
- MassDOT's (in partnership with the Barr Foundation) Shared Streets and Spaces Grant Program;
- MassDOT's Community Transit Grant Program;
- MassDOT's Local Bottleneck Reduction Program (up to \$500,000 and no local match required);
- MassWorks Infrastructure Program funds for infrastructure needs;
- Massachusetts Executive Office of Housing and Economic Development (EOHED) special programs;
- Federal Highway Administration's National Scenic Byways Program grant program.

The Town can refer to the State Aid Reimbursable Programs Estimating Tool (SARPET) website: <u>https://www.mass.gov/info-details/sarpet-details-and-instructions</u>.

Lexington revenue sources that may be allocated to Plan implementation:

- Transportation mitigation fees
- Tax levy, including District Improvement Financing (DIF), Community Preservation Funds, and general tax levy
- In order to permit the design or construction of improvements before receipt of mitigation fees, the Town may borrow funds, applying transportation mitigation fees to the debt service as they become available.

In order to move TMO-1 projects ahead, Lexington may choose to take on more of the implementation costs.

IMPLEMENTATION MATRIX

ltom	Potential Partners							
item #	Recommendation	Lead(s)	Supporting Actor(s)	Priority	Timeline	Cost	Funding	Impact
1	Re-evaluate and update the TMO District mode share target	Town Staff	Planning Board	High	Short	Low	N/A	Low
2	Engage routinely with key stakeholders (including Business Council 128, MIT Lincoln Labs & Hanscom AFB)Biannual meetings	Town Staff	BC 128, Hanscom AFB, MIT LL	High	Short	Low	N/A	Medium
3	 Require review of a TDM plan before site plan approval application and building permits are granted Update and strengthen guidelines for TDM plans Clarify in regulations that trigger includes renovations and changes of use 	Town Staff	Planning Board	High	Short	Low	N/A	High
4	 Establish ongoing TDM monitoring program with clear guidelines on frequency and necessary reporting Establish non-compliance penalties Develop standard survey questions for employee and residential questionnaire and visitor intercept survey Develop standardized intervals for driveway, parking, and bicycle parking counts Develop standardized results spreadsheet for monitoring reporting 	Town Staff	Planning Board	High	Short	Medium	Town/TMO Fund	High
5	Expand the district boundaries if and when the zoning changes in the Lexington Tennis Club Parcel, and the Lexington Armory Parcel to anticipate their growth and redevelopment. Investigate a way to include the MIT Lincoln Labs parcel.	Town Staff	Planning Board	High	Long	Low	N/A	Medium

Itom			Potential Partners					
#	Recommendation	Lead(s)	Supporting Actor(s)	Priority	Timeline	Cost	Funding	Impact
6	Evaluate existing account balances of the Traffic Mitigation and Parking and Transportation Demand Management accounts	Town Staff	-	High	Short	Low	N/A	N/A
7	Clarify that Transportation Mitigation Fund (TMF) can cover programmatic TDM expenses, not just capital expenses	Town Staff	Planning Board	High	Short	Medium	Federal, State, Regional grant funding	High
8	Allocate staff time monitor mode shift targets and administer proposed program.	Town Staff	-	High	Short	Medium	Town Budget	High
9	Implement District-wide travel training and skill/safety training programs and bike maintenance service days, etc.	Town Staff	TMAs, MPO	Medium	Medium	Low	Town Budget/Fed eral, State, Regional grant funding	Medium
10	Evaluate feasible bikeshare options.	Town Staff	Town Staff	Low	Long	Medium	Federal, State, Regional grant funding, MPO	Low
11	Create One-stop Website and/or communications via social media, newsletters, etc.	Town Staff	TMAs/Chamber of Commerce	High	Short	Low	Town Budget/Exp anded TMF funds	High

Itom	m		Potential Partners						
#	Recommendation	Lead(s)	Supporting Actor(s)	Priority	Timeline	Cost	Funding	Impact	
12	Encourage Transportation Management Association membership	TMAs	Town Staff	Medium	Short	Low	N/A	Medium	
13	Encourage unbundling parking	Town Staff	Planning Board	Medium	Long	Low	N/A	High	
14	Implement improvements to MBTA bus stop infrastructure via TDM measures shelters, benches, bike racks, and lighting, among other options.	MBTA /Town Staff	Transportation Advisory Committee /Commission on Disability	Medium	Medium	High	MBTA	Medium	
15	Install Minuteman Path crossing improvements on Westview Road based on best practice design	Town	Bicycle Advisory Committee	High	Medium	Medium	Federal, State, Regional grant funding	Low	
16	Design and install sidewalk provision on Maguire Road, with a sidewalk from Westview Road to Hartwell Avenue.	Town	-	High	Short	High	Federal, State, Regional grant funding	High	
17	Provide safe pedestrian crossing at Wood Street	Town	-	High	Short	Low	Federal, State, Regional grant funding	Medium	
							grant funding		

Itom	m		Potential Partners					
#	Recommendation	Lead(s)	Supporting Actor(s)	Priority	Timeline	Cost	Funding	Impact
18	Provide safe pedestrian crossing at Westview Street	Town	-	Medium	Short	Low	Federal, State, Regional grant funding	High if coinciding with transit service adjustments
20	Undertake and implement a wayfinding/directional signage master plan (to Hartwell District, Minuteman Path, and Hanscom AFB)	Town	District Businesses	High	Medium	High	Federal, State, Regional grant funding	High
20	Install pedestrian crossings and review signal timings whenever corridor/roadway/intersection/access improvements occur	Town	MassDOT-	High	-	Low	Developer Fees	Low
21	As the program grows, consider adding more staff or consultant time that is allocated to TDM.	Town		Medium	Medium	Medium	Town Budget/Exp anded TMF funds	High

APPENDIX A: TDM PLANS SUBMITTED TO THE TOWN

Company	Date Published	Strategies
Transportation Management Plan for TMO-1 District: Hartwell Avenue Area Plan	November 3, 2010	 Transportation Mitigation Fee
Parking and Transportation Demand Management Report for 4 Hartwell Place, Lexington, MA	July 21, 2013	 Surface parking reduction Membership to the Route 128 Business Council Bikeshare Program Public Transportation Shuttle Services
Parking and Transportation Demand Management Report for 4 Hartwell Place, Lexington, MA	June 1, 2015	 Surface parking reduction Membership to the Route 128 Business Council Bikeshare Program Bicycle Amenities – Rack with parking for 18 bicycles Public Transportation Shuttle Services
Parking and Travel Demand Management Plan for 12-18 Hartwell Avenue, Lexington, MA	October 2022	 Transportation information and a transportation coordinator Shuttle member of 128BC Bicycle parking New pedestrian connections – new sidewalks
Parking and Transportation Demand Management Plan, 27-29 Hartwell Avenue, Lexington, MA	May 19, 2017	 Bicycle amenities – 12 new bike racks and two building bicycles Rideshare program - 5% of striped parking spaces will be dedicated to rideshare vehicles Participation in the TMO District
Traffic Impact Assessment – Proposed Research and Development Facility, 91 Hartwell Avenue, Lexington, MA	February 2020	 Encourage public transit use Encourage vanpool and carpool use (no dedicated spaces) Membership to the Route 128 Business Council Bicycle parking Transportation mitigation fee

Company	Date Published	Strategies
Parking and Transportation Demand Management Report for 101 Hartwell Avenue, Lexington, MA	June 1, 2015	 Surface parking reduction 5 dedicated HOV/carpool spaces Membership to the Route 128 Business Council Bikeshare program Public Transportation Shuttle services
Parking and Transportation Demand Management Report for 101 Hartwell Avenue, Lexington, MA	July 31, 2012	 Surface parking reduction 7 dedicated HOV/carpool spaces Membership to the Route 128 Business Council Bike share program Public transportation
Parking and Transportation Demand Management Report for 101 Hartwell Avenue, Lexington, MA	July 31, 2013	 Surface parking reduction 7 dedicated HOV/carpool spaces Membership to the Route 128 Business Council Bike share program Public transportation
Parking and Transportation Demand Management Report for The Hartwell Innovation Campus, Lexington, MA	September 2017	 Surface parking reduction Dedicated HOV spaces Membership to the Route 128 Business Council Bike share program Public transportation Rideshare

Company	Date Published	Strategies
Parking and Transportation Demand Management Report, 17 Hartwell Avenue, Lexington, MA	July 29, 2015	 Off-street parking Two preferential spaces for rideshare Bicycle amenities – bike parking Membership to the Route 128 Business Council Bicycle amenities – showers and lockers for employees Mode split and monitoring program Transportation Coordinator Transit passes for employees NuRide Guaranteed Ride Home Flexible shift hours Telecommuting Cash-out parking program Bicycle and pedestrian route maps
Parking and Transportation Demand Management Plan, 115 Hartwell Avenue, Lexington, MA	February 13, 2015	 Bicycle parking Bicycle amenities – showers and lockers Rideshare program Transportation coordinator Parking reduction 5% of parking spaces dedicated to rideshare vehicles Financial incentives
Transportation Impact Assessment: Proposed Research and Development Facility, 440 Bedford Street, Lexington, MA	August 2021	 Transportation mitigation fee Bicycle parking Public transportation Ridesharing Membership to the Route 128 Business Council Transportation coordinator Alternative mode promotions and incentives

Company	Date Published	Strategies
Updated Parking and Transportation Demand Management Plan – Proposed Research and Development Facility, 91 Hartwell Avenue, Lexington, Massachusetts	April 2020	 Bicycle parking Shower and changing facilities for cyclists Elimination of parking along the southern side of Hartwell Place to provide a continuous pedestrian crosswalk Public transportation - the Hartwell Area Shuttle Ridesharing 1 space per 150 spaces for carpool and vanpool users EV parking Transportation coordinator Alternative mode promotions and incentives Transportation mitigation fee

APPENDIX B: MENU OF TDM MEASURES

The values set in the menu are meant to tip the scales to more effective and district-wide strategies. The exact values may need to be adjusted over time as new projects come online and engage with these strategies and lessons are learned in the TMO-1 context.

When preparing the TDM plan, developers will need to:

- Include all required TDM measures, and
- Select from the menu of TDM measures to meet and/or exceed the minimum point requirements.

Required TDM Measures

Required TDM measures ensure the development projects are committing to the measures that are most impactful when all projects are participating. These include:

- 1. Lifetime annual membership in a local transportation management association serving the TMO-1 District
- 2. Identified point of contact to regularly engage with the TMA to ensure collaboration with developments, tenants, and the Town. Point of contact will be confirmed periodically along with reporting requirements.

Menu of TDM Measures

The point requirements needed to satisfy minimum requirements for a small and large scale TDM plan are listed below. A menu of approved TDM measures is also provided that includes a brief description and points allocated for implementing that measure. A project should select TDM measures that best fit their project context and help satisfy the requirements.

Note that for all measures provided for employees, employees must include part-time and contract workers.

Land Use Category	Minimum Requirement					
	Small Scale Project	Large Scale Project				
Residential, Uses	10 points	12 points				
Office, Lab, Manufacturing, School, or Medical Uses	12 points	16 points				
Service, Retail, or Visitor Uses	6 points	8 points				
Other Uses	4 points	5 points				

Provide Pedestrian Network Amenities

Improve Sidewalk Conditions

Description	Provide Town-approved streetscape improvements within the properties frontage to encourage more walking to and from site
Points: 1-2	One point for building or improving sidewalks to minimum 5-foot town standard width, including curb ramps for the length of the project's frontage on Bedford Street, Hartwell Avenue, Maguire Road, and Westview Street. Two points for building or improving sidewalks to the design standard of a 10-foot wide off-street multi-use path to allow available of the project frontage on Bedford Street.
	Avenue, Maguire Road, and Westview Street.
	One point for providing an easement and building or improving sidewalks to allow cyclists and or pedestrian a safe connection between properties a safe

Improve Crosswalk Conditions

DescriptionProvide Town-approved streetscape improvements to encourage more walking to and from site.Points:
1One point for providing crosswalk improvements up to ADA standards as approved Engineering Division,
including but not limited to: marked crosswalks, raised crosswalks, median islands, tight corner radii, curb ramps
and others.

Improve Walking Conditions: Lighting

DescriptionIf a sidewalk or multiuse path is present: install pedestrian-scale lighting to sidewalks and intersections as
approved by the Engineering Division within 1,000 feet in any direction of property boundary, internal paths, and
parking facilities to enhance pedestrian visibility and safety and perception of safety.Points:
1One point for installing pedestrian-scale lighting to sidewalks and intersections within 1,000 feet in any direction of
property boundary, internal paths, and parking facilities

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	directo
Points: Half point for providing multimodal wayfinding signage at key locations internally and externally that employees, residents, tenants, and visitors to all the following transportation options, as applicable: 0.5 Bicycle Parking Bicycle Amenities (such as changing facilities and repair stations) Bike Share Car Share Delivery Amenities (such as package storage lockers) Shuttle Stops Taxi Stands/Ride Hail pick-up/drop-offs Transit Stops	urects

Active Transportation Focused Wayfinding Signage

Provide Bicycle Network Amenities

Bicycle Facility Funding

Description	Provide funding for construction of or construct planned bicycle facilities within 1,000 feet in any direction of property boundary
Points: 1-2	 One point for providing any streetscape improvements identified by Town staff or the TSG that would facilitate increased bicycling to and from the site. To satisfy this measure a project should minimize all barriers to bicycle access and interconnectivity. Physical barriers such as walls, landscaping, and slopes that impede bicycle circulation should not be constructed. Two points for constructing planned dedicated bicycling facilities that meet all Town requirements and neighborhood streetscape plans.

Bicycle Parking

Description	 Provide secure bicycle parking at the applicable rate prescribed below. Short-term spaces, such as inverted-U racks or post and ring installations, should be weather protected, sturdy, and well anchored. Short-term spaces typically meet the needs of shoppers or visitors and are used for a couple of hours at a time. Long-term spaces, such as bike lockers or bike cages, should be fully sheltered from weather elements and provide a form of access control such as keys or smart cards. Long-term spaces are typically designed to meet the needs of commuters or residents who require storing their bike safely for an entire day or longer. Spaces should be at least 2 feet by 6 feet with a two-foot driving aisle and reflect design best practices such as those identified by the Association of Pedestrian and Bicycle Professionals (APBP). Bike parking spaces should be properly maintained and cleaned in perpetuity.
Points: 0.5 – 1.5	 All Uses Half point for providing outdoor bicycle parking spaces at 1 space per every 20 parking spaces One point for providing indoor bicycle parking spaces at 1 space per every 20 parking spaces Additional 0.5 points for projects that provide bicycle parking above the 1 space per 20 parking spaces

Bicycle Repair Station

Description	Provide an on-site bicycle repair station with adequate tools.
Points: 1	One point for providing a bicycle repair station on-site in a covered area such as a bicycle storage room or garage. Tools and supplies should include, at minimum, those needed to fix a flat tire, adjust a chain, and performing other basic maintenance. Available tools should include, at minimum, a bicycle pump, wrenches, a chain tool, tire levers, hex keys/Allen wrenches, screwdrivers, and spoke wrenches. Although not required, vending machines selling items such as bike tubes, patch kits, lights, locks, hand warmers, and other bicycling gear can be paired with repair stations. Bike repair stations should be properly maintained, including replacing tools as needed, in perpetuity.

End of Trip Facilities: Showers, Changing Facilities, and Lockers

Description	Provide showers and lockers for active modes.
Points: 1	 Office/School/Medical Use One point for providing at minimum one shower and at least six clothes lockers for every 20 long-term bike parking spaces.
	 Other Uses One point for providing at minimum one shower and at least six clothes lockers.

Provide Bike Fleet, Bike Share

Description	Provide on-site fleet of shared bikes for use of employees, residents, and/or guests.
Points: 2	 Home-End Uses One point for providing one shared use bicycle for every 30 dwelling units up to a total of six shared bicycles. Additional long-term parking should be provided for these bicycles in a secure area such as a bicycle cage. It is encouraged that the property owner provide locks, lights, and baskets to facilitate the use of the bicycles.
	All Other Uses
	 One point for providing one shared use bicycle for every 25,000 square feet of occupied floor area up to a total of 25 shared bicycles. Additional long-term parking should be provided for these bicycles in a secure area such as a bicycle cage. It is encouraged that the property owner provide locks, lights, and baskets to facilitate the use of the bicycles.

Provide Transportation Information

Transportation Management Association (TMA) Membership

Description	Be a dues-paying member of Route 128 Business Council (or other local TMA) and enroll employees in programs
Points:	Residential or property manager or commercial owner (on behalf of tenants) pays annual dues and partakes in
N/A (required)	programs provided by the 128 Business Council TMA (or other local TMA per approval by the Town).

TDM Coordinator

Description	If not in a TMA, a TDM coordinator can manage and implement customized TDM programs
Points: 1-2	 One point for a TDM coordinator if shared with other properties operated by management company or owner. Two points if TDM coordinator is exclusive to and/or located on-site.

Real-Time Transit/Transportation-Service Tracking Display

Description	Provide monitors that display travel options, transit schedules, real-time arrival times, and real-time service updates.
Points: 0.5	Half of one point for providing real-time transportation information displays, such as large screens or monitors, in prominent locations (entry/exit areas, lobbies, elevator bays) that provide up to date transit arrivals, departures, and alternative options. At minimum, a project should include a screen at each major entry/exit displaying transit arrival and departures for nearby transit routes (within 0.25 miles for bus routes) availability and location of car share vehicles and bike share, and the approximate walking times to those locations. Ensure displays use accessible text size and font style, use accessible color choices, and have a readable screen layout. Ensure displays adhere to MBTA design guidelines found at: mbta.com/screen design.

One-Stop Website with TDM Information

Description	Provide updated information on all transportation programs, opportunities, and services, transit routes and TDM programs as new elements become operational.
Points: 0-1.5	 One point for linking to the TMA website, regional TDM programs such as MassDOT vanpool programs and emergency ride home options, and MBTA trip planner on company, property manager, or other development website. The website must be kept current.
	 Half point for providing at least two of the following data points: Public parking facility locations, rates, and options, including options for electric vehicles and car seats Real-time transit information, such as that provided by MBTA, and other shuttle services Ride-hailing information and subsidized rates for shared rides Local neighborhood walking and bike maps Points are only applicable if one-stop website is NOT already provided by the Town

Individual Travel Training

Description	Transit systems can be intimidating and seem complicated to new riders or potential riders. Travel training can identify solutions for commuting without a vehicle.
Points: 0-1	 Half point for create a customized report and brochure handout with transportation options, linking to the Transportation Services page of the Town website. This should be updated on an annual basis. Half point for providing an annual "Lunch and Learn Session" for employees or residents, that includes individual "travel plans" based on origins and destinations. Sessions can be provided by the Town or the TMA. We recommend you hire the local TMA, local transportation advocacy organization, or transportation firm to
	implement this measure.

Skill and Safety Training

Description E	Bike skills and safety training to encourage cautious but curious potential bike commuters, aimed at increasing he percentage of commuters who choose to ride.
Points: 0-1 V ir	 One point for providing an annual workshop for residents and/or employees. Workshops can include topics like: Safe route planning and wayfinding Skills and riding etiquette Basic bike maintenance We recommend you hire the local TMA, local transportation advocacy organization, or transportation firm to mplement this measure.

Support Smart Parking Management

Car-Share Parking

Description	 Provide parking dedicated for use by car-share vehicles, from the fleet of a third-party car-share service provider or a car-share service provided by the property owner or management. Car-share vehicles eligible for this parking must in compliance with the following standards: Vehicles must be located at unstaffed, self-service locations on-site. Vehicles must be available for pick-up by users 24 hours daily. The property owner, property management, or a third-party vendor shall provide automobile insurance for its users when using car-share vehicles and shall assume responsibility for car-share vehicle maintenance. All residents/employees eligible to drive shall have access to car-share vehicles in the designated car-share parking spaces. The car-share vehicles may also be made available to users who do not live or work on the property. Users should pay for the use of the car-share vehicles. Vehicles should be made available by reservation on a short-term basis, such as hourly, or in smaller intervals.
Points: 1 - 2	 Residential Uses One point for providing one car-share parking space for every 40 dwelling units. Two points for providing one car-share parking space for every 20 dwelling units. All Other Uses One point for providing one car-share parking space for every 50 non-car-share parking spaces. Two points for providing one car-share parking space for every 30 non-car-share parking spaces.

Unbundle Parking

Description	Detach the cost of parking from rents or leases.
Points: 4	All parking spaces shall be gated and equipped to handle payment and access cards to allow for easy implementation of unbundling parking or other parking measures.
	Residential Uses: Detach the cost of all parking spaces from all residential lease or purchase fees for the life of the project. No units should be marketed with the amenity of "free parking" or similar terms. Unbundled spaces should be leased or sold separately so that residents have the option of renting or buying a space at an additional cost, thus presenting a cost savings by opting out of renting or purchasing a parking space.
	All Other Uses: Detach the cost of all parking spaces from all tenant lease or purchase fees for the life of the project. Unbundled spaces should be leased or sold separately so that tenants have the option of renting or buying a space at an additional cost.

Price Daily Parking

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Description	 Price parking at hourly or daily rates, and do not provide weekly, monthly, annual, or other long-term parking pass options. This may include: Charging employees for daily parking Implementing market or dynamic rate pricing Validating parking for invited guests only
Points: 4-5	 Office/School/Medical Uses Four points for pricing all available parking at hourly or daily rates. To meet this requirement weekly, monthly, and/or annual parking passes may not be made available. Five points for implementing market or dynamic rate pricing (never lower than hourly or daily base rates).

Parking Cash Out

Description	Where free parking is provided, give employees the option to receive the cash value of free parking in-lieu of a parking space. Although not required, cash out works best in conjunction with unbundling as it provides a market signal to forgo subsidizing parking and cashing out employees instead. Unbundling can help to implement a cash out program as it establishes a per stall price point.
Points: 3	Office/School/Medical Uses: Three points for promoting and providing all employees eligible for subsidized or free parking with the choice of forgoing a parking space in exchange for a cash payment equivalent to the cost borne by the employer for providing the space.

Install Parking Count Equipment

Description	Install equipment for counting daily parking occupancy, for use in TDM reporting and service development.
Points:	 Half point for installing equipment for counting daily parking occupancy, for use in TDM reporting and
0.5	service development

Shared Parking Agreement

Description	Sharing parking agreements, particularly between properties that have different peak period parking demands, reduces the oversupply of parking.
Points: 1	One point for implementing a shared parking agreement with a neighboring property, with agreement language filed with the Town, that demonstrates how many shared spaces are meeting parking requirements and demonstrates fewer parking spaces are constructed as part of development or redevelopment.

Transit Network Improvements

Transit Improvements/Amenities

Description	 Provide transit stop improvements including, but not limited to: Bus shelter Bus stop signage, including service maps Bus stop real-time information signage Seating Waste receptacles, maintained by the development site's owner or management Lighting Other amenities, with documented evidence to support their impact on increased transit service ridership
Points: 1-2	 One point for providing two of the above amenities at a transit stop served by an MBTA, Route 128 Business Council, or other TMA route or a shuttle, within a 0.25 mile of the site (not to exceed two total points). The transit stop amenities must meet applicable MBTA standards and with expressed approval from the Town, TMA, or MBTA.

Provide Shuttle/Connector Bus Service

Description	Provide shuttle service for use of employees, residents, and/or guests. Employer based shuttles should serve key MBTA hubs, destinations relevant to the business, pertinent commercial centers, and relevant places of employee commute trip generation (during peak hours). Residential-based shuttles should serve key MBTA hubs, commercial centers, and relevant civic destinations. The service should be provided free of charge to all residents, employees, tenants, and visitors.
Points:	Residential Uses
3-6	• Three points for providing a publicly accessible shuttle at one hour or less headways from 6:00 a.m. to 9:30 a.m. and from 3:00p.m. to 6:30p.m. on weekdays.
	• Five points for providing a publicly accessible shuttle on weekdays and at one hour or less (five points for every 20 minutes or less) headways on weekends from 8:00 a.m. to 7:00 p.m.
	All Other Uses
	• Three points for providing the publicly accessible service at 30 minute or less headways during peak hours and at one hour or less headways during off-peak hours from 8:00 a.m. to 7:00 p.m. on weekdays. Pick-up/drop-offs at places of employee commute trip generation (i.e., residential developments) may occur at a one-hour frequency and are not required during off-peak hours.
	• Six points for providing the publicly accessible service at 15 minute or less headways during peak hours and at 30 minute or less headways during off-peak hours from 8:00 a.m. to 7:00 p.m. on weekdays. Pick-up/drop-offs at places of employee commute trip generation (i.e., residential developments) may occur at a one-hour frequency and are not required during off-peak hours.

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Subsidize Shuttle/Connector Bus Service

Description	Transit is an essential public service that is unlikely to make a profit. Developers subsidizing an existing service helps ensure public transit remains durable and reliable. It also reduces the existence of redundant, expensive, and privatized services.
Points: 4-6	Four points for subsidizing the 128 Business Council shuttle services (or other TMA shuttle if introduced into the TMO-1 District)

Commuter Incentives or Benefit Programs

Provide TDM Program

Points: All Uses:	atching service, such as MassRides, that connects
1-5 • One point for enrolling employees in an online ride ma	for shared rides (carpools or canpools).
 People through a secure network to post and search for One point for providing TDM promotions and welcome alternative modes through methods such targeted mean giveaways, and competitions. Welcome packets should information on non-drive alone options for accessing the offered. For employees, the packet should provide opt specific transit routes, bicycle routes, and carpool option major destinations such as nearby transit centers and One point enrolling all employees in a Transportation I Luum or RideAmigos, which offer commute planning for information online and through mobile applications. The how people travel to work and using this information to raise awareness about these decisions and the association. One point for proactively offering contributions or incert LinkPass for each dwelling unit or employee, at least or Office/School/Medical Uses One point for providing pre-tax Benefits as a program up to 1/3 for vanpool, transit, bicycling and saves emp One point for offering at least one of the following: emic carpool/vanpool/bicycle/walk incentives, subsidized but the set of the following: emic carpool/vanpool/bicycle/walk incentives, subsidized but the set of the following: emic carpool/vanpool/bicycle/walk incentives, subsidized but the set of the following: emic carpool/vanpool/bicycle/walk incentives, subsidized but the set of the following: emic carpool/vanpool/bicycle/walk incentives, subsidized but the set of the following: emic carpool/vanpool/bicycle/walk incentives, subsidized but the set of the following: emic carpool/vanpool/bicycle/walk incentives, subsidized but the set of the following: emic carpool/vanpool/bicycle/walk incentives, subsidized but the set of the following: emic carpool/vanpool/bicycle/walk incentives, subsidized but the set of the following in the carpool/vanpool/bicycle/walk incentives, subsidized but the set of the following in the carpool/vanpool/bicycle/walk incentives, subsidized but the carpool the following in the car	essaging and communications campaigns, incentives, and be provided to all new residents/employees with the site and details on any transportation benefits ations for major employee commute origins including ions. For residents, packets should provide options for a shopping including specific transit and bicycle routes. Management Platform (TMP) application such as functionality, parking management, and transit MPs gamify commute behavior by actively logging to provide incentives, start friendly competition, or ciated financial, environmental and health impacts. entives equivalent to 100% the cost of an MBTA once annually.

Free or Subsidized Transit Passes

Description	If not receiving points for a TDM program, provide contributions or incentives towards the equivalent cost of an MBTA monthly bus pass for employees and/or residents.
Points: 1 - 3	 Residential Uses One point for proactively offering contributions or incentives equivalent to 25% the cost of an MBTA LinkPass for each dwelling unit, at least once annually. New residents should be offered the subsidy upon move in if an internal request deadline has passed. Three points for proactively offering contributions or incentives equivalent to 100% the cost of an MBTA LinkPass for each dwelling unit, at least once annually. New residents should be offered the subsidy upon move in if an internal request deadline has passed. All Other Uses
	 One point for proactively offering contributions or incentives equivalent to 25% the cost of an MBTA LinkPass and 40-ride 128 Business Council REV Bus shuttle pass for each employee, at least once annually, or enrolling in the MBTA Perq program. New employees should be offered the subsidy upon hire if an internal request deadline has passed. Three points for proactively offering contributions or incentives equivalent to 100% the cost of an MBTA LinkPass and 40-ride 128 Business Council REV Bus shuttle pass for each employee, at least once annually. New employees should be offered the subsidy upon hire if an internal request deadline has passed.

Ride-Matching Service Provision/Access

Description	Facilitate carpooling by matching potential riders.
Points: 0.5	 If not receiving points for providing a TDM program, one Point for enrolling residents or employees in an online ride matching service, such as MassRides, that connects people through a secure network to post and search for shared rides.

Programs-4: Vanpool Program Subsidies

Description	Provide vanpool services for employees.
Points: 2	 If not receiving points for providing a TDM program, two points for providing property owner or employer sponsored vanpools providing service between the site and locations where employees live. In order to earn point credit, the program must purchase or lease vans for employee vanpool use and pay for the mileage and maintenance of the vehicles.
TMO-1 District Hartwell Area Plan Update Town of Lexington, MA

Carpool Incentives

Description	 Promote carpool/vanpool participation through a multi-faceted approach including, but not limited to: Designating a percentage of desirable parking spaces for carpool/vanpool vehicles Designating convenient passenger loading/unloading and waiting areas for carpool riders and vehicles Providing an online group, forum, or message service for coordinating rides Providing financial incentives to individuals who enroll in organized carpools or vanpools
Points: 1 - 2	 One point for providing carpool/vanpool coordination forums and physical/locational incentives such as convenient passenger loading/unloading and waiting areas for carpool riders and vehicles. One point for providing carpool/vanpool coordination forums and financial incentives for those who participate. Two points for providing all of the above carpool incentives.

Car-Share Membership

Description	Provide membership to a car share service for employees and/or residents. In order to satisfy this measure the property owner should cover the annual membership and any one-time application fees for a car share program. The property owner should not be held accountable for reimbursing users the cost of any hourly or daily usage charges.
Points: 0 - 0.5	 Half point for proactively offering complimentary annual car share membership to each resident or employee, at least once annually. New residents should be offered membership upon move in and new employees should be offered membership upon hire if an internal request deadline has passed.

Shared-Bike (Scooter or Other) Service Membership

Description	Offer bike share membership, or financial incentives for use on applicable scooter share services, to employees and/or residents.
Points: 0.5	• Half point for proactively offering 50% discount annual bike share membership to each dwelling unit, at least once annually. New residents or employees should be offered membership upon move in or start date if an internal request deadline has passed.

Bicycle Maintenance Services

Description	Subsidize bicycle maintenance services.					
Points: 0.5	Half point for offering employees and residents a reimbursable \$20 per month to use on bicycle maintenance, new safety accessories, or replacement parts					

Flexible Work Schedules

TMO-1 District Hartwell Area Plan Update Town of Lexington, MA

Description	Encouraging alternative work schedules or telecommuting options, such as staggered shift start times, flexible schedules, compressed work weeks, or partial telecommuting schedules.
Points: 1	 Office, School, and Medical Uses One point for offering and promoting flexible work schedules, including staggered start times, remote telework, or compressed work weeks.

Add Category of other. Developer/ property owners and managers may have other good ideas that we can learn from.

APPENDIX C: MONITORING REPORT TEMPLATE

final version of template will always be on Town of Lexington website

Transportation Performance Monitoring Report

Reporting requirements and deadlines

Building Name and Address

Verified Point of Contact

Study Measures – Required

- Confirmation of TMA membership
- Parking unbundled

Study Measures - Additional

To fulfill the transportation monitoring requirement, this report examined travel patterns, parking utilization, TDM measures, and awareness of the TDM program, through the following data collection efforts. *List efforts below.*

Property Characteristics

- Walk score, transit score, and bike score
- Characteristics of the property
 - Square footage by land uses
 - Number of employees and tenants
 - Vehicle parking spaces (broken out by carpool, vanpool, or EV reserved spaces if applicable, as well as if reserved for residents, employees, visitors, or other vehicles)
 - Bicycle parking spaces (broken out by short-term and long-term)

Residential Characteristics

- Work destinations (zip codes) of residents who live at the site
- Potential characteristics including travel distance to work, travel time to work, age, demographics

Employee Characteristics

- Home origins (zip codes) of employees who work at the site
- Percent of employees working from home, by day of week
- Potential characteristics including travel distance to work, travel time to work, age, demographics

TMO-1 District Hartwell Area Plan Update

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TDM Assistance Services

- List the TDM services currently available at the property
- Resident/Employee awareness of TDM services
- Resident/Employee perceptions of TDM options, as reported in surveys

Mode Share

- Mode share split for site
- Reported mode share for work trips over the week

Automobile Trip Generation

- Vehicle trips captured through the intercept survey and automatic counters should be compared to standard planning estimates generated by the Institute of Transportation Engineers (ITE) for the number of adult residents/employees on the property.
- Observed Vehicle Trips should be calculated as a sum of the total number of people who reported they drove alone during the intercept survey and the automatic garage counts. The manual counts from a travel surveyor stationed at the parking garage entrance(s) should not be included in this value.

Parking

- Peak parking utilization rate (counted on a Tuesday, Wednesday, or Thursday)
- Total number of bikes and percent of racks (split by long-term and short-term parking spaces) occupied at 7am, 10am, and 6pm

Recommendations

Any recommendations for improved TDM compliance

APPENDIX D: CASE STUDIES

Lexington's current TMO-1 District Plan and existing zoning does not include details on monitoring programs or programmatic fees. While surrounding jurisdictions do not include examples of these, there are national best practice case studies that are relevant to Lexington. These include Arlington County, Virginia's Transportation Performance Monitoring program and Austin, Texas's Street Impact Fee program.

Arlington County, Virginia TDM Monitoring Program

Arlington County has a county-wide TDM plan, as required by Virginia, and a countywide TDM agency. As part of county-wide TDM efforts, Arlington County requires TDM plans as part of the site plan approval process. As part of the TDM monitoring process, Arlington County's site plans team conducts annual site visits for all properties that have TDM site plan conditions. This fulfills the condition that a site plan building "submit an annual report or letter" outlining TDM activities over the past year. Additionally, many site plan buildings have a transportation performance monitoring study requirement where the site is required to complete one or more building studies after occupancy to ensure that the site is in compliance with Arlington County TDM requirements. Arlington County partners with an outside consultant for this study. The outside consultant does data collection and completes a report ensuring that the development site is meeting set TDM goals for trip reduction.

Austin, Texas Street Impact Fee Program

Austin, Texas created a Street Impact Fee program, similar to Lexington's Transportation Mitigation Fund, to fund expanded transportation infrastructure and programs in areas with increased development. Austin's citywide transportation plan created a list of priority projects to use the Street Impact Fee funds on and Austin's Department of Transportation conducted a street impact fee study to identify the fee per unit necessary to fund the list of projects. The Street Impact Fee applies to any increased development that generates at least 10 trips in the PM peak hour. The Fee applies to any projects with at least 12 single-family homes, 18 low-rise multifamily units, or 23 units in a mid-rise multifamily building. Fees are reduced for developments that are close to transit, reduce parking supply, or increase affordable housing. TDM plans are also required for large developments.

More details can be found at these links:

- https://ite.ygsclicbook.com/pubs/itejournal/2022/june-2022/live/index.html#p=31
- https://www.austintexas.gov/department/street-impact-fee

Austin, Texas Transportation Criteria Manual (and TDM requirements)

Resources:

<u>https://www.austintexas.gov/department/transportation-development-services</u>
 <u>https://www.austintexas.gov/sites/default/files/files/Transportation/Transportation_Development_Services/TCM_Webinars/TCM_Updates_%20June_2022-TIA_TDM.pdf</u>

APPENDIX E: NEIGHBORING MUNICIPALITY DEVELOPMENT TDM STANDARDS

Municipalities surrounding Lexington have similar transportation demand management policies and districts. Eight peer jurisdictions were included in the peer review. These jurisdictions include:

- Bedford
- Burlington
- Waltham
- Needham
- Watertown
- Somerville
- Everett
- Cambridge

Bedford

Bedford has two industrial mixed-use zoning districts that are similar to TMO-1. These districts, the Crosby Drive/Middlesex Turnpike District and the Science and Technology District at Wiggins Avenue, have limited TDM requirements for developers. Bedford does not have a townwide TDM policy, but does include trip reduction and traffic mitigation requirements for areas with Industrial Mixed-Use zoning. The planning board may require participation in a TMA or other trip reduction program for large developments in these zones. If Bedford determines that the net traffic increase from new development will result in traffic congestion, the planning board may require improvements to the public right-of-way to mitigate traffic impacts.

Burlington

Burlington has two districts similar to TMO-1: the 90 Middlesex Turnpike Planned Development District and the South Avenue Planned Development District. There are TDM requirements for each district, but no reporting requirements. In each Planned Development District, TDM requirements for developers include:

- Sidewalk and bicycle path provision
- A contribution to the Middlesex Turnpike Traffic Mitigation fund at \$1.00 per square foot of new net floor area
- Implementation of TDM initiatives, including a TDM coordinator, coordination with MBTA, LRTA, and the Town of Burlington B-Line, and payments to the Town of Burlington for the B-Line to stop near the development if there is not currently a nearby stop. This payment is either \$25,000 outright or \$5,000 for five years.

The South Avenue Planned Development Area also has traffic improvement requirements, that include:

- \$40,000 payment to Burlington's transportation master plan effort
- \$25,000 for the Burlington B-Line
- \$500,000 towards the construction of additional off-street roadway and pedestrian improvements upon the issuance of building permits for the final 320,000 square feet of development

Waltham

Waltham has two districts that are similar to TMO-1: the Limited Commercial Revitalization Area and the Limited Commercial Residential Area Protection Overlay. Developers in these districts must submit a transportation plan to address transportation impacts from a proposed project. Waltham does not have TDM requirements, but does require a contribution to the Traffic Safety and Infrastructure Maintenance Fund. When a developer applies for a special permit to increase intensity of use, they must make a contribution to the Traffic Safety and Infrastructure Maintenance Fund for the portion of the new development in excess of the FAR allowed. This contribution is \$3.00 per square foot of gross floor area for a building whose primary use is office or retail or \$1.00 per square foot of gross floor area for a building whose primary use is multifamily dwelling or research laboratory, industrial, manufacturing, warehousing, or other similar use.

Needham

Needham does not have any transportation management or TDM overlay districts like TMO-1, but has some similar base zoning categories. Needham has an Off-Street Parking Fund, where a special permit may be granted for a fee-in-lieu of parking. While there are no base or overlay requirements for a TDM program, an Intensity of Use Special Permit in the New England Business Center Districts, the Highland Commercial-128 Districts, and the Mixed-Use-128 Districts does require a traffic improvement fee payment, site mitigation efforts, and a TDM program. The traffic improvement fee is \$1,500 per each parking space that is determined to be needed from the increased development. TDM program options include:

- Staggered work hours for at least 10% of the non-management workforce
- Provide preferential carpool parking
- Provide a cash incentive for all carpools (\$40 per month per carpool)
- Shuttle or van service to public transportation
- Provide a work from home option at least one day per week for at least 10% of the total workforce
- Provide subsidized public transit passes of at least 20% of the monthly cost

Watertown

Watertown has TDM requirements for all projects based on projected trip generation. In Watertown, projects require either a Basic or Comprehensive TDM Program if the project has more than 10 units, more than 150 average daily trips, or more than 15 peak

hour trips. Basic plans must include three TDM measures, chosen from a list of TDM options. Comprehensive plans are scored on a point scale, and must get to 14 points. Developers must submit a TDM plan to Watertown, which is reviewed by town staff. If the plan is approved, a staff member will conduct a site visit prior to the issuance of a First Certificate of Occupancy to confirm that all approved physical measures in the TDM Plan have been implemented. Within 12 months of full occupancy, the property owner must submit a monitoring and reporting form to document that physical TDM elements are in place. This monitoring and reporting form must then be filed annually for 3-5 years afterwards at the discretion of town staff, and every two years thereafter.

Somerville

Somerville has three TDM requirements: a mobility management plan, a transportation impact study, and a transportation access plan. A mobility management plan is required for buildings with at least 50,000 square feet of commercial space; buildings with 50 employees; multi-tenant buildings with at least 50 employees across tenants; residential buildings with more than 20 dwelling units; and commercial parking facilities. Mobility management plans must be approved before development review applications are considered complete. Developments also must complete a transportation impact study, which includes an analysis of existing transportation infrastructure and anticipated transportation impacts from a proposed development project and must include proposed mitigation measures for the project. All development that requires a Site Plan Approval must submit a transportation access plan. No building permits are issued until a transportation access plan has been approved.

Everett

In Everett, a development is subject to the requirements of the TDM Ordinance if it passes one of the following thresholds:

- 10 units of residential uses other than single-family detached dwellings
- 10 hotel rooms
- 10 school classrooms
- 10,000 gross square feet of commercial square footage, including office, retail, or restaurant uses
- Any development generating at least 500 daily trip ends (with a trip end being either a trip originating on the site or a trip destined for the site)
- Development sites with a notably constrained pattern of access, such as a single entry point for a large development
- Projects that propose to add less parking than what is required in Section 17 of the City of Everett Zoning Ordinance or more parking than the minimum requirement

These requirements capture a large amount of development in Everett. Additionally, developments that fall under the TDM ordinance must join the TMA, which then helps

the development design a TDM Plan. There are four levels of TMA membership, with different fee requirements and TDM options at each level of membership.

Figure	13:	Everett	Fee	Schedule f	or TMA	Membership
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FEE SCHEDULE FOR TMA MEMBERSHIP: Referred to in Sec. 35.C (1)(a) and (b) of the Ordinance						
		Annual Membership Payments				
Development Type and Intensity Level	Base Membership (everyone joining pays this)	Added Dues for Partner Membership (for organizations that choose to join the TMA outside of the development process)	Added Dues for Permitted Membership (for organizations required to join the TMA through the ordinance)	Added Dues for Associate/ Permitted Membership (for Permitted Member organizations until CO is issued)		
Residential Development	t					
Fewer than 50 units	\$500	\$18 per unit	\$25 per unit	\$12.50 per unit		
51 up to 200 units	\$750	\$18 per unit	\$25 per unit	\$12.50 per unit		
201 up to 350 units	\$1,000	\$18 per unit	\$25 per unit	\$12.50 per unit		
351 units and greater	\$1,500	\$18 per unit \$25 per unit		\$12.50 per unit		
Commercial Developmen						
Less than 50,000 SF	\$500	\$0.02 per square foot	\$0.03 per square foot	\$0.015 per square foot		
50,001 - 250,000 SF	\$750	\$0.02 per square foot	\$0.03 per square foot	\$0.015 per square foot		
250,001 - 500,000 SF	\$1,000	\$0.02 per square foot	\$0.03 per square foot	\$0.015 per square foot		
Over 500,000 SF	\$1,500	\$0.02 per square foot	\$0.03 per square foot	\$0.015 per square foot		

Figure 14: TDM Options in Everett

	TDM Option	Base Level	Partner Level	Permitted Level	Permitted/ Associate Level
Consulting and Technical Assistance	Custom Survey Analysis		x	x	x
	Initial Shuttle Planning			x	x
	Site Specific Zipcode Analysis/Mobility Report		x	x	x
	Survey Distribution	x	x	x	x
	TDM Site Plan Assessment and Implementation			x	x
5	Customized Marketing Materials			x	
etin	Customized Marketing Plan		x	x	
ark	Marketing Materials (Standard)	x	x	x	x
Σ	On site Marketing Events		x	x	
	Blue Bike Subsidy Program		x	x	
	Carpool/Vanpool Subsidy Program		x	x	
	Carshare Subsidy Program		x	x	
S	Emergency Ride Home		x	x	
ervi.	MBTA Subsidy Program		x	x	
M Se	Personalized Trip Planning		x	x	
Ē	Private Ride Matching Platform/Network			x	
	Ride matching/Trip Planning	x	x	x	x
	Trip Logging Incentive Program		x	x	
	Vanpool Formation Assistance		x	x	
	Annual Member Meeting	x	x	x	x
pport ecognition	Member Recognition	x	x	x	x
	News and Educational Resources	x	x	x	x
	TMA Board Seat		x	X	
Su Su	Transportation Coordinator Network Events		x	x	
	Transportation Coordinator Training		x	х	
	Trip Reduction/Program Usage Reporting		x	x	

Cambridge

Cambridge has extensive TDM requirements, but their system is most relevant to Lexington for monitoring and enforcement. If a development is out of compliance with the Parking and TDM Ordinance (such as not reaching their mode-split goal, not implementing required TDM measures, not completing reporting, or not meeting the minimum required survey response rate), Cambridge can fine the development \$10 per parking space per day, and shut down the parking facility, if necessary, until the development comes into compliance. If a development is non-compliant, the Director of the Cambridge Department of Traffic, Parking, and Transportation must give the development written notice of the violation and give them 30 days to become compliant. After the 30 days written notice, the Director of the Cambridge Department of Traffic, Parking, and Transportation can levy fines and shut down the parking facility.

Parking Comparison

Recently Permitted Developments							
Project	12-18 Hartwell	440 Bedford	91 Hartwell	1050 Waltham	97/99 Hayden 128 Spring		
Required parking	720	564	589	416	1,391		
Proposed parking	720	631 Revised 752	502	416 Up to 475	1,664		

LEXINGTON PLANNING BOARD

AGENDA ITEM TITLE:

Staff Updates

PRESENTER:

<u>ITEM</u> NUMBER:

SUMMARY:

SUGGESTED MOTION:

FOLLOW-UP:

DATE AND APPROXIMATE TIME ON AGENDA:

LEXINGTON PLANNING BOARD

AGENDA ITEM TITLE:

Board Member Updates - Review and discuss any other Annual Town Meeting Articles 1-32

PRESENTER:

<u>ITEM</u> NUMBER:

Board Discussion

SUMMARY:

The Planning Board may review and discuss Annual Town Meeting Articles 1-32. Full list of Annual Town Meeting Warrant Articles: https://www.lexingtonma.gov/1557/2023-Annual-Town-Meeting

SUGGESTED MOTION:

FOLLOW-UP:

DATE AND APPROXIMATE TIME ON AGENDA:

LEXINGTON PLANNING BOARD

AGENDA ITEM TITLE:

Upcoming Meetings: 3/29

PRESENTER:

<u>ITEM</u> NUMBER:

SUMMARY:

SUGGESTED MOTION:

FOLLOW-UP:

DATE AND APPROXIMATE TIME ON AGENDA:

LEXINGTON PLANNING BOARD

AGENDA ITEM TITLE:

Review of Meeting Minutes: 2/8, 2/15, 3/1

PRESENTER:

<u>ITEM</u> NUMBER:

SUMMARY:

SUGGESTED MOTION:

FOLLOW-UP:

DATE AND APPROXIMATE TIME ON AGENDA:

LEXINGTON PLANNING BOARD

AGENDA ITEM TITLE:

The meeting will continue until all items are finished. The estimated adjournment time is 7:45 pm

PRESENTER:

<u>ITEM</u> <u>NUMBER:</u>

SUMMARY:

SUGGESTED MOTION:

FOLLOW-UP:

DATE AND APPROXIMATE TIME ON AGENDA: