

NEEDHAM PLANNING BOARD
Tuesday, September 24, 2024
7:00 p.m.

Charles River Room
Public Services Administration Building, 500 Dedham Avenue
AND
Virtual Meeting using Zoom
Meeting ID: **880 4672 5264**
(Instructions for accessing below)

To view and participate in this virtual meeting on your phone, download the “Zoom Cloud Meetings” app in any app store or at www.zoom.us. At the above date and time, click on “Join a Meeting” and enter the following Meeting ID: **880 4672 5264**

To view and participate in this virtual meeting on your computer, at the above date and time, go to www.zoom.us click “Join a Meeting” and enter the following ID: **880 4672 5264**

Or to Listen by Telephone: Dial (for higher quality, dial a number based on your current location):
US: +1 312 626 6799 or +1 646 558 8656 or +1 301 715 8592 or +1 346 248 7799 or +1 669 900 9128 or +1 253 215 8782 Then enter ID: **880 4672 5264**

Direct Link to meeting: <https://us02web.zoom.us/j/88046725264>

1. Public Hearing:

7:00 p.m. Major Project Site Plan Special Permit No. 2024-01: Needham Housing Authority (NHA), 21 Highland Circle, Suite 10, Needham, MA, Petitioner (Property is located at 0 Linden Street and 5 Chambers Street, Needham, Massachusetts). Regarding request redevelop the NHA Linden-Chambers property.

2. Discussion and vote of Planning Board Recommendation: Zoning Articles for the October 21, 2024 Special Town Meeting:

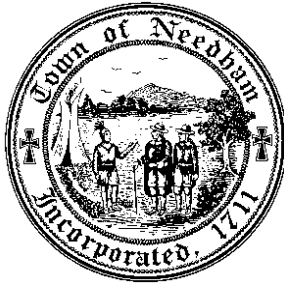
- Article 1: Amend Zoning By-Law – Multi-Family Overlay District (Base Plan)
- Article 2: Amend Zoning By-Law – Map Change for Multi-Family Overlay District (Base Plan)
- Article 3: Amend Zoning By-Law – Multi-Family Overlay District (Neighborhood Housing Plan)
- Article 4: Amend Zoning By-Law – Map Change for Multi-Family Overlay District (Neighborhood Housing Plan)

3. Minutes.

4. Report from Planning Director and Board members.

5. Correspondence.

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



PLANNING & COMMUNITY DEVELOPMENT
PLANNING DIVISION

LEGAL NOTICE
Planning Board
TOWN OF NEEDHAM
NOTICE OF HEARING

In accordance with the provisions of M.G.L., Chapter 40A, S.11; the Needham Zoning By-Laws, Section 7.4, the Needham Planning Board will hold a public hearing on Tuesday, September 24, 2024 at 7:00 p.m. in the Charles River Room, Needham Public Services Administration Building, 500 Dedham Avenue, Needham, MA, as well as by Zoom Web ID Number 880 4672 5264 (further instructions for accessing by Zoom are below), regarding the application of Needham Housing Authority (NHA), 21 Highland Circle, Suite 10, Needham, MA, for a Major Project Special Permit under Site Plan Review, Section 7.4 of the Needham Zoning By-Law.

The subject property is located at 0 Linden Street and 5 Chambers Street. The property is located in the Affordable Housing District pursuant to the amendments of the Zoning By-Law voted at the May 2024 Annual Town Meeting, which amendments remain subject to review and approval by the Massachusetts Attorney General. The property is shown on Assessors Plan No. 133 as Parcels 23 and 24, as well as Assessors Plan No. 134 as Parcel 41, containing a total of 478,540 square feet (10.9858 acres).

The requested Major Project Site Plan Review Special Permit, would, if granted, permit the Petitioner to redevelop its Linden-Chambers property. The redevelopment would result in an increase in the number of affordable housing units on the Property from the current 152 units to 216 units, an increase of 64 units.

The NHA proposes to redevelop the Property in two Phases. Phase I involves the Linden Street buildings on the Property, and it is divided into Phases 1A and 1B. The subject of this site plan review application is Phase I. Phase II involves the five Chambers Street buildings on the Property, the redevelopment of which is not part of this application.

During Phase 1A, the NHA will demolish 10 existing buildings at 138, 140, 144, 146, 150, 152, 156, 158, 166, and 168 Linden Street. The 40 residents living in those units will be temporarily relocated, at no cost to them, to comparable or better dwelling units until they can be moved back into new units. Phase 1A of the redevelopment, providing 76 units and the common facilities for the proposed new Linden Street building, will be constructed. Then the original residents of the 10 buildings will be allowed to move into the north wing.

During Phase 1B, the NHA will demolish the 8 remaining buildings at 170, 172, 174, 180, 182, 184, 186, and 188 Linden Street. The 32 residents of those buildings will be moved into the new building which was constructed during Phase 1A. The construction of the second, southerly wing of the new Linden Street building, with 60 new units, will proceed.

In accordance with the Zoning By-Law, Section 7.4, a Site Plan Review Special Permit is required.

To view and participate in this virtual meeting on your phone, download the “Zoom Cloud Meetings” app in any app store or at www.zoom.us. At the above date and time, click on “Join a Meeting” and enter the following Meeting ID: 880 4672 5264

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Direct Link to meeting: <https://us02web.zoom.us/j/88046725264>

The application may be viewed at this link:

<https://www.needhamma.gov/Archive.aspx?AMID=146&Type=&ADID=> . Interested persons are encouraged to attend the public hearing and make their views known to the Planning Board. This legal notice is also posted on the Massachusetts Newspaper Publishers Association’s (MNPA) website at (<http://masspublicnotices.org/>).

NEEDHAM PLANNING BOARD

Needham Hometown Weekly, September 5, 2024 and September 12, 2024.

ROBERT T. SMART, JR., ESQ.

ATTORNEY AT LAW

399 CHESTNUT STREET

NEEDHAM, MASSACHUSETTS 02492

TEL (781) 444-9344 FAX (781) 449-0242

E-MAIL bob@robertsmart.net WEBSITE www.robertsmart.net

BY HAND

August 23, 2024

Needham Planning Board
500 Dedham Avenue
Needham, MA 02492

Re: Needham Housing Authority, Linden Street Redevelopment, 0 Linden Street and
5 Chambers Street, Needham

Dear Planning Board Members:

The Needham Housing Authority (NHA) hereby submits to the Board an application for site plan review of its proposal to redevelop its Linden-Chambers property at 0 Linden Street and 5 Chambers Street, a site with 478,540 square feet of land, being approximately 10.9858 acres (the "Property"). The redevelopment would result in an increase in the number of affordable housing units on the Property from the current 152 units to 216 units, an increase of 64 units.

Pursuant to Chapter 40A of the Massachusetts General Laws, the Needham Zoning Bylaw, and the Planning Board Rules, the NHA hereby submits three copies of the following:

1. Application for Site Plan Review;
2. Plan Set titled "Schematic Design Plans for Linden Street Redevelopment, Needham Housing Authority", prepared by Bargmann Hendrie + Archetype Inc., which includes the following, all dated August 23, 2024, unless noted otherwise:
 - a. Sheet 000 - Cover / List of Drawings/Zoning Table
 - b. Civil Drawings containing the following:
 - i. Sheet Survey 1 – Existing Conditions Plan
 - ii. Sheet C1 – Phasing Plan
 - iii. Sheet C2 – Demolition, Soil Erosion, and Sediment Control
 - iv. Sheet C3 – Site Layout and Materials Plan
 - v. Sheet C4 -Grading and Drainage
 - vi. Sheet C5 – Utility Plan
 - vii. Sheet C6 – Construction Details I
 - viii. Sheet C6.1 – Construction Details II
 - c. Landscape Drawings containing the following:

- i. Sheet L099 – Tree Protection Plan
 - ii. Sheet L102A – Materials Plan
 - iii. Sheet L102B – Materials Plan
 - iv. Sheet L104 – Planting Plan
 - v. Sheet L105 – Lighting Plan
 - vi. Sheet L501 – Details
 - vii. Sheet L503 - Details
 - viii. Sheet L504 - Details
 - ix. Sheet L505 – Details
 - x. Sheet L506 - Details
 - xi. Sheet L510 – Details
 - d. Architectural Drawings containing the following:
 - i. Sheet A100 – Phase 1 Plans
 - ii. Sheet A101 – Phase 1A First Floor Plans
 - iii. Sheet A102 – Phase 1A Typical Floor Plans
 - iv. Sheet A103 – Phase 1B First Floor Plans
 - v. Sheet A104 – Phase 1B Typical Floor Plans
 - vi. Sheet A200 – Phase 1 Elevations
 - vii. Sheet A201 – Phase 1A Elevations
 - viii. Sheet A202 – Phase 1B Elevations
 - ix. Sheet A300 – Building Sections
 - e. Electrical Drawings containing the following:
 - i. Sheet E000 - Electrical Notes
 - ii. Sheet E100 – Electrical Site Plan
 - iii. Sheet E101 – Electrical Site Plan Photometric
3. Traffic Impact Analysis, titled “Linden Street Redevelopment Needham, Massachusetts”, by Pare Corporation, dated April, 2024;
4. Stormwater Report, titled “Stormwater Report In Support of Notice of Intent for Linden Street Redevelopment (Map 133, Lots 23 and 24) Needham MA” by Hancock Associates, dated 8/23/24;
5. Plan of Land in Needham, by Hancock Associates, dated 12/21/23 (the lot consolidation plan);
6. Zoning letter by Robert T. Smart, Jr., Esq., dated August 23, 2024.

The NHA requests that the Planning Board waive the site plan review filing fee, and any fees for project review by outside consultants, as in-kind contributions by the Town.

The NHA further requests, pursuant to Zoning Bylaw Section 7.44, that the Board waive the submission of any of the required information not submitted herewith.

Very truly yours,

A handwritten signature in black ink, appearing to read 'RSTJ', located below the closing 'Very truly yours,'.

Robert T. Smart, Jr.

Cc: Needham Housing Authority

TOWN OF NEEDHAM
MASSACHUSETTS



500 Dedham Avenue
Needham, MA 02492
781-455-755

PLANNING BOARD

APPLICATION FOR SITE PLAN REVIEW

Project Determination: (circle one) Major Project Minor Project

This application must be completed, signed, and submitted with the filing fee by the applicant or his representative in accordance with the Planning Board's Rules as adopted under its jurisdiction as a Special Permit Granting Authority. Section 7.4 of the By-Laws.

Location of Property 0 Linden Street and 5 Chambers Street, Needham, MA 02492
Name of Applicant Needham Housing Authority
Applicant's Address 21 Highland Circle, Suite 10, Needham, MA 02494
Phone Number 781-444-3011 x 218

Applicant is: Owner ✓ Tenant _____
 Agent/Attorney _____ Purchaser _____

Property Owner's Name Needham Housing Authority
Property Owner's Address 21 Highland Circle, Suite 10, Needham, MA 02494
Telephone Number 781-444-3011 x 218

Characteristics of Property: Lot Area: 478,540 SF (10.9858 acres)
 Present Use: Multifamily Residential
 Map #133, Parcels #23 + 24, Map #134, Parcel #41
 Zoning District: Affordable Housing District*

*The property is located in the Affordable Housing District pursuant to the amendments of the Zoning By-Law voted at the May 2024 Annual Town Meeting, which amendments remain subject to review and approval by the Massachusetts Attorney General.

Description of Project for Site Plan Review under Section 7.4 of the Zoning By-Law:

Please see the filing and zoning letters submitted herewith

Signature of Applicant (or representative) *Cheryl J. [Signature]*
Address if not applicant: N/A
Telephone #781-444-3011 x 218, or 339-222-6187
Owner's permission if other than applicant: N/A

SUMMARY OF PLANNING BOARD ACTION

Received by Planning Board _____ Date _____
Hearing Date _____ Parties of Interest Notified of Public Hearing _____
Decision Required by _____ Decision/Notices of Decision sent _____
Granted _____
Denied _____ Fee Paid _____ Fee Waived _____
Withdrawn _____

NOTE: Reports on Minor Projects must be issued within 35 days of filing date.

ROBERT T. SMART, JR., ESQ.

ATTORNEY AT LAW

399 CHESTNUT STREET

NEEDHAM, MASSACHUSETTS 02492

TEL (781) 444-9344 FAX (781) 449-0242

E-MAIL bob@robertsmart.net WEBSITE www.robertsmart.net

BY HAND

August 23, 2024

Needham Planning Board
500 Dedham Avenue
Needham, MA 02492

Re: Zoning Letter for the Needham Housing Authority, Linden Street Redevelopment, 0 Linden Street and 5 Chambers Street, Site Plan Review Application

Dear Planning Board Members:

The Needham Housing Authority (NHA) has submitted to the Board an application for site plan review of its proposal to redevelop its Linden-Chambers property at 0 Linden Street and 5 Chambers Street, a site with 478,540 square feet of land, being approximately 10.9858 acres (the "Property"). The redevelopment would result in an increase in the number of affordable housing units on the Property from the current 152 units to 216 units, an increase of 64 units.

The NHA proposes to redevelop the Property in two Phases. Phase I involves the Linden Street buildings on the Property, and it is divided into Phases 1A and 1B. The subject of this site plan review application is Phase I. Phase II involves the five Chambers Street buildings on the Property, the redevelopment of which is not part of this application.

During Phase 1A, the NHA will demolish 10 existing buildings at 138, 140, 144, 146, 150, 152, 156, 158, 166, and 168 Linden Street. The 40 residents living in those units will be temporarily relocated, at no cost to them, to comparable or better dwelling units until they can be moved back into new units. Phase 1A of the redevelopment, providing 76 units and the common facilities for the proposed new Linden Street building, will be constructed. Then the original residents of the 10 buildings will be allowed to move into the north wing.

During Phase 1B, the NHA will demolish the 8 remaining buildings at 170, 172, 174, 180, 182, 184, 186, and 188 Linden Street. The 32 residents of those buildings will be moved into the new building which was constructed during Phase 1A. The construction of the second, southerly wing of the new Linden Street building, with 60 new units, will proceed.

The NHA was established by the Town in 1948, for the purpose of constructing, managing and operating multifamily residential buildings that are affordable for persons of low

income. Pursuant to several votes of the Needham Town Meeting, the Town conveyed the land which comprises the current Property to the NHA, between 1957 to 1970. The NHA subsequently constructed the current buildings on the Property, and it has managed the development for the benefit of its low-income residents and the Town since that time. The buildings are worn out, and in dire need of replacement.

The NHA has conducted numerous meetings with the current residents of the Property, nearby property owners, and Town officials, boards and Town Meeting members over the last 16 months. The comments received have been considered by the NHA, and many of them have been incorporated in the current redevelopment proposal.

In May of 2024, the Needham Town Meeting adopted, by nearly unanimous vote, four Articles relating to the redevelopment of the Property: Article 18 (Affordable Housing District), Article 19 (Map Change for Affordable Housing District), Article 22 (Appropriate for Linden Street Redevelopment), and Article 41 (Authorize Select Board to Remove Restrictions). It is expected that the Massachusetts Attorney General will approve the zoning Articles shortly, as they were submitted by the Town Clerk on June 13, 2024.

Zoning Analysis

The Property is entirely located within the newly established Affordable Housing District.

The proposed use of the Property is for an AHD project, defined in Section 3.16.3 of the Zoning Bylaw as “a multi-family housing development of affordable housing units, as defined in Section 1.3 of this By-Law”. All units will be affordable to and occupied by households with incomes at or below eighty (80) percent of the area median income. This use is allowed as a matter of right, subject to site plan review under Section 7.4 of the Zoning Bylaw.

The NHA proposal contemplates the construction of multiple buildings on the Property, all of which will comply with requirements of the Affordable Housing District. Multiple buildings on a lot are allowed by right under Section 3.16.5 of the Zoning Bylaw.

The NHA proposal meets all the density requirements of the Affordable Housing District. It proposes, in two Phases, the replacement of the existing 72 studio apartments on the Linden Street portion of the Property with 136 units, an increase of 64 units. Of the new units, 128 will be one-bedroom, and 8 will be two-bedroom. The new units, averaging 595 square feet, will be significantly larger than the existing units, which average 405 square feet. The proposed density of 19.7 units per acre will be less than the 25 units per acre standard. The proposed floor area ratio is .36, less than the .50 maximum. The proposed lot coverage ratio is 12.4%, less than the 20% maximum.

The NHA is not proposing any changes to the five Chambers Street buildings on the Property with this application. The 80 units in those buildings will remain.

Once Phases 1A and 1B have been completed, there will be 216 units on the Property: 76 in the north wing of the new Linden Street building, 60 in the south wing of the new Linden Street building, and the 80 existing units in the five Chambers Street buildings.

The NHA proposal meets all the dimensional requirements of the Affordable Housing District. The NHA proposes a maximum building height of 53 feet, which is less than the 58-foot maximum, and 4 stories, which is the allowed maximum. The front setback of 88 feet exceeds the 40-foot minimum, the side setbacks of 283 feet on the south side and 155 feet on the north side exceeds the 25-foot minimum, and the rear setback of 33 feet exceeds the 25-foot minimum. The setback areas will be landscaped, vegetative buffer areas to the extent required under Section 3.16.6.

The NHA site plan for the Linden Street Redevelopment shows two parking lots, located in front of the two wings of the proposed new Linden Street building, along Linden Street. The two lots, combined, will provide 70 parking spaces, 2 more than the 68 spaces required under the .5 parking spaces per dwelling unit standard in Section 3.16.7. All new parking spaces for Phase 1A and 1B will comply with the Parking Plan and Design requirements of By-Law Section 5.1.3. The existing 41 space parking lot for the Chambers buildings, which will remain as is during the Phase 1A and Phase 1B development, contains one space more than the 40 spaces required under the Affordable Housing District zoning.

Off-site drainage concerns will be managed through an onsite storm water management system that will have sufficient capacity to contain surface and roof water run-offs within the Property.

A copy of the zoning table for the Linden Street Redevelopment is attached hereto.

Because the NHA proposal will meet all the requirements of the Affordable Housing District, no zoning waivers are necessary. However, to the extent the applicant has failed to notice an applicable zoning requirement, and the proposal fails to meet such requirement(s), appropriate waivers are requested.

Very truly yours,

RTS

Robert T. Smart, Jr.

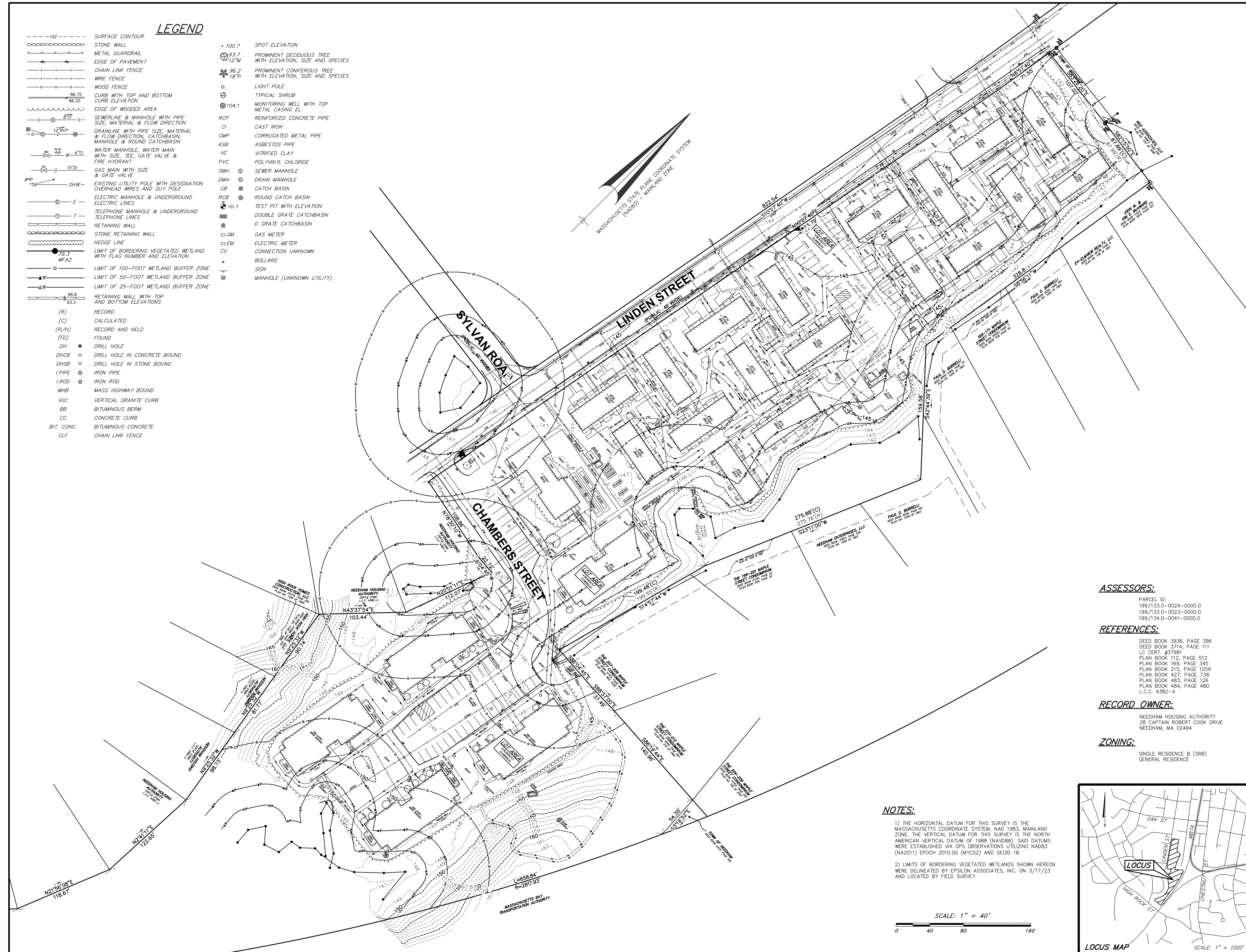
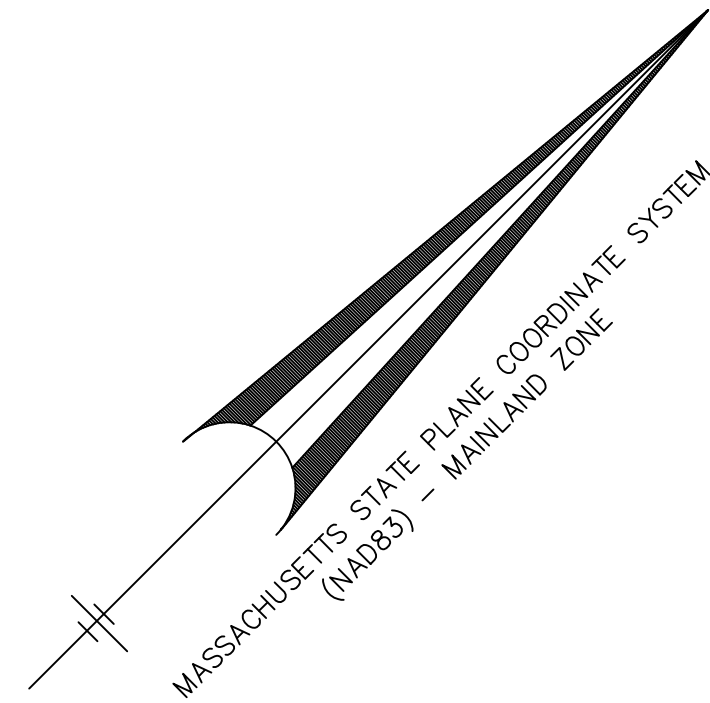
	REQUIRED ZONING	PROPOSED PROJECT - PHASE 1 *	COMPLIANCE	NOTES
ZONING DISTRICT	Affordable Housing District (AHD)	Affordable Housing District (AHD)		
USES	Affordable Multi-Family	Affordable Multi-Family		
ZONING DIMENSIONAL ANALYSIS				
Gross Lot Area	-	478,540 sq. ft.	-	10,9858 acres per Consolidated Plan
Minimum Lot Size	20,000 sq. ft.	182,400 sq. ft.	Y	
Frontage	150 ft	740 ft	Y	
# Of Dwelling Units	-	216	-	* PHASES 1A/1B/CHAMBERS (EXIST.)
Front yard	40 ft	88 ft	Y	
Side Yard - north	25 ft	155 ft	Y	
Side Yard - south	25 ft	283 ft	Y	lawful pe-existing Chambers Building 50 ft
Rear Yard	25 ft	33 ft	Y	
Height	58 ft	53 ft	Y	
Mechanical Height	15 ft	8 ft	Y	
Mechanical Roof Coverage	25%	<1%	Y	
Stories	4	4	Y	PHASES 1A/1B
FAR	0.5	0.36	Y	* PHASES 1A/1B/CHAMBERS (EXIST.)
Units per Acre	25	19.7	Y	* PHASES 1A/1B/CHAMBERS (EXIST.)
Lot Coverage	20%	12.4%	Y	
Parking				
Parking Spaces	0.5/unit	0.5/unit	Y	PHASES 1A/1B = 136 units requires 68 parking spaces
Parking Lot Illumination	per 5.1.3 (a)	per 5.1.3 (a)	Y	
Loading Requirement	per 5.1.3 (b)	per 5.1.3 (b)	Y	
Handicapped Parking	per 5.1.3 (c)	per 5.1.3 (c)	Y	
Driveway Openings	per 5.1.3 (d)	per 5.1.3 (d)	Y	
Compact Cars	per 5.1.3 (e)	per 5.1.3 (e)	Y	
Parking Space Size	per 5.1.3 (f)	per 5.1.3 (f)	Y	
Bumper Overhang	per 5.1.3 (g)	per 5.1.3 (g)	Y	
Parking Space Layout	per 5.1.3 (h)	per 5.1.3 (h)	Y	
Width of Maneuvering Aisle	per 5.1.3 (i)	per 5.1.3 (i)	Y	
Parking Setbacks	per 5.1.3 (j)	per 5.1.3 (j)	Y	
Landscape Areas	per 5.1.3 (k)	per 5.1.3 (k)	Y	
Trees	per 5.1.3 (l)	per 5.1.3 (l)	Y	
Location	per 5.1.3 (m)	per 5.1.3 (m)	Y	
Bicycle Racks	per 5.1.3 (n)	per 5.1.3 (n)	Y	

* The Linden Street Redevelopment includes Phase 1A and 1B, which will replace the 18 Linden Street buildings, increasing the number of Linden units from 72 to 136. This redevelopment will not affect the 80 existing Chambers Street units which will remain until replaced during a future Phase 2.

74-1-1074

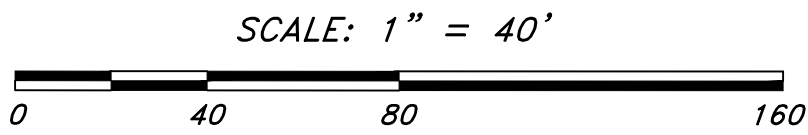
LEGEND

---	102	---	SURFACE CONTOUR
=====			STONE WALL
=====			METAL GUARDRAIL
=====			EDGE OF PAVEMENT
=====			CHAIN LINK FENCE
=====			WIRE FENCE
=====			WOOD FENCE
=====			CURB WITH TOP AND BOTTOM CURB ELEVATION
=====			EDGE OF WOODED AREA
=====			SEWERLINE & MANHOLE WITH PIPE SIZE, MATERIAL & FLOW DIRECTION
=====			DRAINLINE WITH PIPE SIZE, MATERIAL & FLOW DIRECTION, CATCHBASIN, MANHOLE & ROUND CATCHBASIN
=====			WATER MANHOLE, WATER MAIN WITH SIZE, TEE, GATE VALVE & FIRE HYDRANT
=====			GAS MAIN WITH SIZE & GATE VALVE
=====			EXISTING UTILITY POLE WITH DESIGNATION OVERHEAD WIRES AND GUY POLE
=====			ELECTRIC MANHOLE & UNDERGROUND ELECTRIC LINES
=====			TELEPHONE MANHOLE & UNDERGROUND TELEPHONE LINES
=====			RETAINING WALL
=====			STONE RETAINING WALL
=====			HEDGE LINE
=====			LIMIT OF BORDERING VEGETATED WETLAND WITH FLAG NUMBER AND ELEVATION
=====			LIMIT OF 100-FOOT WETLAND BUFFER ZONE
=====			LIMIT OF 50-FOOT WETLAND BUFFER ZONE
=====			LIMIT OF 25-FOOT WETLAND BUFFER ZONE
=====			RETAINING WALL WITH TOP AND BOTTOM ELEVATIONS
(R)			RECORD
(C)			CALCULATED
(R/H)			RECORD AND HELD
(FD)			FOUND
DH			DRILL HOLE
DHCB			DRILL HOLE IN CONCRETE BOUND
DHSB			DRILL HOLE IN STONE BOUND
I,PIPE			IRON PIPE
I,ROD			IRON ROD
MHB			MASS HIGHWAY BOUND
VGC			VERTICAL GRANITE CURB
BB			BITUMINOUS BERM
CC			CONCRETE CURB
BIT. CONC.			BITUMINOUS CONCRETE
CLF			CHAIN LINK FENCE
×	100.7		SPOT ELEVATION
93.7			PROMINENT DECIDUOUS TREE WITH ELEVATION, SIZE AND SPECIES
96.2			PROMINENT CONIFEROUS TREE WITH ELEVATION, SIZE AND SPECIES
18" P			LIGHT POLE
104.1			TYPICAL SHRUB
104.1			MONITORING WELL WITH TOP METAL CASING EL.
RCP			REINFORCED CONCRETE PIPE
CI			CAST IRON
CMP			CORRUGATED METAL PIPE
ASB			ASBESTOS PIPE
VC			VITRIFIED CLAY
PVC			POLYVINYL CHLORIDE
SMH			SEWER MANHOLE
DMH			DRAIN MANHOLE
CB			CATCH BASIN
RCB			ROUND CATCH BASIN
101.7			TEST PIT WITH ELEVATION
			DOUBLE GRATE CATCHBASIN
			D GRATE CATCHBASIN
GM			GAS METER
EM			ELECTRIC METER
CU			CONNECTION UNKNOWN
			BOLLARD
			SIGN
			MANHOLE (UNKNOWN UTILITY)



NOTES:

- 1) THE HORIZONTAL DATUM FOR THIS SURVEY IS THE MASSACHUSETTS COORDINATE SYSTEM, NAD 1983, MAINLAND ZONE. THE VERTICAL DATUM FOR THIS SURVEY IS THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAV88). SAID DATUMS WERE ESTABLISHED VIA GPS OBSERVATIONS UTILIZING NAD83 (NA2011) EPOCH 2010.00 (MYCS2) AND GEOID 18.
- 2) LIMITS OF BORDERING VEGETATED WETLANDS SHOWN HEREON WERE DELINEATED BY EPSILON ASSOCIATES, INC. ON 3/17/23 AND LOCATED BY FIELD SURVEY.



ASSESSORS:

PARCEL ID:
199/133.0-0024-0000.0
199/133.0-0023-0000.0
199/134.0-0041-0000.0

REFERENCES:

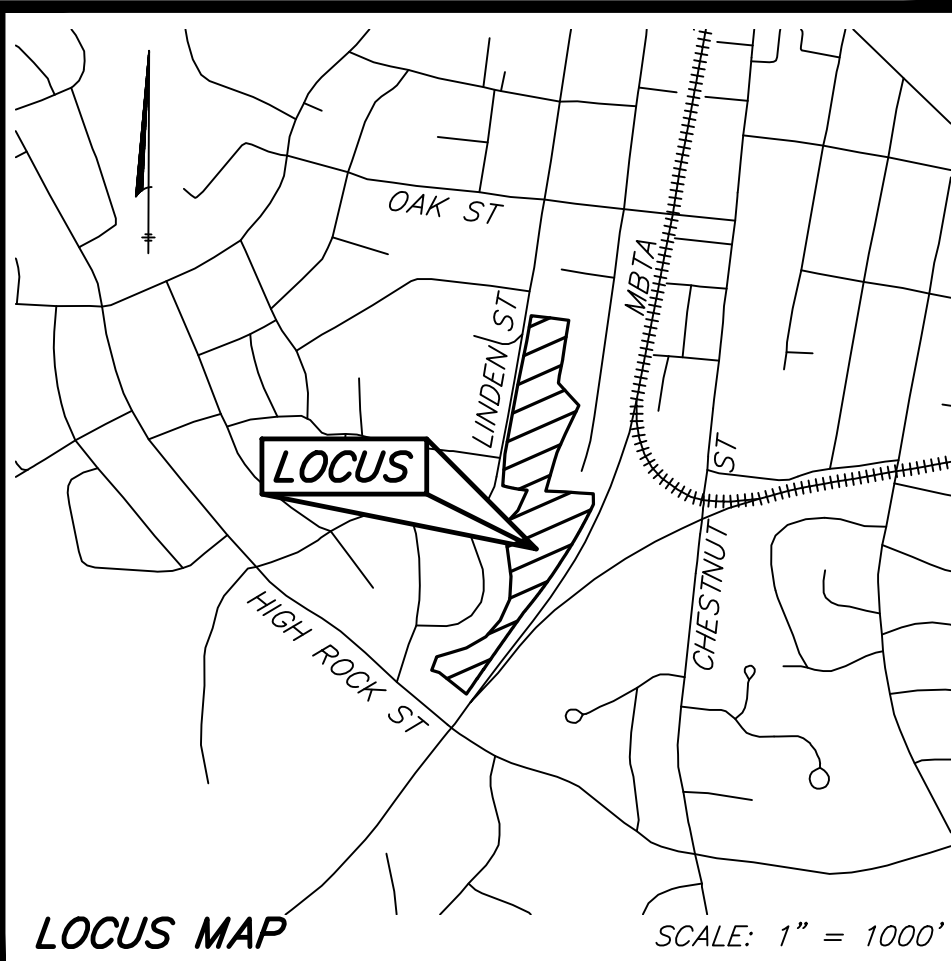
DEED BOOK 3936, PAGE 396
DEED BOOK 3714, PAGE 111
LC CERT. #37981
PLAN BOOK 112, PAGE 512
PLAN BOOK 169, PAGE 345
PLAN BOOK 215, PAGE 1059
PLAN BOOK 427, PAGE 738
PLAN BOOK 483, PAGE 126
PLAN BOOK 484, PAGE 480
L.G.C. 4382-A

RECORD OWNER:

NEEDHAM HOUSING AUTHORITY
28 CAPTAIN ROBERT COOK DRIVE
NEEDHAM, MA 02494

ZONING:

SINGLE RESIDENCE B (SRB)
GENERAL RESIDENCE



LINDEN/
CHAMBERS
REDEVELOPMENT

667 Linden St & 5 Chambers St
Needham, Massachusetts 02492

PREPARED FOR

BARGMANN
HENDRIE +
ARCHETYPE,
INC.

9 Channel Center St, Suite 300
Boston, Massachusetts 02210

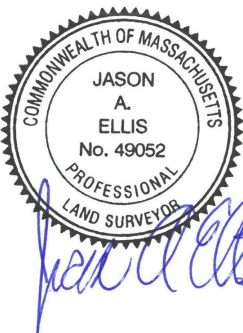
HANCOCK
ASSOCIATES

Civil Engineers

Land Surveyors

Wetland Scientists

121 EAST BERKELEY STREET, BOSTON, MA 02118
VOICE (617) 357-8145, FAX (617) 357-9495
WWW.HANCOCKASSOCIATES.COM

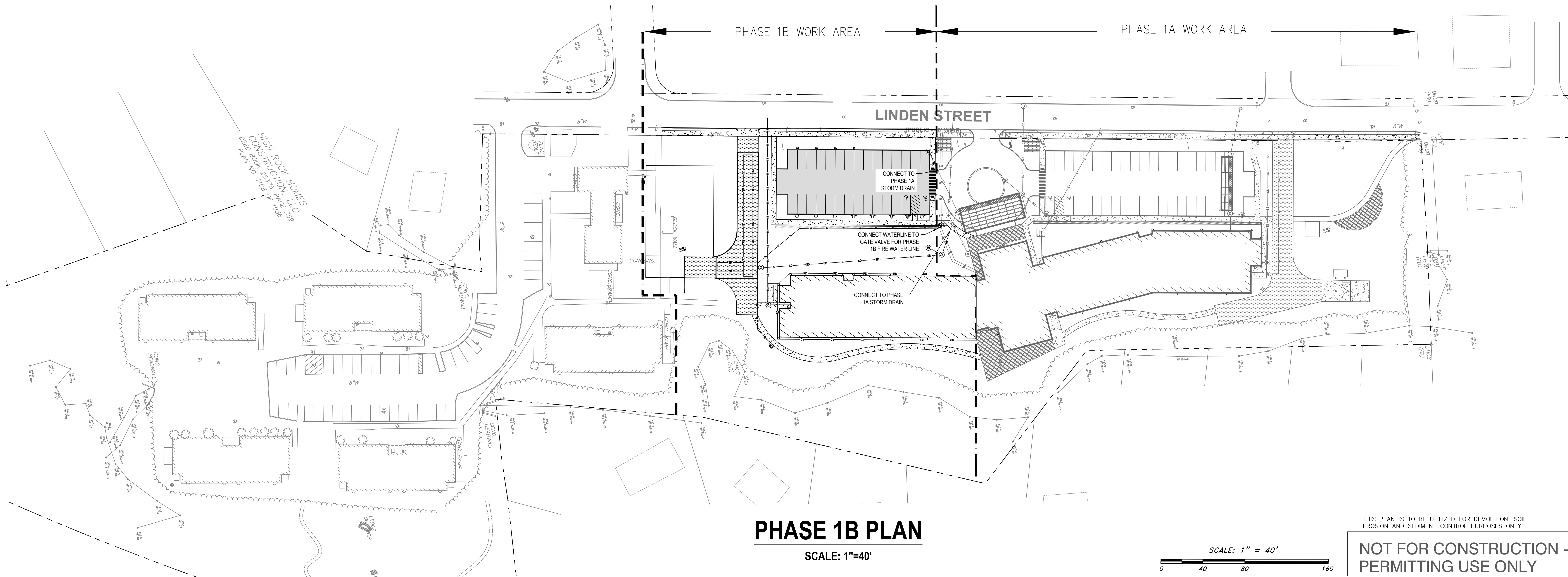
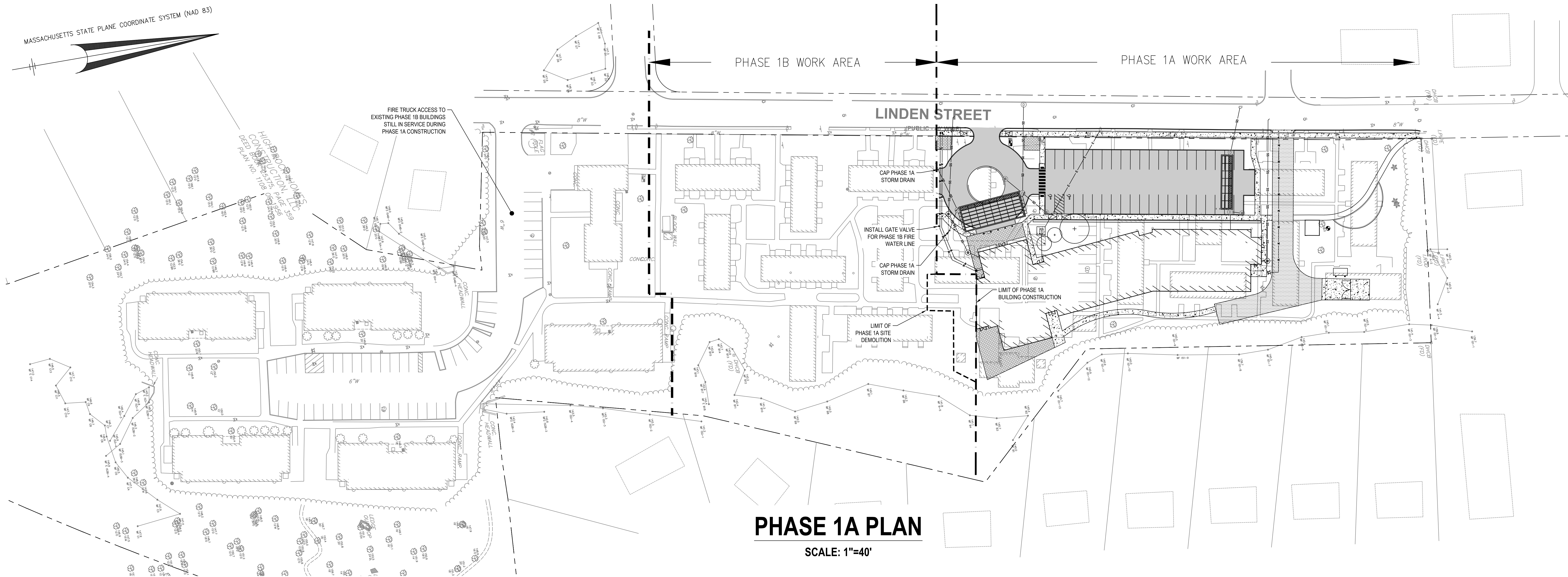


NO.	BY	APP	DATE	ISSUE/REVISION DESCRIPTION
DATE:	5/11/2023			DESIGN BY: JML
SCALE:	1" = 40'			CHECK BY: JAE

EXISTING CONDITIONS
PLAN OF LAND
IN
NEEDHAM, MA

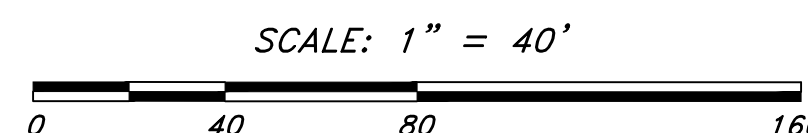
PLOT DATE: Aug 23, 2024 12:28 pm	
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LAYOUT: EC(30x42)	
SHEET: X OF X	
PROJECT NO.:	26774

MASSACHUSETTS STATE PLANE COORDINATE SYSTEM (NAD 83)



THIS PLAN IS TO BE UTILIZED FOR DEMOLITION, SOIL EROSION AND SEDIMENT CONTROL PURPOSES ONLY

NOT FOR CONSTRUCTION - PERMITTING USE ONLY



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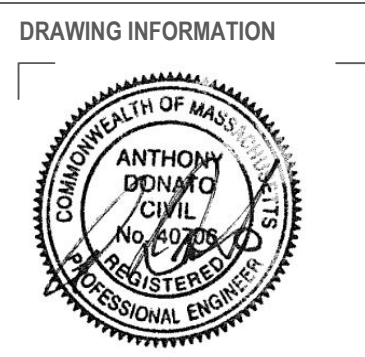
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**Linden Street
Redevelopment**
138-188 Linden St, Needham MA, 02464
Assessor's Map:
199133-23-00
199133-24-00
199134-41-00

CLIENT
**Needham Housing
Authority**
21 Highland Circle,
Needham, MA, 02464

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Landscape Architect
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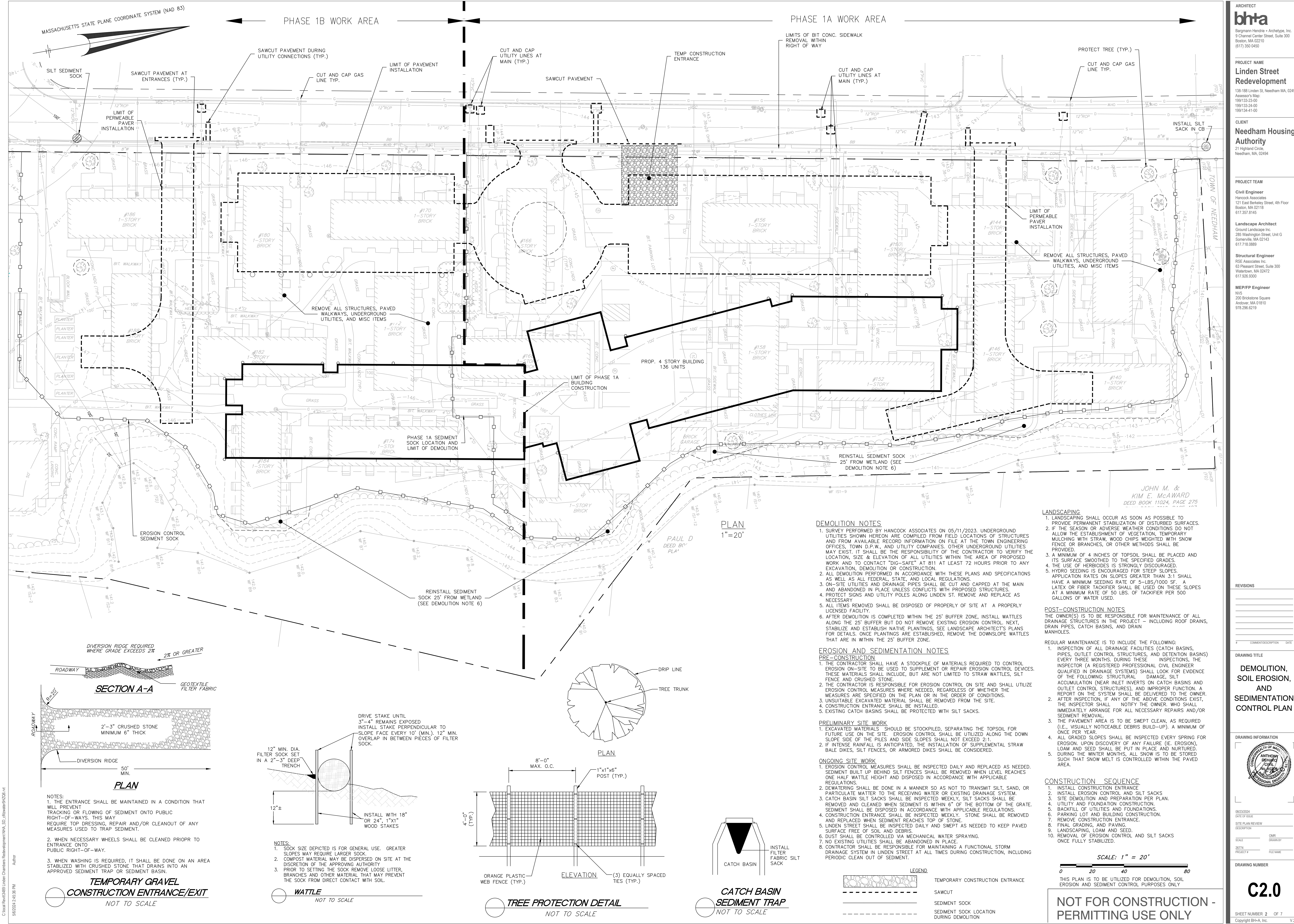
REVISIONS	

DRAWING TITLE
PHASING PLAN



DRAWING INFORMATION
PROJECT NO. 2020004
DATE OF ISSUE
SITE PLAN REVIEW
DESCRIPTION
SCALE
DRAWN BY
PROJECT #
FILE NAME

DRAWING NUMBER
C1
SHEET NUMBER 1 OF 7
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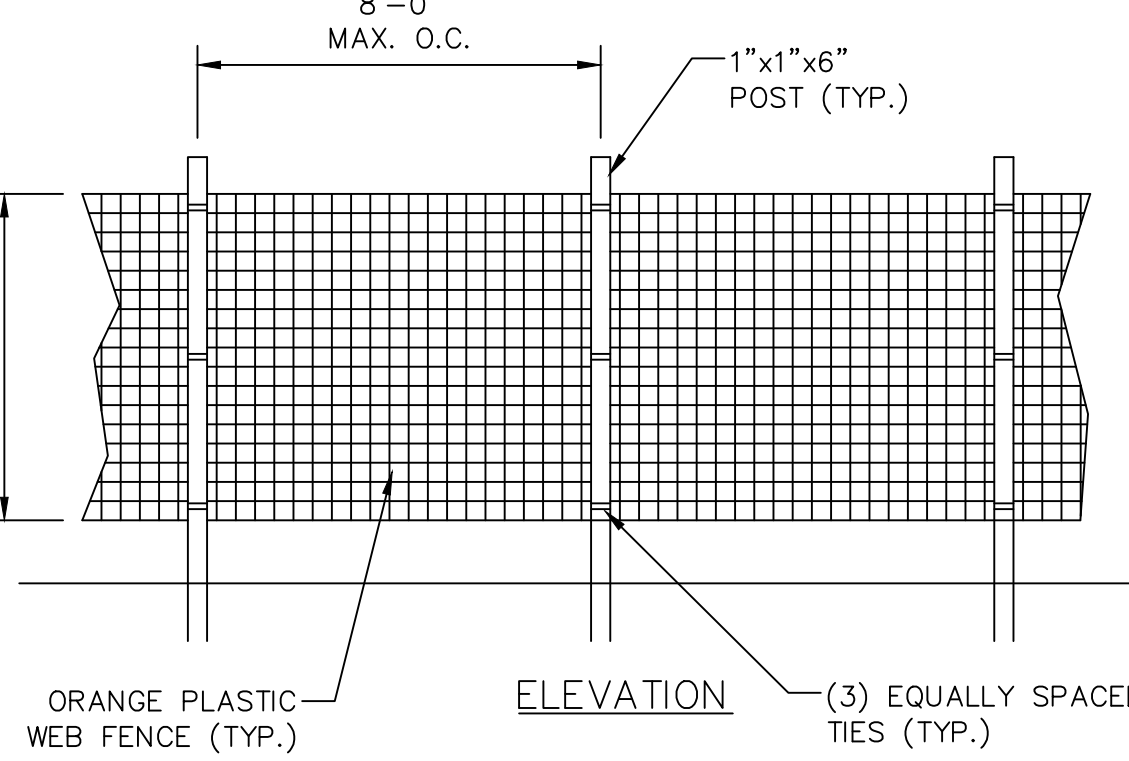
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4/20/2024 2:45:36 PM
Author

- NOTES:
1. THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION THAT WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHT-OF-WAYS. THIS MAY REQUIRE TOP DRESSING, REPAIR AND/OR CLEANOUT OF ANY MEASURES USED TO TRAP SEDIMENT.
 2. WHEN NECESSARY WHEELS SHALL BE CLEANED PRIOR TO ENTRANCE ONTO PUBLIC RIGHT-OF-WAY.
 3. WHEN WASHING IS REQUIRED, IT SHALL BE DONE ON AN AREA STABILIZED WITH CRUSHED STONE THAT DRAINS INTO AN APPROVED SEDIMENT TRAP OR SEDIMENT BASIN.

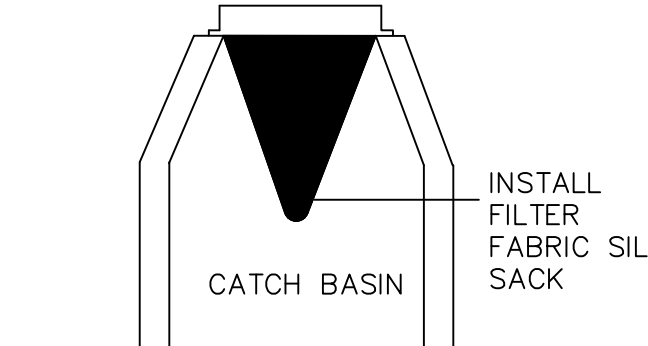
TEMPORARY GRAVEL CONSTRUCTION ENTRANCE/EXIT
NOT TO SCALE

- NOTES:
1. SOCK SIZE DEPICTED IS FOR GENERAL USE. GREATER SLOPES MAY REQUIRE LARGER SOCK.
 2. COMPOST MATERIAL MAY BE DISPERSED ON SITE AT THE DISCRETION OF THE APPROVING AUTHORITY.
 3. PRIOR TO SETTING THE SOCK REMOVE LOOSE LITTER, BRANCHES AND OTHER MATERIAL THAT MAY PREVENT THE SOCK FROM DIRECT CONTACT WITH SOIL.

WATTLE
NOT TO SCALE



TREE PROTECTION DETAIL
NOT TO SCALE



CATCH BASIN SEDIMENT TRAP
NOT TO SCALE

DEMOLITION NOTES

1. SURVEY PERFORMED BY HANCOCK ASSOCIATES ON 05/11/2023. UNDERGROUND UTILITIES SHOWN HEREON ARE COMPILED FROM FIELD LOCATIONS OF STRUCTURES AND FROM AVAILABLE RECORD INFORMATION ON FILE AT THE TOWN ENGINEERING OFFICES, TOWN D.P.W., AND UTILITY COMPANIES. OTHER UNDERGROUND UTILITIES MAY EXIST. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY THE LOCATION, SIZE & ELEVATION OF ALL UTILITIES WITHIN THE AREA OF PROPOSED WORK AND TO CONTACT "DIG-SAFE" AT AT LEAST 72 HOURS PRIOR TO ANY EXCAVATION, DEMOLITION OR CONSTRUCTION.
2. ALL DEMOLITION PERFORMED IN ACCORDANCE WITH THESE PLANS AND SPECIFICATIONS AS WELL AS ALL FEDERAL, STATE, AND LOCAL REGULATIONS.
3. ON-SITE UTILITIES AND DRAINAGE PIPES SHALL BE CUT AND CAPPED AT THE MAIN AND ABANDONED IN PLACE UNLESS CONFLICTS WITH PROPOSED STRUCTURES.
4. PROTECT SIGNS AND UTILITY POLES ALONG LINDEN ST. REMOVE AND REPLACE AS NECESSARY.
5. ALL ITEMS REMOVED SHALL BE DISPOSED OF PROPERLY OF SITE AT A PROPERLY LICENSED FACILITY.
6. AFTER DEMOLITION IS COMPLETED WITHIN THE 25' BUFFER ZONE, INSTALL WATTLES ALONG THE 25' BUFFER BUT DO NOT REMOVE EXISTING EROSION CONTROL, NEXT, STABILIZE AND ESTABLISH NATIVE PLANTINGS. SEE LANDSCAPE ARCHITECT'S PLANS FOR DETAILS. ONCE PLANTINGS ARE ESTABLISHED, REMOVE THE DOWNSLOPE WATTLES THAT ARE IN WITHIN THE 25' BUFFER ZONE.

EROSION AND SEDIMENTATION NOTES

- PRE-CONSTRUCTION**
1. THE CONTRACTOR SHALL HAVE A STOCKPILE OF MATERIALS REQUIRED TO CONTROL EROSION ON-SITE TO BE USED TO SUPPLEMENT OR REPAIR EROSION CONTROL DEVICES. THESE MATERIALS SHALL INCLUDE, BUT ARE NOT LIMITED TO STRAW WATTLES, SILT FENCE AND CRUSHED STONE.
 2. THE CONTRACTOR IS RESPONSIBLE FOR EROSION CONTROL ON SITE AND SHALL UTILIZE EROSION CONTROL MEASURES WHERE NEEDED, REGARDLESS OF WHETHER THE MEASURES ARE SPECIFIED ON THE PLAN OR IN THE ORDER OF CONDITIONS.
 3. UNSUITABLE EXCAVATED MATERIAL SHALL BE REMOVED FROM THE SITE.
 4. CONSTRUCTION ENTRANCE SHALL BE INSTALLED.
 5. EXISTING CATCH BASINS SHALL BE PROTECTED WITH SILT SACKS.

PRELIMINARY SITE WORK

1. EXCAVATED MATERIALS SHOULD BE STOCKPILED, SEPARATING THE TOPSOIL FOR FUTURE USE ON THE SITE. EROSION CONTROL SHALL BE UTILIZED ALONG THE DOWN SLOPE SIDE OF THE PILES AND SIDE SLOPES SHALL NOT EXCEED 2:1.
2. IF INTENSE RAINFALL IS ANTICIPATED, THE INSTALLATION OF SUPPLEMENTAL STRAW BALE DIKES, SILT FENCES, OR ARMORED DIKES SHALL BE CONSIDERED.

ONGOING SITE WORK

1. EROSION CONTROL MEASURES SHALL BE INSPECTED DAILY AND REPLACED AS NEEDED. SEDIMENT BUILT UP BEHIND SILT FENCES SHALL BE REMOVED WHEN LEVEL REACHES ONE HALF WATTLE HEIGHT AND DISPOSED IN ACCORDANCE WITH APPLICABLE REGULATIONS.
2. DOWATERING SHALL BE DONE IN A MANNER SO AS NOT TO TRANSMIT SILT, SAND, OR PARTICULATE MATTER TO THE RECEIVING WATER OR EXISTING DRAINAGE SYSTEM.
3. CATCH BASIN SILT SACKS SHALL BE INSPECTED WEEKLY. SILT SACKS SHALL BE REMOVED AND CLEANED WHEN SEDIMENT IS WITHIN 6" OF THE BOTTOM OF THE GRATE. SEDIMENT SHALL BE DISPOSED IN ACCORDANCE WITH APPLICABLE REGULATIONS.
4. CONSTRUCTION ENTRANCE SHALL BE INSPECTED WEEKLY. STONE SHALL BE REMOVED AND REPLACED WHEN SEDIMENT REACHES TOP OF STONE.
5. LINDEN STREET SHALL BE INSPECTED DAILY AND SWEEPED AS NEEDED TO KEEP PAVED SURFACE FREE OF SOIL AND DEBRIS.
6. DUST SHALL BE CONTROLLED VIA MECHANICAL WATER SPRAYING.
7. NO EXISTING UTILITIES SHALL BE ABANDONED IN PLACE.
8. CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING A FUNCTIONAL STORM DRAINAGE SYSTEM IN LINDEN STREET AT ALL TIMES DURING CONSTRUCTION, INCLUDING PERIODIC CLEAN OUT OF SEDIMENT.

- LEGEND**
- TEMPORARY CONSTRUCTION ENTRANCE
 - SAWCUT
 - SEDIMENT SOCK
 - SEDIMENT SOCK LOCATION DURING DEMOLITION

LANDSCAPING

1. LANDSCAPING SHALL OCCUR AS SOON AS POSSIBLE TO PROVIDE PERMANENT STABILIZATION OF DISTURBED SURFACES.
2. IF THE SEASON OR ADVERSE WEATHER CONDITIONS DO NOT ALLOW THE ESTABLISHMENT OF VEGETATION, TEMPORARY MULCHING WITH STRAW, WOOD CHIPS WEIGHTED WITH SNOW FENCE OR BRANCHES, OR OTHER METHODS SHALL BE PROVIDED.
3. A MINIMUM OF 4 INCHES OF TOPSOIL SHALL BE PLACED AND ITS SURFACE SMOOTHED TO THE SPECIFIED GRADES.
4. THE USE OF HERBICIDES IS STRONGLY DISCOURAGED.
5. HYDRO SEEDING IS ENCOURAGED FOR STEEP SLOPES. APPLICATION RATES ON SLOPES GREATER THAN 3:1 SHALL HAVE A MINIMUM SEEDING RATE OF 5-LBS/1000 SF. A LATEX OR FIBER TACKIFIER SHALL BE USED ON THESE SLOPES AT A MINIMUM RATE OF 50 LBS. OF TACKIFIER PER 500 GALLONS OF WATER USED.

POST-CONSTRUCTION NOTES

- THE OWNER(S) IS TO BE RESPONSIBLE FOR MAINTENANCE OF ALL DRAINAGE STRUCTURES IN THE PROJECT - INCLUDING ROOF DRAINS, DRAIN PIPES, CATCH BASINS, AND DRAIN MANHOLES.

REGULAR MAINTENANCE IS TO INCLUDE THE FOLLOWING:

1. INSPECTION OF ALL DRAINAGE FACILITIES (CATCH BASINS, PIPES, OUTLET CONTROL STRUCTURES, AND DETENTION BASINS) EVERY THREE MONTHS. DURING THESE INSPECTIONS, THE INSPECTOR (A REGISTERED PROFESSIONAL CIVIL ENGINEER QUALIFIED IN DRAINAGE SYSTEMS) SHALL LOOK FOR EVIDENCE OF THE FOLLOWING: STRUCTURAL DAMAGE, SILT ACCUMULATION (NEAR INLET INVERTS ON CATCH BASINS AND OUTLET CONTROL STRUCTURES), AND IMPROPER FUNCTION. A REPORT ON THE SYSTEM SHALL BE DELIVERED TO THE OWNER.
2. AFTER INSPECTION, IF ANY OF THE ABOVE CONDITIONS EXIST, THE INSPECTOR SHALL NOTIFY THE OWNER. WHO SHALL IMMEDIATELY ARRANGE FOR ALL NECESSARY REPAIRS AND/OR SEDIMENT REMOVAL.
3. THE PAVEMENT AREA IS TO BE SWEEP CLEAN, AS REQUIRED (I.E., VISUALLY NOTICEABLE DEBRIS BUILD-UP), A MINIMUM OF ONCE PER YEAR.
4. ALL GRADED SLOPES SHALL BE INSPECTED EVERY SPRING FOR EROSION. UPON DISCOVERY OF ANY FAILURE (IE. EROSION), LOAM AND SEED SHALL BE PUT IN PLACE AND NURTURED.
5. DURING THE WINTER MONTHS, ALL SNOW IS TO BE STORED SUCH THAT SNOW MELT IS CONTROLLED WITHIN THE PAVED AREA.

CONSTRUCTION SEQUENCE

1. INSTALL CONSTRUCTION ENTRANCE
2. INSTALL EROSION CONTROL AND SILT SACKS
3. SITE DEMOLITION AND PREPARATION PER PLAN.
4. UTILITY AND FOUNDATION CONSTRUCTION.
5. BACKFILL OF UTILITIES AND FOUNDATIONS.
6. PARKING LOT AND BUILDING CONSTRUCTION.
7. REMOVE CONSTRUCTION ENTRANCE.
8. FINAL GRADING, AND PAVING.
9. LANDSCAPING, LOGS AND SEED.
10. REMOVAL OF EROSION CONTROL AND SILT SACKS ONCE FULLY STABILIZED.

SCALE: 1" = 20'

0 20 40 80

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PROJECT NAME
Linden Street Redevelopment
138-188 Linden St, Needham MA, 02494
Assessor's Map:
199133-23-00
199133-24-00
199134-41-00

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REVISIONS

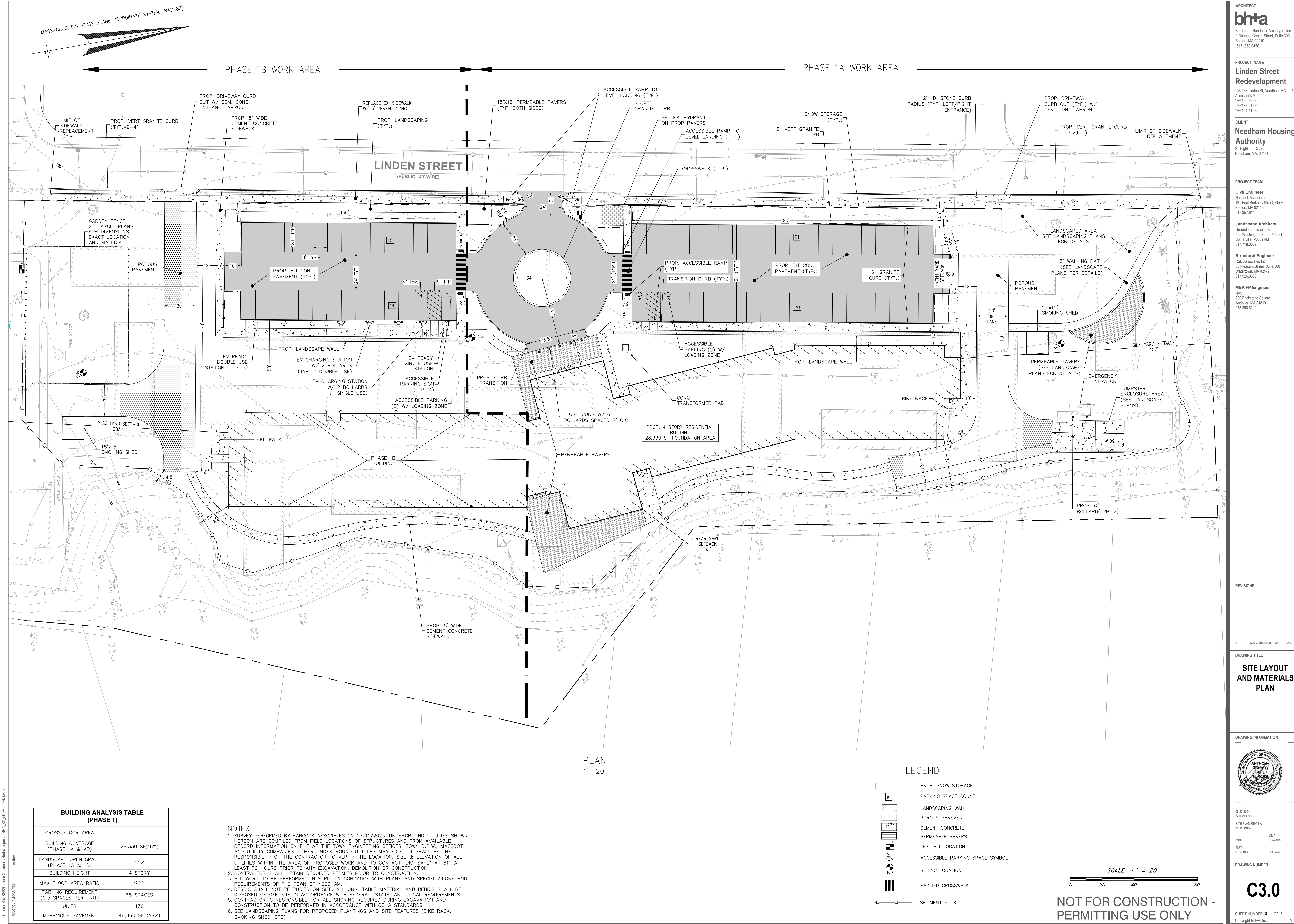
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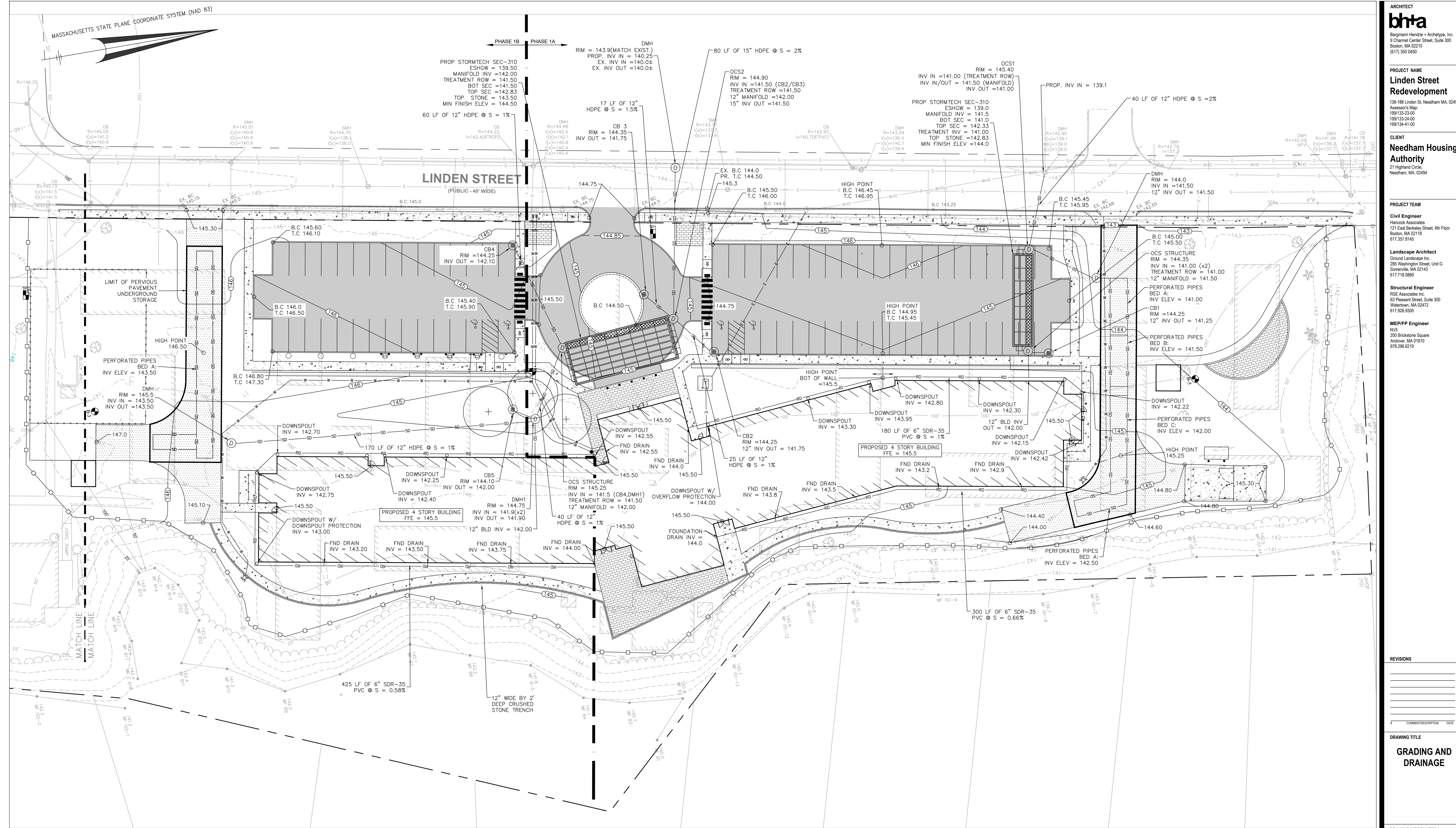
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SCALE
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FILE NAME
DRAWING NUMBER

C2.0

SHEET NUMBER 2 OF 7
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4/26/2024 2:45:36 PM
Author



PLAN
1"=20'

- NOTES:
1. LOCATION OF ALL EXISTING AND PROPOSED SERVICES MUST BE CONFIRMED IN THE FIELD PRIOR TO CONSTRUCTION. ALL DISCREPANCIES MUST BE REPORTED TO THE ENGINEER.
 2. ALL UTILITIES AND SERVICES WITHIN LIMITS OF DISTURBANCES SHALL BE VERTICALLY AND HORIZONTALLY LOCATED.
 3. CONTRACTOR TO COMPLY WITH UTILITY NOTIFICATION REQUIREMENTS.
 4. ALL NEW UTILITIES/SERVICES ARE TO BE INSTALLED UNDERGROUND

LEGEND	
EXISTING	PROPOSED
DRAIN MANHOLE	⊙
CATCH BASIN	⊞
DRAIN PIPE	—SD—
CONTOUR	- - -
BORE LOCATION	⊙

SCALE: 1" = 20'

0 20 40 80

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ARCHITECT
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9 Channel Center Street, Suite 300
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PROJECT NAME
**Linden Street
Redevelopment**

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199133-24-00
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REVISIONS

#	DESCRIPTION	DATE

DRAWING TITLE

**GRADING AND
DRAINAGE**

DRAWING INFORMATION



08/23/2024
DATE OF ISSUE
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28/77A
PROJECT #
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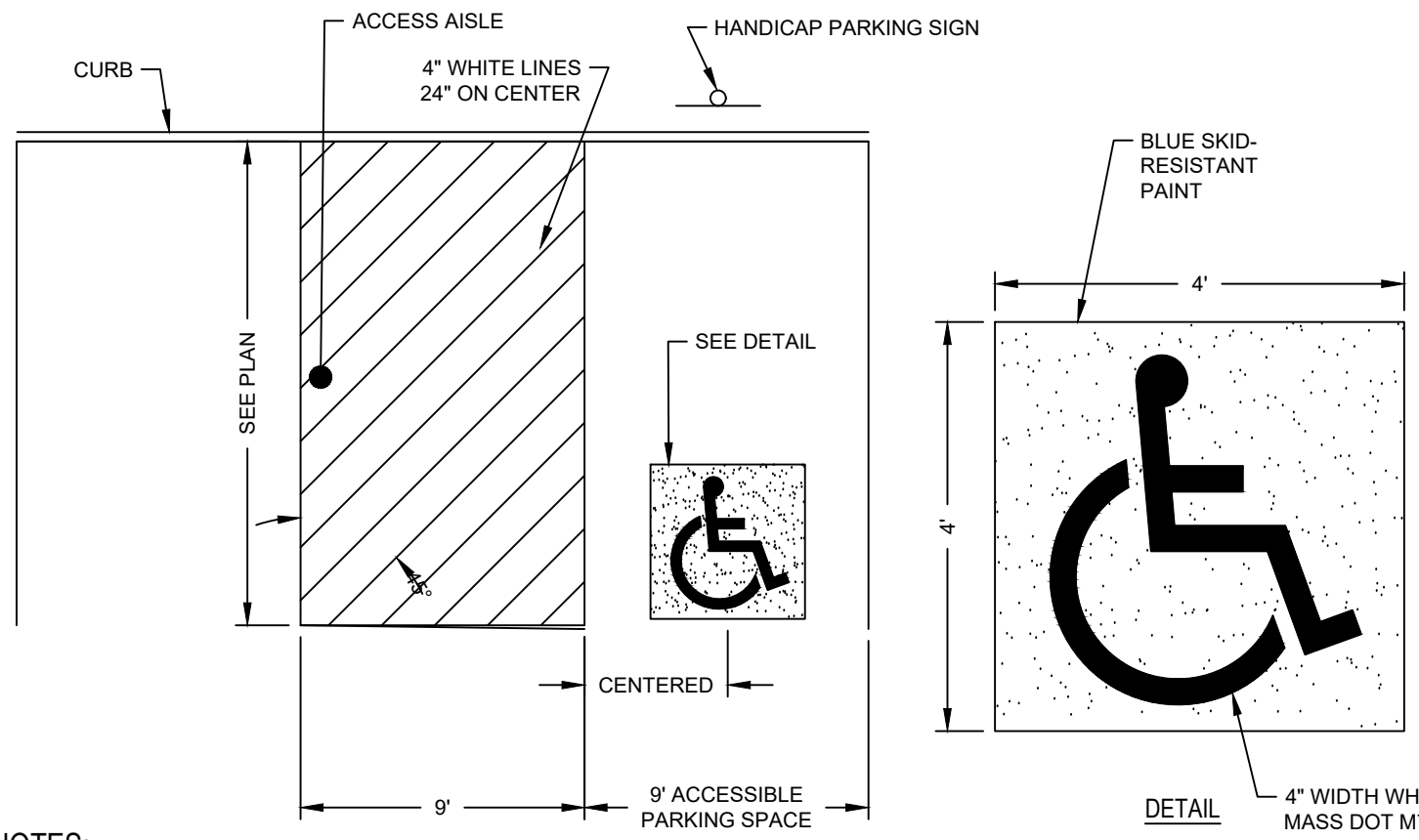
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SHEET NUMBER 4 OF 7
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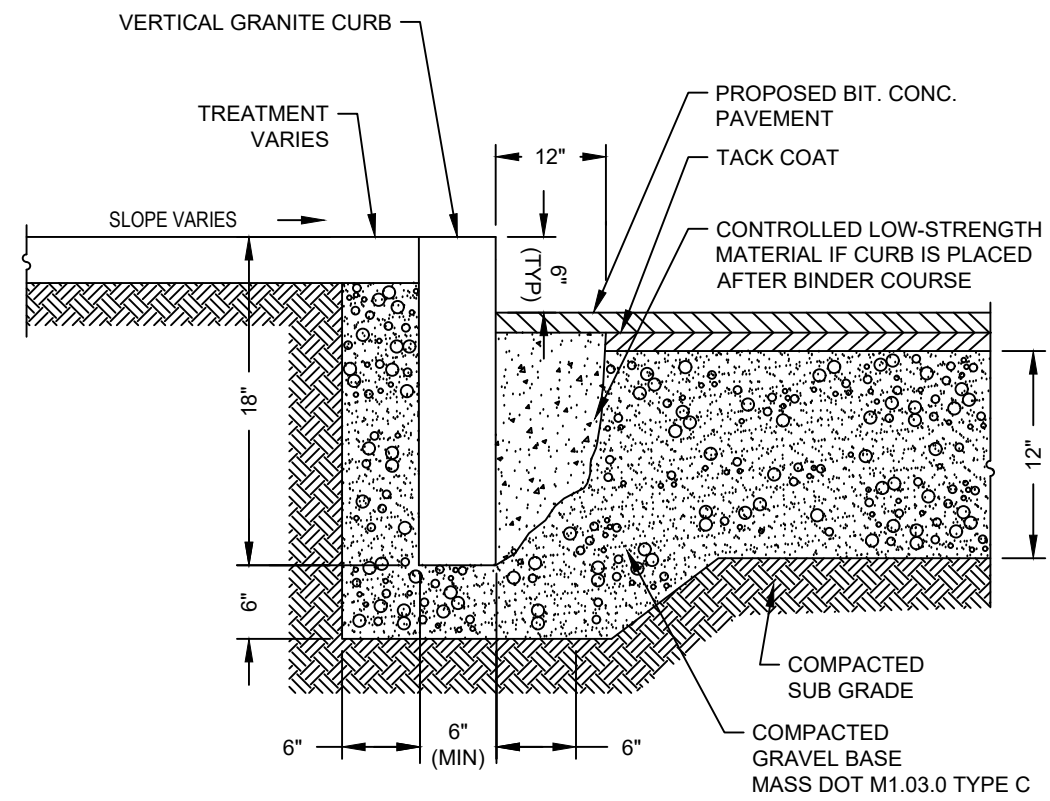


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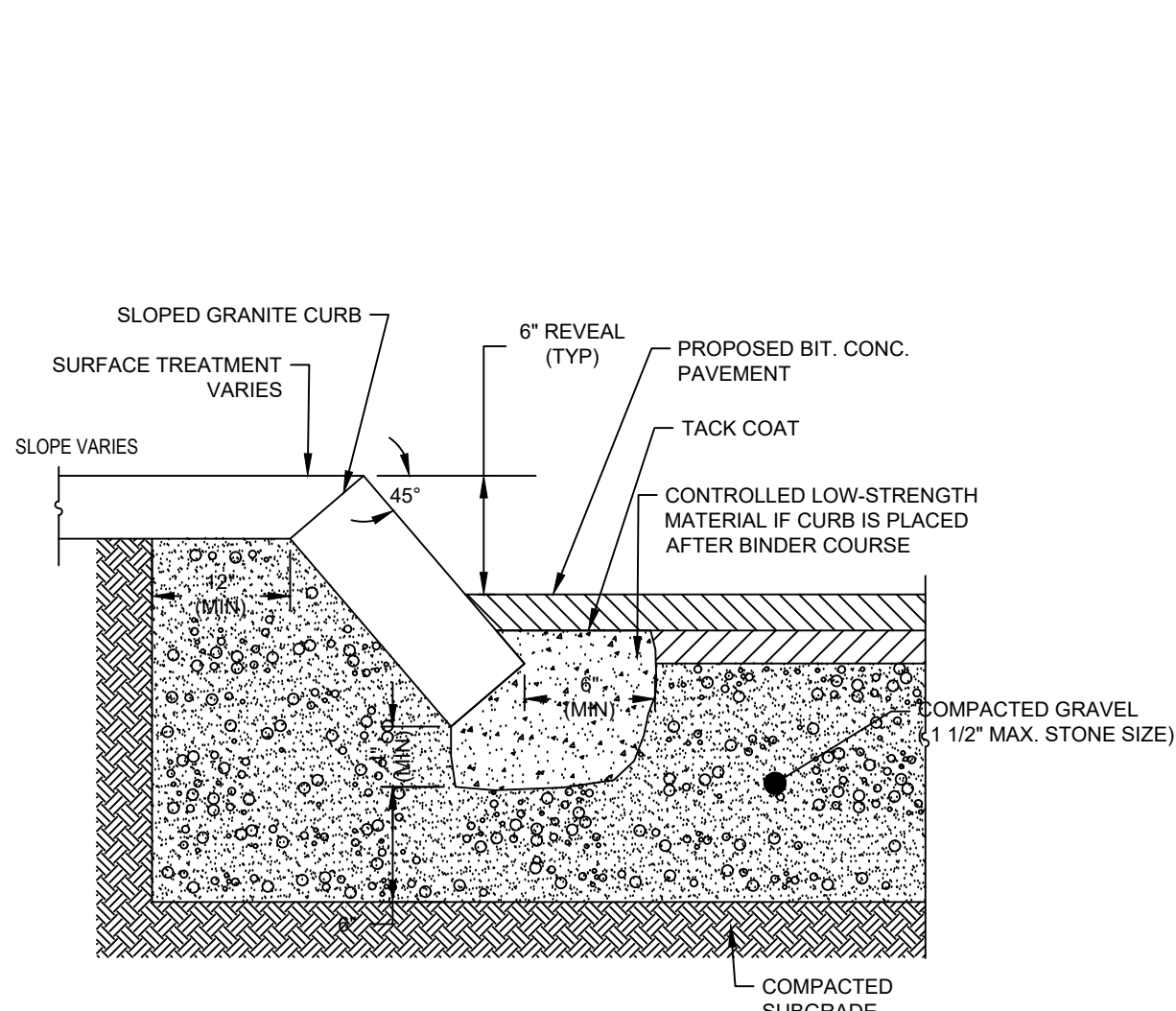


- NOTES:
1. ALL DIMENSIONS TO EDGES OF 4" PAVEMENT STRIPING.
 2. ALL STRIPING SHALL BE 4" WIDE SOLID WHITE PAVEMENT MARKINGS UNLESS OTHERWISE NOTED. MASS DOT M7.01.23 FAST DRYING WHITE WATER-BORNE TRAFFIC PAINT.

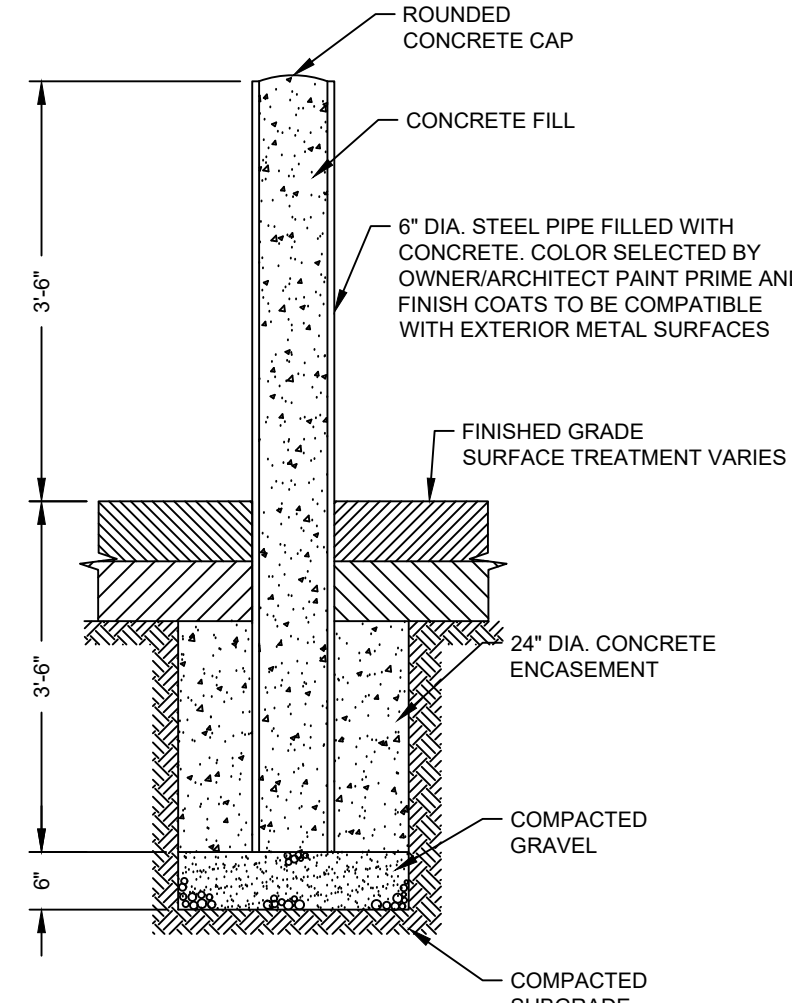
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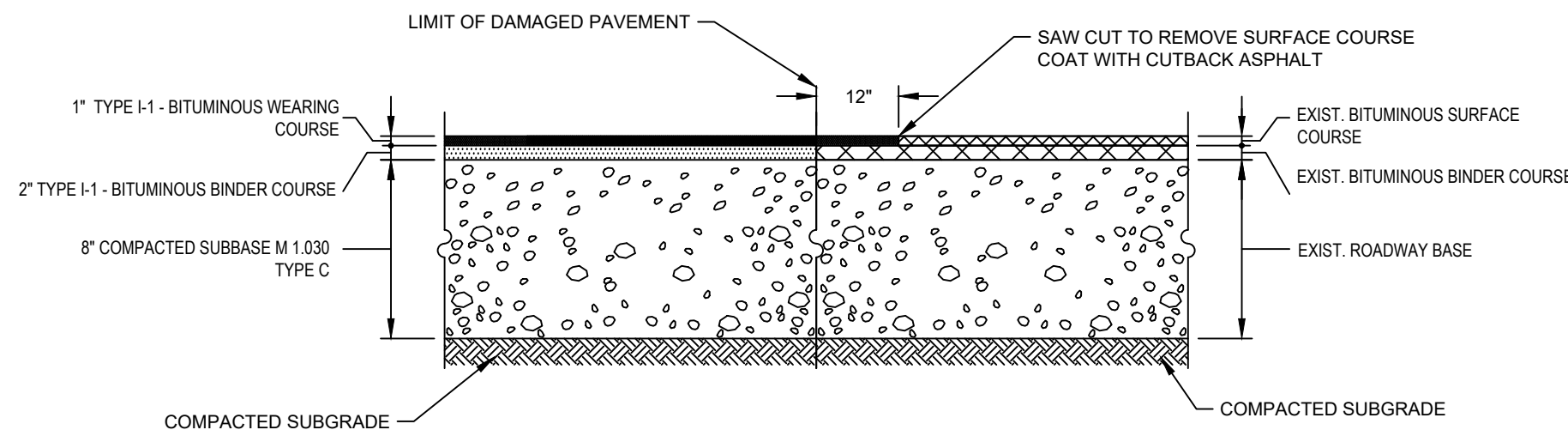
2 VERTICAL GRANITE CURB & SLOPED GRANITE CURB
NOT TO SCALE



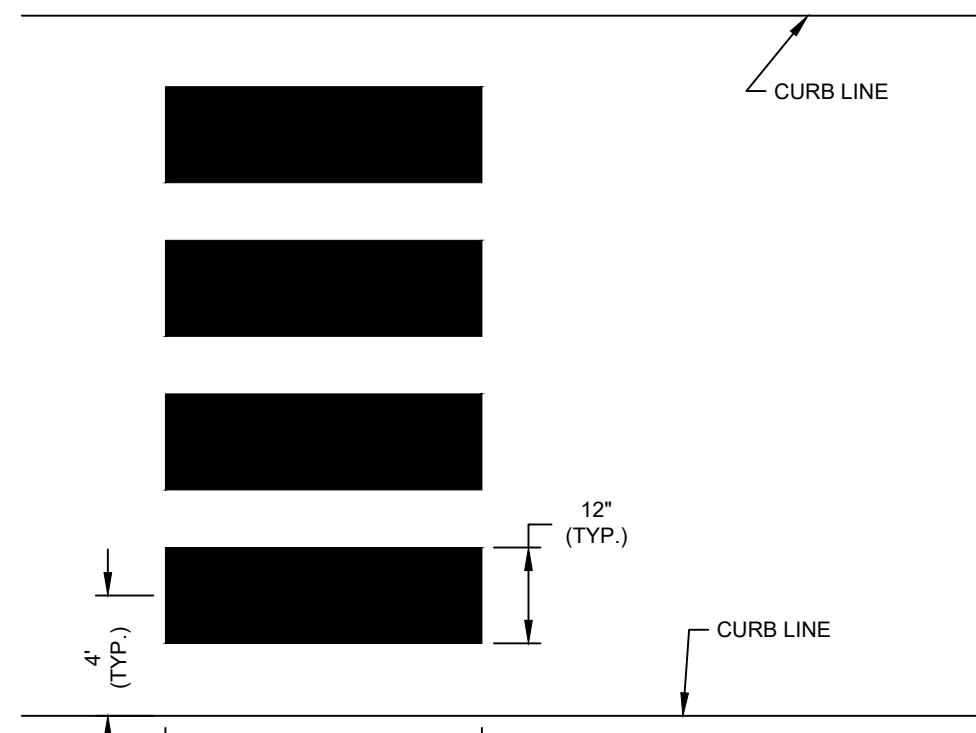
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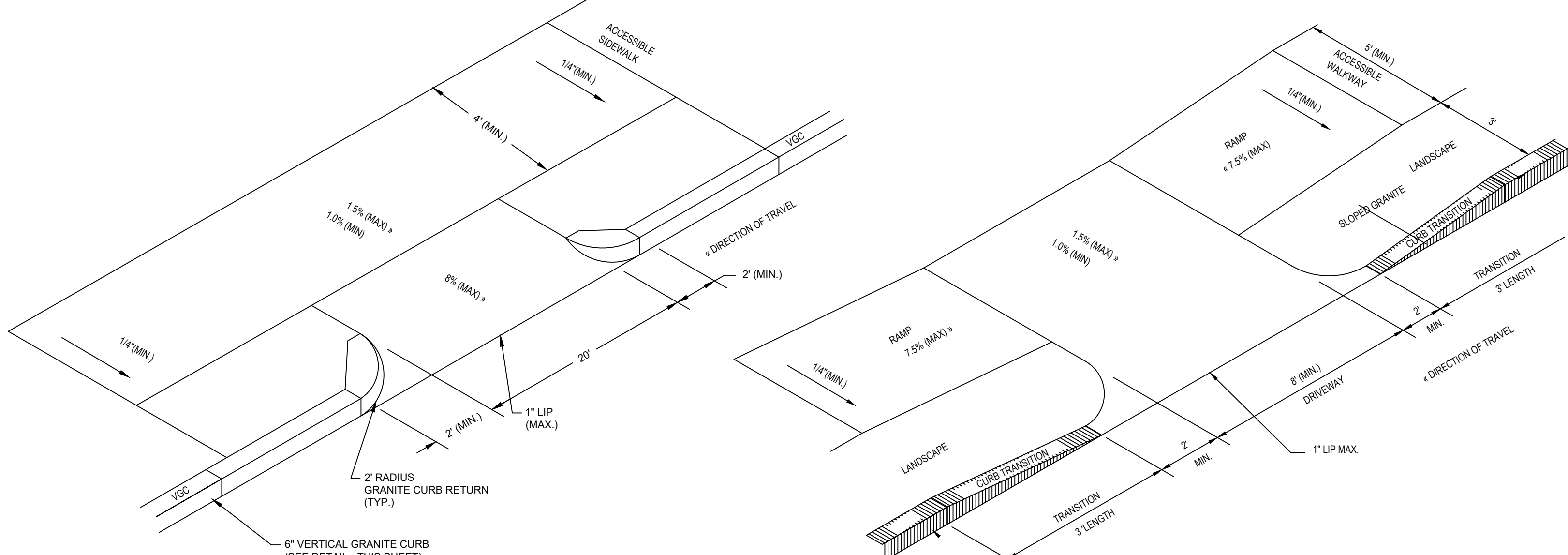
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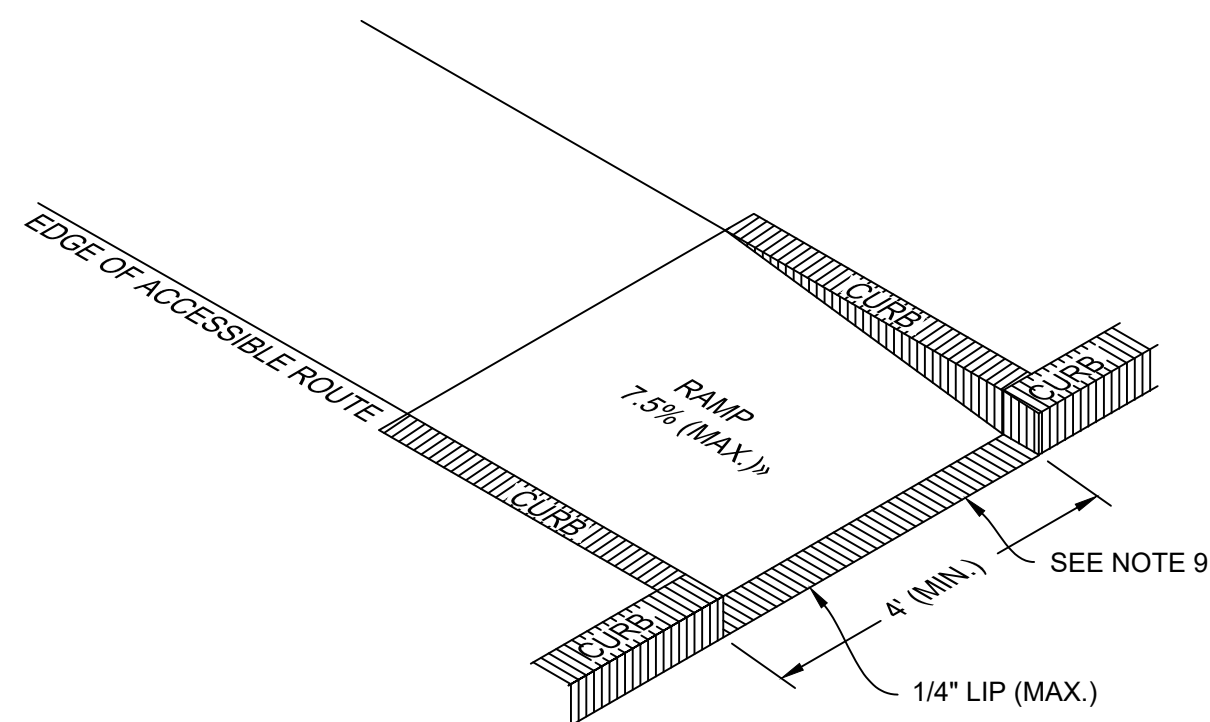
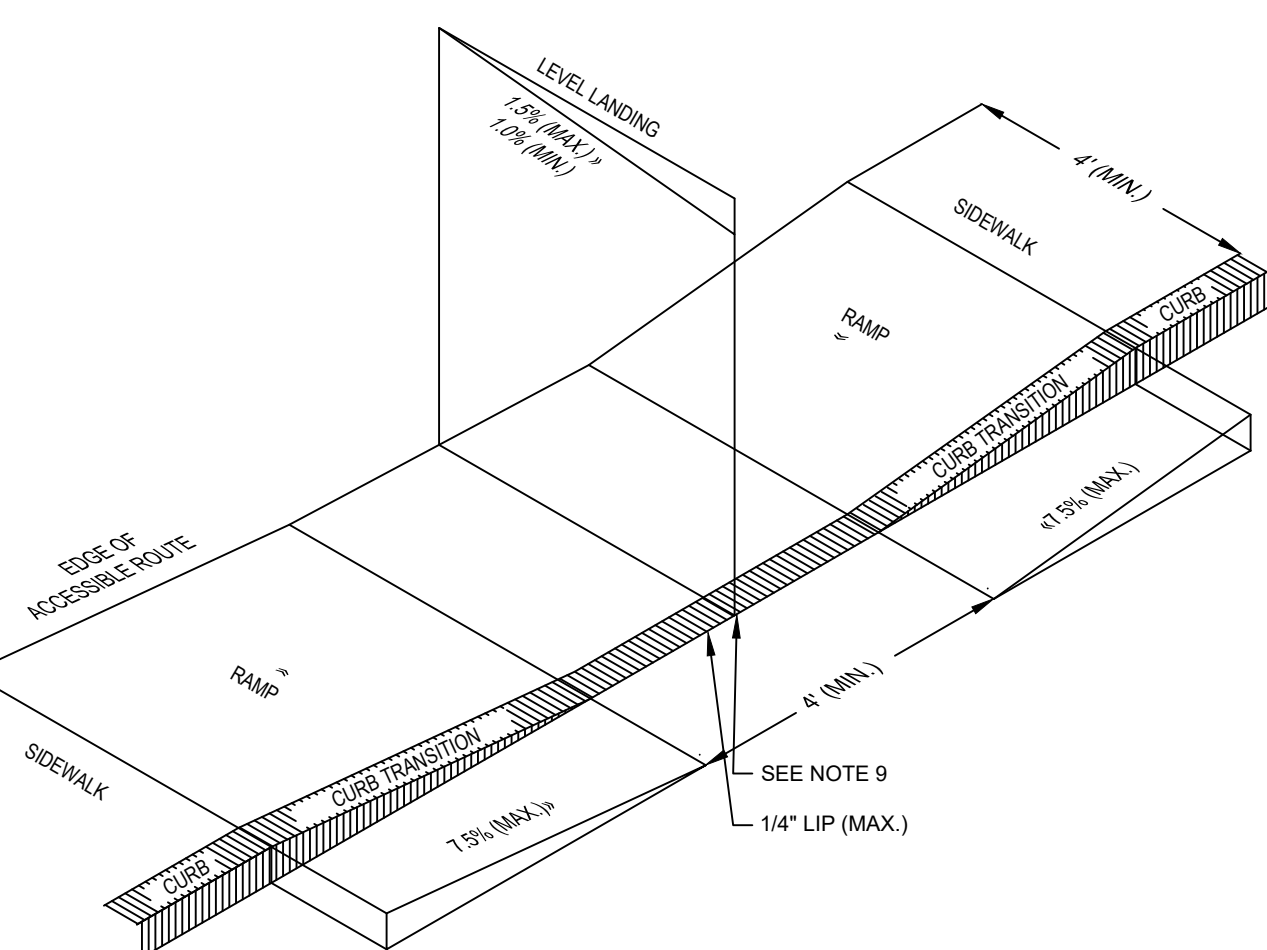
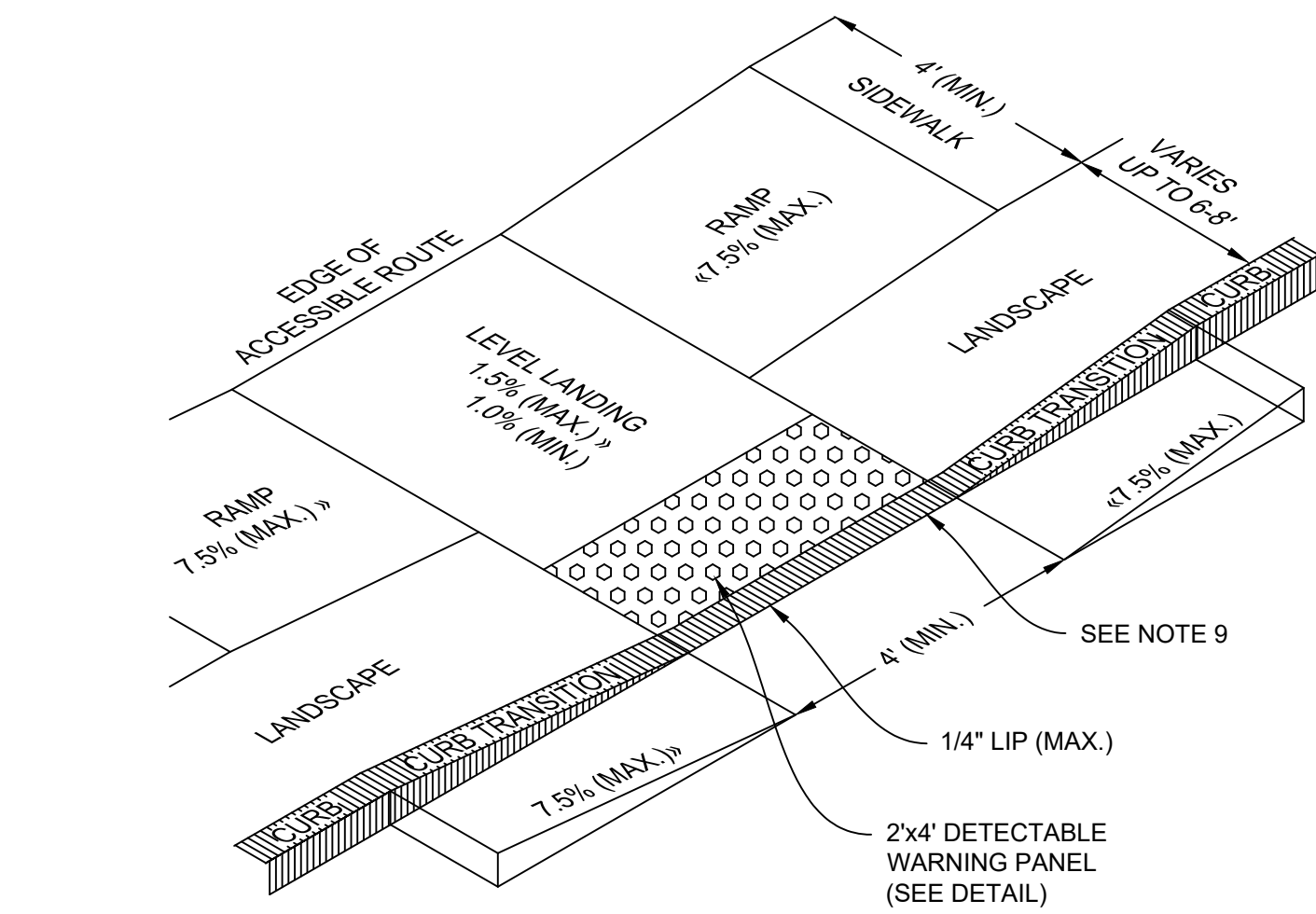
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6 CROSSWALK
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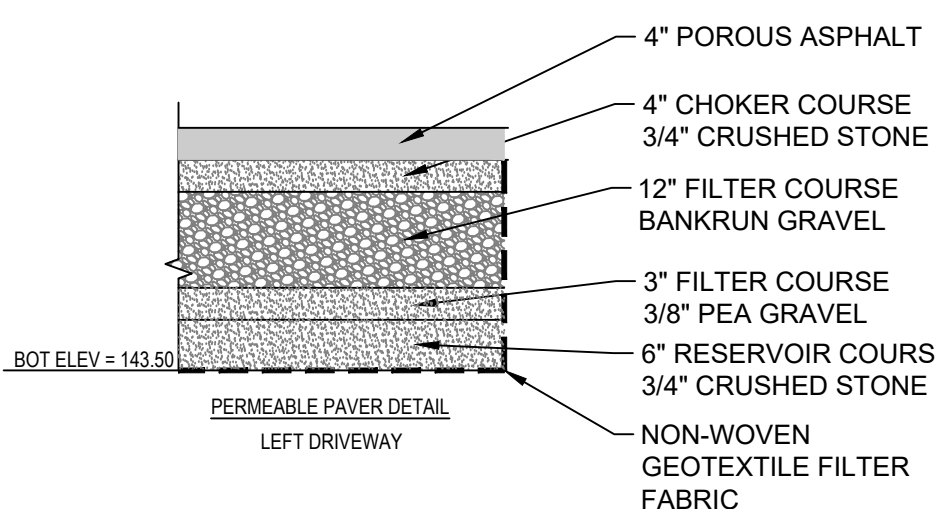


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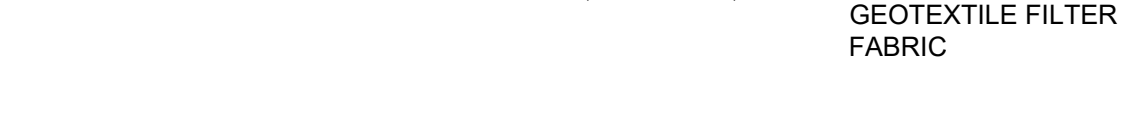
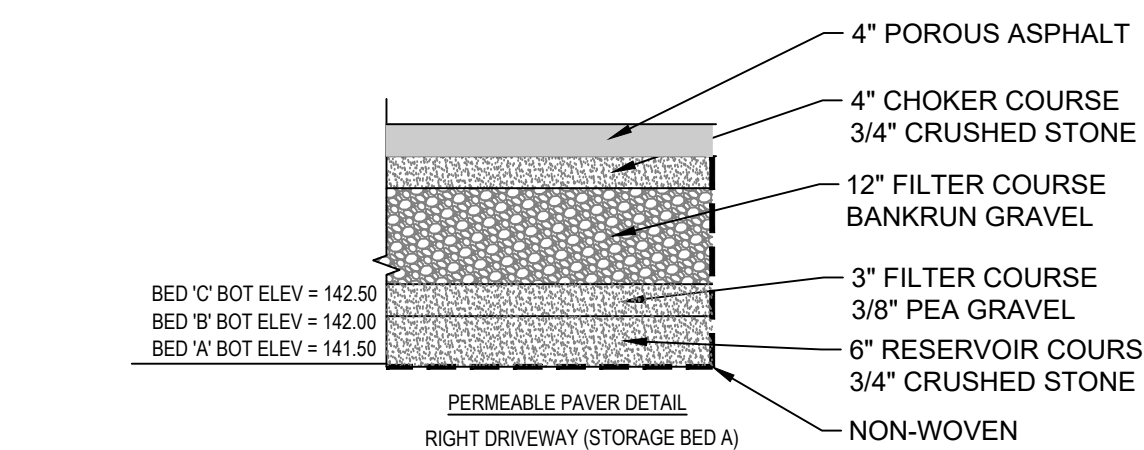
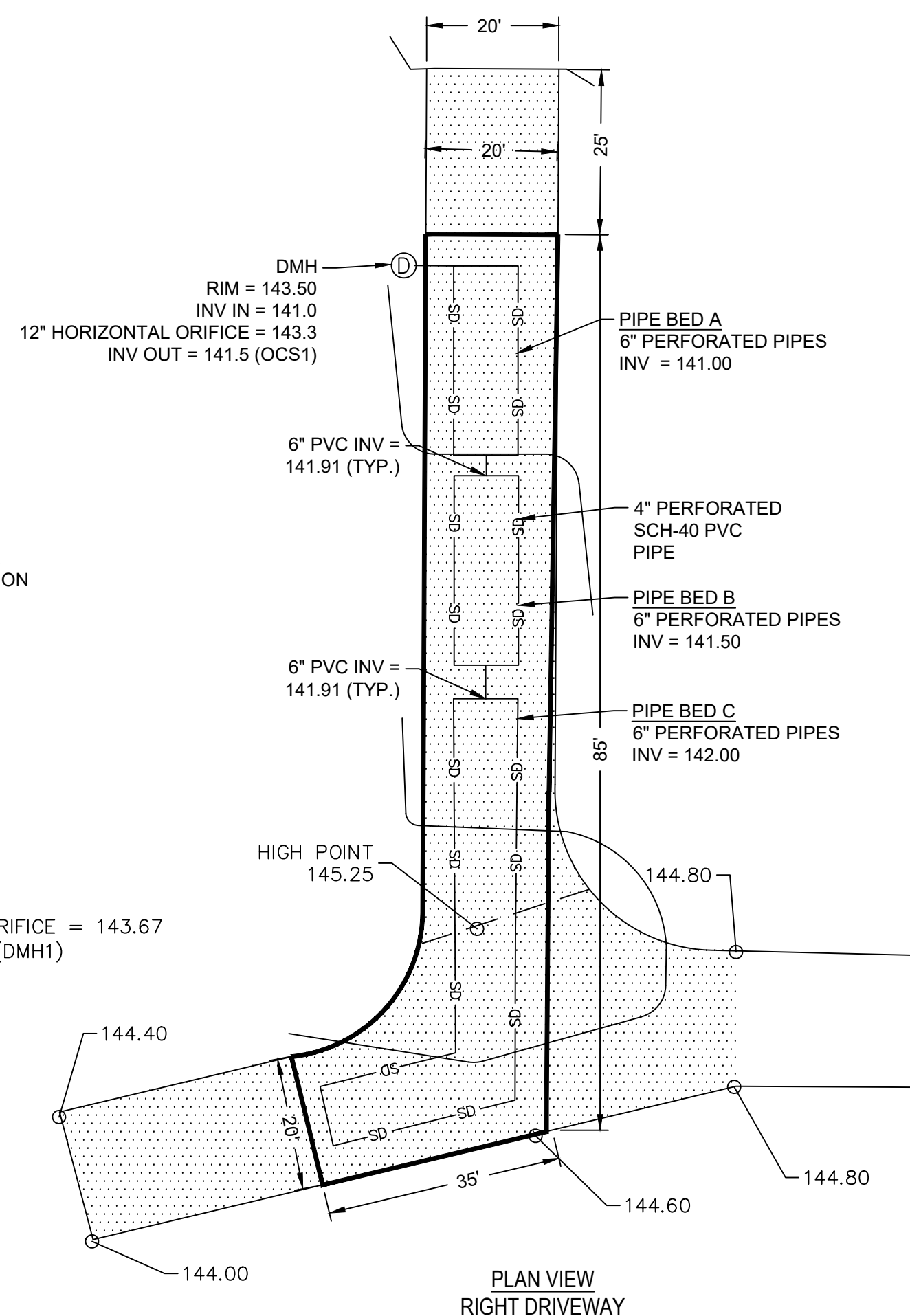


- NOTES:
1. THE MAXIMUM ALLOWABLE SIDEWALK AND RAMP CROSS SLOPES SHALL BE 1.5% (1\"/>

8 ACCESSIBLE CURB RAMP
NOT TO SCALE

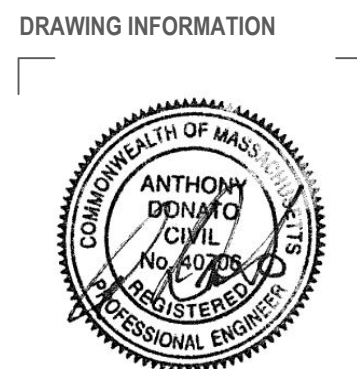


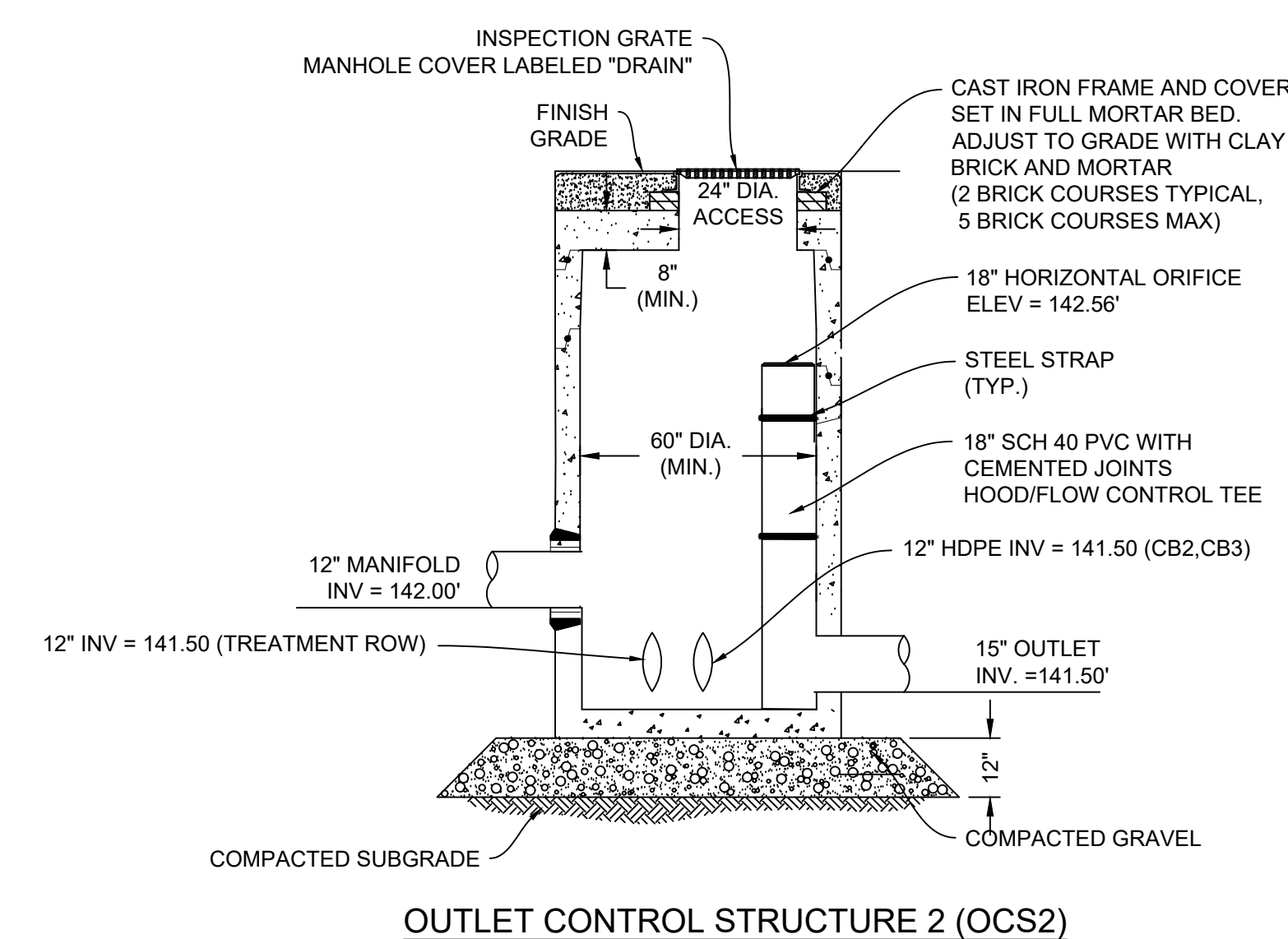
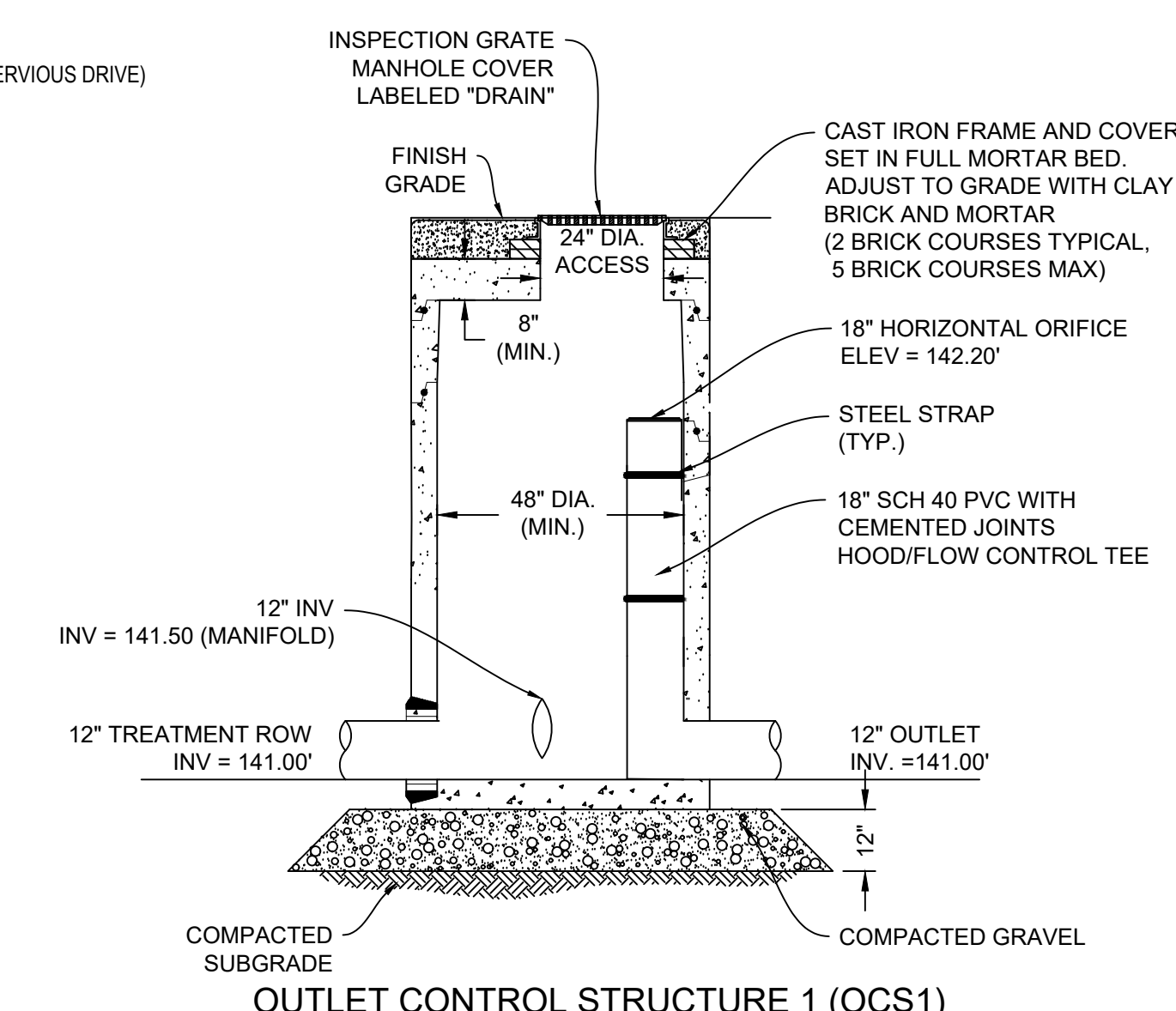
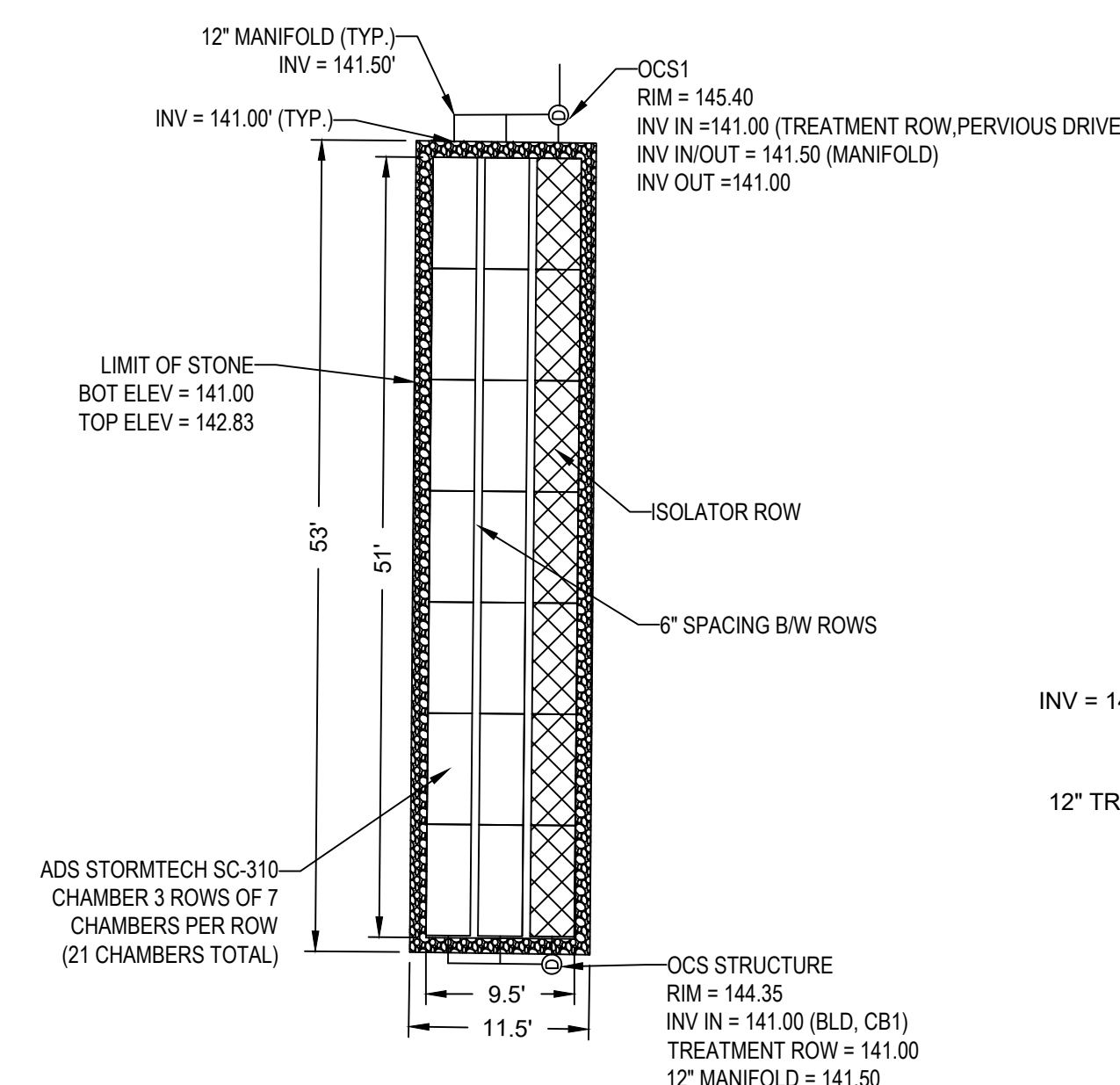
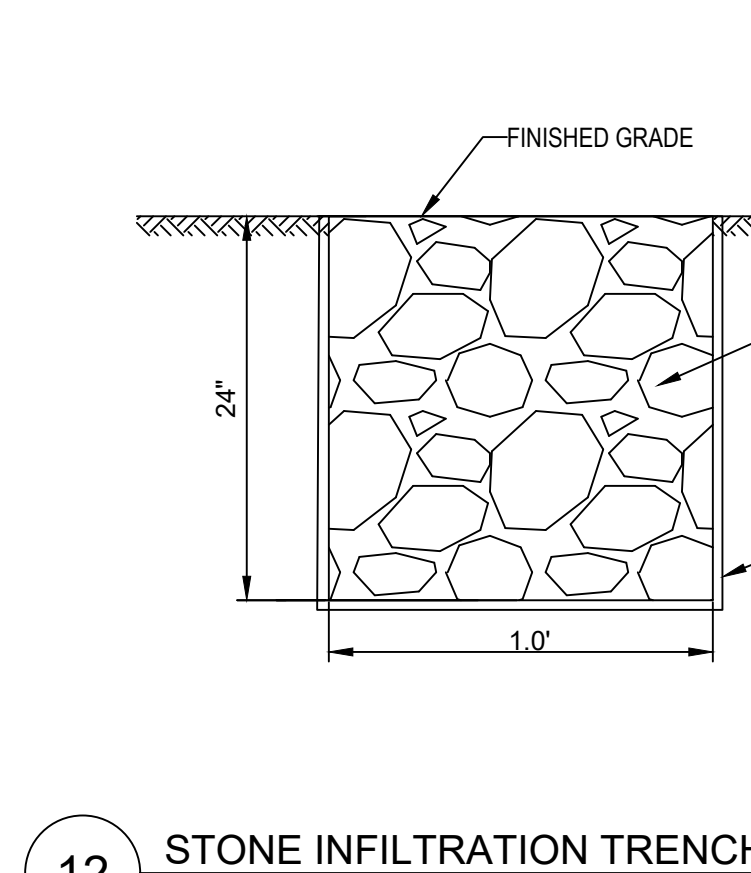
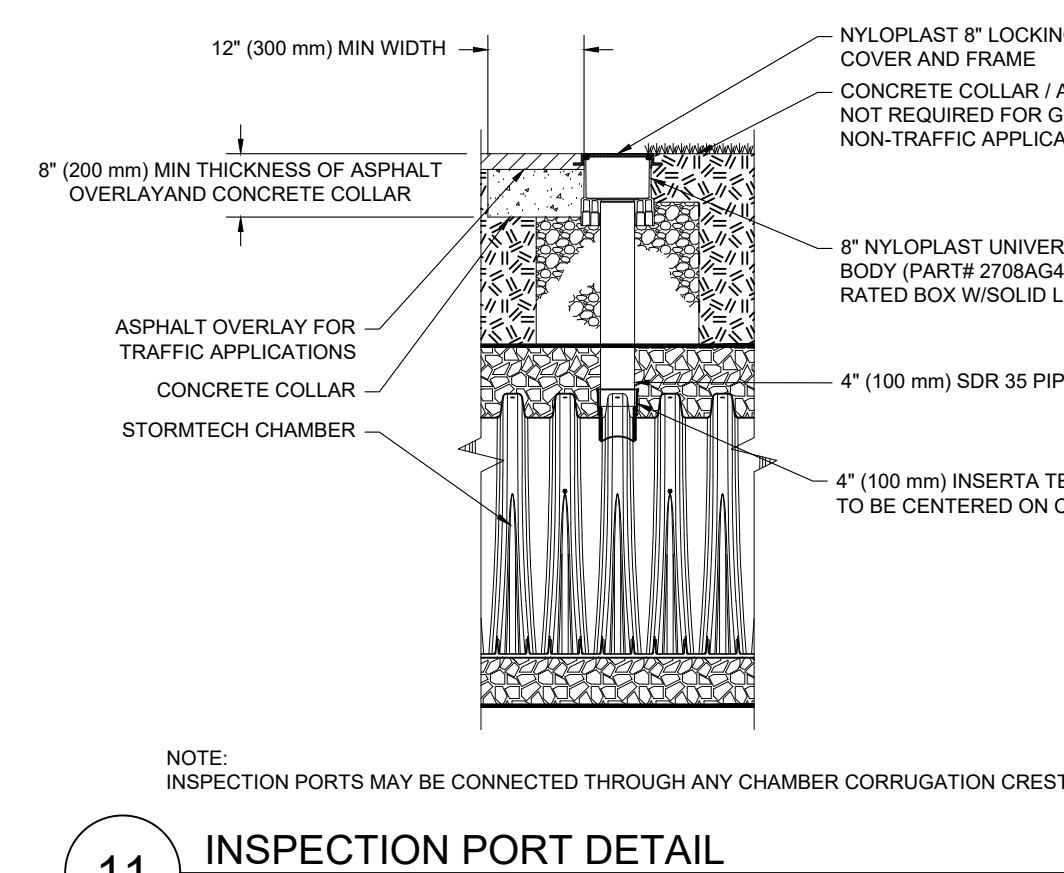
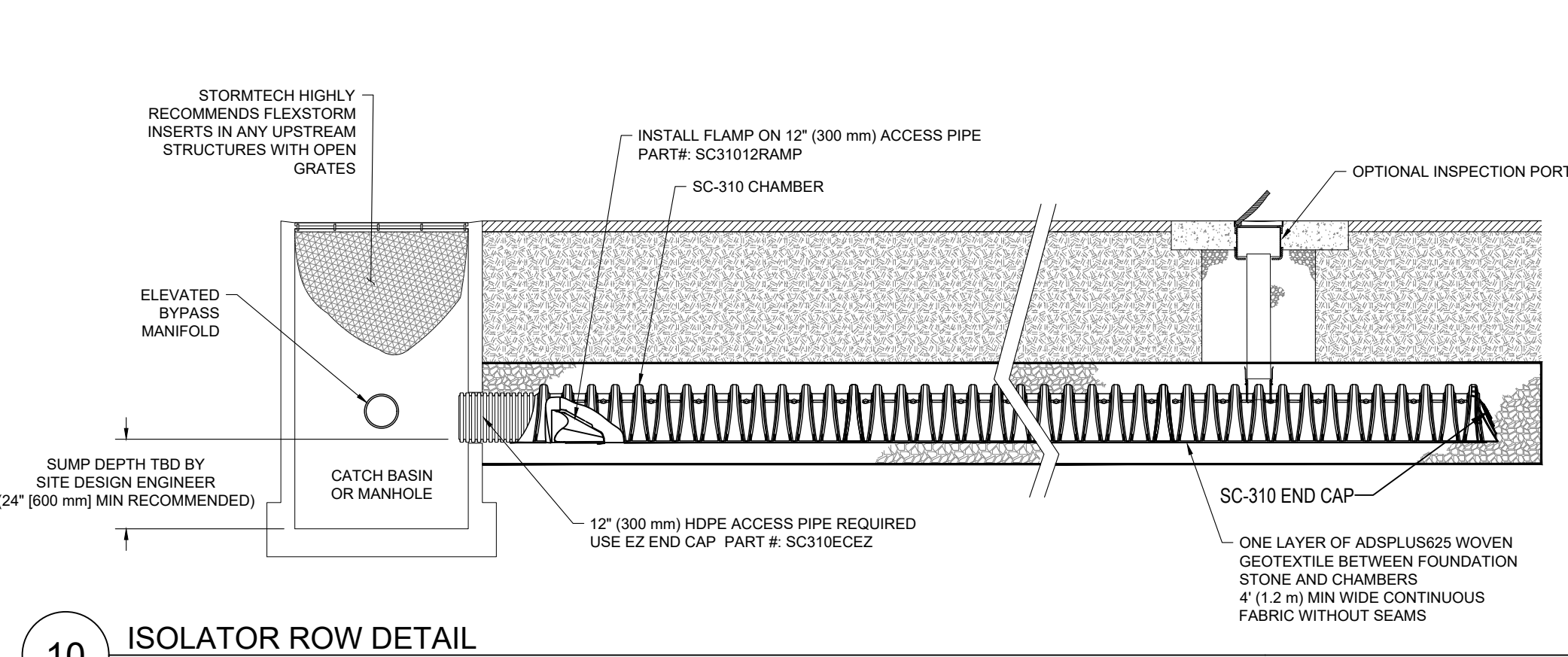
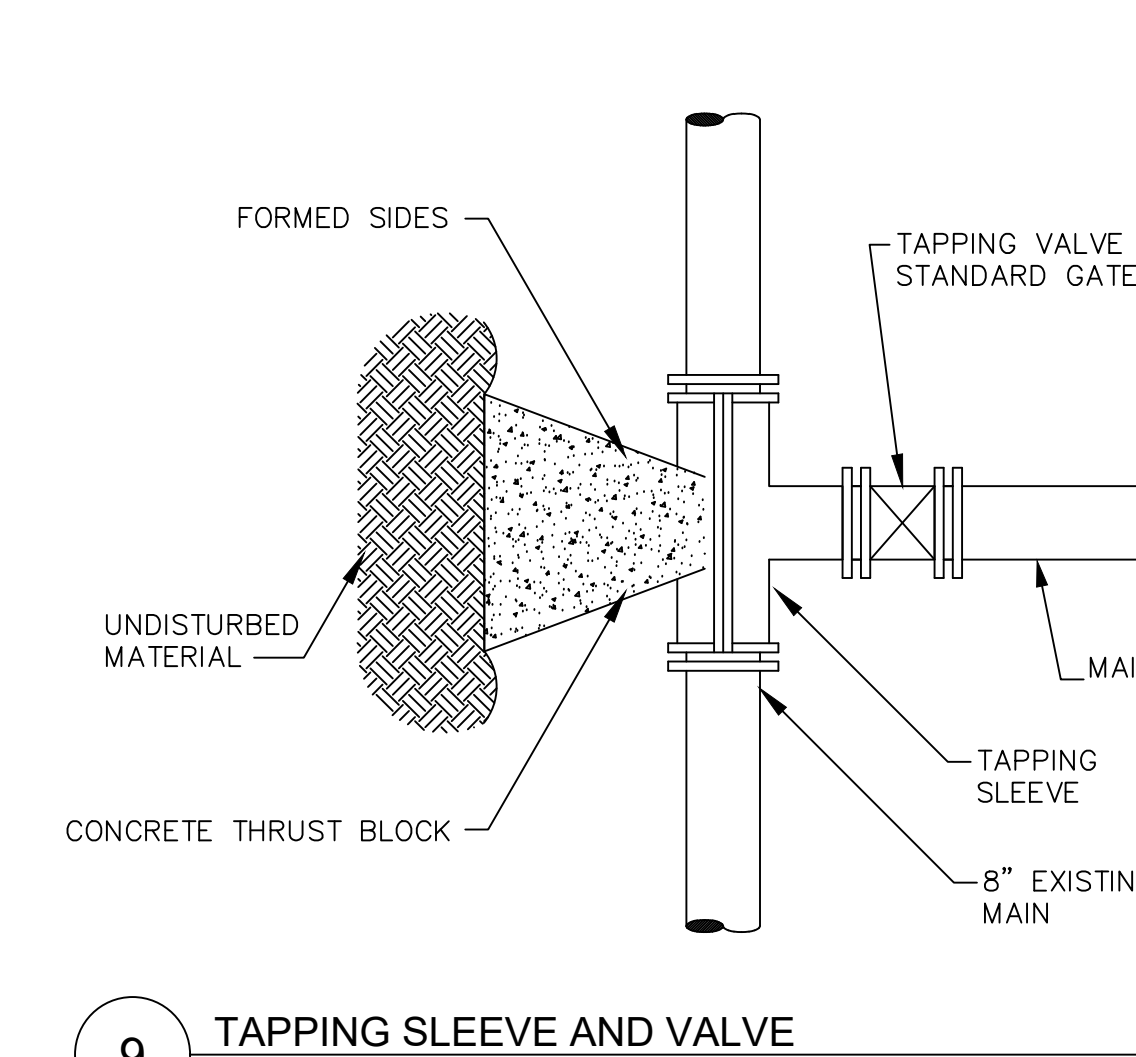
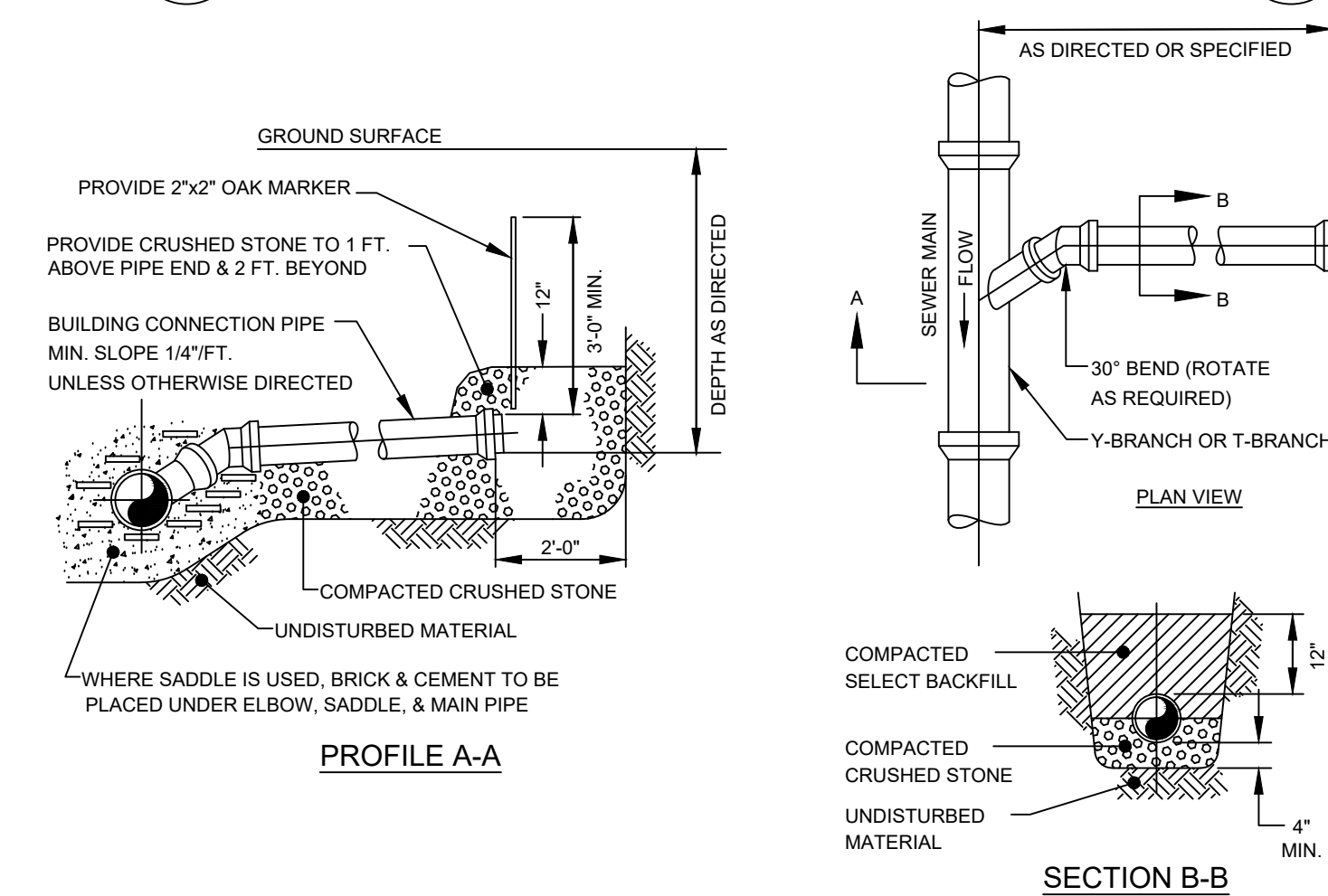
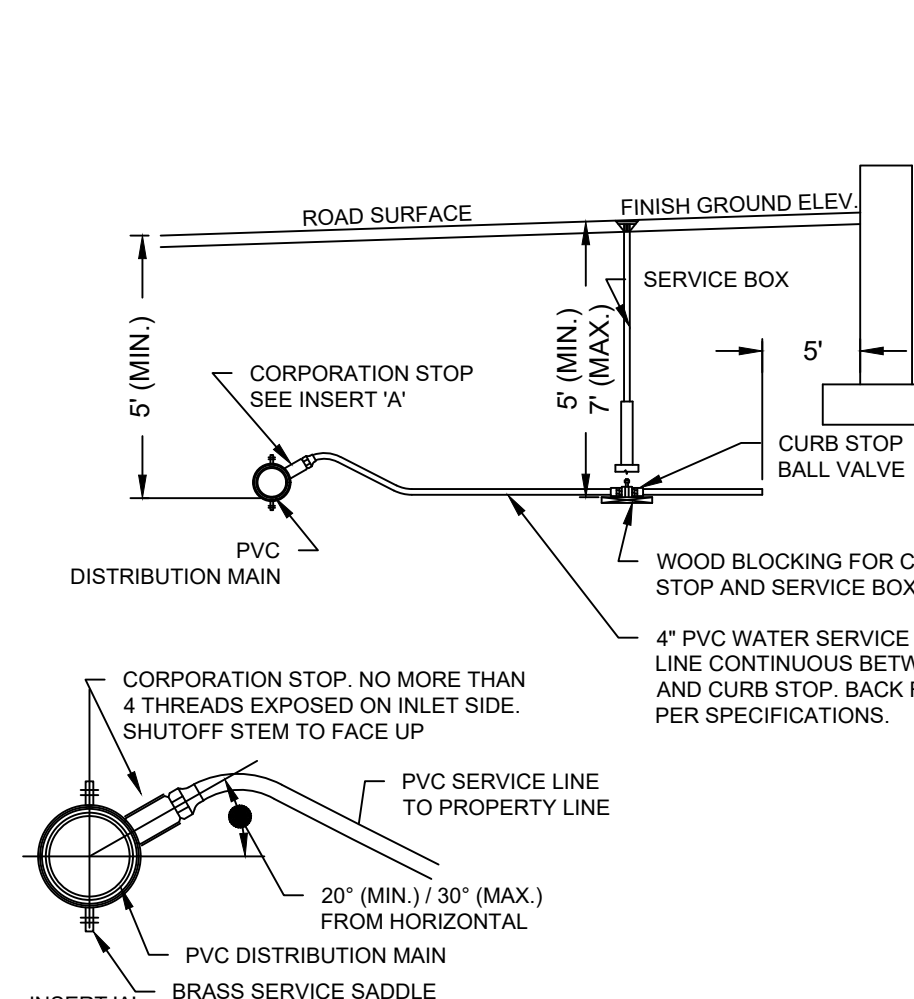
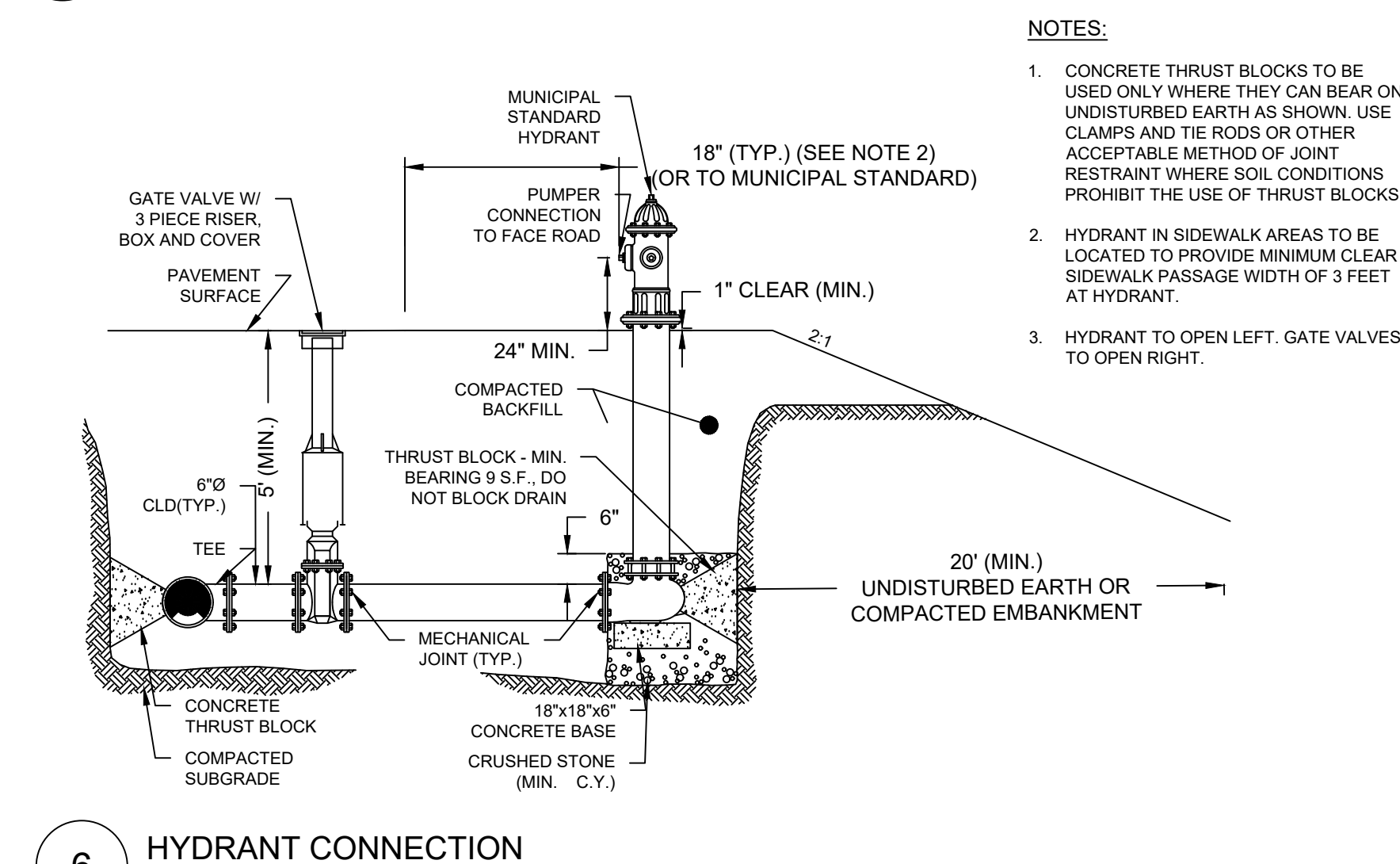
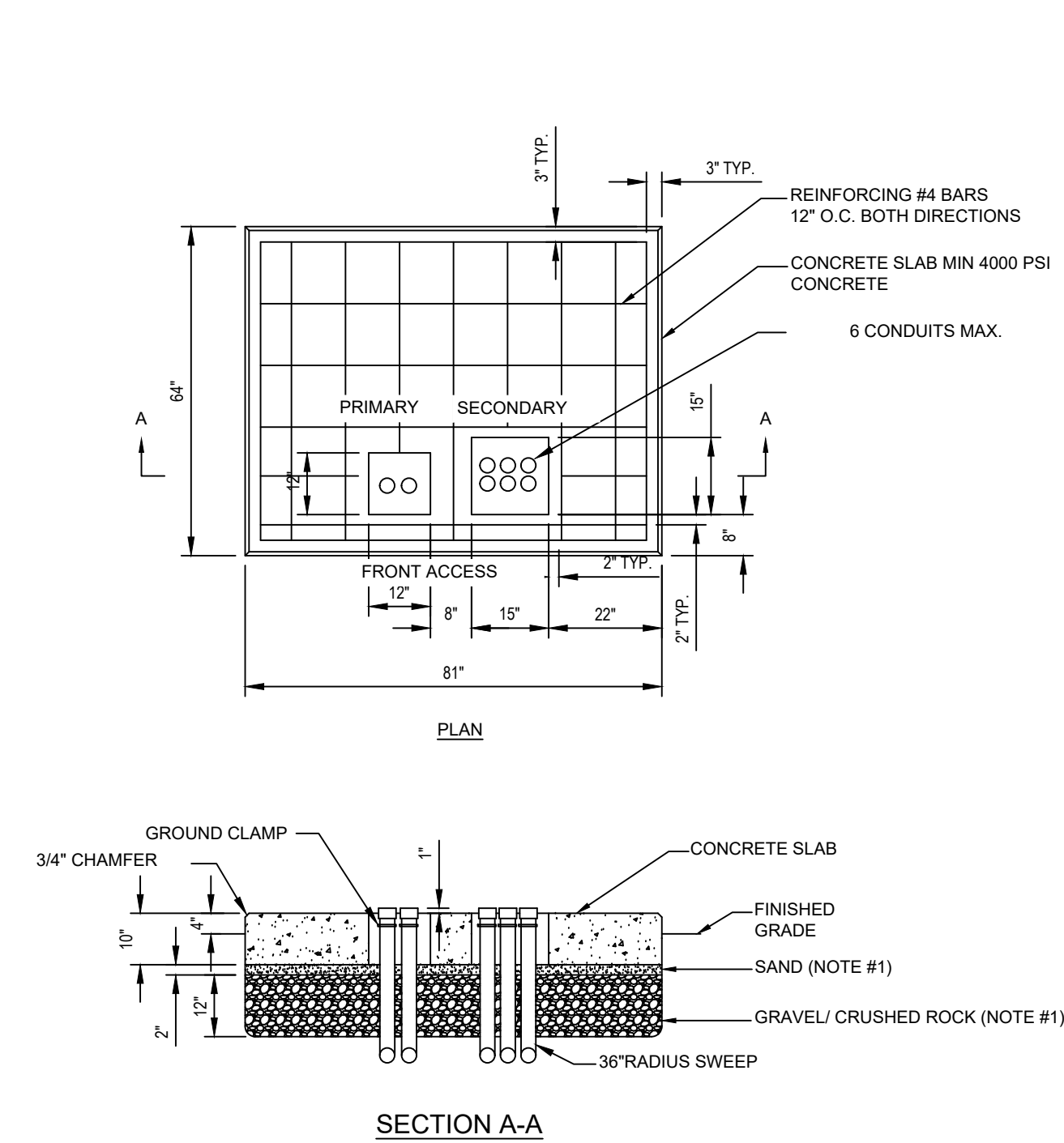
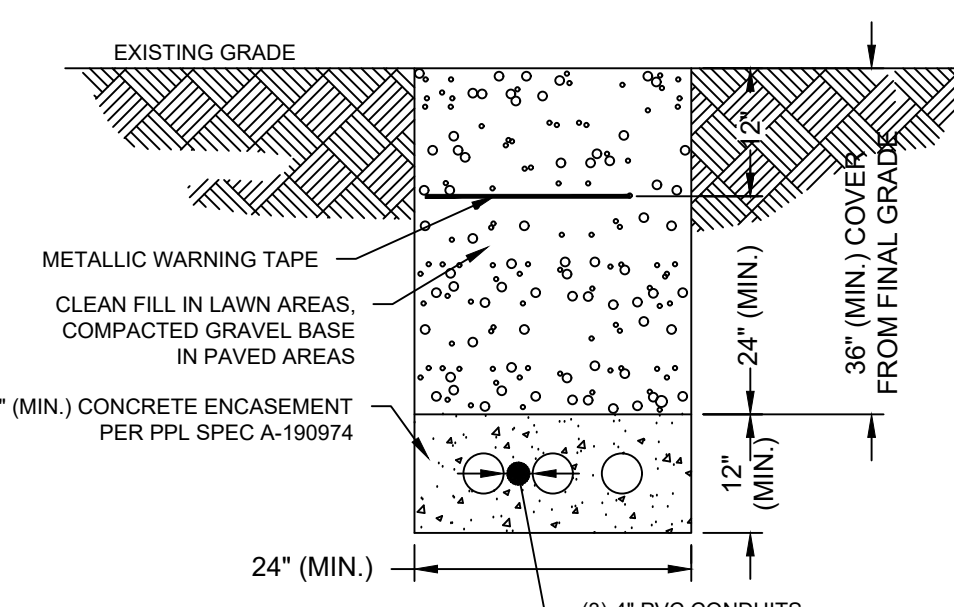
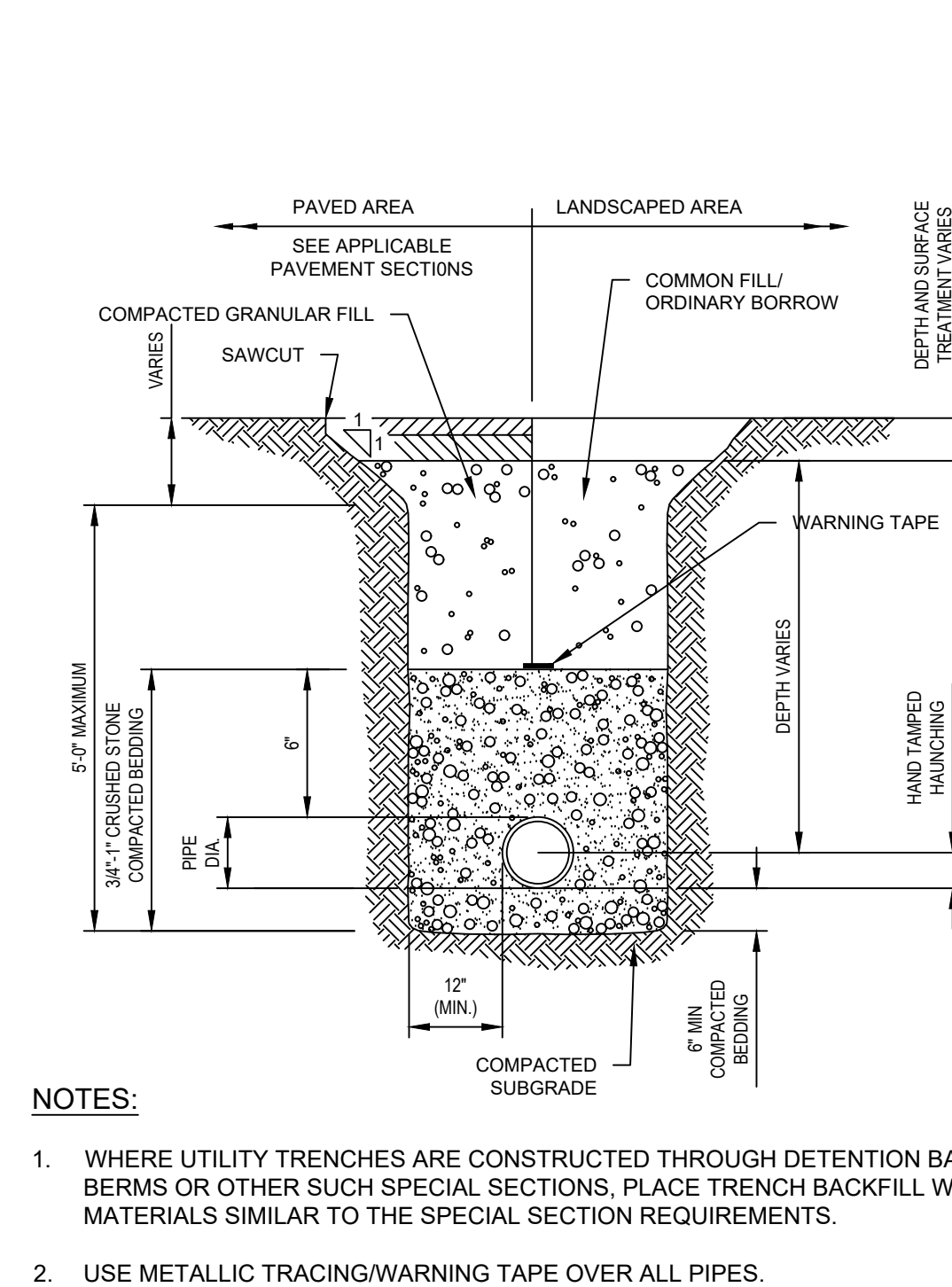
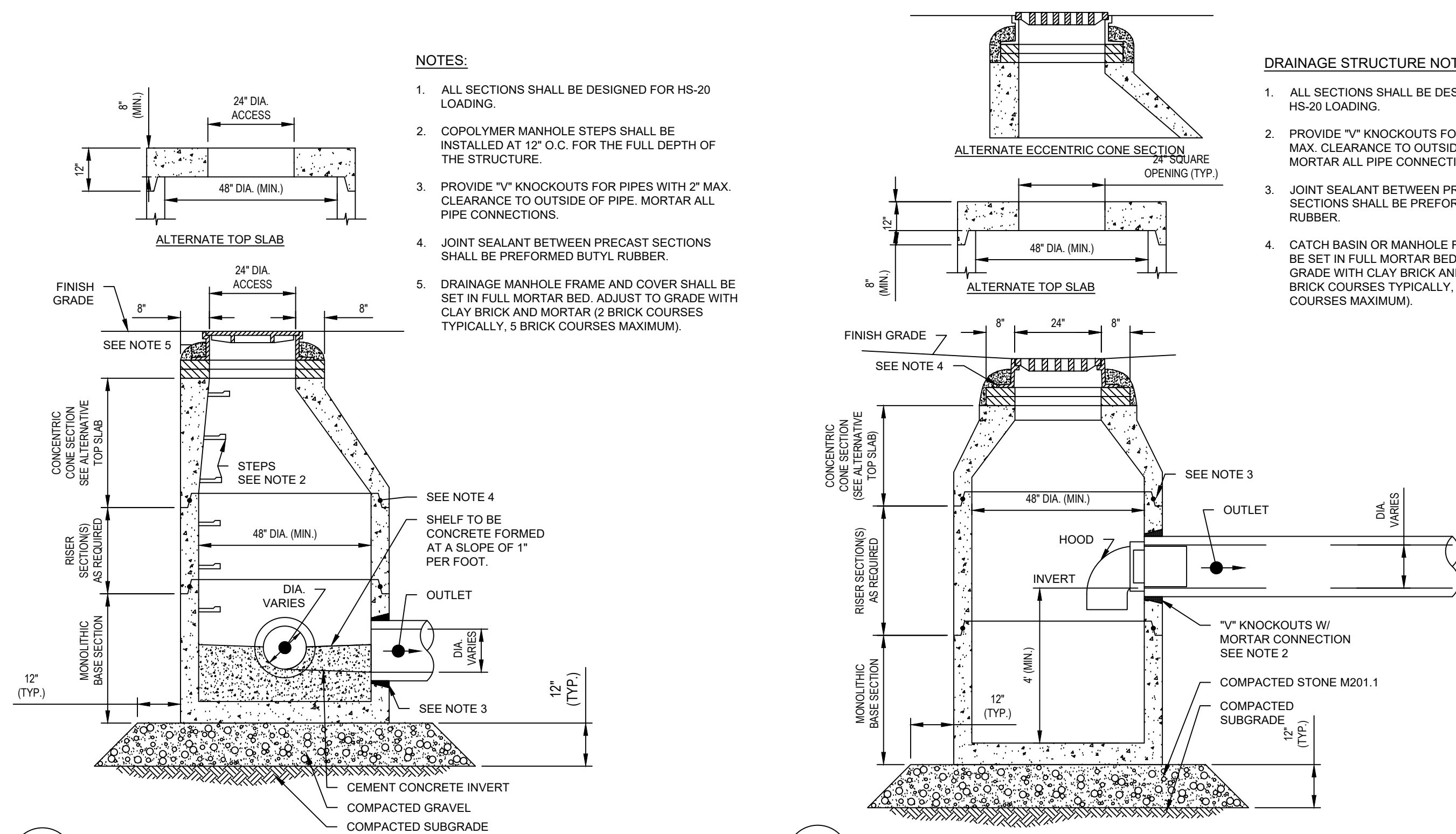
14 PERVIOUS ASPHALT
NOT TO SCALE



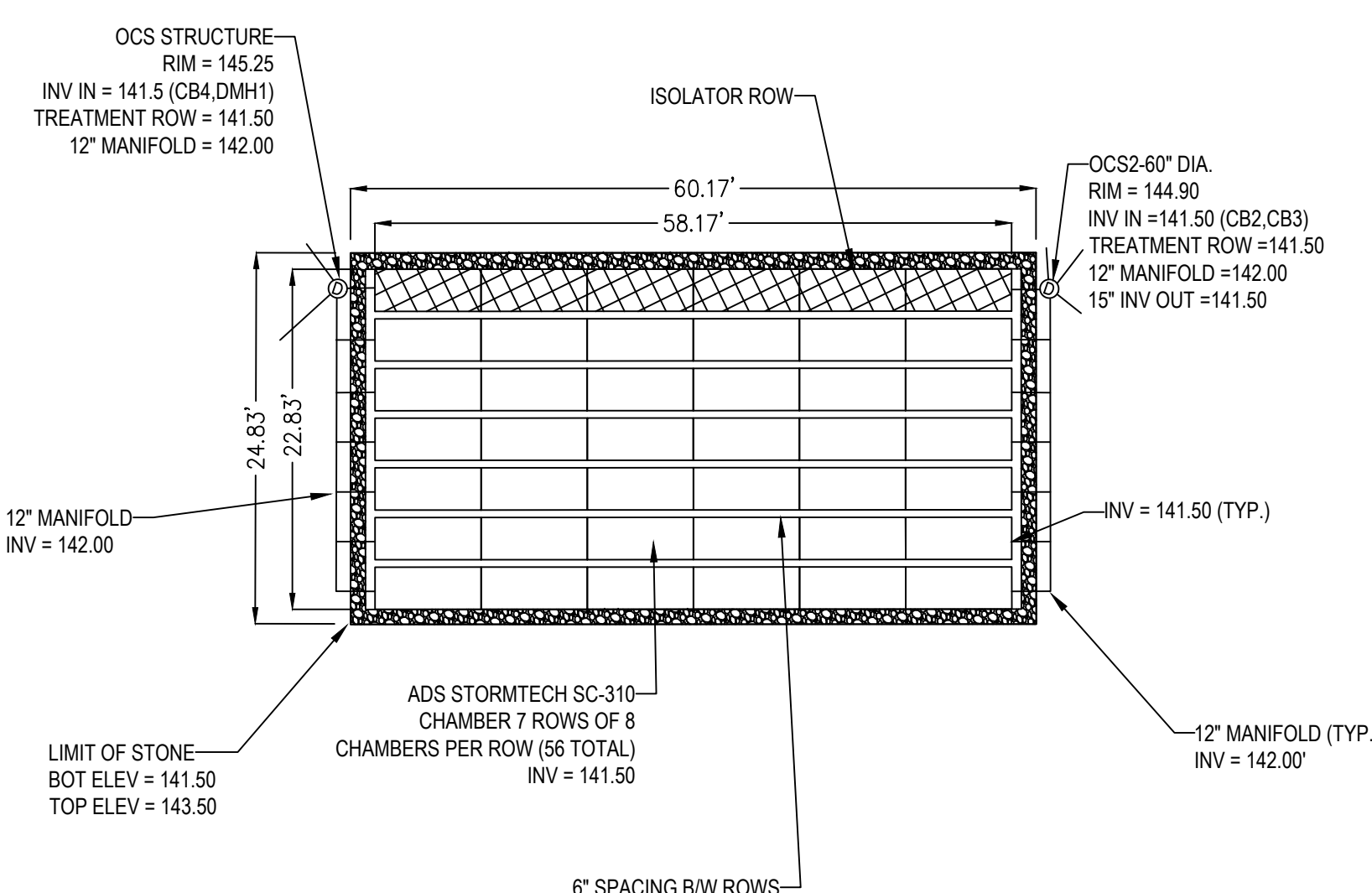
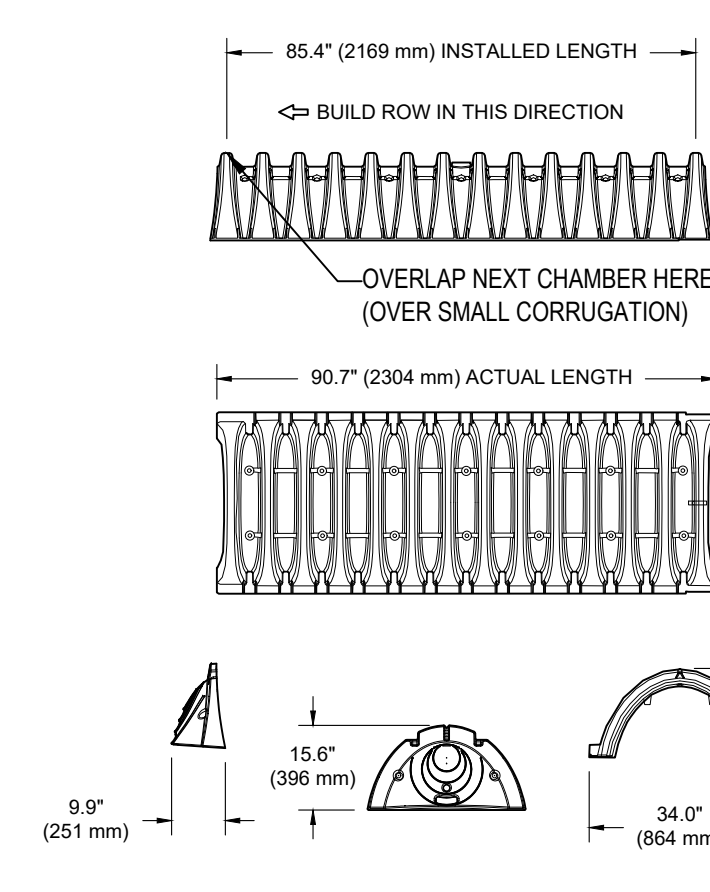
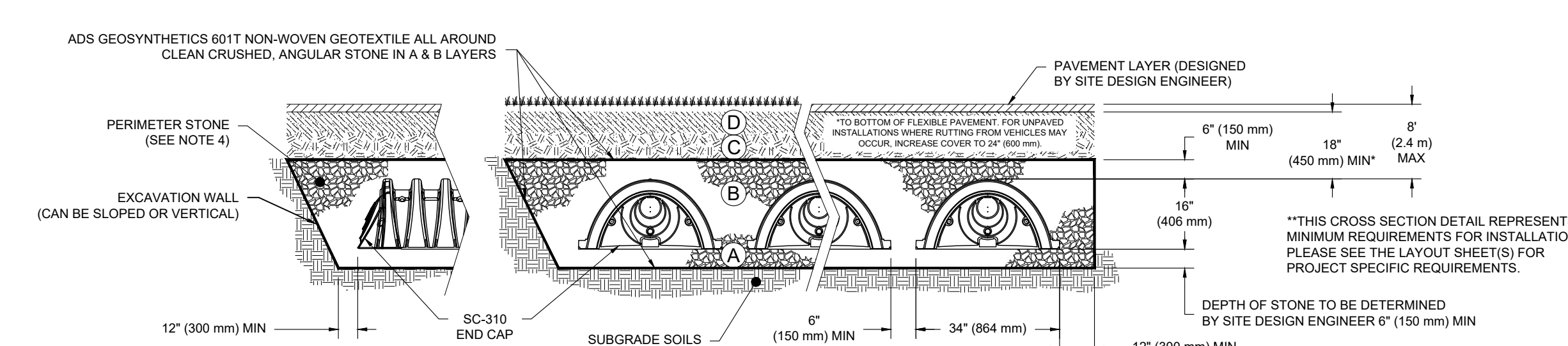
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REVISIONS	





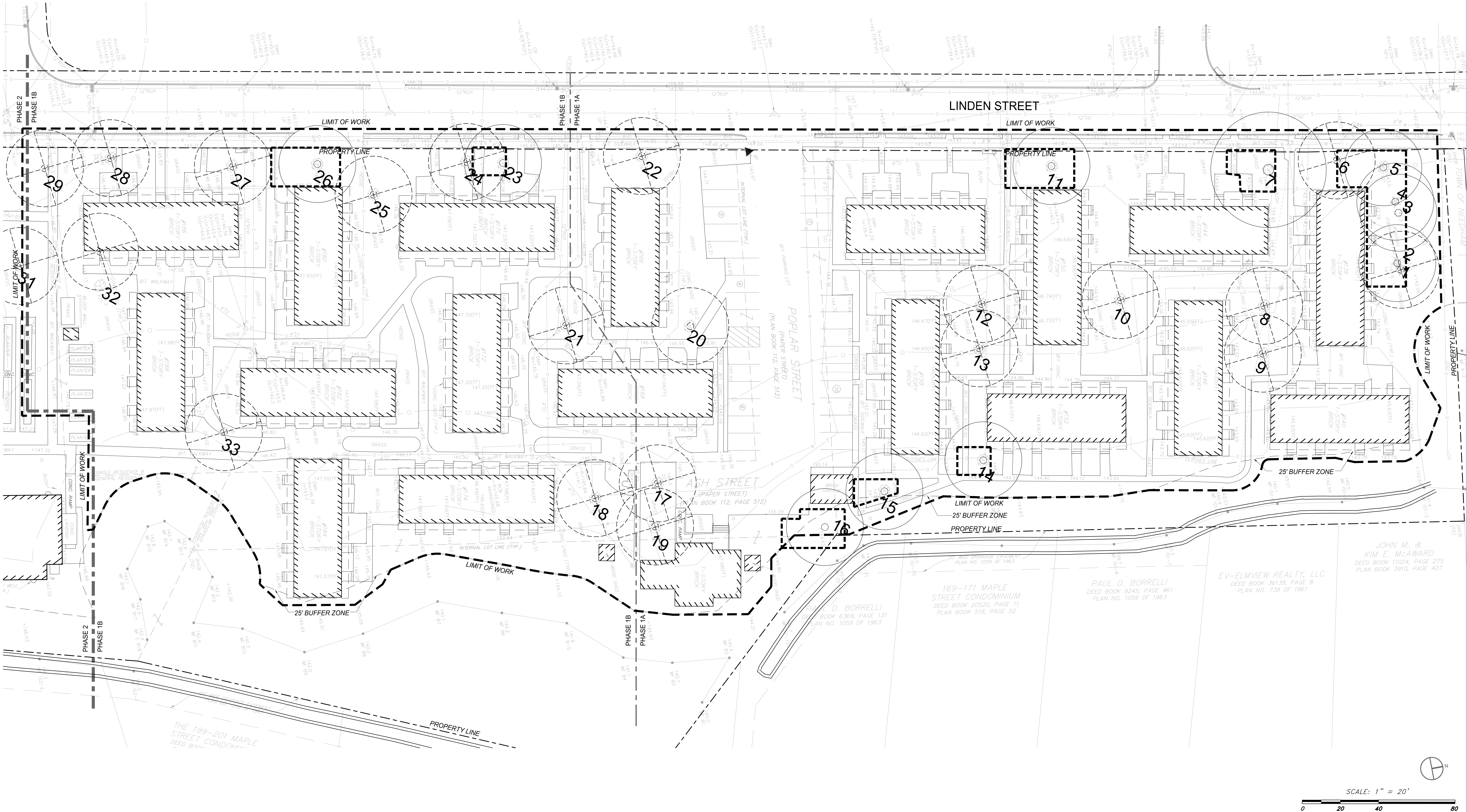
ACCEPTABLE FILL MATERIALS: STORMTECH SC-310 CHAMBER SYSTEMS				
	MATERIAL LOCATION	DESCRIPTION	AASHTO MATERIAL CLASSIFICATIONS	COMPACTION / DENSITY REQUIREMENT
D	FINAL FILL: FILL MATERIAL FOR LAYER D* STARTS FROM THE TOP OF THE C* LAYER TO THE BOTTOM OF FLEXIBLE PAVEMENT OR UNPAVED FINISHED GRADE ABOVE. NOTE THAT PAVEMENT SUBGRADE MAY BE PART OF THE D* LAYER.	ANY SOIL/ROCK MATERIALS, NATIVE SOLTS, OR PER ENGINEER'S PLANS. CHECK MATERIALS FOR PAVEMENT SUBGRADE REQUIREMENTS.	N/A	PREPARE PER SITE DESIGN ENGINEER'S PLANS. PAVED INSTALLATIONS MAY HAVE STROGMENT MATERIAL AND PREPARATION REQUIREMENTS.
	INITIAL FILL: FILL MATERIAL FOR LAYER C* STARTS FROM THE TOP OF THE EMBEDEDMENT STONE (B* LAYER) TO 16" (400 mm) ABOVE THE TOP OF THE CHAMBER. NOTE THAT PAVEMENT SUBGRADE MAY BE A PART OF THE C* LAYER.	GRANULAR WELL-GRADED SOIL/AGGREGATE MIXTURES, <3% FINES OR PROCESSED AGGREGATE. MOST PAVEMENT SUBGRADE MATERIALS CAN BE USED IN LIEU OF THIS LAYER.	AASHTO M45 ¹ A-1, A-2.4-3.4 OR AASHTO M43 ¹ 3.357, 4.467, 5.66, 6.6, 67, 68, 7.76, 8.8, 9.9, 10.	BEGIN COMPACTIONS AFTER 17" (300 mm) OF MATERIAL OVER THE CHAMBERS IS REACHED. COMPACT ADDITIONAL LAYERS IN 6", 170 (430 mm) LIFTS TO 1 MM, 90% PROCTOR DENSITY FOR WELL-GRADED MATERIAL AND 95% RELATIVE DENSITY FOR PROCESSED AGGREGATE MATERIALS. ROLLER GROSS VEHICLE WEIGHT NOT TO EXCEED 20,000 LBS (9k N). DYNAMIC FORCE NOT TO EXCEED 20,000 LBS (89 kN).
B	EMBEDEDMENT STONE: FILL SURROUNDING THE CHAMBERS FROM THE FOUNDATION STONE (A* LAYER) TO THE C* LAYER ABOVE.	CLEAN, CRUSHED, ANGULAR STONE OR RECYCLED CONCRETE ²	AASHTO M43 ¹ 3.357, 4.467, 5.66, 57.	NO COMPACTION REQUIRED
A	FOUNDATION STONE: FILL BELOW CHAMBERS FROM THE SUBGRADE UP TO THE FOOT (BOTTOM) OF THE CHAMBER.	CLEAN, CRUSHED, ANGULAR STONE OR RECYCLED CONCRETE ²	AASHTO M43 ¹ 3.357, 4.467, 5.66, 57.	PLATE COMPACT OR ROLL TO ACHIEVE A FLAT SURFACE. ^{2,3}



NOT FOR CONSTRUCTION -
PERMITTING USE ONLY

ID#	DBH	Common Name	Health	Status	Notes
1	14	Hemlock	Poor	Remove	Half dead
2	12	Hemlock	Fair	Preserve	
3	13	Hemlock	Fair	Preserve	
4	15	Hemlock	Fair	Preserve	
5	16	Crabapple	Fair	Preserve	
6	15	Crabapple	Fair	Remove	Poor Structure
7	21	Honeylocust	Fair	Preserve	
8	18	Crabapple	Poor	Remove	Decline in canopy
9	10	Crabapple	Poor	Remove	Decline in canopy
10	12	Crabapple	Poor	Remove	Decline in canopy
11	24	Honey locust	Good	Preserve	
12	12	Crabapple	Poor	Remove	Decline in canopy
13	12	Crabapple	Poor	Remove	Decline in canopy
14	21	Honeylocust	Good	Preserve	
15	27	Honeylocust	Good	Preserve	
16	24	Honeylocust	Good	Preserve	
17	22	Honeylocust	Good	Remove	
18	13	Norway maple	Fair	Remove	Invasive species, thin canopy
19	12	Crabapple	Fair	Remove	Many cavities
20	19	Norway maple	Fair	Remove	Invasive species, thin canopy
21	10	Dogwood	Fair	Remove	Disease prone
22	19	Norway maple	Fair	Remove	Invasive species, disfigured by utilities, in decline

ID#	DBH	Common Name	Health	Status	Notes
23	14	Crabapple	Fair	Preserve	
24	17	Magnolia	Poor	Remove	Poor health
25	12	Honeylocust	Good	Remove	
26	29	Tulip Tree	Good	Preserve	
27	10	Kwanzan cherry	Good	Remove	Near dead In decline- girdling roots Girdling roots, disfigured by utilities
28	23	Red maple	Poor	Remove	
29	23	Red maple	Poor	Remove	
30	21	London Plane	Poor	Remove	
31	21	Crabapple	Poor	Remove	Sooty mold
32	22	Honeylocust	Fair	Remove	
33	18	Norway maple	Good	Remove	Invasive species
34	21	Silver maple	Fair	Preserve	
35	17	Silver maple	Good	Preserve	
36	17	Silver maple	Poor	Remove	Weak, in decline Poor health
37	19	Silver maple	Poor	Remove	
38	23	Silver maple	Fair	Preserve	
39	10	Crabapple	Good	Preserve	
40	16	Crabapple	Good	Preserve	
41	14	Crabapple	Good	Preserve	
42	13	Crabapple	Good	Preserve	
43	24	Silver maple	Good	Preserve	

[illegible]

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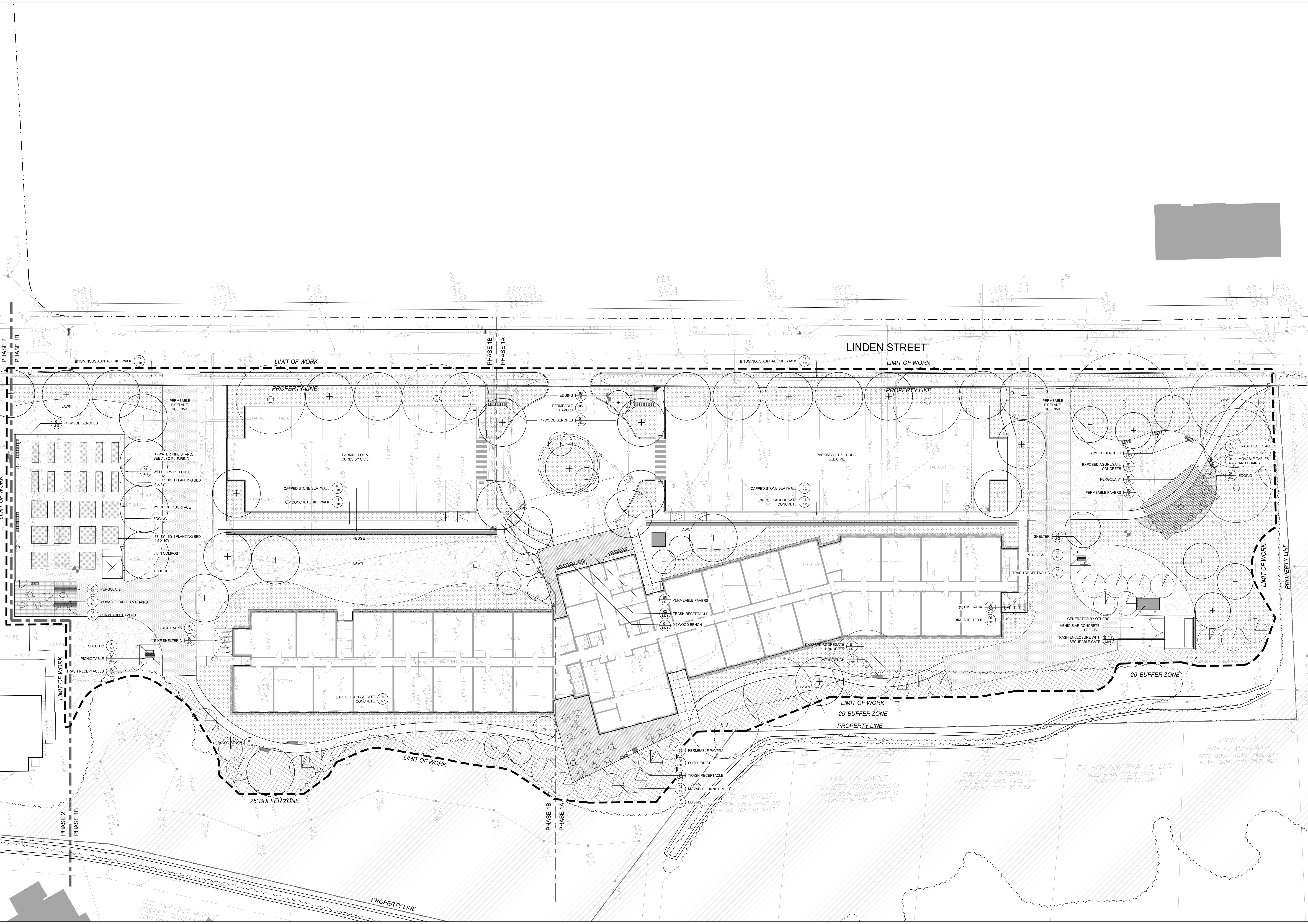
TREE PROTECTION PLAN

DRAWING INFORMATION

08/23/2024	
DATE OF ISSUE	
Site Plan Review	
DESCRIPTION	
1" = 20'	CP
SCALE	DRAWN BY
3489.00	
PROJECT #	FILE NAME

DRAWING NUMBER

L099



ARCHITECT
bh+a
Bergmann Hendrie + Archetype, Inc.
9 Channel Center Street, Suite 300
Boston, MA 02210
(617) 350 0450

PROJECT NAME
**Linden Street
Redevelopment**

CLIENT
**Needham Housing
Authority**
21 Highland Circle,
Needham, MA, 02494

PROJECT TEAM
Civil Engineer
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121 East Berkeley Street, 4th Floor
Boston, MA 02115
617.357.8145
Landscape Architect
Ground Landscape Inc.
285 Washington Street, Unit G
Somerville, MA 02143
617.716.9999
Structural Engineer
RSE Associates Inc.
63 Pleasant Street, Suite 300
Watertown, MA 02472
617.926.9300
MEP/FP Engineer
NVS
200 Brickstore Square
Andover, MA 01810
978.296.6219

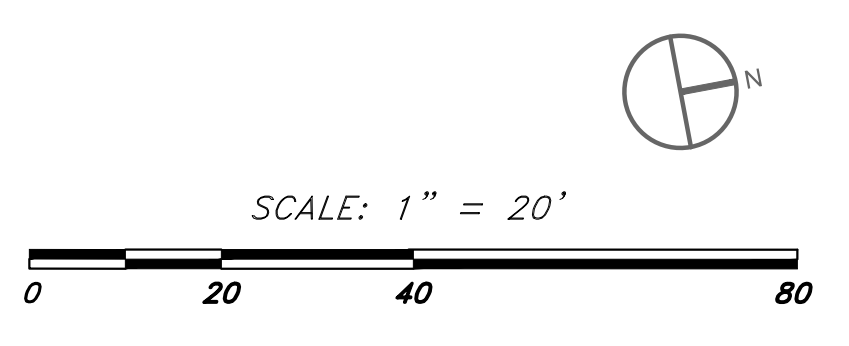
REVISIONS

NO.	DESCRIPTION	DATE

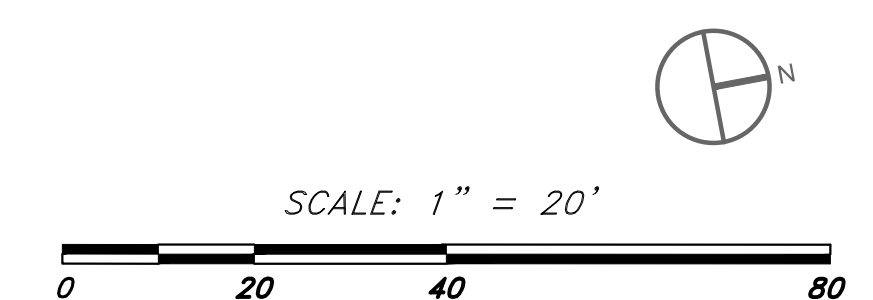
DRAWING TITLE
MATERIAL PLAN

DRAWING INFORMATION

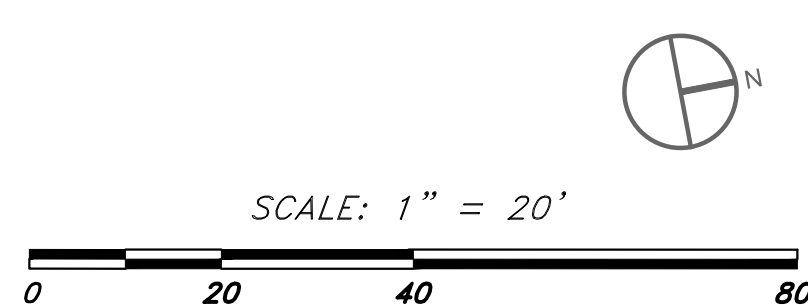
DATE OF ISSUE	DATE OF REVIEW	SCALE	PROJECT
08/23/2024		1" = 20'	

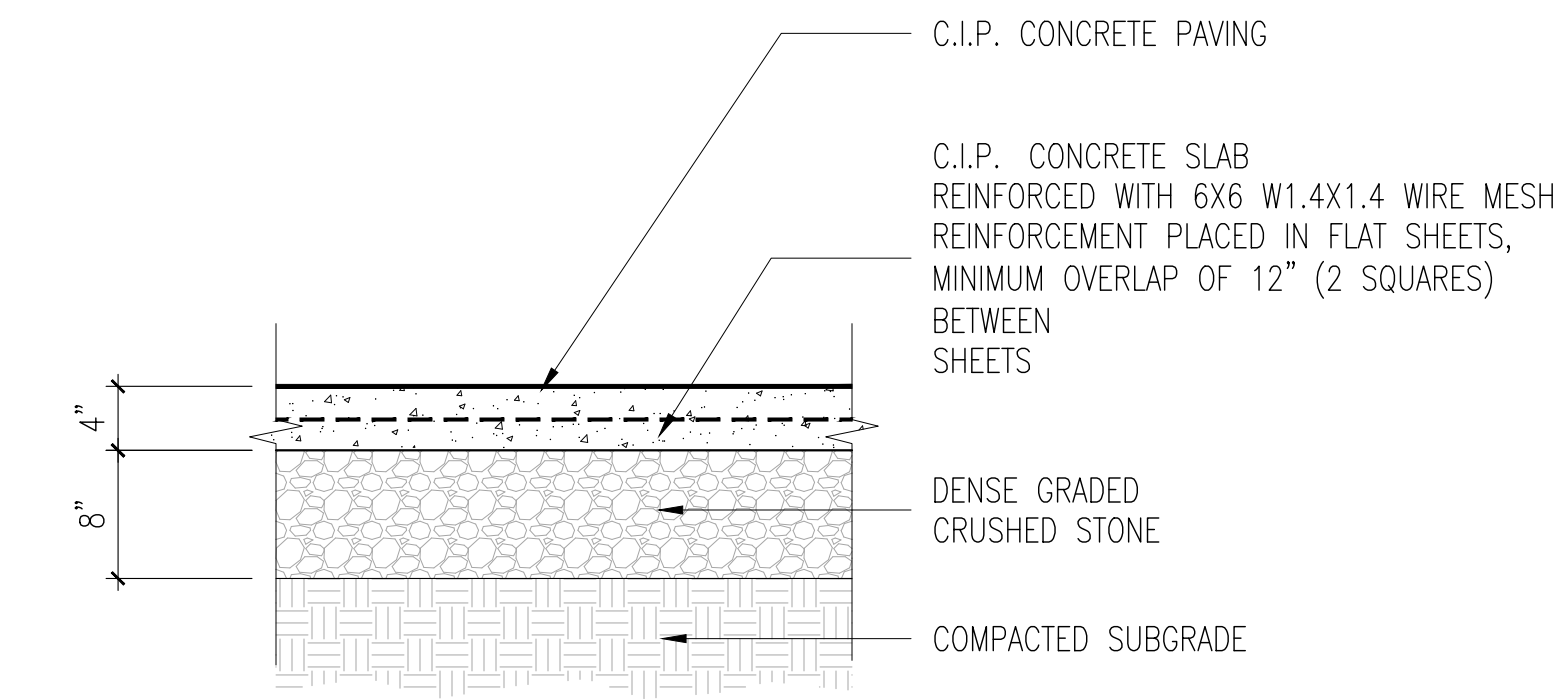


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L102A

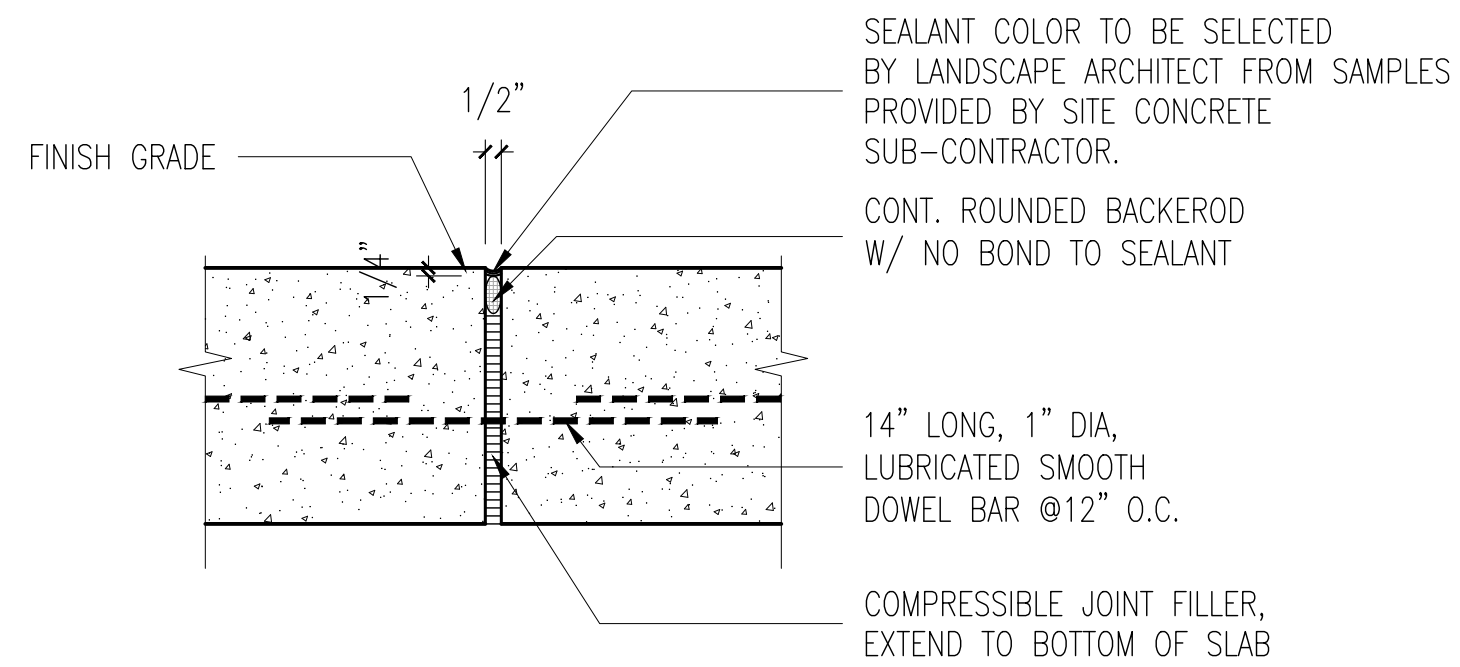


NOTE: FOR LIGHTING SPECIFICATIONS SEE ELECTRICAL
LANDSCAPE FOR LOCATION ONLY.

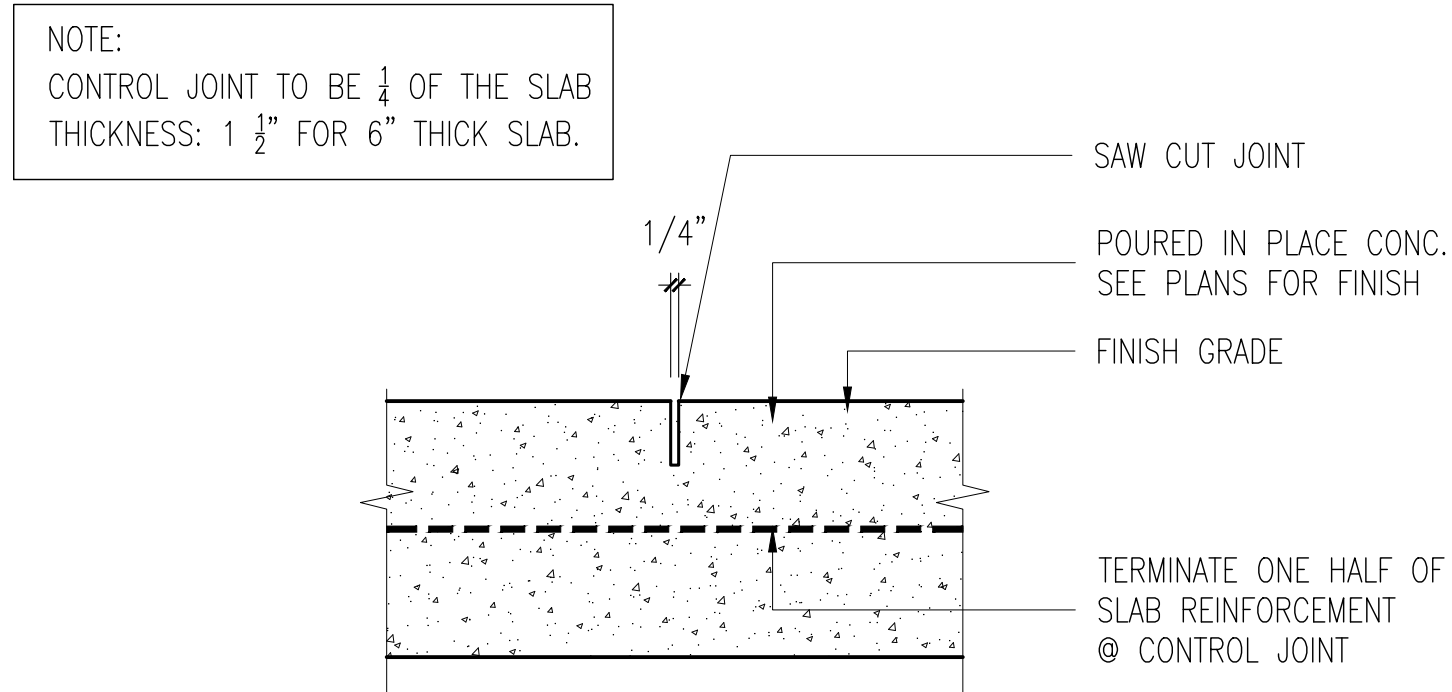




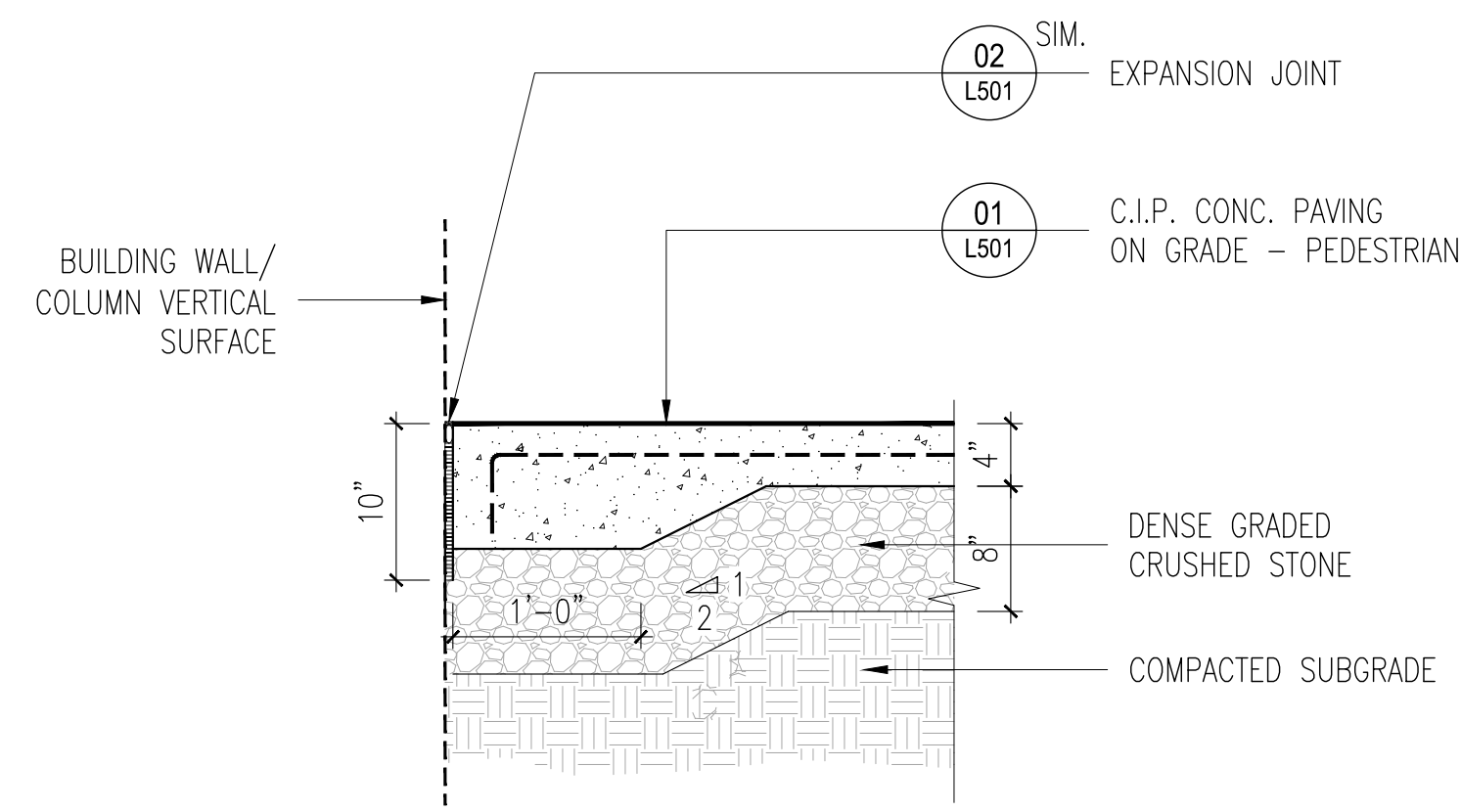
01 C.I.P CONC. PAVING - PEDESTRIAN
SCALE: 1" = 1'-0"



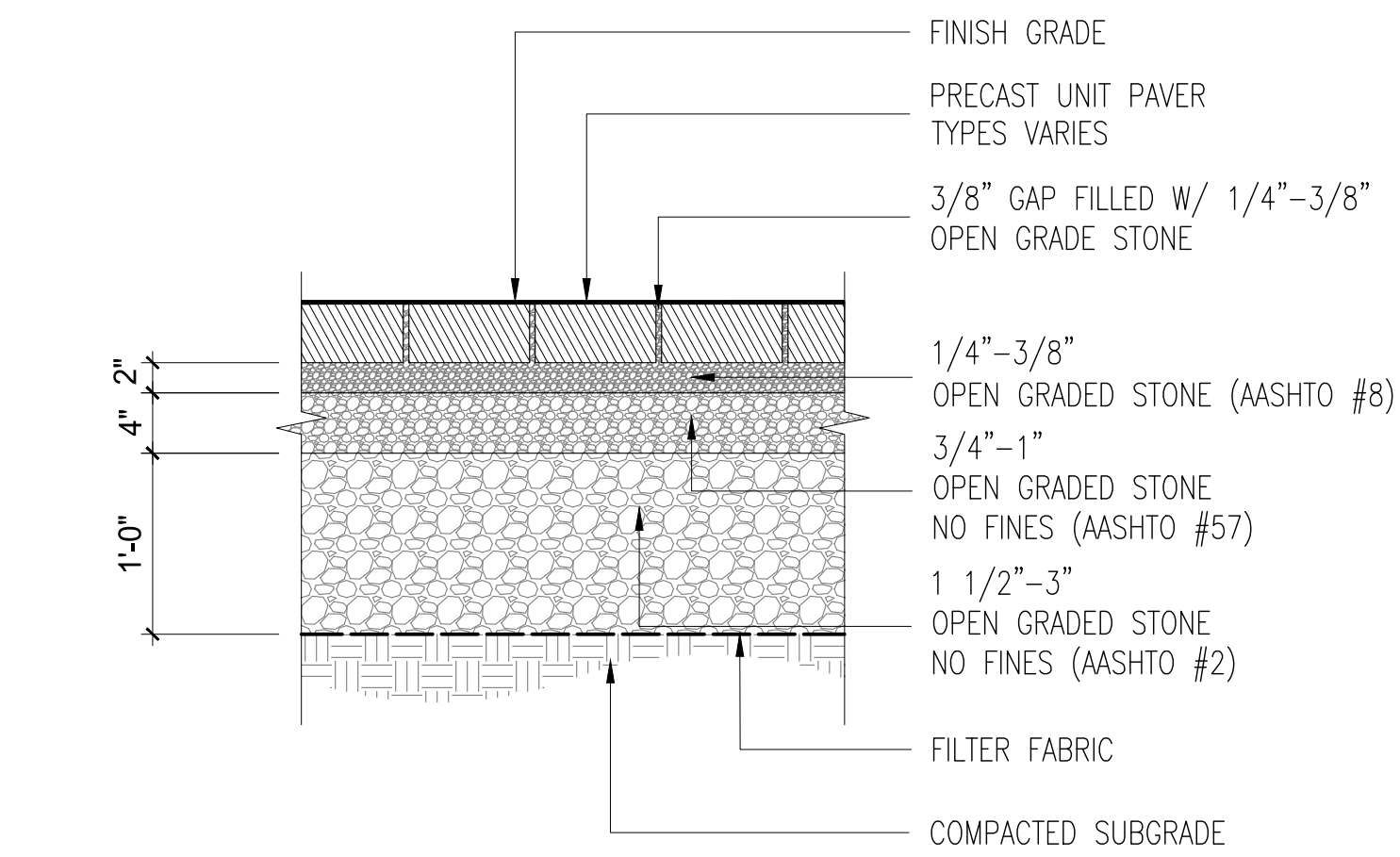
02 EXPANSION JOINT
SCALE: 2" = 1'-0"



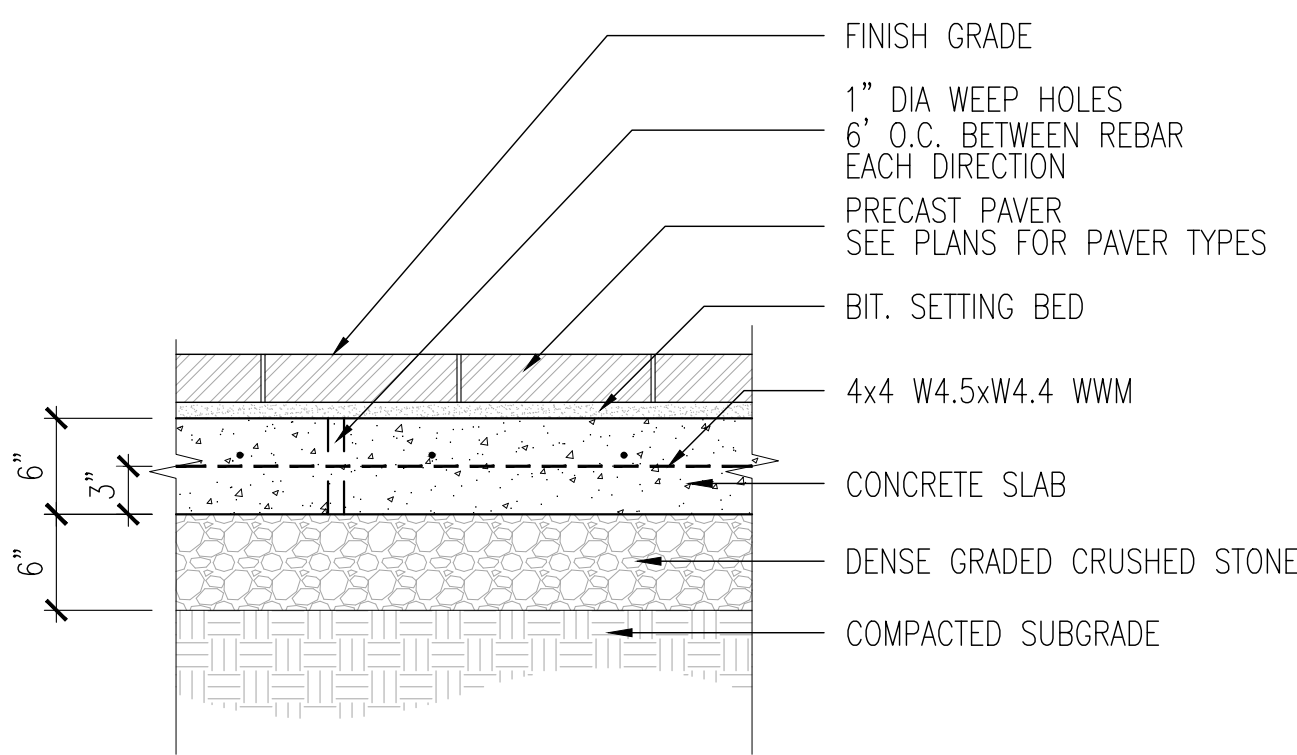
03 CONTROL JOINT
SCALE: 2" = 1'-0"



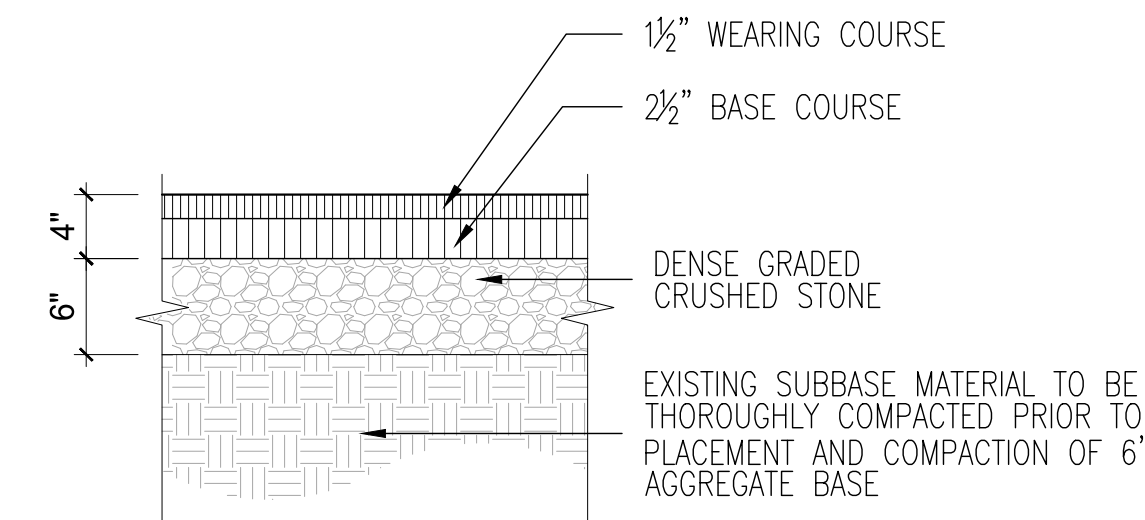
04 C.I.P CONCRETE EDGE CONDITION
SCALE: 1" = 1'-0"



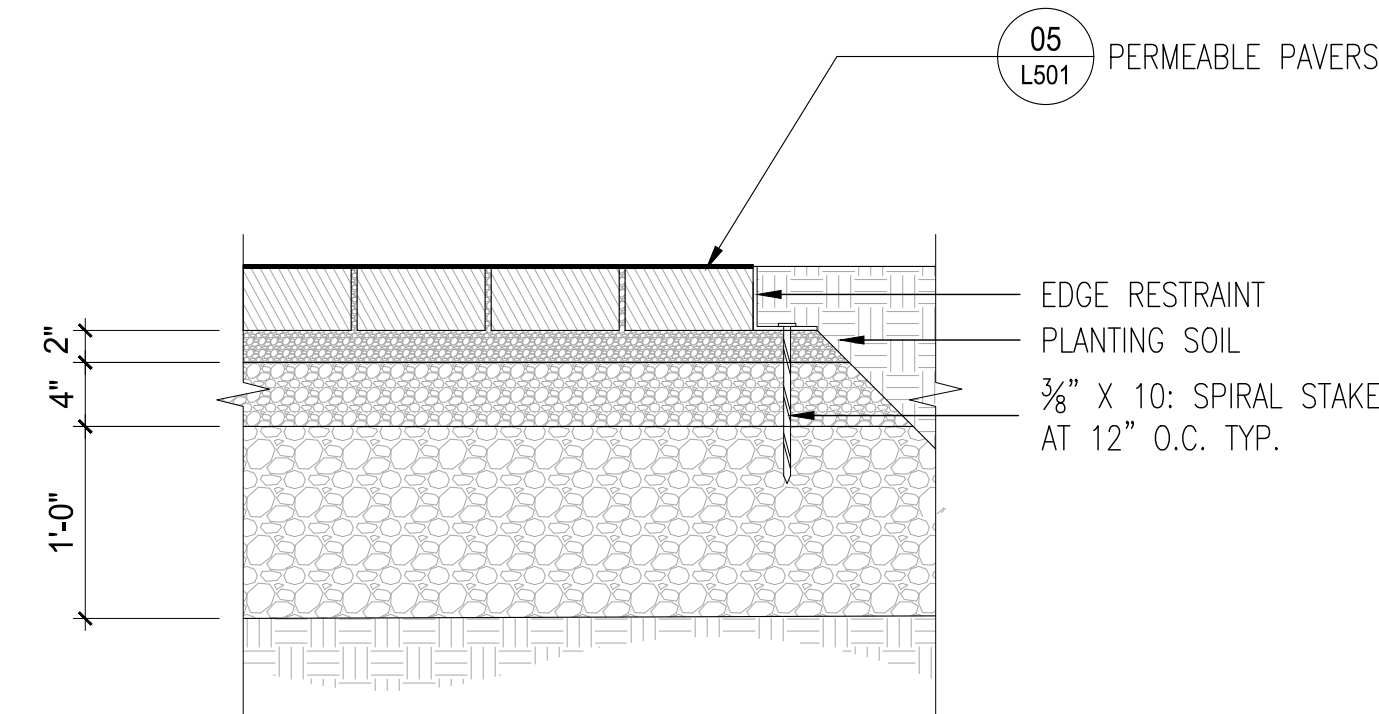
05 PERMEABLE PAVING
SCALE: 1" = 1'-0"



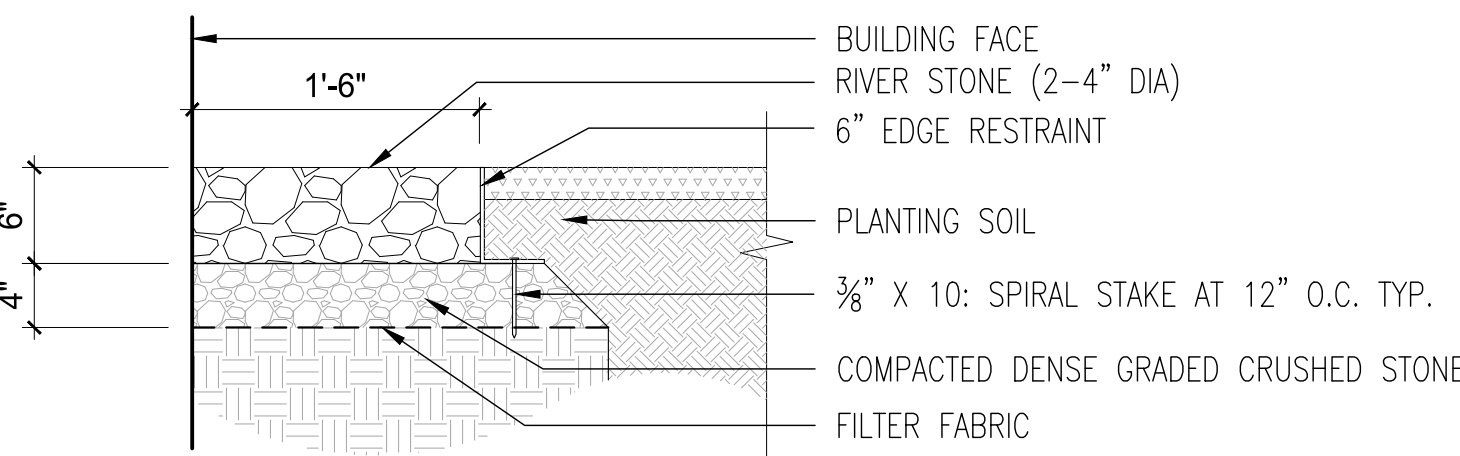
06 PRECAST PAVERS ON CONCRETE
SCALE: 1" = 1'-0"



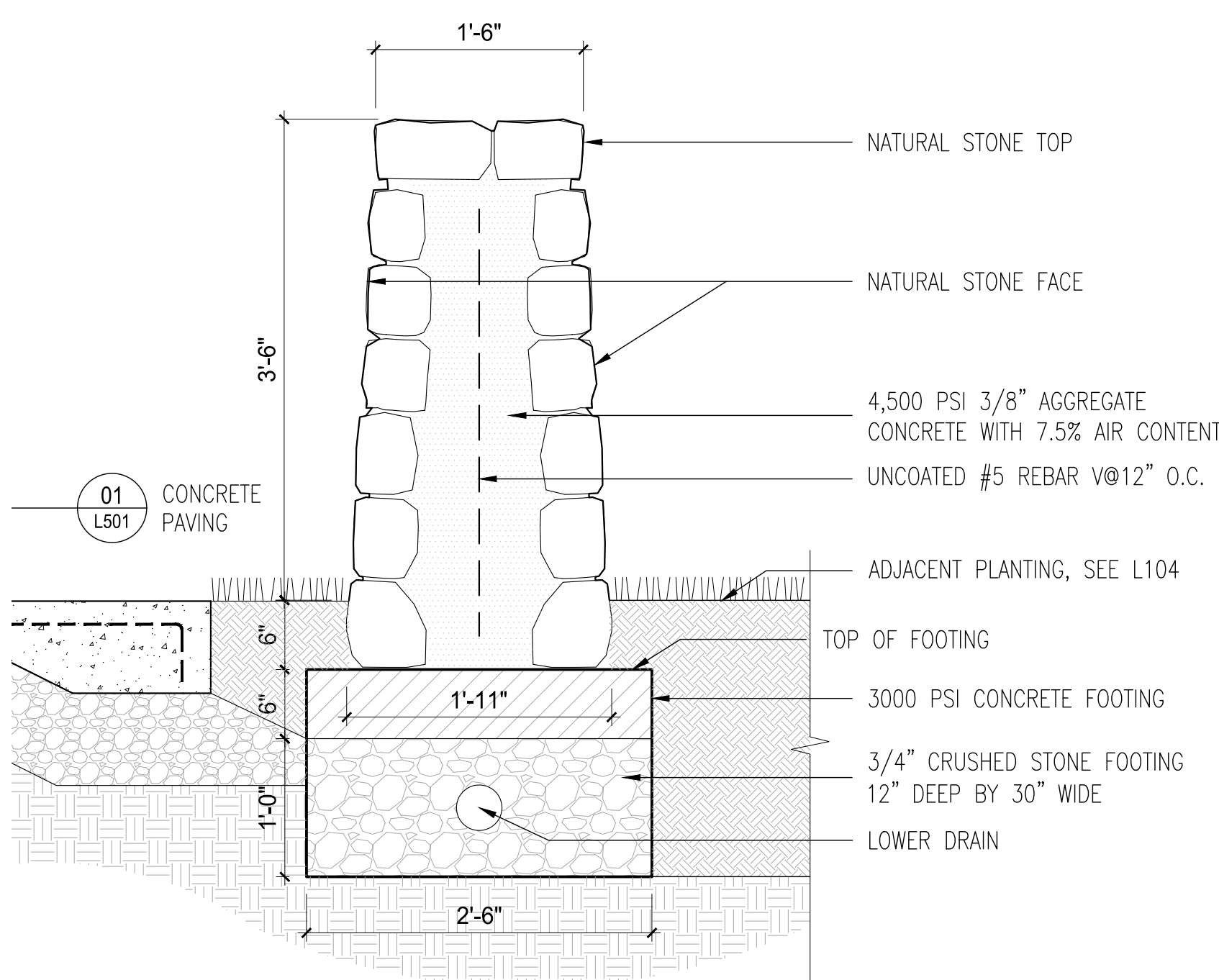
07 BITUMINOUS ASPHALT
SCALE: 1" = 1'-0"



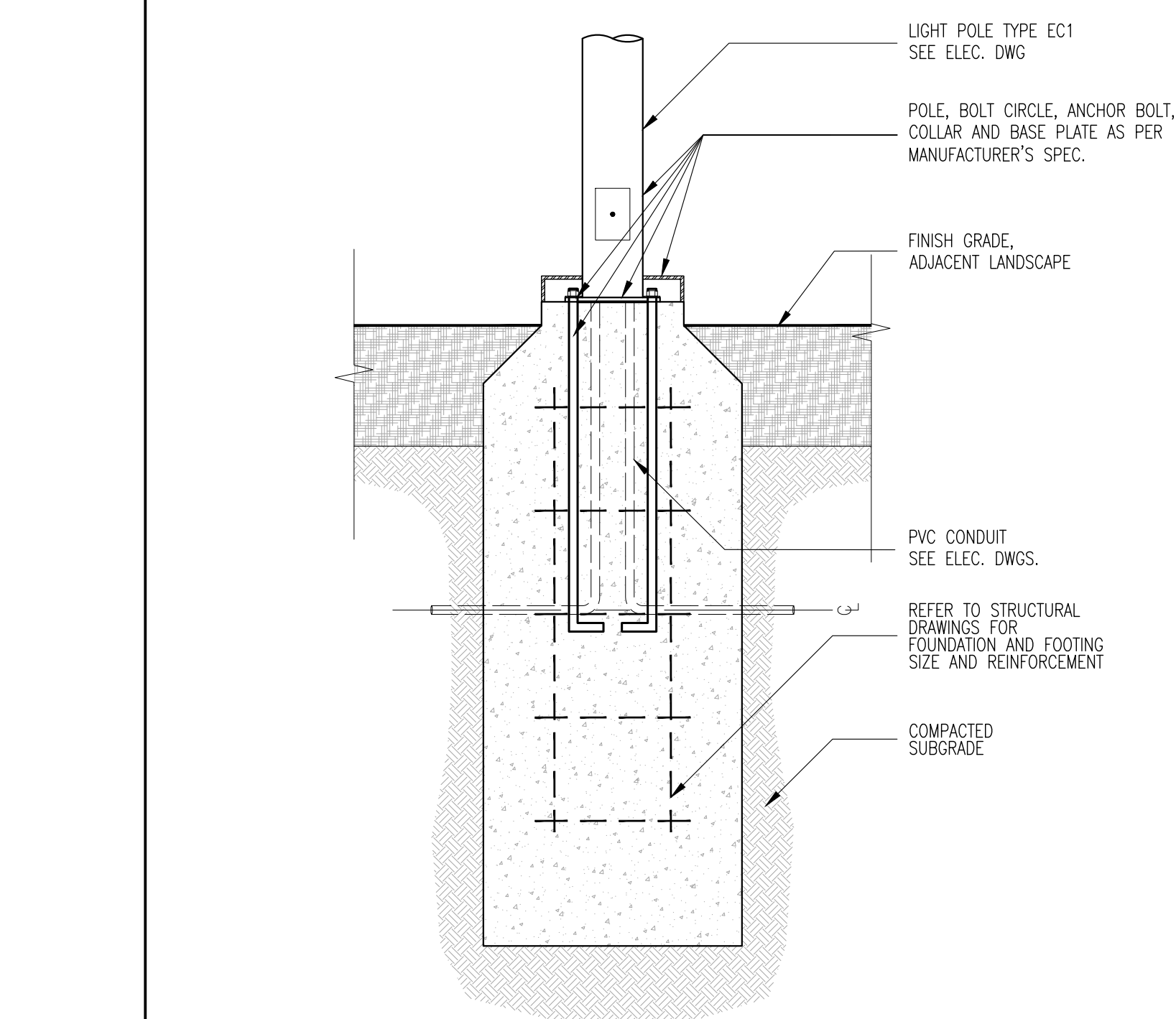
08 EDGING AT PERMEABLE PAVING
SCALE: 1" = 1'-0"



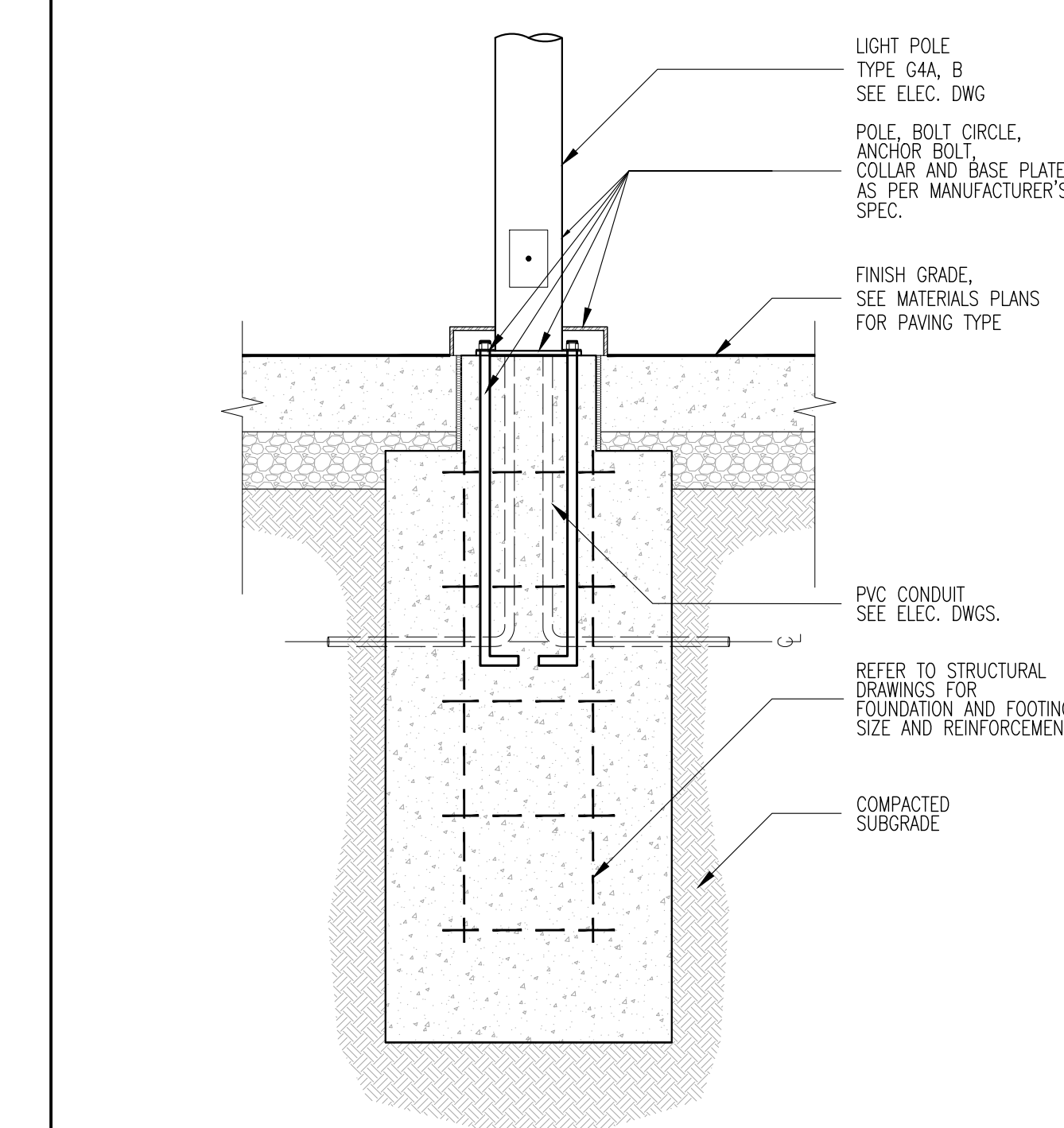
09 AGGREGATE STRIP AT BUILDING FACE
SCALE: 1" = 1'-0"



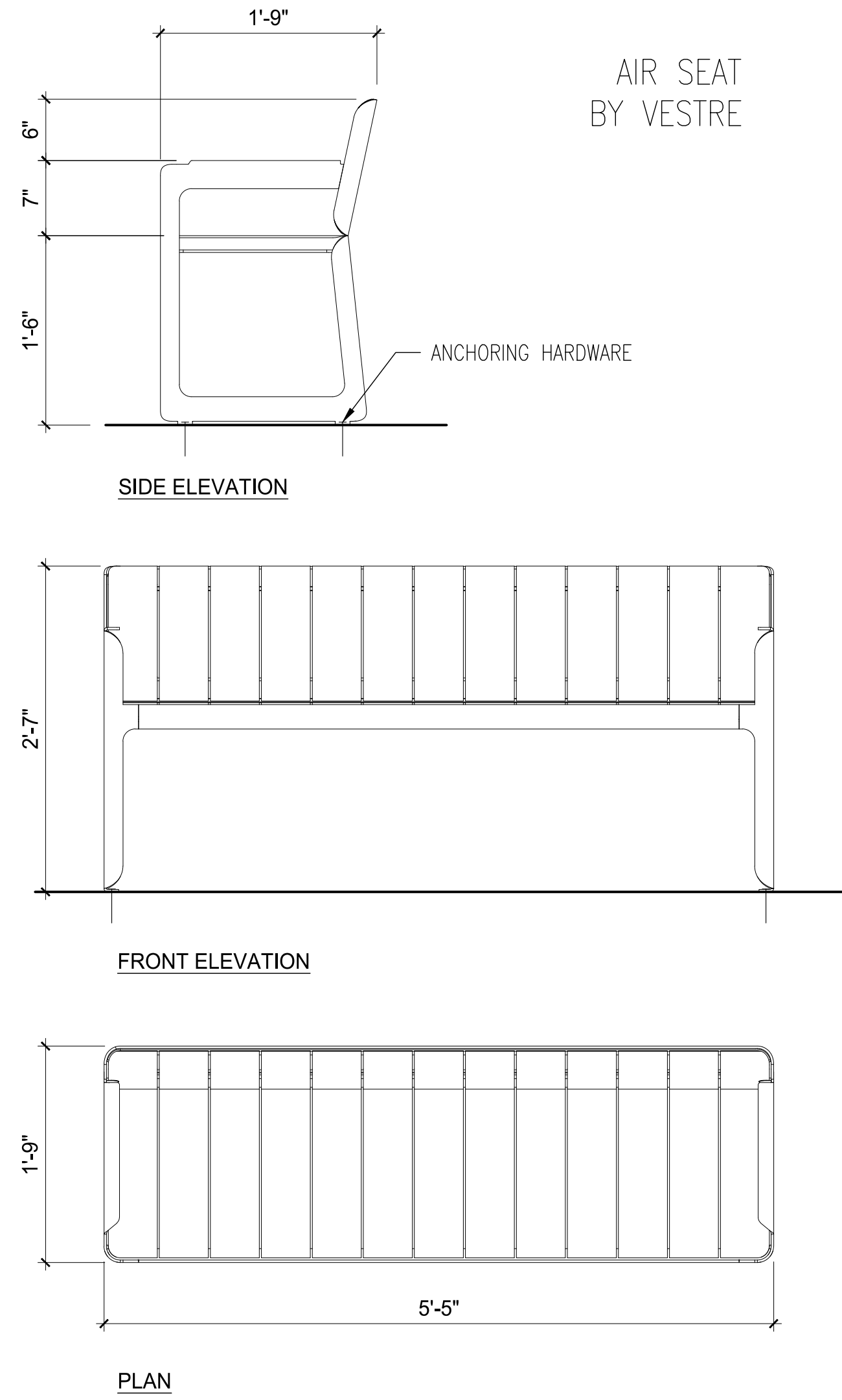
10 CAPPED STONE SEATWALL
SCALE: 1" = 1'-0"



11 LIGHT POLE FOOTING IN PLANTING
SCALE: 3/4" = 1'-0"

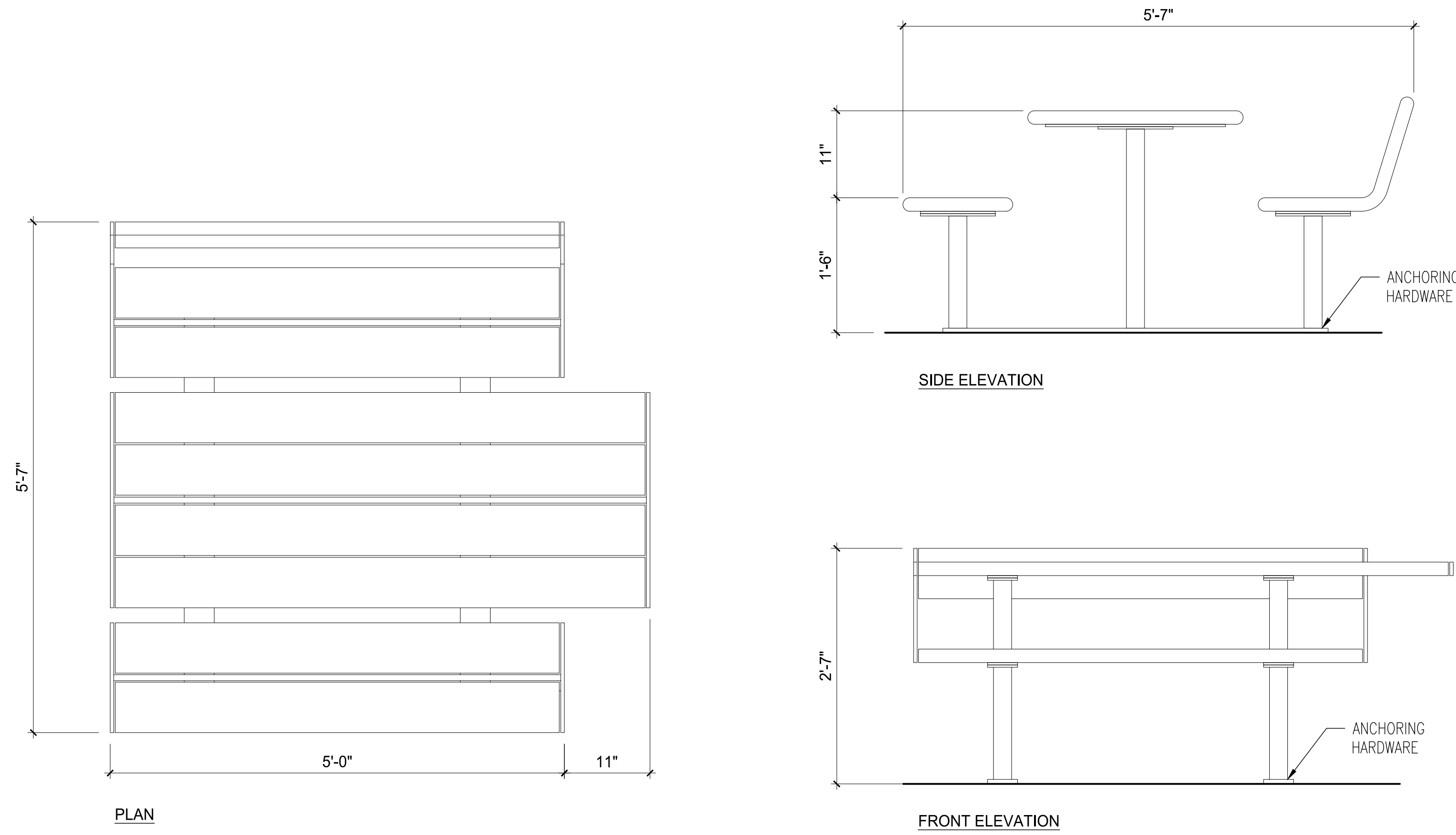


12 LIGHT POLE FOOTING IN PAVING
SCALE: 3/4" = 1'-0"



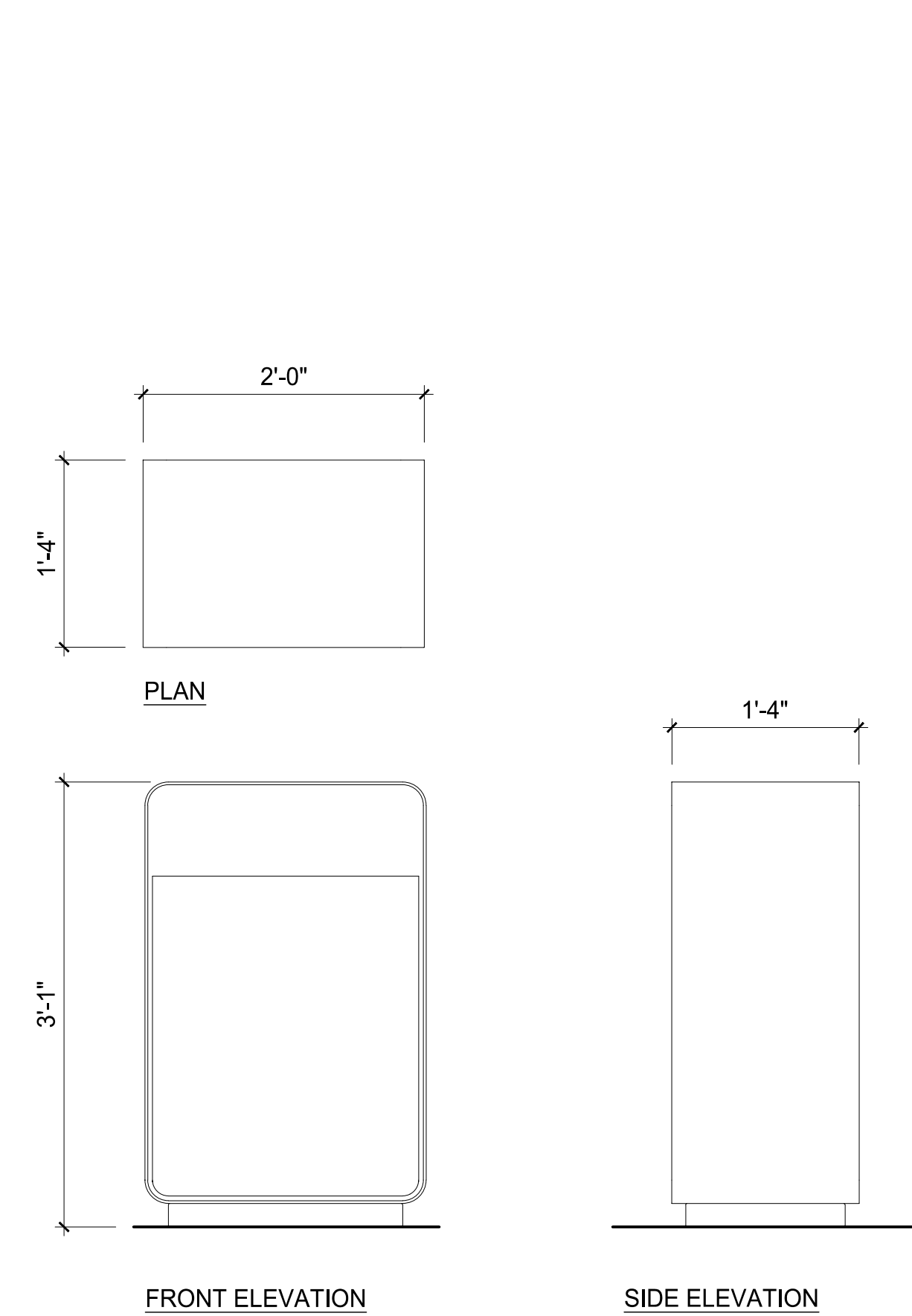
01 BACKED WOOD BENCH W/ ARMRESTS
SCALE: 1"=1'-0"

APRIL PICNIC TABLE
BY VESTRE

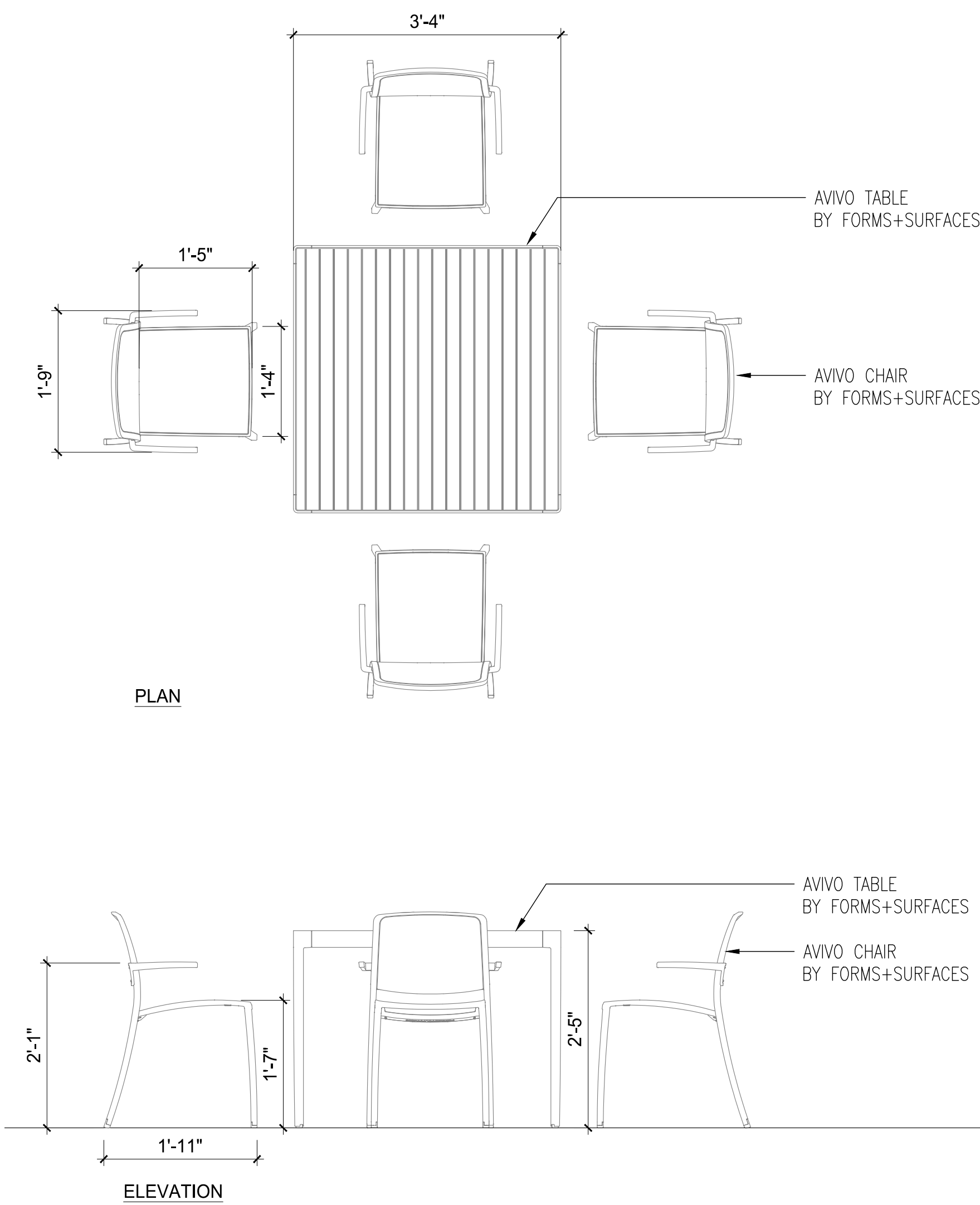


02 PICNIC TABLE
SCALE: 1"=1'-0"

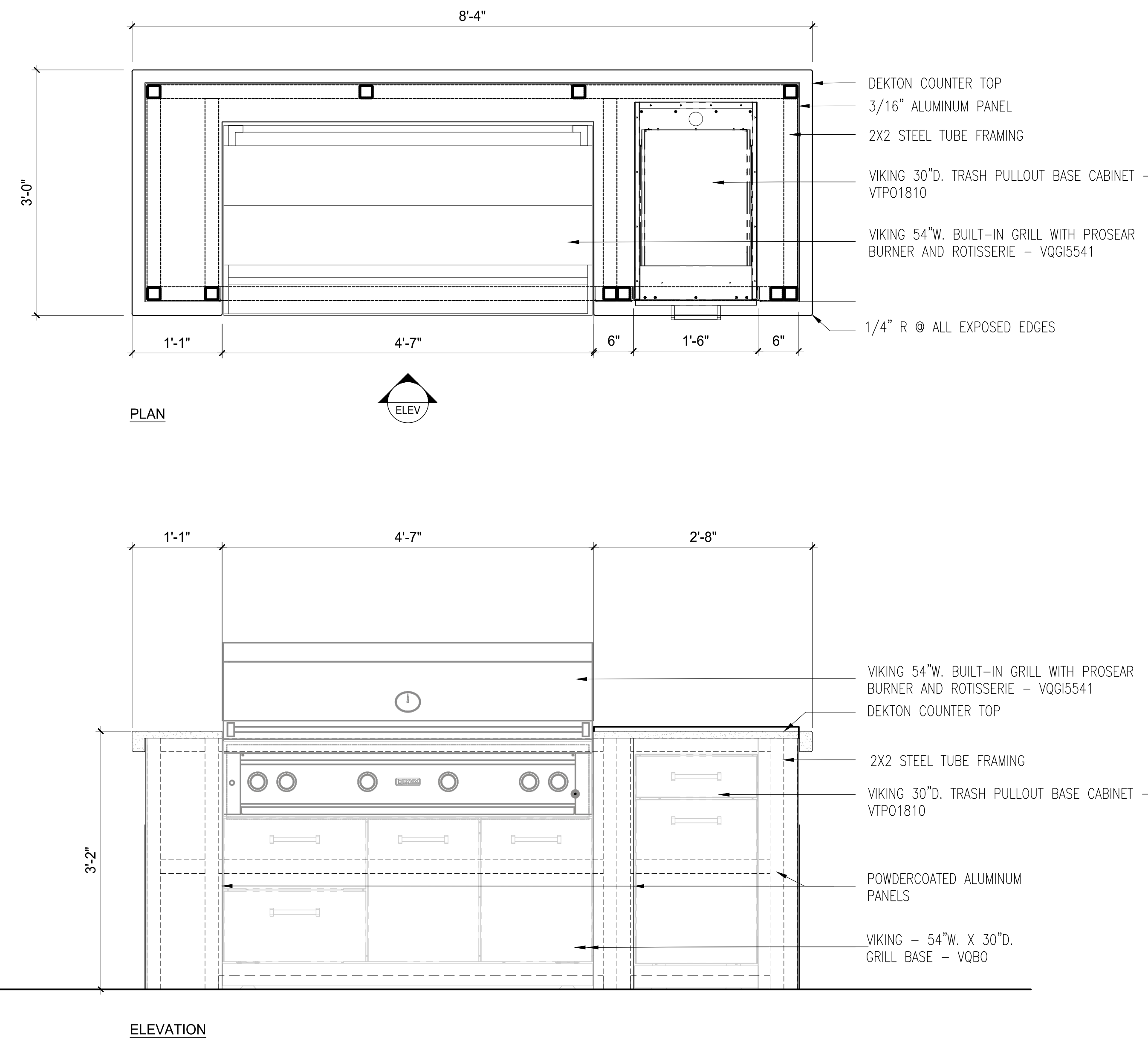
VROOM LITTER BIN
BY VESTRE



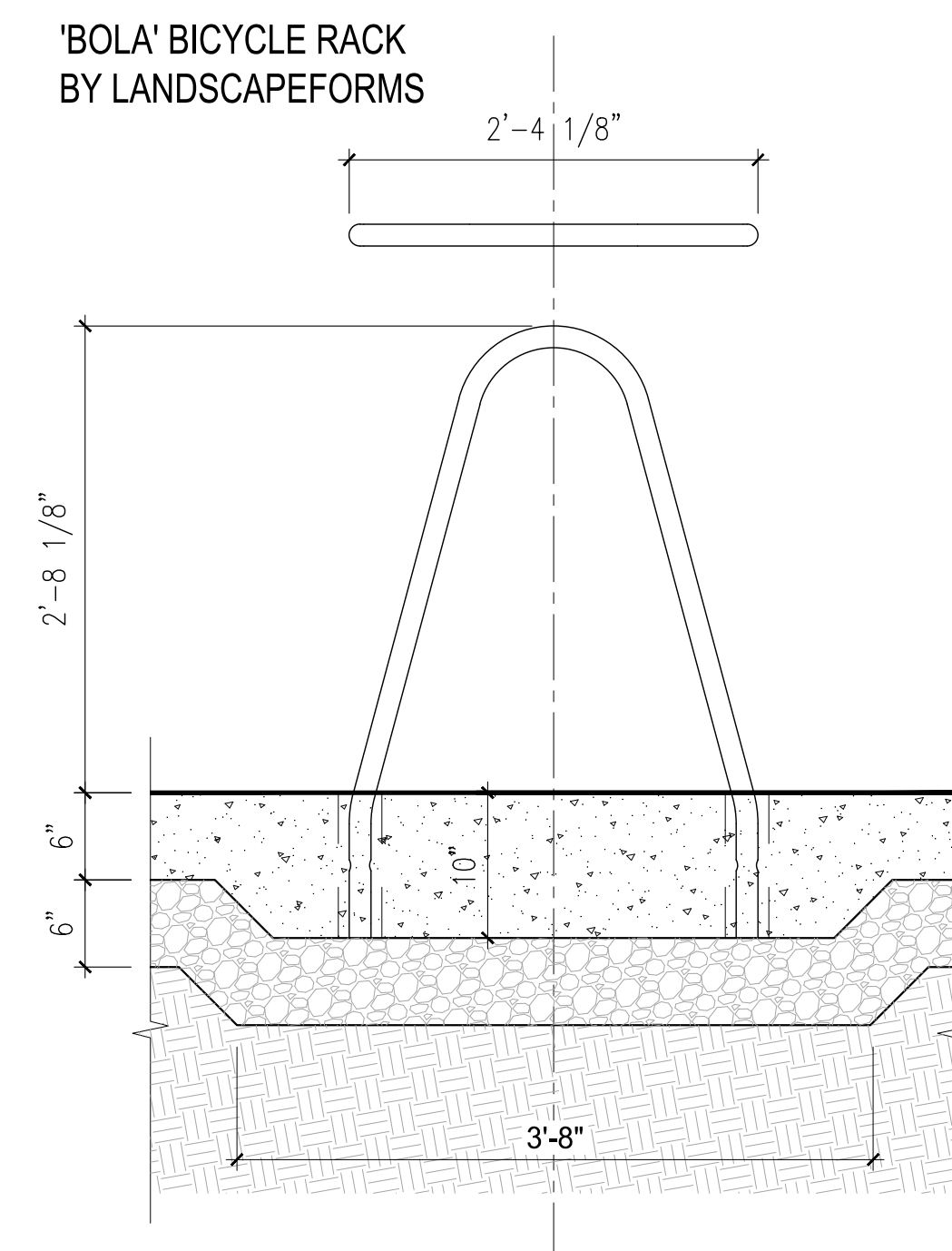
03 TRASH RECEPCTACLE
SCALE: 1"=1'-0"



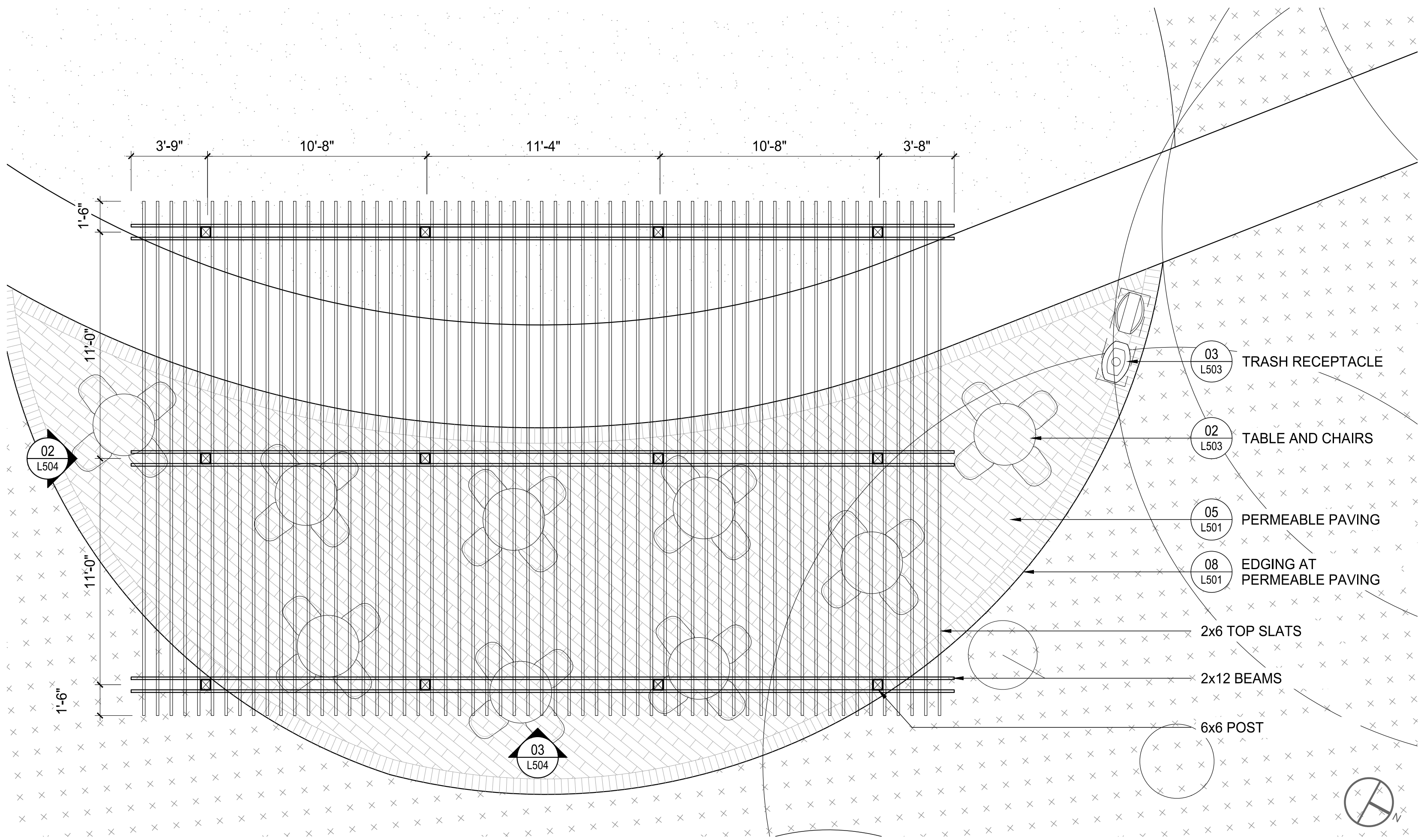
04 MOVABLE TABLE AND CHAIRS
SCALE: 3/4"=1'-0"



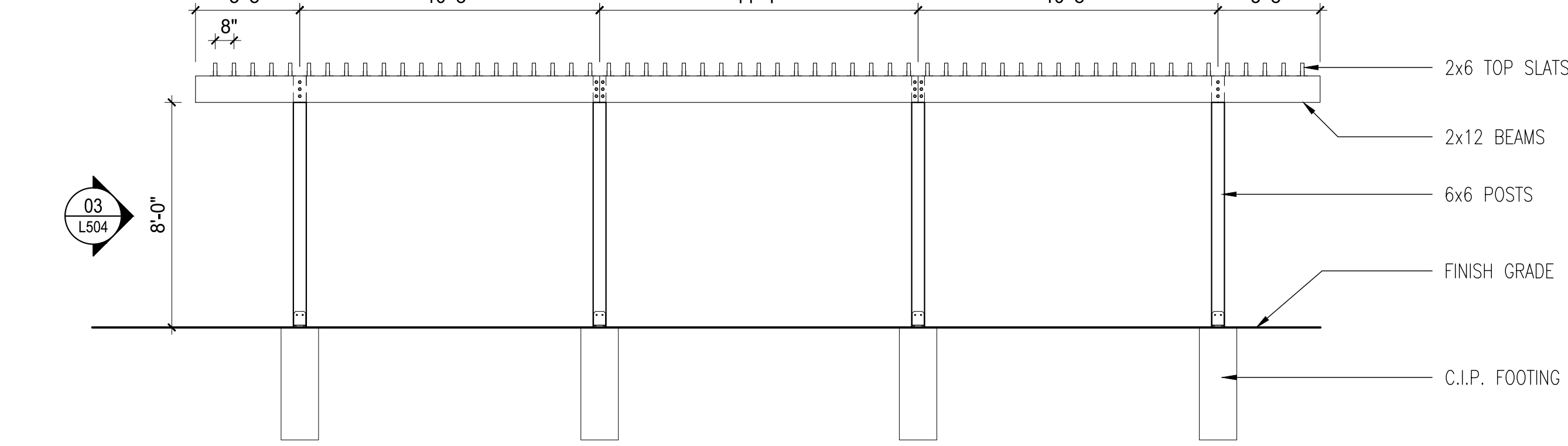
05 OUTDOOR GRILL
SCALE: 1"=1'-0"



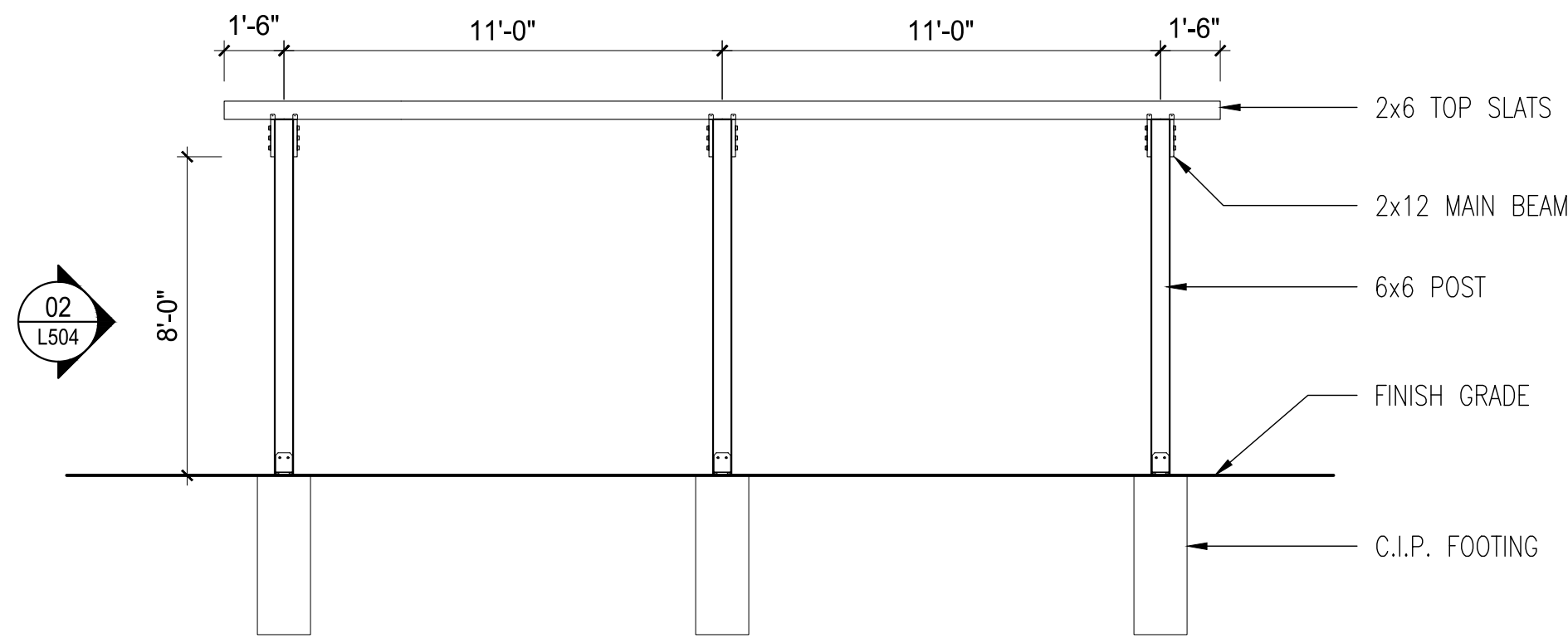
06 BIKE RACK
SCALE: 1"=1'-0"



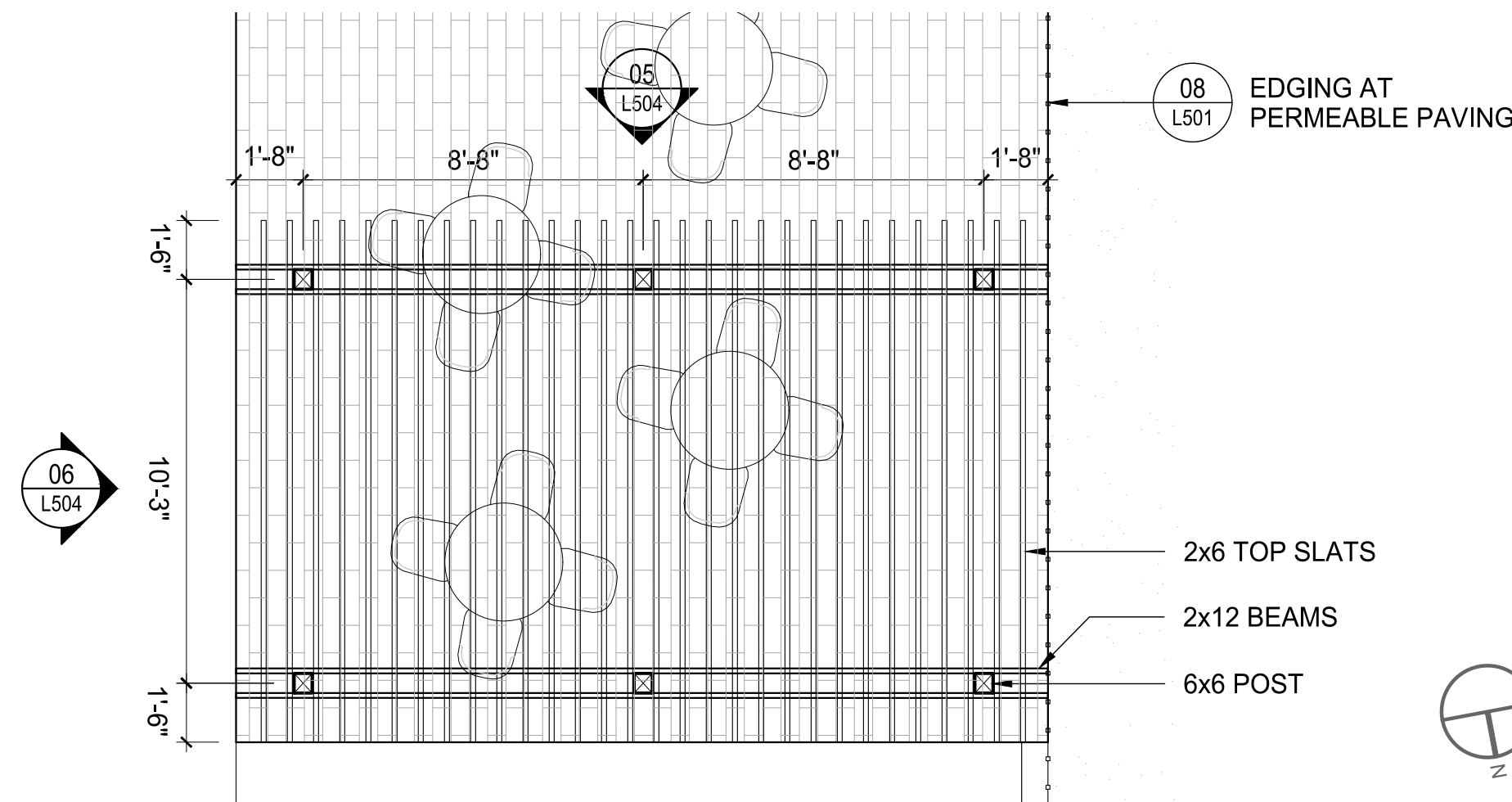
01 PERGOLA 'A' - PLAN
SCALE: 1/4"=1'-0"



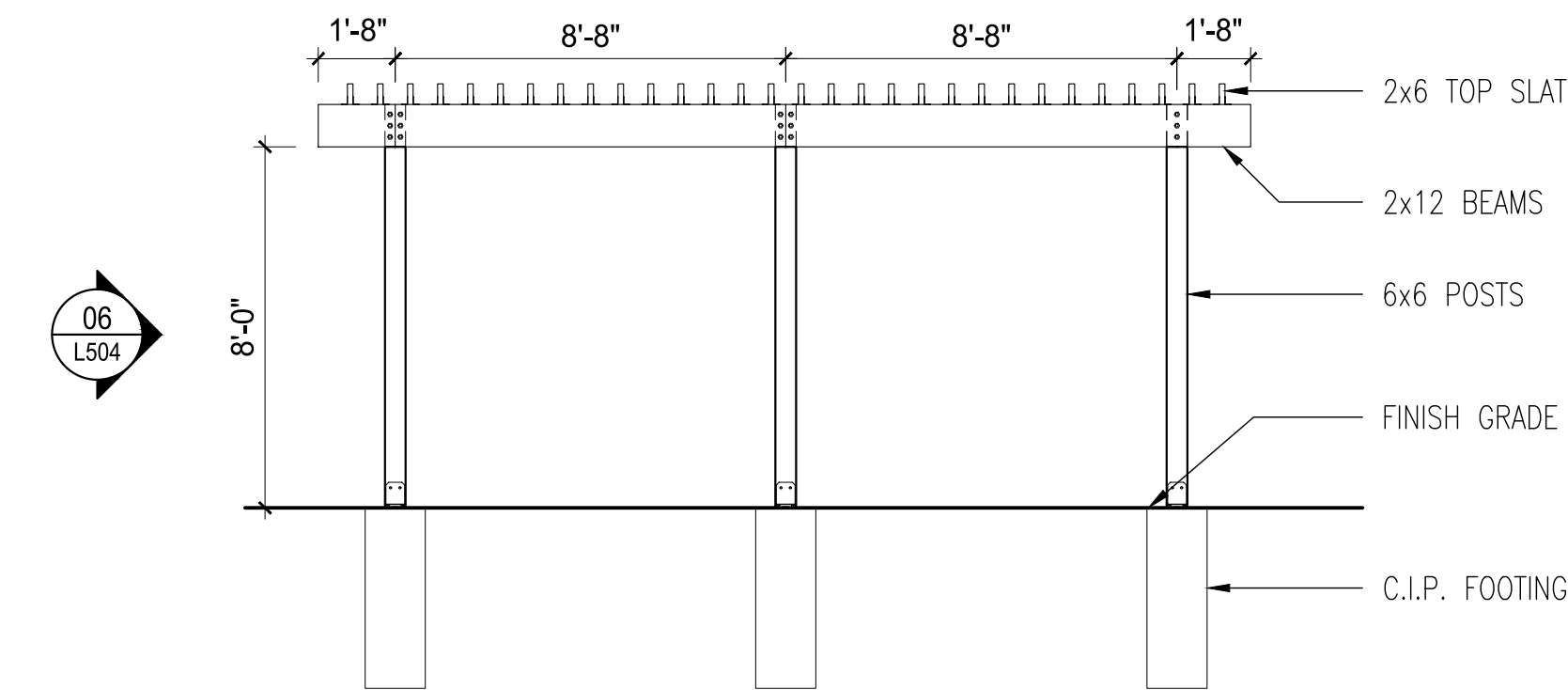
02 PERGOLA 'A' - ELEVATION (EAST/ WEST)
SCALE: 1/4"=1'-0"



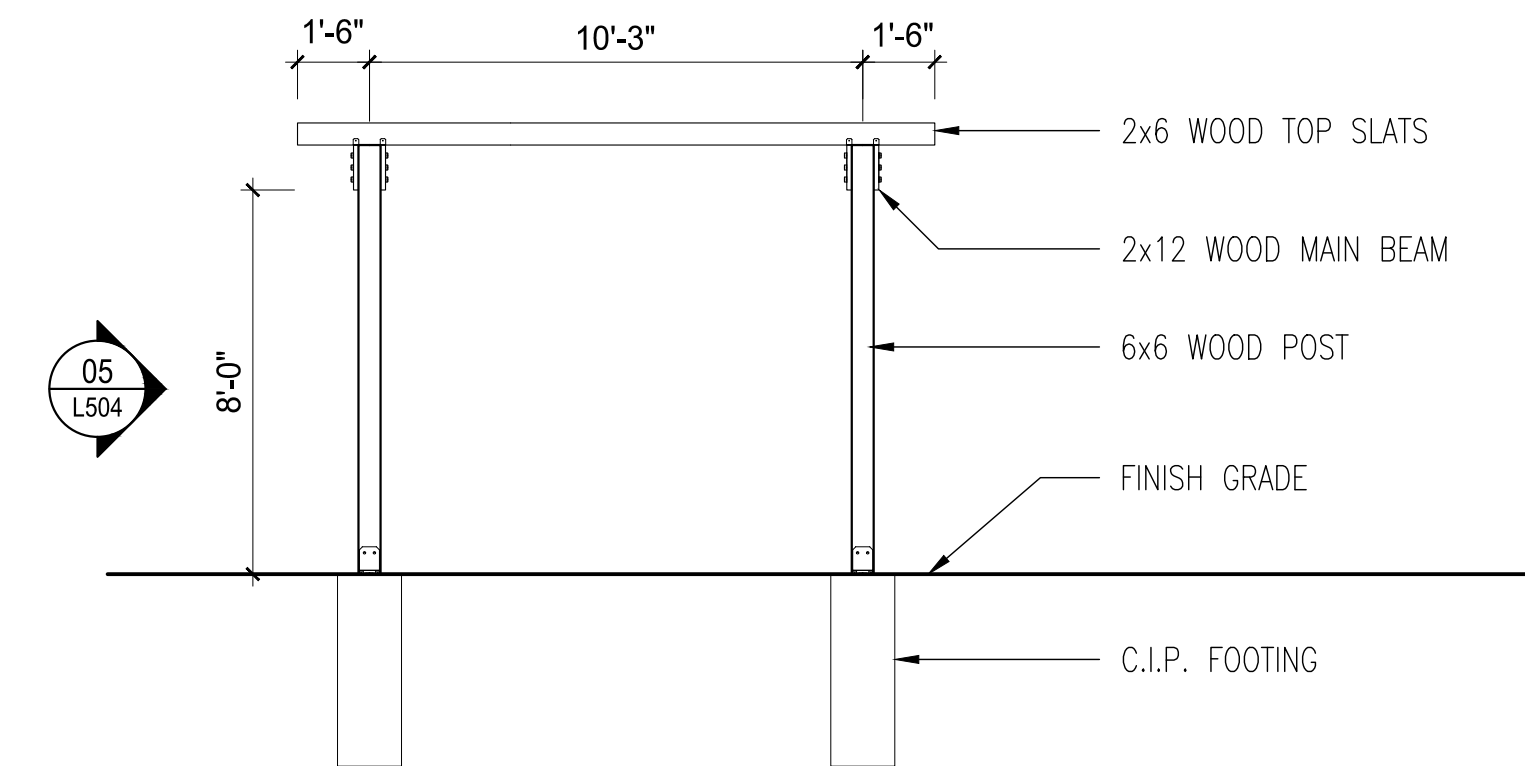
03 PERGOLA 'A' - ELEVATION (NORTH/ SOUTH)
SCALE: 1/4"=1'-0"



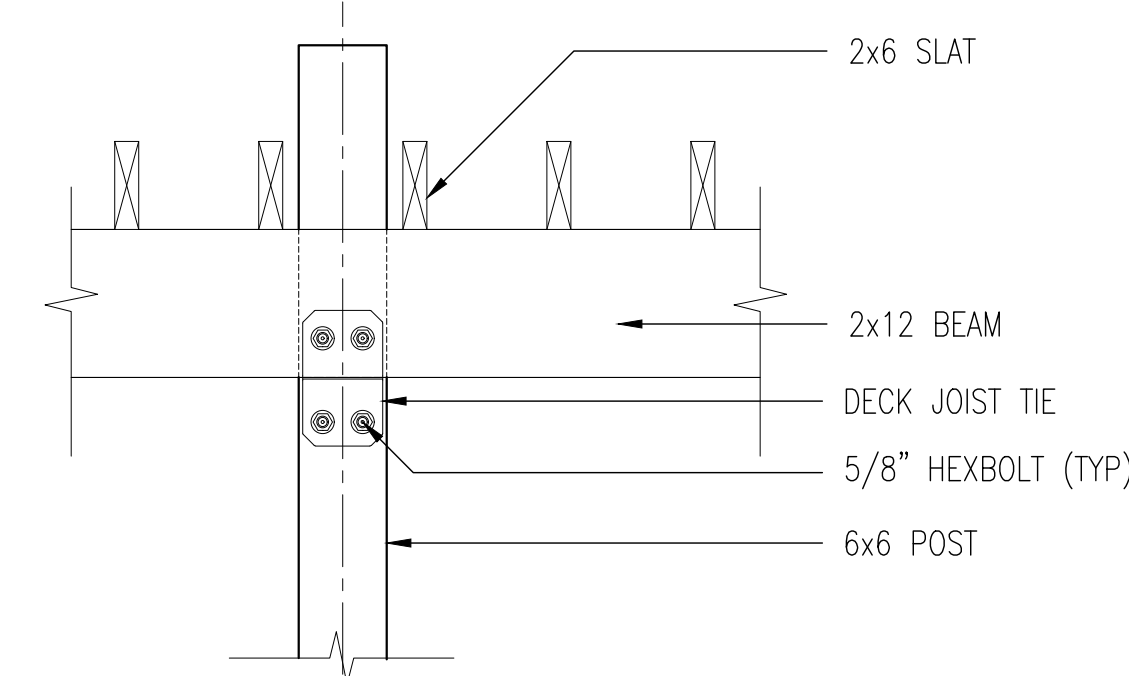
04 PERGOLA 'B' - PLAN
SCALE: 1/4"=1'-0"



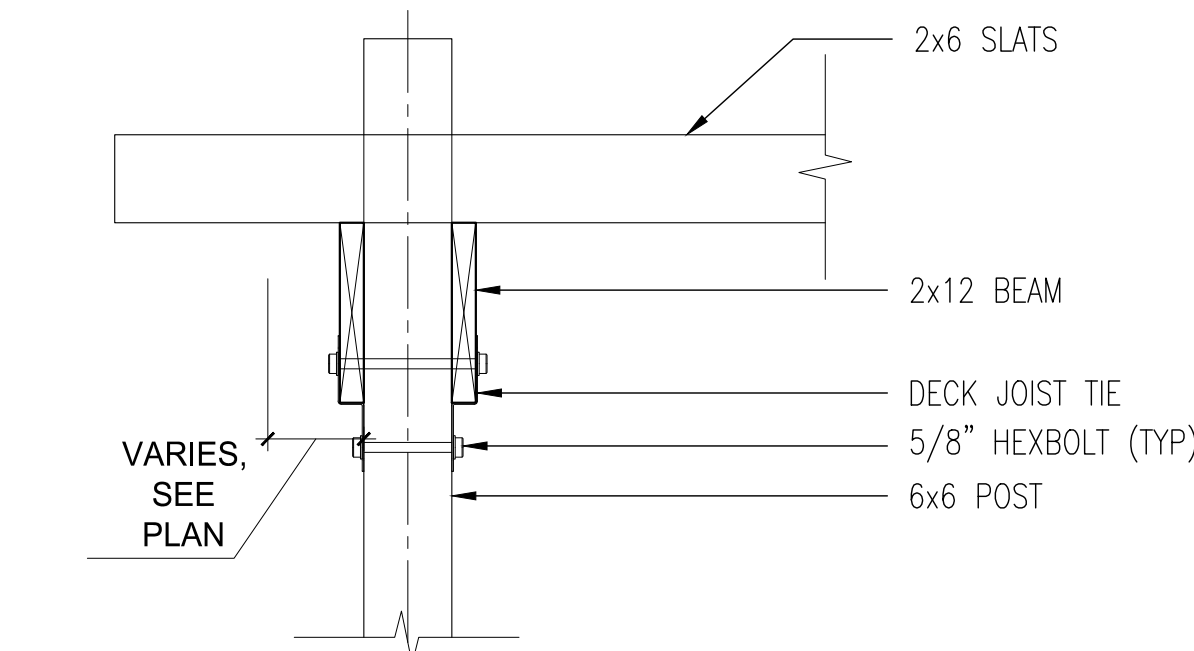
05 PERGOLA 'B' - ELEVATION (NORTH/ SOUTH)
SCALE: 1/4"=1'-0"



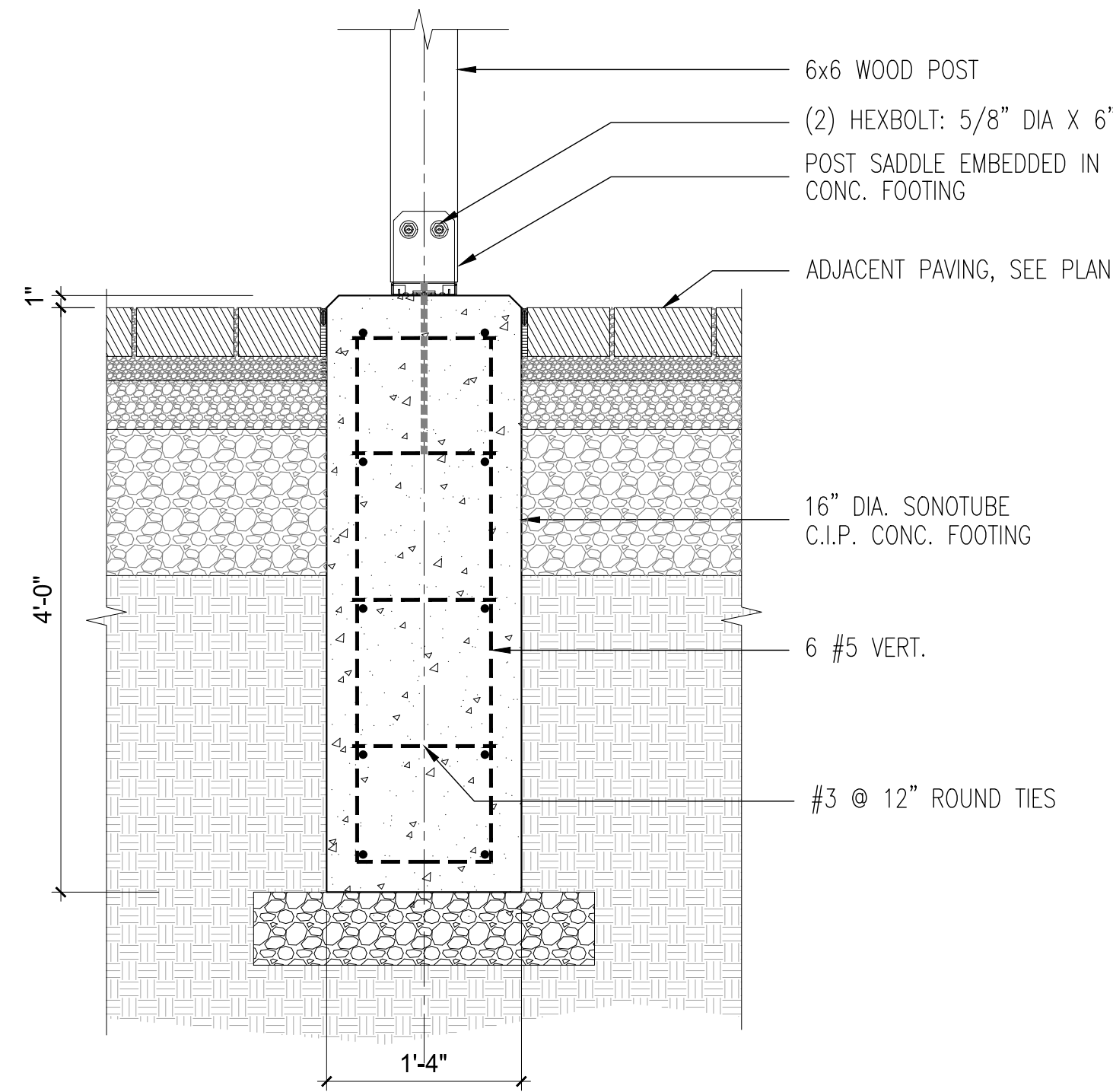
06 PERGOLA 'B' - ELEVATION (EAST/ WEST)
SCALE: 1/4"=1'-0"



07 PERGOLA CONNECTION A
SCALE: 1"=1'-0"

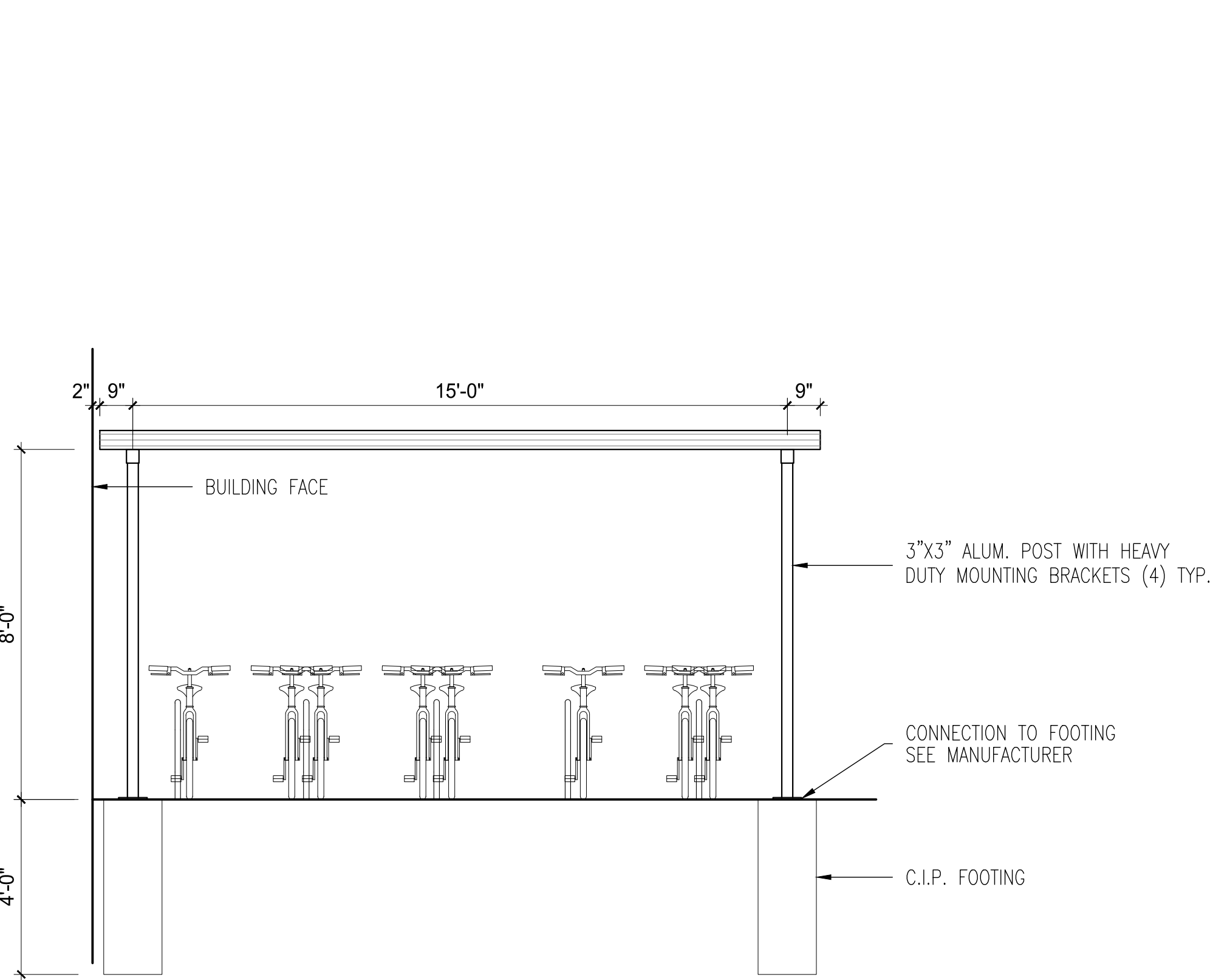
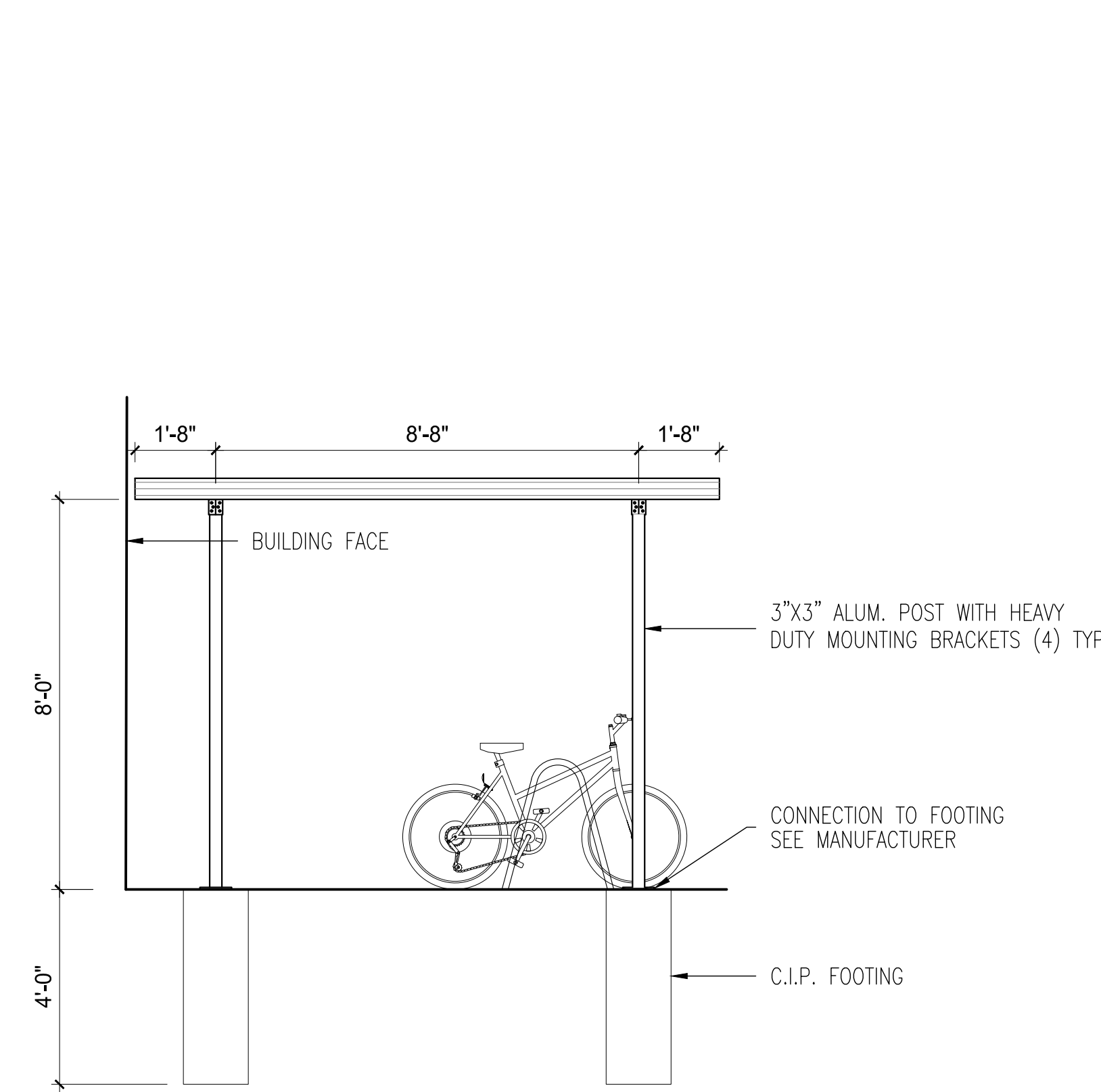
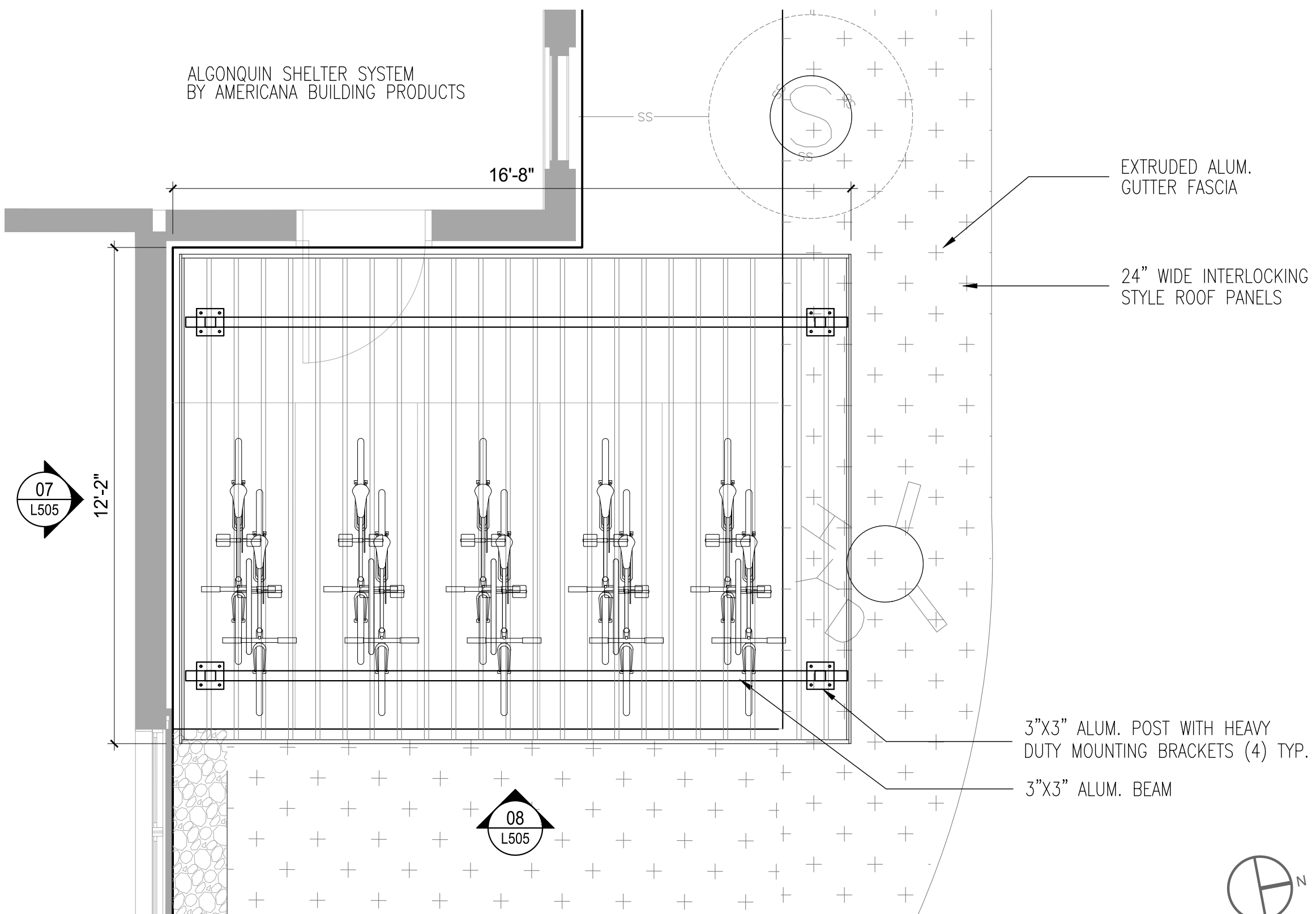
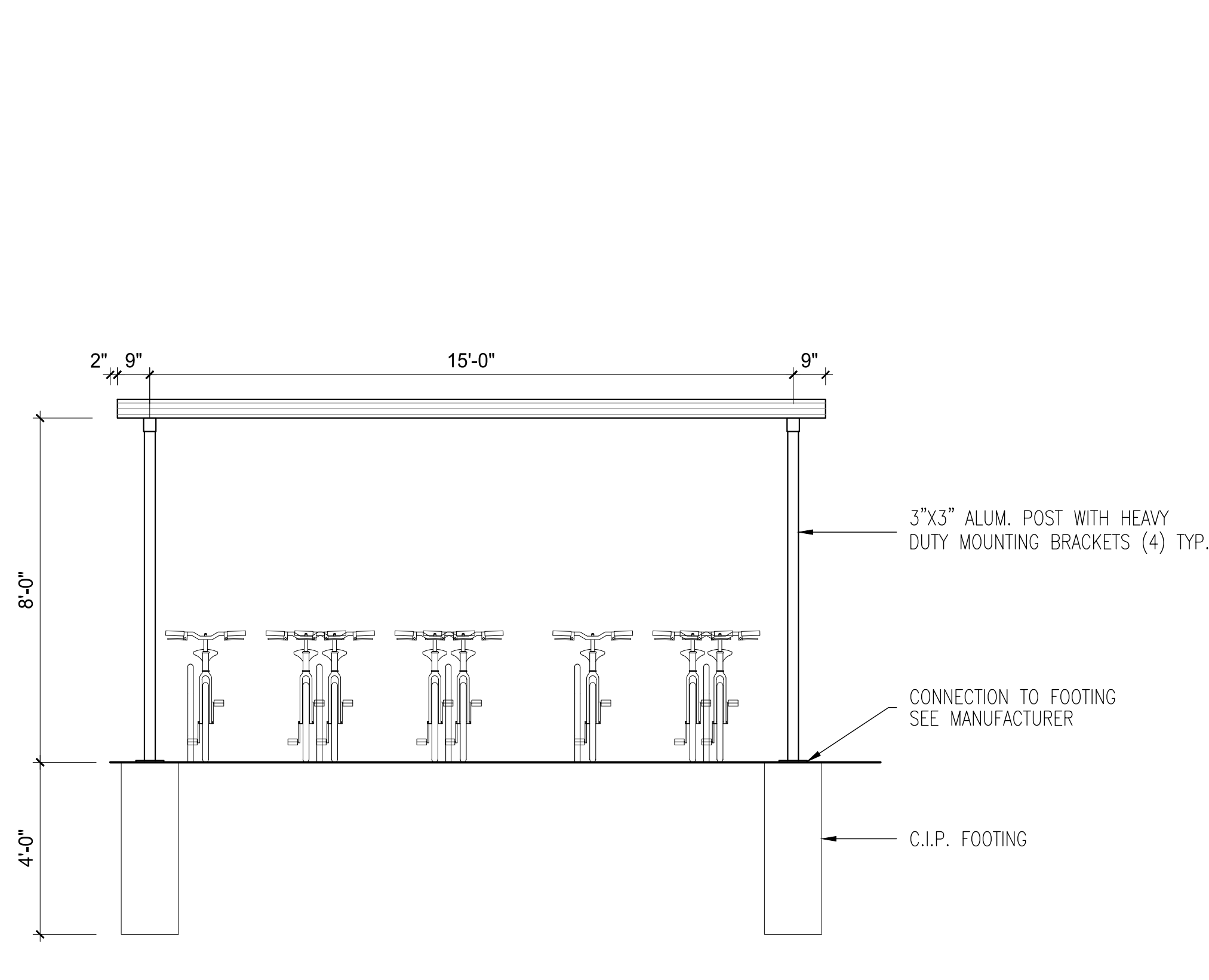
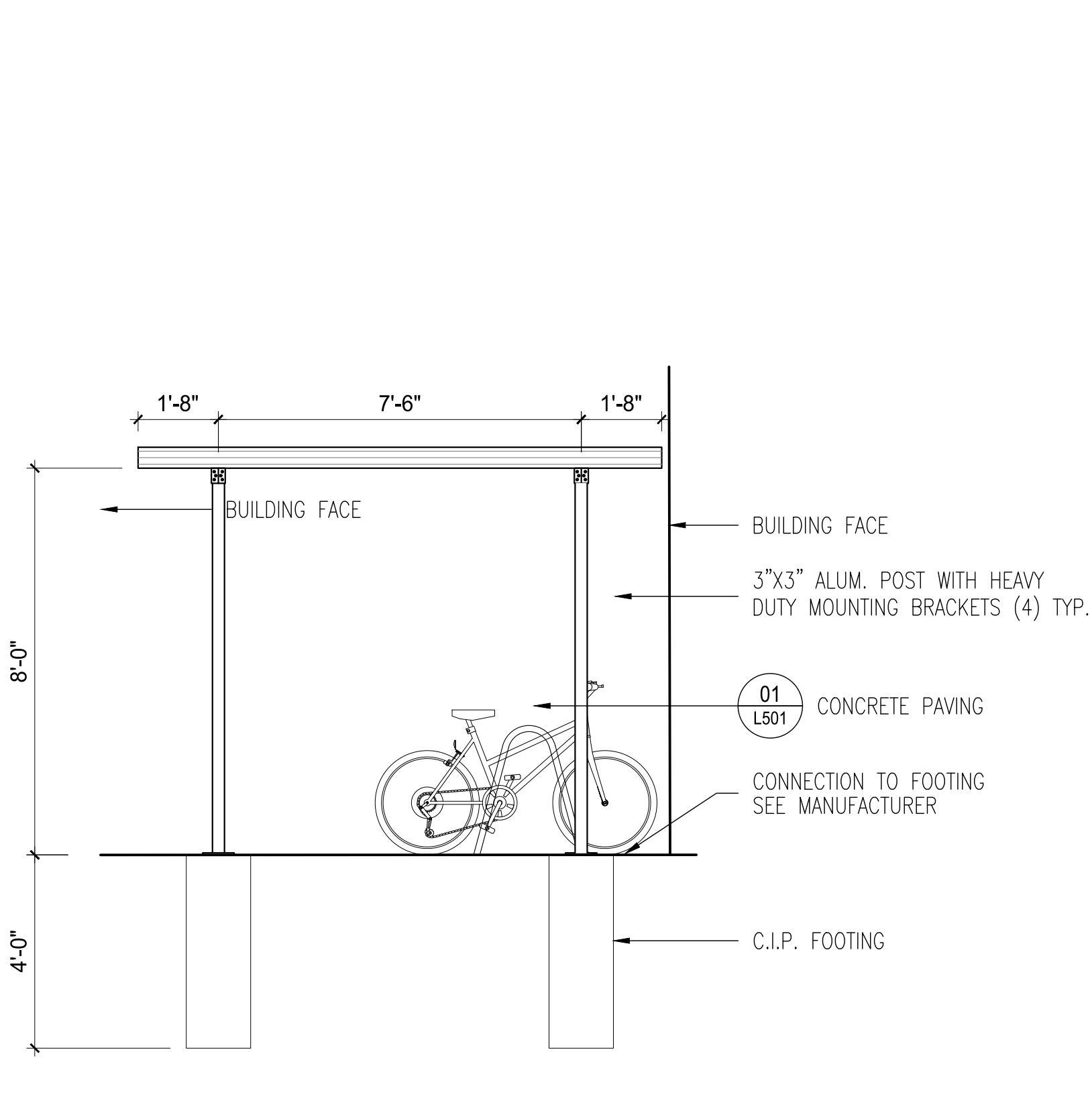
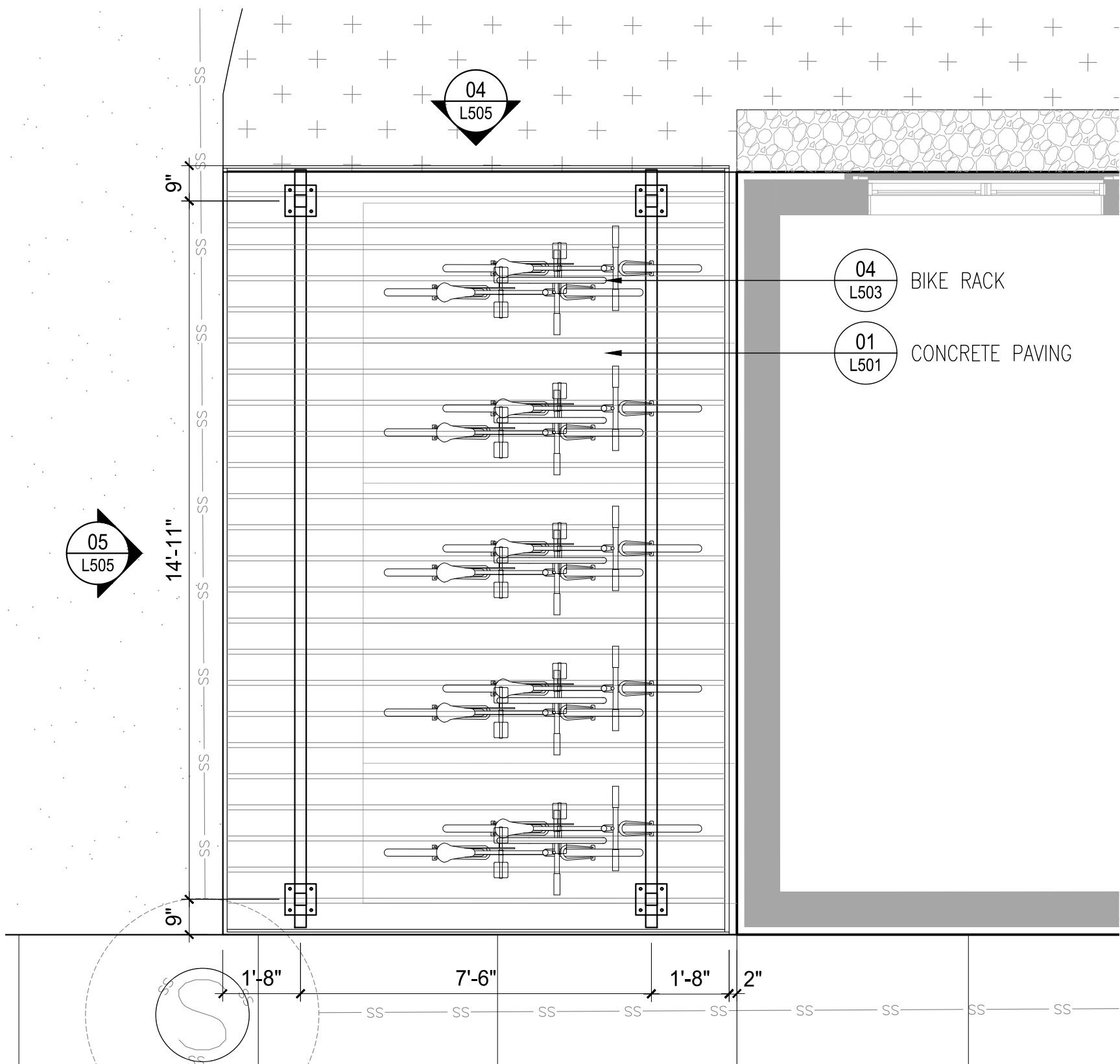
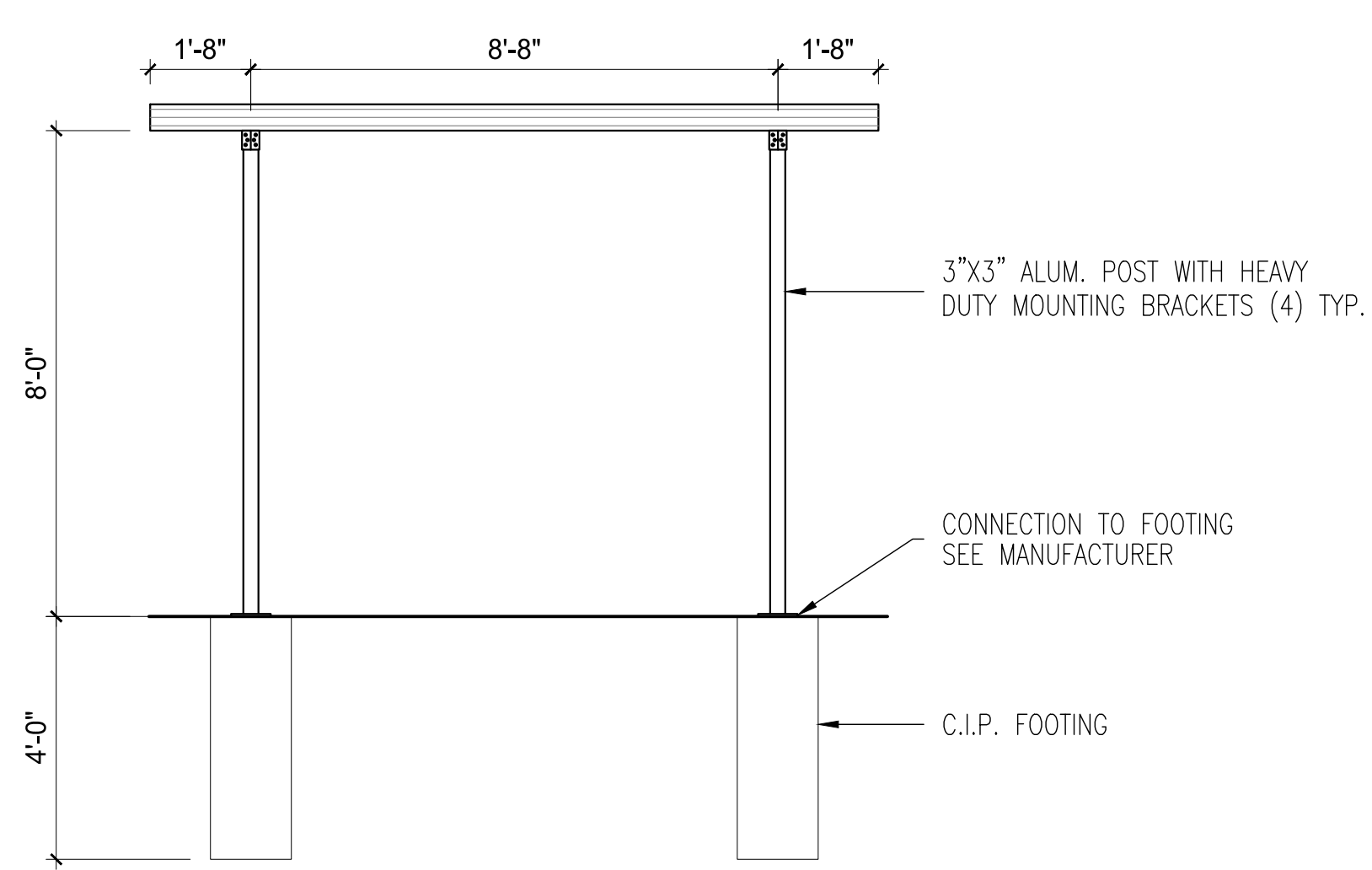
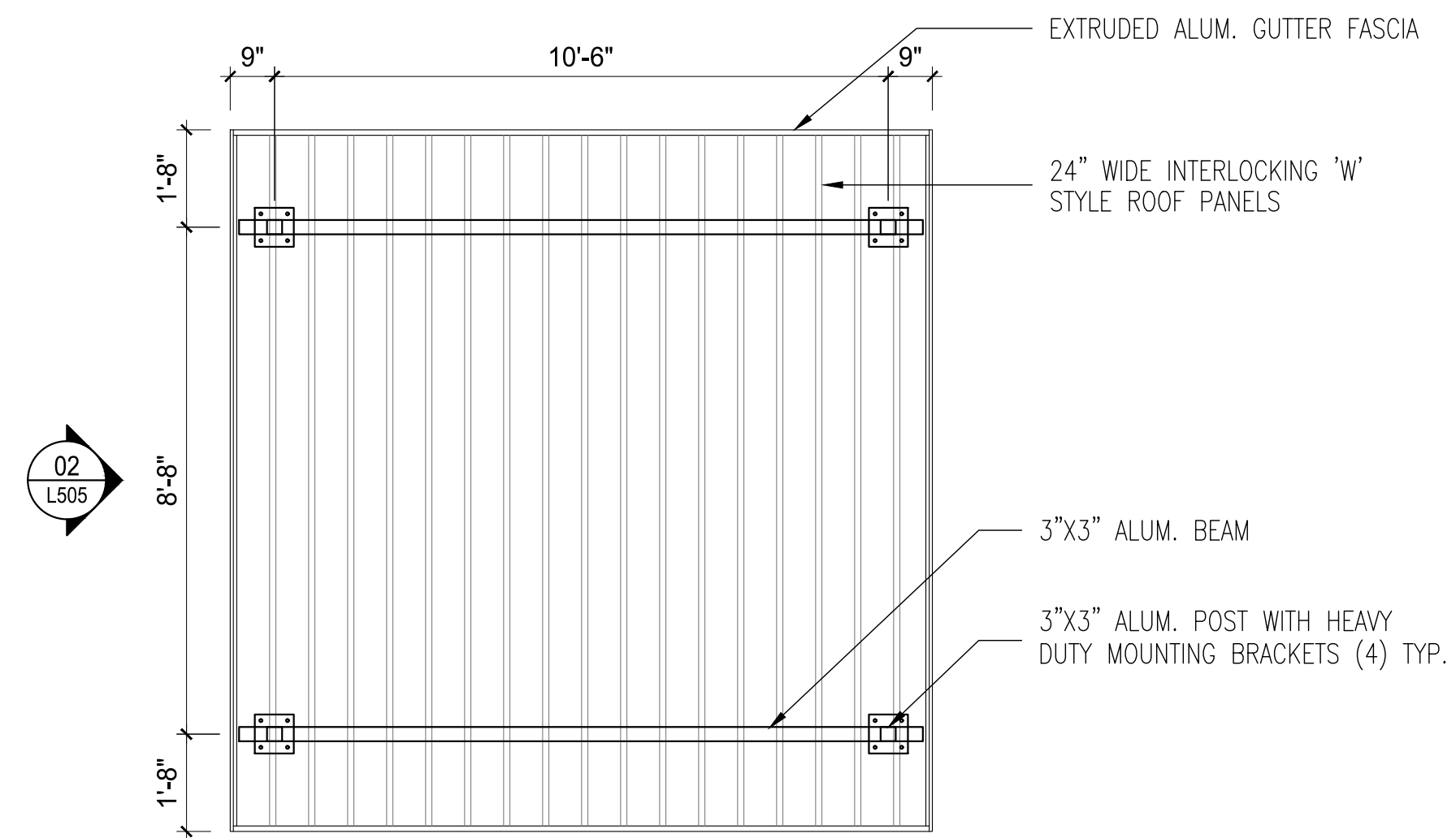


08 PERGOLA CONNECTION B
SCALE: 1"=1'-0"



09 PERGOLA POST FOOTING
SCALE: 1"=1'-0"

- NOTES:**
- ALL CONNECTORS AND ANCHORS (I.E. POST SADDLE, DECK JOIST TIE, ETC.) TO BE STAINLESS STEEL
 - PERGOLA MEMBER SIZING AND CONNECTIONS REQUIRE STRUCTURAL REVIEW OR ENGINEERED SHOP DRAWINGS



REVISIONS	

DRAWING TITLE

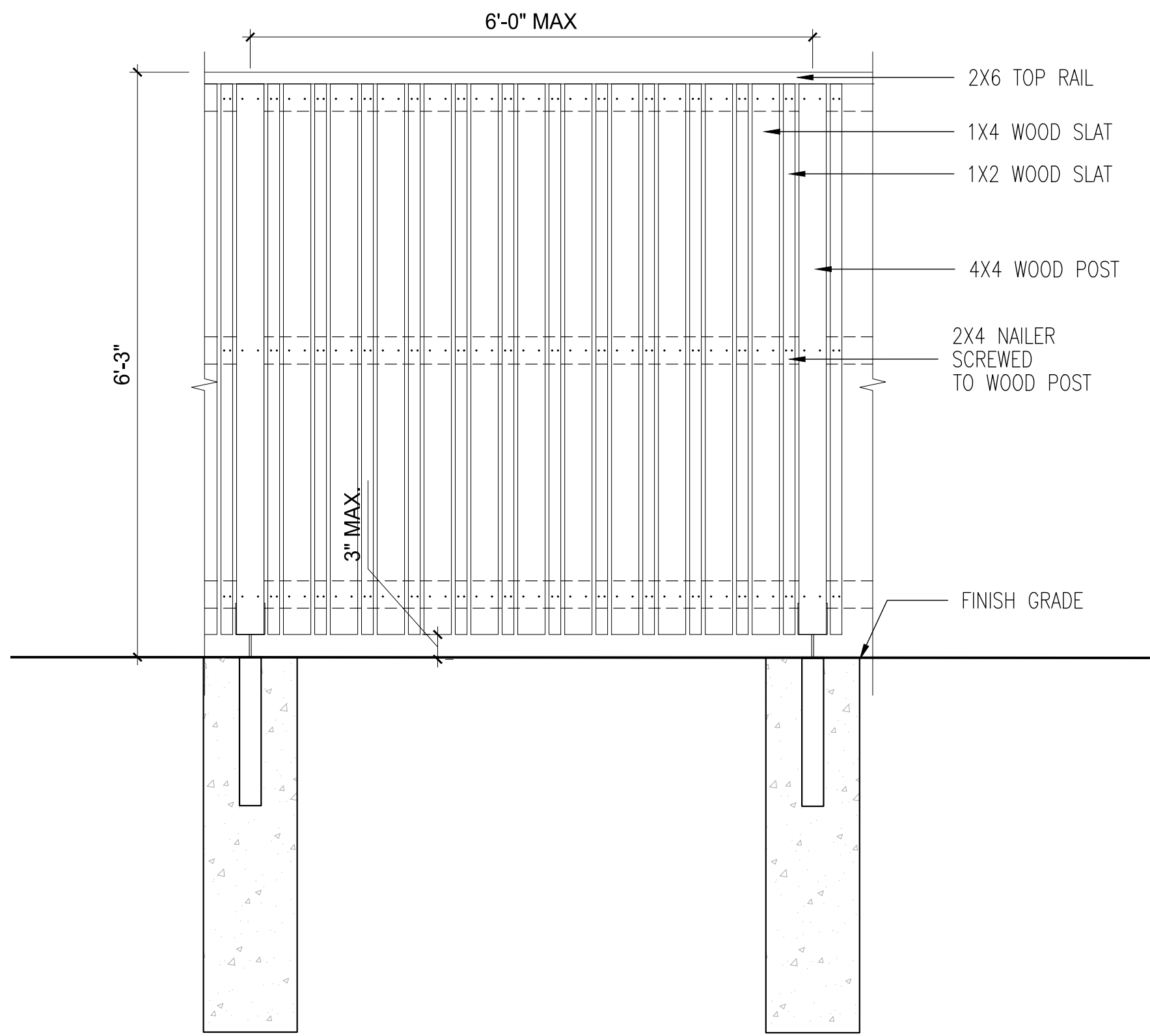
DETAILS

DRAWING INFORMATION

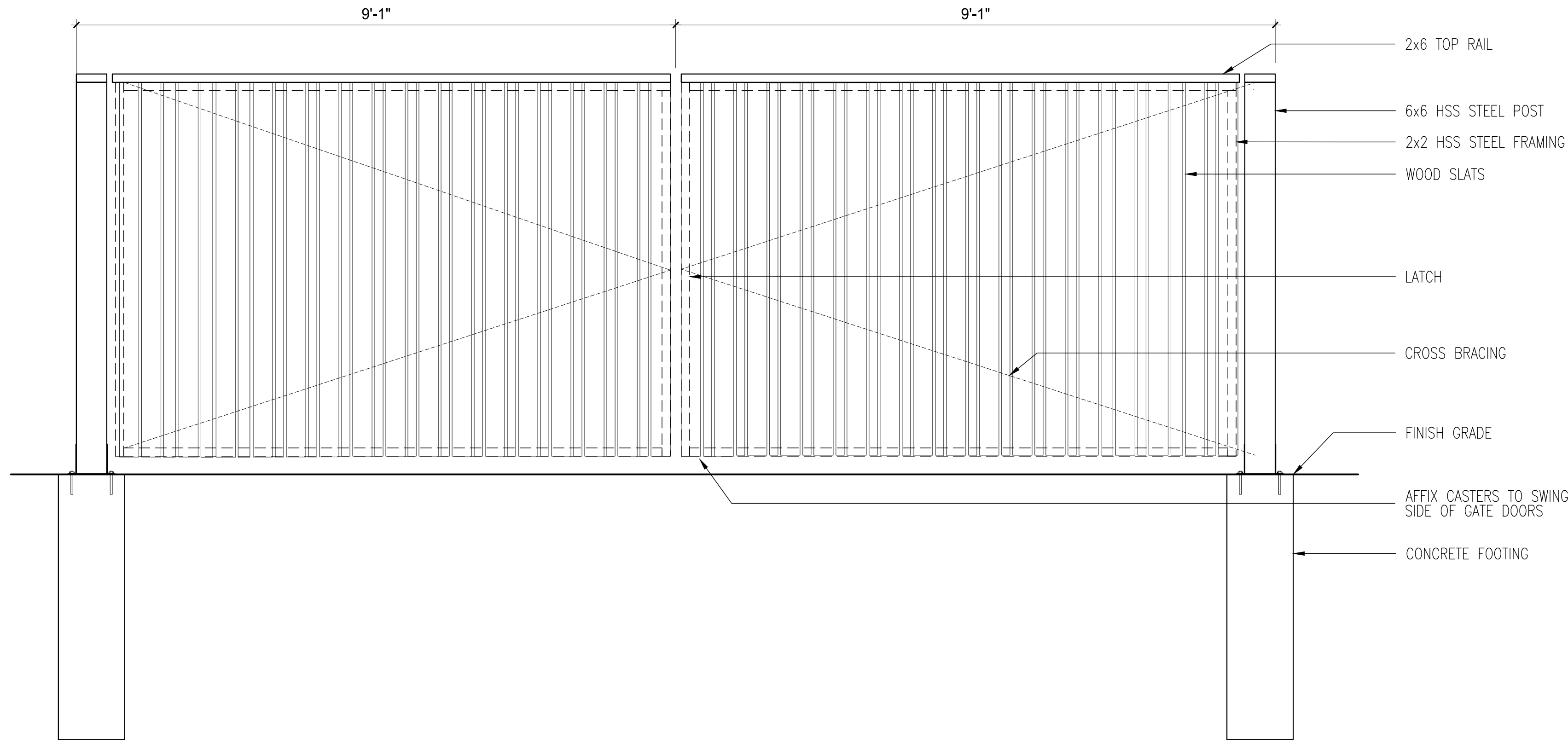
08/23/2024	DATE OF ISSUE
Site Plan Review	DESCRIPTION
AS NOTED	CP
SCALE	DRAWN BY
3/8"=1'-0"	PROJECT #
FILE NAME	

DRAWING NUMBER

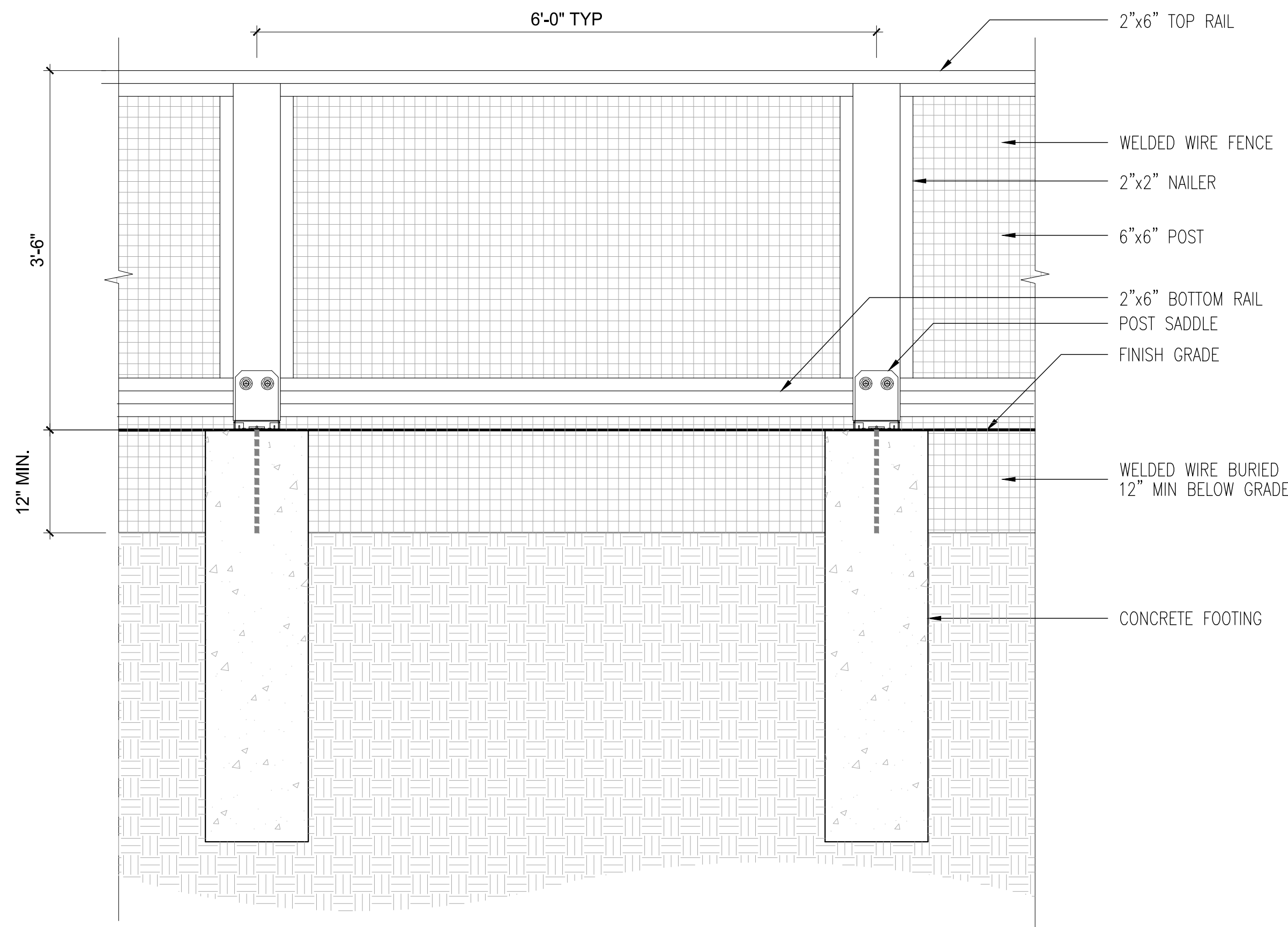
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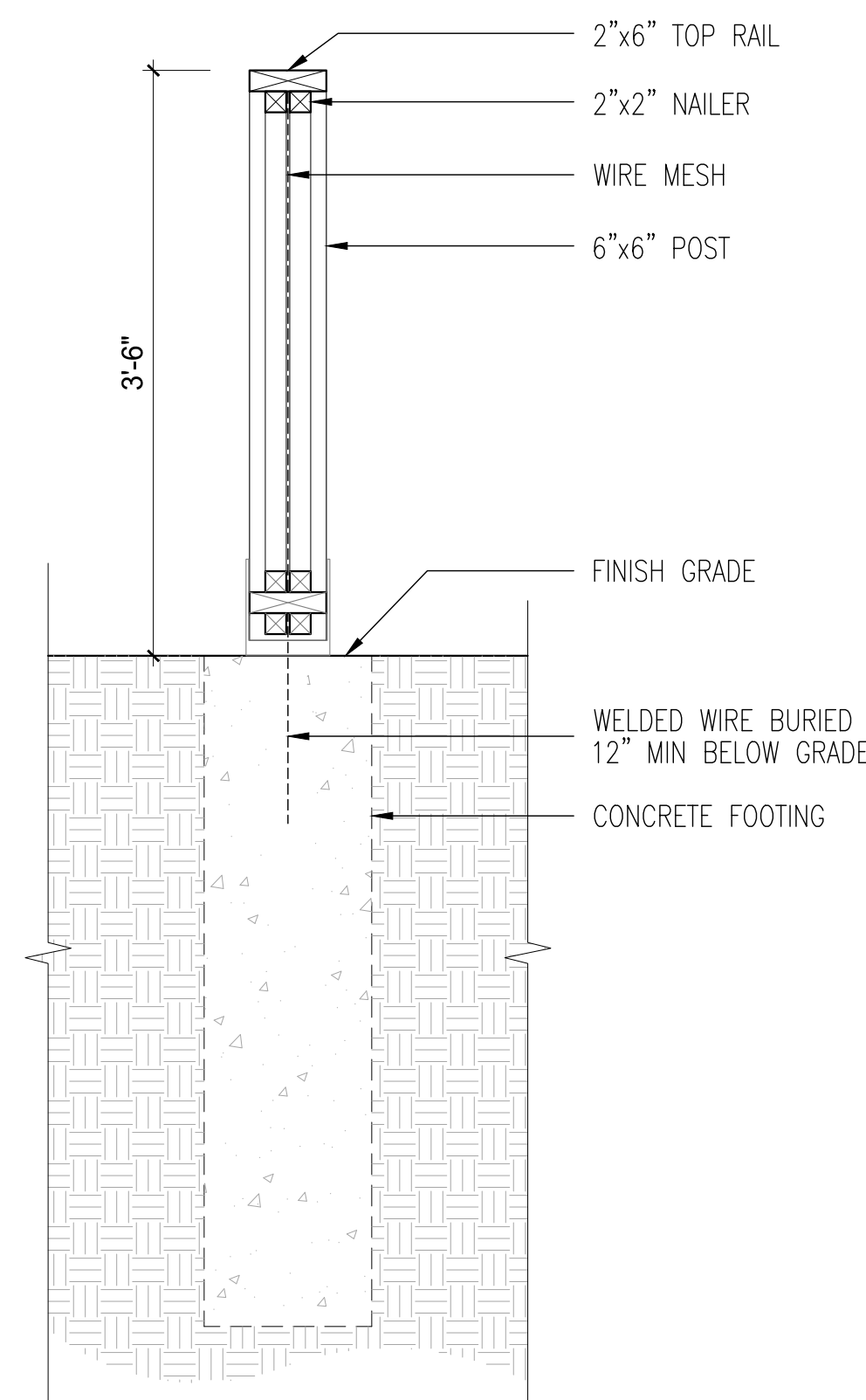
01 TRASH ENCLOSURE FENCE PANEL
SCALE: 3/4"=1'-0"



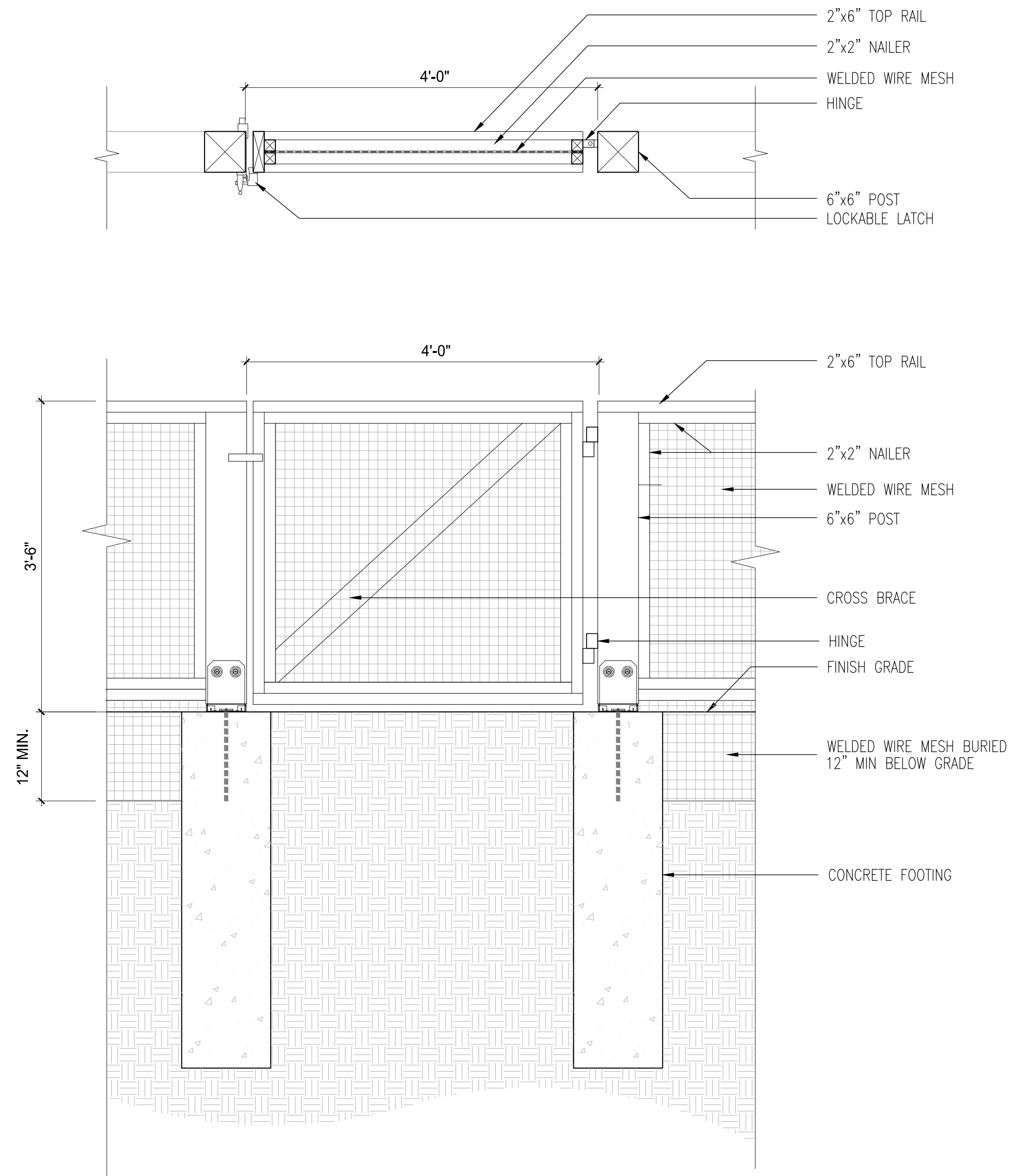
02 TRASH ENCLOSURE GATE
SCALE: 3/4"=1'-0"



03 COMMUNITY GARDEN FENCE - ELEVATION
SCALE: 1"=1'-0"



04 COMMUNITY GARDEN FENCE - SECTION
SCALE: 1"=1'-0"



05 COMMUNITY GARDEN GATE - ELEVATION AND PLAN
SCALE: 1"=1'-0"

REVISIONS	

DRAWING TITLE

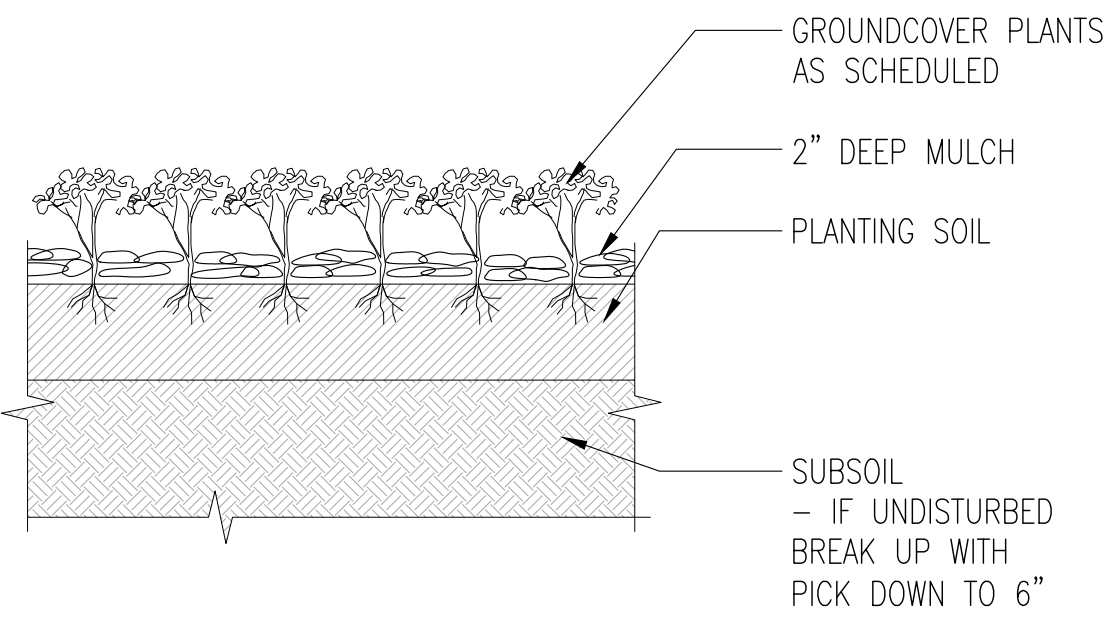
DETAILS

DRAWING INFORMATION

DRAWING NUMBER

L506

NOTE:
SEE PLANT SPACING DIAGRAM
FOR GROUNDCOVER SPACING

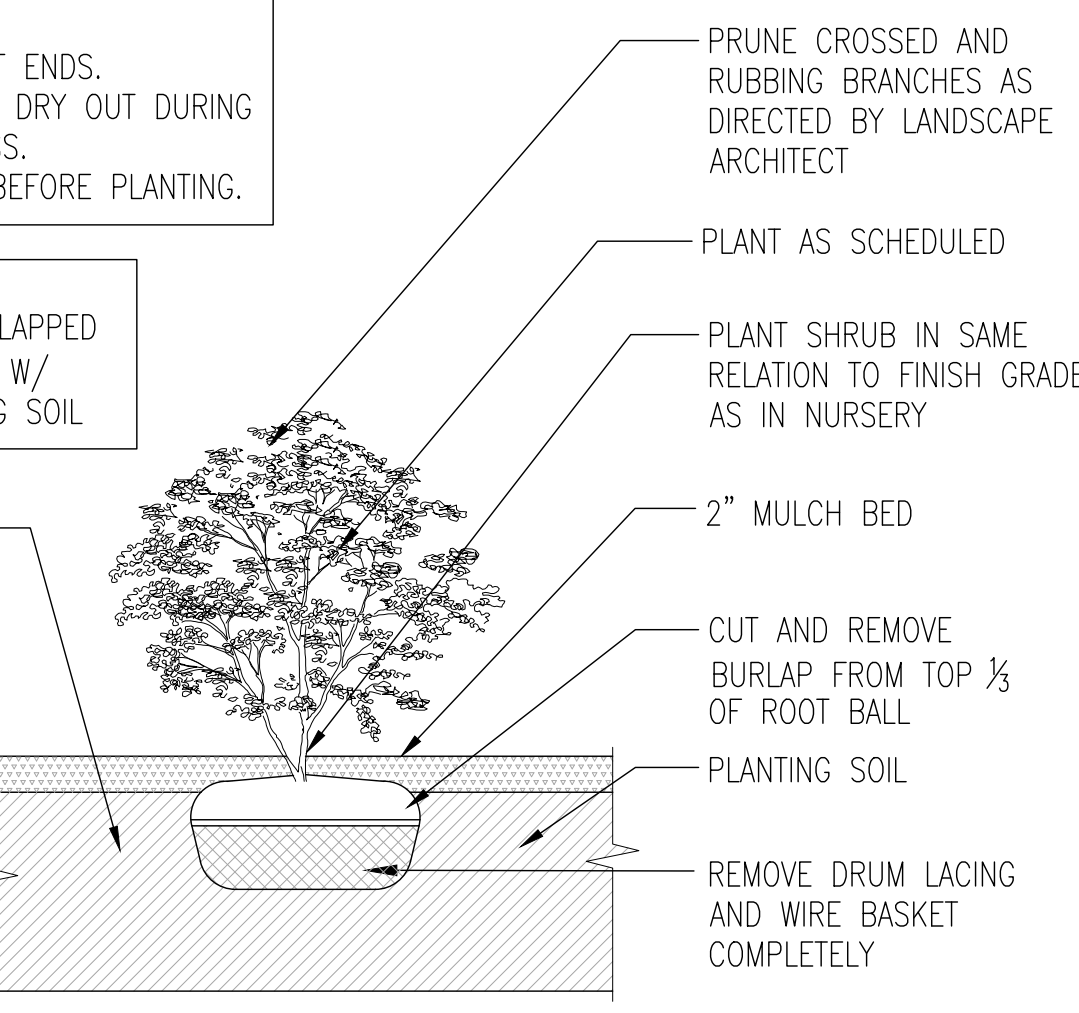


01 GROUNDCOVER PLANTING
SCALE: 1" = 1'-0"

NOTE:
CLEANLY PRUNE ALL ROOT ENDS.
DO NOT ALLOW ROOTS TO DRY OUT DURING
THE INSTALLATION PROCESS.
SOAK ROOTS OVERNIGHT BEFORE PLANTING.

NOTE:
INSTALL BALLED AND BURLAPPED
SHRUBS SIMULTANEOUSLY W/
INSTALLATION OF PLANTING SOIL

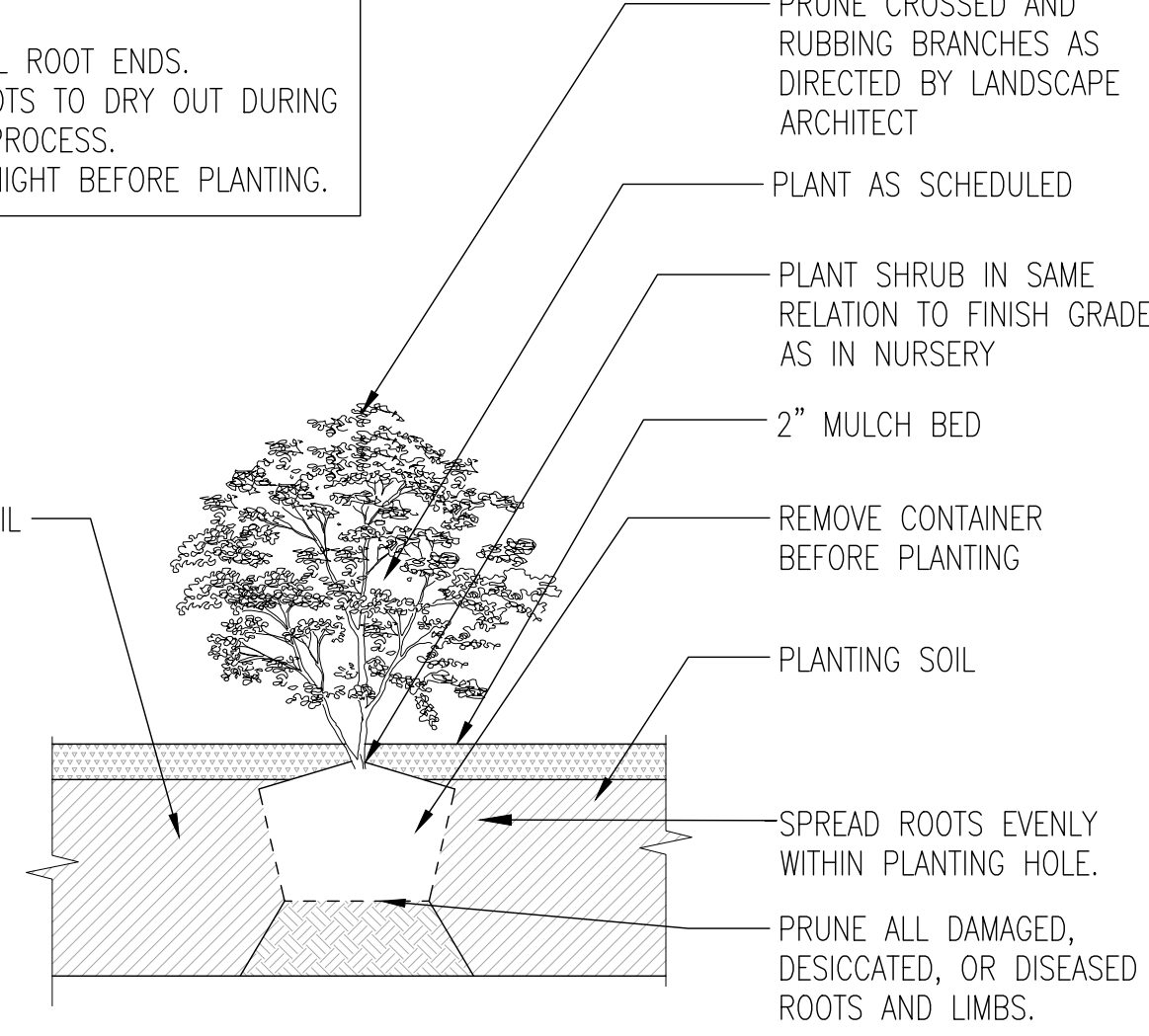
PLACE PLANTING SOIL
IN 6-8" LIFTS.
TAMP AND WATER
BETWEEN LIFTS.



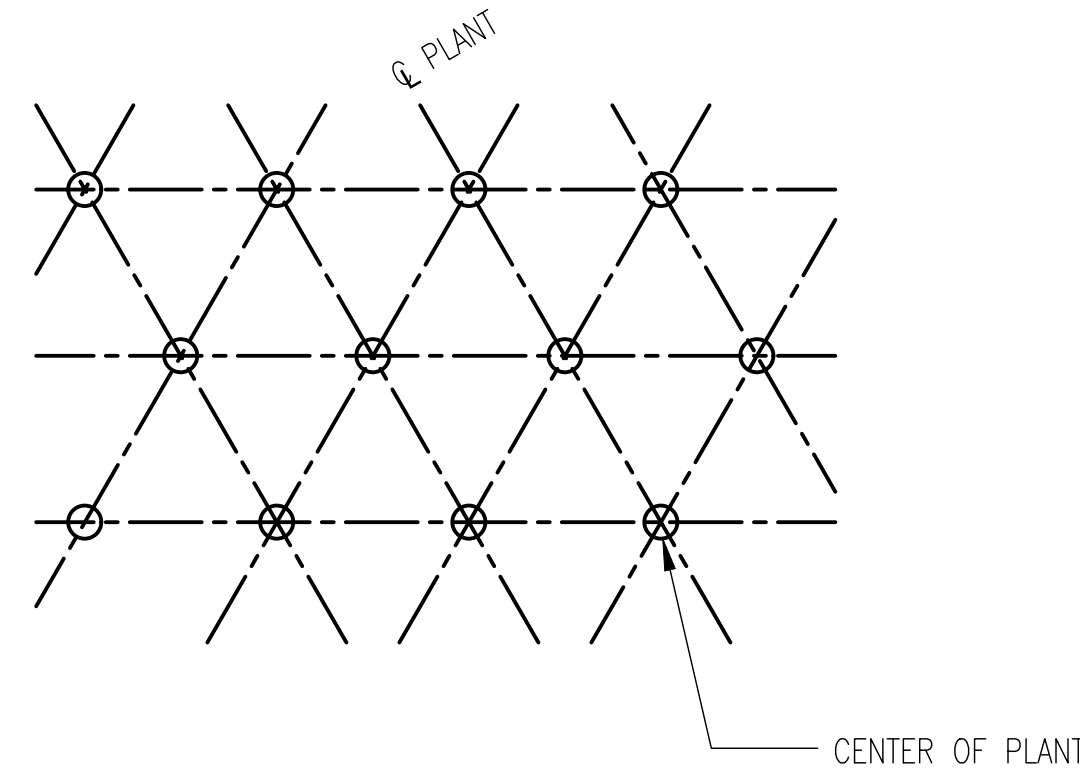
02 SHRUB PLANTING - B&B
SCALE: 3/4" = 1'-0"

NOTE:
CLEANLY PRUNE ALL ROOT ENDS.
DO NOT ALLOW ROOTS TO DRY OUT DURING
THE INSTALLATION PROCESS.
SOAK ROOTS OVERNIGHT BEFORE PLANTING.

PLACE PLANTING SOIL
IN 6-8" LIFTS.
TAMP AND WATER
BETWEEN LIFTS.

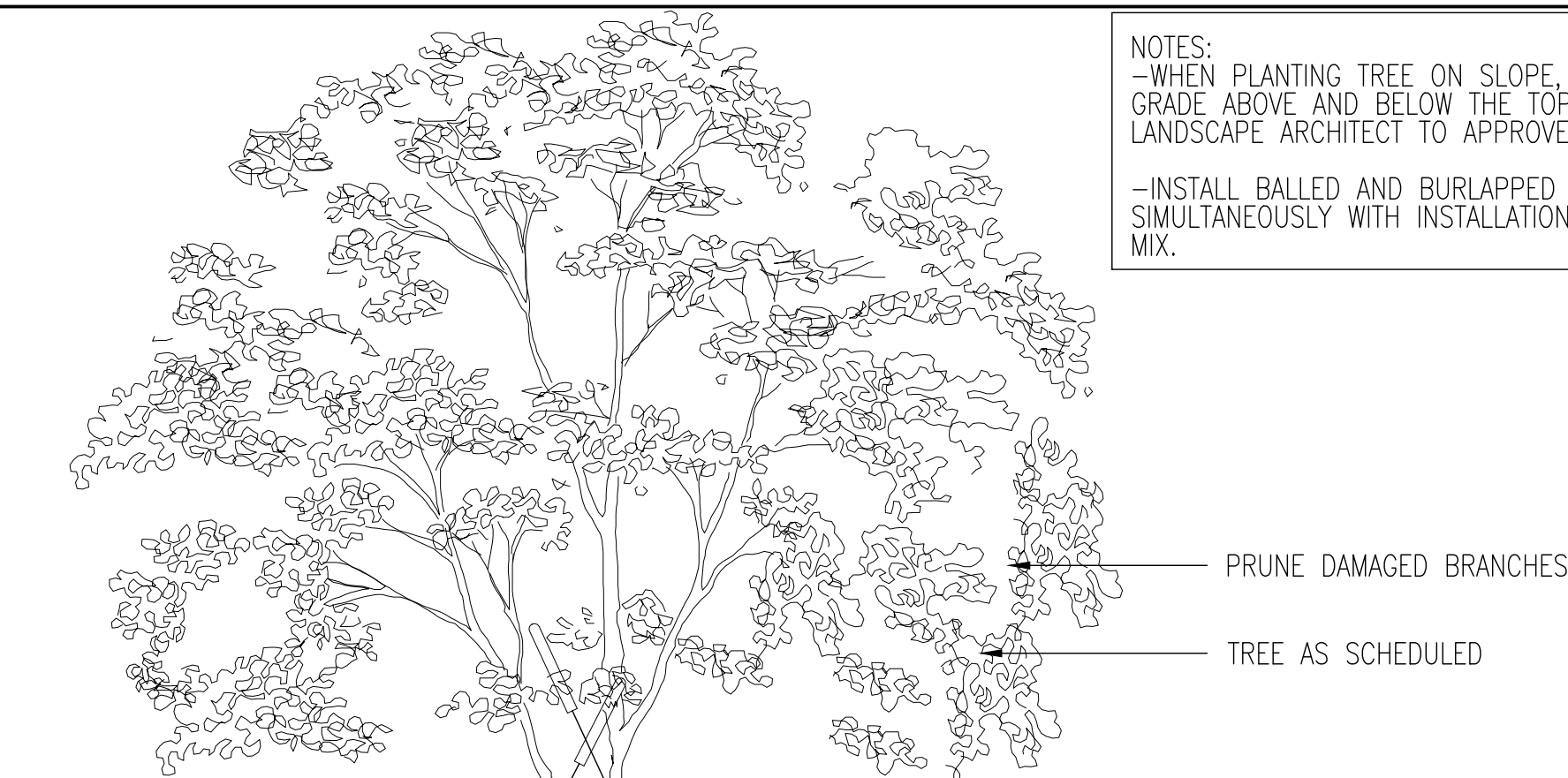


03 SHRUB/PERENNIAL - CONTAINER
SCALE: 3/4" = 1'-0"

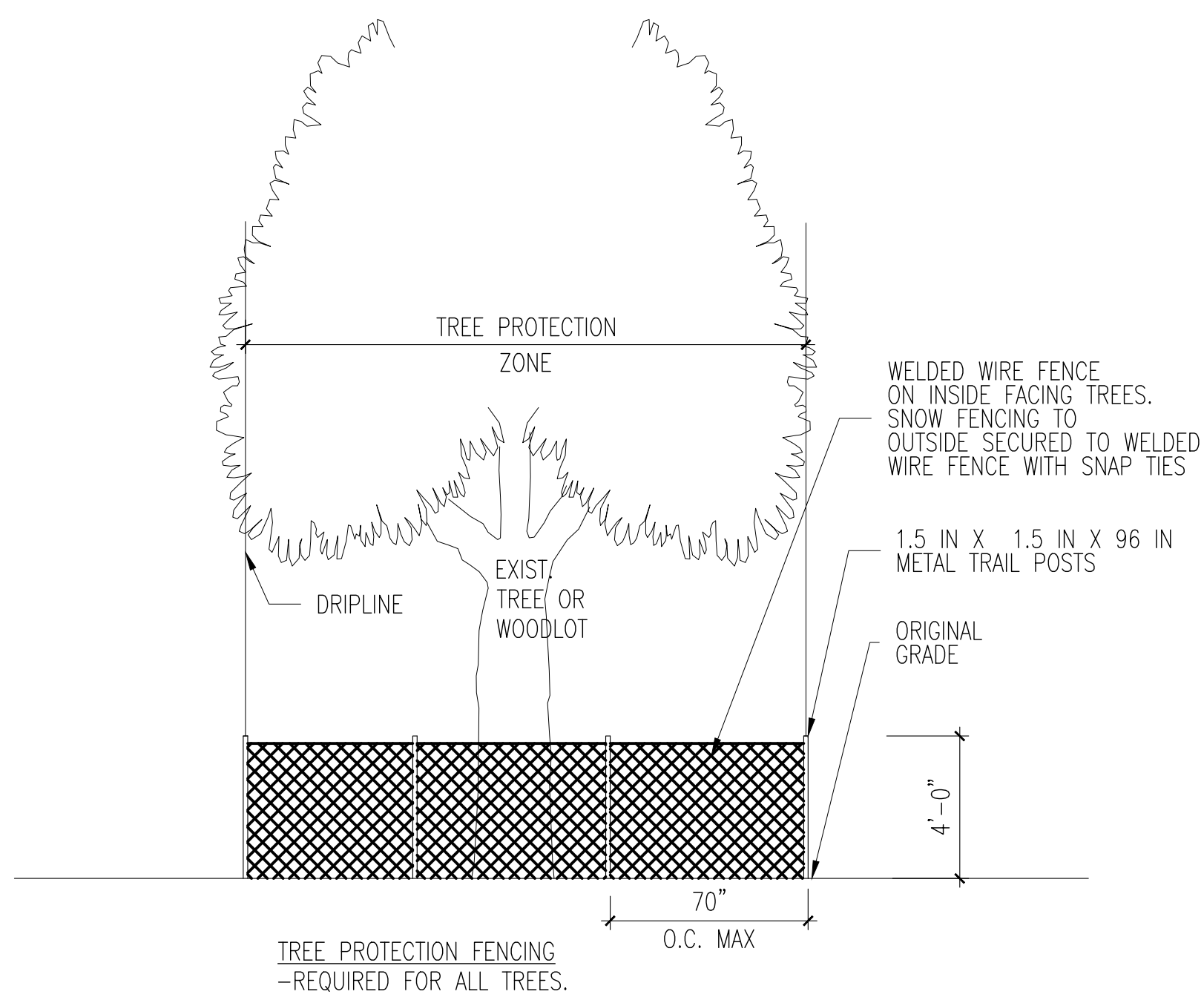


04 PLANT SPACING DIAGRAM - PLAN
SCALE: 1" = 1'-0"

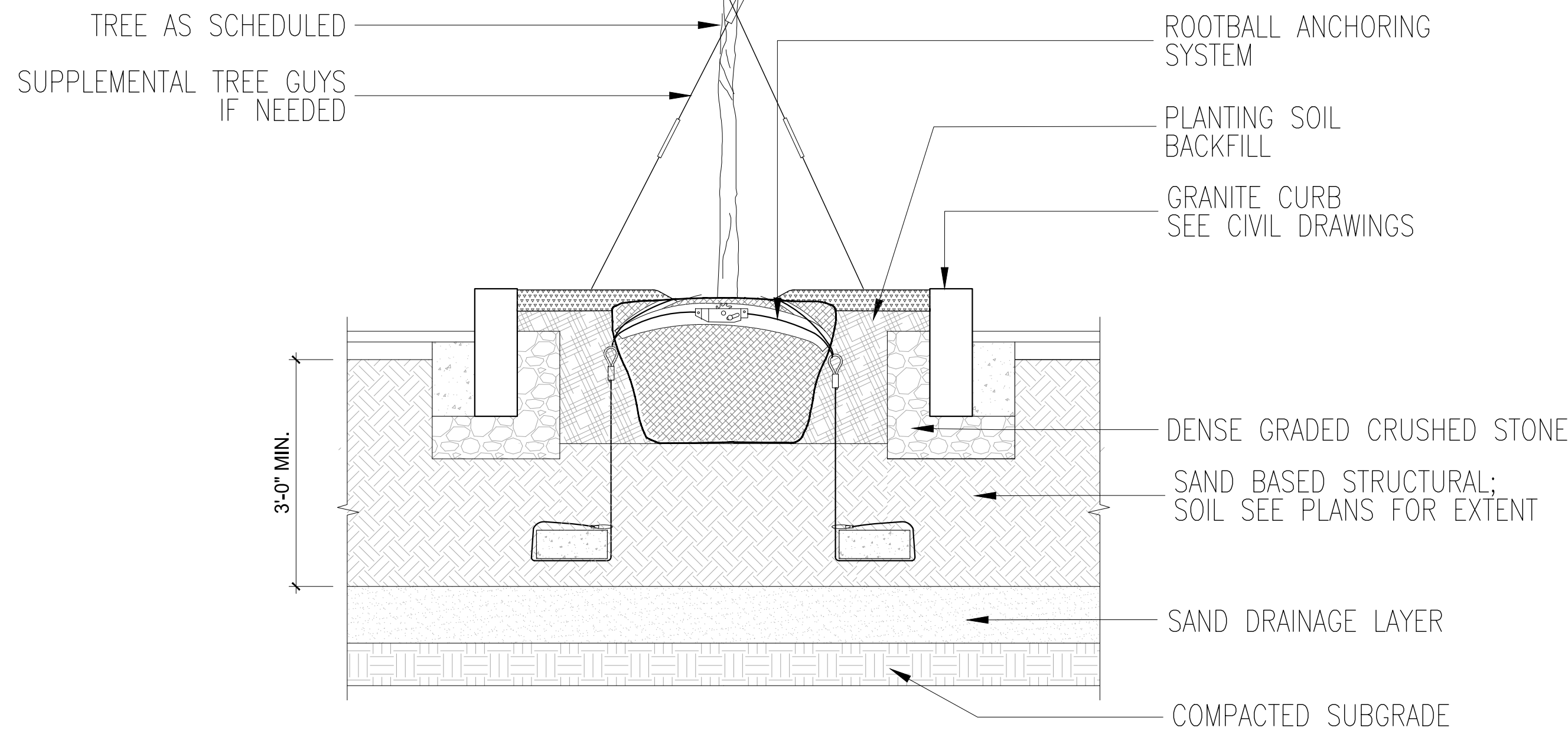
NOTES:
-WHEN PLANTING TREE ON SLOPE, AVERAGE THE
GRADE ABOVE AND BELOW THE TOP OF THE ROOTBALL.
LANDSCAPE ARCHITECT TO APPROVE
-INSTALL BALLED AND BURLAPPED TREES
SIMULTANEOUSLY WITH INSTALLATION OF PLANT SOIL
MIX.



05 TREE PLANTING IN OPEN BED
SCALE: 3/4" = 1'-0"



06 TREE PROTECTION
SCALE: 1/4" = 1'-0"



07 TREE PLANTING IN STRUCTURAL SOIL
SCALE: 3/4" = 1'-0"

REVISIONS	

DRAWING TITLE

DETAILS

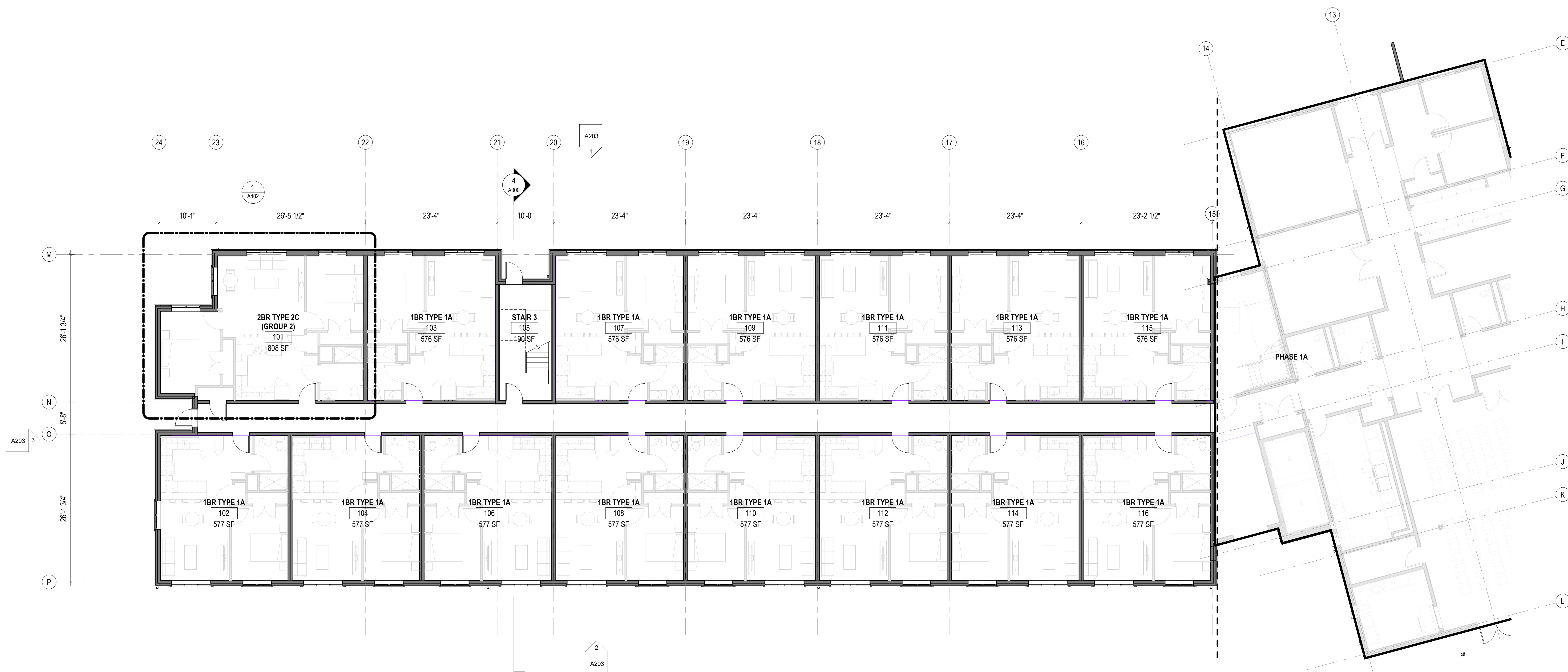
DRAWING INFORMATION	

3 Phase 1 - Roof Plan
1/16" = 1'-0"

2 Phase 1 - Typical Floor Plan - Floors 1-4
1/16" = 1'-0"

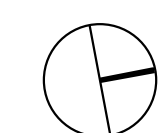
1 Phase 1 - First Floor Plan





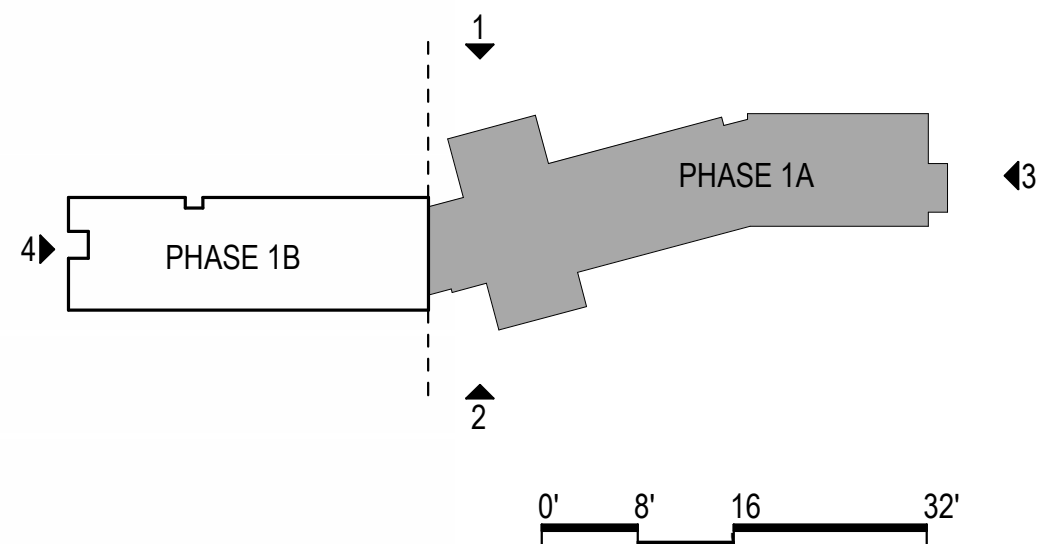
1 Phase 1B - First Floor Plan
1/8" = 1'-0"







EXTERIOR WALL ASSEMBLY TYPES - SEE A011	
EW1-1	THIN MASONRY VENEER SYSTEM AS WALL BASE WITH TYPICAL WOOD FRAME WALL ASSEMBLY
EW2-1	HIGH DENSITY FIBER CEMENT PANEL RAINSCREEN WITH TYPICAL WOOD FRAME WALL ASSEMBLY
EW3-1	THIN MASONRY VENEER SYSTEM AS WALL BASE WITH TYPICAL WOOD FRAME WALL ASSEMBLY
EW4-1	HIGH DENSITY FIBER CEMENT PANEL RAINSCREEN WITH CMU WALL ASSEMBLY







1 Phase 1B - West Elevation
1/8" = 1'-0"

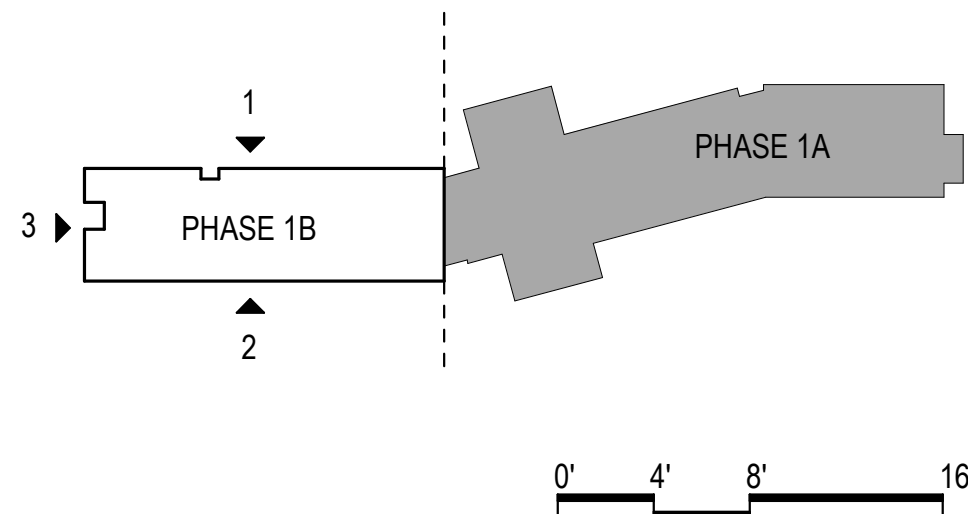


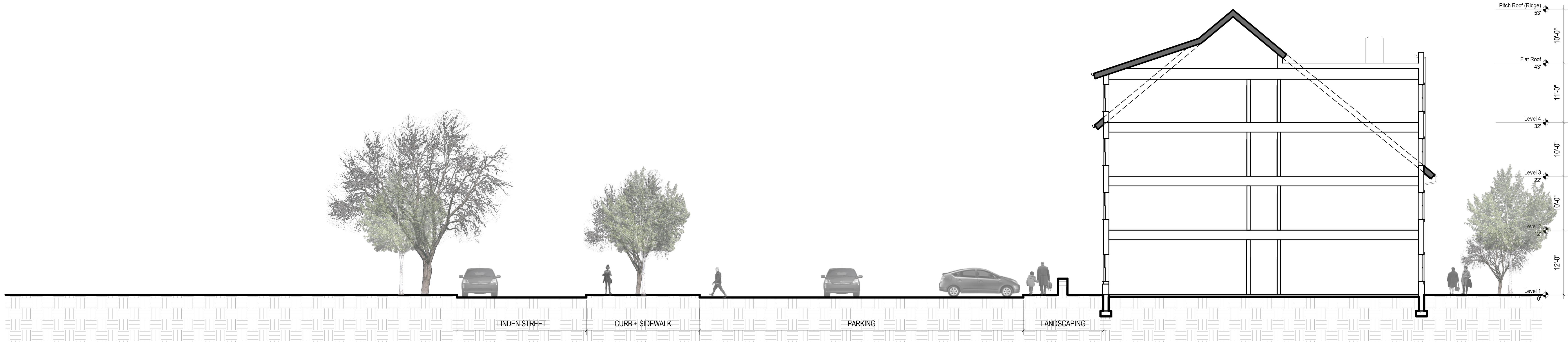
3 Phase 1B - South Elevation
1/8" = 1'-0"



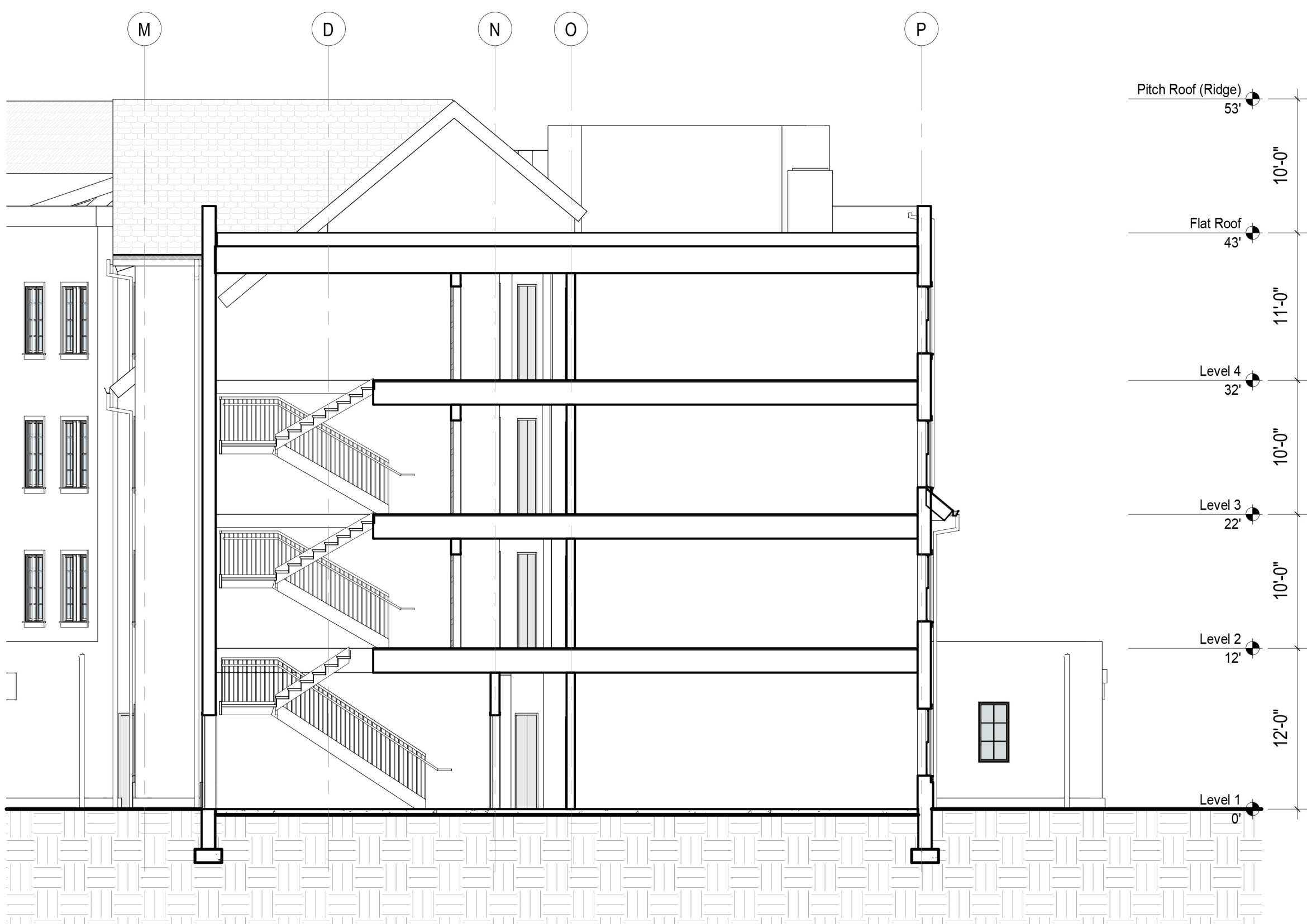
2 Phase 1B - East Elevation
1/8" = 1'-0"

EXTERIOR WALL ASSEMBLY TYPES - SEE A011	
EW1-1	THIN MASONRY VENEER SYSTEM AS WALL BASE WITH TYPICAL WOOD FRAME WALL ASSEMBLY
EW2-1	HIGH DENSITY FIBER CEMENT PANEL RAINSCREEN WITH TYPICAL WOOD FRAME WALL ASSEMBLY
EW3-1	THIN MASONRY VENEER SYSTEM AS WALL BASE WITH TYPICAL WOOD FRAME WALL ASSEMBLY
EW4-1	HIGH DENSITY FIBER CEMENT PANEL RAINSCREEN WITH CMU WALL ASSEMBLY

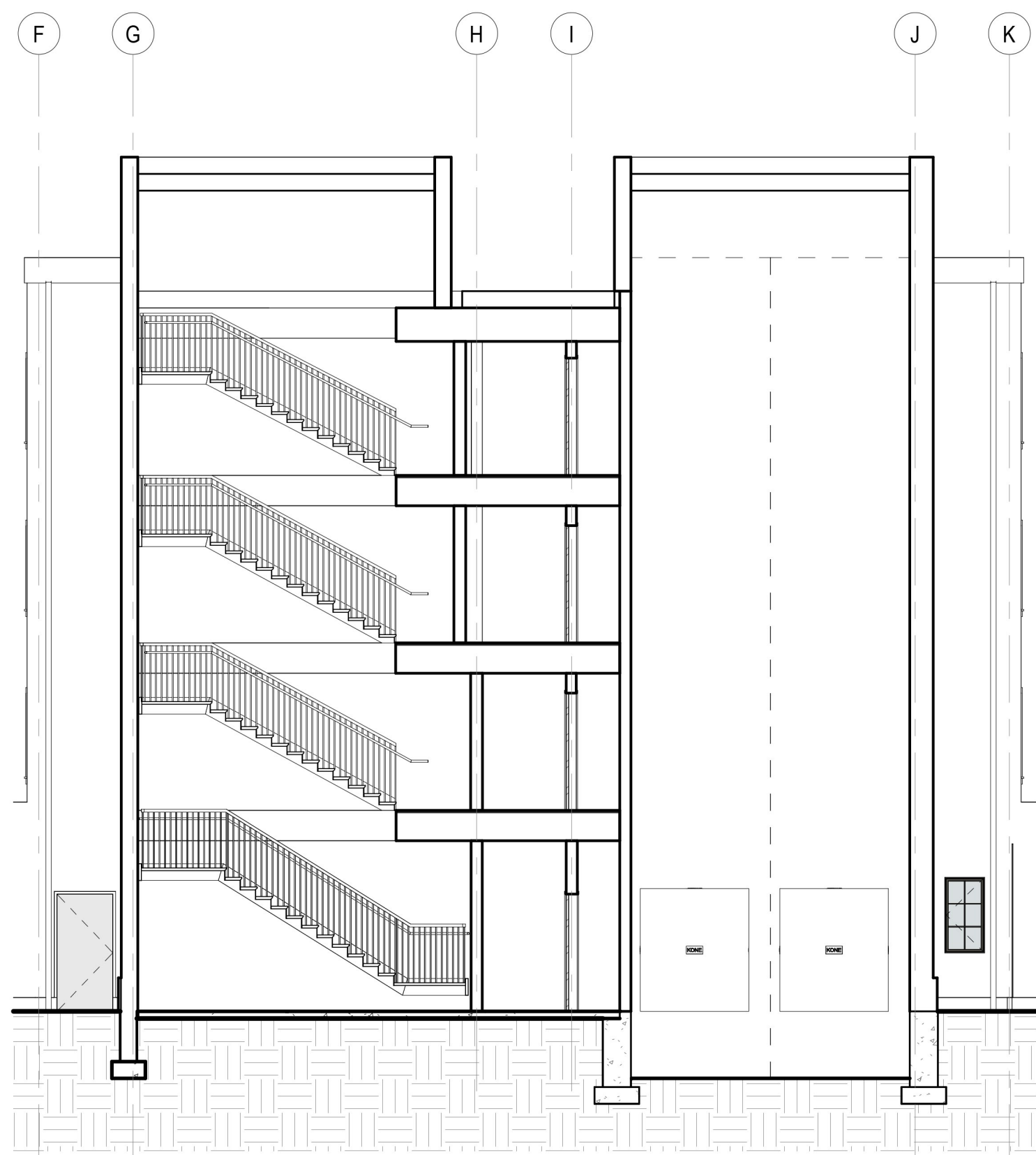




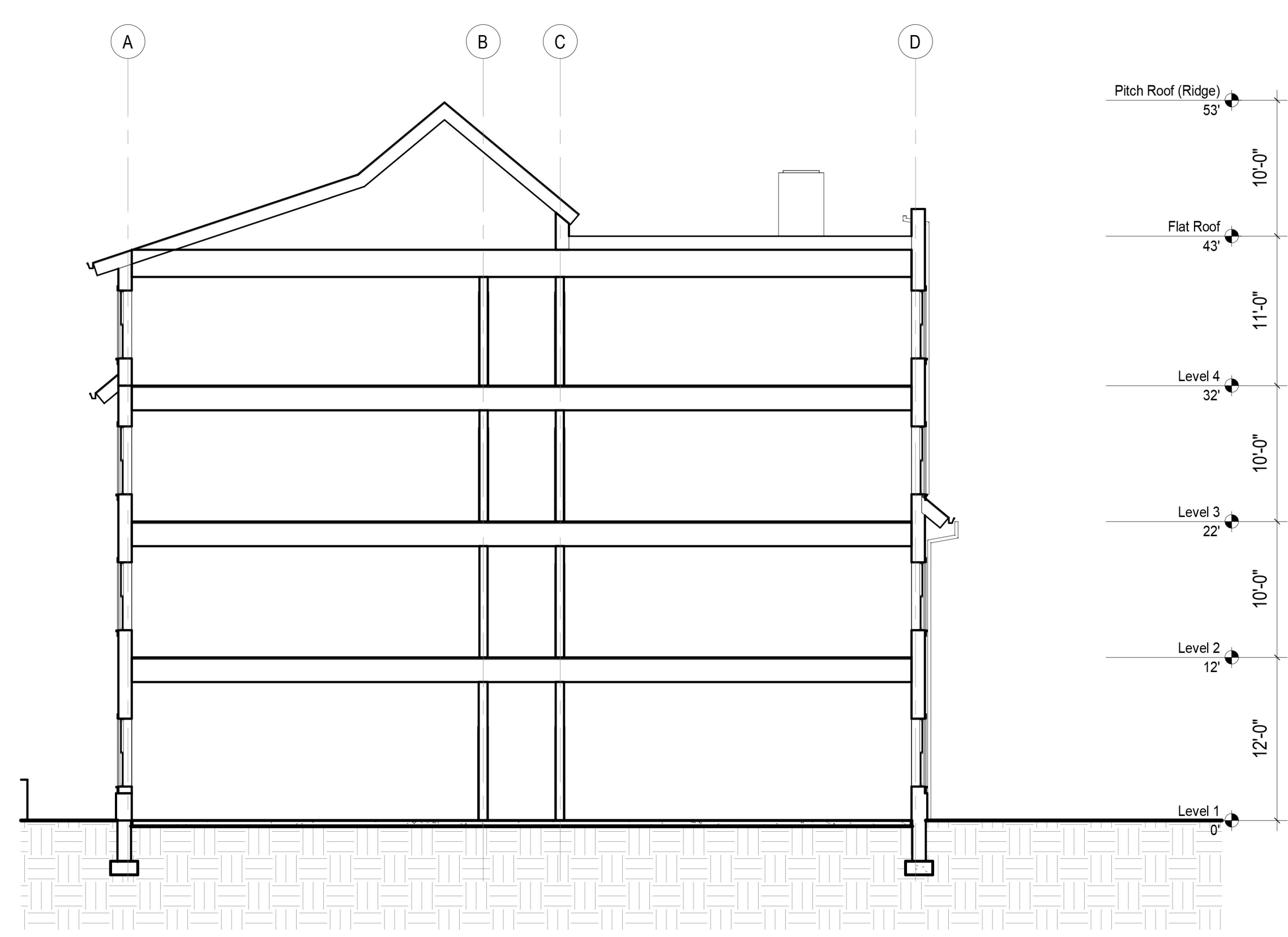
5 Site Section - Phase 1A
1/8" = 1'-0"



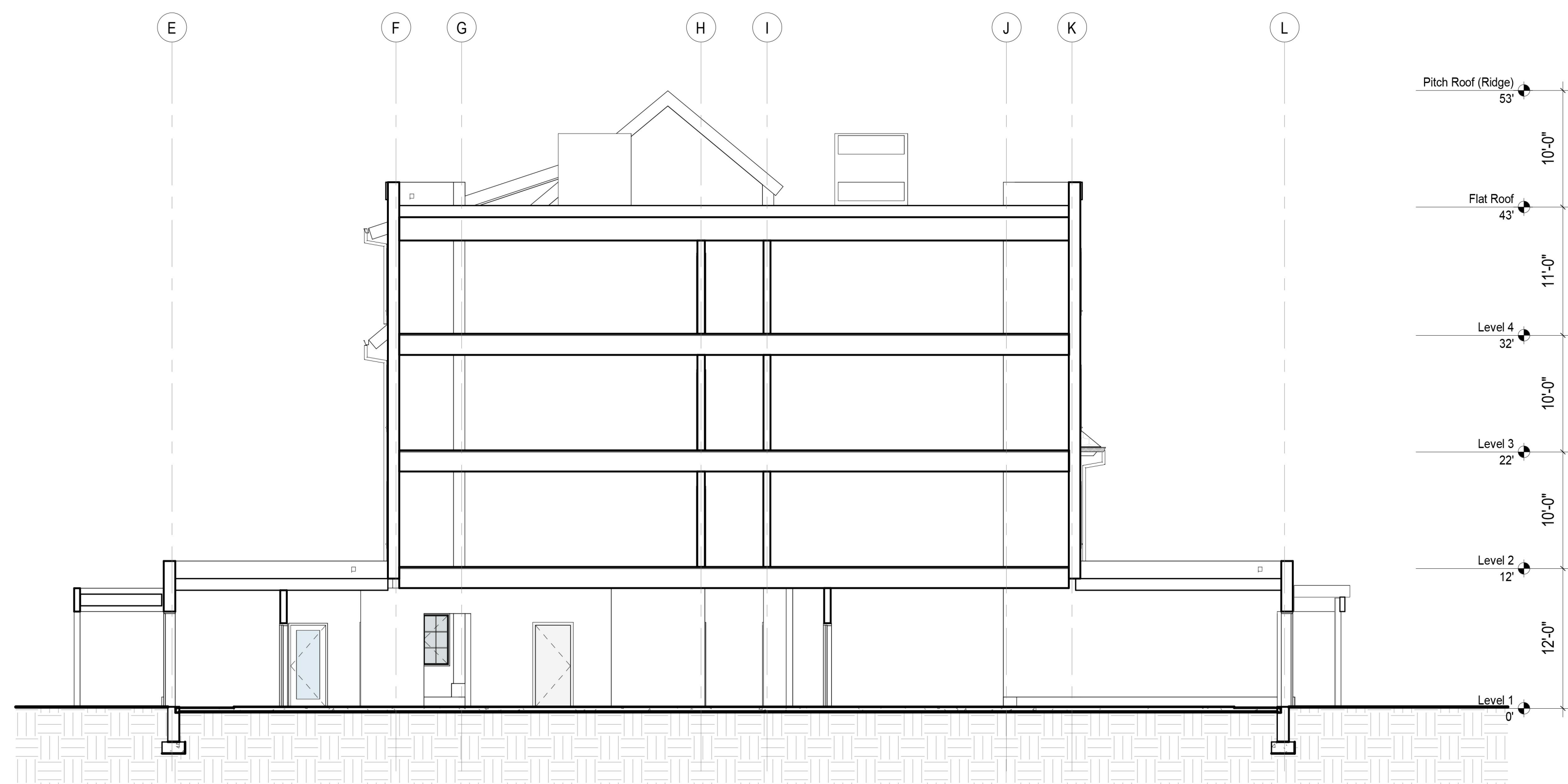
4 Building Section - Phase 1B @ Stair2
1/8" = 1'-0"



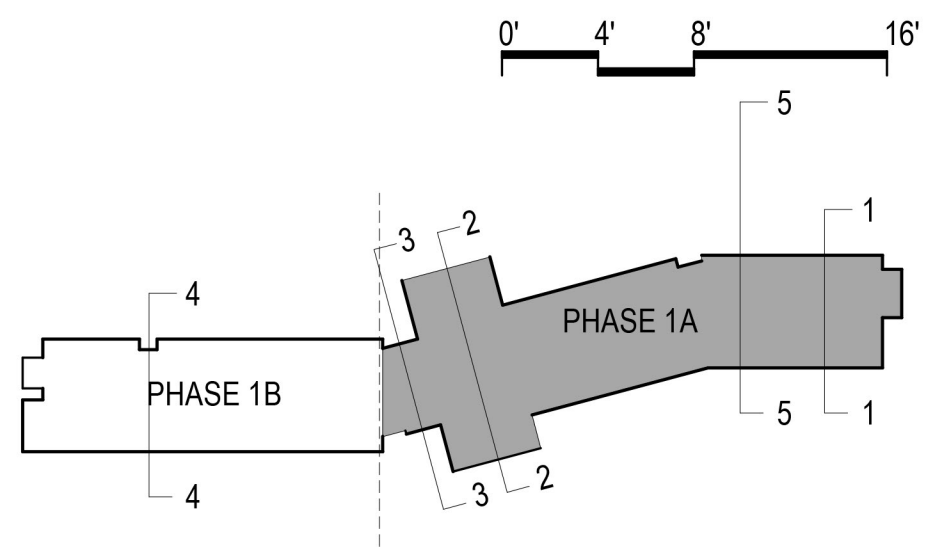
3 Building Section - Phase 1A @ Elevator
1/8" = 1'-0"



1 Building Section - Phase 1A
1/8" = 1'-0"



2 Building Section - Phase 1A @ Core
1/8" = 1'-0"



REVISIONS	

DRAWING INFORMATION	
DATE OF ISSUE	08/23/2024
DESCRIPTION	Site Plan Review
SCALE	As indicated
PROJECT #	3489.00
DRAWN BY	CF
CHECKED BY	me/hd
FILE NAME	

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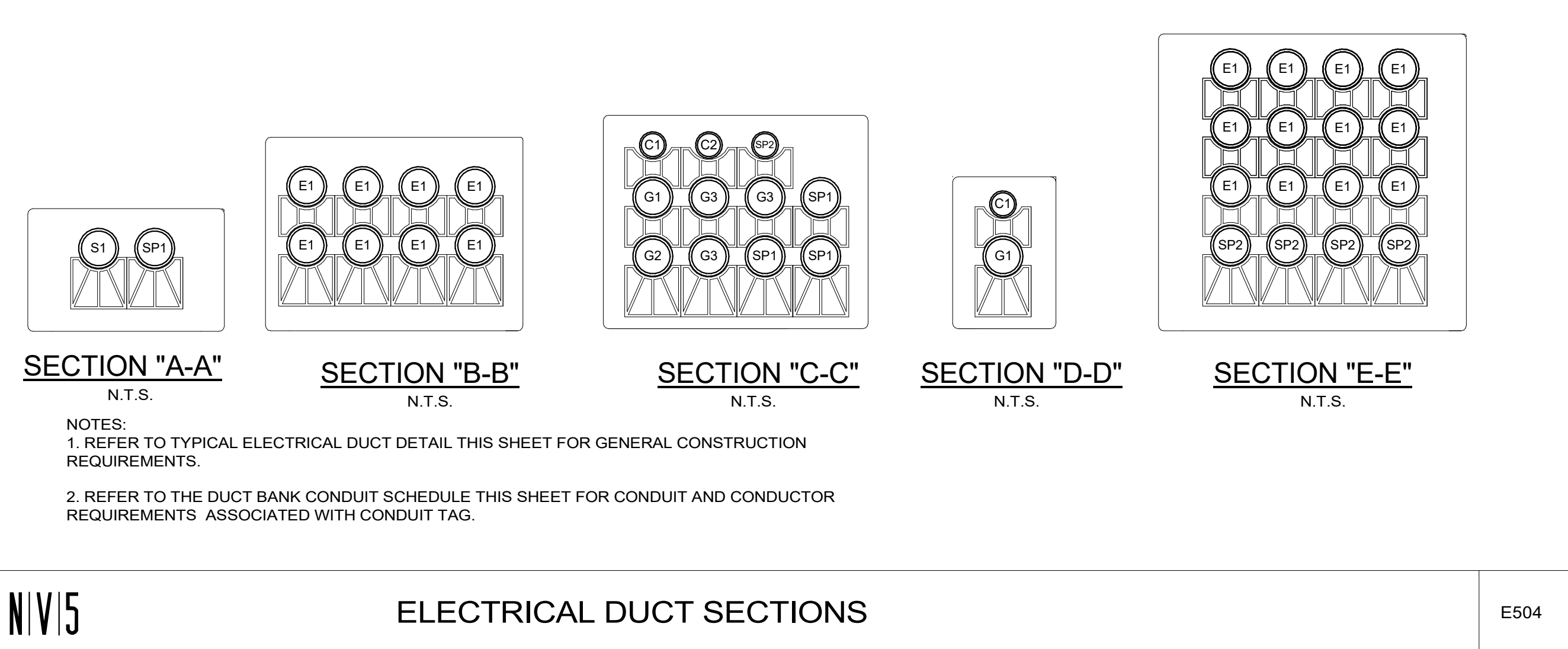
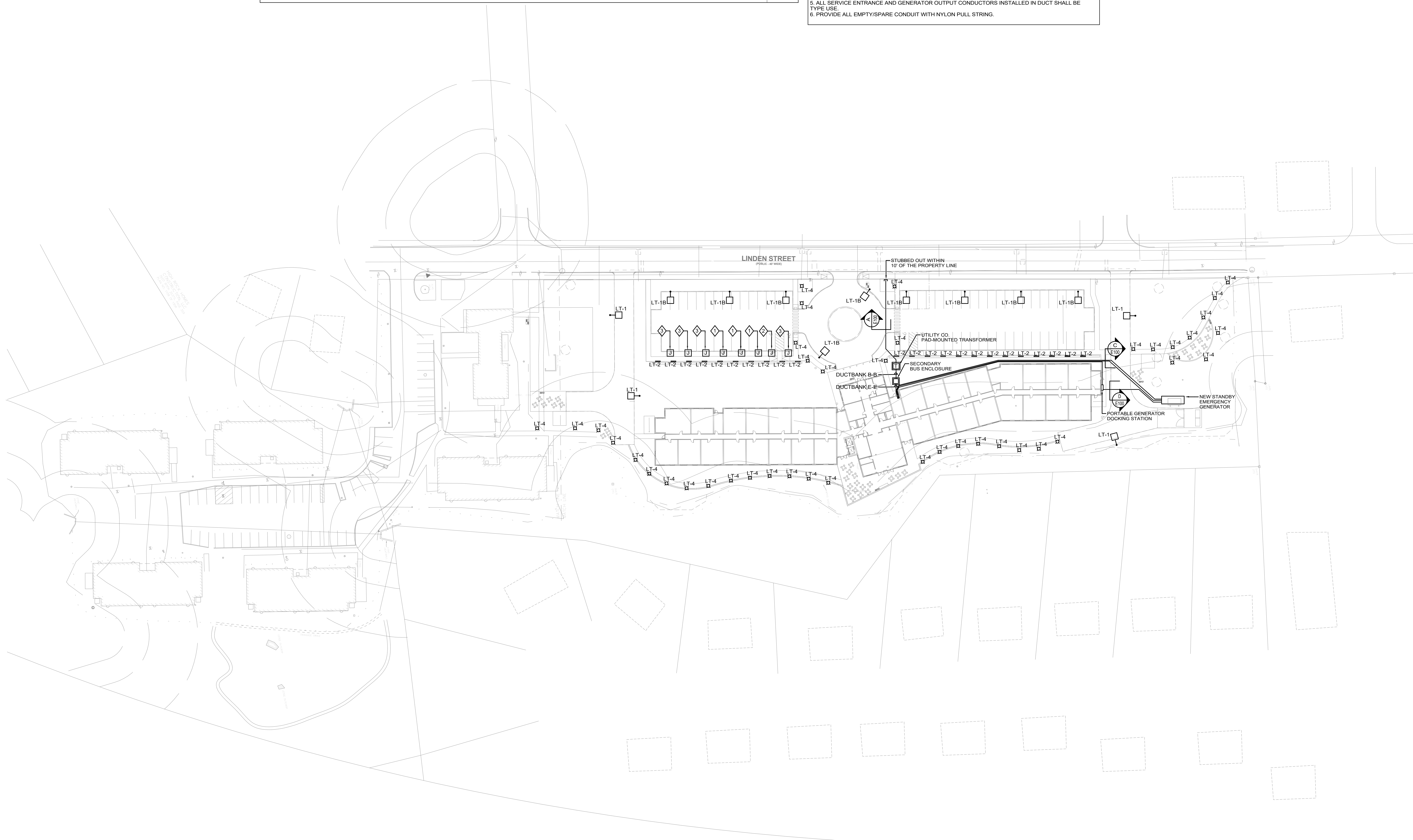
SECURITY LEGEND	
SYMBOL	DESCRIPTION
	DOOR RELEASE BUTTON
	DOOR CONTACT
	CARD READER
	REQUEST TO EXIT MOTION DETECTOR
	ELECTRIC DOOR STRIKE
	SECURITY CAMERA
	KEY PAD
	MOTION DETECTOR, WALL MOUNTED "C" INDICATES CIRCULAR BEAM "L" INDICATES LINEAR BEAM
	MOTION DETECTOR, CEILING MOUNTED
	SECURITY CONTROL PANEL
TELECOMMUNICATIONS LEGEND	
SYMBOL	DESCRIPTION
	FLOOR TELECOM OUTLET
	WALL TELECOM OUTLET
	CEILING TELECOM OUTLET
	SPEAKER, CEILING MOUNTED "LS" INDICATES LOCAL SOUND SYSTEM "VC" INDICATES INTEGRAL VOLUME CONTROL KNOB
	PUSHBUTTON
	TV OUTLET, WALL MOUNTED
	TV OUTLET, CEILING MOUNTED DATA/VIDEO PROJECTOR OUTLET W/ CONDUIT TO TV OUTLET
SITE LEGEND	
SYMBOL	DESCRIPTION
	UNDERGROUND SECTION. REFER TO SECTION DETAIL "A" INDICATES DETAIL LETTER "B" INDICATES DRAWING NUMBER
	ELECTRIC MANHOLE
	TELEPHONE MANHOLE / TELECOMMUNICATIONS
	ELECTRIC HAND HOLE
	TELEPHONE HAND HOLE / TELECOMMUNICATIONS
	GROUND CABLE
	UNDERGROUND ELECTRIC
	UNDERGROUND TELEPHONE / TELECOMMUNICATIONS
	UNDERGROUND FIRE ALARM
	OVERHEAD ELECTRIC
	OVERHEAD TELEPHONE / TELECOMMUNICATIONS
	OVERHEAD FIRE ALARM
FIRE ALARM LEGEND	
SYMBOL	DESCRIPTION
	FIRE ALARM CONTROL PANEL
	DEDICATED MONITORING PANEL
	FIRE ALARM MASTER BOX
	REMOTE ALARM ANNUNCIATOR

ELECTRICAL ABBREVIATIONS			
#	NUMBER	LOC	LOCATION
+18"	MOUNTING HEIGHTS ARE TO CENTERLINE OF DEVICE ABOVE FINISH FLOOR OR FINISH GRADE	LOR	LOOK OUT RELAY
		LTG	LIGHTING
		LV	LOW VOLTAGE
A, AMP	AMPERES	(M)	EXISTING EQUIPMENT TO BE REWORKED/MODIFIED
AC	AIR CONDITIONING	M, MTR	MOTOR
AC	ALTERNATING CURRENT	MS	MOTOR/GENERATOR SET
ADA	AMERICAN WITH DISABILITIES ACT	MAN	MANUAL
AF	AMPERE FRAME	MAX	MAXIMUM
AFCI	ARC FAULT CIRCUIT INTERRUPTER	MCA	MINIMUM CIRCUIT AMPS
AFF	ABOVE FINISHED FLOOR	MCB	MAIN CIRCUIT BREAKER
AFG	ABOVE FINISHED GRADE	MCC	MOTOR CONTROL CENTER
AHJ	AUTHORITY HAVING JURISDICTION	MCP	MOTOR CONTROL PANEL
AHU	AIR HANDLING UNIT	MEC	MASSACHUSETTS ELECTRICAL CODE
AIC	AMPERE INTERRUPTING CAPACITY	MECH	MECHANICAL
AL	ALUMINUM	MANUFACTURER	
APPROX	APPROXIMATE	MH	MAINTENANCE HATCH
ARCH	ARCHITECT	MIN	MINIMUM
ATS	AUTOMATIC TRANSFER SWITCH	MISC	MISCELLANEOUS
AUTO	AUTOMATIC	MLO	MAIN LUGS ONLY
AVG	AVERAGE	MOCOP	MAXIMUM OVER CURRENT PROTECTION
AWG	AMERICAN WIRE GAUGE	MSB	MAIN SWITCHBOARD
		MTD	MOUNTED
		MTG	MOUNTING
		MTS	MANUAL TRANSFER SWITCH
B	BURIED		
BKR	BREAKER		
BLDG	BUILDING		
C	CONDUIT	(N)	NEW LOCATION OF EXISTING WORK
CA	CABLE	NA	NOT APPLICABLE
CAB	CABINET	NC	NORMALLY CLOSED
CAT	CATALOG	NEC	NATIONAL ELECTRICAL CODE
CATV	CABLE TELEVISION	NEMA	NATIONAL ELECTRICAL MANUFACTURERS ASSOCIATION
CB	CIRCUIT BREAKER	NF	NON-FUSED
CCTV	CLOSED CIRCUIT TELEVISION	NFPA	NATIONAL FIRE PROTECTION ASSOCIATION
CEC	CALIFORNIA ELECTRICAL CODE	NIC	NOT IN CONTRACT
CKT	CIRCUIT	NO	NORMALLY OPEN
CL	CENTERLINE	NORM	NORMAL
CLF	CURRENT LIMITING FUSE	NRTL	NATIONALLY RECOGNIZED TESTING LABORATORY
CLG	CEILING	NTS	NOT TO SCALE
COL	COLUMN	NVE	NEVADA ENERGY
COMB	COMBINATION		
CONN	CONNECTION	OC	ON CENTER
CONST	CONSTRUCTION	OFCI	OWNER FURNISHED CONTRACTOR INSTALLED
CONTR	CONTRACTOR	OH	OVERHEAD
CPU	CENTRAL PROCESSING UNIT	OPD	OVER CURRENT PROTECTION DEVICE
CS	CONTROL SWITCH	OSHPD	OFFICE OF STATEWIDE HEALTH PLANNING AND DEVELOPMENT
CTL	CONTROL		
CU	COPPER	P	POLE
		PB	PUSH BUTTON
(D)	DEMO	PDU	POWER DISTRIBUTION UNIT
dB	DECIBEL	PF	POWER FACTOR
DB	DISTRIBUTION BOARD	PH(a)	PHASE
DC	DIRECT CURRENT	PL	PILOT LIGHT
DET	DETAIL	PNL	PANEL
DIA	DIAMETER	POC	POINT OF CONNECTION
DISC	DISCONNECT	POD	POINT OF DISCONNECTION
DIST	DISTRIBUTION	POS	PROVIDED UNDER OTHER SECTIONS
DN	DOWN	PP	POWER POLE
DWG	DRAWING	PTZ	PAN, TILT, ZOOM
		PVC	POLYVINYL CHLORIDE
(E), EXIST	EXISTING	PWR	POWER
EA	EACH		
EC	ELECTRICAL CONTRACTOR		
EHU	ELECTRIC HEATING UNIT	(R)	EXISTING WORK TO BE RELOCATED
EL	ELEVATION	RECEPT	RECEPTACLE
ELEC	ELECTRICAL	REFRIG	REFRIGERATOR
ELR	END OF LINE RESISTOR	REQD	REQUIRED
EMERG	EMERGENCY	RSS	RIGID GALVANIZED STEEL
EMT	ELECTRIC METALLIC TUBING	RM	ROOM
ENG	ENGINEER	RMS	ROOT MEAN SQUARE VALUE
EQUIP	EQUIPMENT	RND	ROUND
(ER)	EXISTING TO BE RELOCATED	RPM	REVOLUTIONS PER MINUTE
ETC	ELAPSED TIME CONTROLLER	SEC	SECOND
EW	ELECTRIC WATER HEATER	SN	SOLID NEUTRAL
		SNEC	SOUTHERN NEVADA ELECTRICAL CODE AMENDMENTS
F/A	FIRE ALARM	SPD	SURGE PROTECTIVE DEVICE
FAAP	FIRE ALARM ANNUNCIATOR PANEL	SPEC	SPECIFICATION
FACP	FIRE ALARM CONTROL PANEL	SQ	SQUARE
FIXT	FIXTURE	SQFT	SQUARE FEET
FL	FLOOR	SS	SAFETY SWITCH
FLA	FULL LOAD AMPS	SS	SAFETY SWITCH
FLMT	FLEXIBLE LIQUID TIGHT METALLIC TUBING	STR	STARTER
FLUOR	FLUORESCENT	STRUCT	STRUCTURAL
FR	FRAME	SW	SWITCH
FREQ	FREQUENCY	SWBD	SWITCHBOARD
FT	FOOT	SWCHGR	SWITCHGEAR
		SYM	SYMMETRICAL
G, GND	GROUND	T, XFMR	TRANSFORMER
GEC	GROUNDING ELECTRODE CONDUCTOR	TB	TERMINAL BLOCK
GEN	GENERATOR	TEL	TELEPHONE
GFI, GFCI	GROUND FAULT CIRCUIT INTERRUPTER	TERM	TERMINAL
GFP	GROUND FAULT PROTECTION	TS	TEMPERATURE SWITCH
		TT	TEMPERED SHELDED-PAIR
HH	HANDHOLE	TV	TELEVISION
HID	HIGH INTENSITY DISCHARGE	TVSS	TRANSIENT VOLTAGE SURGE SUPPRESSER
HOA	HAND OFF AUTOMATIC	TYP	TYPICAL
HORZ	HORIZONTAL		
HP	HORSEPOWER	UF	UNDERFLOOR DUCT
HTR	HEATER	UG	UNDERGROUND
HV	HIGH VOLTAGE	UH	UNIT HEATER
HVAC	HEATING, VENTILATING, AND AIR CONDITIONING	UL	UNDERWRITERS LABORATORIES
HZ	HERTZ	UNO	UNLESS NOTED OTHERWISE
		UPS	UNINTERRUPTIBLE POWER SUPPLY
IBC	INTERNATIONAL BUILDING CODE	UTP	UNSHIELDED TWISTED-PAIR
IG	ISOLATED GROUND	V	VOLT
IMC	INTERMEDIATE METALLIC CONDUIT	VA	VOLT AMPERE
INCAND	INCANDESCENT	VA	VOLT-AMP
		VAV	VARIABLE AIR VOLUME
JB	JUNCTION BOX	VD	VOLTAGE DROP
JCT	JUNCTION	VENT	VENTILATION
		VERT	VERTICAL
KMIL	THOUSAND CIRCULAR MILS	VFD	VARIABLE FREQUENCY DRIVE
KO	KNOCK OUT	VSD	VARIABLE SPEED DRIVE
KV	KILOVOLT	W	WATT
KVA	KILOVOLT AMPERES	WP	WEATHER-PROOF (NEMA 3R)
KW	KILOWATT	XP	EXPLOSION PROOF
KWH	KILOWATT HOURS		

ELECTRICAL GENERAL NOTES	
1.	DO NOT SCALE DRAWINGS. VERIFY DIMENSIONS IN FIELD PRIOR TO COMMENCEMENT OF WORK.
2.	ALL RECEPTACLES TO BE MOUNTED AT +18" UNLESS OTHERWISE NOTED. RECEPTACLE HEIGHTS SHALL COMPLY WITH ANSI 117.1 REQUIREMENTS
3.	REFER TO ARCHITECTURAL DEMOLITION DRAWINGS FOR LOCATION AND EXTENT OF DEMOLITION REQUIRED. CONTRACTOR SHALL VISIT SITE PRIOR TO BID TO DETERMINE EXTENT OF WORK INVOLVED. PROVIDE LABOR AND MATERIALS AS REQUIRED TO MAINTAIN AND/OR RESTORE CONTINUITY OF SERVICE TO EXISTING CIRCUITS.
4.	CONTRACTOR SHALL PROVIDE ALL NECESSARY DEMOLITION TO REMOVE EXISTING UNUSED CONDUIT, WIRE, CABLE, JUNCTION BOXES, RECEPTACLES, SWITCHES, LIGHTS, ETC COMPLETE WITH ASSOCIATED CIRCUITING TO SOURCE.
5.	SYSTEM OUTAGES SHALL BE PERMITTED ONLY AT TIMES APPROVED BY OWNER. IN WRITING. WORK WHICH COULD RESULT IN AN ACCIDENTAL OUTAGE (BEYOND BRANCH CIRCUITS) SHALL BE PERFORMED WITH THE OWNERS MAINTENANCE PERSONNEL ADVISED OF SUCH WORK.
6.	PRIOR TO COMMENCEMENT OF ROUGH-IN WORK, COORDINATE WITH ARCHITECT, DRAWING NOTES, ELEVATIONS, SECTIONS, SPECIFICATIONS, FURNITURE, FIXTURES, AND EQUIPMENT FOR ALL RECEPTACLE AND COMMUNICATION DEVICE MOUNTING HEIGHT AND MOUNTING LOCATION.
7.	ALL 120V, SINGLE PHASE, 15 AND 20 AMP RECEPTACLE OUTLETS THAT ARE USED AS TEMPORARY POWER DURING CONSTRUCTION SHALL HAVE GFCI PROTECTION.
8.	ALL PENETRATIONS, SLEEVES, OPENINGS, ETC. THROUGH SMOKE OR FIRE RATED WALLS, CEILINGS, OR FLOORS SHALL BE PROPERLY CAULKED WITH AN APPROVED FIRE CAULKING MATERIAL, APPROVED BY ENGINEER, UNLESS NOTED OTHERWISE.
9.	ALL PENETRATIONS THROUGH SOUND, SECURITY OR FIRE WALLS SHALL BE SLEEVED OTHER MECHANICAL PROTECTION. ALL PENETRATIONS AND SLEEVES SHALL BE SEALED WITH CAULKING AND INTUMESCENT MATERIAL (WHERE APPROPRIATE) TO MAINTAIN RESPECTIVE RATINGS OF WALL.
10.	PROVIDE EQUIPMENT BONDING JUMPER GROUND CONNECTION IN ALL BOXES, ENCLOSURES, ETC. FROM THE EQUIPMENT GROUNDING CONDUCTOR.
11.	ALL EMPTY RACEWAY SYSTEMS SHALL HAVE A #12 PULLWIRE OR EQUAL AND SHALL BE IDENTIFIED AT ALL JUNCTIONS, PULL AND TERMINATION POINTS. USING PERMANENT METALLIC TAGS. TAG SHALL INDICATE INTENDED USE OF CONDUIT, ORIGINATION AND TERMINATION POINTS OF EACH INDIVIDUAL CONDUIT.
12.	CONTRACTOR SHALL COORDINATE INSTALLATION OF ALL LIGHT FIXTURES TO ENSURE THAT THE LIGHT FIXTURES DO NOT INTERFERE WITH ANY STRUCTURAL, MECHANICAL, OR PLUMBING COMPONENTS AND EQUIPMENT. COORDINATE RELOCATION OF ANY LIGHT FIXTURE DUE TO INTERFERENCES WITH STRUCTURAL, MECHANICAL, OR PLUMBING COMPONENTS AND EQUIPMENT.
13.	FIXTURES RECESSED IN "T-BAR" CEILING SHALL BE SUPPORTED INDEPENDENTLY OF CEILING SYSTEM, WITH TWO #12 HANGER WIRES UP TO STRUCTURE. SECURE HANGER WIRES TO OPPOSITE CORNERS OF FIXTURE. CLIP FIXTURE TO GRID ON TWO SIDES WITH FACTORY-FURNISHED CLIPS. FINAL CONNECTION TO FIXTURE SHALL BE MADE WITH A FLEXIBLE UL APPROVED ASSEMBLY.
14.	CONDUITS PENETRATING THROUGH ROOF SHALL HAVE ROOF FLASHING WITH CAULK TYPE COUNTER FLASHING SLEEVE. INSTALLATION SHALL BE WATER TIGHT. CONDUITS SHALL NOT BE RUN HORIZONTALLY ON THE ROOF. PENETRATIONS SHALL BE AT EQUIPMENT LOCATIONS ONLY AND SHALL BE COORDINATED WITH MECHANICAL EQUIPMENT.
15.	FINAL CONNECTIONS TO MOTORS, TRANSFORMERS AND OTHER VIBRATING EQUIPMENT SHALL BE WITH FLEXIBLE METAL CONDUIT (INDOORS) OR LIQUID TIGHT FLEXIBLE METAL CONDUIT (OUTDOORS) AND APPROVED FITTINGS. DO NOT SECURE CONDUITS, DISCONNECTS OR DEVICES TO DUCTWORK OR MECHANICAL EQUIPMENT.
16.	WIRE TERMINATION PROVISIONS FOR PANELBOARDS, CIRCUIT BREAKERS, SAFETY SWITCHES, AND ALL OTHER ELECTRICAL APPARATUS SHALL BE LISTED AS SUITABLE FOR 75°C.
17.	CONTRACTOR SHALL PROVIDE A VOLTAGE BARRIER IN BOXES CONTAINING MULTIPLE SWITCHES WITH A VOLTAGE POTENTIAL OF 300V OR GREATER.
18.	COORDINATE ELECTRICAL DEVICES AND EQUIPMENT WITH THE INTERIOR AND ARCHITECTURAL DRAWINGS. IF CONFLICTS OCCUR, BRING THEM TO THE ARCHITECTS ATTENTION PROMPTLY.
19.	CONTRACTOR SHALL COORDINATE WITH OTHER TRADES TO INSURE THAT PIPING, DUCTS, ETC INSTALLED WITHIN ELECTRICAL ROOMS OR SPACES SHALL BE INSTALLED PER NEC 110-26. ALL PIPING, DUCTS, ETC SHALL BE INDICATED ON THE SHOP DRAWINGS.
20.	EACH RECEPTACLE INSTALLED OUTDOORS, WITHIN 72" OF SINKS, ELECTRIC WATER COOLERS, IN DAMP OR WET AREAS, ON ROOF, BELOW GRADE ELEVATOR PITS, JANITOR CLOSETS AND TOILET ROOMS, SHALL HAVE INDIVIDUAL GROUND FAULT (GFCI) PROTECTION.
21.	REFER TO MECHANICAL CONTROL DIAGRAMS FOR ADDITIONAL WIRING REQUIREMENTS. PROVIDE ALL RACEWAYS, WIRING, CONTROL SWITCHES, ETC AS REQUIRED.
22.	FINAL CONNECTIONS TO EQUIPMENT SHALL BE PER MANUFACTURERS APPROVED WIRING DIAGRAMS, DETAILS AND INSTRUCTIONS. IT SHALL BE THE CONTRACTORS RESPONSIBILITY TO PROVIDE MATERIALS AND EQUIPMENT COMPATIBLE WITH EQUIPMENT SUPPLIED.

ELECTRICAL SYMBOL LEGEND					
(THIS IS A MASTER LEGEND. NOT ALL SYMBOLS MAY APPEAR ON DRAWINGS.)					
GENERAL		WIRING DEVICES		DIAGRAMS	
SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION
	SHEET NOTE		RECEPTACLE RATED 20A, 120V, MOUNTED AT +18" UNLESS NOTED OTHERWISE. RECEPTACLE HEIGHTS SHALL COMPLY WITH ANSI 117.1 REQUIREMENTS		TRANSFORMER
	KITCHEN EQUIPMENT TAG		"G" - INDICATES CIRCUIT NUMBER		CIRCUIT BREAKER
	REVISION NUMBER		"GFI" - INDICATES WEATHERPROOF GFCI RECEPTACLE		SHUNT TRIP CIRCUIT BREAKER
	ELECTRICAL EQUIPMENT TAG		DUPLEX RECEPTACLE		DRAW-OUT CIRCUIT BREAKER - MEDIUM VOLTAGE
	MECHANICAL EQUIPMENT TYPE		DOUBLE DUPLEX RECEPTACLE		DRAW-OUT CIRCUIT BREAKER - LOW VOLTAGE
	MECHANICAL EQUIPMENT NUMBER		FLUSH FLOOR/CEILING DUPLEX RECEPTACLE		SWITCH FUSE
	- SEE HVAC AND PLUMBING DRAWINGS.		FLUSH FLOOR/CEILING DOUBLE DUPLEX RECEPTACLE		GENERATOR
	SECTION DRAWING NUMBER		SPECIAL PURPOSE RECEPTACLE - WALL / FLOOR / CEILING "XX" INDICATES TAG NUMBER. REFER TO SPECIAL PURPOSE RECEPTACLE SCHEDULE		POTENTIAL TRANSFORMER
	REFERENCING SHEET		HOSPITAL GRADE RECEPTACLE		CURRENT TRANSFORMER
	CALL OUT DRAWING NUMBER		HOSPITAL GRADE DOUBLE DUPLEX RECEPTACLE		GROUNDING ELECTRODE
	REFERENCING SHEET		MULTI-OUTLET PLUGSTRIP		METER
EXISTING DEVICE LEGEND			MULTI-OUTLET ASSEMBLY, DEVICES AS INDICATED		AUTOMATIC TRANSFER SWITCH
SYMBOL	DESCRIPTION		WALL JUNCTION BOX		AUTOMATIC TRANSFER SWITCH WITH BYPASS MAINTENANCE
	NEW WORK		FLOOR/CEILING JUNCTION BOX		CAPACITOR
	EXISTING WORK TO REMAIN		JUNCTION BOX AND SWITCH WITH CONNECTION TO FIRE/SMOKE DAMPER. COORDINATE REQUIREMENTS WITH FIRE ALARM SYSTEM AND MECHANICAL CONTROL DIAGRAMS		KIRK KEY INTERLOCK
	EXISTING WORK TO BE REMOVED (DEMO)		JUNCTION BOX AND SWITCH WITH CONNECTION TO VARIABLE AIR VOLUME BOX. COORDINATE REQUIREMENTS WITH MECHANICAL CONTROL DIAGRAMS		AMMETER
	EXISTING WORK TO BE RELOCATED		DOOR HOLDER		VOLTMETER
	NEW LOCATION OF EXISTING WORK		CLOCK RECEPTACLE AT +90" UNLESS NOTED OTHERWISE		WATT METER
LIGHTING			SPECIALTY BOX - WALL / FLOOR / CEILING		WATTHOUR METER
SYMBOL	DESCRIPTION		FLOOR MOUNTED BOX FOR POWER CONNECTION TO PRE-WIRED FURNITURE PARTITIONS		SHUNT TRIP DEVICE
	LIGHTING FIXTURE (SEE LIGHTING FIXTURE SCHEDULE)		WALL MOUNTED BOX FOR POWER CONNECTION TO PRE-WIRED FURNITURE PARTITIONS		PANELBOARD
	"A1" - INDICATES LIGHTING FIXTURE TYPE		FLOOR MOUNTED BOX WITH MULTIPLE DEVICES		
	"2" - INDICATES CIRCUIT NUMBER		"TB" INDICATES TYPE AS DEFINED IN NOTES/SCHEDULES.		
	"S" - INDICATES SWITCH CONTROL		PULL BOX		
	FIXTURE SHADING INDICATES FIXTURE ON EMERGENCY CIRCUIT, LIFE SAFETY OR INTEGRAL BATTERY BACK-UP		POWER POLE		
	FIXTURE HALF SHADING INDICATES FIXTURE ON CRITICAL BRANCH CIRCUITING		CORD DROP WITH DUPLEX RECEPTACLE		
	LINEAR PENDANT FIXTURE		CORD DROP WITH DOUBLE DUPLEX RECEPTACLE		
	LINEAR STRIP FIXTURE		CORD DROP WITH SPECIAL PURPOSE RECEPTACLE. "XX" INDICATES TAG NUMBER. REFER TO SPECIAL PURPOSE RECEPTACLE SCHEDULE		
	RECESSED LINEAR SLOT LIGHT		BRANCH CIRCUITS AND FEEDERS		
	LINEAR LED FIXTURE		SYMBOL		
	DOWNLIGHT FIXTURE		DESCRIPTION		
	PENDANT FIXTURE		BRANCH CIRCUIT HOME RUN TIKES INDICATE QUANTITY OF CONDUCTORS. GROUND CONDUCTORS ARE NOT INDICATED. NO TIKES INDICATES 2@12 & 1@12S IN 3/4" MINIMUM R22A-1.5 INDICATES PANEL AND CIRCUIT DESIGNATION FROM WHICH HOMERUN SHALL ORIGINATE. EACH CIRCUIT SHALL BE 20A-1P (20AMP SINGLE POLE) UNLESS NOTED OTHERWISE.		
	TRACK LIGHT WITH FIXTURE HEADS		CONDUIT BELOW FLOOR OR BELOW GRADE		
	WALL WASH / ACCENT LIGHT		CONDUIT STUB-OUT		
	SPECIALTY FIXTURE - PROFILE SPOT LIGHT		CONDUIT AND/OR WIRE TURNED UP		
	SPECIALTY FIXTURE - WASH LIGHT		CONDUIT AND/OR WIRE TURNED DOWN		
	WALL MOUNTED FIXTURE		FLEXIBLE CONNECTION TO EQUIPMENT, RACEWAY AND CONDUCTOR RATING TO MATCH ASSOCIATED BRANCH CIRCUIT OR FEEDER		
	STEP LIGHT		BRANCH CIRCUIT FOR EMERGENCY BATTERY DC CIRCUIT, MINIMUM 2#10 IN 3/4" UNLESS OTHERWISE NOTED		
	POLE MOUNTED FIXTURE		MOTOR AND CONTROLS		
	BOLLARD FIXTURE		SYMBOL		
	EXIT SIGN WITH DIRECTIONAL ARROWS AND EXIT FACE (SHADED) AS INDICATED		DESCRIPTION		
	EXIT SIGN WITH DIRECTIONAL ARROWS AND EXIT FACE (SHADED) AS INDICATED		S ₁		
	EMERGENCY BATTERY LIGHTING UNIT WITH TWIN HEADS		S ₂		
	EMERGENCY BATTERY LIGHTING UNIT WITH TWIN HEADS AND EXIT SIGN		MANUAL MOTOR STARTING SWITCH WITH THERMAL OVERLOAD PROTECTION		
POWER DISTRIBUTION			MAGNETIC MOTOR STARTER. REFER TO MAGNETIC MOTOR STARTER & VFD SCHEDULE FOR TYPE, SIZE AND ENCLOSURE.		
SYMBOL	DESCRIPTION		COMBINATION FUSED DISCONNECT MAGNETIC MOTOR STARTER. REFER TO MAGNETIC MOTOR STARTER AND VFD SCHEDULE FOR TYPE, SIZE AND ENCLOSURE.		
	DARK SHADING ON EQUIPMENT INDICATES 208/120V, LIGHT SHADING INDICATES 480/277V		CONTACTOR IN NEMA 1 ENCLOSURE UNLESS OTHERWISE NOTED		
	SURFACE MOUNTED PANELBOARD		MOTOR CONTROL CENTER		
	FLUSH MOUNTED PANELBOARD		EQUIPMENT CONTROL PANEL		
	DRY TYPE TRANSFORMER		VARIABLE SPEED DRIVE		
	"TS" - INDICATES KVA RATING OF TRANSFORMER		MOTOR, NUMERICAL INDICATES HORSEPOWER		
	REFER TO DRY TYPE K-RATED TRANSFORMER SCHEDULE		"2" - INDICATES HORSEPOWER RATING		
	SWITCHBOARD, MOTOR CONTROL CENTER OR DISTRIBUTION BOARD		DISCONNECT SWITCH RATED 30AMP, 3-POLE, IN NEMA TYPE 1 ENCLOSURE, UNLESS OTHERWISE NOTED		
	LIGHTING CONTROL PANEL		"3R" - INDICATES NEMA TYPE 3R ENCLOSURE		
	CONTROL PANEL		"2P" - INDICATES 2 POLE SINGLE PHASE DISCONNECT		
	LADDER CABLE TRAY		"60AS" - INDICATES 60A SWITCH		
	CHANNEL CABLE TRAY		FUSED DISCONNECT SWITCH, 3-POLE, IN NEMA TYPE 1 ENCLOSURE, UNLESS OTHERWISE NOTED		
	BUSWAY, HORIZONTAL, REFER TO RISER FOR RATING		"3R" - INDICATES NEMA TYPE 3R ENCLOSURE		
	BUSWAY, VERTICAL, REFER TO RISER FOR RATING		"60AS" - INDICATES 60AMP SWITCH		
	BUSWAY, HORIZONTAL, WITH FUSED PLUG-IN DISCONNECT		"60AF" - INDICATES 60AMP FUSES		
	GROUND BAR		ENCLOSED CIRCUIT BREAKER IN NEMA TYPE 1 ENCLOSURE, UNLESS OTHERWISE NOTED		
	CUSTOMER METER				
	UTILITY METER AND SOCKET				
	CURRENT TRANSFORMER CABINET				

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DUCT BANK CONDUIT SCHEDULE			
TAG	DESCRIPTION	CONDUIT	CONDUCTORS
ES	PRIMARY ELECTRIC	5"	SEE NOTE 6
E1	SECONDARY ELECTRIC	4"	4#600KCMIL
G1	LIFE-SAFETY BRANCH		
G2	LEGALLY REQUIRED STANDBY BRANCH		
G3	OPTIONAL STANDBY BRANCH		
C1	GENERATOR START	2"	
C2	GENERATOR AUXILIARIES	2"	
SP1	SPARE	5"	NOTE 6
SP2	SPARE	4"	NOTE 6
SP3	SPARE	2"	NOTE 6

NOTES:
1. REFER TO DUCT BANK SECTIONS FOR CORRESPONDING CONDUIT AND CONDUCTOR.
2. REFER TO THE TYPICAL DUCTBANK SECTION FOR DETAILS REQUIRED IN THE CONSTRUCTION OF THE DUCT BANK ENVELOPE.
3. REFER TO THE SPECIFICATIONS FOR ADDITIONAL INFORMATION INCLUDING BUT NOT LIMITED TO DUCT BANK REINFORCEMENT REQUIRED UNDER PAVED AREAS INTENDED FOR VEHICULAR TRAFFIC AND AT MANHOLE/BUILDING INTERFACES.
4. ALL CONDUCTORS INSTALLED IN DUCT SHALL BE SUITABLE FOR WET LOCATIONS.
5. ALL SERVICE ENTRANCE AND GENERATOR OUTPUT CONDUCTORS INSTALLED IN DUCT SHALL BE TYPE USE.
6. PROVIDE ALL EMPTY/SPARE CONDUIT WITH NYLON PULL STRING.

KEYNOTES	
1	FOR DUAL EV CHARGER MANUFACTURED BY CHARGEPOINT CP6000 SERIES - MAXIMUM 80A (POWER SHARE) DUAL PORT WITH SINGLE POWER CONNECTION RATED 19.2kW, 125A/208V/1PH. PROVIDE WEATHERPROOF (NEMA 3R) JUNCTION BOX MOUNTED AT 12" AFG. UTILIZE RIGID STEEL CONDUIT/SWEEP FOR ABOVE GRADE INSTALLATION.
2	FOR SINGLE EV CHARGER MANUFACTURED BY CHARGEPOINT CP6000 SERIES - MAXIMUM 80A (STANDARD) SINGLE PORT WITH SINGLE POWER CONNECTION RATED 19.2kW, 125A/208V/1PH. PROVIDE WEATHERPROOF (NEMA 3R) JUNCTION BOX MOUNTED AT 12" AFG. UTILIZE RIGID STEEL CONDUIT/SWEEP FOR ABOVE GRADE INSTALLATION.
3	FOR FUTURE SINGLE EV CHARGER PROVIDE WEATHERPROOF (NEMA 3R) JUNCTION BOX MOUNTED AT 12" AFG. UTILIZE RIGID STEEL CONDUIT/SWEEP FOR ABOVE GRADE INSTALLATION.
NOTES: 1. REFER TO SPECIFICATIONS, DETAILS, AND CONTROL DRAWINGS FOR ADDITIONAL INFORMATION. 2. X 3. X	

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Redevelopment**

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REVISIONS

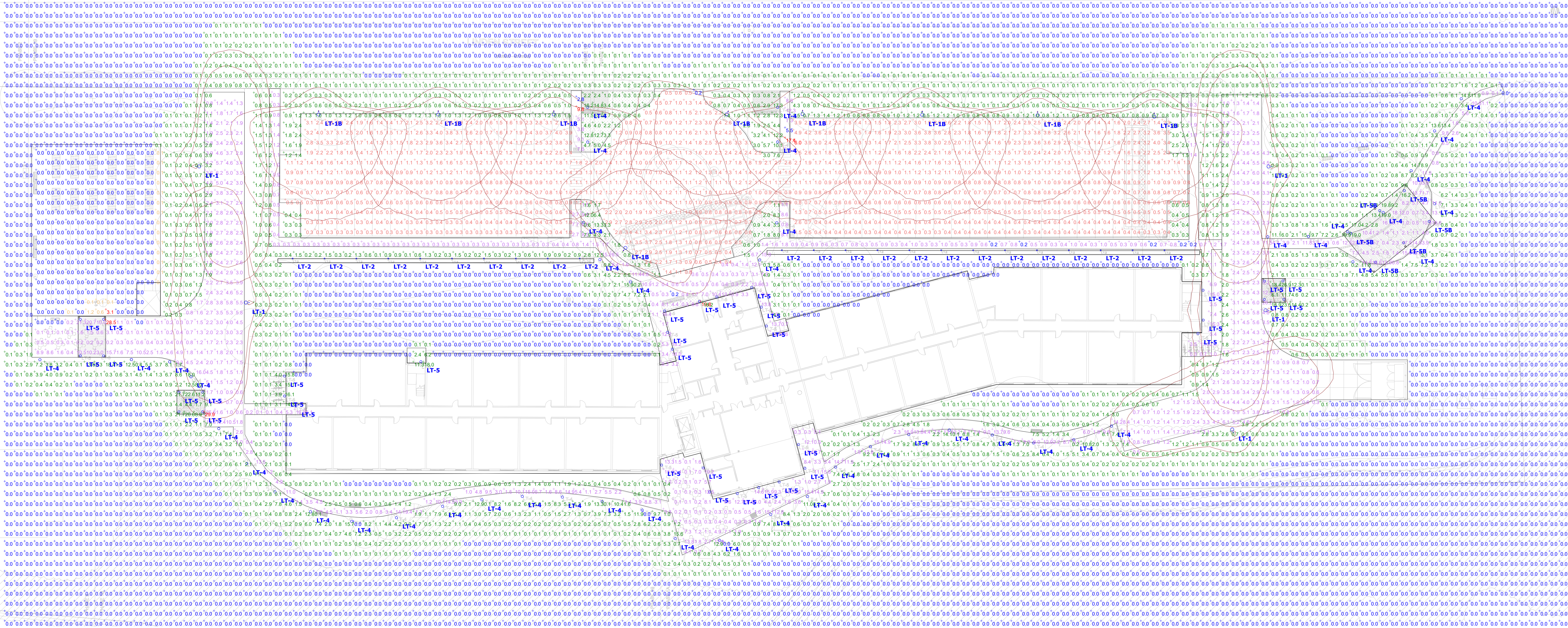
DRAWING TITLE
Electrical Site Plan

DRAWING INFORMATION

08/23/2024	DATE OF ISSUE
FOR REFERENCE	DESCRIPTION
As indicated	DLF
SCALE	DRAWN BY
02/20/2024	PROJECT #
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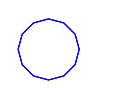
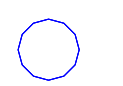
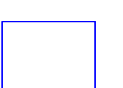
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STATISTICS

DESCRIPTION	SYMBOL	AVG.	MAX.	MIN.	MAX/MIN	AVG/MIN
GARDEN	+	0.0 fc	3.1 fc	0.0 fc	N/A	N/A
Outer Perimeter	+	0.5 fc	29.9 fc	0.0 fc	N/A	N/A
PARKING	+	1.3 fc	6.0 fc	0.2 fc	30.0:1	6.5:1
WALKING PATH	+	6.4 fc	9.8 fc	2.8 fc	3.5:1	2.3:1
WALKING PATH	+	10.4 fc	17.4 fc	5.5 fc	3.2:1	1.9:1
WALKING PATH	+	2.7 fc	19.6 fc	0.2 fc	98.0:1	13.5:1
ACCESS ROAD / PATH	+	3.9 fc	28.5 fc	0.0 fc	N/A	N/A

SCHEDULE

Symbol	Label	Quantity	Manufacturer	Catalog Number	Description	Light Loss Factor	Wattage
	LT-1	5	Lumenpulse	PURXXX VOLT CSL M150 30K CRI 80 3BLS FINISH DIM XX TN4	Pure T Area Light Type 3 w/ Backlight Control *ADVISE POLE*	0.9	132
	LT-1B	9	Lumenpulse	PURXXX VOLT CSL M150 30K CRI 80 4BLS FINISH DIM XX TN4	Pure T Area Light Type 4 w/ Backlight Control *ADVISE POLE*	0.9	132
	LT-2	23	Sage Lighting	SLVR 27 FINISH	SLVR Step Light	0.9	2.98
	LT-4	47	Spitzer	BRA F42 24LC VOLTAGE CC D3 FINISH	Architectural Round Bollard 3'x5"	0.9	21.6769
	LT-5	35	Luminis Lighting	SYF400 L1L10 VWD K40 VOLTAGE FINISH MOUNTING XX	Syrios Pro - Wall Mount	0.9	12
	LT-5B	6	Luminis Lighting	SYF410 L1L10 VWD K40 VOLTAGE FINISH MOUNTING XX	Syrios Pro - Surface Mount	0.9	12

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TRAFFIC IMPACT ANALYSIS

Pare Project No. 23085.00

Linden Street Redevelopment Needham, Massachusetts

Prepared for:
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April 2024



ENGINEERS * SCIENTISTS ✻ PLANNERS

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Appendix B	Crash Data
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Appendix D	Census Data
Appendix E	Trip Generation & Distribution
Appendix F	Traffic Capacity Analysis
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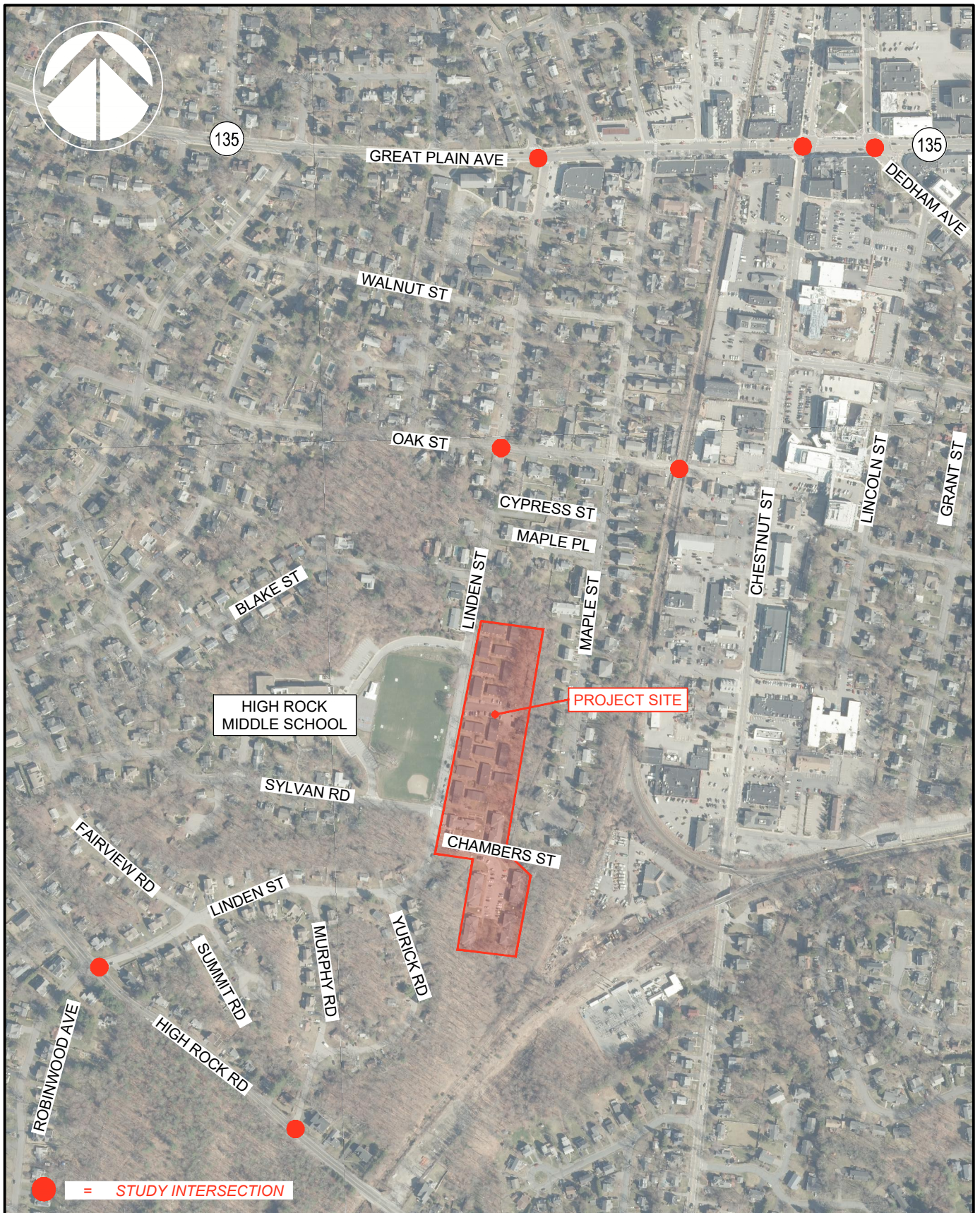
INTRODUCTION

The following report represents a traffic study completed for a proposed redevelopment of the senior and disabled housing development located on Linden Street and Chambers Street in Needham, Massachusetts. The Needham Housing Authority (NHA) aims to redevelop the housing from the current 152 units to a maximum of approximately 275 units.

Due to its proximity to a nearby middle school: High Rock School, traffic circulation patterns were observed during the morning arrival and afternoon dismissal periods.

Presented within are existing conditions in the vicinity of the project site, a safety analysis of the study area, and an analysis of the traffic based on existing, future (2031) no-build and future (2031) build conditions. A locus map of the study area is provided in **Figure 1** and the proposed site layout is shown in **Figure 2A** and **Figure 2B**. **Figure 2A** shows the Phase 1 development, while **Figure 2B** shows the full buildout including Phase 1 and 2.





PROJECT NO. 23085.00

DATE: JUNE 2023

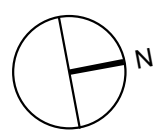
FIGURE 1 LOCUS MAP

LINDEN-CHAMBERS HOUSING REDEVELOPMENT
NEEDHAM, MASSACHUSETTS



1 Site Plan A Phase 1
1" = 40'-0"

0' 20' 40' 80'





1 Site Plan Proposed
1" = 40'-0"



DATA COLLECTION

Seven study intersections have been identified for examination with regards to traffic capacity and safety as part of this study. The study intersections include:

- High Rock Street at Linden Street
- High Rock Street at Murphy Road
- Great Plain Avenue at Linden Street
- Great Plain Avenue at Chestnut Street/Chapel Street
- Great Plain Avenue at Dedham Avenue/Highland Avenue
- Linden Street at Oak Street
- Chestnut Street at Oak Street

On May 10, 2023 manual turning movement counts (MTMCs) were conducted at all of the study area intersections between the hours of 7:00 a.m. and 9:00 a.m. and 2:00 p.m. and 6:00 p.m.

Crash data for the roadway network in the vicinity of the project site was retrieved from the Massachusetts Department of Transportation (MassDOT) Crash Query and Visualization Tool for the period of May 2018 through April 2023. A crash review is included in this report to identify any potential trends that may require mitigation.

A field review of the study area was conducted on Tuesday, May 9, 2023. Geometric measurements and other field observations were recorded at the significant intersections in the vicinity of the project site, the information obtained was used in the analysis of the study area intersections.

The Planning Department for the Town of Needham was contacted to determine if there are currently any developments proposed whose trip generation information should be included in the study, of which none were noted.



EXISTING CONDITIONS

The study area is defined as the significant roadways and intersections in the vicinity of the site that may be impacted by the construction of the residential development. Listed below are the roadways and intersections included in the study area.

Study Area Roadways:

- High Rock Street
- Linden Street
- Murphy Road
- Great Plain Avenue
- Chestnut Street
- Chapel Street
- Dedham Avenue
- Highland Avenue
- Oak Street

Study Area Intersections:

- High Rock Street at Linden Street
- High Rock Street at Murphy Road
- Great Plain Avenue at Linden Street
- Great Plain Avenue at Chestnut Street/Chapel Street
- Great Plain Avenue at Dedham Avenue/Highland Avenue
- Linden Street at Oak Street
- Chestnut Street at Oak Street

Study Area Roadways

High Rock Street

High Rock Street is classified as a major collector and is under town jurisdiction. This street corridor runs in a general northwest/southeast direction within the study area. The typical roadway cross-section of High Rock Street consists of one lane in each direction separated by a double yellow center line. The northwest approach contains an 11-foot-wide lane and a three-foot-wide shoulder. The southeast approach contains a 15-foot-wide lane. Sidewalks are present along most of the roadway. Land use surrounding this roadway is predominantly residential.

Linden Street

Linden Street is a local road and is under town jurisdiction. This roadway runs along the north/south direction within the study area. It is a two-way 24-foot-wide street without lane striping. Sidewalks are present along the roadway. On-street parking is allowed throughout the whole length of Linden Street except for stricter parking regulations along the Linden Chambers Housing Development and High Rock School. Within these areas, parking is prohibited on the western side of the road, while parking is prohibited during the school's arrival and dismissal periods, 7:00 a.m. to 8:00 a.m. and 2:00 p.m. to 3:00 p.m. on weekdays from September 1st through June 30th. Land uses along this roadway are predominantly residential.



Murphy Road

Murphy Road is a two-way, 23-foot-wide local road and under town jurisdiction. This roadway runs along the north/south direction within the study area. No sidewalks are present along this roadway. Land use along this road is residential.

Great Plain Avenue

Great Plain Avenue is classified as a principal arterial under town jurisdiction. It is also known as Route 135 and runs along the east/west direction within the study area. The typical roadway cross section of Great Plain Avenue varies throughout its length. West of Linden Street, it consists of 11-foot-wide travel lanes in each direction, a four-foot-wide shoulder on the northern side, and on-street parking on the south side. East of Linden Street, the cross-section varies, but it widens to have two travel lanes in each direction with on-street parking on both sides of the street east of an at-grade railroad crossing located approximately 700 feet east of its intersection with Linden Street. Sidewalks are present on both sides of the street throughout the study area. Land uses surrounding this roadway are predominantly commercial and recreational.

Chestnut Street

Chestnut Street is classified as a minor arterial under town jurisdiction. This roadway runs along the north/south direction within the study area. The cross-section of Chestnut Street consists of an 11-foot-wide travel lane in each direction. Turn lanes are present at various intersections, and where there are no turn lanes, on-street parking is present on one side of the street. There are sidewalks on both sides of the street along the length of the roadway. Permitted, paid, and permit-required parking is provided in various locations throughout its length. The Route 59 bus stop is located on the west side of Chestnut Street just south of Great Plain Avenue. Land uses surrounding the roadway are predominantly commercial.

Chapel Street

Chapel Street is classified as a principal arterial under town jurisdiction. This roadway runs along the north/south direction within the study area. The typical cross-section of Chapel Street consists of a 10-foot-wide travel lane in each direction, an 8-foot-wide parking lane and an 8-foot sidewalk on both sides. Land uses surrounding the roadway are predominantly commercial and recreational. A Route 59 bus stop is located on the east side of Chestnut Street just north of Great Plain Avenue. In addition, the Needham Center Train Station is accessed from Chapel Street approximately 500 feet north of Great Plain Avenue.

Dedham Avenue

Dedham Avenue is classified as a principal arterial under town jurisdiction. This roadway runs in the general northwest/southeast direction within the study area. Typically, Dedham Avenue consists of a 10-foot-wide travel lane and a five-foot-wide shoulder. Sidewalks are present on both sides of the roadway. Land uses are predominantly residential.



Highland Avenue

Highland Avenue is classified as a principal arterial under town jurisdiction. This roadway runs in the general north/south direction within the study area. The roadway cross section consists of a 15-foot-wide travel lane in each direction. Permitted, paid, and permit-required on-street parking is provided in various locations throughout its length. Sidewalks are present along both sides of the roadway. Land use is mostly commercial.

Oak Street

Oak Street is classified as a major collector street and is under the town's jurisdiction. This roadway runs generally in an east/west direction within the study area. Oak Street has a width of approximately 22 feet within the study area with one 11-foot-wide travel lane in each direction. On-street parking is not permitted at any time on either side of the street. There are sidewalks on both sides of the street along the length of the roadway. An at-grade railroad crossing is located approximately 300 feet west of Chestnut Street. There are no bus stops on Oak Street, however, there are bus stops on Chestnut Street just north of its intersection with Oak Street. Land uses surrounding Oak Street are predominantly residential over most of its length, with some commercial uses between the railroad crossing and Chestnut Street.

Study Area Intersections

High Rock Street at Linden Street/Robinwood Avenue

The intersection of High Rock Street at Linden Street and Robinwood Avenue forms an offset four-legged, two-way stop-controlled intersection. High Rock makes up the northern and southern legs, Linden Street makes up the eastern leg, and Robinwood makes up the western leg. Linden Street and Robinwood Avenue are stop-controlled while High Rock Street operates freely. All four approaches have a single vehicular lane. In the area of the intersection High Rock Street has sidewalks on both sides of the street while Linden Street and Robinwood Avenue both have sidewalks on their northern side only.



Photo 1. Intersection of High Rock Street at Linden Street and Robinwood Avenue

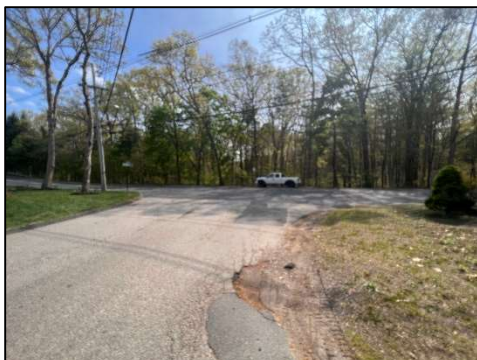


Photo 2. Intersection of High Rock Street at Murphy Road

High Rock Street at Murphy Road

High Rock Street at Murphy Road is a three-legged unsignalized intersection. High Rock Street makes up the northern and southern legs and Murphy Road makes up the eastern leg. All approaches to the intersection have a single approach lane. Murphy Road is stop-controlled while High Rock Street operates freely. Sidewalks are present along both sides of High Rock Street north of the intersection and along the west side of the street south of the intersection. There are no sidewalks along Murphy Road.



Great Plain Avenue at Linden Street/Washburn Avenue

Great Plain Avenue at Linden Street and Washburn Avenue is an offset four-legged unsignalized intersection. Great Plain Avenue makes up the eastern and western legs, Linden Street makes up the southern leg, and Washburn Avenue makes up the northern leg. All approaches to the intersection have a single vehicular approach lane. The northern and southern approaches are stop-controlled, while Great Plain Avenue operates freely. There are sidewalks on both sides of all intersection legs. Marked crosswalks are present across Linden Street and Washburn Avenue approaches, and a marked crosswalk across Great Plain Avenue connecting the north side of Linden Street and the south side of Washburn Avenue.



Photo 3. Intersection of Great Plain Avenue at Linden Street and Washburn Avenue



Photo 4. Intersection of Great Plain Avenue at Chestnut Street and Chapel Street

Great Plain Avenue at Chestnut Street/Chapel Street

The intersection of Great Plain Avenue at Chestnut Street and Chapel Street forms a four-legged signalized intersection. Great Plain Avenue makes up the eastern and western legs, Chestnut Street makes up the southern leg, and Chapel Street makes up the northern leg. The northbound and southbound approaches consist of a left-turn lane only and a shared through and right turn lane. The eastbound and westbound approaches consist of two lanes in each direction. Bicycle sharrows are present in the westbound right lane. The intersection is raised and paved with bricks as a shared area for vehicles and pedestrians, so there are no marked crosswalks across any of the approaches. Concrete sidewalks are present along the entire perimeter of the intersection. Pedestrian push buttons are provided at each corner of the intersection.

The traffic signal operates under five phases. The first phase serves westbound movements only. The second phase grants movements to westbound and eastbound movements with permitted left movement. The third phase serves northbound movements only with a protected left-turn. The fourth phase grants movements to northbound and southbound movements with permitted left movement. Finally, there is a dedicated pedestrian phase that is only served if a call is made via a push button. The traffic signal is coordinated with the signalized railroad crossing to the west of the intersection and the signalized intersection at Dedham Avenue and Highland Avenue.



Great Plain Avenue at Dedham Avenue/ Highland Avenue

The intersection of Great Plain Avenue at Dedham Avenue and Highland Avenue forms a four-legged signalized intersection. Highland Avenue makes up the northern leg, Dedham Avenue makes up the southern leg, and Great Plain Avenue makes up the eastern and western legs. The southbound and eastbound approaches both consist of a shared left/through lane and a right turn lane. The westbound approach is comprised of one shared through/right lane and a through lane – left turns are not allowed for this leg. The northbound approach consists of two lanes, including a dedicated left turn lane and a shared through and right turn lane. The northbound right turn is channelized. This intersection is also raised and therefore has no marked crosswalks across its approaches, except for a crosswalk across the channelized northbound right turn lane. There are sidewalks along the entire perimeter of this intersection.



Photo 5. Intersection of Great Plain Avenue at Dedham Avenue and Highland Avenue

This intersection operates under four phases. The first phase serves northbound movements only. The second phase grants movement for southbound vehicles only. The third phase allows movement for all eastbound and westbound vehicles, with a permitted left for eastbound vehicles. Finally, there is a dedicated pedestrian phase that is only served if a call is made via a push button.



Photo 6. Intersection of Oak Street at Linden Street

Oak Street at Linden Street

Oak Street at Linden Street is a four-legged all-way stop-controlled intersection. Oak Street makes up the eastern and western legs and Linden Street makes up the northern and southern legs. All approaches to the intersection have a single vehicular approach lane. There are sidewalks on both sides of all intersection legs. Marked crosswalks are located across all four intersection legs.

Oak Street at Chestnut Street

The intersection of Oak Street at Chestnut Street forms a four-legged signalized intersection. Oak Street is the western leg, Chestnut Street makes up the northern and southern legs, and a driveway to Beth Israel Deaconess Hospital makes up the eastern leg. The northbound and southbound approaches consist of two lanes, including a left-turn lane only and a shared through and right turn lane northbound and a dedicated right turn lane and shared through and left turn lane southbound. The eastbound and westbound approaches consist of one lane for all movements. Marked crosswalks are located



Photo 7. Intersection of Oak Street at Chestnut Street



across all four legs of the intersection. Sidewalks are present along the entire perimeter of the intersection. Pedestrian push buttons are provided at each corner of the intersection.

The traffic signal operates under three phases. The first phase serves all Chestnut Street traffic. The second phase is a dedicated pedestrian phase that is only served if a call is made via a push button. The third phase serves Oak Street and the hospital driveway approaches. The traffic signal operates independently of the railroad crossing located approximately 300 feet west of the intersection.

School Observations

Due to the proximity of Linden Chambers Housing Development to High Rock School, a review of the existing traffic conditions at and around the school was completed through field observations conducted during school arrival and dismissal periods. Parking occupancy was also recorded in the school parking lot. All observations at High Rock School were conducted on Tuesday, May 9, 2023, while the school was operating under typical conditions.

High Rock School serves all 6th grade students in the Town of Needham, totaling 438 students during the 2022-2023 school year. The school currently has three driveways, including one each on Ferndale Road, Sylvan Road, and Linden Street. During morning arrival and afternoon dismissal periods, the Linden Street access becomes entry-only and the Sylvan Road access a left-turn exit-only. Parking is available for staff to use along the eastern side of the building, while visitors can park in the lot on the western side of the building, accessed via Ferndale Road.

Morning Arrival Operations

During the morning arrival period, parents, faculty, and staff enter the driveway located on Linden Street, while buses enter through Ferndale Road. A crossing guard is assigned at the intersection of Linden Street and Sylvan Road to direct vehicles and student walkers.

Bus drop-off occurs on the ring driveway at the end of Ferndale Road (**Photo 5**). A total of 22 buses were observed entering and exiting the driveway between 7:12 a.m. and 7:40 a.m. Five buses unloaded students along the ring driveway at a time, though a maximum of 11 buses were observed to be queuing at the same time. This queue extended with one bus on Ferndale Road, and five buses along Sylvan Road. Students unloaded from the buses enter through the west entrance. Buses then circulate around the ring driveway and exit back out through Ferndale Road.

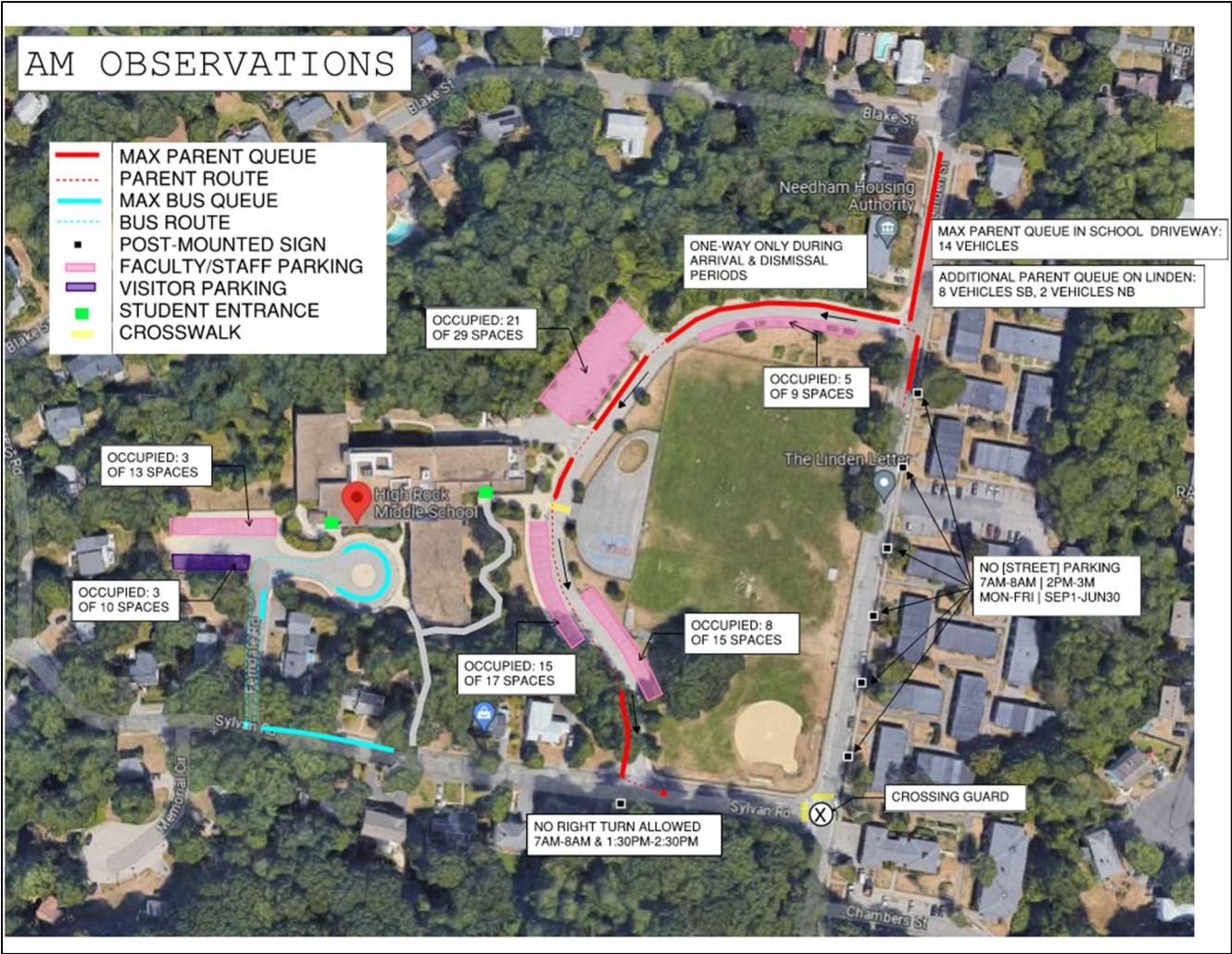
Parent traffic uses the approximately 900-foot-long driveway located on the eastern side of the building, entering from Linden Street and exiting onto Sylvan Road. Queuing begins north of the crosswalk located near the east entrance at roughly 7:19 a.m. and peaks at 7:25 a.m. A maximum of 14 vehicles were observed queued on the driveway, with an additional 10 vehicles queued on Linden Street. Students are unloaded as soon as they get close to the building. As soon as students are unloaded from the vehicles, parents follow the driveway and turn left on Sylvan Road to exit. By 7:40 a.m., traffic calms down in the area.

Student walkers were observed walking to the site from Sylvan Road and Linden Street. A total of 15 bikers were observed arriving in the morning.



Figure 3 below graphically displays the arrival operations of the school.

Figure 3: Morning Arrival Operations



Afternoon Dismissal Operations

The afternoon dismissal procedure operates in a similar pattern to the morning arrival procedure. **Figure 4** graphically displays the dismissal operations of the school.

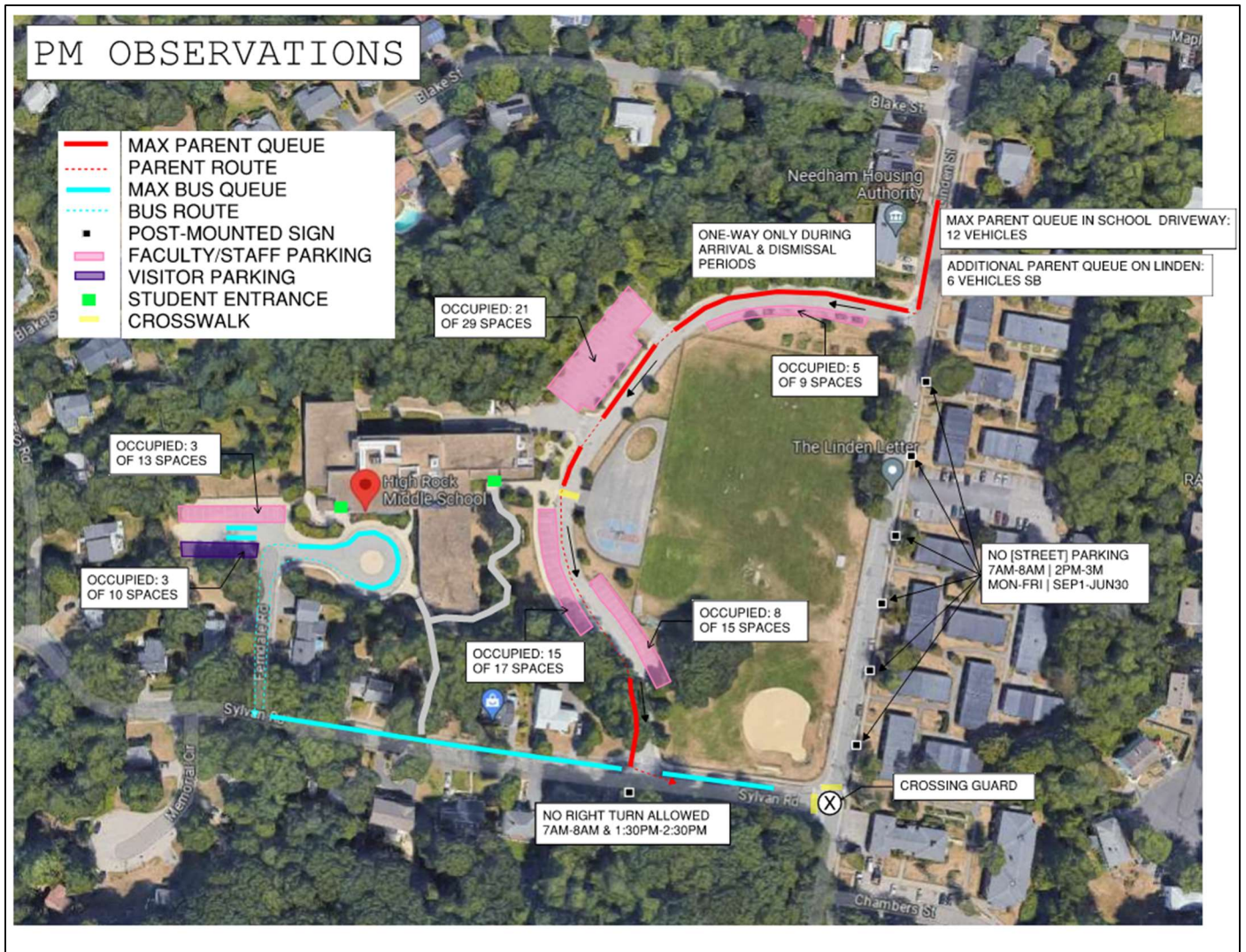
Four buses were observed to start queuing by 1:44 p.m. with a maximum queue of 20 buses by 2:10 p.m. A total of 22 buses were observed during the whole dismissal period. Unlike the morning, six buses were observed to be parked along the ring driveway loading students, while two were parked in the western parking lot. No buses were observed to be parked along Ferndale Road. Instead, the remaining buses lined up along the shoulder of Sylvan Road and extended to the intersection of Sylvan Road and Linden Street. A faculty member was observed to be present to assist with loading students into the buses. Once all the students are loaded, the buses exit through Ferndale Road. As soon as a bus exited through Ferndale Road, a bus initially queued on Sylvan Road would enter. By 2:18 p.m., all buses had departed, and traffic had calmed down in the area.

Parent traffic was observed beginning to queue along the eastern driveway well before the 2:10 p.m. dismissal. The queue starts at 1:22 p.m. and dissipates by 2:15 p.m. At peak, the maximum vehicle queue observed was 20 vehicles; 12 vehicles were in the driveway, while the other eight vehicles were idling along Linden Street. Students used the sidewalk to access their parent's vehicles. Once they are in the vehicle, parents would pass the vehicles in front and continue towards the end of the driveway to exit left on Sylvan Road.

Walkers and bikers used a similar route to depart the school as they used to arrive in the morning.



Figure 4: Afternoon Dismissal Operations



EXISTING TRAFFIC VOLUMES

Manual turning movement counts (MTMCs) were conducted on May 10, 2023 during the hours of 7:00 a.m. to 9:00 a.m. and 2:00 p.m. to 6:00 p.m. for the following intersections:

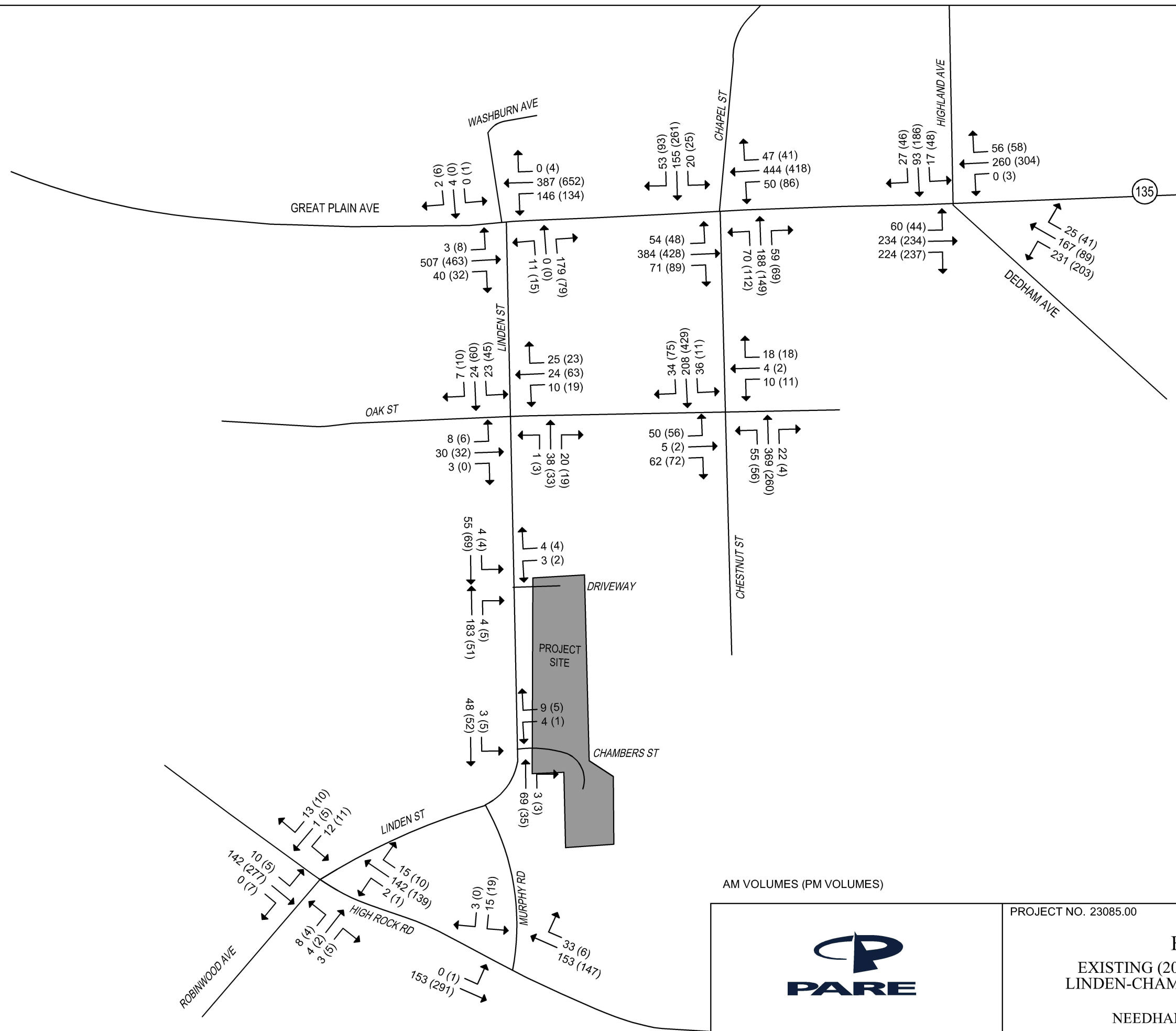
- High Rock Street at Linden Street
- High Rock Street at Murphy Road
- Great Plain Avenue at Linden Street
- Great Plain Avenue at Chestnut Street/Chapel Street
- Great Plain Avenue at Dedham Avenue/Highland Avenue

Subsequently, MTMCs were conducted on June 21, 2023 during the hours of 7:00 a.m. to 9:00 a.m. and 4:00 p.m. to 6:00 p.m. for the following intersections:

- Linden Street at Oak Street
- Chestnut Street at Oak Street

Copies of all count data are provided in Appendix A. Existing traffic volumes for the morning peak hour and afternoon peak hour are shown in Figure 5.





DATE: JULY 2023

FIGURE 5
EXISTING (2023) TRAFFIC VOLUMES
LINDEN-CHAMBERS REDEVELOPMENT
NEEDHAM, MASSACHUSETTS

SAFETY ANALYSIS

Crash Data

Crash data was collected from the Massachusetts Department of Transportation Crash Query and Visualization Tool for the most recent 5-year period, from May 2018 through April 2023 for the study area.

Table 1 below provides a breakdown of the crashes based on type and severity. The complete crash data summary is provided in Appendix B.

Table 1: Crash Data Summary

Roadway/ Intersection	Total Crashes	Non-Fatal Injuries	Angle	Head On	Single Vehicle	Rear End	Sideswipe	Unknown
Chambers Street	2	0	0	0	1	0	0	1
Chapel Street	3	1	0	0	0	1	2	0
Chestnut Street	3	0	1	0	0	2	0	0
Dedham Avenue	2	0	0	0	0	0	2	0
Great Plain Avenue	68	0	17	0	11	11	27	2
Highland Avenue	6	0	2	0	1	3	0	0
Linden Street	7	0	5	0	0	0	2	0
Oak Street	4	1	2	0	0	1	0	1
Great Plain Avenue at Chestnut/ Chapel Street	19	3	8	1	0	2	8	0
Great Plain Avenue at Highland/ Dedham Avenue	3	0	2	0	0	0	1	0
Great Plain Avenue at Linden Street	5	3	1	0	1	1	2	0
High Rock Street at Linden Street	3	0	3	0	0	0	0	0
Linden Street at Chambers Street	1	0	1	0	0	0	0	0
Oak Street at Linden Street	5	1	4	0	0	0	1	0
Oak Street at Chestnut Street	1	1	0	0	1	0	0	0
TOTAL	132	10	46	1	15	21	45	4



From May 2018 through April 2023, a total of 132 crashes occurred within the study area. Of the 132 crashes, ten resulted in non-fatal injuries. The most notable roadway corridor is Great Plain Avenue with 95 total crashes within the study area, roughly 72% of the total crashes within the study area. Along this roadway, 38 were sideswipe collisions, 28 were angle collisions, 12 were single-vehicle collisions and 14 were rear-end collisions. Six of these collisions resulted in injuries, none in a fatality.

Rear-end collisions are commonly the leading crash type in corridors such as Great Plain Avenue. The relatively high number of sideswipe collisions appear to be from drivers changing lanes, frequently from the left lane to the right lane to get around a left-turning vehicle waiting for an oncoming gap in traffic. Some of these crashes may also be attributed to the somewhat awkward westbound transition from two lanes to one after crossing the railroad tracks. In addition, the number of angle collisions along Great Plain Avenue appears elevated. This is likely due to drivers entering from driveways or side streets entering into traffic without a sufficiently large gap, which is common along heavily traveled arterial streets. When angle collisions happen at signals, this is typically due to red-light running. The very low number of crashes resulting in injuries (less than 10% of crashes) indicates that travel speeds along this busy corridor are relatively low.

The remainder of the study streets and intersections appear to have a relatively low number of crashes, with very few injuries and no fatalities.

There are no MassDOT-identified crash clusters located within the project area.

Sight Distance

On May 9, 2023, spot speed studies were conducted on Linden Street between the two vehicle access ways to assess driving speeds along Linden Street. The Needham prima facie speed limit of 30 miles per hour applies to most of the street, but in the area of the site and where the speed study was conducted, a school zone speed limit of 20 miles per hour is posted along Linden Street. A summary of the speed data results is shown in **Table 2** below. The most notable metric presented in the table is the 85th percentile speed, which was utilized for the sight distance analysis. Based on the speeds observed, the sight distance analysis was conducted using an operating speed of 30 miles per hour.

Table 2: Linden Street Speed Study Summary

	Posted Speed	Average Speed	True Median (50 th Percentile)	85 th Percentile	10 MPH Pace	% over Posted
Northbound	20	24	24	28	18-27	80
Southbound	20	25	26	30	21-30	82



In conjunction with the spot speed study conducted, the available sight distance at the existing driveways were measured. Photos of the sight lines are shown in **Photos 8 through 11** below.



Photo 8. Sight distance looking South (left) from Chambers Street



Photo 9. Sight distance looking North (right) from Chambers Street



Photo 10. Sight distance looking South (left) from the Linden Street Parking Lot



Photo 11. Sight distance looking North (right) from the Linden Street Parking Lot

According to the latest edition of the American Association of State Highway and Transportation Officials (AASHTO) publication *A Policy on the Geometric Design of Highways and Streets*, the minimum safe stopping sight distances (SSD) for operating speeds of 30 miles per hour is 200 feet. The required intersection sight distance to avoid a collision is equal to the stopping sight distance.

In addition, AASHTO gives guidance for a more desirable intersection sight distance (ISD) for these speeds, which will not only avoid collisions, but maintain vehicular flow of at least 70 percent of the original operating speed. Meeting the desirable criteria for sight distance is more applicable to heavily traveled roadways, where maintaining steady traffic flow is important. A summary of the sight distance available for each driveway can be seen in **Table 3** below.

Table 3: Sight Distance Summary

		Required ISD (ft)	Desirable ISD (ft)	Measured ISD (ft)
Chambers Street	Looking South (left)	200	290	305
	Looking North (right)	200	335	>500
Linden Street Parking Lot	Looking South (left)	200	290	>500
	Looking North (right)	200	335	>500

ISD = Intersection Sight Distance

As shown, all sight distances exceed both minimum and desirable intersection sight distance standards.



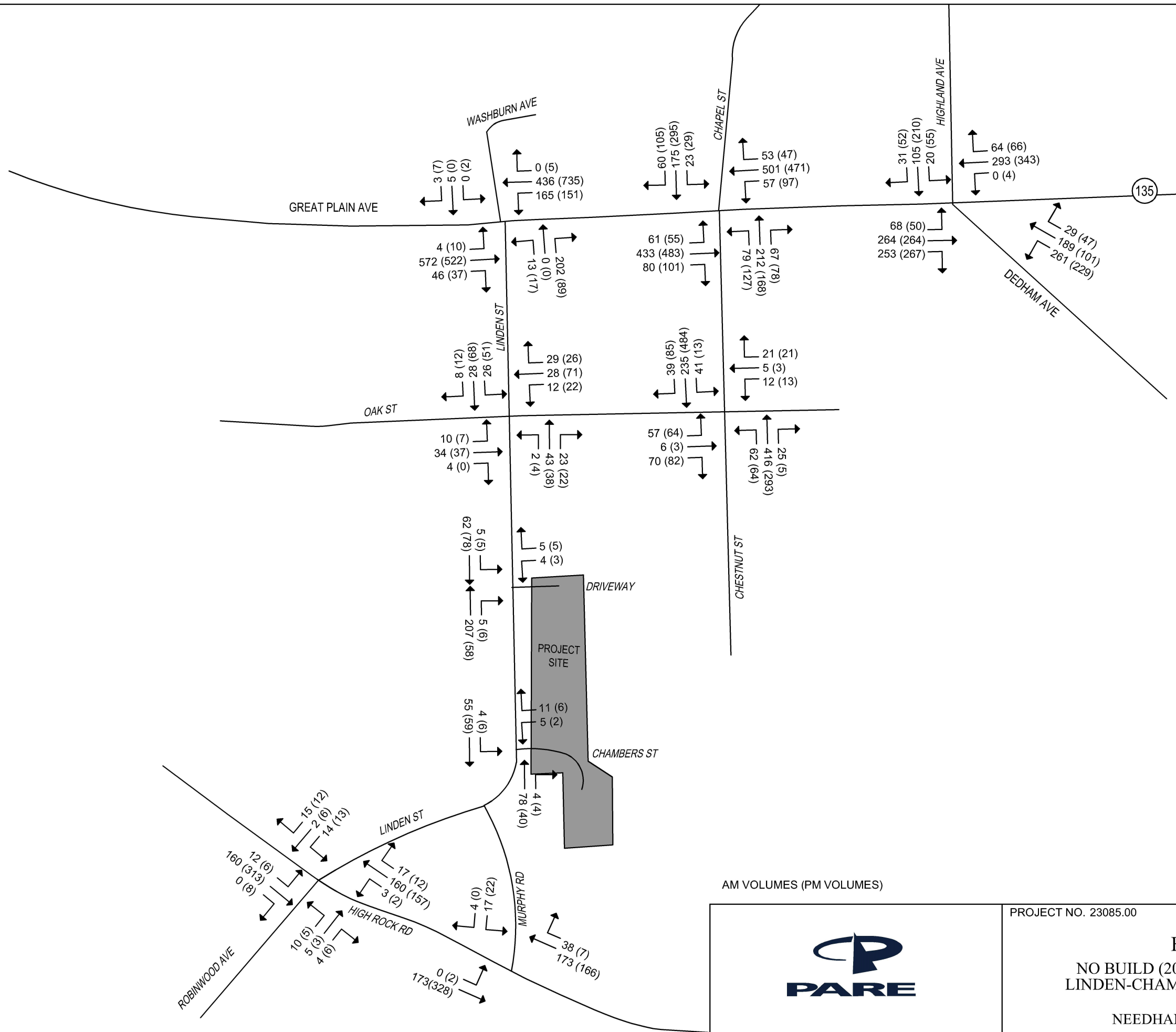
NO-BUILD CONDITIONS

Future no-build traffic volumes are determined by projecting the existing traffic volumes based on a determined annual growth rate and including known potential developments within the study area. The Needham Planning Department was contacted to determine if there are currently any developments proposed within the vicinity of the site whose trip generation information should be included in this study; there were none reported.

To account for background growth along the roadways within the vicinity of the project site, the existing traffic volumes were projected forward over an eight-year horizon from 2023 to 2031. Recent census data was reviewed to determine the appropriate growth rate. The census data showed a population increase of approximately 1.06% per year from 2010 to 2020 for the Town of Needham. Therefore, a growth rate of 1.5% per year was used for the eight-year projection.

A copy of the available census data is provided in Appendix D. **Figure 6** provides the 2031 no-build volumes for the morning and afternoon peak hours.





AM VOLUMES (PM VOLUMES)



PROJECT NO. 23085.00

DATE: MARCH 2024

FIGURE 6
NO BUILD (2031) TRAFFIC VOLUMES
LINDEN-CHAMBERS REDEVELOPMENT
NEEDHAM, MASSACHUSETTS

BUILD CONDITIONS

The future 2031 build condition represents the future 2031 no-build condition plus the anticipated trips due to the proposed increase of a maximum of 123 dwelling units. With the existing 152 units, the proposed additional units increase the total number to 275 units.

Trip Generation

The expected trips for the proposed residential development were determined through the use of the 11th edition of *Trip Generation*, published by the Institute of Transportation Engineers (ITE). Land Use Code (LUC) 220 for Multifamily Housing (Low-Rise) consisting of an additional 123 dwelling units. **Table 4** below summarizes the expected trips for this facility throughout the day, during the morning peak, and afternoon peak hour.

Table 4: Trip Generation Summary

		Weekday	AM Peak	PM Peak
LUC 220 – Multifamily Housing (Low-Rise) - 123 Units	Entering	432	15	46
	Exiting	432	46	27
	Total	864	61	73

Trip Distribution

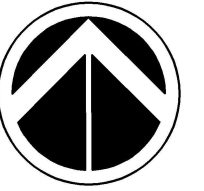
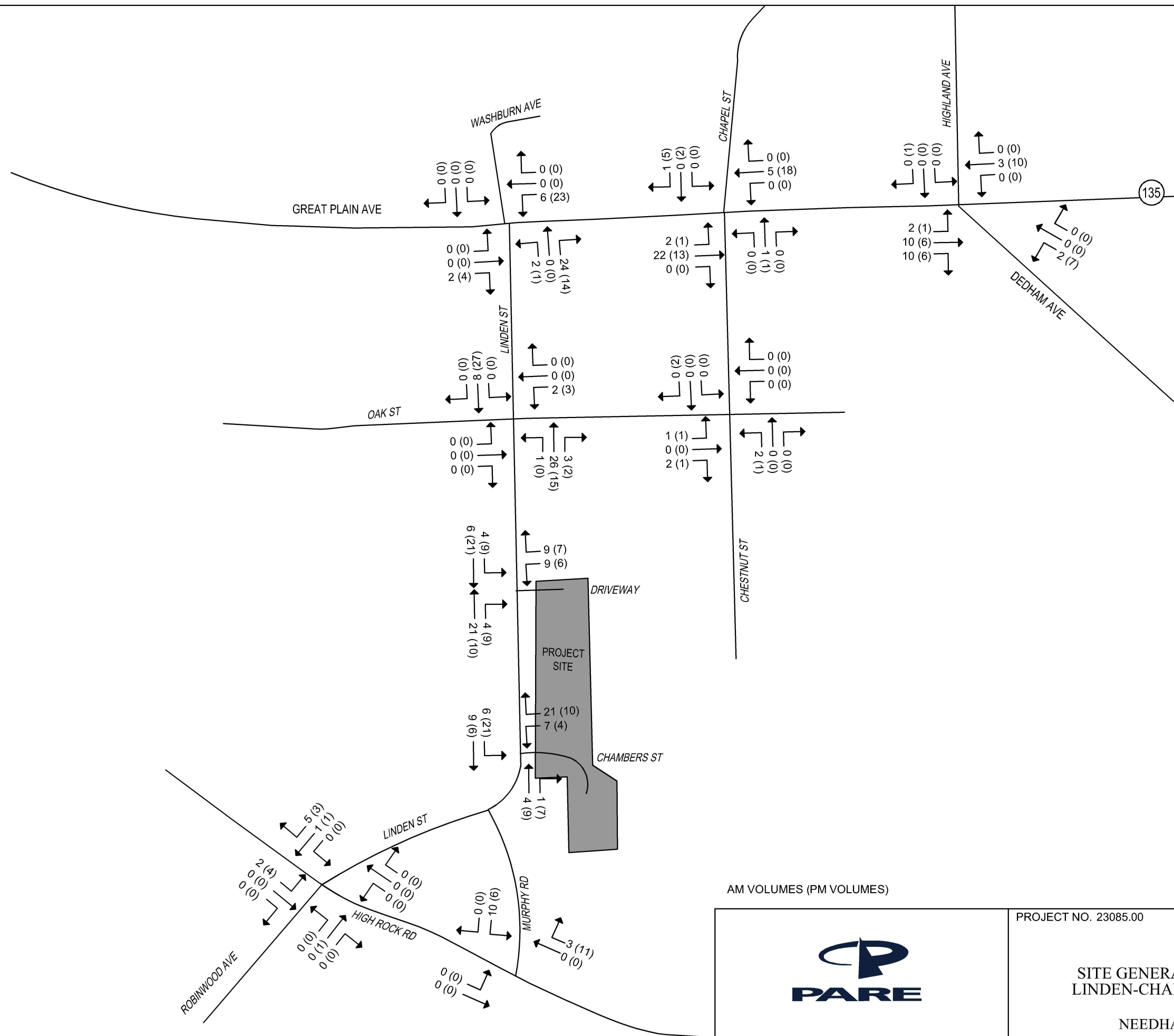
Given the land use on the site will not change, only expand, it is anticipated that trip distribution for traffic associated with the redevelopment is expected to follow similar existing traffic patterns.

South of the site, it is anticipated that vehicles will be using intersections with the most direct route. Vehicles heading east are anticipated to use the intersection of High Rock Street and Murphy Road, while vehicles heading west are anticipated to use the intersection of High Rock Street at Linden Street and Robinwood Avenue.

Site-generated traffic volumes are shown in **Figure 7** for new traffic to the development, while **Figure 8** displays the future (2031) build condition volumes.

After applying the additional site -generated trips, traffic volumes along Linden Street are anticipated to increase by approximately 14-15 percent during the morning peak hour and by between 25 and 32 percent during the afternoon peak hour in the vicinity of the proposed development.





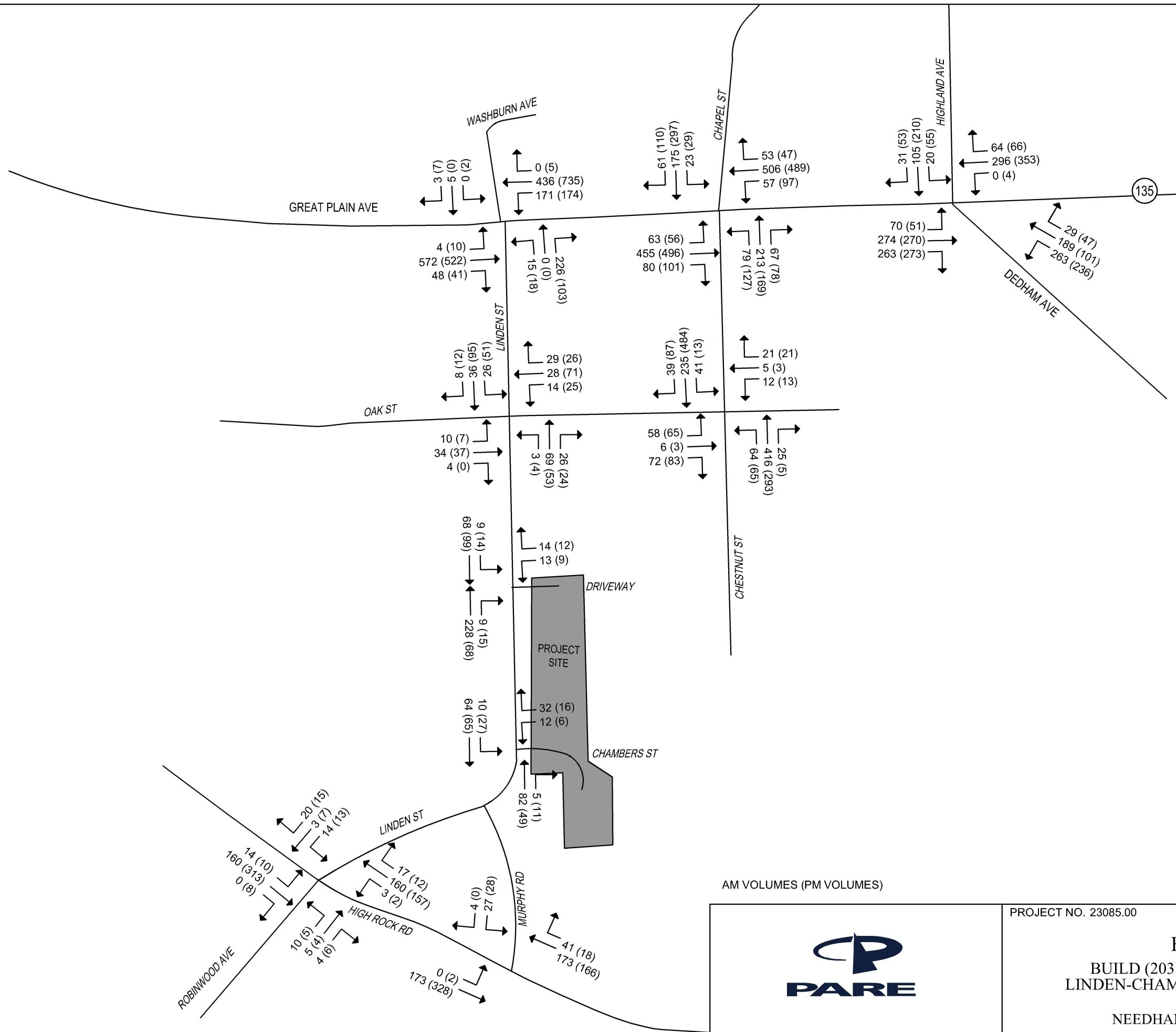
AM VOLUMES (PM VOLUMES)



PROJECT NO. 23085.00

DATE: APRIL 2024

FIGURE 7
SITE GENERATED TRAFFIC VOLUMES
LINDEN-CHAMBERS REDEVELOPMENT
NEEDHAM, MASSACHUSETTS



AM VOLUMES (PM VOLUMES)



PROJECT NO. 23085.00

DATE: APRIL 2024

FIGURE 8
BUILD (2031) TRAFFIC VOLUMES
LINDEN-CHAMBERS REDEVELOPMENT
NEEDHAM, MASSACHUSETTS

CAPACITY ANALYSES

Capacity analyses were completed for all study intersections for existing, future no-build, and future build conditions. Capacity analyses characterize intersections based on their level of service (LOS). LOS is a quality measure describing operational conditions within a traffic stream, generally in terms of service measures such as speed, travel times, traffic interruptions, etc. Six LOS values, from A to F, are defined for each type of facility, with A representing the best operating conditions and F representing the worst operating conditions. The LOS criteria for signalized and unsignalized intersections is provided in **Table 5** below. **Tables 6 and 7** summarize the capacity analysis results for the morning and afternoon peak hours, respectively.

Table 5: LOS Criteria for Signalized and Unsignalized Intersections

LOS	Signalized Intersection	Unsignalized Intersection
	Delay Time (sec/veh)	Delay Time (sec/veh)
A	≤ 10	0-10
B	> 10-20	> 10-15
C	> 20-35	> 15-25
D	> 35-55	> 25-35
E	> 55-80	> 35-50
F	> 80	> 50

As shown in the tables below, there is minimal anticipated increase in overall LOS at the signalized intersections between no-build and build conditions during either the morning or afternoon peak hours. Further, all three signalized intersections are anticipated to operate at LOS C or better during the morning peak hour and LOS D or better during the afternoon peak hour. The overall impact of the proposed development is anticipated to be less than two seconds of additional delay at all signalized intersections during both peak hours. The analysis did indicate some difficult movements/approaches, including the Dedham Avenue northbound left approach and southbound left approach during both peak hours. These are existing conditions, and the proposed development is not anticipated to significantly exacerbate the delays experienced for these approaches.



Table 6: Morning Peak Hour LOS Summary

Intersection	Movement		Existing (2023)		Future (2031) No-Build		Future (2031) Build	
			LOS (Delay ¹)	Queue Length ²	LOS (Delay ¹)	Queue Length ²	LOS (Delay ¹)	Queue Length ²
Great Plain Avenue at Chestnut Street and Chapel Street	EB	LTR	B (16.4)	234	B (19.4)	275	B (19.4)	290
	WB	LTR	A (9.5)	153	B (11.5)	171	B (11.6)	172
	NB	L	D (37.1)	83	D (36.4)	93	D (37.2)	93
		TR	E (61.0)	#334	E (55.9)	#398	E (57.8)	#402
	SB	L	C (31.4)	33	C (30.2)	36	C (30.8)	36
		TR	E (66.0)	256	E (67.6)	#317	E (71.4)	#321
	Intersection		C (28.6)		C (29.6)		C (30.3)	
Great Plain Avenue at Dedham Avenue and Highland Avenue	EB	LT	C (22.1)	#377	C (23.0)	#441	C (23.5)	#467
		R	A (3.7)	32	A (4.1)	44	A (4.3)	53
	WB	LTR	C (20.3)	159	C (21.6)	180	C (21.6)	181
	NB	L	E (65.2)	270	E (67.9)	306	E (68.1)	308
		TR	D (51.7)	216	D (52.5)	247	D (52.3)	247
	SB	LT	E (77.0)	#157	F (83.5)	#194	F (83.5)	#194
		R	A (1.0)	0	A (1.2)	0	A (1.2)	< 25
Intersection		C (33.2)		C (34.8)		C (34.7)		
Oak Street at Chestnut Street	EB	LTR	B (14.5)	58	B (16.5)	80	B (16.7)	71
	WB	LTR	C (21.8)	32	C (22.0)	36	C (22.0)	36
	NB	L	B (16.3)	41	B (17.2)	47	B (17.3)	48
		TR	C (24.3)	240	C (28.3)	281	C (28.3)	281
	SB	LT	C (20.2)	155	C (25.5)	194	C (25.5)	194
		R	A (2.8)	11	A (3.6)	13	A (3.6)	13
	Intersection		C (20.4)		C (24.0)		C (24.0)	
Great Plain Avenue at Linden Street and Washburn Avenue	EB	L	A (8.3)	< 25	A (8.5)	< 25	A (8.5)	< 25
	WB	L	A (10.0)	< 25	B (10.7)	< 25	B (10.7)	< 25
	NB	LTR	E (39.7)	148	F (110.0)	298	F (164.8)	398
	SB	LTR	E (35.9)	< 25	E (49.7)	< 25	F (52.0)	< 25
Linden Street at Oak Street	EB	LTR	A (7.6)	< 25	A (7.8)	< 25	A (8.0)	< 25
	WB	LTR	A (7.4)	< 25	A (7.6)	< 25	A (7.7)	< 25
	NB	LTR	A (7.4)	< 25	A (7.6)	< 25	A (7.9)	< 25
	SB	LTR	A (7.7)	< 25	A (7.8)	< 25	A (8.0)	< 25



Table 6 (Continued): Morning Peak Hour LOS Summary

Intersection	Movement		Existing (2023)		Future (2031) No-Build		Future (2031) Build	
			LOS (Delay ¹)	Queue Length ²	LOS (Delay ¹)	Queue Length ²	LOS (Delay ¹)	Queue Length ²
High Rock Street at Linden Street and Robinwood Avenue	EB	LTR	B (12.1)	< 25	B (12.9)	< 25	B (13.0)	< 25
	WB	LTR	B (11.0)	< 25	B (11.7)	< 25	B (11.6)	< 25
	NB	LTR	A (7.7)	< 25	A (7.8)	< 25	A (7.8)	< 25
	SB	LTR	A (7.6)	< 25	A (7.7)	< 25	A (7.7)	< 25
Linden Street at Access Driveway	WB	LR	B (11.1)	< 25	B (11.7)	< 25	B (13.0)	< 25
	SB	LT	A (8.1)	< 25	A (8.2)	< 25	A (8.4)	< 25
Linden Street at Chamber Street	WB	LR	A (9.1)	< 25	A (9.2)	< 25	A (9.5)	< 25
	SB	LT	A (7.4)	< 25	A (7.5)	< 25	A (7.5)	< 25
High Rock Street at Murphy Road	WB	LTR	B (11.6)	< 25	B (12.1)	< 25	B (12.6)	< 25
	SB	L	A (0.0)	< 25	A (0.0)	< 25	A (0.0)	< 25

1. Delay shown in seconds per vehicle.

2. Queue Length shown in feet, assuming 25 feet per vehicle at unsignalized intersections.

- 95th percentile volume exceeds capacity, value shown is queue after two consecutive 95th percentile cycles.

Table 7: Afternoon Peak Hour LOS Summary

Table 7: Afternoon Peak Hour LOS Summary								
Intersection	Movement		Existing (2023)		Future (2031) No-Build		Future (2031) Build	
			LOS (Delay ¹)	Queue Length ²	LOS (Delay ¹)	Queue Length ²	LOS (Delay ¹)	Queue Length ²
Great Plain Avenue at Chestnut Street and Chapel Street	EB	LTR	B (19.4)	273	C (21.1)	#344	C (21.6)	#360
	WB	LTR	B (13.5)	145	B (16.6)	#349	B (17.2)	#366
	NB	L	D (51.9)	#121	F (80.5)	#175	F (80.5)	#175
		TR	D (40.6)	236	D (42.7)	268	D (42.7)	269
	SB	L	C (26.4)	34	C (26.7)	37	C (26.7)	37
		TR	F (94.3)	#474	F (133.2)	#554	F (140.9)	#566
	Intersection		D (35.8)		D (46.5)		D (48.0)	
Great Plain Avenue at Dedham Avenue and Highland Avenue	EB	LT	C (20.5)	#371	C (23.9)	#446	C (24.3)	#461
		R	A (6.5)	78	A (7.3)	101	A (7.4)	103
	WB	LTR	C (23.1)	192	C (24.6)	217	C (24.8)	223
	NB	L	E (71.6)	#279	E (78.4)	#327	F (81.7)	#339
		TR	D (43.4)	146	D (44.8)	166	D (44.4)	166
	SB	LT	E (61.9)	256	E (64.9)	#293	E (64.9)	#293
		R	A (0.7)	< 25	A (1.2)	< 25	A (1.3)	< 25
	Intersection		C (33.5)		D (36.2)		D (36.7)	



Table 7 (Continued): Afternoon Peak Hour LOS Summary

Intersection	Movement		Existing (2023)		Future (2031) No-Build		Future (2031) Build	
			LOS (Delay ¹)	Queue Length ²	LOS (Delay ¹)	Queue Length ²	LOS (Delay ¹)	Queue Length ²
Oak Street at Chestnut Street	EB	LTR	B (13.4)	66	B (15.5)	80	B (15.7)	81
	WB	LTR	C (21.9)	30	C (22.3)	34	C (22.3)	34
	NB	L	B (18.8)	48	C (22.5)	58	C (22.7)	59
		TR	B (18.1)	155	B (18.9)	177	B (18.9)	177
	SB	LT	C (23.0)	264	C (25.9)	310	C (25.9)	310
		R	A (4.4)	24	A (4.2)	25	A (4.2)	26
	Intersection		B (18.8)		C (20.7)		C (20.7)	
Great Plain Avenue at Linden Street and Washburn Avenue	EB	L	A (9.3)	< 25	A (9.6)	< 25	A (9.6)	< 25
	WB	L	A (9.3)	< 25	A (9.8)	< 25	A (9.9)	< 25
	NB	LTR	E (36.2)	68	F (80.5)	135	F (124.1)	188
	SB	LTR	D (25.2)	< 25	E (48.6)	< 25	F (60.6)	< 25
Linden Street at Oak Street	EB	LTR	A (7.8)	< 25	A (8.0)	< 25	A (8.2)	A (8.0)
	WB	LTR	A (8.1)	< 25	A (8.4)	< 25	A (8.6)	A (8.4)
	NB	LTR	A (7.7)	< 25	A (7.9)	< 25	A (8.2)	A (7.9)
	SB	LTR	A (8.3)	< 25	A (8.5)	< 25	A (8.9)	A (8.5)
High Rock Street at Linden Street and Robinwood Avenue	EB	LTR	B (12.4)	< 25	B (13.4)	< 25	B (13.8)	< 25
	WB	LTR	B (12.4)	< 25	B (13.5)	< 25	B (13.5)	< 25
	NB	LTR	A (8.0)	< 25	A (8.1)	< 25	A (8.1)	< 25
	SB	LTR	A (7.6)	< 25	A (7.6)	< 25	A (7.7)	< 25
Linden Street at Access Driveway	WB	LR	A (9.0)	< 25	A (9.1)	< 25	A (9.5)	< 25
	SB	L	A (7.4)	< 25	A (7.4)	< 25	A (7.5)	< 25
Linden Street at Chamber Street	WB	LR	A (8.6)	< 25	A (8.8)	< 25	A (9.1)	< 25
	SB	L	A (7.3)	< 25	A (7.3)	< 25	A (7.4)	< 25
High Rock Street at Murphy Road	WB	LTR	B (12.9)	< 25	B (13.8)	< 25	B (14.1)	< 25
	SB	L	A (7.6)	< 25	A (7.6)	< 25	A (7.7)	< 25

1. Delay shown in seconds per vehicle.

2. Queue Length shown in feet, assuming 25 feet per vehicle at unsignalized intersections.

- 95th percentile volume exceeds capacity, value shown is queue after two consecutive 95th percentile cycles.



At the unsignalized intersections, the Linden Street approach to Great Plain Avenue currently experiences significant delays during commuter peak hours. Under the 2031 no-build condition, this approach is anticipated to operate at LOS F. These conditions are common at unsignalized approaches to heavily traveled arterial streets. The proposed development expansion adds approximately one vehicle to this approach every 105 seconds during the morning peak hour and one vehicle every 90 seconds during the afternoon peak hour. Further, these increases assume that nearly all traffic approaching Great Plain Avenue would utilize this approach. However, motorists have several other options to access Great Plain Avenue depending on their ultimate destination. These options include Curve Street, Marked Tree Road, Maple Street, and Chestnut Street. If motorists believe they can access Great Plain Avenue quicker by utilizing these paths, they likely will, reducing the impacts on the Linden Street northbound approach. Potential mitigation measures for this approach are limited. There does not appear to be enough right-of-way to add an approach lane at this intersection. Further, while the intersection would appear to meet a peak hour traffic signal warrant, it is unknown if the intersection would meet any other warrants, including a four-hour warrant or an 8-hour warrant. All other movements at the other unsignalized intersections within the study area maintain an LOS of B or better with the proposed expansion.



CONCLUSION

Pare Corporation conducted analyses of the potential impacts of the redevelopment of the senior and disabled housing development located on Linden Street and Chambers Street in Needham, Massachusetts. The Needham Housing Authority (NHA) aims to redevelop the housing from the current 152 units to a maximum of 275 units. The existing access driveways for the developments are anticipated to remain, with layout changes within the site only.

A safety review was conducted for the study of roadways and intersections. Crash data extracted from the MassDOT online crash data portal showed most of the crashes within the study area occurred along Great Plain Avenue. The crash data indicates that there are more sideswipe and angle crashes along this corridor than expected, but the rate of personal injuries was quite low and there were no fatalities. MassDOT has not identified any crash clusters anywhere along Great Plain Avenue. In addition, sight distances reviewed for the site driveways indicate more than adequate sight distances allowing vehicles exiting the driveways ample time to safely enter Linden Street.

Capacity analyses conducted at three signalized intersections and six unsignalized intersections indicate generally minor increases in delay at surrounding intersections. Signalized intersections are anticipated to have an LOS D or better for both morning and afternoon peak hours. Unsignalized intersections are anticipated to operate at an LOS B or better except for the intersection of Great Plain Avenue at Linden Street and Washburn Avenue. The stop-controlled northbound and southbound approaches of this intersection are anticipated to operate at an LOS E or F condition during both the no-build and build scenarios. The proposed housing expansion is anticipated to add less than 30 vehicles to the northbound approach during the morning peak hour and less than 20 vehicles during the afternoon peak hour to the northbound approach at this intersection, assuming none of these motorists utilize other available options to get to Great Plain Avenue. The proposed expansion is not anticipated to add any trips to the southbound approach.

In summary, Pare Corporation is of the opinion that the proposed development can be safely accommodated on the roadways and through the intersections within the study area.



HANCOCK ASSOCIATES



DRAFT

Stormwater Report

In Support Of

Notice of intent

For

Linden Street Redevelopment

(Map 133, Lots 23 and 24)

Needham MA

PREPARED BY:

Hancock Associates
#26774

PREPARED FOR:

Needham Housing Authority
21 Highland Circle,
Needham MA, 02494

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Introduction

Needham Housing Authority proposes to redevelop the site located at 133-188 Linden St, Needham MA with a four-story multi-unit residential building. Associated improvements will include paved vehicular parking and circulation, pedestrian walkways, recreation areas, landscaped areas, stormwater management systems, and utility services.

The project area is currently developed with single story multi-unit residential buildings, paved walkways, and grassed lawn areas. A central driveway provides parking for each unit. The buildings are serviced by municipal sewer, water, gas, and electric services. The site is abutted by residential houses to the north, east, and south. The eastern residential houses are separated from the site by a bordering vegetated wetland. There are two driveway entrances from Linden Street on the westerly side of the site. Across Linden Street is the High Rock Middle School. The site is relatively level but does slope upwards from north to south from elevation 142' to 147'.

The existing stormwater system consists of roof drains which discharge into a central subsurface drain system which discharges to the existing storm drain system located in Linden Street. Stormwater over the remainder of the site sheet flows to Linden Street to the west and the BVW to the East.

The proposed stormwater management system will include a series of deep sump hooded catch basins, drain manholes, roof drains, and grassed swales which will convey stormwater from paved areas and roof areas into two subsurface Stormtech SC-310 infiltration systems. Stormwater is treated for TSS and nutrients and groundwater recharge is provided by these two systems. The discharge from the stormwater system will discharge to the existing stormwater system located in Linden Street. There are two fire truck access lanes on the northern and southern sides of the building which will be constructed using pervious pavement and subsurface crushed gravel reservoirs. A network of perforated pvc pipes will help distribute stormwater through the stone reservoirs and overflow pipes connect the pipes to the SC-310 infiltration systems. A crushed stone infiltration trench is proposed along the concrete sidewalk at the rear of the building to collect stormwater runoff from the sidewalk and landscaping. These will provide further stormwater storage and infiltration for runoff from the fire access drives and landscaped areas.

The proposed stormwater management system is designed to meet the Stormwater Management Standards described in the Massachusetts Stormwater Handbook to the maximum extent practicable and the Town of Needham Stormwater Standards. The following report describes the system's compliance with these standards.

Standard 1: No New Untreated Discharges

The Massachusetts Stormwater Handbook states that no new stormwater conveyances may discharge untreated stormwater directly to or cause erosions in wetlands or waters of the Commonwealth. The project does not include new stormwater conveyances.

Standard 2: Peak Rate Attenuation

The Massachusetts Stormwater Handbook states that stormwater management systems shall be designed so that post-development peak discharge rates do not exceed pre-development peak discharge rates. A summary of the existing and proposed discharge rates follows. The proposed condition discharge rates of runoff are at or below the existing rates to the same discharge points. Please see the attached "Existing Drainage Figure" and "Proposed Drainage Figure" figures (Appendix III) and HydroCAD output (Appendix IV) for more information.

For the purpose of these calculations the following assumptions were made:

- The project property lines, wetland boundary, and Linden Street have been used to delineate the Pre/Post Development watershed boundary.
- The same total watershed area of the drainage areas is used to compare the existing and proposed conditions.
- The Natural Resources Conservation Service (NRCS) Web Soil Survey of Essex County defines multiple soils in the project area as 655, Udorthents, wet substrate (Hydrologic Soil Group not rated). A Preliminary Geotechnical Study completed by Intertek Professional Service Industries (PSI) on February 08, 2023. The report indicates that the upper layer consists of fill containing coarse sand, gravel and silt. The underlying layers consists of glacial till containing fine to coarse sand, some gravel and little to some silt. Soil testing was conducted by Hancock Associates and the two test pits confirm that the subsoil consists of sand.

Two (2) drainage analysis points have been modeled to represent the pre and post development watershed:

- Drainage Analysis Point DP1 defines the bordering vegetated wetlands at the rear of the site (east)
- Drainage Analysis Point DP2 defines the curb line of Linden Street along the front of the property (West)

The following sub catchments define the watershed of the Pre-development condition of the Phase 1 work area:

Subcatchment EX1 is comprised of single story buildings, asphalt walkways, concrete steps and landings, landscaped grassed lawns, and wooded areas. Stormwater flows overland to DP1 and is comprised of sheet flow and shallow concentrated flow.

Subcatchment EX2 is comprised of single story buildings, asphalt parking lot, asphalt walkways, concrete steps and landings, landscaped grassed lawns, and wooded areas. Stormwater flows overland to DP2 and is comprised of sheet flow and shallow concentrated flow.

Subcatchment EX3 is situated on HSG 'D' soils and is comprised of single story buildings, asphalt parking lot, asphalt walkways, concrete steps and landings, landscaped grassed lawns, and wooded areas. Stormwater flows overland to DP2 and is comprised of sheet flow and shallow concentrated flow.

Subcatchment BLD is comprised of all building roads. Stormwater flows via pipes to DP2.

The following sub catchments define the watershed of the Post-development condition of the Phase 1 work area:

Subcatchment P1 consists of the area at rear (east) of the building and to the north of the building that drains to DP1. The area is comprised of woods, non grazed meadow, and P1A and P1B. P1A consists of landscaped area and concrete sidewalk directly adjacent to the rear (east) side of the building. Stormwater flows overland to the stone infiltration trench (Pond 7P) which infiltrates runoff. P1B consists of the rear patio constructed from permeable pavers. All Stormwater is infiltrated through the subsurface storage below the pavers (Pond 5P).

Subcatchment P2A consists of the area that infiltrates into the upper section (Pond 1P) of the pervious pavement fire access driveway on the northeastern side of the building. The area is comprised of concrete walkway, pervious pavement, and landscape/meadow. Overflow from the system drains to subcatchment P2B via a perforated pipe underdrain or sheet flow over the pervious pavement.

Subcatchment P2B consists of the area that infiltrates into the lower section (Pond 2P & 3P) of the pervious pavement fire access driveway on the northwestern side of the building. The area is comprised of concrete

walkway, pervious pavement, and landscape/meadow. Overflow from the system drains to infiltration system 1 (IS1) via an overflow pipe or sheet flow over the pervious pavement to DP2.

Subcatchment P3 consists of the northern portion of the parking lot. Stormwater sheet flows into deep sump catch basin CB1 which then flows into SC-310 infiltration system 1 (Pond IS1). Overflow from the system drains to DP2. The area is comprised of concrete walkway, bituminous concrete parking lot, and landscaped areas.

Subcatchment P4-P6 consists of the remainder of the parking lot and entrance driveway/circle. Stormwater sheet flows into deep sump catch basins CB2, CB3, and CB4 respectively, which then flows into SC-310 system 2 (Pond IS2). Overflow from the system drains to DP2. The areas are comprised of concrete walkway, bituminous concrete parking lot, and landscaped areas.

Subcatchment P7 consists of the area between the parking lot and the south eastern portion of the building. Stormwater flows into a shallow swale which runs parallel to the building. Stormwater is collected in the low point of the swale by catch basin CB5 which discharges into SC-310 System 2 (IS2). The area is comprised of landscaped areas.

Subcatchment P8 consists of the area on the southwestern side of the building that infiltrates into the subsurface system (Pond 4P) located under the pervious asphalt driveway. Overflow from the system drains to infiltration system 2 (IS2) via an overflow pipe or sheet flow over the pervious pavement to DP2. The area is comprised of concrete walkway, permeable pavement, and landscaped areas.

Subcatchment P9 consists of the area abutting Linden Street that does not enter any of the infiltration systems. Overflow from the system drains to DP1. The area is comprised of concrete walkway, permeable paved driveway, and grassed landscaped areas.

Subcatchments B1A & B1B consist of roof area which discharge to Infiltration system 1 (IS1) & 2 (IS2) respectively.

Table 1: Peak Rates of Runoff

Discharge Point	Peak Rate (cfs)							
	2-Year Storm (3.30" Rainfall Depth)		10-Year Storm (5.20" Rainfall Depth)		25-Year Storm (6.40" Rainfall Depth)		100-Year Storm (8.20" Rainfall Depth)	
	Existing	Proposed	Existing	Proposed	Existing	Proposed	Existing	Proposed
DP1 (Linden St)	3.31	3.31	6.81	6.79	9.27	8.90	13.16	11.46
DP2 (Wetland)	0.05	0.00	0.75	0.00	1.64	0.01	3.23	0.41

Table 2: Runoff Volume

Discharge Point	Volume (cf)							
	2-Year Storm (3.30" Rainfall Depth)		10-Year Storm (5.20" Rainfall Depth)		25-Year Storm (6.40" Rainfall Depth)		100-Year Storm (8.20" Rainfall Depth)	
	Existing	Proposed	Existing	Proposed	Existing	Proposed	Existing	Proposed
DP1 (Linden St)	11,658	3,746	22,602	10,840	30,303	16,453	42,573	26,102
DP2 (wetland)	626	0.00	3,568	38	6,300	385	11,291	1,715

Standard 3: Recharge

The Massachusetts Stormwater Handbook states that loss of annual recharge to groundwater shall be eliminated or minimized. The annual recharge from the post-development site shall approximate the annual recharge from the pre-development conditions based on soil type. Recharge volumes are provided for all the proposed impervious areas. For the purpose of these calculations, all of the project areas are considered to be Hydrologic Soil Group A. The required recharge volume is 1" multiplied by the area of impervious surfaces. See Appendix VI for the attached HydroCAD summaries for the recharge volumes provided. The volumes is as follows:

Required Recharge Volume, HSG B = Target Depth * Impervious Area = 1"/12" * 66,254 SF = 5,521 CF

This project is a redevelopment by reducing the overall impervious area by introducing landscaped areas and reducing the amount of roof area. This project is also an improvement on the existing condition due to the installation of stormwater management systems on a site where none exist.

Recharge Volumes (volume under lowest outlet)

Subsurface system 1 (IS1): 477 cf

Subsurface system 2 (IS2): 1,099 cf

Pervious Pavement (drive left 1P,2P,3P): 250cf

Pervious Pavement (drive right 4P): (1304+388+759)=2,451 cf

Permeable Pavers (patio back 5P): 516 cf

Permeable Pavers (patios front 6P): 420 cf

Stone Infiltration trench (7P): 300cf

Total recharge volume = 5,558cf >5,521 cf

The total recharge volume is 5,958 cubic feet. Since the volume provided is greater than the required recharge volume, the standard is met. Please refer to the HydroCAD output for Recharge Volumes (Appendix VI) for more information.

The Massachusetts Stormwater Handbook states that the recharge volume must drain within 72 hours. Observations in test pits observed on-site indicate that the soil that the subsurface systems will be installed upon is sand. Please see the attached "Geotechnical Engineering Report" (Appendix VII) and soil test pit information on the pre and post development drainage plans (Appendix IV). The following "drawdown" calculation assumes a Rawl's Rate of 8.27 inches per hour, corresponding to texture class "sand".

Drawdown Time = Storage Volume / (Rawl's Rate * Bottom Area)

Subsurface system 1 (IS1):

= 477 CF / (8.27 in/hr * 610 SF) = 1.1 Hour

Subsurface system 2 (IS2):

= 1,099 CF / (8.27 in/hr * 1494 SF) = 0.4 Hours

Permeable Pavement (drive right 1P,2P,3P):

= 2,451 CF / (8.27 in/hr * 5,185 SF) = 0.8 Hours

Permeable Pavement (drive left 4P):

= 250 CF / (8.27 in/hr * 4666 SF) = 0.1 Hours

Permeable Pavement (patio back 5P):

= 516 CF / (8.27 in/hr * 1,720 SF) = 0.6 Hours

Permeable pavement (patio front 6P):

= 420 CF / (8.27 in/hr * 400 SF) = 1.5 Hours

Stone Infiltration trench (7P)

= 300 CF / (8.27 in/hr * 500 SF) = 0.9 Hours

Since the drawdown time of all infiltration practices is less than 72 hours, the requirement is met.

Standard 4: Water Quality

The Massachusetts Stormwater Handbook states that systems shall be designed to remove 80% of the average annual post-development construction load of Total Suspended Solids (TSS).

Stormwater runoff from vehicular paved areas will be treated to the required TSS removal via deep sump hooded catch basins, SC=310 treatment rows, and permeable pavers. The treatment train computation is as follows:

Table 2A: Treatment Train Calculation: SC-310

BMP	TSS Removal Rate	Starting TSS Load	Amount Removed	Remaining Load
Deep sump catch basin	0.25	1	.25	.75
Total TSS Pretreatment				75%
SC-310	0.80	.75	0.6	0.15
Total TSS Removal				85%
Total Phosphorus removal				68%

Table 2B: Treatment Train Calculation: Permeable Pavers

BMP	TSS Removal Rate	Starting TSS Load	Amount Removed	Remaining Load
Grassed Filter Strips	0.1	1	.1	.90
Street Sweeping	0.1	.9	.9	.81
Total TSS Pretreatment				19%
Permeable paver/Infiltration Trench	0.80	.81	0.65	0.16
Total TSS Removal				84%
Total Phosphorus removal				70%

Water Quality Volume Calculations

Standard 4 requires a certain amount of stormwater to be infiltrated to remove sediment and nutrients from stormwater runoff.

$$WQV = (A) * 1\text{in.}$$

Where:

A = impervious surface drainage area (in square feet)

WQV = water quality volume in watershed inches (1-inch in this case)

Subsurface System 1 (IS1)

$$WQV = (21,312)(1\text{ inch.})(1\text{ft} / 12\text{inches})$$

$$WQV = 1,776\text{ CF (1,918 cf infiltrated in the 1.4" storm, 0cf discharge from system)}$$

Subsurface System 2 (IS2)

$$WQV = (36,278)(1\text{ inch.})(1\text{ft} / 12\text{inches})$$

$$WQV = 3,023\text{ CF (3,393cf infiltrated in the 1.6" storm, 0cf discharge from system)}$$

Back patio (No impervious area)

Front patio (No impervious area)

Permeable Pavement (drive right 1P,2P,3P):

$$WQV = (2,150)(1\text{ inch.})(1\text{ft} / 12\text{inches})$$

$$WQV = 180\text{ CF (2,451 cf of storage below the lowest outlet)}$$

Permeable Pavement (drive left 4P):

$$WQV = (1020\text{ SF})(1\text{ inch.})(1\text{ft} / 12\text{inches})$$

$$WQV = 85\text{ CF (250 cf of storage below the lowest outlet)}$$

Stone Infiltration Trench (7P)

$$WQV = (2,300\text{ SF})(1\text{ inch.})(1\text{ft} / 12\text{inches})$$

$$WQV = 191\text{ CF (300 cf of storage below the lowest outlet)}$$

All of the systems provide more storage volume than the required calculated water quality volume; therefore, the requirement is met.

Standard 5: Land Uses with Higher Potential Pollutant Loads

This site will not be considered a Land Use with Higher Potential Pollutant Load since it will not have more than 1000 vehicle trips per day and will not have support any industrial use.

Standard 6: Critical Area

The proposed project is not within a critical area.

Standard 7: Redevelopment

The proposed project is a redevelopment. The project aims to develop the existing degraded single story residential buildings into a multi-unit residential building serviced by ADA compliant parking and sidewalks. In doing so, the project will reduce the amount of impervious area, create landscaping/open space, and provide stormwater infiltration systems where none currently exist. This project intends to comply with all the Massachusetts Stormwater Standards to the maximum extent practicable.

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

Best management practices (BMP) for erosion and sedimentation control are staked straw wattles, hydro seeding, construction entrance, catch basin sediment sacks, and phased development. Many stormwater BMP technologies (e.g., infiltration technologies) are not designed to handle the high concentrations of sediments typically found in construction runoff and must be protected from construction-related sediment loadings. Construction BMP's must be maintained. In developing the proposed project, certain measures will be implemented to minimize impacts erosion and sedimentation could have on surrounding areas. This section addresses items that involve proper construction techniques, close surveillance of workmanship, and immediate response to emergency situations. The developer must be prepared to provide whatever reasonable measures are necessary to protect the environment during construction and to stabilize all disturbed areas as soon as construction ends. Construction period pollution prevention and erosion and sediment control shall meet the requirements for the 2022 EPA Construction General Permit for all projects requiring coverage under the CGP.

Pre-Construction

1. The contractor shall have a stockpile of materials required to control erosion on-site to be used to supplement or repair erosion control devices. These materials shall include, but are not limited to, wattles and crushed stone.
2. The contractor is responsible for erosion control on site and shall utilize erosion control measures where needed, regardless of whether the measures are specified on the plan or in the order of conditions.

Preliminary Site Work

1. Excavated materials should be stockpiled, separating the topsoil for future use on the site. Erosion control shall be utilized along the down slope side of the piles and side slopes shall not exceed 2:1.
2. If intense rainfall is anticipated, the installation of supplemental straw bale dikes, silt fences, or armored dikes shall be considered.
3. Unsuitable excavated material shall be removed from the site.
4. Construction entrance shall be installed.
5. Existing catchbasins shall be protected with silt sacks.

Ongoing Site Work

1. Erosion control measures shall be regularly inspected and replaced as needed.
2. Dewatering shall be done in a manner so as not to transmit silt, sand or particulate matter to the receiving water or existing drainage system.

Landscaping

1. Landscaping shall occur as soon as possible to provide permanent stabilization of disturbed surfaces.
2. If the season or adverse weather conditions do not allow the establishment of vegetation, temporary mulching with straw, wood chips weighted with snow fence or branches, or other methods shall be provided.
3. A minimum of 4 inches of topsoil shall be placed and its surface smoothed to the specified grades.
4. The use of herbicides is strongly discouraged.
5. Hydro seeding is encouraged for steep slopes. Application rates on slopes greater than 3:1 shall have a minimum seeding rate of 5-lbs/1000 SF. A latex or fiber tackifier shall be used on these slopes at a minimum rate of 50 lbs. of tackifier per 500 gallons of water used.

Standard 9: Operations and Maintenance Plan

The information provided herein is intended to provide the base information for operation and maintenance of the site in perpetuity subject to updates and revisions as required at a future date. As such all future property owners must be notified in writing of this plan and be provided with a copy of this plan, a complete set of the design drawings and/or a completed as-built plan showing all the drainage features as they were constructed, which are considered part of this document. Please see the attached Operations and Maintenance Log (Appendix VII).

Stormwater management system owner: Needham Housing Authority
The party responsible for operation and maintenance: Needham Housing Authority

Preliminary Stormwater Operation and Maintenance Budget

Quarterly Inspection and Maintenance x \$2,500 per visit = \$10,000 annually

Illicit Discharge - Practices to Minimize Storm Water Contamination

- All waste materials will be collected and stored in a securely lidded metal dumpster.
- All trash and debris from the site will be deposited in the dumpster. The dumpster will be emptied on a regular schedule prior to being over full.
- All personnel will be instructed regarding the correct procedure for waste disposal.
- Good housekeeping and spill control practices will be followed to minimize storm water contamination from petroleum products, paints, and cleaning products.
- All site vehicles will be monitored for leaks and receive regular preventive maintenance to reduce the chance of leakage.
- Spill kits will be provided with any activity that could provide contamination.
- All paint containers and curing compounds will be tightly sealed and stored when not required for use. Excess paint will not be discharged to the storm sewers but will be properly disposed of according to the manufacturer's instructions.
- All spills will be cleaned up immediately upon discovery. Spills large enough to reach the storm sewers will be reported to the Massachusetts Department of Environmental Protection Northeast Regional Office at 1-888-304-1133.

Subsurface Infiltration System

The infiltration BMP (subsurface SC-310 chamber system) shall be inspected after every major storm for the first few months to ensure it is stabilized and functioning properly. If necessary, corrective action shall be taken until the system functions properly. Inspectors should note how long water remains standing in the inspection port after a storm; standing water within the basin 48 to 72 hours after a storm indicates that the infiltration capacity may have been overestimated. If the ponding is due to clogging, immediately address the reasons for the clogging. Thereafter, inspect the infiltration BMP at least twice per year.

Pervious Pavement

The infiltration BMP shall be inspected after every major storm for the first few months to ensure it is stabilized and functioning properly. If necessary, corrective action shall be taken until the system functions properly. Inspectors should note how long water remains standing in the inspection port after a storm; standing water within the basin 48 to 72 hours after a storm indicates that the infiltration capacity may have been overestimated. If the ponding is due to clogging, immediately address the reasons for the clogging. Thereafter, inspect the infiltration BMP at least twice per year. Sanding is not allowed over pervious pavement. Vacuum sweep the surface monthly.

Deep Sump Hooded Catch Basins

Inspect deep sump catch basins four times per year including the end of the foliage and snow removal seasons. Sediments must also be removed four times per year or when the depth of deposits is greater than or equal to one half the depth of the sump. Vacuum trucks are to be used to remove trapped sediment and supernatant. Although catch basin debris often contains concentrations of oil and hazardous materials such as petroleum hydrocarbons and metals, MassDEP classifies them as solid waste. Any contaminated materials must be evaluated in accordance with the Hazardous Waste Regulations, 310 CMR 30.00, and handled as hazardous waste. MassDEP regulations prohibit landfills from accepting materials that contain free draining liquids.

Roof Drain Leaders

Routine roof inspections shall be performed two times per year. The roof shall be kept clean and free of debris, and the roof drainage systems shall be kept clear. Gutters and downspouts shall be cleaned at least twice per year, or more frequently as necessary.

Vegetated Areas Maintenance

Although not a structural component of the drainage system, the maintenance of vegetated areas may affect the functioning of stormwater management practices. This includes the health/density of vegetative cover and activities such as the application and disposal of lawn and garden care products, disposal of leaves and yard trimmings.

Initial Post-Construction Inspection

During the initial period of vegetation establishment pruning and weeding are required twice in first year by contractor or owner. Any dead vegetation/plantings found after the first year will be replaced. Proper mulching is mandatory and regular watering may be required initially to ensure proper establishment of new vegetation.

Long-Term Maintenance

The planted areas shall be inspected on a semi-annual basis and any litter removed. Weeds and invasive plant species shall be removed by hand. Maintain planted areas adjacent to pavement to prevent soil washout. Immediately clean any soil deposits on pavement. Leaf litter and other detritus shall be removed twice per year. If needed to maintain aesthetic appearance, perennial plantings may be trimmed at the end of the growing season.

Trees and shrubs shall be inspected twice per year to evaluate health and attended to as necessary. Seeded ground cover or grass areas shall not receive mulching. Re-seed bare areas; install appropriate erosion control measures when native soil is exposed or erosion channels are forming. Plant alternative mixtures of grass species in the event of unsuccessful establishment. The grass vegetation should not be cut to a height less than four inches.

Pesticide/Herbicide Usage

No pesticides are to be used unless a single spot treatment is required for a specific control application.

Structural Best Management Practice	Action	Date Completed	Completed By	Comments
Infiltration Systems - Inspect twice per year. Clean as required	Inspect/repair/clean			
Roof Drain Leaders – Inspect/clean twice per year.	Inspect/Clean			
Pervious Pavement. Inspect twice per year. Vacuum sweep monthly. Clean pipes as required	Inspect/maintain			
Deep Sump Catch Basins/Outlet Control structures– Inspect/clean four times per year. Clean when sump is 50% full.	Inspect/Clean			
Vegetated Areas Maintenance – Inspect twice per year. Maintain as required.	Inspect			
	Inspect			

Standard 10: Prohibition of Illicit Discharges

No illicit discharges currently exist and no future illicit discharges will be allowed including wastewater discharges and discharges of stormwater contaminated by contact with process wastes, raw materials, toxic pollutants, hazardous substances, soil, or grease.

HANCOCK ASSOCIATES

Surveyors | Engineers | Scientists



NEEDHAM HOUSING AUTHORITY

Linden Street Redevelopment

Planning Board – Site Plan Review
September 24, 2024



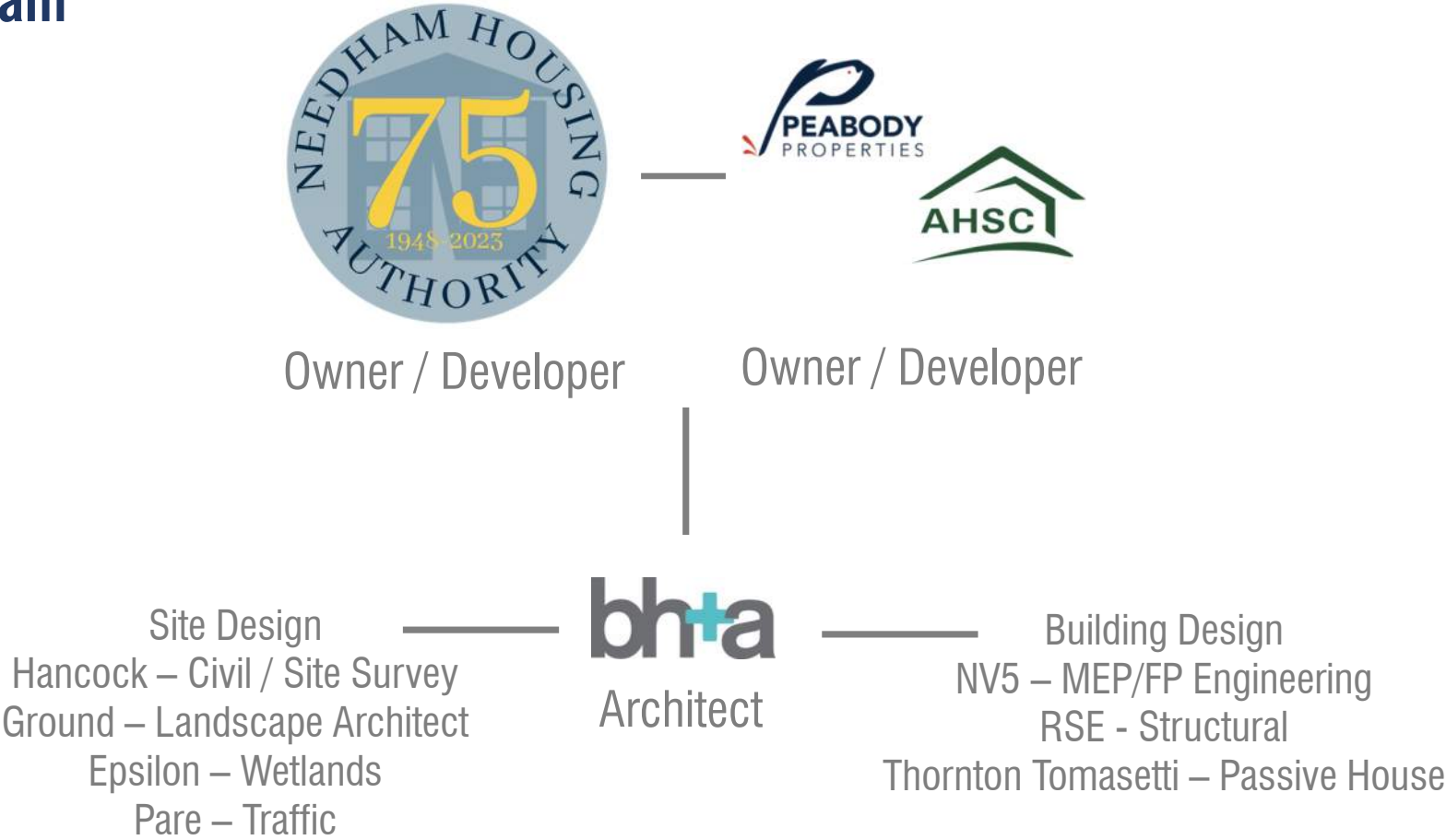
Bargmann Hendrie + Archetype Inc.

Site Plan Review - Submission

Pursuant to Chapter 40A of the Massachusetts General Laws, the Needham Zoning Bylaw, and the Planning Board Rules, the Needham Housing Authority submits the following:

- Application for Site Plan Review
- Plan Set titled, Site Plan Review, dated 8/23/24
- Traffic Impact Analysis, dated April 2024
- Stormwater Report
- Plan of Land (the Consolidation Plan), dated 12/21/24
- Zoning Letter, dated 8/23/24

Project Team



Co-Development

- ✓ 23 years of Collaboration
- ✓ 19 affordable housing communities together



Peabody Companies

Family-owned and operated by Principals Melissa Fish-Crane and Karen Fish-Will
Established in 1976, delivering excellence in professional real estate services to client communities from New England to New Jersey to Florida, where 23% are estate-owned properties and 77% are 3rd-party entities.
Growing, diversified portfolio with over 14,650 multi-family housing units, more than 30,000 residents, and 600 Peabody team members.

Affordable Housing and Services Collaborative (AHSC)

AHSC is a 501c3 non-profit organization founded by Edward A. Fish in 2001
Mission to provide and preserve affordable housing with services for various populations
Over 30 projects – through acquisition, development, rehabilitation, construction, or providing a significant role in project financing plan, we have created or preserved over 3,000 units as affordable

Agenda

- Project Overview
- Site Plan Review Submission
 - Civil
 - Landscape
 - Building
 - Supplemental Studies
- Questions / Comments

LINDEN STREET REDEVELOPMENT
Needham Housing Authority

[illegible][illegible]

LIST OF DRAWINGS

[illegible]

SITE PLAN REVIEW - 08/23/2024

Timeline

NHA Facilities Masterplan	February, 2019
Concept Phase	June, 2023
Design Review Team	August, 2023
Schematic Design	November, 2023
Spring Town Meeting - Affordable Housing District	May, 2024
Design Review Team (DRT)	July 25, 2024
Design Review Board (DRB)	August 19, 2024
Site Plan Review Submission	August 23, 2024
Conservation Commission NOI	August 29, 2024
Conservation Commission Hearing	September 12, 2024
Planning Board Hearing	September 24, 2024
LIHTC funding pre-application due to EOHLC	early November 2024

Town Engagement – 2023 - 2024



Number of Presentations/Meetings:

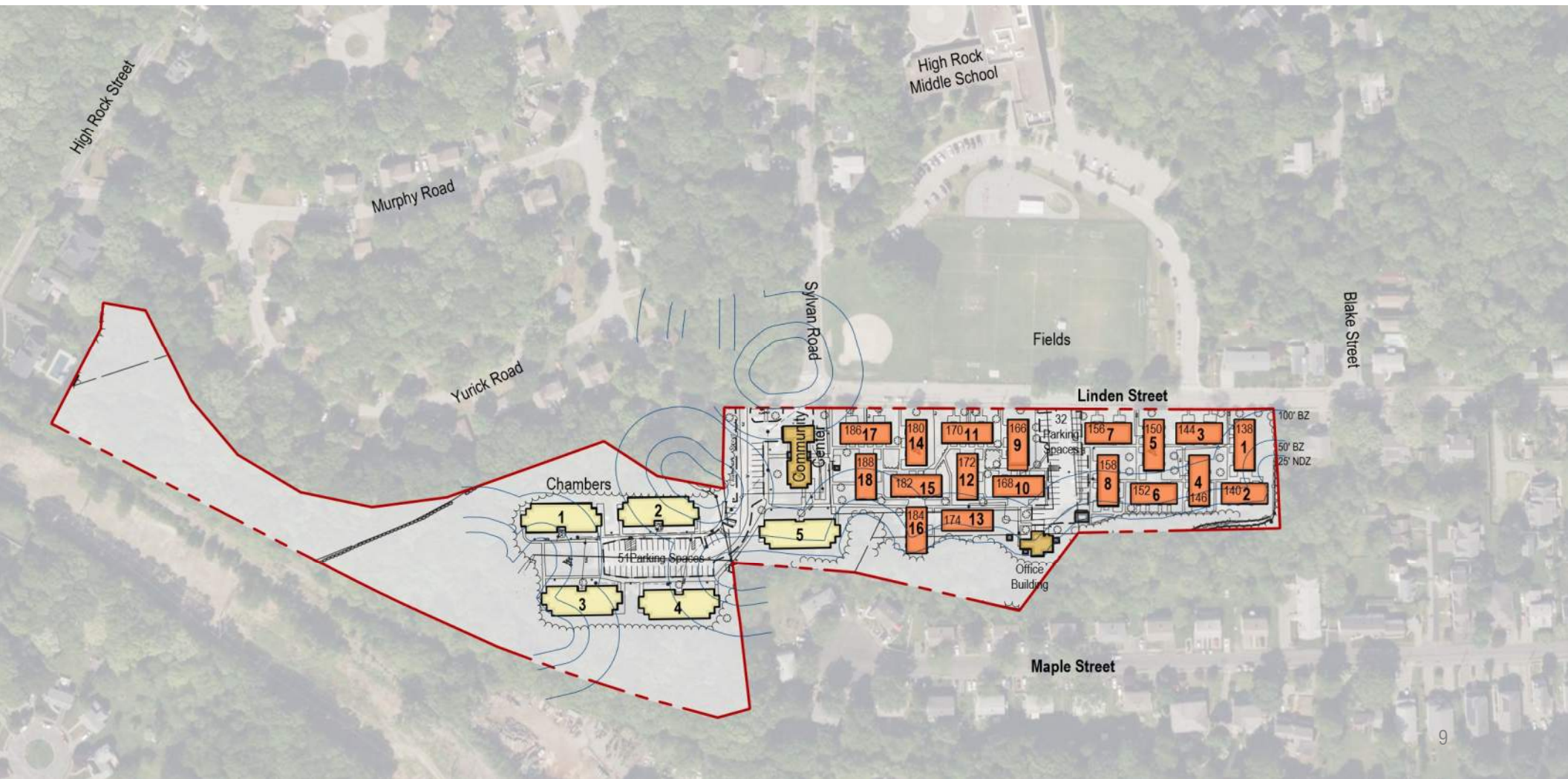
• Planning Board	7
• Residents	5
• Neighbors	5
• State and Federal Reps	5
• Select Board	4
• Finance Committee	4
• Conservation Committee	4
• Public Hearings	3
• Town Meeting Members	3
• TCHOC	3
• Board of Health	2
• League of Women Voters	2
• Town Department Heads	1
• School Department	1
• EOHLC	1

Existing Conditions

- Built between 1959 and 1962 (Linden) and 1972 (Chambers)
- 152 studio units of state public housing for low-income elderly / disabled households
- Poor physical conditions (Site and Buildings)
- Accessibility compliance issues
- Undersized units
- Wetland challenges



Existing Linden/Chambers Community



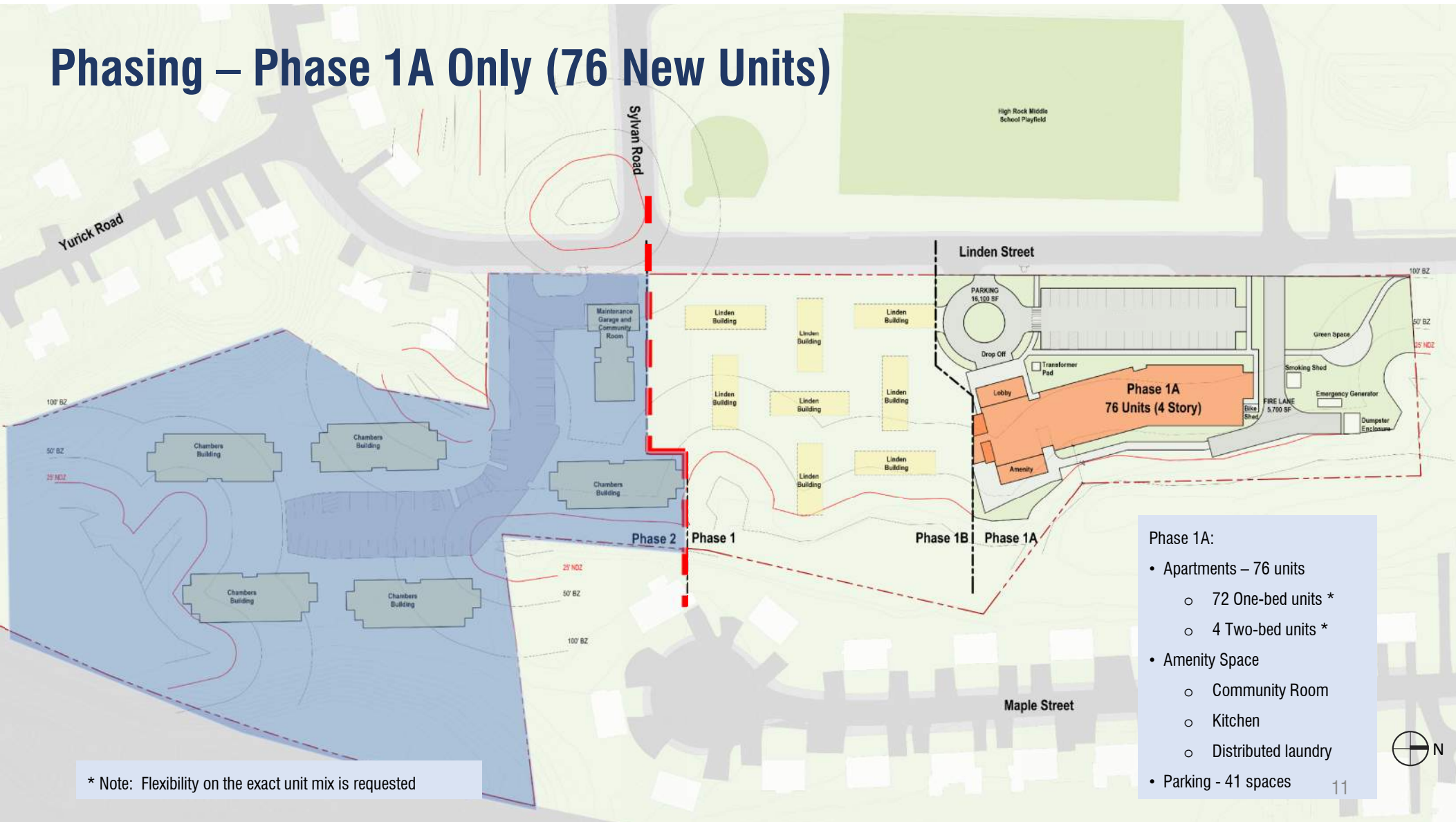
Zoning

The Planning Board sponsored warrant article 18, which created the Affordable Housing District, and warrant article 19, which placed the Needham Housing Authority land in the District. The Needham Town Meeting adopted these articles, by nearly unanimous votes, at the Annual Town meeting in May 2024. The Affordable Housing District allows multi-family affordable housing, for persons with incomes up to 80% of area median income, subject to site plan review. The District warrant article also sets forth density, dimensional, and parking requirements, which are shown on the adjacent zoning table.



	REQUIRED ZONING	PROPOSED PROJECT - PHASE I *	COMPLIANCE	NOTES
ZONING DISTRICT	Affordable Housing District (AHD)	Affordable Housing District (AHD)		
USES	Affordable Multi-Family	Affordable Multi-Family		
ZONING DIMENSIONAL ANALYSIS				
Gross Lot Area	-	478,540 sq. ft.	-	10,9858 acres per Consolidated Plan
Minimum Lot Size	20,000 sq. ft.	182,400 sq. ft.	Y	
Frontage	150 ft	740 ft	Y	
# Of Dwelling Units	-	216	-	* PHASES 1A/1B/CHAMBERS (EXIST.)
Front yard	40 ft	88 ft	Y	
Side Yard - north	25 ft	155 ft	Y	
Side Yard - south	25 ft	283 ft	Y	lawful pre-existing Chambers Building 50 ft
Rear Yard	25 ft	33 ft	Y	
Height	58 ft	53 ft	Y	
Mechanical Height	15 ft	8 ft	Y	
Mechanical Roof Coverage	25%	< 1%	Y	
Stories	4	4	Y	PHASES 1A/1B
FAR	0.5	0.36	Y	* PHASES 1A/1B/CHAMBERS (EXIST.)
Units per Acre	25	19.7	Y	* PHASES 1A/1B/CHAMBERS (EXIST.)
Lot Coverage	20%	12.4%	Y	
Parking				
Parking Spaces	0.5/unit	0.5/unit	Y	PHASES 1A/1B= 136 units requires 68 parking spaces
Parking Lot Illumination	per 5.1.3 (a)	per 5.1.3 (a)	Y	
Loading Requirement	per 5.1.3 (b)	per 5.1.3 (b)	Y	
Handicapped Parking	per 5.1.3 (c)	per 5.1.3 (c)	Y	
Driveway Openings	per 5.1.3 (d)	per 5.1.3 (d)	Y	
Compact Cars	per 5.1.3 (e)	per 5.1.3 (e)	Y	
Parking Space Size	per 5.1.3 (f)	per 5.1.3 (f)	Y	
Bumper Overhang	per 5.1.3 (g)	per 5.1.3 (g)	Y	
Parking Space Layout	per 5.1.3 (h)	per 5.1.3 (h)	Y	
Width of Maneuvering Aisle	per 5.1.3 (i)	per 5.1.3 (i)	Y	
Parking Setbacks	per 5.1.3 (j)	per 5.1.3 (j)	Y	
Landscape Areas	per 5.1.3 (k)	per 5.1.3 (k)	Y	
Trees	per 5.1.3 (l)	per 5.1.3 (l)	Y	
Location	per 5.1.3 (m)	per 5.1.3 (m)	Y	
Bicycle Racks	per 5.1.3 (n)	per 5.1.3 (n)	Y	
* The Linden Street Redevelopment includes Phase 1A and 1B, which will replace the 18 Linden Street buildings, increasing the number of Linden units from 72 to 136. This redevelopment will not affect the 80 existing Chambers Street units, which will remain until replaced during a future Phase 2.				

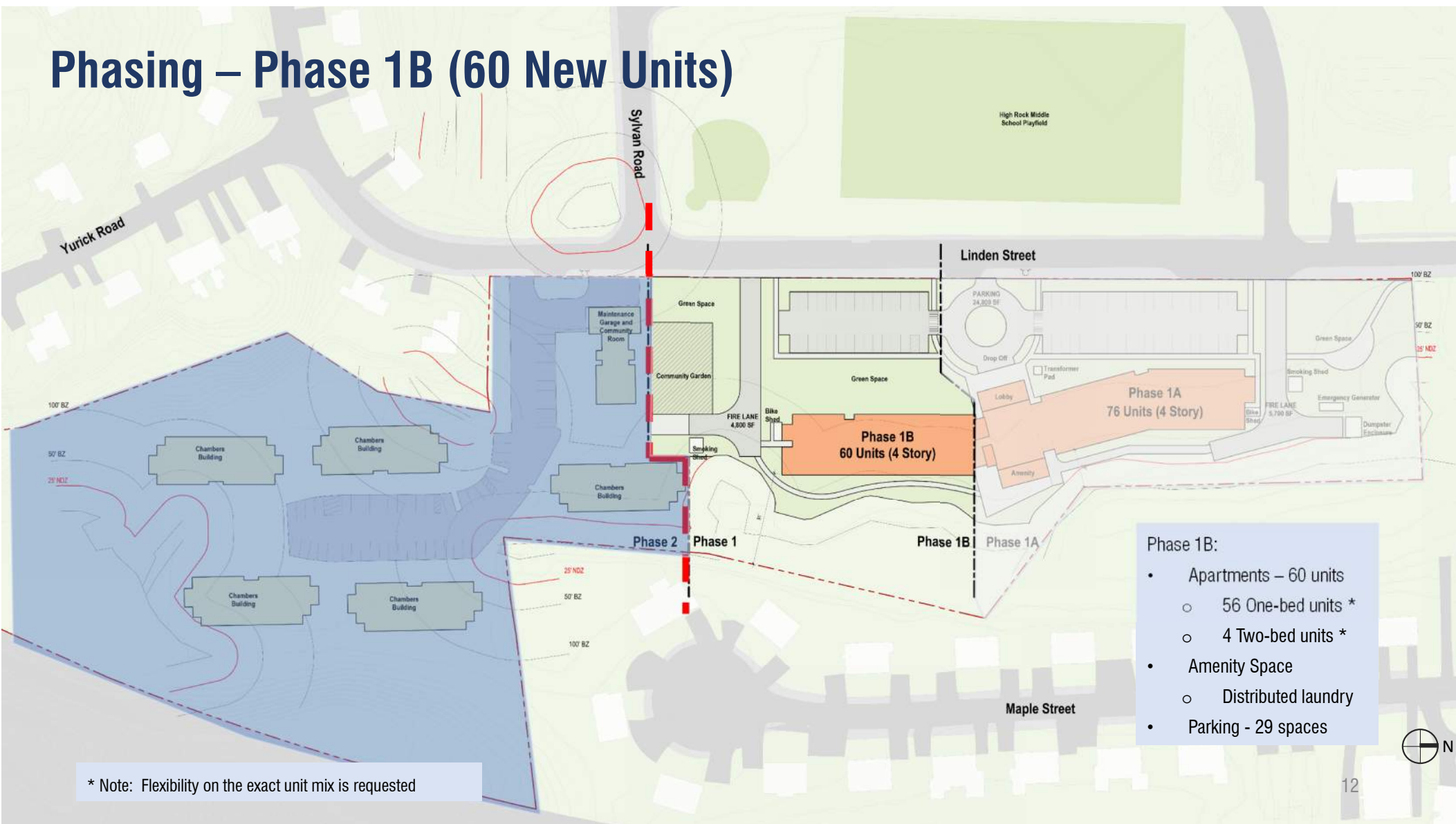
Phasing – Phase 1A Only (76 New Units)



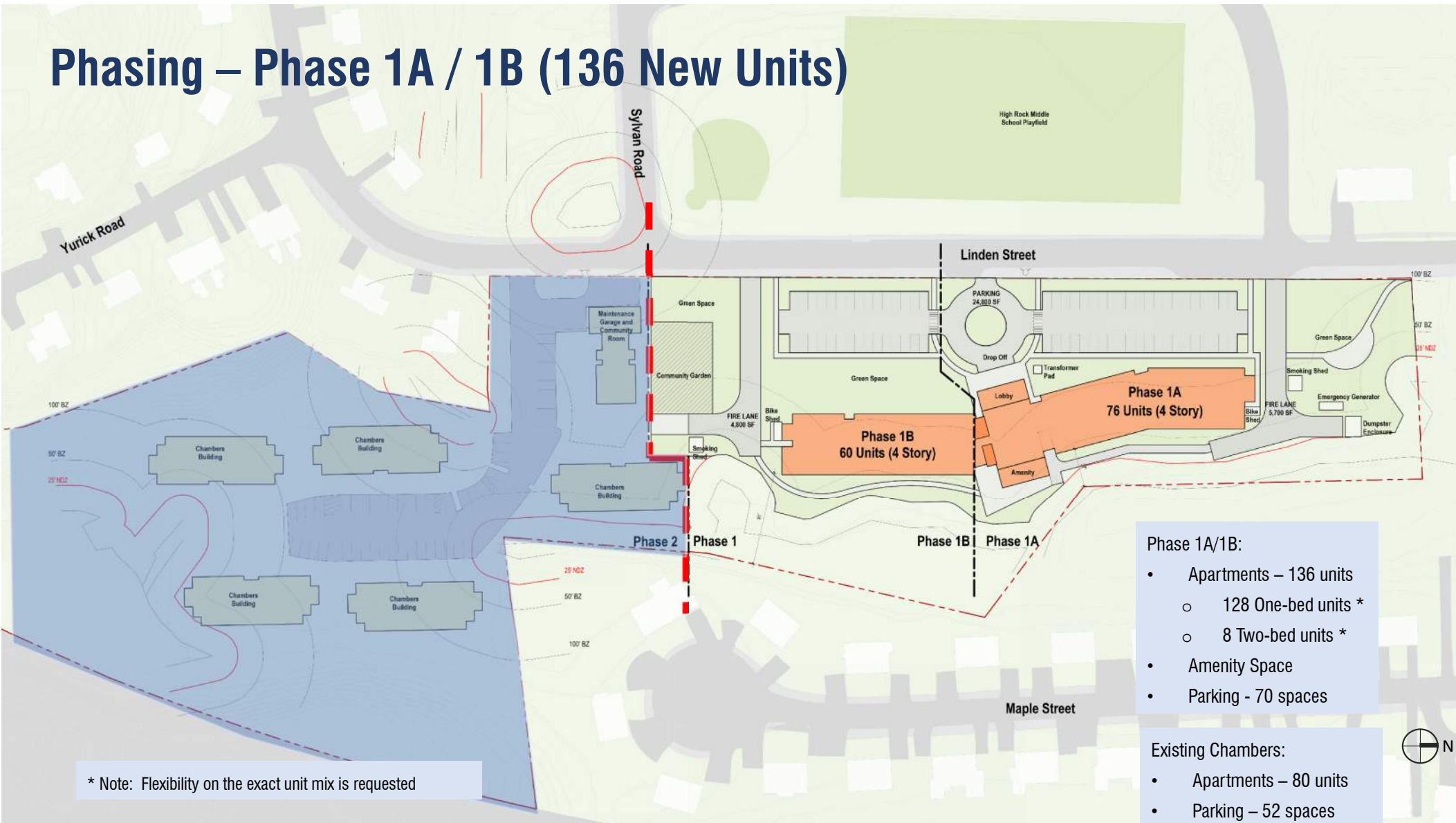
Phase 1A:

- Apartments – 76 units
 - 72 One-bed units *
 - 4 Two-bed units *
- Amenity Space
 - Community Room
 - Kitchen
 - Distributed laundry
- Parking - 41 spaces

Phasing – Phase 1B (60 New Units)



Phasing – Phase 1A / 1B (136 New Units)





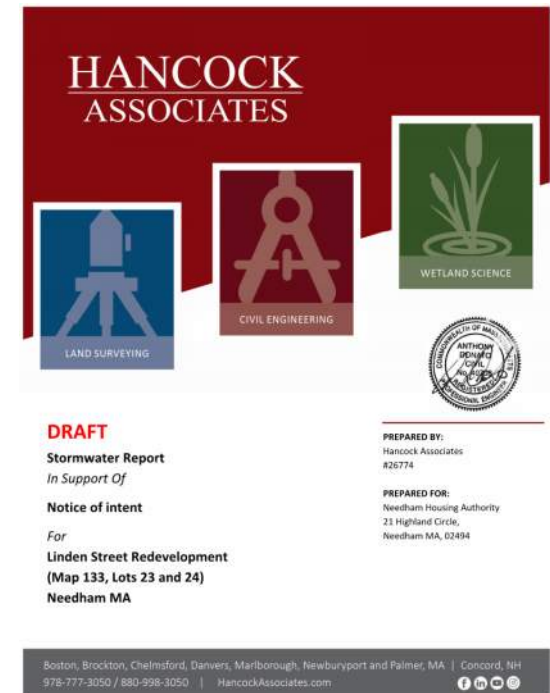
Maple Street – Aerial View



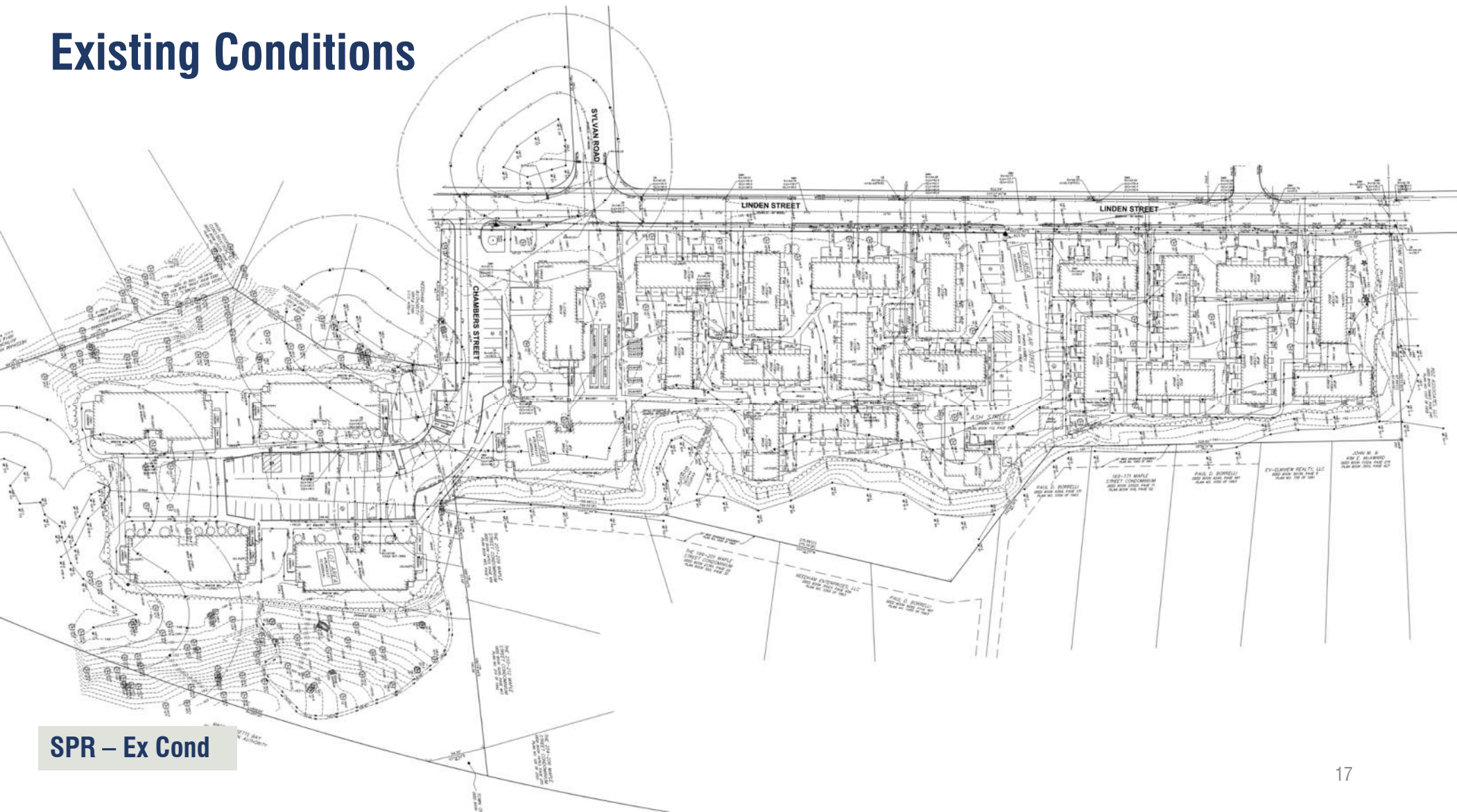
Linden Street – Aerial View

Stormwater Report Summary

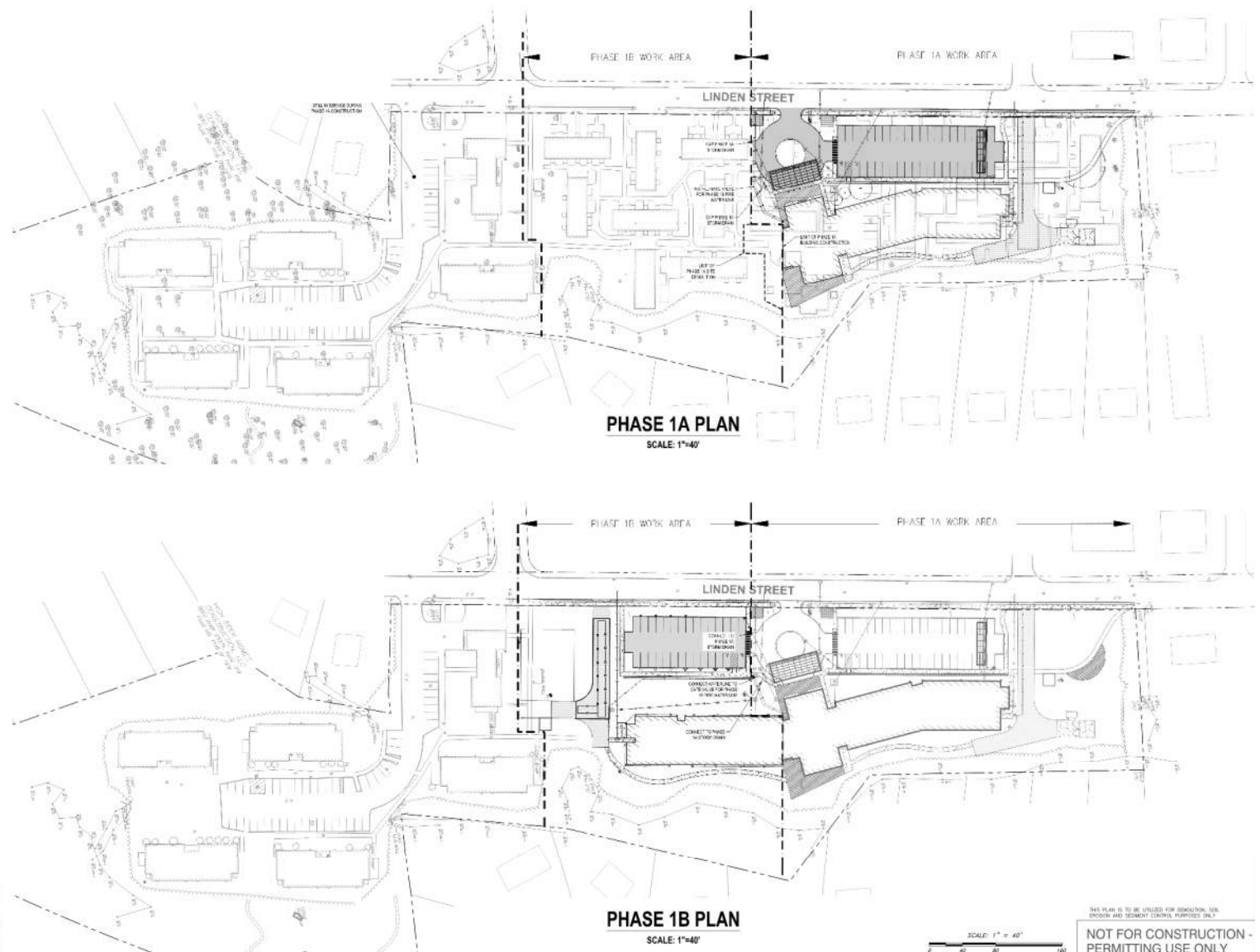
- Adds more than 1" of recharge for the total amount of proposed impervious area for Phase 1.
- Stormwater calculations for the 2, 10, 25 , and 100-year storm events.
- Reduces both the rate and volume of stormwater run-off from the site for each of the storm year events.
- Provides 80% total suspended solids (TSS) and 50% total phosphorus (TP) removal
- Incorporates Best Management Practices (deep sumps, gas traps, pre/post construction operation and maintenance plan) to stormwater management system.



Existing Conditions



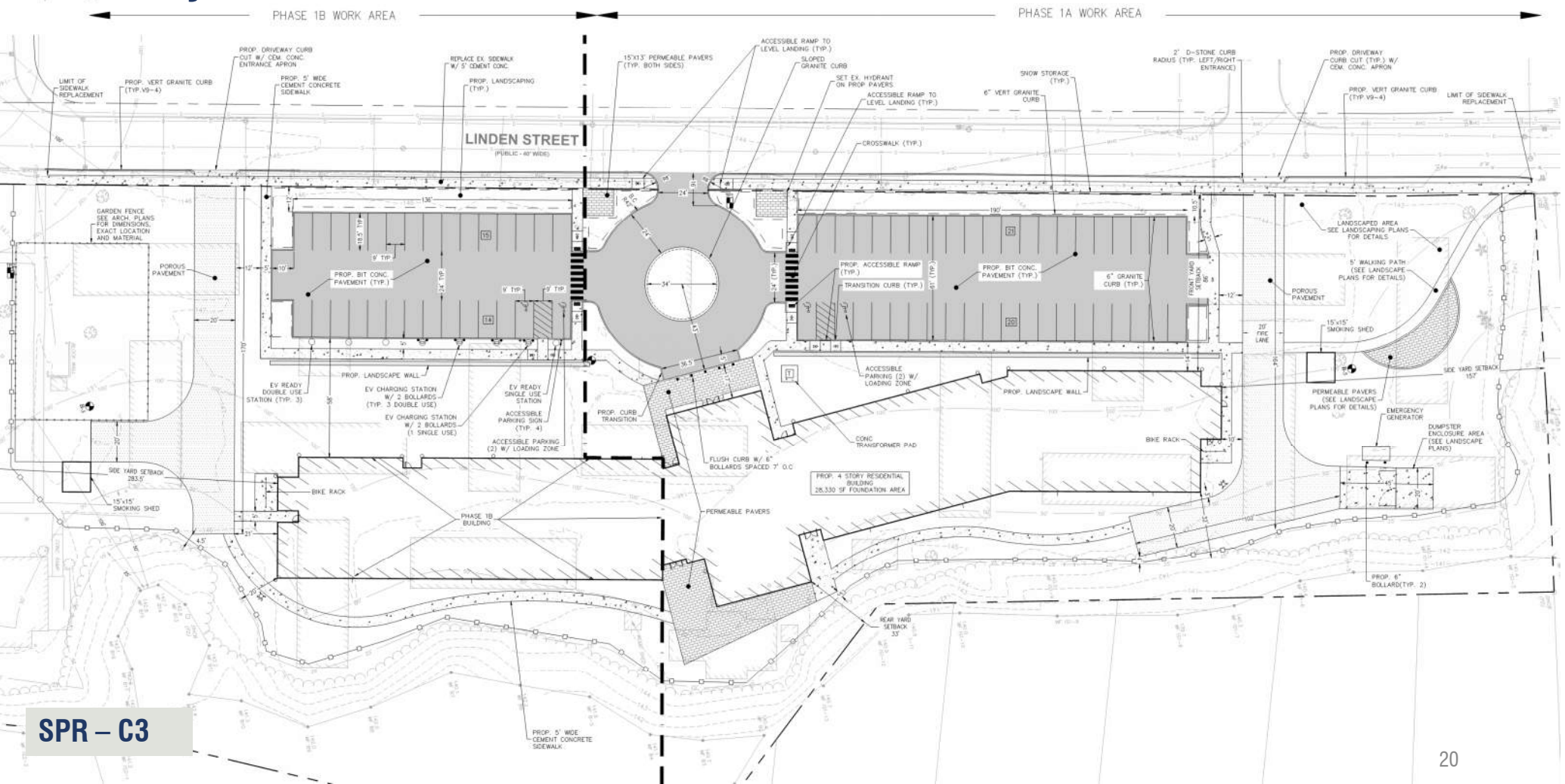
SPR - C1



SPR – C2



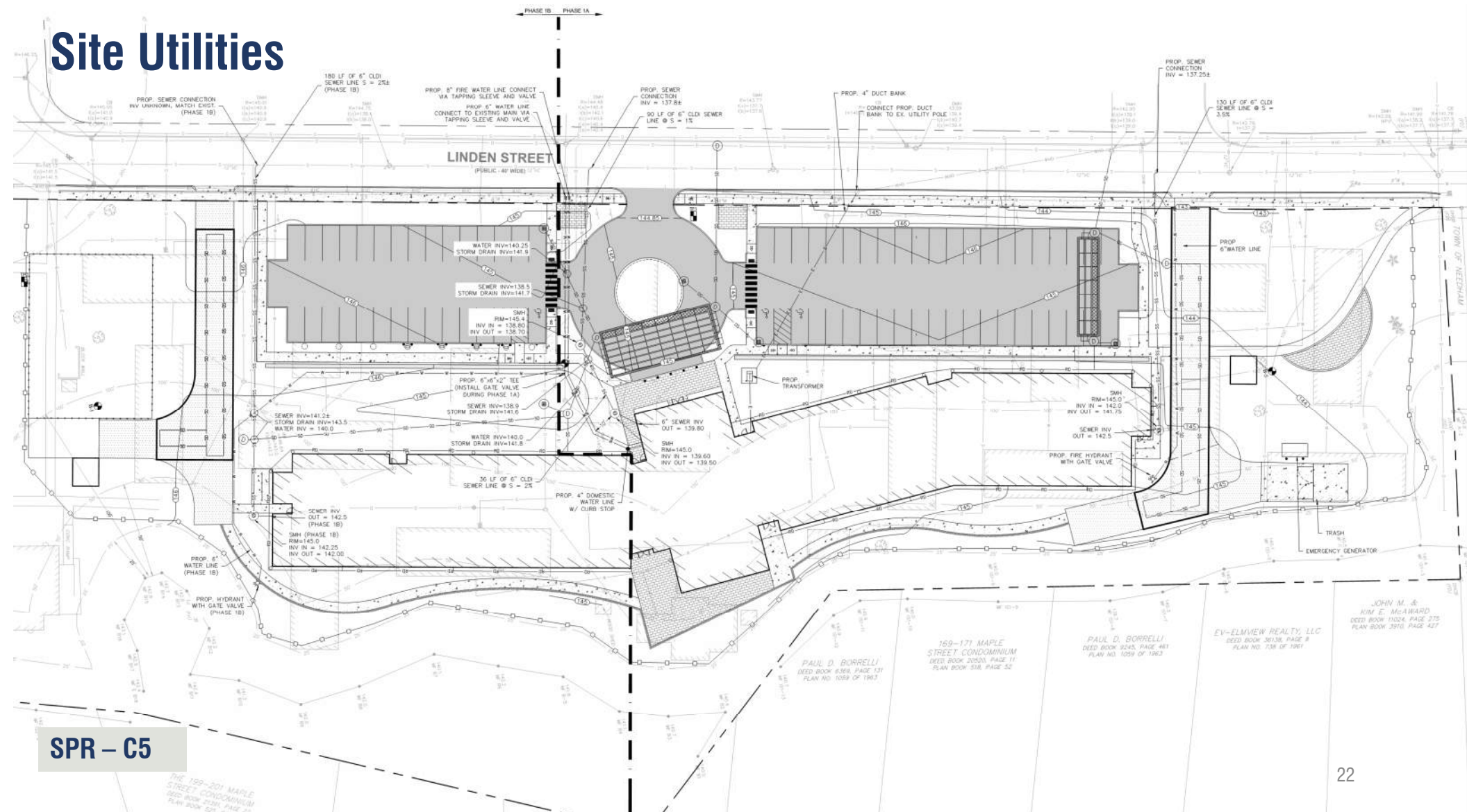
Site Layout and Materials Plan



SPR – C4



Site Utilities



SPR - C5

Landscape Plan



Tree Survey

Limitations of the assignment

The trees were examined in their deciduous state, so foliar quality and density could not be assessed. The presence of structural defects was part of the structural condition assessment, but the examination was cursory, and visual only – no advanced decay detection tools or equipment were used. This was not a formal *Tree Risk Assessment*, and Tree Specialists, Inc. makes no guarantee about the structural stability of the trees that were examined.

Landscape trees

The planted landscape trees were primarily Honeylocust and Flowering crabapple varieties. There were also some Norway and Silver maples. Overall, I would rate the canopy coverage as “sparse”, within the developed landscape areas. Statistically, it is a mixed bag condition-wise:

- 13 of 43 trees surveyed had a *Poor* health rating
- 9 of 43 had a *Fair* health rating
- 15 of 43 had a *Good* health rating

Trees with Fair or Poor health or structure ratings are not generally good preservation candidates, as they are compromised and won't survive the additional stress of construction injury.

While there was definitely evidence of past pruning, the overall maintenance level appears to be limited. Many crabapples are prone to chronic foliar fungal diseases, and at least some of these trees appear to be affected. In terms of asset value, the Honeylocust trees are the most significant, as they are of a size, age, and condition that makes them valuable for shade and structure in the landscape. Some of the crabapples are decent, but these can be easily replaced with new flowering varieties – preferably with species or cultivars with better disease resistance.

Woodland/wetland perimeter

The adjacent wooded areas are filled with a mix of invasive trees, shrubs and vines, along with some significant natives. Many of the trees are in bad shape, and are very close to the existing buildings. In most settings, these trees would have already been removed, for the safety of the buildings and the residents. I would also note that the trees along the edge are very shallow rooted, due to the soil conditions and the high water table. This makes them very intolerant to grade changes.

Linden-Chambers – Arborist Study
April 13, 2023



Tree Inventory

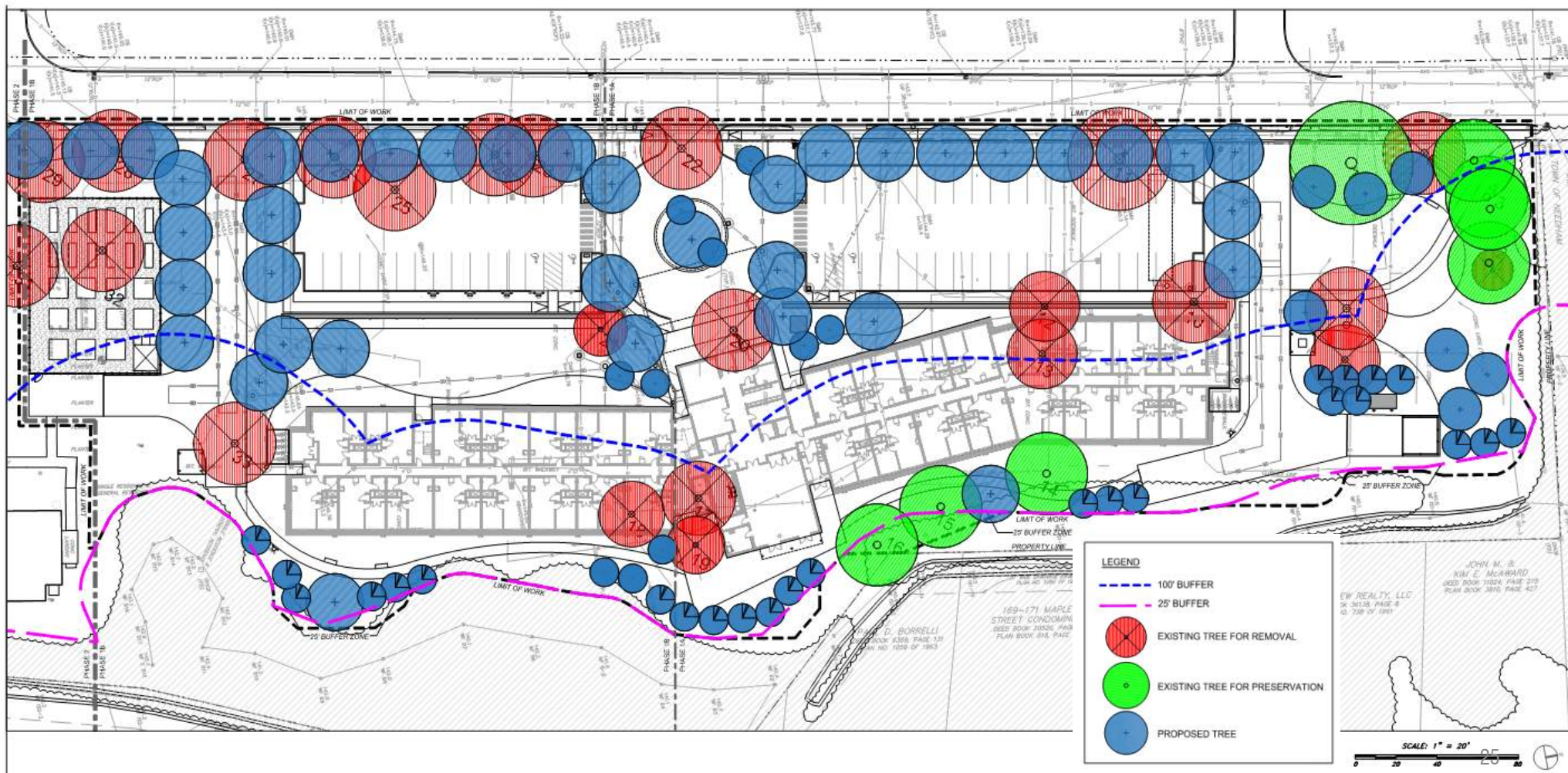
ID#	DBH"	Common name	Condition		Comments
			Health	Structure	
1	14"	Hemlock	Poor	Poor	Top missing - ½ dead – remove
2	12"	Hemlock	Fair	Fair	Ok
3	13"	Hemlock	Fair	Fair	Hemlock Woolly Adelgid & Scale
4	15"	Hemlock	Fair	Fair	Hemlock Woolly Adelgid & Scale
5	16"	Crabapple	Fair	Fair	
6	15"	Crabapple	Fair	Poor	
7	21"	Honeylocust	Fair	Fair	Crown gall - decay in root collar
8	18"	Crabapple	Poor	Poor	Decline in canopy
9	10"	Crabapple	Poor	Poor	Decline in canopy
10	12"	Crabapple	Poor	Fair	Decline in canopy
11	24"	Honey locust	Good	Good	
12	12"	Crabapple	Poor	Fair	Decline in canopy
13	12"	Crabapple	Poor	Poor	Decline in canopy
14	21"	Honeylocust	Good	Good	
15	27"	Honeylocust	Good	Good	
16	24"	Honeylocust	Good	Fair	
17	22"	Honeylocust	Good	Good	
18	13"	Norway maple	Fair	Fair	Thin canopy

Linden-Chambers – Arborist Study
April 13, 2023



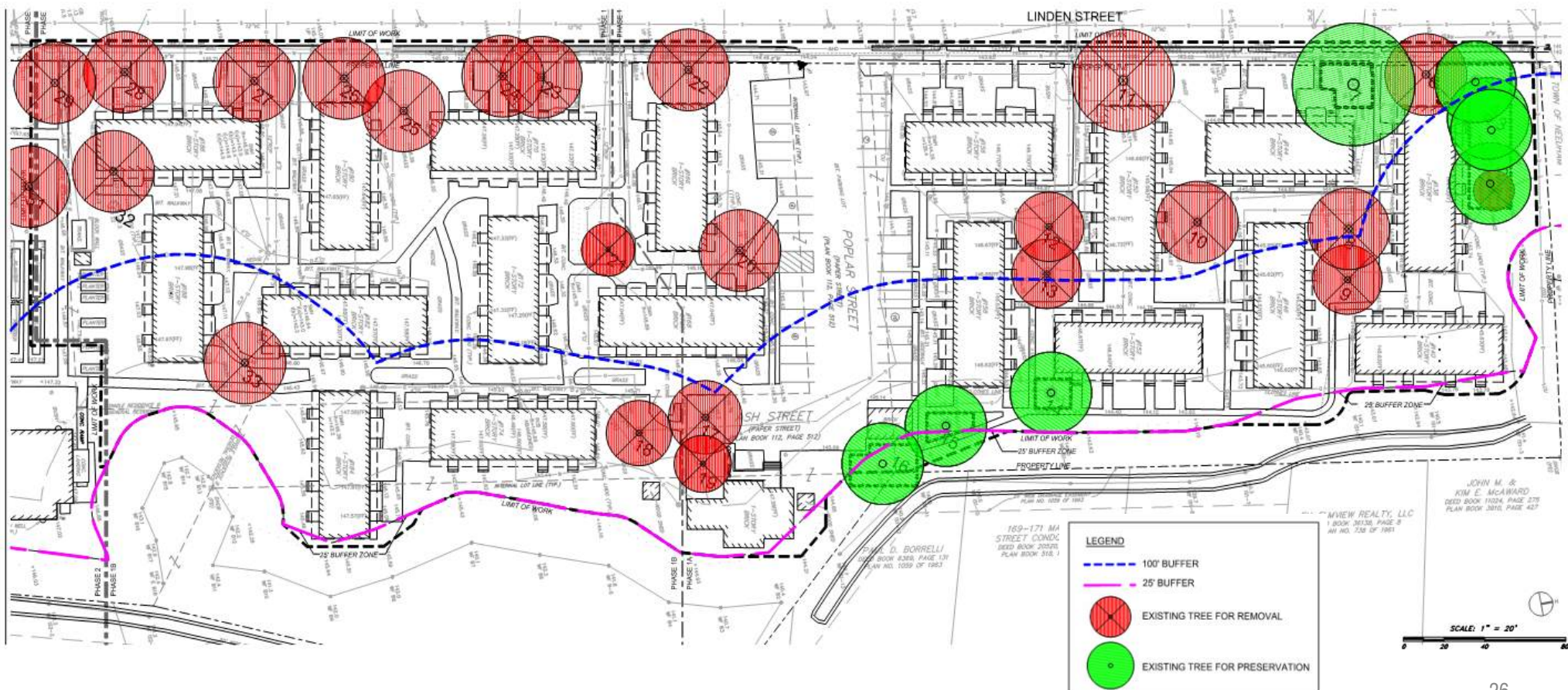
Tree Summary

TREES TO BE RETAINED: 8 (AVG DBH 18.6")
TREES TO BE REMOVED: 24 (AVG DBH 16.7")
NEW TREES TO BE PLANTED: 80



Tree Protection Plan

- 1 TREE WITHIN 25' BOUNDARY TO BE PRESERVED
- 6/12 TREES WITHIN 100' BOUNDARY TO BE PRESERVED
- 5/6 REMOVALS WITHIN 100' BOUNDARY DUE TO POOR HEALTH
- 17/24 (71%) TOTAL REMOVALS DUE TO POOR HEALTH/ DECLINE/ INVASIVE



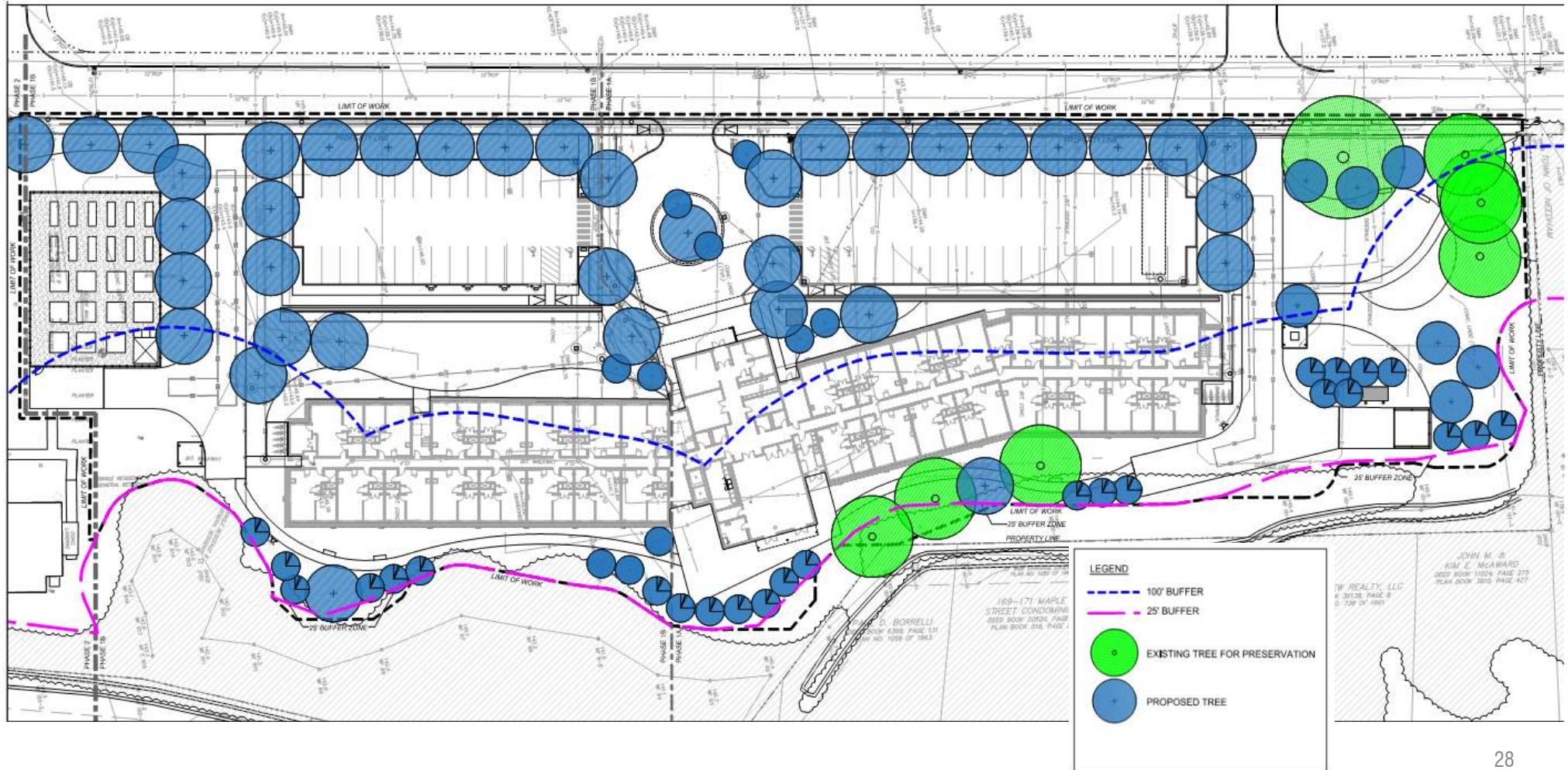
Existing Tree Inventory

- 1 TREE WITHIN 25' BOUNDARY TO BE PRESERVED
- 6/12 TREES WITHIN 100' BOUNDARY TO BE PRESERVED
- 5/6 REMOVALS WITHIN 100' BOUNDARY DUE TO POOR HEALTH
- 17/24 (71%) TOTAL REMOVALS DUE TO POOR HEALTH/ DECLINE/ INVASIVE

ID#	DBH	Common Name	Health	Status	25'	100'	Notes
1	14	Hemlock	Poor	Remove		Y	Half dead
2	12	Hemlock	Fair	Preserve		Y	
3	13	Hemlock	Fair	Preserve		Y	
4	15	Hemlock	Fair	Preserve		Y	
5	16	Crabapple	Fair	Preserve			
6	15	Crabapple	Fair	Remove			Poor Structure
7	21	Honeylocust	Fair	Preserve			
8	18	Crabapple	Poor	Remove			Decline in canopy
9	10	Crabapple	Poor	Remove		Y	Decline in canopy
10	12	Crabapple	Poor	Remove			Decline in canopy
11	24	Honey locust	Good	Remove			
12	12	Crabapple	Poor	Remove			Decline in canopy
13	12	Crabapple	Poor	Remove			Decline in canopy
14	21	Honeylocust	Good	Preserve		Y	
15	27	Honeylocust	Good	Preserve		Y	
16	24	Honeylocust	Good	Preserve	Y	Y	
17	22	Honeylocust	Good	Remove		Y	
18	13	Norway maple	Fair	Remove		Y	Invasive species, thin canopy
19	12	Crabapple	Fair	Remove		Y	Many cavities
20	19	Norway maple	Fair	Remove			Invasive species, thin canopy
21	10	Dogwood	Fair	Remove			Disease prone
22	19	Norway maple	Fair	Remove			Invasive species, disfigured by utilities, in decline
23	14	Crabapple	Fair	Remove			
24	17	Magnolia	Poor	Remove			Poor health
25	12	Honeylocust	Good	Remove			
26	29	Tulip Tree	Good	Remove			
27	10	Kwanzan cherry	Good	Remove			Near dead
28	23	Red maple	Poor	Remove			In decline- girdling roots
29	23	Red maple	Poor	Remove			Girdling roots, disfigured by utilities
31	21	Crabapple	Poor	Remove			Sooty mold
32	22	Honeylocust	Fair	Remove			
33	18	Norway maple	Good	Remove		Y	Invasive species

Proposed New Trees

- 42/ 80 (53%) TO BE CANOPY TREES
 - 13/80 (16%) UNDERSTOREY TREES
 - 25/80 (31%) EVERGREEN BUFFER TREES
- 3- 5 CALIPER
8- 10'
8- 10'



Planting Palettes

Linden Chambers Plant Palettes

Plant material will be selected from the following lists or similar species

North Garden Palette

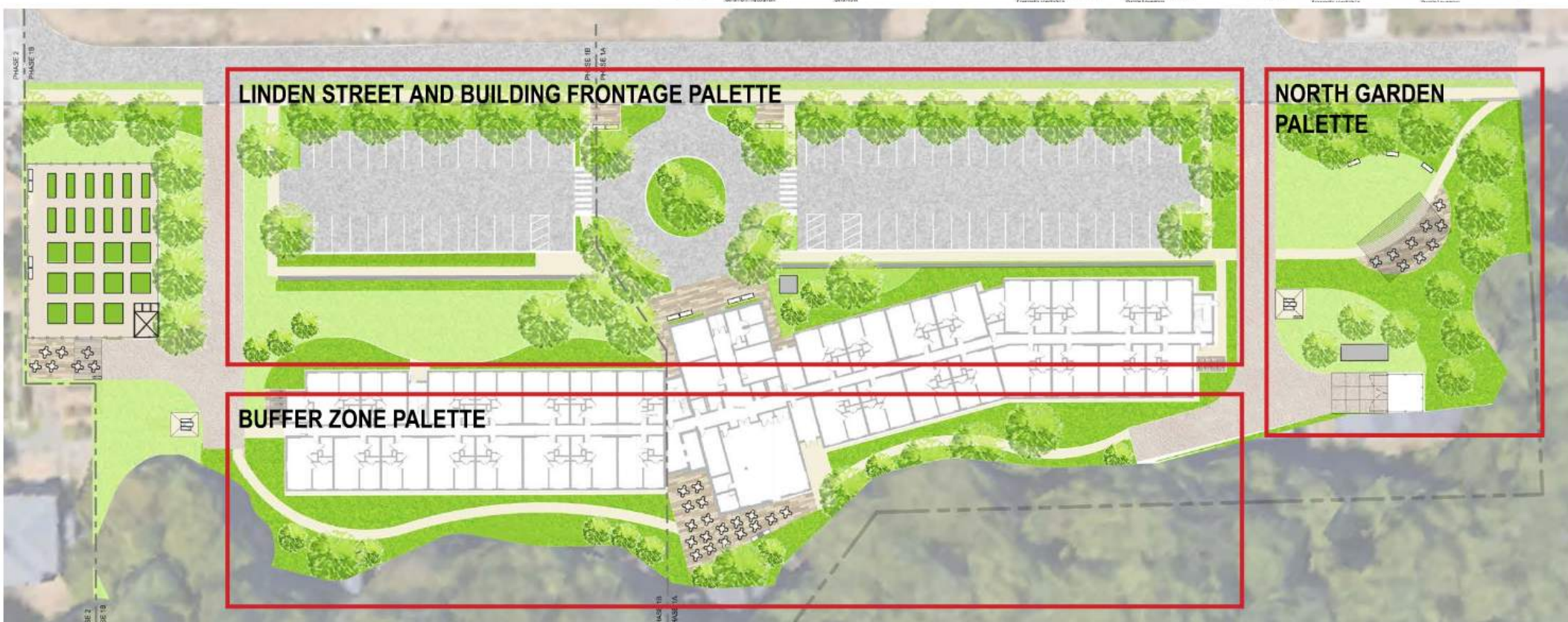
	Botanical Name	Common Name
Tree Family		
	<i>Clusia molle</i>	Taila Tree
	<i>Acacia robusta</i>	Red Maple
	<i>Albizia amara</i>	American Silk
	<i>Guarea glabra</i>	Red Oak
Tree Landmark		
	<i>Cordia alliodora</i>	Yagüe Dogwood
	<i>Albizia leonensis</i>	Amorillo
	<i>Cordia lutea</i>	Yagüe Dogwood
Shrub		
	<i>Rosa 'Green Gaze'</i>	Green Rosewood
	<i>Rosa 'Green Gaze'</i>	Apricot Red Rose
	<i>Rosa 'Bleeding Heart'</i>	Bleeding Heart Rose
	<i>Rubus</i>	Yakari
	<i>Washingtonia</i>	Washingtonia
Shrub		
	<i>Guarea glabra</i>	Guarea

Linden Street Palette

[illegible]

Wetland Edge Palette

Western Cope's Racer	Scientific Name	Common Name
Trees - canopy		
	<i>Batrachoseps</i>	Tree Toad
	<i>Boophis</i>	Tree Frog
	<i>Chironomantis</i>	Red-footed Red Frog
	<i>Eleutherodactylus</i>	Whit Frog
	<i>Agalyptis</i>	Tree Mole
Trees - understory		
	<i>Cercoleone</i>	Red Frog
	<i>Amphispelma</i>	Red-spotted
	<i>Haemulon</i>	Whit Frog
Shrub		
	<i>Amphispelma</i>	Whit Frog
	<i>Chironomantis</i>	Red-footed
	<i>Mantidactylus</i>	Whit Frog
	<i>Phyllomantis</i>	Whit Frog
	<i>Phyllomantis</i>	Whit Frog
	<i>Phyllomantis</i>	Whit Frog
	<i>Phyllomantis</i>	Whit Frog
Grass		



Planting Palettes – Linden Street & Building Frontage



Amelanchier



Endless Summer Hydrangea



Cunningham White Rhododendron



Dwarf Fountain Grass



Stella D'Oro Daylily



Sweetpepper Bush



Rhododendron English Roseum



Apricot Drift Rose



May Night Sage



Red Maple



Planting Palettes – Buffer Zone (Native)



Sweetpepper Bush



Sensitive Fern



Mapleleaf Viburnum



Bunchberry



Pennsylvania Sedge



Red Osier Dogwood



Steeplebush



Anemone



Hayscented Fern



Eastern Wild Ginger



River Birch



Planting Palettes – North Garden



Cardinal Flower



Spotted geranium



Inkberry Holly



Sweetpepper Bush



Arrowwood Viburnum



New England Aster



Butterfly Weed



Black Eyed Susans



Red Oak



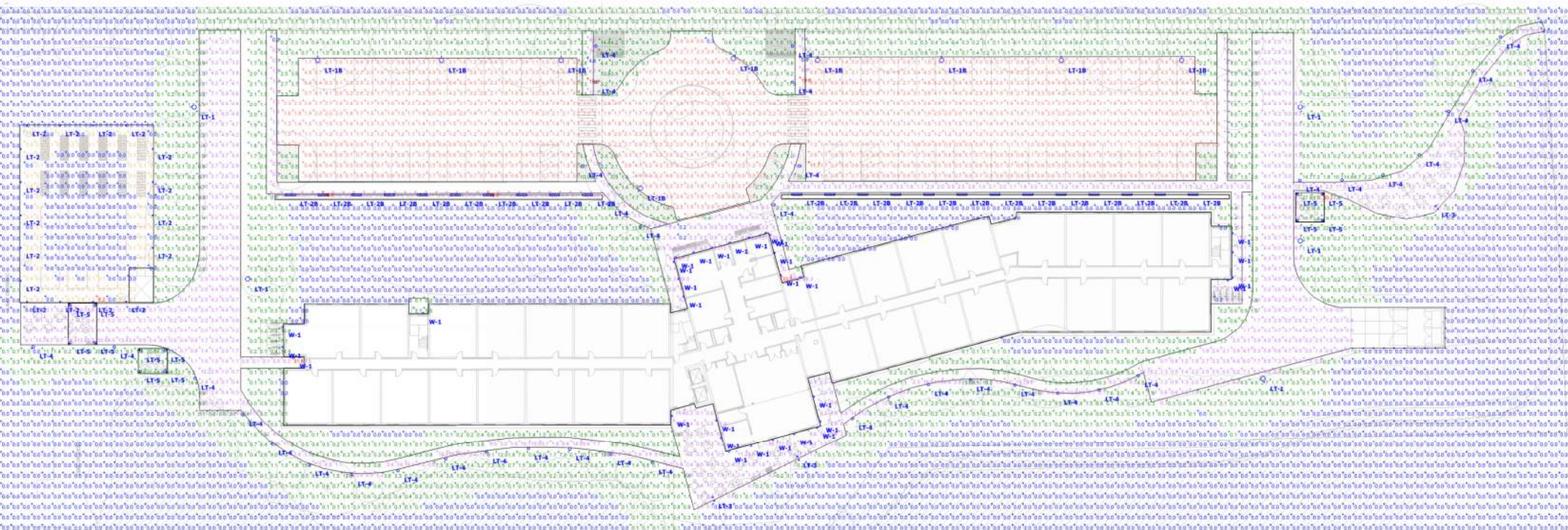
Tulip Tree



Pagoda Dogwood



Site Lighting - Photometrics



Site Lighting

STATISTICS						
DESCRIPTION	SYMBOL	AVG.	MAX	MIN.	MAX/MIN	AVG/MIN
GARDEN	✚	0.3 fc	8.2 fc	0.0 fc	N/A	N/A
GROUND	✚	0.5 fc	30.2 fc	0.0 fc	N/A	N/A
PARKING	✚	2.0 fc	11.7 fc	0.3 fc	39.0:1	6.7:1
WALKING PATH	✚	4.0 fc	16.8 fc	0.2 fc	84.0:1	20.0:1
WALKING PATH	✚	11.0 fc	19.6 fc	4.6 fc	4.3:1	2.4:1
WALKING PATH	✚	11.0 fc	19.6 fc	5.8 fc	3.4:1	1.9:1
WALKING PATH	✚	4.2 fc	33.0 fc	0.2 fc	165.0:1	21.0:1
ACCESS ROAD / PATH	✚	3.8 fc	31.8 fc	0.0 fc	N/A	N/A

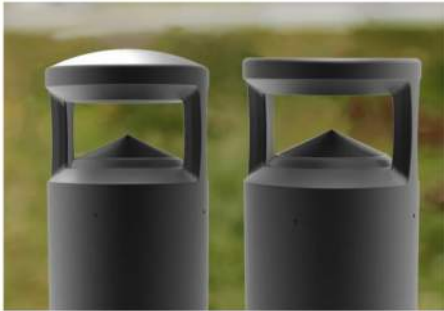
SCHEDULE							
Symbol	Label	Quantity	Manufacturer	Catalog Number	Description	Light Loss Factor	Wattage
	LT-1	5	Lumenpulse	ALG000X VOLTAGE L170 40K CRI 80 3BLS CONTROL MOUNTING	Allegra Medium Backlight Control *ADVISE POLE*	0.9	146
	LT-1B	9	Lumenpulse	ALG000X VOLTAGE L170 40K CRI 80 4BLS CONTROL MOUNTING	Allegra Medium Backlight Control *ADVISE POLE*	0.9	146
	LT-2	17	Sage Lighting	SLVR 27 FINISH	SLVR Step Light	0.9	2.98
	LT-2B	23	Hydrel	HSL13 12/INCH LED 40K MVOLT L DIMMING XX FINISH	Surface mount step light 9"	0.9	10.6
	LT-3	3	Lumenpulse	BLDC TM1 VOLTAGE 12FT CSL XS15 40K CRI 80 3BLS LV FINISH CONTROL	Lumenblade Column Backlight Control *ADVISE POLE*	0.9	25
	LT-4	38	Spitzer	BRA F42 24LC VOLTAGE CC D3 FINISH	Architectural Round Bollard 3'-5"	0.9	21.6769
	LT-5	12	Luminis Lighting	SYP400 L1L10 VWD K40 VOLTAGE FINISH MOUNTING XX	Syrios Pro	0.9	12
	W-1	31	Brownlee	7070 08 FINISH U07 WD 35K OPTIONS	Brownlee Slope Slim 8"	0.9	6.8702



LT-1 / LT-1B
Parking and drive



LT-2
Garden wall and parking wall

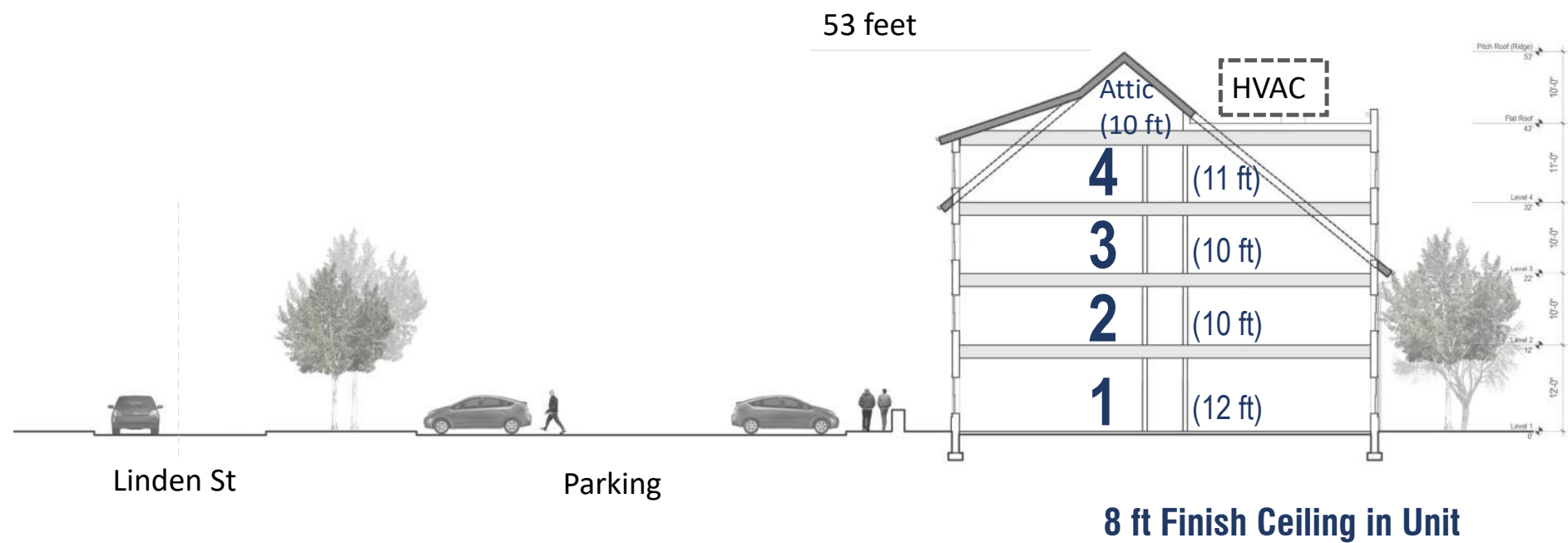


LT-4
Paths/sidewalks



LT-5 / W1
Trellis and building mounted

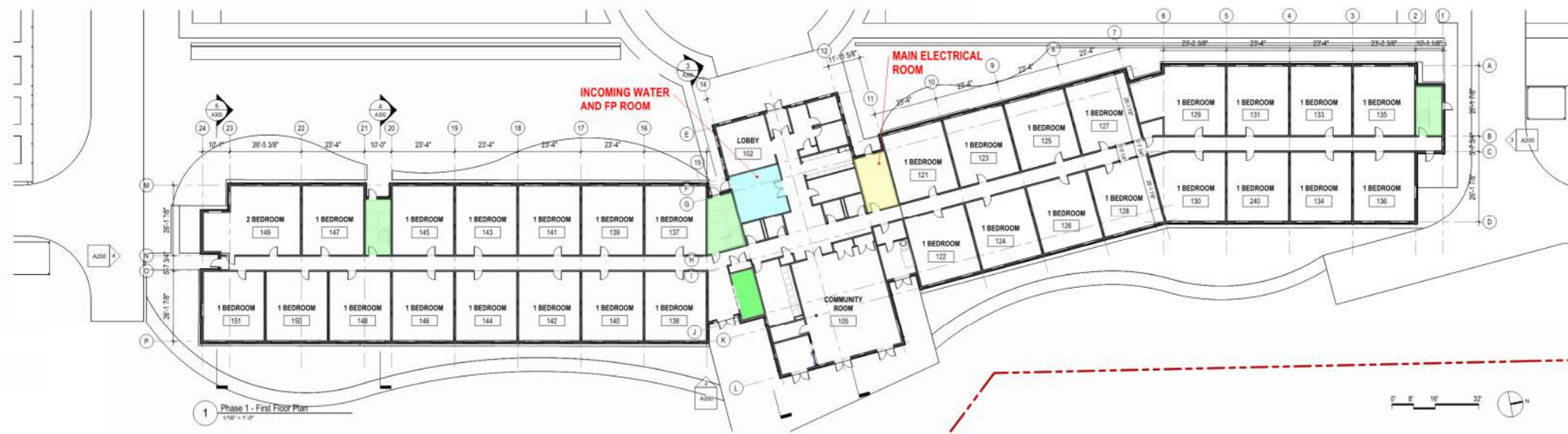
Building / Site Section



Building Plans



Building Plans – Services and Entries



Building Elevations



Phase 1 West Elevation - Linden Street
1/32" = 1'-0"



Phase 1 East Elevation - Maple Street
1/32" = 1'-0"



Phase 1 South Elevation
1/32" = 1'-0"



Phase 1 North Elevation
1/32" = 1'-0"

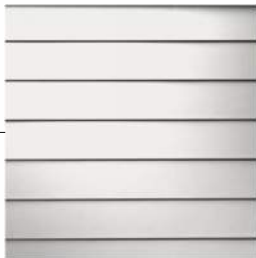
Building Elevations



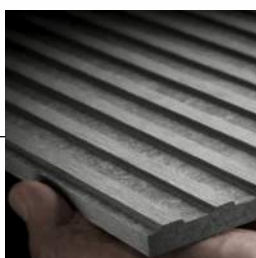
Fiber Cement Panel Shingle



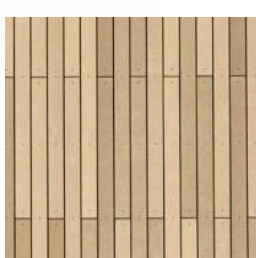
Fiber Cement Panel Board & batten



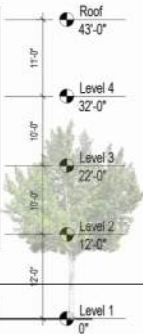
Fiber Cement Lap siding



Fiber Cement Rainscreen



Fiber Cement Rainscreen accent



Facing Linden Street



Linden Street

Building Elevations



Fiber Cement
Rainscreen



Fiber Cement Panel
Board & batten



Fiber Cement
Lap siding



Facing Maple Street



Maple Street



Corner at Linden and Blake Street



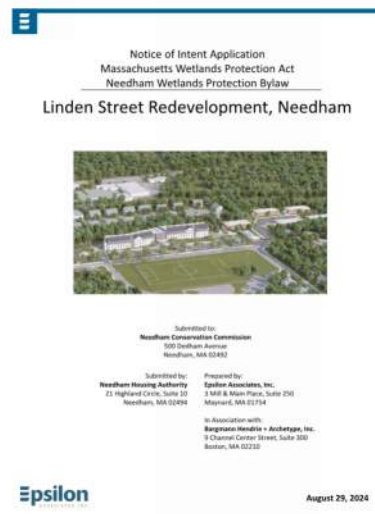
Linden Street / Sylvan Road



Corner at Linden and High Rock Middle School Road

Supplemental Studies

- Wetlands / Conservation
- Traffic / Parking
- Geotechnical
- Passive House Certification



Wetlands / Conservation Commission



Notice of Intent Application
Massachusetts Wetlands Protection Act
Needham Wetlands Protection Bylaw

Linden Street Redevelopment, Needham



Submitted to:
Needham Conservation Commission
500 Dedham Avenue
Needham, MA 02492

Submitted by:
Needham Housing Authority
21 Highland Circle, Suite 10
Needham, MA 02494

Prepared by:
Epsilon Associates, Inc.
3 Mill & Main Place, Suite 250
Maynard, MA 01754

In Association with:
Bargmann Hendrie + Archetype, Inc.
9 Channel Center Street, Suite 300
Boston, MA 02210



August 29, 2024

- Designed to avoid alterations to any wetland resource area.
- Decrease in impervious surface.
- Re-establish 25 foot no disturb zone by removing structures, stopping maintenance and enhancing with native plantings.
- No construction, other than restoration, proposed within 25' of Bank or BVW.
- Increase in open space

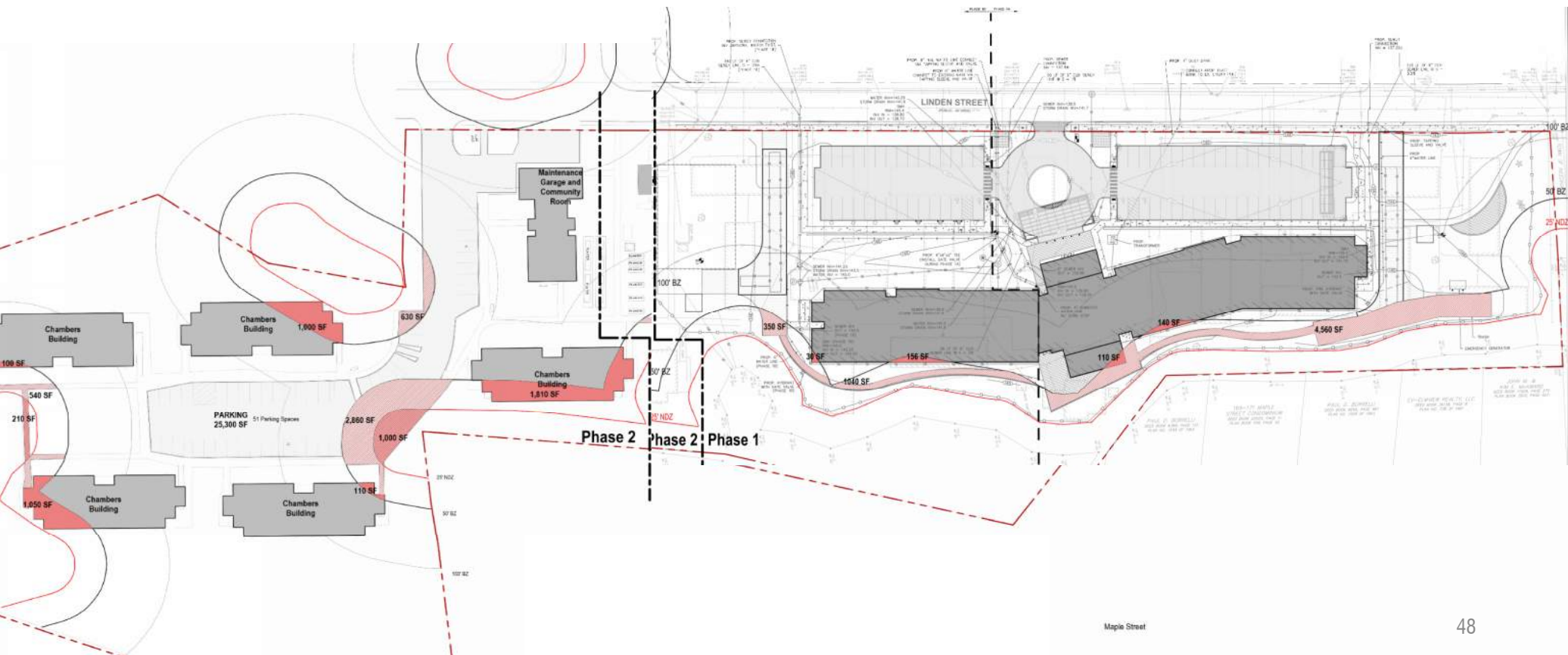
Existing – Wetland Buffer Encroachment Overlay

■ 25' BVW Full Site: 1,605 sf; Linden Street: 395 sf
■ 50' BVW Full Site: 16,050 sf; Linden Street: 7,950 sf



Proposed – Wetland Buffer Encroachment Overlay

- 25' BVW Full Site: 1,210 sf (24.6% reduction); Linden Street 0 sf (100% reduction)
- 50' BVW Full site: 14,486 sf (9.7% reduction); Linden Street 6,386 sf (19.7% reduction)

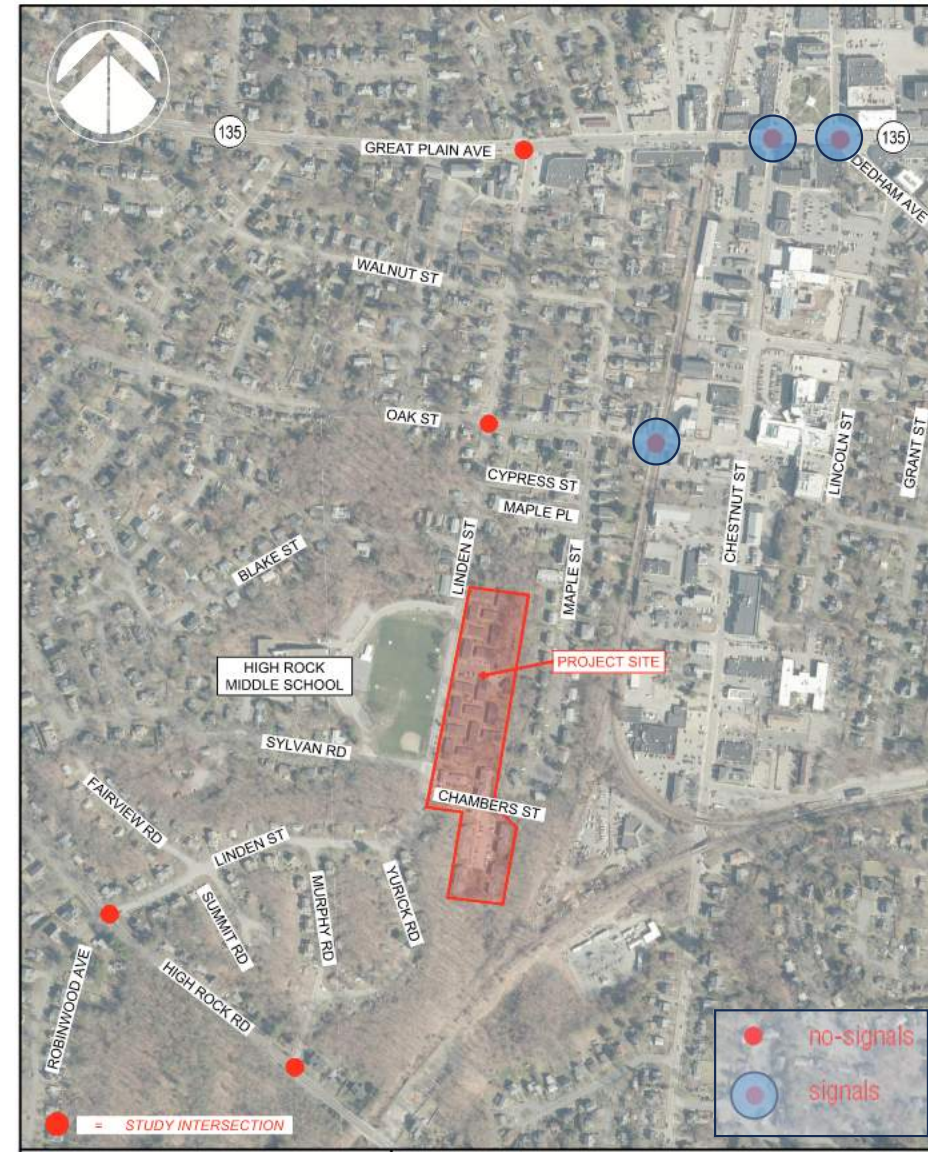


Traffic – Scope of Study



- Evaluated the potential traffic impacts of increase the development size from 152 units to up to 275 units (1A + 1B + existing Chambers = 216 units)
- Study was completed in April 2024
- Reviewed potential traffic impacts at seven intersections, including capacity analyses under existing conditions, 2031 without development expansion (No-Build), and 2031 with development expansion (Build) conditions
- Conducted observations at High Rock Middle School during morning arrival peak (7:10 - 7:40am) and afternoon dismissal peak (1:20 – 2:15pm)
- Conducted traffic safety reviews within the study area, including reviews of crash history at all study intersections and sight distance analysis at the site driveways
- Based on the analyses conducted, developed conclusions and recommendations

Traffic – HR School & Intersections



Traffic Summary

Conclusions and Recommendations

- Crashes: Less than 10% of crashes result in injuries, no MassDOT crash clusters, no abnormal crash patterns
- Access Sight Distances: Both meet both minimum and desirable sight distance standards
- Trip Generation: Approximately 61 additional trips during the morning peak hour and 73 trips in the afternoon peak hour, distributed to study intersections based on existing travel patterns

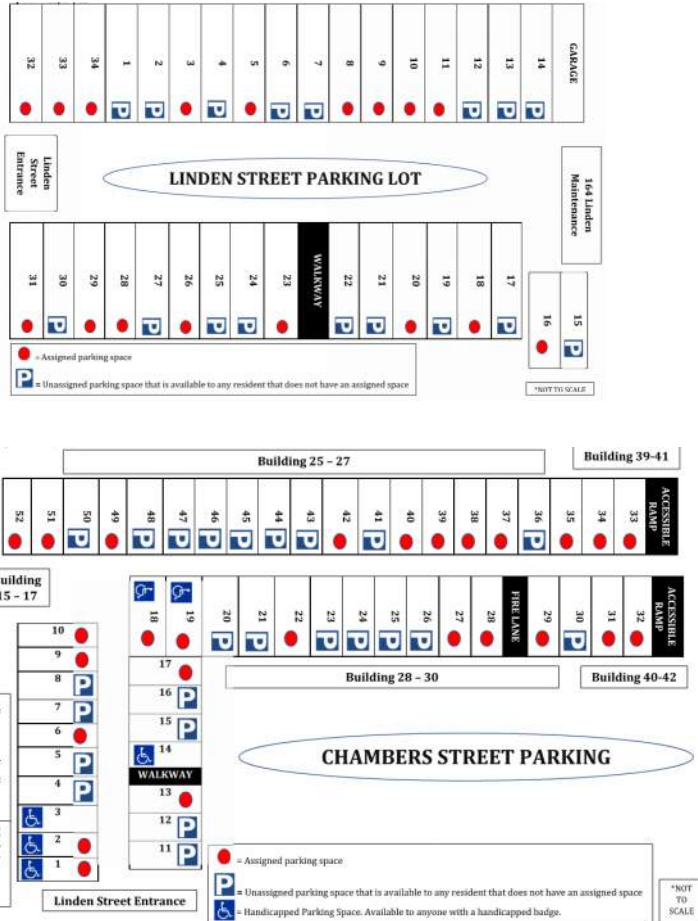
Table 4: Trip Generation Summary

		Weekday	AM Peak	PM Peak
LUC 220 – Multifamily Housing (Low-Rise) - 123 Units	Entering	432	15	46
	Exiting	432	46	27
	Total	864	61	73

Impacts

- Negligible at all 3 signalized intersections
- Northbound Linden Avenue approach to Great Plain Ave
- All other unsignalized intersection approaches/movements, including site accesses, expected to operate at LOS B or better
- Proposed expansion can be safely accommodated on area streets.

Existing Parking



	units	parking req .5 per unit	parking provided	accessible required	accessible provided	EV provided	EV ready provided
Linden Street Only - Existing Conditions							
Existing Linden	72	38	34	2	0		
total	72	38	34	2	0		
Full Site - Existing Conditions							
Existing Linden	72	38	34	2	0		
Existing Chambers	80	40	52	3	6		
total	152	78	86	5	6		
Linden Street Only - end of phase 1B							
1A	76	38	41	2	2		
1B new	60	30	29	2	2	7	7
total	136	68	70	4	4	7	7
Full Site - end of phase 1B							
1A	76	38	41	2	2		
1B new	60	30	29	2	2	7	7
Chambers	80	40	52	3	6		
total	216	108	122	7	10	7	7

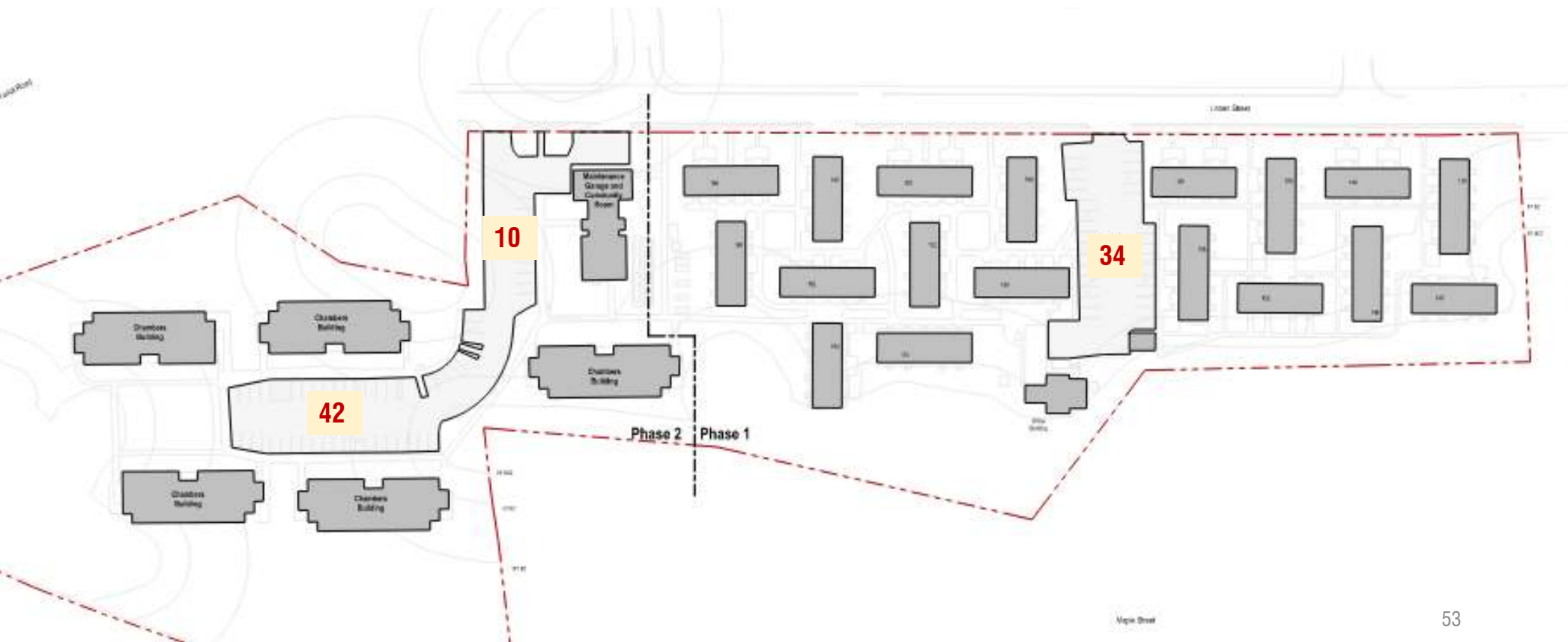
NHA Existing Parking Utilization:

Full Site: 86 spaces – 43 assigned of 152 units = 28% of units
 Linden Street: 34 spaces – 17 assigned of 72 units = 24% of units

Existing - Parking

Full Site: 86 spaces

Linden Street: 34 spaces

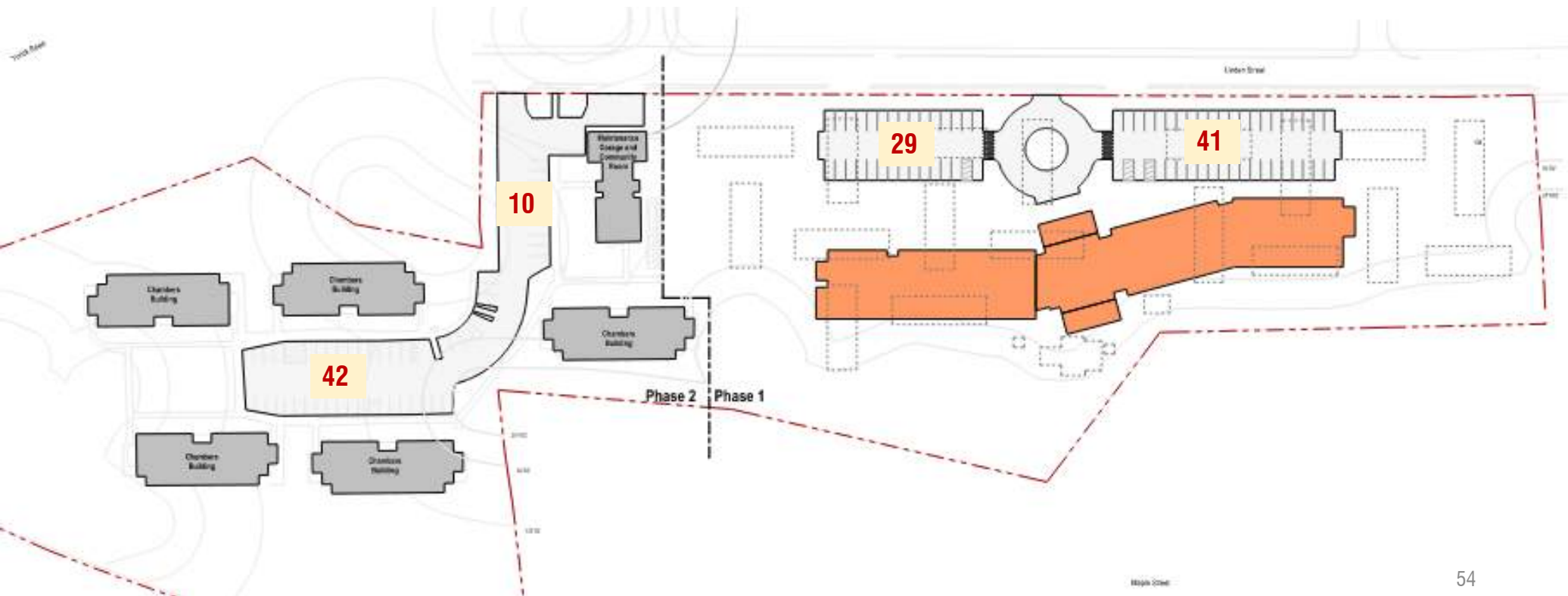


Proposed – Parking

Required = .5 spaces per apartment

Full Site: 216 units x .5 = 108 required, 122 provided

Linden Street: 136 units x .5 = 68 required, 70 provided



Geotechnical – Borings and Estimated Seasonal Highwater Table

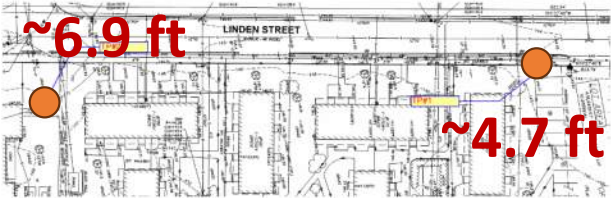


HANCOCK ASSOCIATES
Surveyors | Engineers | Scientists
Test Pits (#26774)
Linden Street Phase I
May 30, 2024

Soil Evaluator: Anthony Donato (#598)

Test Pit#1	Test Pit#2
Elevation: 144.6 ±	Elevation: 146.8 ±
0-6" Loam/Fill	0-6" Loam/Fill
6"-84" Sand	6"-80" Sand
Weeping: None	Weeping: 72"
ESHW: 72"/6'p(Elev. 138.6)	ESHW: 78"/6'p(Elev. 140.8)

Figure 1: Test pit locations



Passive House

Appendix A: WUFI Model Input Table

Input	Value	Comment
Climate Zone	ASHRAE Climate Zone 5 PHIUS+ Climate File: Norwood Memorial, MA	
Interior Conditioned Floor Area (iCFA)	102,297 SF	All conditioned spaces from Ground Level to Roof Top
Occupancy	135 dwelling units / 143 bedrooms / 278 ppl	
Envelope	Current Design	
Exterior Wall	R-27 effective	
Flat & Sloped Roof	R-60	
Slab Edge	R-15	This will be required for Ground Level conditioned spaces around the slab perimeter.
Exterior Door (Opaque)	R-10	Insulated hollow metal doors- with thermally broken door frame.
Window U-factor	Average fixed and operable assembly of U-0.22	Assumes a COG U-value of 0.22 and frame U-value of 0.22
Window SHGC	0.3	
Glass Doors U-factor	U-0.21 (Regularly occupied) U-0.61 (non-regularly occupied & vestibule)	Manufacturer must provide separated glass and frame values to confirm Phius condensation requirements are met.
Enclosure Infiltration Rate	0.06 CFM/sf @ 50 Pa	Phius does not include air tightness as a metric for window certification, window infiltration should be reviewed prior to selections.
Compartmentalization Requirement	0.3 CFM/sf of unit envelope @ 50 Pa	Airtight drywall

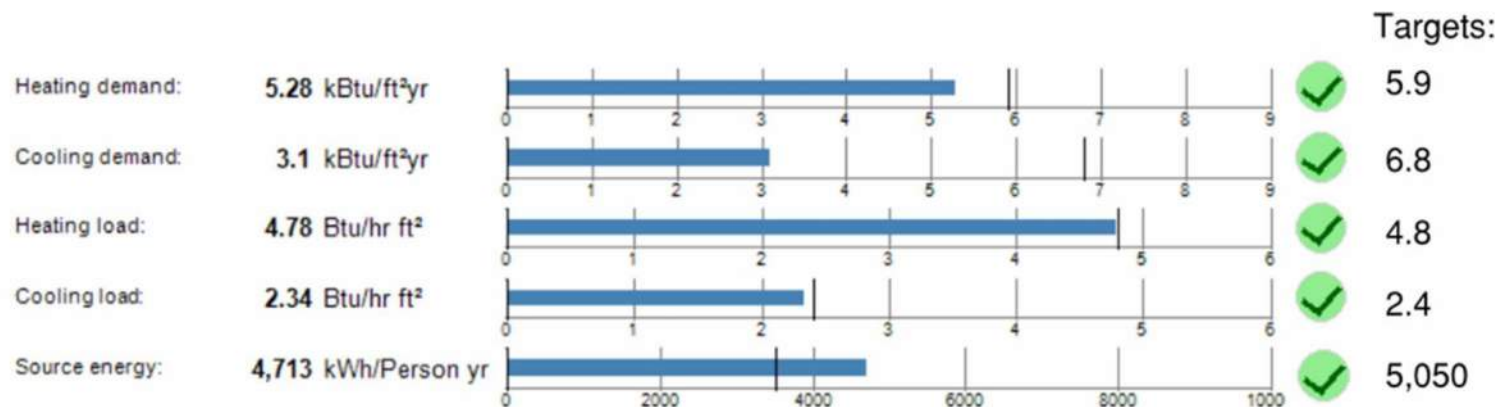
Ventilation		
Ventilation System	2 DOAS units with 7000 CFM each	
Ventilation Rate	45 CFM – 1 Bedroom Units 54 CFM – 2 Bedroom Units DOAS – 14000 cfm supply & 14000cfm exhaust	
Ventilation Heat Recovery	84% sensible heat recovery effectiveness; per info provided	Must be an AHRI certified wheel or packaged unit and must include frost protection and summer bypass – Selections needed for system airflow and design temp. modeled using AHRI 1060 certified software.
Fan Power	1.2 -1.5 W/cfm	Supply and exhaust combined
Filtration	MERV 13 for OA and MERV 8 for EA, MERV 3 at Kitchen grilles	
Economizer Mode	Temperature or humidity-controlled bypass	Required to meet PHIUS thermal metrics
Space Conditioning		
Heating and Cooling	VRF Heat Pump	
Heating COP	3.49 @ 17F / 3.49 @ 47F	Averaged using Phius Multi-Heat Pump Calculator
Cooling Recirc. COP	6.4	

Domestic Hot Water		
Water Heater Type	Central Electric Resistance water heater with integrated tank	NV5 please confirm.
System COP		
Piping Insulation	R-4 minimum required	
Appliances & Lighting		
Clothes washer	311 kWh/yr MEF 2.06	Must be Energy Star Certified
Dryer	Condensing CEF 3.48	Placeholder- better performing unit available
Fridge/Freezer Combo	716 kWh/yr	
Dishwasher	240 kWh/yr	Must be Energy Star Certified
Stove/oven	0.22 kWh/use	Electric
Interior Lighting	115,627 kWh/yr	90+% bulbs/fixtures must be Energy
Exterior Lighting	23,311 kWh/yr	Star Certified
Miscellaneous Electric Loads	112,606 kWh/yr	PHIUS Multi-family calculator used to calculate plug loads & lighting, no occupancy sensors assumed
Renewable Energy		
On-site PV	TBD	

Passive House

5.0 Phius Results

Based on TT's current understanding of the project design and specifications, the project can achieve Phius 2021 CORE or ZERO certification. Figure 1 demonstrates compliance against the metrics with the current design based on the input table in Appendix A. TT recommends a minimum of a % buffer on each metric to allow for adjustments in the results based on the Phius review process. If the project exceeds the source energy limit of ~5,050 kWh/person-year for the CORE pathway, on-site PV will be required. If on-site PV is not feasible or there is not enough roof space, off-site renewables, power purchase agreement, or RECs may be used to offset ALL source energy and follow the Phius ZERO pathway, which requires the building to be all-electric.

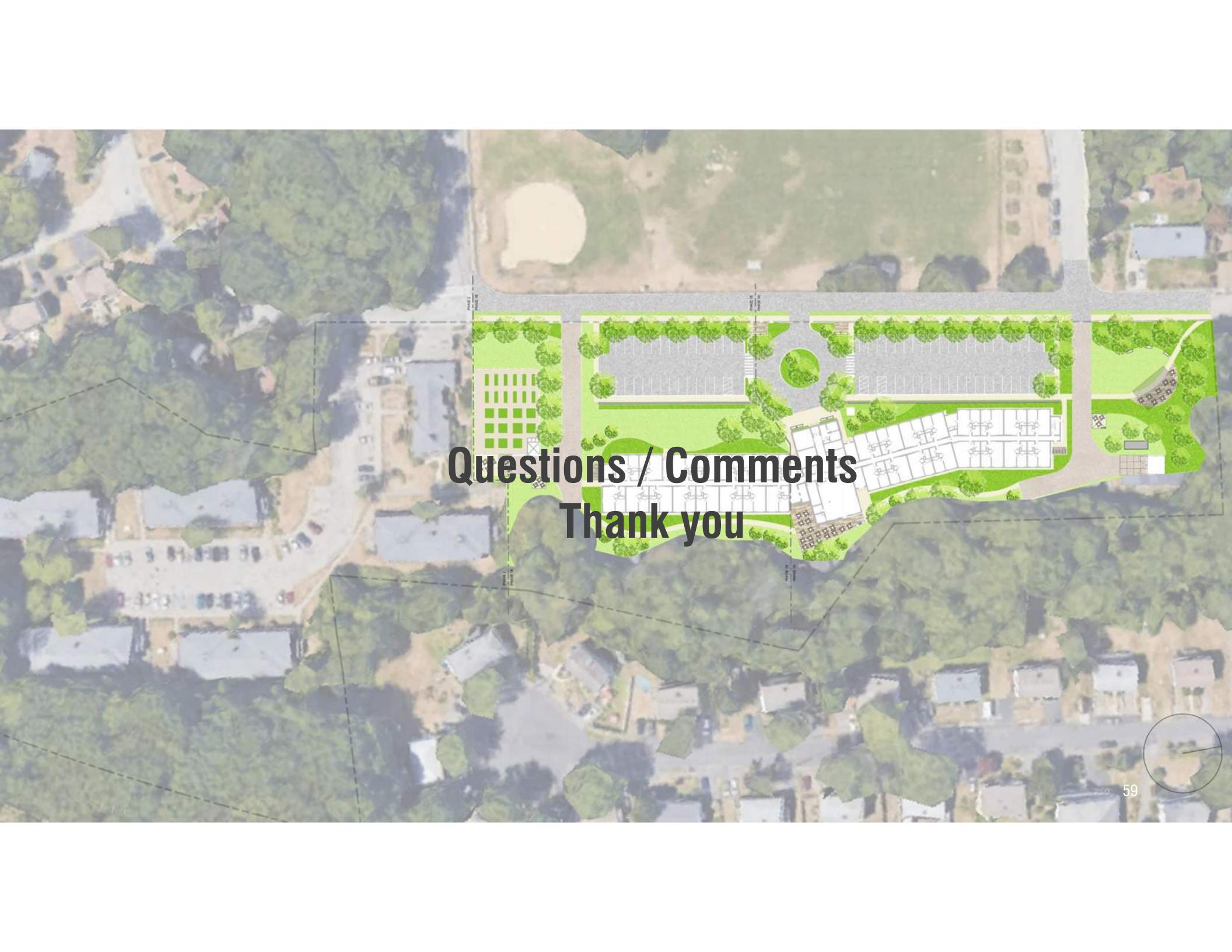


Closing

NHA goal/objective: to receive SPR approval and Order of Conditions by Friday October 18, 2024 in order to meet State/Federal funding application deadline of Preliminary LIHTC funding pre-application to EOHLC in early November.

In much appreciation – the following reviews have been received in advance of today's Public Hearing:

- Needham Building Dept – 8/30/24 – no issue
- Needham Fire Dept – 9/3/24 – no issue
- Needham Police – 9/5/24 – address utility work to be restricted to “off-peak times”. Request pre-construction meeting take place with NPD/NFD.DPW to review construction vehicle staging on Linden Street, to minimize impact to High Rock School.
- Conservation Commission Hearing – 9/12/24 - no adverse public comment.
- DPW – pending



Questions / Comments
Thank you

Alexandra Clee

From: Joseph Prondak
Sent: Friday, August 30, 2024 8:06 AM
To: Alexandra Clee
Subject: RE: Request for comment - Needham Housing Authority Linden Chambers Redevelopment

Hi Alex,

The Building Department has no concerns for this proposal.

Joe Prondak

From: Alexandra Clee <aclee@needhamma.gov>
Sent: Thursday, August 29, 2024 5:01 PM
To: Joseph Prondak <jprondak@needhamma.gov>; Thomas Ryder <tryder@needhamma.gov>; John Schlittler <JSchlittler@needhamma.gov>; Tara Gurge <TGurge@needhamma.gov>; Timothy McDonald <tmcdonald@needhamma.gov>; Tom Conroy <TConroy@needhamma.gov>; Carys Lustig <clustig@needhamma.gov>; Deb Anderson <andersond@needhamma.gov>
Cc: Elisa Litchman <elitchman@needhamma.gov>; Lee Newman <LNewman@needhamma.gov>; Justin Savignano <jsavignano@needhamma.gov>; Donald Anastasi <DAnastasi@needhamma.gov>; Jay Steeves <steevesj@needhamma.gov>; Ronnie Gavel <rgavel@needhamma.gov>; Edward Olsen <eolsen@needhamma.gov>
Subject: Request for comment - Needham Housing Authority Linden Chambers Redevelopment

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The Planning Board has scheduled this matter for September 24, 2024. Please send your comments **by Wednesday September 18, 2024**, at the latest.

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Thank you, alex.

Alexandra Clee
 Assistant Town Planner
 Needham, MA
 781-455-7550 ext. 271
www.needhamma.gov/planning

Alexandra Clee

From: Tom Conroy
Sent: Tuesday, September 3, 2024 10:01 AM
To: Alexandra Clee
Subject: RE: Request for comment - Needham Housing Authority Linden Chambers Redevelopment

No issues with Fire Dept.



From: Alexandra Clee <aclee@needhamma.gov>
Sent: Thursday, August 29, 2024 5:01 PM
To: Joseph Prondak <jprondak@needhamma.gov>; Thomas Ryder <tryder@needhamma.gov>; John Schlittler <JSchlittler@needhamma.gov>; Tara Gurge <TGurge@needhamma.gov>; Timothy McDonald <tmcdonald@needhamma.gov>; Tom Conroy <TConroy@needhamma.gov>; Carys Lustig <clustig@needhamma.gov>; Deb Anderson <andersond@needhamma.gov>
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Thank you, alex.

Alexandra Clee
Assistant Town Planner
Needham, MA
781-455-7550 ext. 271
www.needhamma.gov/planning

Alexandra Clee

From: John Schlittler
Sent: Thursday, September 5, 2024 3:03 PM
To: Alexandra Clee
Subject: RE: Request for comment - Needham Housing Authority Linden Chambers Redevelopment

Alex,
I am ok with it with the caveat that a full pre-construction meeting take place with PD/Fire, DPW and anyone else we feel is relevant. The biggest concern would be construction vehicles staging on Linden St, minimizing impact to the HR School, utility work on Linden and surrounding streets will have to be done in off peak times etc. This will have to be discussed prior to work commencing.
Thanks,
John

From: Alexandra Clee <aclee@needhamma.gov>
Sent: Thursday, August 29, 2024 5:01 PM
To: Joseph Prondak <jprondak@needhamma.gov>; Thomas Ryder <tryder@needhamma.gov>; John Schlittler <JSchlittler@needhamma.gov>; Tara Gurge <TGurge@needhamma.gov>; Timothy McDonald <tmcdonald@needhamma.gov>; Tom Conroy <TConroy@needhamma.gov>; Carys Lustig <clustig@needhamma.gov>; Deb Anderson <andersond@needhamma.gov>
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Subject: Request for comment - Needham Housing Authority Linden Chambers Redevelopment

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Alexandra Clee
 Assistant Town Planner
 Needham, MA
 781-455-7550 ext. 271
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TOWN OF NEEDHAM

**TOWN HALL
1471 Highland Avenue
Needham, MA 02492-2669**

Design Review Board

August 19, 2024

Memo Site Plan Review, 0 Linden Street, Needham Housing Authority

The Housing Authority is proposing to replace existing one-story apartments with 4 story buildings housing 136 units.

The site layout was reviewed. Existing wetlands constrict the site. The Board agreed with the building and parking placement. The building is not right on the street and the drainage and wetland area create a buffer to the residential area behind the site. There is a plan for ground and building runoff water to be recharged. There is some small area of lawn in front of the building, but it is not planned to be surface retention.

The Board discussed the possibility of using narrower driveways, but the fire department requires the proposed width. The applicant stated they are considering a pervious surface for the paved areas. They are aware that there is a maintenance issue to using that surface and are prepared to maintain it.

The Board liked the various site amenities that are included in the project. They will be a great asset for that community. They include garden space, outdoor areas, a plaza off of the community room, and benches along the front parking lot to allow residents to watch the activities at the High Rock fields. There is a walking path in the rear of the building which ends at the fire access driveway. The Board asked if there was some way for the walk to be visually extended through the drive to the garden area amenities and future walk thru Phase 2. There are limitations due to the fire equipment so that issue was not resolved.

The landscaping was reviewed. The Board approves of the mix of plantings proposed, and the extensive use of native plantings. The illustrations showed what appeared to be lawn in the rear of the building adjacent to the wetlands. The applicant stated it would more likely use a ground cover, which the Board agreed was a good choice. There was a palette of trees in the presentation that the Board approves. There was a question of whether only one tree type would be used along the street and the applicant stated they will be using a mix species. There are telephone/electric wires which will remain along the street. It was suggested the more columnar varieties of the tree species be used. The Board approves the overall landscaping plans.

The buildings are 4 stories in height. The massing is broken up both in plan and elevation through material changes and creating a roofline at the 3rd floor ceiling height and placing the 4th floor in a dormered structure. Small gabled portions work to break up the massing. In plan, the building is broken into sections that change angles and have smaller connector sections and a section at the main building entrance. The smaller sections have a different siding and color.

The Board thought this broken up massing approach was successful in decreasing the visual impact of the larger buildings. The main buildings have a mix of materials, with some larger trim accents. The Board suggested further development of the material changes and accent areas would improve the elevations. The applicant stated they are planning to do more development of the elevations; the timing of our review was early in the process. The Board thought the applicant had made a good start and approved of the concepts and approach. Continued development of the approach illustrated will result in a well-designed project. The choice of using architectural forms existing in the residential neighborhood, gables, dormers, trimmed double and triple sets of windows, and the mix of residential scaled siding choices, was approved of by the DRB.

The Board recognizes the project is a change in scale from the existing structures on the sites. We did note that there is no neighbor across the front of the building, just playing fields, and that the neighbors in the rear have a developed wetland buffer to help screen the new building. Given the site constrictions and the goals of the NHA as far as unit totals, the DRB believes the buildings are well placed and well designed and approve of the proposal.

End of notes.

Alexandra Clee

From: Deb Anderson
Sent: Friday, September 20, 2024 11:05 AM
To: Alexandra Clee
Subject: RE: Request for comment - Needham Housing Authority Linden Chambers Redevelopment

The Needham Housing Authority and their consultants presented their Notice of Intent Application materials to the Conservation Commission at their meeting on 9/12/24. It was apparent that through all of the previous discussions and updates provided by the Applicant during the process of putting together the plan that was presented were very helpful. Many of the issues within the Commission's jurisdiction that had been raised were addressed by the Applicant and we anticipate the Commission will vote to issue the Permit for this phase of the development, with few if any revisions required, at their 9/26/24 Meeting, as long as MassDEP has reviewed the filing and issued a filing number. If you have any questions, please feel free to get in touch.

Debbie Anderson, PWS
Director of Conservation
Town of Needham
500 Needham Avenue
Needham, MA 02492
781-455-7550 x 248

From: Alexandra Clee <aclee@needhamma.gov>
Sent: Friday, September 20, 2024 10:59 AM
To: Joseph Prondak <jprondak@needhamma.gov>; Thomas Ryder <tryder@needhamma.gov>; John Schlittler <JSchlittler@needhamma.gov>; Tara Gurge <TGurge@needhamma.gov>; Timothy McDonald <tmcDonald@needhamma.gov>; Tom Conroy <TConroy@needhamma.gov>; Carys Lustig <clustig@needhamma.gov>; Deb Anderson <andersond@needhamma.gov>
Cc: Elisa Litchman <elitchman@needhamma.gov>; Lee Newman <LNewman@needhamma.gov>; Justin Savignano <jsavignano@needhamma.gov>; Donald Anastasi <DAnastasi@needhamma.gov>; Jay Steeves <steevesj@needhamma.gov>; Ronnie Gavel <rgavel@needhamma.gov>; Edward Olsen <eolsen@needhamma.gov>
Subject: RE: Request for comment - Needham Housing Authority Linden Chambers Redevelopment

Most of you already commented, but I wanted to apologize for my mistake of referencing a prior project's description in my email. (sometimes moving too fast over here for my own good!).

I am amending the first sentence, as it now reads below. If you have any revision to your comments, do let me know. All of the other materials provided was correct.

Alex.

Alexandra Clee
Assistant Town Planner
Needham, MA

From: Alexandra Clee

Sent: Thursday, August 29, 2024 5:01 PM

To: Joseph Prondak <jprondak@needhamma.gov>; Thomas Ryder <tryder@needhamma.gov>; John Schlittler <JSchlittler@needhamma.gov>; Tara Gurge <TGurge@needhamma.gov>; Timothy McDonald <tmcdonald@needhamma.gov>; Tom Conroy <TConroy@needhamma.gov>; Carys Lustig <clustig@needhamma.gov>; Deb Anderson <andersond@needhamma.gov>

Cc: Elisa Litchman <elitchman@needhamma.gov>; Lee Newman <LNewman@needhamma.gov>; Justin Savignano <jsavignano@needhamma.gov>; Donald Anastasi <DAnastasi@needhamma.gov>; Jay Steeves <steevesj@needhamma.gov>; Ronnie Gavel <rgavel@needhamma.gov>; Edward Olsen <eolsen@needhamma.gov>

Subject: Request for comment - Needham Housing Authority Linden Chambers Redevelopment

Dear all,

We have received the attached application materials for the proposal by the Petitioner to allow ~~the addition of a permanent emergency generator at the CATH~~ for a development of the Needham Housing Authority at Linden Chambers. More information can be found in the attachments.

The Planning Board has scheduled this matter for September 24, 2024. Please send your comments **by Wednesday September 18, 2024**, at the latest.

The documents attached for your review are detailed below and can be found on the Common Drive due to their size:
<K:\Planning Board Applications\Planning NHA Linden Chambers redevelopment 2024>

1. Cover Letter from Attorney Robert Smart, dated August 23, 2024.
2. Application for Site Plan Review.
3. Letter from Attorney Robert Smart, dated August 23, 2024, with attached zoning table.
4. Plan of Land in Needham, by Hancock Associates, dated 12/21/23 (the lot consolidation plan).
5. Plan entitled "Schematic Design Plans for Linden Street Redevelopment, Needham Housing Authority", prepared by Bargmann Hendrie + Archetype Inc., 9 Channe; Center Street, Suite 300, Boston, MA, 02210, Hancock Associates, 121 East Berkely Street, 4th Floor, Boston, MA, 02118, Ground Landscape Inc., 285 Washington Street, Unit G, Somerville, MA, 02143, consisting of 33 sheets: Sheet 1, Sheet 000 - Cover / List of Drawings/Zoning Table, dated August 23, 2024; Sheet 2, entitled "Existing Conditions Plan of Lane in Needham, MA," dated May 11, 2023; Sheet 3, Sheet C1, entitled "Phasing Plan," dated August 23, 2024; Sheet 4, Sheet C2.0, entitled "Demolition, Soil Erosion, and Sediment Control," dated August 23, 2024; Sheet 5, Sheet C3.0, entitled "Site Layout and Materials Plan," dated August 23, 2024; Sheet 6, Sheet C4.0, entitled "Grading and Drainage," dated August 23, 2024; Sheet 7, Sheet C5.0, entitled "Utility Plan," dated August 23, 2024; Sheet 8, Sheet C6.0, entitled "Construction Details I," dated August 23, 2024; Sheet 9, Sheet C6.1, entitled "Construction Details II," dated August 23, 2024; Sheet 10, Sheet L099, entitled "Tree Protection Plan," dated August 23, 2024; Sheet 11, Sheet L102A, entitled "Materials Plan," dated August 23, 2024; Sheet 12, Sheet L102B, entitled "Materials Plan," dated August 23, 2024; Sheet 13, Sheet L104, entitled "Planting Plan," dated August 23, 2024; Sheet 14, Sheet L105, entitled "Site Lighting Plan," dated August 23, 2024; Sheet 15, Sheet L501, entitled "Details," dated August 23, 2024; Sheet 16, Sheet L503, entitled "Details," dated August 23, 2024; Sheet 17,

Sheet L504, entitled "Details," dated August 23, 2024; Sheet 18, Sheet L505, entitled "Details," dated August 23, 2024; Sheet 19, Sheet L506, entitled "Details," dated August 23, 2024; Sheet 20, Sheet L510, entitled "Details," dated August 23, 2024; Sheet 21, Sheet A100, entitled "Phase 1 Plans," dated August 23, 2024; Sheet 22, Sheet A101, entitled "Phase 1A First Floor Plans," dated August 23, 2024; Sheet 23, Sheet A102, entitled "Phase 1A - Typical Floor Plan- Floors 2-4," dated August 23, 2024; Sheet 24, Sheet A104, entitled "Phase 1B - First Floor Plan," dated August 23, 2024; Sheet 25, Sheet A105, entitled "Phase 1B - Typical Floor Plan- Floors 2-4," dated August 23, 2024; Sheet 26, Sheet A200, entitled "Phase 1 Elevations," dated August 23, 2024; Sheet 27, Sheet A201, entitled "Phase 1A Elevations," dated August 23, 2024; Sheet 28, Sheet A202, entitled "Phase 1B Elevations," dated August 23, 2024; Sheet 29, Sheet A203, entitled "Phase 1B – Elevations," dated August 23, 2024; Sheet 30, Sheet A300, entitled "Building Sections," dated August 23, 2024; Sheet 31, Sheet E000, entitled "Electrical Legend, Notes and Abbreviations," dated August 23, 2024; Sheet 32, Sheet E100, entitled "Electrical Site Plan," dated August 23, 2024; Sheet 33, Sheet E101, entitled "Electrical Site Plan Photometric," dated August 23, 2024.

6. Traffic Impact Analysis, titled "Linden Street Redevelopment Needham, Massachusetts", by Pare Corporation, dated April, 2024.
7. Stormwater Report, titled "Stormwater Report In Support of Notice of Intent for Linden Street Redevelopment (Map 133, Lots 23 and 24) Needham MA" by Hancock Associates, dated 8/23/24;

Thank you, alex.

Alexandra Clee
Assistant Town Planner
Needham, MA
781-455-7550 ext. 271
www.needhamma.gov/planning

Alexandra Clee

From: Tara Gurge
Sent: Wednesday, September 18, 2024 5:40 PM
To: Alexandra Clee
Cc: Lee Newman; Timothy McDonald
Subject: Request for comment - Needham Housing Authority Linden Chambers Redevelopment

Hello Alex –

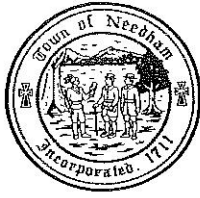
Here are the Public Health Division's comments for the Planning Board regarding the proposed Needham Housing Authority Linden Chambers Redevelopment. See below:

- The kitchen proposed in the new building located on this property, to be built in Phase 1A, would need an online Food Permit Plan Review application completed, along with proposed food establishment design plans, which will need to be submitted and reviewed and approved by the Public Health Division prior to start of construction. Here is the direct link to the online Food Establishment Permit Plan Review application - <https://needhamma.viewpointcloud.com/categories/1073/record-types/1006516>.
- Please keep in mind, as part of this new food establishment kitchen plan approval, sufficient space must be made available in the parking lot for both a solid waste (trash) dumpster and a separate recycling dumpster, along with waste oil/grease containment (if applicable.) These dumpsters must be placed in an easily accessible area outside of the new facility, on a concrete pad, close to the food establishment. An exterior grease interceptor may also need to be installed.
- If additional exterior residential trash and recycling areas are built on site, each area must contain a sufficient number of separate recycling and trash covered waste containers which will need to be placed on easily cleanable surfaces, and have access to an exterior water source/ exterior faucet to allow each of those areas to be routinely pressure washed to ensure they are maintained in a clean and sanitary condition at all times to decrease the risk of attracting pests.
- Prior to demolition, the owner must apply for this Demolition review online, via our online permit application system. See direct link to this permit review application -- <https://needhamma.viewpointcloud.com/categories/1073/record-types/1006508>. This form will need to be completed along with the submittal of the required supplemental report documents for our review and approval (as noted on the form.) **PLEASE NOTE:** Pest control reports, along with the asbestos sampling and removal reports, etc., must be uploaded to our online system for review for each structure to be demolished, prior to the issuance of Demolition permits by the Building Department.
- On-going pest control must be conducted prior to and during demolition of the structures AND on-going pest control must be conducted throughout construction.
- The buildings should be fully compliant with 105 CMR 410.00: Minimum standards of fitness for human habitation (MA Housing Code). Recommend that our office performs inspections of the building prior to the units being rented out to confirm it meets state health code requirements.
- Outdoor seating areas must be maintained in a clean and sanitary condition by facilities and residents, as to not attract pests. This building is next to the woods and a water source, and pests are likely to harbor here once food is made available to them.

Please let us know if you have any follow-up questions or if you need any additional information from us on those requirements.

Thanks,





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

September 19, 2024

Needham Planning Board
Needham Public Service Administration Building
Needham, MA 02492

RE: Major Project Special Permit MPSP 2024-01
Linden Chambers Housing Redevelopment

Dear Members of the Board,

The Department of Public Works has completed its review of the above-referenced plan review. The applicant is proposing to demolish and redevelop property at 0 Linden and 5 Chamber Street. Phase IA consists of demolishing 10-existing buildings on Linden Street and constructing a new 4-story building with 76- units. Phase IB has not been designed for review at this time.

The documents submitted for review are as follows:

1. Cover Letter from Attorney Robert Smart, dated August 23, 2024.
2. Application for Site Plan Review.
3. Letter from Attorney Robert Smart, dated August 23, 2024,
4. Plan of Land in Needham, by Hancock Associates, dated 12/21/23 (the lot consolidation plan).
5. Plan entitled "Schematic Design Plans for Linden Street Redevelopment, Needham Housing Authority", prepared by Bargmann Hendrie + Archetype Inc., 9 Channe; Center Street consisting of 33 sheets:
6. Traffic Impact Analysis, titled "Linden Street Redevelopment Needham, Massachusetts", by Pare Corporation, dated April, 2024.
7. Stormwater Report, titled "Stormwater Report In Support of Notice of Intent for Linden Street Redevelopment (Map 133, Lots 23 and 24) Needham MA" by Hancock Associates, dated 8/23/24;

Our comments and recommendations are as follows:

- A sound study for the Emergency Generator is absent from the application.
- Although the site has been designed to meet the stormwater requirements, the DPW has been expressing a need for additional onsite storage of stormwater due to historic flooding issues in the area. We encourage the housing authority and surrounding property owners to partner with the town in finding areas for stormwater storage and potential grant funding to benefit this neighborhood.

- As part of the Planning Board Decision's the DPW requests that the Operation and Maintenance plan for the stormwater controls be incorporated into the decision. The Operation and Maintenance will need a funding source, and Maintenance reports submitted to the DPW-Engineering Division by the end of April every year. It is expected that the maintenance of all the systems onsite will require an updated Operation and Maintenance Plan based on predictable requirements for vacuum sweeping and infiltration system cleanings, etc. after the systems are constructed. Such revised plan (if needed) should be submitted to the Department of Public Works for approval.
- As part of the NPDES requirements, the applicant will need to comply with the Public Outreach & Education and Public Participation & Involvement control measures. The applicant shall submit a letter to the DPW identifying the measures selected and dates by which the measures will be completed in order to incorporate it into the Planning Board's decision.

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

Truly yours,

Thomas A Ryder
Town Engineer

ARTICLE 1: AMEND ZONING BY-LAW – MULTI-FAMILY OVERLAY DISTRICT (BASE COMPLIANCE PLAN)

To see if the Town will vote to amend the Needham Zoning By-Law as follows:

1. By amending Section 1.3, Definitions by adding the following terms:

Applicant – A person, business, or organization that applies for a building permit, Site Plan Review, or Special Permit.

2. By amending Section 2.1, Classes of Districts by adding the following after ASOD Avery Square Overlay District:

MFOD – Multi-family Overlay District

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3. By inserting a new Section 3.17 Multi-family Overlay District:

3.17 Multi-family Overlay District

3.17.1 Purposes of District

The purposes of the Multi-family Overlay District include, but are not limited to, the following:

- (a) Providing Multi-family housing in Needham, consistent with the requirements of M.G.L. Chapter 40A (the Zoning Act), Section 3A;
- (b) Supporting vibrant neighborhoods by encouraging Multi-family housing within a half-mile of a Massachusetts Bay Transit Authority (MBTA) commuter rail station; and
- (c) Establishing controls which will facilitate responsible development and minimize potential adverse impacts upon nearby residential and other properties.

Toward these ends, Multi-family housing in the Multi-family Overlay District is permitted to exceed the density and dimensional requirements that normally apply in the underlying zoning district(s) provided that such development complies with the requirements of this Section 3.17.

3.17.2 Scope of Authority

In the Multi-family Overlay District, all requirements of the underlying district shall remain in effect except where the provisions of Section 3.17 provide an alternative to such requirements, in which case these provisions shall supersede. If an Applicant elects to develop Multi-family housing in accordance with Section 3.17, the provisions of the Multi-family Overlay District shall apply to such development. Notwithstanding anything contained herein to the contrary, where the provisions of the underlying district are in conflict or inconsistent with the provisions of the Multi-family Overlay District, the terms of the Multi-family Overlay District shall apply.

If the applicant elects to proceed under the zoning provisions of the underlying district (meaning the applicable zoning absent any zoning overlay) or another overlay district, as applicable, the zoning bylaws applicable in such district shall control and the provisions of the Multi-family Overlay District shall not apply.

3.17.2.1 Subdistricts

The Multi-family Overlay District contains the following sub-districts, all of which are shown on the MFOD Boundary Map and indicated by the name of the sub-district:

- (a) A-1
- (b) B
- (c) ASB-MF
- (d) CSB
- (e) HAB
- (f) IND

3.17.3 Definitions

For purposes of this Section 3.17, the following definitions shall apply.

Affordable housing – Housing that contains one or more Affordable Housing Units as defined by Section 1.3 of this By-Law. Where applicable, Affordable Housing shall include Workforce Housing Units, as defined in this Subsection 3.17.3 Definitions.

As of right – Development that may proceed under the zoning in place at time of application without the need for a special permit, variance, zoning amendment, waiver, or other discretionary zoning approval.

Compliance Guidelines – *Compliance Guidelines for Multi-Family Zoning Districts Under Section 3A of the Zoning Act* as further revised or amended from time to time.

EOHLC – The Massachusetts Executive Office of Housing and Livable Communities, or EOHLC’s successor agency.

Multi-family housing – A building with three or more residential dwelling units or two or more buildings on the same lot with more than one residential dwelling unit in each building and that complies with the requirements of M.G.L. c.40A, §3A and the rules and requirements thereunder.

Open space – Contiguous undeveloped land within a parcel boundary.

Parking, structured – A structure in which parking spaces are accommodated on multiple stories; a parking space area that is underneath all or part of any story of a structure; or a parking space area that is not underneath a structure, but is entirely covered, and has a parking surface at least eight feet below grade. Structured parking does not include surface parking or carports, including solar carports.

Parking, surface – One or more parking spaces without a built structure above the space. A solar panel designed to be installed above a surface parking space does not count as a built structure for the purposes of this definition.

Residential dwelling unit – A single unit providing complete, independent living facilities for one or more persons, including permanent provisions for living, sleeping, eating, cooking, and sanitation.

Section 3A – Section 3A of the Zoning Act.

Site plan review authority – The Town of Needham Planning Board.

Special permit granting authority – The Town of Needham Planning Board.

Sub-district – An area within the MFOD that is geographically smaller than the MFOD district and differentiated from the rest of the district by use, dimensional standards, or development standards.

Subsidized Housing Inventory (SHI) – A list of qualified Affordable Housing Units maintained by EOHLC used to measure a community's stock of low-or moderate-income housing for the purposes of M.G.L. Chapter 40B, the Comprehensive Permit Law.

Workforce housing unit – Affordable Housing Unit as defined by Section 1.3 of this By-Law but said Workforce Housing Unit shall be affordable to a household with an income of between eighty (80) percent and 120 percent of the area median income as defined.

3.17.4 Use Regulations

3.17.4.1 Permitted Uses

The following uses are permitted in the Multi-family Overlay District as a matter of right:

- (a) Multi-family housing.

3.17.4.2 Accessory Uses

The following uses are considered accessory as of right to any of the permitted uses in Subsection 3.17.4.1:

- (a) Parking, including surface parking and structured parking on the same lot as the principal use.
- (b) Any uses customarily and ordinarily incident to Multi-family housing, including, without limitation, residential amenities such as bike storage/parking, a swimming pool, fitness facilities and similar amenity uses.

3.17.5 Dimensional Regulations

3.17.5.1 Lot Area, Frontage and Setback Requirements

The following lot area, frontage and setback requirements shall apply in the Multi-family Overlay District sub-districts listed below. Buildings developed under the regulations of the Multi-family Overlay District shall not be further subject to the maximum lot area, frontage, and setback requirements of the underlying districts, as contained in Subsection 4.3.1 Table of Regulations, Subsection 4.4.1 Minimum Lot Area and Frontage, Subsection 4.4.4 Front Setback, Subsection 4.6.1 Basic Requirements, and Subsection 4.6.2 Front and Side Setbacks.

	A-1	B	ASB-MF	CSB	HAB	IND
Minimum Lot Area (square feet)	20,000	10,000	10,000	10,000	10,000	10,000
Minimum Lot Frontage (feet)	120	80	80	80	80	80
Minimum Front Setback (feet) from the front property line	25	10	Minimum 10 Maximum 15 ^{c,f,g}	20 feet for buildings with frontage on Chestnut Street 10 feet for all other buildings	20	25
Minimum Side and Rear Setback (feet)	20	10 ^{a, b}	10 ^{a, c,d}	20 (side) ^{a, b,d,e}	20 ^{a, b}	20 ^{a, b}

(a) The requirement of an additional 50-foot side or rear setback from a residential district as described in Subsection 4.4.8 Side and Rear Setbacks Adjoining Residential Districts or Subsection 4.6.5 Side and Rear Setbacks Adjoining Residential Districts shall not apply.

(b) Any surface parking, within such setback, shall be set back 10 feet from an abutting residential district and such buffer shall be suitably landscaped.

~~(c) Any underground parking structure shall be located entirely below the grade of the existing lot and set back at least ten (10) feet from the lot line and the surface of the garage structure shall be suitably landscaped in accordance with Subsection 4.4.8.5 Landscaping Specifications.~~

~~(d)~~(c) The rear and side setbacks are 20 feet along the MBTA right-of-way. With respect to any lot partially within an underlying residential district, (i) no building or structure for a multi-family residential use shall be placed or constructed within 110 feet of the lot line of an abutting lot containing an existing single family residential structure and (ii) except for access driveways and sidewalks, which are permitted, any portion of the lot within said residential district shall be kept open with landscaped areas, hardscaped areas, outdoor recreation areas (e.g., swimming pool) and/or similar open areas.

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~~(e)~~(d) On the west side of Chestnut Street, the rear setback shall be 20 feet. On the east side of Chestnut Street, the rear setback shall be 30 feet.

~~(f)~~(e) Seventy percent (70%) of the main datum line of the front facade of the building shall be set back no more than 15 feet, except that periodic front setbacks greater than fifteen (15) feet are allowed if activated by courtyards, landscaping, drive aisles, amenity areas, or other similar site design features that enhance the streetscape. In the ASB-MF subdistrict, the Applicant may apply for a Special Permit from the Planning Board if less than seventy percent (70%) of the main datum line front facade of the building is set back 15 feet.

~~(g) In the ASB-MF subdistrict, the Applicant may apply for a Special Permit from the Planning Board for an additional curb cut on Highland Avenue or West Street. For the sake of clarity, modifications to existing curb cuts do not require a Special Permit.~~

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3.17.5.2 Building Height Requirements

The maximum building height in the Multi-family Overlay District sub-districts shall be as shown below. Buildings developed under the Multi-family Overlay District shall not be further subject to the maximum height regulations of the underlying district, as contained in Subsection 4.3.1 Table of Regulations, Subsection 4.4.2 Maximum Building Bulk, Subsection 4.4.3 Height Limitation, Subsection 4.6.1 Basic Requirements, and Subsection 4.6.4 Height Limitation.

	A-1	B	ASB-MF	CSB	HAB	IND
Maximum Building Height (stories)	3.0	3.0	3.0 ^c	3.0	3.0	3.0
Maximum Building Height (ft) ^{a,b}	40	40	40 ^c	40	40	40

- (a) Exceptions. The limitation on height of buildings shall not apply to chimneys, ventilators, towers, silos, spires, stair overruns, elevator overruns, mechanical equipment, roof parapets, architectural screening, or other ornamental features of buildings, which features (i) are in no way used for living purposes; (ii) do not occupy more than 25% of the gross floor area of the building and (iii) do not project more than 15 feet above the maximum allowable height.
- (b) Exceptions: Renewable Energy Installations. The Site Plan Review Authority may waive the height and setbacks in Subsection 3.17.5.2 Building Height Requirements and Subsection 3.17.5.1 Lot Area, Frontage and Setback Requirements to accommodate the installation of solar photovoltaic, solar thermal, living, and other eco-roofs, energy storage, and air-source heat pump equipment. Such installations shall be appropriately screened, consistent with the requirements of the underlying district; shall not create a significant detriment to abutters in terms of noise or shadow; and must be appropriately integrated into the architecture of the building and the layout of the site. The installations shall not provide additional habitable space within the development.
- (c) In the ASB-MF subdistrict, the Applicant may apply for a Special Permit from the Planning Board for a height of four stories and 50 feet, provided that the fourth story along Highland Avenue and West Street incorporates one or more of the following design elements: (i) a pitched roof having a

maximum roof pitch of 45 degrees; (ii) a fourth story recessed from the face of the building by a minimum of 12 feet; and/or (iii) such other architectural design elements proposed by the Applicant and approved by the Planning Board during the Special Permit process.

3.17.5.3 Building Bulk and Other Requirements

The maximum floor area ratio or building coverage and the maximum number of dwelling units per acre, as applicable, in the Multi-family Overlay District sub-districts shall be as shown below, except that the area of a building devoted to underground parking shall not be counted as floor area for purposes of determining the maximum floor area ratio or building coverage, as applicable. Buildings developed under the regulations of the Multi-family Overlay District shall not be subject to any other limitations on floor area ratio or building bulk in Subsection 4.3.1 Table of Regulations, Subsection 4.4.2 Maximum Building Bulk, and Subsection 4.6.3 Maximum Lot Coverage.

	A-1	B	ASB-MF	CSB	HAB	IND
Floor Area Ratio (FAR)	0.50	N/A	1.3 ^{b, c}	0.70	0.70	0.50
Maximum Building Coverage (%)	N/A	25%	N/A	N/A	N/A	N/A
Maximum Dwelling Units per Acre ^a	18	N/A	44^dN/A	18	N/A	N/A

(a) The total land area used in calculating density shall be the total acreage of the lot on which the development is located.

(b) In the ASB-MF subdistrict, the Applicant may apply for a Special Permit from the Planning Board for an FAR of up to 1.7.

~~(c)~~ In the ASB-MF subdistrict, the following shall not be counted as floor area for purposes of determining the maximum floor area ratio: (i) interior portions of a building devoted to off-street parking; (ii) parking garages, structured parking or deck/rooftop parking that are screened ~~from Highland Avenue as required by Section 3.17.6(c) and from the Needham Heights Common~~ in a manner compatible with the architecture of the building ~~from Highland Avenue and the Needham Heights Common~~. In the ASB-MF subdistrict, the Applicant may apply for a Special Permit from the Planning Board to exclude additional areas from floor area for purposes of determining the maximum floor area ratio.

~~(c)(d)~~ In the ASB-MF subdistrict, Multi-family housing may exceed the maximum of 44 dwelling units per acre by special permit.

3.17.5.4 Multiple Buildings on a Lot

In the Multi-family Overlay District, more than one building devoted to Multi-family housing may be located on a lot, provided that each building complies with the requirements of Section 3.17 of this By-Law.

3.17.5.5 Use of Dwelling Units

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Consistent with the Executive Office of Housing and Livable Communities' Compliance Guidelines for Multi-family Zoning Districts Under Section 3A of the Zoning Act, and notwithstanding anything else contained in the Zoning By-Law to the contrary, Multi-family housing projects shall not be required to include units with age restrictions, and units shall not be subject to limit or restriction concerning size, the number or size of bedrooms, a cap on the number of occupants, or a minimum age of occupants.

3.17.6 Off-Street Parking

- (a) The minimum number of off-street parking spaces shall be one space per dwelling unit for all subdistricts within the Multi-family Overlay District.
- (b) Parking areas shall be designed and constructed in accordance with Subsection 5.1.3 Parking Plan and Design Requirements. The remaining provisions of Section 5.1 Off Street Parking Regulations shall not apply to projects within the Multi-family Overlay District.

(c) In the ASB-MF subdistrict, the façade(s) of all parking garages, structured parking and deck/rooftop parking visible from Highland Avenue shall be designed to be generally indistinguishable from the façade(s) of the residential portion of the building(s), and shall allow no view of parked vehicles from Highland Avenue except where such view is intermittent and incidental to the operation of the parking area, such as a view afforded by the opening of an automated garage door.

(d) Enclosed parking areas shall comply with Subsection 4.4.6 Enclosed Parking.

(e) No parking shall be allowed within the front setback. Parking shall be on the side or to the rear of the building, or below grade.

(f) The minimum number of bicycle parking spaces shall be one space per dwelling unit.

(g) Bicycle storage. For a multi-family development of 25 units or more, no less than 25% of the required number of bicycle parking spaces shall be integrated into the structure of the building(s) as covered spaces.

3.17.7 Development Standards

- (a) Notwithstanding anything in the Zoning By-Law outside of this Section 3.17 to the contrary, Multi-family housing in the Multi-family Overlay District shall not be subject to any special permit requirement.
- (b) Building entrances shall be available from one or more streets on which the building fronts and, if the building fronts Chestnut Street, Garden Street, Highland Avenue, Hillside Avenue, Rosemary Street, or West Street, the primary building entrance must be located on at least one such street.
- (c) The site shall be designed so that all collection and storage areas for residential refuse shall be internal to the building(s), or otherwise shall not be visible from any public way and appropriately

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screened from abutting properties, and adequate management and removal of refuse shall be provided for.

- (d) Site arrangement and driveway layout shall provide sufficient access for emergency and service vehicles, including fire, police, and rubbish removal.
- (e) Plantings shall be provided and include species that are native or adapted to the region. Plants on the Massachusetts Prohibited Plant List, as may be amended, are prohibited.
- (f) All construction shall be subject to the current town storm water bylaws, regulations, and policies along with any current regulations or policies from DEP, state, and federal agencies.
- (g) Control measures shall be employed to mitigate any substantial threat to water quality or soil stability, both during and after construction.
- (h) There shall be adequate water, sewer, and utility service provided to serve the project.
- (i) Off-site glare from headlights shall be controlled through arrangement, grading, fences, and planting. Off-site light over-spill from exterior lighting shall be controlled through luminaires selection, positioning, and mounting height so as to not add more than one foot candle to illumination levels at any point off-site.
- (j) Pedestrian and vehicular movement within and outside the project site shall be protected, through selection of egress points, provision for adequate sight distances, and through reasonable mitigation measures for traffic attributable to the project.
- (k) Site arrangements and grading shall minimize to the extent practicable the number of removed trees 8" trunk diameter or larger, and the volume of earth cut and fill.
- (l) No retaining wall shall be built within the required yard setback except a retaining wall with a face not greater than four (4) feet in height at any point and a length that does not exceed forty (40) percent of the lot's perimeter. Notwithstanding the foregoing, retaining walls may graduate in height from four (4) to seven (7) feet in height when providing access to a garage or egress entry doors at the basement level, measured from the basement or garage floor to the top of the wall. In such cases, the wall is limited to seven (7) feet in height for not more than 25% of the length of the wall.
- (m) Retaining walls with a face greater than twelve (12) feet in height are prohibited unless the Applicant's engineer certifies in writing to the Building Commissioner that the retaining wall will not cause an increase in water flow off the property and will not adversely impact adjacent property or the public.
- (n) Construction activity shall be consistent with Section 3.8 of the General By-Laws and any reasonable conditions on construction activity that are warranted at a particular site and included in the applicable site plan approval, including but not limited to hours during which construction activity may take place, the movement of trucks or heavy equipment on or off the site, measures to control dirt, dust, and erosion and to protect existing vegetation to be preserved on the site.

Special Development Standards for the A-1 Subdistrict:

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The following requirements apply to all development projects within the A-1 subdistrict of the Multi-family Overlay District:

- (a) 4.3.2 Driveway Openings
- (b) 4.3.3 Open Space
- (c) 4.3.4 Building Location, with the substitution of “Multifamily Dwelling” for “apartment house.”

Special Development Standards for the B and IND Subdistricts of the Multi-Family Overlay District:

- (a) The requirements of the first paragraph of 4.4.5 Driveway Openings shall apply to all development projects within the Multi-family Overlay District within the B and IND subdistricts.

Special Development Standards for the ASD-MF Subdistrict of the Multi-Family Overlay District:

- (a) Multi-family housing in the ASD-MF subdistrict shall employ existing curb cuts on Highland Avenue and West Street. Existing curb cuts may be improved and reconstructed, and may be modified subject to site plan review. An Applicant may apply for a Special Permit from the Planning Board for an additional curb cut on Highland Avenue or West Street.

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3.17.8 Affordable Housing

Any multi-family building with six or more dwelling units shall include Affordable Housing Units as defined in Section 1.3 of this By-Law and the requirements below shall apply.

3.17.8.1 Provision of Affordable Housing

Not fewer than 12.5% of housing units constructed shall be Affordable Housing Units. For purposes of calculating the number of Affordable Housing Units required in a proposed development, any fractional unit shall be rounded up to the nearest whole number and shall be deemed to constitute a whole unit.

In the event that the Executive Office of Housing and Livable Communities (EOHLC) determines that the calculation detailed above does not comply with the provisions of Section 3A of MGL c.40A, the following standard shall apply:

Not fewer than 10% of housing units constructed shall be Affordable Housing Units. For purposes of calculating the number of Affordable Housing Units required in a proposed development, any fractional unit shall be rounded up to the nearest whole number and shall be deemed to constitute a whole unit.

3.17.8.2 Affordable Housing Development Standards

Affordable Units shall be:

- (a) Integrated with the rest of the development and shall be compatible in design, appearance, construction, and quality of exterior and interior materials with the other units and/or lots;
- (b) Dispersed throughout the development;

- (c) Located such that the units have equal access to shared amenities, including light and air, and utilities (including any bicycle storage and/or Electric Vehicle charging stations) within the development;
- (d) Located such that the units have equal avoidance of any potential nuisances as market-rate units within the development;
- (e) Distributed proportionately among unit sizes; and
- (f) Distributed proportionately across each phase of a phased development.
- (g) Occupancy permits may be issued for market-rate units prior to the end of construction of the entire development provided that occupancy permits for Affordable Units are issued simultaneously on a pro rata basis.

3.17.9 Site Plan Review

3.17.9.1 Applicability

Site Plan Review, as provided for in this Section 3.17, is required for all Multi-family housing projects within the Multi-Family Overlay District. Notwithstanding any other provision contained in the Zoning By-Law, except as expressly provided for in this Section 3.17, Multi-family housing projects are not subject to site plan or special permit review pursuant to Section 7.4.

3.17.9.2 Submission Requirements

The Applicant shall submit the following site plan and supporting documentation as its application for Site Plan Review, unless waived in writing by the Planning and Community Development Director:

- (a) Locus plan;
- (b) Location of off-site structures within 100 feet of the property line;
- (c) All existing and all proposed building(s) showing setback(s) from the property lines;
- (d) Building elevation, to include penthouses, parapet walls and roof structures; floor plans of each floor; cross and longitudinal views of the proposed structure(s) in relation to the proposed site layout, together with an elevation line to show the relationship to the center of the street;
- (e) Existing and proposed contour elevations in one-foot increments;
- (f) Parking areas, including the type of space, dimensions of typical spaces, and width of maneuvering aisles and landscaped setbacks;
- (g) Driveways and access to site, including width of driveways and driveway openings;
- (h) Facilities for vehicular and pedestrian movement;
- (i) Drainage;
- (j) Utilities;

- (k) Landscaping including trees to be retained and removed;
- (l) Lighting;
- (m) Loading and unloading facilities;
- (n) Provisions for refuse removal; and
- (o) Projected traffic volumes in relation to existing and reasonably anticipated conditions based on standards from the Institute of Transportation Engineers and prepared by a licensed traffic engineer and including, if applicable, recommended traffic mitigation measures based on the traffic attributable to a particular project.

3.17.9.3 Timeline

Upon receipt of an application for Site Plan Review for a project in the MFOD, the Site Plan Review Authority shall transmit a set of application materials to the Department of Public Works, Town Engineer, Police Department, Fire Department, Design Review Board, and to any other Town agency it deems appropriate, which shall each have thirty five (35) days to provide any written comment. Upon receipt of an application, the Site Plan Review Authority shall also notice a public hearing in accordance with the notice provisions contained in M.G.L. c.40A, §11. Site plan review shall be completed, with a decision rendered and filed with the Town Clerk, no later than 6 months after the date of submission of the application.

3.17.9.4 Site Plan Approval

Site Plan approval for uses listed in Subsection 3.17.3 Permitted Uses shall be granted upon determination by the Site Plan Review Authority that the following criteria have been satisfied. The Site Plan Review Authority may impose reasonable conditions, at the expense of the applicant, to ensure that these criteria have been satisfied.

- (a) the Applicant has submitted the information as set forth in Subsection 3.17.9.2 Submission Requirements~~3.17.8.2 Affordable Housing Development Standards~~; and
- (b) the project as described in the application meets the dimensional and density requirements contained in Subsection 3.17.5 Dimensional Regulations, the parking requirements contained in Subsection 3.17.6 Off-Street Parking, ~~and~~ the development standards contained in Subsection 3.17.7 Development Standards, ~~and Subsection 3.17.8.2 Affordable Housing Development Standards~~.

3.17.9.5 Waivers

When performing site plan review, the Planning Board may waive the requirements of Subsection 3.17.6 hereof and/or Subsection 5.1.3 Parking Plan and Design Requirements, or particular submission requirements.

When performing site plan review for a Multi-family Housing project that involves preservation of a structure listed in the National Register of Historic Places, the Massachusetts Register of Historical Places, the Inventory of Historic Assets for the Town of Needham, or is in pending for inclusion in any

such register or inventory, the Planning Board as part of site plan review may reduce the applicable front, side or rear setbacks in this Section 3.17 by up to 40%.

3.17.9.6 Project Phasing

An Applicant may propose, in a Site Plan Review submission, that a project be developed in phases subject to the approval of the Site Plan Review Authority, provided that the submission shows the full buildout of the project and all associated impacts as of the completion of the final phase. However, no project may be phased solely to avoid the provisions of Subsection 3.17.7 Affordable Housing.

3.17.10 Design Guidelines

The Planning Board may adopt and amend, by simple majority vote, Design Guidelines which shall be applicable to all rehabilitation, redevelopment, or new construction within the Multi-family Overlay District. Such Design Guidelines must be objective and not subjective and may contain graphics illustrating a particular standard or definition to make such standard or definition clear and understandable. The Design Guidelines for the Multi-family Overlay District shall be as adopted by the Planning Board and shall be available on file in the Needham Planning Department.

3.17.11 Special Permits

In those specific occasions where this Section 3.17 authorizes relief in the form of a special permit only, applications shall be reviewed and decided by the Planning Board in accordance with Section 7.5.2.

4. By amending the first sentence of Section 7.6.1, Special Permit Granting Authority, to add Section 3.17 to the list of Sections for which the Planning Board is the Special Permit Granting Authority, so that this sentence reads as follows:

The Planning Board shall act as a Special Permit Granting Authority only where so designated in Sections 3.4, 3.8, 3.9, 3.10, 3.14, 3.16, 3.17, 4.2.10, 4.2.11, 4.2.12, 4.4.5, 4.4.9, 4.4.10, 5.1.1.6, 6.6, 6.8 and 7.4 of this By-Law.

5. By amending the first paragraph of Section 7.7.2.2, Authority and Specific Powers, to add site plan reviews under Section 3.17 to the jurisdiction of the Design Review Board, so that this paragraph reads as follows:

The Design Review Board shall review requests for site plan review and approval submitted in accordance with Section 3.17 Multi-family Overlay District, Section 7.4 Site Plan Review and requests for special permits in accordance with Section 4.2.11 Planned Residential Development, Section 4.2.10 Flexible Development and Section 6.11 Retaining Walls and, for a minor project that only involves a change in the exterior facade of a building in the Center Business District, shall review and may approve such facade change.

65. By amending Section 7.7.3, Procedure, by inserting in the second paragraph, after the second sentence, a new sentence to read as follows:

Within fifteen (15) days of the meeting, a final advisory design review report shall be sent both to the applicant and to the Planning Board, when a site plan review is required under Section 3.17.

so that this paragraph reads as follows:

Within twenty (20) days of receipt of a Design Review application, the Design Review Board shall hold a meeting, to which the applicant shall be invited, for the purpose of conducting a review of the proposed project or activity. Within fifteen (15) days of the meeting, a preliminary design review report shall be sent to both the applicant and to the Planning Board, when a special permit is required under Sections 7.4, 4.2.11 and 4.2.10. Within fifteen (15) days of the meeting, a final advisory design review report shall be sent both to the applicant and to the Planning Board, when a site plan review is required under Section 3.17. However, if the proposed project or activity involves only a building permit or sign permit from the Building Commissioner, or is a “Minor Project” under Site Plan Review (all as described in Subsection 7.7.2.2), no preliminary report is required and the written advisory report of the Design Review Board to the applicant and the Building Commissioner shall be a final report.

Or take any other action relative thereto.

ARTICLE 2: AMEND ZONING BY-LAW – MAP CHANGE FOR MULTI-FAMILY OVERLAY DISTRICT (BASE PLAN)

To see if the Town will vote to amend the Needham Zoning By-Law by amending the Zoning Map as follows:

- (a) Place in the A-1 Subdistrict of the Multi-family Overlay District a portion of land now zoned Apartment A-1 and located directly to the south of Hamlin Lane as shown on Needham Town Assessors Map 200, Parcels 1 and 31, superimposing that district over the existing Apartment A-1 district, said description being as follows:

Beginning at the point of intersection of the easterly sideline of Greendale Avenue and the northerly sideline of Charles River; thence running westerly by the easterly line of Greendale Avenue, four hundred forty-two and 36/100 (442.36) feet, more or less; northeasterly by the southerly line of Hamlin Lane, five hundred thirty-five and 44/100 (535.44) feet, more or less; southeasterly by the southerly line of Hamlin Lane, twenty and 22/100 (20.22) feet, more or less; southeasterly by the land of the Commonwealth of Massachusetts, State Highway I-95, five hundred thirty-nine 11/100 (539.11) feet, more or less; southwesterly by the land of the Commonwealth of Massachusetts, State Highway I-95, four hundred sixty-six (466) feet, more or less; northwesterly by the northerly sideline of Charles River, two hundred seventy-six (276) to the point of beginning.

- (b) Place in the CSB Subdistrict of the Multi-family Overlay District a portion of land now zoned Chestnut Street Business and Single Residence B and located directly to the east and west of Chestnut Street as shown on Needham Town Assessors Map 47, Parcels 54, 72, 74-03, 74-04, 76, 77, 78, 79, 80, 83, 84, 85, 86, 87, 88, and 91, Needham Town Assessors Map 46, Parcels 12, 13, 14, 15, 16, 17, 18, 19, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 58, 59, 60, and 61 and Needham Town Assessors Map 45, Parcel 6, superimposing that district over the existing Chestnut Street Business and Single Residence districts, said description being as follows:

Beginning at the point of intersection of the easterly sideline of M.B.T.A and the southerly sideline of Keith Place; thence running southeasterly by the southerly sideline of Keith Place to the intersection with northerly sideline of Chestnut Street; southwesterly by the northerly sideline of Chestnut Street to the intersection with northerly sideline of Freeman Place; northeasterly to a point on the southerly sideline of Chestnut Street, approximately four hundred and ninety-five 88/100 (495.88) feet from the intersection with southerly sideline of School Street; southeasterly by the southerly property line of Deaconess-Glover Hospital Corporation, one hundred and eighty-seven 68/100 (187.68) feet, more or less; southwesterly by the easterly property line of Deaconess-Glover Hospital Corporation, ninety-six 74/100 (96.74) feet, more or less; southwesterly by the westerly property line of Chaltanya Kadem and Shirisha Meda, eighty-two 80/100 (82.80) feet, more or less; southwesterly by the westerly property line of Huard, eighty-two 80/100 (82.80) feet, more or less; southwesterly by the westerly property line of Reidy, ninety-seven 40/100 (97.40) feet, more or less; northeasterly by the northerly property line of L. Petrini & Son Inc, fifteen 82/100 (15.82) feet, more or less; southwesterly by easterly property line of L. Petrini & Son Inc, one hundred and seventy-seven 77/100 (177.77) feet, more or less; northeasterly by the easterly property line of L. Petrini & Son Inc, one hundred and two 59/100 (102.59) feet, more or less; southwesterly by the easterly property line of L. Petrini & Son Inc, fifty 16/100 (50.16) feet, more or less; northeasterly by the easterly property line of L. Petrini & Son Inc, seven 39/100 (7.39) feet, more or less; southwesterly by the easterly property of Briarwood Property LLC, seventy-five (75.00) feet, more or less; northeasterly by the easterly property of Briarwood Property LLC, one hundred (100) feet, more or less; southwesterly by the easterly property of Briarwood Property LLC, two hundred and

forty-nine 66/100 (249.66) feet, more or less; southeasterly by the southerly property of Briarwood Property LLC, two hundred ninety-three (293.28) feet, more or less; southwesterly by the easterly property of Veterans of Foreign Wars, one hundred and fifty (150) feet, more or less; northeasterly by the southerly property line of Veterans of Foreign Wars, eighty-five (85) feet, more or less; southwest by the easterly property of M.B.T.A, one hundred and sixty (160) feet, more or less; southeasterly by the northerly sideline of Junction Street to intersection with westerly sideline of Chestnut; southwesterly by the westerly sideline of Chestnut Street to intersection with northerly sideline of property of M.B.T.A; southwesterly by the southerly property line of Castanea Dentata LLC, two hundred and twenty-eight 81/100 (228.81) feet, more or less; southwesterly by the southerly property line of Castanea Dentata LLC, one hundred and eight 53/100 (108.53) feet, more or less; northwesterly by the southerly property line of Castanea Dentata LLC, one hundred and thirty-six 6/100 (136.06) feet, more or less; northwesterly by the southerly property line of Castanea Dentata LLC, one hundred and ten 10/100 (110.10) feet, more or less; thence running northeasterly by the easterly sideline of M.B.T.A. to the point of beginning.

- (c) Place in the IND Subdistrict of the Multi-family Overlay District a portion of land now zoned Industrial and Single Residence B and located directly to the south and east of Denmark Lane as shown on Needham Town Assessors Map 132, Parcel 2, superimposing that district over the existing Industrial and Single Residence B districts, said description being as follows:

Beginning at the point of intersection of the westerly sideline of M.B.T.A. and the southerly sideline of Great Plain Ave; thence running southwesterly by the westerly line of M.B.T.A, four hundred thirty-seven 24/100 (437.24) feet, more or less; southwesterly by the southerly property line of Denmark Lane Condominium, one hundred and eleven 17/100 (111.17) feet, more or less; northeasterly by the easterly property line of Denmark Lane Condominium, two hundred (200) feet, more or less; northwesterly by the southerly property line of Denmark Lane Condominium, one hundred and thirty-nine 75/100 (139.75) feet, more or less; northeasterly by the easterly sideline of Maple Street, one hundred and thirty-five (135) feet, more or less; southeasterly by the northerly property line of Denmark Lane Condominium, one hundred and forty (140) feet, more or less; southwesterly by the northerly property line of Denmark Lane Condominium, fifteen 20/100 (15.2) feet, more or less; northeasterly by the northerly property line of Denmark Lane Condominium, two 44/100 (2.44) feet, more or less; southwesterly by the northerly property line of Denmark Lane Condominium, thirty-three 35/100 (33.35) feet, more or less; northeasterly by the northerly property line of Denmark Lane Condominium, seventy-nine (79) feet, more or less; northwesterly by the northerly property line of Denmark Lane Condominium, thirteen 28/100 (13.28) feet, more or less; northeasterly by the northerly property line of Denmark Lane Condominium, forty-seven 50/100 (47.50) feet, more or less; northeasterly by the northerly property line of Denmark Lane Condominium, eighty-one 91/100 (81.91) feet, more or less; northeasterly by the southerly sideline of Great Plain Ave, twelve 28/100 (12.28) feet to the point of beginning.

- (d) Place in the CSB Subdistrict of the Multi-family Overlay District a portion of land now zoned Chestnut Street Business and located directly to the east of Garden Street as shown on Needham Town Assessors Map 51, Parcels 17, 20, 22, 23, superimposing that district over the existing Chestnut Street Business district said description being as follows:

Beginning at the point of intersection of the westerly sideline of M.B.T.A. and the northerly sideline of Great Plain Ave; thence running southwesterly by the northerly sideline of Great Plain Ave, nine 32/100 (9.32) feet, more or less; northeasterly by the westerly property line of Town of Needham, fifty-three 17/100 (53.17) feet, more or less; northeasterly by the westerly property line of Town of Needham, fifty-six 40/100 (56.40) feet, more or less; northeasterly by the westerly property line of Town of Needham, fifty-six 92/100 (56.92) feet, more or less; northwesterly by the westerly

property line of Town of Needham, on an arch length one hundred and twelve 99/100 (112.99) feet, more or less; northeasterly by the westerly property line of Town of Needham, fifteen 10/100 (15.10) feet, more or less; northeasterly by the westerly property line of Town of Needham, one hundred and thirty-eight 83/100 (138.83) feet, more or less; southeasterly by the northerly property line of Town of Needham, thirty-three 42/100 (33.42) feet, more or less; northwesterly by the southerly property line of Eaton Square Realty LLC, forty (40) feet, more or less; northwesterly by the southerly property line of Eaton Square Realty LLC, eighty-one 99/100 (81.99) feet, more or less; northwesterly by the southerly property line of Eaton Square Realty LLC, fifty-eighty 31/100 (58.31) feet, more or less; northeasterly by the easterly sideline of Garden Street to intersection with May Street; northeasterly by the southerly sideline of May Street, sixty-one 33/100 (61.33) feet, more or less; southwesterly by the westerly sideline of M.B.T.A to the point of beginning.

- (e) Place in the B Subdistrict of the Multi-family Overlay District a portion of land now zoned Business and Single Residence B and located directly to the west of Highland Avenue as shown on Needham Town Assessors Map 52, Parcels 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, and 12, and Needham Town Assessors Map 226, Parcels 56, 57, and 58, superimposing that district over the existing Business and Single Residence B districts, said description being as follows:

Beginning at the point of intersection of the easterly sideline of M.B.T.A. and the northerly sideline of May Street; thence running northeasterly by the easterly sideline of M.B.T.A. to the intersection with southerly sideline of Rosemary Street; southeasterly by the southerly sideline of Rosemary Street to the intersection with easterly sideline of Highland Ave; southwesterly by the westerly sideline of Highland Avenue to the intersection with the northerly sideline of May St; southwesterly by the northerly sideline of May Street to the point of beginning.

- (f) Place in the A-1 Subdistrict of the Multi-family Overlay District a portion of land now zoned Apartment A-1 and located directly to east of Highland Avenue and north of May Street as shown on Needham Town Assessors Map 53, Parcels 1, 2 and 3, superimposing that district over the existing Apartment A-1 district, said description being as follows:

Beginning at the point of intersection of the northerly sideline of May Street and the westerly sideline of Oakland Avenue; thence running easterly by the northerly sideline of May Street to the intersection with easterly sideline of Highland Avenue; northeasterly by the easterly sideline of Highland Avenue to the intersection with southerly sideline of Oakland Avenue; southeasterly by the southerly sideline of Oakland Avenue: southerly by the westerly sideline of Oakland Avenue to the point of beginning.

- (g) Place in the A-1 Subdistrict of the Multi-family Overlay District a portion of land now zoned Apartment A-1 and located directly to the west of Hillside Avenue and north of Rosemary Street as shown on Needham Town Assessors Map 100 Parcels 1, 35, and 36, and Needham Town Assessors Map 101, Parcels 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 24, 25, and 26, superimposing that district over the existing Apartment A-1 district, said description being as follows:

Beginning at the point of intersection of the northerly sideline of Rosemary Street and the easterly sideline of Concannon Circle; thence running northwesterly by the easterly sideline of Concannon Circle, one hundred and sixty (160) feet, more or less; northwesterly by the easterly property line of 15 Concannon Circle Realty Trust, two hundred and thirty-two 75/100 (232.75) feet, more or less; northwesterly by the easterly property line of L. Petrini and Son Inc, one hundred and forty-five 84/100 (145.84) feet, more or less; northeasterly by the northerly property line of L. Petrini and Son Inc, one hundred and twenty-five (125) feet, more or less; northwesterly by the westerly sideline of Tillotson Road, one hundred and twelve (112) feet, more or less; northeasterly across

Tillotson Road to the northeasterly corner of the property of L. Petrini and Son Inc, forty (40) feet, more or less; northeasterly by the northerly property line of L. Petrini and Son Inc, one hundred and twenty-five (125) feet, more or less; northwesterly by the easterly property line of Petrini Corporation, one hundred and nineteen 94/100 (119.94) feet, more or less; northeasterly by the southerly property line of L. Petrini and Son Inc, one hundred and sixty-two (162) feet, more or less; northwesterly by the easterly property line of Rosemary Ridge Condominium, three hundred and twenty-eight (328) feet, more or less; northeasterly by the northerly property line of Rosemary Ridge Condominium, two hundred and ninety (290) feet, more or less; northeasterly by the northerly property line of Rosemary Ridge Condominium, one hundred and sixty-two 19/100 (162.19), more or less; northwesterly by the northerly property line of Rosemary Ridge Condominium, one hundred and thirty (130), more or less; southeasterly by the northerly property line of Rosemary Ridge Condominium, two hundred and forty-one 30/100 (241.30), more or less; southeasterly by the northerly property line of Pop Realty LLC, ninety-four 30/100 (94.30), more or less to westerly side of Hillside Avenue; southeasterly by the westerly sideline of Hillside Avenue to intersection with northerly sideline of Rosemary Street; southeasterly by the northerly sideline of Rosemary Street to the point of beginning.

- (h) Place in the IND Subdistrict of the Multi-family Overlay District a portion of land now zoned Industrial, Hillside Avenue Business, and Single Residence B and located directly to the east of Hillside Avenue and north of Rosemary Street as shown on Needham Town Assessors Map 100, Parcels 3, 4, 5, 7, 8, 9, 10, 11, 12, and 61, and Needham Town Assessors Map 101, Parcels 2, 3, 4, 5 and 6, superimposing that district over the existing Industrial, Hillside Avenue Business, and Single Residence B districts, said description being as follows:

Beginning at the point of intersection of the northerly sideline of Rosemary Street and the westerly sideline of M.B.T.A.; thence running northwesterly by the northerly sideline of Rosemary Street to the intersection with easterly sideline of Hillside Avenue; northeasterly by the easterly sideline of Hillside Avenue to the intersection with southerly sideline of West Street; northeasterly by the southerly sideline of West Street to the intersection with the westerly sideline of M.B.T.A.; southeasterly by the westerly sideline of M.B.T.A. to the point of beginning.

- (i) Place in the ASB-MF Subdistrict of the Multi-family Overlay District a portion of land now zoned Avery Square Business and Single Residence B and located directly to the west of Highland Avenue and south of West Street as shown on Needham Town Assessors Map 63, Parcel 37, superimposing that district over the existing Avery Square Business and Single Residence B districts, said description being as follows:

Beginning at the point of intersection of the easterly sideline of M.B.T.A. and the southerly sideline of West Street; thence running southeasterly by the southerly sideline of West Street, one hundred and sixty-one 48/100 (161.48) feet, more or less; southeasterly on arch, twenty-nine (27/100) 29.27 feet to a point on the easterly sideline of Highland Avenue; southeasterly by the easterly sideline of Highland Avenue seven hundred and sixty-one (761.81) feet, more or less; northeasterly by the easterly sideline of Highland Avenue ten (10) feet, more or less; southeasterly by the easterly sideline of Highland Avenue seventy (70) feet, more or less; northwesterly by the southerly property line of HCRI Massachusetts Properties Trust II, one hundred and fifty (150) feet, more or less; southeasterly by the southerly property line of HCRI Massachusetts Properties Trust II, seventy (70) feet, more or less; southwesterly by the southerly property line of HCRI Massachusetts Properties Trust II, one hundred and two 57/100 (102.57) feet, more or less; northeasterly by the easterly sideline of M.B.T.A., three hundred and seventy-one 56/100 (371.56) feet, more or less; northwesterly by the easterly sideline of M.B.T.A., three 54/100 (3.54) feet, more or less; northeasterly by the easterly sideline of M.B.T.A., three hundred and ninety-three 56/100 (393.56)

feet, more or less; northeasterly by the easterly sideline of M.B.T.A., one hundred and seventy-five 46/100 (175.46) feet to the point of beginning.

- (j) Place in the HAB Subdistrict of the Multi-family Overlay District a portion of land now zoned Hillside Avenue Business and located directly to the east of Hillside Avenue and north of West Street as shown on Needham Town Assessors Map 99, Parcels 1, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, and 14, superimposing that district over the existing Hillside Avenue district, said description being as follows:

Beginning at the point of intersection of the westerly sideline of M.B.T.A and the northerly sideline of West Street; thence running northwesterly by the northerly sideline of West Street to the intersection with easterly sideline of Hillside Avenue; northwesterly by the easterly sideline of Hillside Avenue to the intersection with northerly sideline of Hunnewell Street; northwesterly by the easterly sideline of Hillside Avenue, twenty-four 1/100 (24.01) feet to the angle point; northeasterly by the easterly sideline of Hillside Avenue, ninety-five 61/100 (95.61) feet, more or less; northeasterly by the northerly property line of Hillside Condominium, two hundred and twenty-one 75/100 (221.75) feet, more or less; northeasterly by the northerly property line of Hunnewell Needham LLC, eighteen 48/100 (18.48) feet, more or less; southwesterly by the westerly sideline of M.B.T.A. to the point of beginning.

- (k) Place in the IND Subdistrict of the Multi-family Overlay District a portion of land now zoned Industrial and Single Residence B and located at Crescent Road as shown on Needham Town Assessors Map 98, Parcels 40 and 41, and Needham Town Assessors Map 99, Parcels 38, 39, 40, 61, 62, 63, and 88, superimposing that district over the existing Industrial and Single Residence B districts, said description being as follows:

Beginning at the bound on easterly side of Hunnewell Street, approximately three hundred and thirty-two 35/100 (332.35) feet from the intersection with Hillside Avenue; thence running southwesterly by the easterly property line of Microwave Development Laboratories Inc, one hundred and ninety-one 13/100 (191.13) feet, more or less; southeasterly by the easterly property line of Microwave Development Laboratories Inc, sixty-eight 68/100 (68.75) feet, more or less; southeasterly by the easterly property line of Microwave Development Laboratories Inc, one hundred and thirty (130) feet, more or less; southeasterly by the easterly property line of Drack Realty LLC, seventy-three (73) feet, more or less; southwesterly by the easterly property line of Drack Realty LLC, one hundred and forty (140) feet, more or less; northeasterly by the northerly property line of Lally, forty-one (41) feet, more or less; southeasterly by the easterly property line of Lally, seventy-five (75) feet, more or less; southwesterly by the southerly property line of Lally, one hundred (100) feet, more or less; southwesterly to the center of Crescent Road, twenty (20) feet, more or less; southeasterly by the center of Crescent Road, twenty-nine (29) feet, more or less; southwesterly to a bound located twenty-nine feet from the angle point on the easterly side of Crescent Road; southwesterly by the southerly property line of 66 Crescent Road LL, four hundred and fifteen 60/100 (415.60) feet, more or less; northwesterly by the easterly property line of Town of Needham, fifty-two 37/100 (52.37) feet, more or less; northwesterly by the easterly property line of Town of Needham, one hundred and sixty-two 37/100 (162.37) feet, more or less; southwesterly by the easterly property line of Town of Needham, forty-five 76/100 (45.76) feet, more or less; northwesterly by the easterly property line of Town of Needham, one hundred and forty-three 92/100 (143.92) feet, more or less; northwesterly by the easterly property line of Town of Needham, fifteen 71/100 (15.71) feet, more or less; southwesterly by the easterly property line of Town of Needham, two hundred and forty-eight 40/100 (248.40) feet, more or less; northwesterly by the easterly property line of Town of Needham, fifty-three 33/100 (53.33) feet, more or less; northeasterly by the northerly property line of 166 Crescent Road LLC, five hundred and fifty-five

68/100 (555.68) feet, more or less; northeasterly to the center of Crescent Road, twenty (20) feet, more or less; northwesterly by the center of Crescent Road, fifty-six 47/100 (56.47) feet, more or less; northeasterly to the bound located four 38/100 (4.38) feet from the end of the Crescent Road; northeasterly by the northerly property line of Microwave Development Laboratories Inc, one hundred and forty-six 29/100 (146.29) feet, more or less; southeasterly by the northerly property line of Microwave Development Laboratories Inc, fifty-four 82/100 (54.82) feet, more or less; northeasterly by the northerly property line of Microwave Development Laboratories Inc, fifty-four 21/100 (54.21) feet, more or less; southeasterly by the easterly property line of Microwave Development Laboratories Inc, one hundred and ninety-five 81/100 (195.81) feet, more or less; northeasterly by the easterly property line of Microwave Development Laboratories Inc, seven (7) feet, more or less; southeasterly by the easterly property line of Microwave Development Laboratories Inc, ninety-one (91) feet, more or less; northeasterly by the easterly property line of Microwave Development Laboratories Inc, one hundred and forty-two (142) feet, more or less; southeasterly by the easterly sideline of Hunnewell Street, twenty (20) feet to the point of beginning.

- (l) Place in the A-1 Subdistrict of the Multi-family Overlay District a portion of land now zoned Apartment A-1 and Single Residence B and located east and west of Highland Avenue at Cottage Avenue as shown on Needham Town Assessors Map 70, Parcels 24 and 25, superimposing that district over the existing Apartment A-1 and Single Residence B districts, said description being as follows:

Beginning at the point on the westerly sideline of Highland Avenue, two hundred and seventeen 63/100 (217.63) from the arch on Webster Street; thence running southwest by the westerly sideline of Highland Avenue, three hundred and seventeen (317) feet, more or less; southeasterly across Highland Avenue, fifty (50) feet to a point on the easterly sideline of Highland Avenue; southeasterly by the northerly property line of Avery Park Condominium, two hundred and seventy-eight 75/100 (278.75) feet, more or less; northeasterly by the northerly property line of Avery Park Condominium, sixty-one (61.51) feet, more or less; northeasterly by the northerly property line of Avery Park Condominium, one hundred and seventy-nine 70/100 (179.70) feet, more or less; southwest by the westerly sideline of Webster Street, thirty-one 16/100 (31.16) feet, more or less; southwest by the southerly property line of Avery Park Condominium, one hundred and sixty-six 51/100 (166.51) feet, more or less; southwest by the southerly property line of Avery Park Condominium, one hundred and five 59/100 (105.59) feet, more or less; southwest by the southerly property line of Avery Park Condominium, one hundred and forty-four 62/100 (144.62) feet, more or less; northwesterly by the southerly property line of Avery Park Condominium, two hundred and seventy-seven 29/100 (277.29) feet, more or less; northwesterly across Highland Avenue, fifty (50) feet to a point on the westerly side of Highland Avenue; northwesterly by the southerly property line of Hamilton Highlands LLC, one hundred and fifty-nine 45/100 (159.45) feet, more or less; southwest by the southerly property line of Hamilton Highlands LLC, ninety-seven 33/100 (97.33) feet, more or less; northwesterly by the northerly sideline of Cottage Avenue, forty (40) feet, more or less; southwest by the southerly property line of Hamilton Highlands LLC, fifteen (15) feet, more or less; northwesterly by the southerly property line of Hamilton Highlands LLC, twenty-five 54/100 (25.54) feet, more or less; northeasterly by the easterly sideline of M.B.T.A., five hundred and seventy-five 57/100 (575.57) feet, more or less; southeasterly by the northerly property line of Hamilton Highlands LLC, one hundred and forty-five 2/100 (145.02) feet, more or less; northeasterly by the northerly property line of Hamilton Highlands LLC, one hundred and one 57/100 (101.57) feet, more or less; southeasterly by the northerly property line of Hamilton Highlands LLC, one hundred and eighty 18/100 (180.18) feet, more or less; southeasterly by the northerly property line of Hamilton Highlands LLC, fifty-six 57/100 (56.57) feet to the point of beginning.

Or take any other action relative thereto.

ARTICLE 3: AMEND ZONING BY-LAW – MULTI-FAMILY OVERLAY DISTRICT (NEIGHBORHOOD HOUSING PLAN)

To see if the Town will vote to amend the Needham Zoning By-Law, inclusive of those amendments adopted under Article 1 and Article 2, as follows, and to act on anything related thereto:

1. Amending the definition of Mixed-Use Building in Section 1.3 to include the Multi-family Overlay District, so that the definition reads as follows:

Mixed-Use Building – A building in the Needham Center, Chestnut Street, Garden Street or Multi-family Overlay District in which the ground floor facing the street is used for such retail or restaurant uses as may be permitted by right or by special permit in the applicable overlay district, and other ground-floor and upper-floor space is used for other commercial use(s) or dwelling units(s), and subject to any additional qualifications provided for in the applicable overlay district.

2. Amending Section 3.17 Multi-family Overlay District by revising Subsection 3.17.2.1 Subdistricts to read as follows:

The Multi-family Overlay District contains the following sub-districts, all of which are shown on the MFOD Boundary Map and indicated by the name of the sub-district:

- (a) A-1
- (b) B
- (c) ASB-MF
- (d) CSB-E (Chestnut Street Business – East)
- (e) CSB-W (Chestnut Street Business – West)
- (f) CSB-GS
- (g) HAB
- (h) IND
- (i) IND-C (Industrial – Crescent)

3. Amending Subsection 3.17.1 Purposes of District by amending the last paragraph to read as follows:

Toward these ends, Multi-family housing and mixed-use development (where allowed) in the Multi-family Overlay District is permitted to exceed the density and dimensional requirements that normally apply in the underlying zoning district(s) provided that such development complies with the requirements of this Section 3.17.

4. Amending Subsection 3.17.4. Use Regulations, by adding the following paragraph (b) to Subsection 3.17.4.1 Permitted Uses:

3.17.4.1 Permitted Uses

- (b) In the B and CSB subdistricts: A Mixed-Use Building containing commercial use(s) on the ground floor, whether facing the street or otherwise, is permitted by right, provided that all upper floors shall be used as Multi-family Housing. Commercial uses are limited to the uses listed below:
 - i. Retail establishments serving the general public containing less than 5,750 gross square feet of floor area. In multi-tenanted structures the provisions of the section will individually apply to each tenant or use and not to the aggregate total of the structure.

- ii. Retail trade or shop for custom work or the making of articles to be sold at retail on the premises.
 - iii. Offices and banks.
 - iv. Craft, consumer, professional or commercial service establishment dealing directly with the public and not enumerated elsewhere in this section.
 - v. Personal fitness service establishment, provided all required off-street parking is provided on-site for all land uses located on the subject site and in adherence with the requirements of Section 5.1.2, Required Parking, absent any waivers from the provisions of Subsection 5.1.1.5 and 5.1.1.6.
 - vi. Manufacturing clearly incidental and accessory to retail use on the same premises and the product is customarily sold on the premises.
 - vii. Laundry; coin operated or self-service laundry or dry-cleaning establishment.
5. Amending Subsection 3.17.4. Use Regulations, by adding the following after Subsection 3.17.4.1 Permitted Uses and renumbering Subsection 3.17.4.2 Accessory Uses to 3.17.4.3:

3.17.4.2 Special Permit Uses in the B and CSB Subdistricts

The following uses are permitted by Special Permit from the Planning Board in the B and CSB sub-districts of the Multi-family Overlay District:

- (a) A Mixed-Use Building containing commercial use(s) listed below on the ground floor, whether facing the street or otherwise, and provided that all upper floors shall be used as Multi-family Housing:
 - i. Restaurant serving meals for consumption on the premises and at tables with service provided by waitress or waiter.
 - ii. Take-out operation accessory to the above.
 - iii. Take-out food counter as an accessory to a food retail or other non- consumptive retail establishment.
 - iv. Retail sales of ice cream, frozen yogurt, and similar products for consumption on or off the premises.
 - v. Take-out establishment primarily engaged in the dispensing of prepared foods to persons carrying food and beverage away for preparation and consumption elsewhere.
 - vi. Personal fitness service establishment, where there is insufficient off-street parking on-site to serve all land uses located thereon in adherence with the requirements of Subsection 5.1.2 Required Parking but where it can be demonstrated that the hours, or days, of peak parking for the uses are sufficiently different that a lower total will provide adequately for all uses or activities served by the parking lot.

6. Amending Section 3.17 Multi-family Overlay District by replacing the tables in Subsection 3.17.5 ~~Dimensional Regulations~~Requirements with the tables below, with all other text, including footnotes, contained in Subsection 3.17.5 to remain unamended unless noted below:

3.17.5. Dimensional ~~Regulations~~Requirements

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Replace the table in Subsection 3.17.5.1 Lot Area, Frontage and Setback Requirements with the tables below:

Table 1A. Lot Area, Frontage and Setback Requirements

	A-1	B	ASB-MF	HAB	IND
Minimum Lot Area (square feet)	20,000	10,000	10,000	10,000	10,000
Minimum Lot Frontage (feet)	120	80	80	80	80
Minimum Front Setback (feet) from the front property line	25	10	Minimum 10 Maximum 15 de,f	20	25
Minimum Side and Rear Setback (feet)	20	20 ^{a, b}	10 ^{a,cd}	20 ^{a,b}	20 ^{a,b}

Table 1B. Lot Area, Frontage and Setback Requirements

	CSB-E	CSB-W	CSB-GS	IND - C
Minimum Lot Area (square feet)	10,000	10,000	10,000	10,000
Minimum Lot Frontage (feet)	80	80	80	80
Minimum Front Setback (feet) from the front property line	Minimum of 5 feet or average of setbacks within 100 feet, whichever is smaller	Minimum of 5 feet or average of setbacks within 100 feet, whichever is smaller	Minimum of 10 feet or average of setbacks within 100 feet, whichever is smaller	25
Minimum Side and Rear Setback (feet)	20 (side) 30 (rear) ^{a, b}	20 ^{a, b}	20 ^{a, b}	20 ^{a, b}

And delete footnote (~~de~~).

And renumber footnote (~~ef~~) as footnote (~~de~~).

~~And renumber footnote (g) as footnote (f).~~

Replace the table in Subsection 3.17.5.2 Building Height Requirements with the tables below:

Table 2A. Building Height Requirements

	A-1	B	ASB-MF	HAB	IND
Maximum Building Height (stories) ^d	4.0	4.0 4.5 with commercial ground floor or see 3.17.8.1	3.0 ^c	3.0	3.0
Maximum Building Height (feet) ^{a, b, d}	50	50 55 with commercial ground floor or see 3.17.8.1	40 ^c	40	40

Table 2B. Building Height Requirements

	CSB-E	CSB-W	CSB-GS	IND - C
Maximum Building Height (stories) ^d	3.0 3.5 with commercial ground floor or see 3.17.8.1	4.0 4.5 with commercial ground floor or see 3.17.8.1	3.0 3.5 with commercial ground floor or see 3.17.8.1	3.0
Maximum Building Height (feet) ^{a, b, d}	40 45 with commercial ground floor or see 3.17.8.1	50 55 with commercial ground floor or see 3.17.8.1	40 45 with commercial ground floor or see 3.17.8.1	40

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And add new footnote (d):

(d) The requirements of Subsection 4.4.7 Business Use in Other Districts are not applicable to commercial ground floor uses in the MFOD.

Replace the table in Subsection 3.17.5.3 **Building Bulk and Other Requirements** with the tables below:

Table 3A. Building Bulk and Other Requirements

	A-1	B	ASB-MF	HAB	IND
Floor Area Ratio (FAR)	1.0	2.0	1.3 ^{b, c}	1.0	1.0
Maximum Building Coverage (%)	N/A	N/A	N/A	N/A	N/A
Maximum Dwelling Units per Acre ^a	36	48	44^d N/A	24	24

Table 3B. Building Bulk and Other Requirements

	CSB-E	CSB-W	CSB-GS	IND - C
Floor Area Ratio (FAR)	2.0	2.0	2.00	0.75
Maximum Building Coverage (%)	N/A	N/A	N/A	N/A
Maximum Dwelling Units per Acre ^a	N/A	N/A	N/A	24

7. Amending Section 3.17 Multi-family Overlay District by inserting in Subsection 3.17.6 a new subsection (b), to read as follows:

(b) In addition to the parking required under section (a), above, each and every non-residential component of a Mixed-Use Building shall be required to provide a minimum number of off-street parking spaces calculated in accordance with Section 5.1.

and to re-letter existing subsections (b) through (f) in appropriate alphabetical order to account for this insertion.

7.8. Amending Section 3.17 Multi-family Overlay District by adding the following to Subsection 3.17.7 Development Standards, to read as follows:

(o) For a mixed-use building, entrances to ground-floor dwelling units shall be located on the side or rear of the building, not from any side facing the street, or the entrances may be from a first-floor lobby serving other uses in the building.

(p) For a mixed-use building, the ground floor of the front facade shall contain only retail or restaurant uses allowed by right or by special permit.

8.9. Amending Section 3.17 Multi-family Overlay District by adding a new paragraph to Subsection 3.17.8.1 Provision of Affordable Housing, immediately following the first paragraph, to read as follows:

3.17.8.1 Provision of Affordable Housing.

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In the B and CSB subdistricts, an Applicant may provide an additional 7.5% of units as Workforce Housing Units in place of the requirement for a commercial ground floor to achieve the additional allowable height listed in Tables 2A and 2B under Subsection 3.17.5.2 Building Height Requirements.

9.10. Amending Section 3.17 Multi-family Overlay District by modifying the first line of Subsection 3.17.8.2 Affordable Housing Development Standards to read as follows:

Affordable Units, including Workforce Housing Units, shall be:

Or take any other action relative thereto.

ARTICLE 4: **AMEND ZONING BY-LAW – MAP CHANGE FOR MULTI-FAMILY OVERLAY DISTRICT (NEIGHBORHOOD HOUSING PLAN)**

To see if the Town will vote to amend the Needham Zoning By-Law by amending the Zoning Map, inclusive of those changes adopted under Article 2, as follows:

- (a) Place in the CSB-W Subdistrict of the Multi-family Overlay District a portion of land now zoned Chestnut Street Business and located directly to the west of Chestnut Street as shown on Needham Town Assessors Map 47, Parcels 72, 74-03, 74-04, 76, 77, 78, 79, 80, 83, 84, 85, 86, 87, 88, and 91, and Needham Town Assessors Map 46, Parcels 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 58, 59, 60, and 61, superimposing that district over the existing Chestnut Street Business district and removing the existing CSB Subdistrict of the Multi-family Overlay District, said description being as follows:

Beginning at the point of intersection of the easterly sideline of M.B.T.A and the southerly sideline of Keith Place; thence running southeasterly by the southerly sideline of Keith Place to the intersection with westerly sideline of Chestnut Street; southwesterly by the westerly sideline of Chestnut Street to the intersection with northerly sideline of property of M.B.T.A; northeasterly by the northerly sideline of M.B.T.A; northeasterly by the easterly sideline of M.B.T.A. to the point of beginning.

- (b) Place in the CSB-E Subdistrict of the Multi-family Overlay District a portion of land now zoned Chestnut Street Business and Single Residence B and located directly to the east of Chestnut Street as shown on Needham Town Assessors Map 46, Parcels 12, 13, 14, 15, 16, 17, 18, 19, 32, 33 and 34 superimposing that district over the existing Chestnut Street Business and Single Residence districts and removing the existing CSB Subdistrict of the Multi-family Overlay District, said description being as follows:

Beginning at the point on the easterly sideline of Chestnut Street, approximately four hundred and ninety-five 88/100 (495.88) feet from the intersection with southerly sideline of School Street; southeasterly by the southerly property line of Deaconess-Glover Hospital Corporation, one hundred and eighty-seven 68/100 (187.68) feet, more or less; southwesterly by the easterly property line of Deaconess-Glover Hospital Corporation, ninety-six 74/100 (96.74) feet, more or less; southwesterly by the westerly property line of Chaltanya Kadem and Shirisha Meda, eighty-two 80/100 (82.80) feet, more or less; southwesterly by the westerly property line of Huard, eighty-two 80/100 (82.80) feet, more or less; southwesterly by the westerly property line of Reidy, ninety-seven 40/100 (97.40) feet, more or less; northeasterly by the northerly property line of L. Petrini & Son Inc, fifteen 82/100 (15.82) feet, more or less; southwesterly by easterly property line of L. Petrini & Son Inc, one hundred and seventy-seven 77/100 (177.77) feet, more or less; northeasterly by the easterly property line of L. Petrini & Son Inc, one hundred and two 59/100 (102.59) feet, more or less; southwesterly by the easterly property line of L. Petrini & Son Inc, fifty 16/100 (50.16) feet, more or less; northeasterly by the easterly property line of L. Petrini & Son Inc, seven 39/100 (7.39) feet, more or less; southwesterly by the easterly property of Briarwood Property LLC, seventy-five (75.00) feet, more or less; northeasterly by the easterly property of Briarwood Property LLC, one hundred (100) feet, more or less; southwesterly by the easterly property of Briarwood Property LLC, two hundred and forty-nine 66/100 (249.66) feet, more or less; southeasterly by the southerly property of Briarwood Property LLC, two hundred ninety-three (293.28) feet, more or less; southwesterly by the easterly property of Veterans of Foreign Wars, one hundred and fifty (150) feet, more or less; northeasterly by the southerly property line of Veterans of Foreign Wars, eighty-five (85) feet, more or less; southwest by the easterly property of M.B.T.A, one hundred and sixty (160) feet, more or less; southeasterly by the northerly sideline of Junction Street to

intersection with easterly sideline of Chestnut; northeasterly by the easterly sideline of Chestnut Street to the point of beginning.

- (c) Place in the CSB-E Subdistrict of the Multi-family Overlay District a portion of land now zoned Chestnut Street Business and located at 433 Chestnut Street as shown on Needham Town Assessors Map 45, Parcel 6, superimposing that district over the existing Chestnut Street Business district and removing the existing CSB Subdistrict of the Multi-family Overlay District, said description being as follows:

Starting at the point of intersection of the westerly sideline of Chestnut Street and the southerly sideline of M.B.T.A.; southerly by the westerly sideline of Chestnut Street to the intersection with northerly sideline of M.B.T.A.; southwesterly by the southerly property line of Castanea Dentata LLC, two hundred and twenty-eight 81/100 (228.81) feet, more or less; southwesterly by the southerly property line of Castanea Dentata LLC, one hundred and eight 53/100 (108.53) feet, more or less; northwesterly by the southerly property line of Castanea Dentata LLC, one hundred and thirty-six 6/100 (136.06) feet, more or less; northwesterly by the southerly property line of Castanea Dentata LLC, one hundred and ten 10/100 (110.10) feet, more or less; running northeasterly by the easterly sideline of M.B.T.A. to the point of beginning.

- (d) Place in the CSB-GS Subdistrict of the Multi-family Overlay District a portion of land now zoned Chestnut Street Business and located directly to the east of Garden Street as shown on Needham Town Assessors Map 51, Parcels 17, 20, 22, 23, superimposing that district over the existing Chestnut Street Business district and removing the existing CSB Subdistrict of the Multi-family Overlay District, said description being as follows:

Beginning at the point of intersection of the westerly sideline of M.B.T.A. and the northerly sideline of Great Plain Ave; thence running southwesterly by the northerly sideline of Great Plain Ave, nine 32/100 (9.32) feet, more or less; northeasterly by the westerly property line of Town of Needham, fifty-three 17/100 (53.17) feet, more or less; northeasterly by the westerly property line of Town of Needham, fifty-six 40/100 (56.40) feet, more or less; northeasterly by the westerly property line of Town of Needham, fifty-six 92/100 (56.92) feet, more or less; northwesterly by the westerly property line of Town of Needham, on an arch length one hundred and twelve 99/100 (112.99) feet, more or less; northeasterly by the westerly property line of Town of Needham, fifteen 10/100 (15.10) feet, more or less; northeasterly by the westerly property line of Town of Needham, one hundred and thirty-eight 83/100 (138.83) feet, more or less; southeasterly by the northerly property line of Town of Needham, thirty-three 42/100 (33.42) feet, more or less; northwesterly by the southerly property line of Eaton Square Realty LLC, forty (40) feet, more or less; northwesterly by the southerly property line of Eaton Square Realty LLC, eighty-one 99/100 (81.99) feet, more or less; northwesterly by the southerly property line of Eaton Square Realty LLC, fifty-eighty 31/100 (58.31) feet, more or less; northeasterly by the easterly sideline of Garden Street to intersection with May Street; northeasterly by the southerly sideline of May Street, sixty-one 33/100 (61.33) feet, more or less; southwesterly by the westerly sideline of M.B.T.A to the point of beginning.

- (e) Place in the A-1 Subdistrict of the Multi-family Overlay District a portion of land now zoned Industrial and Single Residence B and located directly to the south and east of Denmark Lane as shown on Needham Town Assessors Map 132, Parcel 2, superimposing that district over the existing Industrial and Single Residence B districts, and removing the existing IND Subdistrict of the Multi-family Overlay District, said description being as follows:

Beginning at the point of intersection of the westerly sideline of M.B.T.A. and the southerly sideline of Great Plain Ave; thence running southwesterly by the westerly line of M.B.T.A, four hundred

thirty-seven 24/100 (437.24) feet, more or less; southwesterly by the southerly property line of Denmark Lane Condominium, one hundred and eleven 17/100 (111.17) feet, more or less; northeasterly by the easterly property line of Denmark Lane Condominium, two hundred (200) feet, more or less; northwesterly by the southerly property line of Denmark Lane Condominium, one hundred and thirty-nine 75/100 (139.75) feet, more or less; northeasterly by the easterly sideline of Maple Street, one hundred and thirty-five (135) feet, more or less; southeasterly by the northerly property line of Denmark Lane Condominium, one hundred and forty (140) feet, more or less; southwesterly by the northerly property line of Denmark Lane Condominium, fifteen 20/100 (15.2) feet, more or less; northeasterly by the northerly property line of Denmark Lane Condominium, two 44/100 (2.44) feet, more or less; southwesterly by the northerly property line of Denmark Lane Condominium, thirty-three 35/100 (33.35) feet, more or less; northeasterly by the northerly property line of Denmark Lane Condominium, seventy-nine (79) feet, more or less; northwesterly by the northerly property line of Denmark Lane Condominium, thirteen 28/100 (13.28) feet, more or less; northeasterly by the northerly property line of Denmark Lane Condominium, forty-seven 50/100 (47.50) feet, more or less; northeasterly by the northerly property line of Denmark Lane Condominium, eighty-one 91/100 (81.91) feet, more or less; northeasterly by the southerly sideline of Great Plain Ave, twelve 28/100 (12.28) feet to the point of beginning.

- (f) Place in the A-1 Subdistrict of the Multi-family Overlay District a portion of land now zoned Single Residence B and located directly to the west of Highland Avenue and north of Hunnewell Street as shown on Needham Town Assessors Map 69, Parcel 37, superimposing that district over the existing Single Residence B district, said description being as follows:

Beginning at the point of intersection of the easterly sideline of the M.B.T.A and the northerly sideline of Hunnewell Street; thence running northwesterly by the easterly sideline of the M.B.T.A., on an arch one hundred and twenty-one 22/100 (121.22) feet, more or less; southeasterly by the northerly property line of The Suites of Needham LLC, one hundred and sixty 23/100 (160.23) feet, more or less; southwesterly by the easterly sideline of Highland Avenue to the intersection with northerly sideline of Hunnewell Street; northwesterly by the northerly sideline of Hunnewell Street to the point of beginning.

- (g) Remove from the A-1 Subdistrict of the Multi-family Overlay District a portion of land now zoned Apartment A-1 and Single Residence B and located east and west of Highland Avenue at Cottage Avenue as shown on Needham Town Assessors Map 70, Parcels 24 and 25, said description being as follows:

Beginning at the point on the westerly sideline of Highland Avenue, two hundred and seventeen 63/100 (217.63) from the arch on Webster Street; thence running southwesterly by the westerly sideline of Highland Avenue, three hundred and seventeen (317) feet, more or less; southeasterly across Highland Avenue, fifty (50) feet to a point on the easterly sideline of Highland Avenue; southeasterly by the northerly property line of Avery Park Condominium, two hundred and seventy-eight 75/100 (278.75) feet, more or less; northeasterly by the northerly property line of Avery Park Condominium, sixty-one (61.51) feet, more or less; northeasterly by the northerly property line of Avery Park Condominium, one hundred and seventy-nine 70/100 (179.70) feet, more or less; southwesterly by the westerly sideline of Webster Street, thirty-one 16/100 (31.16) feet, more or less; southwesterly by the southerly property line of Avery Park Condominium, one hundred and sixty-six 51/100 (166.51) feet, more or less; southwesterly by the southerly property line of Avery Park Condominium, one hundred and five 59/100 (105.59) feet, more or less; southwesterly by the southerly property line of Avery Park Condominium, one hundred and forty-four 62/100 (144.62) feet, more or less; northwesterly by the southerly property line of Avery Park Condominium, two hundred and seventy-seven 29/100 (277.29) feet, more or less; northwesterly

across Highland Avenue, fifty (50) feet to a point on the westerly side of Highland Avenue: northwesterly by the southerly property line of Hamilton Highlands LLC, one hundred and fifty-nine 45/100 (159.45) feet, more or less; southwesterly by the southerly property line of Hamilton Highlands LLC, ninety-seven 33/100 (97.33) feet, more or less; northwesterly by the northerly sideline of Cottage Avenue, forty (40) feet, more or less; southwesterly by the southerly property line of Hamilton Highlands LLC, fifteen (15) feet, more or less; northwesterly by the southerly property line of Hamilton Highlands LLC, twenty-five 54/100 (25.54) feet, more or less; northeasterly by the easterly sideline of M.B.T.A., five hundred and seventy-five 57/100 (575.57) feet, more or less; southeasterly by the northerly property line of Hamilton Highlands LLC, one hundred and forty-five 2/100 (145.02) feet, more or less; northeasterly by the northerly property line of Hamilton Highlands LLC, one hundred and one 57/100 (101.57) feet, more or less; southeasterly by the northerly property line of Hamilton Highlands LLC, one hundred and eighty 18/100 (180.18) feet, more or less; southeasterly by the northerly property line of Hamilton Highlands LLC, fifty-six 57/100 (56.57) feet to the point of beginning.

- (h) Place in the IND-C Subdistrict of the Multi-family Overlay District a portion of land now zoned Industrial and Single Residence B and located at Crescent Road as shown on Needham Town Assessors Map 98, Parcels 40 and 41, and Needham Town Assessors Map 99, Parcels 38, 39, 40, 61, 62, 63, and 88, superimposing that district over the existing Industrial and Single Residence B districts, and removing the existing IND Subdistrict of the Multi-family Overlay District, said description being as follows:

Beginning at the bound on easterly side of Hunnewell Street, approximately three hundred and thirty-two 35/100 (332.35) feet from the intersection with Hillside Avenue; thence running southwesterly by the easterly property line of Microwave Development Laboratories Inc, one hundred and ninety-one 13/100 (191.13) feet, more or less; southeasterly by the easterly property line of Microwave Development Laboratories Inc, sixty-eight 68/100 (68.75) feet, more or less; southeasterly by the easterly property line of Microwave Development Laboratories Inc, one hundred and thirty (130) feet, more or less; southeasterly by the easterly property line of Drack Realty LLC, seventy-three (73) feet, more or less; southwesterly by the easterly property line of Drack Realty LLC, one hundred and forty (140) feet, more or less; northeasterly by the northerly property line of Lally, forty-one (41) feet, more or less; southeasterly by the easterly property line of Lally, seventy-five (75) feet, more or less; southwesterly by the southerly property line of Lally, one hundred (100) feet, more or less; southwesterly to the center of Crescent Road, twenty (20) feet, more or less; southeasterly by the center of Crescent Road, twenty-nine (29) feet, more or less; southwesterly to a bound located twenty-nine feet from the angle point on the easterly side of Crescent Road; southwesterly by the southerly property line of 66 Crescent Road LL, four hundred and fifteen 60/100 (415.60) feet, more or less; northwesterly by the easterly property line of Town of Needham, fifty-two 37/100 (52.37) feet, more or less; northwesterly by the easterly property line of Town of Needham, one hundred and sixty-two 37/100 (162.37) feet, more or less; southwesterly by the easterly property line of Town of Needham, forty-five 76/100 (45.76) feet, more or less; northwesterly by the easterly property line of Town of Needham, one hundred and forty-three 92/100 (143.92) feet, more or less; northwesterly by the easterly property line of Town of Needham, fifteen 71/100 (15.71) feet, more or less; southwesterly by the easterly property line of Town of Needham, two hundred and forty-eight 40/100 (248.40) feet, more or less; northwesterly by the easterly property line of Town of Needham, fifty-three 33/100 (53.33) feet, more or less; northeasterly by the northerly property line of 166 Crescent Road LLC, five hundred and fifty-five 68/100 (555.68) feet, more or less; northeasterly to the center of Crescent Road, twenty (20) feet, more or less; northwesterly by the center of Crescent Road, fifty-six 47/100 (56.47) feet, more or less; northeasterly to the bound located four 38/100 (4.38) feet from the end of the Crescent Road; northeasterly by the northerly property line of Microwave Development Laboratories Inc, one

hundred and forty-six $29/100$ (146.29) feet, more or less; southeasterly by the northerly property line of Microwave Development Laboratories Inc, fifty-four $82/100$ (54.82) feet, more or less; northeasterly by the northerly property line of Microwave Development Laboratories Inc, fifty-four $21/100$ (54.21) feet, more or less; southeasterly by the easterly property line of Microwave Development Laboratories Inc, one hundred and ninety-five $81/100$ (195.81) feet, more or less; northeasterly by the easterly property line of Microwave Development Laboratories Inc, seven (7) feet, more or less; southeasterly by the easterly property line of Microwave Development Laboratories Inc, ninety-one (91) feet, more or less; northeasterly by the easterly property line of Microwave Development Laboratories Inc, one hundred and forty-two (142) feet, more or less; southeasterly by the easterly sideline of Hunnewell Street, twenty (20) feet to the point of beginning.

Or take any other action relative thereto.

ARTICLE 1: AMEND ZONING BY-LAW – MULTI-FAMILY OVERLAY DISTRICT (BASE COMPLIANCE PLAN)

To see if the Town will vote to amend the Needham Zoning By-Law as follows:

1. By amending Section 1.3, Definitions by adding the following terms:

Applicant – A person, business, or organization that applies for a building permit, Site Plan Review, or Special Permit.

2. By amending Section 2.1, Classes of Districts by adding the following after ASOD Avery Square Overlay District:

MFOD – Multi-family Overlay District

3. By inserting a new Section 3.17 Multi-family Overlay District:

3.17 Multi-family Overlay District

3.17.1 Purposes of District

The purposes of the Multi-family Overlay District include, but are not limited to, the following:

- (a) Providing Multi-family housing in Needham, consistent with the requirements of M.G.L. Chapter 40A (the Zoning Act), Section 3A;
- (b) Supporting vibrant neighborhoods by encouraging Multi-family housing within a half-mile of a Massachusetts Bay Transit Authority (MBTA) commuter rail station; and
- (c) Establishing controls which will facilitate responsible development and minimize potential adverse impacts upon nearby residential and other properties.

Toward these ends, Multi-family housing in the Multi-family Overlay District is permitted to exceed the density and dimensional requirements that normally apply in the underlying zoning district(s) provided that such development complies with the requirements of this Section 3.17.

3.17.2 Scope of Authority

In the Multi-family Overlay District, all requirements of the underlying district shall remain in effect except where the provisions of Section 3.17 provide an alternative to such requirements, in which case these provisions shall supersede. If an Applicant elects to develop Multi-family housing in accordance with Section 3.17, the provisions of the Multi-family Overlay District shall apply to such development. Notwithstanding anything contained herein to the contrary, where the provisions of the underlying district are in conflict or inconsistent with the provisions of the Multi-family Overlay District, the terms of the Multi-family Overlay District shall apply.

If the applicant elects to proceed under the zoning provisions of the underlying district (meaning the applicable zoning absent any zoning overlay) or another overlay district, as applicable, the zoning bylaws applicable in such district shall control and the provisions of the Multi-family Overlay District shall not apply.

3.17.2.1 Subdistricts

The Multi-family Overlay District contains the following sub-districts, all of which are shown on the MFOD Boundary Map and indicated by the name of the sub-district:

- (a) A-1
- (b) B
- (c) ASB-MF
- (d) CSB
- (e) HAB
- (f) IND

3.17.3 Definitions

For purposes of this Section 3.17, the following definitions shall apply.

Affordable housing – Housing that contains one or more Affordable Housing Units as defined by Section 1.3 of this By-Law. Where applicable, Affordable Housing shall include Workforce Housing Units, as defined in this Subsection 3.17.3 Definitions.

As of right – Development that may proceed under the zoning in place at time of application without the need for a special permit, variance, zoning amendment, waiver, or other discretionary zoning approval.

Compliance Guidelines – *Compliance Guidelines for Multi-Family Zoning Districts Under Section 3A of the Zoning Act* as further revised or amended from time to time.

EOHLC – The Massachusetts Executive Office of Housing and Livable Communities, or EOHLC's successor agency.

Multi-family housing – A building with three or more residential dwelling units or two or more buildings on the same lot with more than one residential dwelling unit in each building and that complies with the requirements of M.G.L. c.40A, §3A and the rules and requirements thereunder.

Open space – Contiguous undeveloped land within a parcel boundary.

Parking, structured – A structure in which parking spaces are accommodated on multiple stories; a parking space area that is underneath all or part of any story of a structure; or a parking space area that is not underneath a structure, but is entirely covered, and has a parking surface at least eight feet below grade. Structured parking does not include surface parking or carports, including solar carports.

Parking, surface – One or more parking spaces without a built structure above the space. A solar panel designed to be installed above a surface parking space does not count as a built structure for the purposes of this definition.

Residential dwelling unit – A single unit providing complete, independent living facilities for one or more persons, including permanent provisions for living, sleeping, eating, cooking, and sanitation.

Section 3A – Section 3A of the Zoning Act.

Site plan review authority – The Town of Needham Planning Board.

Special permit granting authority – The Town of Needham Planning Board.

Sub-district – An area within the MFOD that is geographically smaller than the MFOD district and differentiated from the rest of the district by use, dimensional standards, or development standards.

Subsidized Housing Inventory (SHI) – A list of qualified Affordable Housing Units maintained by EOHLC used to measure a community's stock of low-or moderate-income housing for the purposes of M.G.L. Chapter 40B, the Comprehensive Permit Law.

Workforce housing unit – Affordable Housing Unit as defined by Section 1.3 of this By-Law but said Workforce Housing Unit shall be affordable to a household with an income of between eighty (80) percent and 120 percent of the area median income as defined.

3.17.4 Use Regulations

3.17.4.1 Permitted Uses

The following uses are permitted in the Multi-family Overlay District as a matter of right:

- (a) Multi-family housing.

3.17.4.2 Accessory Uses

The following uses are considered accessory as of right to any of the permitted uses in Subsection 3.17.4.1:

- (a) Parking, including surface parking and structured parking on the same lot as the principal use.
- (b) Any uses customarily and ordinarily incident to Multi-family housing, including, without limitation, residential amenities such as bike storage/parking, a swimming pool, fitness facilities and similar amenity uses.

3.17.5 Dimensional Regulations

3.17.5.1 Lot Area, Frontage and Setback Requirements

The following lot area, frontage and setback requirements shall apply in the Multi-family Overlay District sub-districts listed below. Buildings developed under the regulations of the Multi-family Overlay District shall not be further subject to the maximum lot area, frontage, and setback requirements of the underlying districts, as contained in Subsection 4.3.1 Table of Regulations, Subsection 4.4.1 Minimum Lot Area and Frontage, Subsection 4.4.4 Front Setback, Subsection 4.6.1 Basic Requirements, and Subsection 4.6.2 Front and Side Setbacks.

	A-1	B	ASB-MF	CSB	HAB	IND
Minimum Lot Area (square feet)	20,000	10,000	10,000	10,000	10,000	10,000
Minimum Lot Frontage (feet)	120	80	80	80	80	80
Minimum Front Setback (feet) from the front property line	25	10	Minimum 10 Maximum 15 ^e	20 feet for buildings with frontage on Chestnut Street 10 feet for all other buildings	20	25
Minimum Side and Rear Setback (feet)	20	10 ^{a, b}	10 ^{a, c}	20 (side) ^{a, b, d}	20 ^{a, b}	20 ^{a, b}

- (a) The requirement of an additional 50-foot side or rear setback from a residential district as described in Subsection 4.4.8 Side and Rear Setbacks Adjoining Residential Districts or Subsection 4.6.5 Side and Rear Setbacks Adjoining Residential Districts shall not apply.
- (b) Any surface parking, within such setback, shall be set back 10 feet from an abutting residential district and such buffer shall be suitably landscaped.
- (c) The rear and side setbacks are 20 feet along the MBTA right-of-way. With respect to any lot partially within an underlying residential district, (i) no building or structure for a multi-family residential use shall be placed or constructed within 110 feet of the lot line of an abutting lot containing an existing single family residential structure and (ii) except for access driveways and sidewalks, which are permitted, any portion of the lot within said residential district shall be kept open with landscaped areas, hardscaped areas, outdoor recreation areas (e.g., swimming pool) and/or similar open areas.
- (d) On the west side of Chestnut Street, the rear setback shall be 20 feet. On the east side of Chestnut Street, the rear setback shall be 30 feet.

- (e) Seventy percent (70%) of the main datum line of the front facade of the building shall be set back no more than 15 feet, except that periodic front setbacks greater than fifteen (15) feet are allowed if activated by courtyards, landscaping, drive aisles, amenity areas, or other similar site design features that enhance the streetscape. In the ASB-MF subdistrict, the Applicant may apply for a Special Permit from the Planning Board if less than seventy percent (70%) of the main datum line front facade of the building is set back 15 feet.

3.17.5.2 Building Height Requirements

The maximum building height in the Multi-family Overlay District sub-districts shall be as shown below. Buildings developed under the Multi-family Overlay District shall not be further subject to the maximum height regulations of the underlying district, as contained in Subsection 4.3.1 Table of Regulations, Subsection 4.4.2 Maximum Building Bulk, Subsection 4.4.3 Height Limitation, Subsection 4.6.1 Basic Requirements, and Subsection 4.6.4 Height Limitation.

	A-1	B	ASB-MF	CSB	HAB	IND
Maximum Building Height (stories)	3.0	3.0	3.0 ^c	3.0	3.0	3.0
Maximum Building Height (ft) ^{a,b}	40	40	40 ^c	40	40	40

- (a) Exceptions. The limitation on height of buildings shall not apply to chimneys, ventilators, towers, silos, spires, stair overruns, elevator overruns, mechanical equipment, roof parapets, architectural screening, or other ornamental features of buildings, which features (i) are in no way used for living purposes; (ii) do not occupy more than 25% of the gross floor area of the building and (iii) do not project more than 15 feet above the maximum allowable height.
- (b) Exceptions: Renewable Energy Installations. The Site Plan Review Authority may waive the height and setbacks in Subsection 3.17.5.2 Building Height Requirements and Subsection 3.17.5.1 Lot Area, Frontage and Setback Requirements to accommodate the installation of solar photovoltaic, solar thermal, living, and other eco-roofs, energy storage, and air-source heat pump equipment. Such installations shall be appropriately screened, consistent with the requirements of the underlying district; shall not create a significant detriment to abutters in terms of noise or shadow; and must be appropriately integrated into the architecture of the building and the layout of the site. The installations shall not provide additional habitable space within the development.
- (c) In the ASB-MF subdistrict, the Applicant may apply for a Special Permit from the Planning Board for a height of four stories and 50 feet, provided that the fourth story along Highland Avenue and West Street incorporates one or more of the following design elements: (i) a pitched roof having a maximum roof pitch of 45 degrees; (ii) a fourth story recessed from the face of the building by a minimum of 12 feet; and/or (iii) such other architectural design elements proposed by the Applicant and approved by the Planning Board during the Special Permit process.

3.17.5.3 Building Bulk and Other Requirements

The maximum floor area ratio or building coverage and the maximum number of dwelling units per acre, as applicable, in the Multi-family Overlay District sub-districts shall be as shown below, except

that the area of a building devoted to underground parking shall not be counted as floor area for purposes of determining the maximum floor area ratio or building coverage, as applicable. Buildings developed under the regulations of the Multi-family Overlay District shall not be subject to any other limitations on floor area ratio or building bulk in Subsection 4.3.1 Table of Regulations, Subsection 4.4.2 Maximum Building Bulk, and Subsection 4.6.3 Maximum Lot Coverage.

	A-1	B	ASB-MF	CSB	HAB	IND
Floor Area Ratio (FAR)	0.50	N/A	1.3 ^{b, c}	0.70	0.70	0.50
Maximum Building Coverage (%)	N/A	25%	N/A	N/A	N/A	N/A
Maximum Dwelling Units per Acre ^a	18	N/A	44 ^d	18	N/A	N/A

- (a) The total land area used in calculating density shall be the total acreage of the lot on which the development is located.
- (b) In the ASB-MF subdistrict, the Applicant may apply for a Special Permit from the Planning Board for an FAR of up to 1.7.
- (c) In the ASB-MF subdistrict, the following shall not be counted as floor area for purposes of determining the maximum floor area ratio: (i) interior portions of a building devoted to off-street parking; (ii) parking garages, structured parking or deck/rooftop parking that are screened from Highland Avenue as required by Section 3.17.6(c) and from the Needham Heights Common in a manner compatible with the architecture of the building. In the ASB-MF subdistrict, the Applicant may apply for a Special Permit from the Planning Board to exclude additional areas from floor area for purposes of determining the maximum floor area ratio.
- (d) In the ASB-MF subdistrict, Multi-family housing may exceed the maximum of 44 dwelling units per acre by special permit.

3.17.5.4 Multiple Buildings on a Lot

In the Multi-family Overlay District, more than one building devoted to Multi-family housing may be located on a lot, provided that each building complies with the requirements of Section 3.17 of this By-Law.

3.17.5.5 Use of Dwelling Units

Consistent with the Executive Office of Housing and Livable Communities' Compliance Guidelines for Multi-family Zoning Districts Under Section 3A of the Zoning Act, and notwithstanding anything else contained in the Zoning By-Law to the contrary, Multi-family housing projects shall not be required to include units with age restrictions, and units shall not be subject to limit or restriction concerning size, the number or size of bedrooms, a cap on the number of occupants, or a minimum age of occupants.

3.17.6 Off-Street Parking

- (a) The minimum number of off-street parking spaces shall be one space per dwelling unit for all subdistricts within the Multi-family Overlay District.
- (b) Parking areas shall be designed and constructed in accordance with Subsection 5.1.3 Parking Plan and Design Requirements. The remaining provisions of Section 5.1 Off Street Parking Regulations shall not apply to projects within the Multi-family Overlay District.
- (c) In the ASB-MF subdistrict, the façade(s) of all parking garages, structured parking and deck/rooftop parking visible from Highland Avenue shall be designed to be generally indistinguishable from the façade(s) of the residential portion of the building(s), and shall allow no view of parked vehicles from Highland Avenue except where such view is intermittent and incidental to the operation of the parking area, such as a view afforded by the opening of an automated garage door.
- (d) Enclosed parking areas shall comply with Subsection 4.4.6 Enclosed Parking.
- (e) No parking shall be allowed within the front setback. Parking shall be on the side or to the rear of the building, or below grade.
- (f) The minimum number of bicycle parking spaces shall be one space per dwelling unit.
- (g) Bicycle storage. For a multi-family development of 25 units or more, no less than 25% of the required number of bicycle parking spaces shall be integrated into the structure of the building(s) as covered spaces.

3.17.7 Development Standards

- (a) Notwithstanding anything in the Zoning By-Law outside of this Section 3.17 to the contrary, Multi-family housing in the Multi-family Overlay District shall not be subject to any special permit requirement.
- (b) Building entrances shall be available from one or more streets on which the building fronts and, if the building fronts Chestnut Street, Garden Street, Highland Avenue, Hillside Avenue, Rosemary Street, or West Street, the primary building entrance must be located on at least one such street.
- (c) The site shall be designed so that all collection and storage areas for residential refuse shall be internal to the building(s), or otherwise shall not be visible from any public way and appropriately screened from abutting properties, and adequate management and removal of refuse shall be provided for.
- (d) Site arrangement and driveway layout shall provide sufficient access for emergency and service vehicles, including fire, police, and rubbish removal.
- (e) Plantings shall be provided and include species that are native or adapted to the region. Plants on the Massachusetts Prohibited Plant List, as may be amended, are prohibited.
- (f) All construction shall be subject to the current town storm water bylaws, regulations, and policies along with any current regulations or policies from DEP, state, and federal agencies.

- (g) Control measures shall be employed to mitigate any substantial threat to water quality or soil stability, both during and after construction.
- (h) There shall be adequate water, sewer, and utility service provided to serve the project.
- (i) Off-site glare from headlights shall be controlled through arrangement, grading, fences, and planting. Off-site light over-spill from exterior lighting shall be controlled through luminaries selection, positioning, and mounting height so as to not add more than one foot candle to illumination levels at any point off-site.
- (j) Pedestrian and vehicular movement within and outside the project site shall be protected, through selection of egress points, provision for adequate sight distances, and through reasonable mitigation measures for traffic attributable to the project.
- (k) Site arrangements and grading shall minimize to the extent practicable the number of removed trees 8" trunk diameter or larger, and the volume of earth cut and fill.
- (l) No retaining wall shall be built within the required yard setback except a retaining wall with a face not greater than four (4) feet in height at any point and a length that does not exceed forty (40) percent of the lot's perimeter. Notwithstanding the foregoing, retaining walls may graduate in height from four (4) to seven (7) feet in height when providing access to a garage or egress entry doors at the basement level, measured from the basement or garage floor to the top of the wall. In such cases, the wall is limited to seven (7) feet in height for not more than 25% of the length of the wall.
- (m) Retaining walls with a face greater than twelve (12) feet in height are prohibited unless the Applicant's engineer certifies in writing to the Building Commissioner that the retaining wall will not cause an increase in water flow off the property and will not adversely impact adjacent property or the public.
- (n) Construction activity shall be consistent with Section 3.8 of the General By-Laws and any reasonable conditions on construction activity that are warranted at a particular site and included in the applicable site plan approval, including but not limited to hours during which construction activity may take place, the movement of trucks or heavy equipment on or off the site, measures to control dirt, dust, and erosion and to protect existing vegetation to be preserved on the site.

Special Development Standards for the A-1 Subdistrict:

The following requirements apply to all development projects within the A-1 subdistrict of the Multi-family Overlay District:

- (a) 4.3.2 Driveway Openings
- (b) 4.3.3 Open Space
- (c) 4.3.4 Building Location, with the substitution of "Multifamily Dwelling" for "apartment house."

Special Development Standards for the B and IND Subdistricts of the Multi-Family Overlay District:

- (a) The requirements of the first paragraph of 4.4.5 Driveway Openings shall apply to all development projects within the Multi-family Overlay District within the B and IND subdistricts.

Special Development Standards for the ASD-MF Subdistrict of the Multi-Family Overlay District:

- (a) Multi-family housing in the ASD-MF subdistrict shall employ existing curb cuts on Highland Avenue and West Street. Existing curb cuts may be improved and reconstructed, and may be modified subject to site plan review. An Applicant may apply for a Special Permit from the Planning Board for an additional curb cut on Highland Avenue or West Street.

3.17.8 Affordable Housing

Any multi-family building with six or more dwelling units shall include Affordable Housing Units as defined in Section 1.3 of this By-Law and the requirements below shall apply.

3.17.8.1 Provision of Affordable Housing

Not fewer than 12.5% of housing units constructed shall be Affordable Housing Units. For purposes of calculating the number of Affordable Housing Units required in a proposed development, any fractional unit shall be rounded up to the nearest whole number and shall be deemed to constitute a whole unit.

In the event that the Executive Office of Housing and Livable Communities (EOHLC) determines that the calculation detailed above does not comply with the provisions of Section 3A of MGL c.40A, the following standard shall apply:

Not fewer than 10% of housing units constructed shall be Affordable Housing Units. For purposes of calculating the number of Affordable Housing Units required in a proposed development, any fractional unit shall be rounded up to the nearest whole number and shall be deemed to constitute a whole unit.

3.17.8.2 Affordable Housing Development Standards

Affordable Units shall be:

- (a) Integrated with the rest of the development and shall be compatible in design, appearance, construction, and quality of exterior and interior materials with the other units and/or lots;
- (b) Dispersed throughout the development;
- (c) Located such that the units have equal access to shared amenities, including light and air, and utilities (including any bicycle storage and/or Electric Vehicle charging stations) within the development;
- (d) Located such that the units have equal avoidance of any potential nuisances as market-rate units within the development;
- (e) Distributed proportionately among unit sizes; and
- (f) Distributed proportionately across each phase of a phased development.

- (g) Occupancy permits may be issued for market-rate units prior to the end of construction of the entire development provided that occupancy permits for Affordable Units are issued simultaneously on a pro rata basis.

3.17.9 Site Plan Review

3.17.9.1 Applicability

Site Plan Review, as provided for in this Section 3.17, is required for all Multi-family housing projects within the Multi-Family Overlay District. Notwithstanding any other provision contained in the Zoning By-Law, except as expressly provided for in this Section 3.17, Multi-family housing projects are not subject to site plan or special permit review pursuant to Section 7.

3.17.9.2 Submission Requirements

The Applicant shall submit the following site plan and supporting documentation as its application for Site Plan Review, unless waived in writing by the Planning and Community Development Director:

- (a) Locus plan;
- (b) Location of off-site structures within 100 feet of the property line;
- (c) All existing and all proposed building(s) showing setback(s) from the property lines;
- (d) Building elevation, to include penthouses, parapet walls and roof structures; floor plans of each floor; cross and longitudinal views of the proposed structure(s) in relation to the proposed site layout, together with an elevation line to show the relationship to the center of the street;
- (e) Existing and proposed contour elevations in one-foot increments;
- (f) Parking areas, including the type of space, dimensions of typical spaces, and width of maneuvering aisles and landscaped setbacks;
- (g) Driveways and access to site, including width of driveways and driveway openings;
- (h) Facilities for vehicular and pedestrian movement;
- (i) Drainage;
- (j) Utilities;
- (k) Landscaping including trees to be retained and removed;
- (l) Lighting;
- (m) Loading and unloading facilities;
- (n) Provisions for refuse removal; and
- (o) Projected traffic volumes in relation to existing and reasonably anticipated conditions based on standards from the Institute of Transportation Engineers and prepared by a licensed traffic engineer

and including, if applicable, recommended traffic mitigation measures based on the traffic attributable to a particular project.

3.17.9.3 Timeline

Upon receipt of an application for Site Plan Review for a project in the MFOD, the Site Plan Review Authority shall transmit a set of application materials to the Department of Public Works, Town Engineer, Police Department, Fire Department, Design Review Board, and to any other Town agency it deems appropriate, which shall each have thirty five (35) days to provide any written comment. Upon receipt of an application, the Site Plan Review Authority shall also notice a public hearing in accordance with the notice provisions contained in M.G.L. c.40A, §11. Site plan review shall be completed, with a decision rendered and filed with the Town Clerk, no later than 6 months after the date of submission of the application.

3.17.9.4 Site Plan Approval

Site Plan approval for uses listed in Subsection 3.17.3 Permitted Uses shall be granted upon determination by the Site Plan Review Authority that the following criteria have been satisfied. The Site Plan Review Authority may impose reasonable conditions, at the expense of the applicant, to ensure that these criteria have been satisfied.

- (a) the Applicant has submitted the information as set forth in Subsection 3.17.9.2 Submission Requirements; and
- (b) the project as described in the application meets the dimensional and density requirements contained in Subsection 3.17.5 Dimensional Regulations, the parking requirements contained in Subsection 3.17.6 Off-Street Parking, the development standards contained in Subsection 3.17.7 Development Standards, and Subsection 3.17.8.2 Affordable Housing Development Standards.

3.17.9.5 Waivers

When performing site plan review, the Planning Board may waive the requirements of Subsection 3.17.6 hereof and/or Subsection 5.1.3 Parking Plan and Design Requirements, or particular submission requirements.

When performing site plan review for a Multi-family Housing project that involves preservation of a structure listed in the National Register of Historic Places, the Massachusetts Register of Historical Places, the Inventory of Historic Assets for the Town of Needham, or is in pending for inclusion in any such register or inventory, the Planning Board as part of site plan review may reduce the applicable front, side or rear setbacks in this Section 3.17 by up to 40%.

3.17.9.6 Project Phasing

An Applicant may propose, in a Site Plan Review submission, that a project be developed in phases subject to the approval of the Site Plan Review Authority, provided that the submission shows the full buildout of the project and all associated impacts as of the completion of the final phase. However, no project may be phased solely to avoid the provisions of Subsection 3.17.7 Affordable Housing.

3.17.10 Design Guidelines

The Planning Board may adopt and amend, by simple majority vote, Design Guidelines which shall be applicable to all rehabilitation, redevelopment, or new construction within the Multi-family Overlay District. Such Design Guidelines must be objective and not subjective and may contain graphics illustrating a particular standard or definition to make such standard or definition clear and understandable. The Design Guidelines for the Multi-family Overlay District shall be as adopted by the Planning Board and shall be available on file in the Needham Planning Department.

3.17.11 Special Permits

In those specific occasions where this Section 3.17 authorizes relief in the form of a special permit only, applications shall be reviewed and decided by the Planning Board in accordance with Section 7.5.2.

4. By amending the first sentence of Section 7.6.1, Special Permit Granting Authority, to add Section 3.17 to the list of Sections for which the Planning Board is the Special Permit Granting Authority, so that this sentence reads as follows:

The Planning Board shall act as a Special Permit Granting Authority only where so designated in Sections 3.4, 3.8, 3.9, 3.10, 3.14, 3.16, 3.17, 4.2.10, 4.2.11, 4.2.12, 4.4.5, 4.4.9, 4.4.10, 5.1.1.6, 6.6, 6.8 and 7.4 of this By-Law.

5. By amending the first paragraph of Section 7.7.2.2, Authority and Specific Powers, to add site plan reviews under Section 3.17 to the jurisdiction of the Design Review Board, so that this paragraph reads as follows:

The Design Review Board shall review requests for site plan review and approval submitted in accordance with Section 3.17 Multi-family Overlay District, Section 7.4 Site Plan Review and requests for special permits in accordance with Section 4.2.11 Planned Residential Development, Section 4.2.10 Flexible Development and Section 6.11 Retaining Walls and, for a minor project that only involves a change in the exterior facade of a building in the Center Business District, shall review and may approve such facade change.

6. By amending Section 7.7.3, Procedure, by inserting in the second paragraph, after the second sentence, a new sentence to read as follows:

Within fifteen (15) days of the meeting, a final advisory design review report shall be sent both to the applicant and to the Planning Board, when a site plan review is required under Section 3.17.

so that this paragraph reads as follows:

Within twenty (20) days of receipt of a Design Review application, the Design Review Board shall hold a meeting, to which the applicant shall be invited, for the purpose of conducting a review of the proposed project or activity. Within fifteen (15) days of the meeting, a preliminary design review report shall be sent to both the applicant and to the Planning Board, when a special permit is required under Sections 7.4, 4.2.11 and 4.2.10. Within fifteen (15) days of the meeting, a final advisory design review report shall be sent both to the applicant and to the Planning Board, when a site plan review is required under Section 3.17. However, if the proposed project or activity involves only a building permit or sign permit from the Building Commissioner, or is a "Minor Project" under Site Plan Review (all as described in Subsection 7.7.2.2), no preliminary report is required and the written advisory report of the Design Review Board to the applicant and the Building Commissioner shall be a final report.

Or take any other action relative thereto.

ARTICLE 2: **AMEND ZONING BY-LAW – MAP CHANGE FOR MULTI-FAMILY OVERLAY DISTRICT (BASE PLAN)**

To see if the Town will vote to amend the Needham Zoning By-Law by amending the Zoning Map as follows:

- (a) Place in the A-1 Subdistrict of the Multi-family Overlay District a portion of land now zoned Apartment A-1 and located directly to the south of Hamlin Lane as shown on Needham Town Assessors Map 200, Parcels 1 and 31, superimposing that district over the existing Apartment A-1 district, said description being as follows:

Beginning at the point of intersection of the easterly sideline of Greendale Avenue and the northerly sideline of Charles River; thence running westerly by the easterly line of Greendale Avenue, four hundred forty-two and 36/100 (442.36) feet, more or less; northeasterly by the southerly line of Hamlin Lane, five hundred thirty-five and 44/100 (535.44) feet, more or less; southeasterly by the southerly line of Hamlin Lane, twenty and 22/100 (20.22) feet, more or less; southeasterly by the land of the Commonwealth of Massachusetts, State Highway I-95, five hundred thirty-nine 11/100 (539.11) feet, more or less; southwesterly by the land of the Commonwealth of Massachusetts, State Highway I-95, four hundred sixty-six (466) feet, more or less; northwesterly by the northerly sideline of Charles River, two hundred seventy-six (276) to the point of beginning.

- (b) Place in the CSB Subdistrict of the Multi-family Overlay District a portion of land now zoned Chestnut Street Business and Single Residence B and located directly to the east and west of Chestnut Street as shown on Needham Town Assessors Map 47, Parcels 54, 72, 74-03, 74-04, 76, 77, 78, 79, 80, 83, 84, 85, 86, 87, 88, and 91, Needham Town Assessors Map 46, Parcels 12, 13, 14, 15, 16, 17, 18, 19, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 58, 59, 60, and 61 and Needham Town Assessors Map 45, Parcel 6, superimposing that district over the existing Chestnut Street Business and Single Residence districts, said description being as follows:

Beginning at the point of intersection of the easterly sideline of M.B.T.A and the southerly sideline of Keith Place; thence running southeasterly by the southerly sideline of Keith Place to the intersection with northerly sideline of Chestnut Street; southwesterly by the northerly sideline of Chestnut Street to the intersection with northerly sideline of Freeman Place; northeasterly to a point on the southerly sideline of Chestnut Street, approximately four hundred and ninety-five 88/100 (495.88) feet from the intersection with southerly sideline of School Street; southeasterly by the southerly property line of Deaconess-Glover Hospital Corporation, one hundred and eighty-seven 68/100 (187.68) feet, more or less; southwesterly by the easterly property line of Deaconess-Glover Hospital Corporation, ninety-six 74/100 (96.74) feet, more or less; southwesterly by the westerly property line of Chaltanya Kadem and Shirisha Meda, eighty-two 80/100 (82.80) feet, more or less; southwesterly by the westerly property line of Huard, eighty-two 80/100 (82.80) feet, more or less; southwesterly by the westerly property line of Reidy, ninety-seven 40/100 (97.40) feet, more or less; northeasterly by the northerly property line of L. Petrini & Son Inc, fifteen 82/100 (15.82) feet, more or less; southwesterly by easterly property line of L. Petrini & Son Inc, one hundred and seventy-seven 77/100 (177.77) feet, more or less; northeasterly by the easterly property line of L. Petrini & Son Inc, one hundred and two 59/100 (102.59) feet, more or less; southwesterly by the easterly property line of L. Petrini & Son Inc, fifty 16/100 (50.16) feet, more or less; northeasterly by the easterly property line of L. Petrini & Son Inc, seven 39/100 (7.39) feet, more or less; southwesterly by the easterly property of Briarwood Property LLC, seventy-five (75.00) feet, more or less; northeasterly by the easterly property of Briarwood Property LLC, one hundred (100) feet, more or less; southwesterly by the easterly property of Briarwood Property LLC, two hundred and

forty-nine 66/100 (249.66) feet, more or less; southeasterly by the southerly property of Briarwood Property LLC, two hundred ninety-three (293.28) feet, more or less; southwesterly by the easterly property of Veterans of Foreign Wars, one hundred and fifty (150) feet, more or less; northeasterly by the southerly property line of Veterans of Foreign Wars, eighty-five (85) feet, more or less; southwest by the easterly property of M.B.T.A, one hundred and sixty (160) feet, more or less; southeasterly by the northerly sideline of Junction Street to intersection with westerly sideline of Chestnut; southwesterly by the westerly sideline of Chestnut Street to intersection with northerly sideline of property of M.B.T.A; southwesterly by the southerly property line of Castanea Dentata LLC, two hundred and twenty-eight 81/100 (228.81) feet, more or less; southwesterly by the southerly property line of Castanea Dentata LLC, one hundred and eight 53/100 (108.53) feet, more or less; northwesterly by the southerly property line of Castanea Dentata LLC, one hundred and thirty-six 6/100 (136.06) feet, more or less; northwesterly by the southerly property line of Castanea Dentata LLC, one hundred and ten 10/100 (110.10) feet, more or less; thence running northeasterly by the easterly sideline of M.B.T.A. to the point of beginning.

- (c) Place in the IND Subdistrict of the Multi-family Overlay District a portion of land now zoned Industrial and Single Residence B and located directly to the south and east of Denmark Lane as shown on Needham Town Assessors Map 132, Parcel 2, superimposing that district over the existing Industrial and Single Residence B districts, said description being as follows:

Beginning at the point of intersection of the westerly sideline of M.B.T.A. and the southerly sideline of Great Plain Ave; thence running southwesterly by the westerly line of M.B.T.A, four hundred thirty-seven 24/100 (437.24) feet, more or less; southwesterly by the southerly property line of Denmark Lane Condominium, one hundred and eleven 17/100 (111.17) feet, more or less; northeasterly by the easterly property line of Denmark Lane Condominium, two hundred (200) feet, more or less; northwesterly by the southerly property line of Denmark Lane Condominium, one hundred and thirty-nine 75/100 (139.75) feet, more or less; northeasterly by the easterly sideline of Maple Street, one hundred and thirty-five (135) feet, more or less; southeasterly by the northerly property line of Denmark Lane Condominium, one hundred and forty (140) feet, more or less; southwesterly by the northerly property line of Denmark Lane Condominium, fifteen 20/100 (15.2) feet, more or less; northeasterly by the northerly property line of Denmark Lane Condominium, two 44/100 (2.44) feet, more or less; southwesterly by the northerly property line of Denmark Lane Condominium, thirty-three 35/100 (33.35) feet, more or less; northeasterly by the northerly property line of Denmark Lane Condominium, seventy-nine (79) feet, more or less; northwesterly by the northerly property line of Denmark Lane Condominium, thirteen 28/100 (13.28) feet, more or less; northeasterly by the northerly property line of Denmark Lane Condominium, forty-seven 50/100 (47.50) feet, more or less; northeasterly by the northerly property line of Denmark Lane Condominium, eighty-one 91/100 (81.91) feet, more or less; northeasterly by the southerly sideline of Great Plain Ave, twelve 28/100 (12.28) feet to the point of beginning.

- (d) Place in the CSB Subdistrict of the Multi-family Overlay District a portion of land now zoned Chestnut Street Business and located directly to the east of Garden Street as shown on Needham Town Assessors Map 51, Parcels 17, 20, 22, 23, superimposing that district over the existing Chestnut Street Business district said description being as follows:

Beginning at the point of intersection of the westerly sideline of M.B.T.A. and the northerly sideline of Great Plain Ave; thence running southwesterly by the northerly sideline of Great Plain Ave, nine 32/100 (9.32) feet, more or less; northeasterly by the westerly property line of Town of Needham, fifty-three 17/100 (53.17) feet, more or less; northeasterly by the westerly property line of Town of Needham, fifty-six 40/100 (56.40) feet, more or less; northeasterly by the westerly property line of Town of Needham, fifty-six 92/100 (56.92) feet, more or less; northwesterly by the westerly

property line of Town of Needham, on an arch length one hundred and twelve 99/100 (112.99) feet, more or less; northeasterly by the westerly property line of Town of Needham, fifteen 10/100 (15.10) feet, more or less; northeasterly by the westerly property line of Town of Needham, one hundred and thirty-eight 83/100 (138.83) feet, more or less; southeasterly by the northerly property line of Town of Needham, thirty-three 42/100 (33.42) feet, more or less; northwesterly by the southerly property line of Eaton Square Realty LLC, forty (40) feet, more or less; northwesterly by the southerly property line of Eaton Square Realty LLC, eighty-one 99/100 (81.99) feet, more or less; northwesterly by the southerly property line of Eaton Square Realty LLC, fifty-eighty 31/100 (58.31) feet, more or less; northeasterly by the easterly sideline of Garden Street to intersection with May Street; northeasterly by the southerly sideline of May Street, sixty-one 33/100 (61.33) feet, more or less; southwest by the westerly sideline of M.B.T.A to the point of beginning.

- (e) Place in the B Subdistrict of the Multi-family Overlay District a portion of land now zoned Business and Single Residence B and located directly to the west of Highland Avenue as shown on Needham Town Assessors Map 52, Parcels 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, and 12, and Needham Town Assessors Map 226, Parcels 56, 57, and 58, superimposing that district over the existing Business and Single Residence B districts, said description being as follows:

Beginning at the point of intersection of the easterly sideline of M.B.T.A. and the northerly sideline of May Street; thence running northeasterly by the easterly sideline of M.B.T.A. to the intersection with southerly sideline of Rosemary Street; southeasterly by the southerly sideline of Rosemary Street to the intersection with easterly sideline of Highland Ave; southwest by the westerly sideline of Highland Avenue to the intersection with the northerly sideline of May St; southwest by the northerly sideline of May Street to the point of beginning.

- (f) Place in the A-1 Subdistrict of the Multi-family Overlay District a portion of land now zoned Apartment A-1 and located directly to east of Highland Avenue and north of May Street as shown on Needham Town Assessors Map 53, Parcels 1, 2 and 3, superimposing that district over the existing Apartment A-1 district, said description being as follows:

Beginning at the point of intersection of the northerly sideline of May Street and the westerly sideline of Oakland Avenue; thence running easterly by the northerly sideline of May Street to the intersection with easterly sideline of Highland Avenue; northeasterly by the easterly sideline of Highland Avenue to the intersection with southerly sideline of Oakland Avenue; southeasterly by the southerly sideline of Oakland Avenue: southerly by the westerly sideline of Oakland Avenue to the point of beginning.

- (g) Place in the A-1 Subdistrict of the Multi-family Overlay District a portion of land now zoned Apartment A-1 and located directly to the west of Hillside Avenue and north of Rosemary Street as shown on Needham Town Assessors Map 100 Parcels 1, 35, and 36, and Needham Town Assessors Map 101, Parcels 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 24, 25, and 26, superimposing that district over the existing Apartment A-1 district, said description being as follows:

Beginning at the point of intersection of the northerly sideline of Rosemary Street and the easterly sideline of Concannon Circle; thence running northwesterly by the easterly sideline of Concannon Circle, one hundred and sixty (160) feet, more or less; northwesterly by the easterly property line of 15 Concannon Circle Realty Trust, two hundred and thirty-two 75/100 (232.75) feet, more or less; northwesterly by the easterly property line of L. Petrini and Son Inc, one hundred and forty-five 84/100 (145.84) feet, more or less; northeasterly by the northerly property line of L. Petrini and Son Inc, one hundred and twenty-five (125) feet, more or less; northwesterly by the westerly sideline of Tillotson Road, one hundred and twelve (112) feet, more or less; northeasterly across

Tillotson Road to the northeasterly corner of the property of L. Petrini and Son Inc, forty (40) feet, more or less; northeasterly by the northerly property line of L. Petrini and Son Inc, one hundred and twenty-five (125) feet, more or less; northwesterly by the easterly property line of Petrini Corporation, one hundred and nineteen 94/100 (119.94) feet, more or less; northeasterly by the southerly property line of L. Petrini and Son Inc, one hundred and sixty-two (162) feet, more or less; northwesterly by the easterly property line of Rosemary Ridge Condominium, three hundred and twenty-eight (328) feet, more or less; northeasterly by the northerly property line of Rosemary Ridge Condominium, two hundred and ninety (290) feet, more or less; northeasterly by the northerly property line of Rosemary Ridge Condominium, one hundred and sixty-two 19/100 (162.19), more or less; northwesterly by the northerly property line of Rosemary Ridge Condominium, one hundred and thirty (130), more or less; southeasterly by the northerly property line of Rosemary Ridge Condominium, two hundred and forty-one 30/100 (241.30), more or less; southeasterly by the northerly property line of Pop Realty LLC, ninety-four 30/100 (94.30), more or less to westerly side of Hillside Avenue; southeasterly by the westerly sideline of Hillside Avenue to intersection with northerly sideline of Rosemary Street; southeasterly by the northerly sideline of Rosemary Street to the point of beginning.

- (h) Place in the IND Subdistrict of the Multi-family Overlay District a portion of land now zoned Industrial, Hillside Avenue Business, and Single Residence B and located directly to the east of Hillside Avenue and north of Rosemary Street as shown on Needham Town Assessors Map 100, Parcels 3, 4, 5, 7, 8, 9, 10, 11, 12, and 61, and Needham Town Assessors Map 101, Parcels 2, 3, 4, 5 and 6, superimposing that district over the existing Industrial, Hillside Avenue Business, and Single Residence B districts, said description being as follows:

Beginning at the point of intersection of the northerly sideline of Rosemary Street and the westerly sideline of M.B.T.A.; thence running northwesterly by the northerly sideline of Rosemary Street to the intersection with easterly sideline of Hillside Avenue; northeasterly by the easterly sideline of Hillside Avenue to the intersection with southerly sideline of West Street; northeasterly by the southerly sideline of West Street to the intersection with the westerly sideline of M.B.T.A.; southeasterly by the westerly sideline of M.B.T.A. to the point of beginning.

- (i) Place in the ASB-MF Subdistrict of the Multi-family Overlay District a portion of land now zoned Avery Square Business and Single Residence B and located directly to the west of Highland Avenue and south of West Street as shown on Needham Town Assessors Map 63, Parcel 37, superimposing that district over the existing Avery Square Business and Single Residence B districts, said description being as follows:

Beginning at the point of intersection of the easterly sideline of M.B.T.A. and the southerly sideline of West Street; thence running southeasterly by the southerly sideline of West Street, one hundred and sixty-one 48/100 (161.48) feet, more or less; southeasterly on arch, twenty-nine (27/100) 29.27 feet to a point on the easterly sideline of Highland Avenue; southeasterly by the easterly sideline of Highland Avenue seven hundred and sixty-one (761.81) feet, more or less; northeasterly by the easterly sideline of Highland Avenue ten (10) feet, more or less; southeasterly by the easterly sideline of Highland Avenue seventy (70) feet, more or less; northwesterly by the southerly property line of HCRI Massachusetts Properties Trust II, one hundred and fifty (150) feet, more or less; southeasterly by the southerly property line of HCRI Massachusetts Properties Trust II, seventy (70) feet, more or less; southwest by the southerly property line of HCRI Massachusetts Properties Trust II, one hundred and two 57/100 (102.57) feet, more or less; northeasterly by the easterly sideline of M.B.T.A., three hundred and seventy-one 56/100 (371.56) feet, more or less; northwesterly by the easterly sideline of M.B.T.A., three 54/100 (3.54) feet, more or less; northeasterly by the easterly sideline of M.B.T.A., three hundred and ninety-three 56/100 (393.56)

feet, more or less; northeasterly by the easterly sideline of M.B.T.A., one hundred and seventy-five 46/100 (175.46) feet to the point of beginning.

- (j) Place in the HAB Subdistrict of the Multi-family Overlay District a portion of land now zoned Hillside Avenue Business and located directly to the east of Hillside Avenue and north of West Street as shown on Needham Town Assessors Map 99, Parcels 1, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, and 14, superimposing that district over the existing Hillside Avenue district, said description being as follows:

Beginning at the point of intersection of the westerly sideline of M.B.T.A and the northerly sideline of West Street; thence running northwesterly by the northerly sideline of West Street to the intersection with easterly sideline of Hillside Avenue; northwesterly by the easterly sideline of Hillside Avenue to the intersection with northerly sideline of Hunnewell Street; northwesterly by the easterly sideline of Hillside Avenue, twenty-four 1/100 (24.01) feet to the angle point; northeasterly by the easterly sideline of Hillside Avenue, ninety-five 61/100 (95.61) feet, more or less; northeasterly by the northerly property line of Hillside Condominium, two hundred and twenty-one 75/100 (221.75) feet, more or less; northeasterly by the northerly property line of Hunnewell Needham LLC, eighteen 48/100 (18.48) feet, more or less; southwesterly by the westerly sideline of M.B.T.A. to the point of beginning.

- (k) Place in the IND Subdistrict of the Multi-family Overlay District a portion of land now zoned Industrial and Single Residence B and located at Crescent Road as shown on Needham Town Assessors Map 98, Parcels 40 and 41, and Needham Town Assessors Map 99, Parcels 38, 39, 40, 61, 62, 63, and 88, superimposing that district over the existing Industrial and Single Residence B districts, said description being as follows:

Beginning at the bound on easterly side of Hunnewell Street, approximately three hundred and thirty-two 35/100 (332.35) feet from the intersection with Hillside Avenue; thence running southwesterly by the easterly property line of Microwave Development Laboratories Inc, one hundred and ninety-one 13/100 (191.13) feet, more or less; southeasterly by the easterly property line of Microwave Development Laboratories Inc, sixty-eight 68/100 (68.75) feet, more or less; southeasterly by the easterly property line of Microwave Development Laboratories Inc, one hundred and thirty (130) feet, more or less; southeasterly by the easterly property line of Drack Realty LLC, seventy-three (73) feet, more or less; southwesterly by the easterly property line of Drack Realty LLC, one hundred and forty (140) feet, more or less; northeasterly by the northerly property line of Lally, forty-one (41) feet, more or less; southeasterly by the easterly property line of Lally, seventy-five (75) feet, more or less; southwesterly by the southerly property line of Lally, one hundred (100) feet, more or less; southwesterly to the center of Crescent Road, twenty (20) feet, more or less; southeasterly by the center of Crescent Road, twenty-nine (29) feet, more or less; southwesterly to a bound located twenty-nine feet from the angle point on the easterly side of Crescent Road; southwesterly by the southerly property line of 66 Crescent Road LL, four hundred and fifteen 60/100 (415.60) feet, more or less; northwesterly by the easterly property line of Town of Needham, fifty-two 37/100 (52.37) feet, more or less; northwesterly by the easterly property line of Town of Needham, one hundred and sixty-two 37/100 (162.37) feet, more or less; southwesterly by the easterly property line of Town of Needham, forty-five 76/100 (45.76) feet, more or less; northwesterly by the easterly property line of Town of Needham, one hundred and forty-three 92/100 (143.92) feet, more or less; northwesterly by the easterly property line of Town of Needham, fifteen 71/100 (15.71) feet, more or less; southwesterly by the easterly property line of Town of Needham, two hundred and forty-eight 40/100 (248.40) feet, more or less; northwesterly by the easterly property line of Town of Needham, fifty-three 33/100 (53.33) feet, more or less; northeasterly by the northerly property line of 166 Crescent Road LLC, five hundred and fifty-five

68/100 (555.68) feet, more or less; northeasterly to the center of Crescent Road, twenty (20) feet, more or less; northwesterly by the center of Crescent Road, fifty-six 47/100 (56.47) feet, more or less; northeasterly to the bound located four 38/100 (4.38) feet from the end of the Crescent Road; northeasterly by the northerly property line of Microwave Development Laboratories Inc, one hundred and forty-six 29/100 (146.29) feet, more or less; southeasterly by the northerly property line of Microwave Development Laboratories Inc, fifty-four 82/100 (54.82) feet, more or less; northeasterly by the northerly property line of Microwave Development Laboratories Inc, fifty-four 21/100 (54.21) feet, more or less; southeasterly by the easterly property line of Microwave Development Laboratories Inc, one hundred and ninety-five 81/100 (195.81) feet, more or less; northeasterly by the easterly property line of Microwave Development Laboratories Inc, seven (7) feet, more or less; southeasterly by the easterly property line of Microwave Development Laboratories Inc, ninety-one (91) feet, more or less; northeasterly by the easterly property line of Microwave Development Laboratories Inc, one hundred and forty-two (142) feet, more or less; southeasterly by the easterly sideline of Hunnewell Street, twenty (20) feet to the point of beginning.

- (I) Place in the A-1 Subdistrict of the Multi-family Overlay District a portion of land now zoned Apartment A-1 and Single Residence B and located east and west of Highland Avenue at Cottage Avenue as shown on Needham Town Assessors Map 70, Parcels 24 and 25, superimposing that district over the existing Apartment A-1 and Single Residence B districts, said description being as follows:

Beginning at the point on the westerly sideline of Highland Avenue, two hundred and seventeen 63/100 (217.63) from the arch on Webster Street; thence running southwest by the westerly sideline of Highland Avenue, three hundred and seventeen (317) feet, more or less; southeasterly across Highland Avenue, fifty (50) feet to a point on the easterly sideline of Highland Avenue; southeasterly by the northerly property line of Avery Park Condominium, two hundred and seventy-eight 75/100 (278.75) feet, more or less; northeasterly by the northerly property line of Avery Park Condominium, sixty-one (61.51) feet, more or less; northeasterly by the northerly property line of Avery Park Condominium, one hundred and seventy-nine 70/100 (179.70) feet, more or less; southwest by the westerly sideline of Webster Street, thirty-one 16/100 (31.16) feet, more or less; southwest by the southerly property line of Avery Park Condominium, one hundred and sixty-six 51/100 (166.51) feet, more or less; southwest by the southerly property line of Avery Park Condominium, one hundred and five 59/100 (105.59) feet, more or less; southwest by the southerly property line of Avery Park Condominium, one hundred and forty-four 62/100 (144.62) feet, more or less; northwesterly by the southerly property line of Avery Park Condominium, two hundred and seventy-seven 29/100 (277.29) feet, more or less; northwesterly across Highland Avenue, fifty (50) feet to a point on the westerly side of Highland Avenue; northwesterly by the southerly property line of Hamilton Highlands LLC, one hundred and fifty-nine 45/100 (159.45) feet, more or less; southwest by the southerly property line of Hamilton Highlands LLC, ninety-seven 33/100 (97.33) feet, more or less; northwesterly by the northerly sideline of Cottage Avenue, forty (40) feet, more or less; southwest by the southerly property line of Hamilton Highlands LLC, fifteen (15) feet, more or less; northwesterly by the southerly property line of Hamilton Highlands LLC, twenty-five 54/100 (25.54) feet, more or less; northeasterly by the easterly sideline of M.B.T.A., five hundred and seventy-five 57/100 (575.57) feet, more or less; southeasterly by the northerly property line of Hamilton Highlands LLC, one hundred and forty-five 2/100 (145.02) feet, more or less; northeasterly by the northerly property line of Hamilton Highlands LLC, one hundred and one 57/100 (101.57) feet, more or less; southeasterly by the northerly property line of Hamilton Highlands LLC, one hundred and eighty 18/100 (180.18) feet, more or less; southeasterly by the northerly property line of Hamilton Highlands LLC, fifty-six 57/100 (56.57) feet to the point of beginning.

Or take any other action relative thereto.

ARTICLE 3: AMEND ZONING BY-LAW – MULTI-FAMILY OVERLAY DISTRICT (NEIGHBORHOOD HOUSING PLAN)

To see if the Town will vote to amend the Needham Zoning By-Law, inclusive of those amendments adopted under Article 1 and Article 2, as follows, and to act on anything related thereto:

1. Amending the definition of Mixed-Use Building in Section 1.3 to include the Multi-family Overlay District, so that the definition reads as follows:

Mixed-Use Building – A building in the Needham Center, Chestnut Street, Garden Street or Multi-family Overlay District in which the ground floor facing the street is used for such retail or restaurant uses as may be permitted by right or by special permit in the applicable overlay district, and other ground-floor and upper-floor space is used for other commercial use(s) or dwelling units(s), and subject to any additional qualifications provided for in the applicable overlay district.

2. Amending Section 3.17 Multi-family Overlay District by revising Subsection 3.17.2.1 Subdistricts to read as follows:

The Multi-family Overlay District contains the following sub-districts, all of which are shown on the MFOD Boundary Map and indicated by the name of the sub-district:

- (a) A-1
- (b) B
- (c) ASB-MF
- (d) CSB-E (Chestnut Street Business – East)
- (e) CSB-W (Chestnut Street Business – West)
- (f) CSB-GS
- (g) HAB
- (h) IND
- (i) IND-C (Industrial – Crescent)

3. Amending Subsection 3.17.1 Purposes of District by amending the last paragraph to read as follows:

Toward these ends, Multi-family housing and mixed-use development (where allowed) in the Multi-family Overlay District is permitted to exceed the density and dimensional requirements that normally apply in the underlying zoning district(s) provided that such development complies with the requirements of this Section 3.17.

4. Amending Subsection 3.17.4. Use Regulations, by adding the following paragraph (b) to Subsection 3.17.4.1 Permitted Uses:

3.17.4.1 Permitted Uses

- (b) In the B and CSB subdistricts: A Mixed-Use Building containing commercial use(s) on the ground floor, whether facing the street or otherwise, is permitted by right, provided that all upper floors shall be used as Multi-family Housing. Commercial uses are limited to the uses listed below:
 - i. Retail establishments serving the general public containing less than 5,750 gross square feet of floor area. In multi-tenanted structures the provisions of the section will individually apply to each tenant or use and not to the aggregate total of the structure.

- ii. Retail trade or shop for custom work or the making of articles to be sold at retail on the premises.
 - iii. Offices and banks.
 - iv. Craft, consumer, professional or commercial service establishment dealing directly with the public and not enumerated elsewhere in this section.
 - v. Personal fitness service establishment, provided all required off-street parking is provided on-site for all land uses located on the subject site and in adherence with the requirements of Section 5.1.2, Required Parking, absent any waivers from the provisions of Subsection 5.1.1.5 and 5.1.1.6.
 - vi. Manufacturing clearly incidental and accessory to retail use on the same premises and the product is customarily sold on the premises.
 - vii. Laundry; coin operated or self-service laundry or dry-cleaning establishment.
5. Amending Subsection 3.17.4. Use Regulations, by adding the following after Subsection 3.17.4.1 Permitted Uses and renumbering Subsection 3.17.4.2 Accessory Uses to 3.17.4.3:

3.17.4.2 Special Permit Uses in the B and CSB Subdistricts

The following uses are permitted by Special Permit from the Planning Board in the B and CSB sub-districts of the Multi-family Overlay District:

- (a) A Mixed-Use Building containing commercial use(s) listed below on the ground floor, whether facing the street or otherwise, and provided that all upper floors shall be used as Multi-family Housing:
 - i. Restaurant serving meals for consumption on the premises and at tables with service provided by waitress or waiter.
 - ii. Take-out operation accessory to the above.
 - iii. Take-out food counter as an accessory to a food retail or other non- consumptive retail establishment.
 - iv. Retail sales of ice cream, frozen yogurt, and similar products for consumption on or off the premises.
 - v. Take-out establishment primarily engaged in the dispensing of prepared foods to persons carrying food and beverage away for preparation and consumption elsewhere.
 - vi. Personal fitness service establishment, where there is insufficient off-street parking on-site to serve all land uses located thereon in adherence with the requirements of Subsection 5.1.2 Required Parking but where it can be demonstrated that the hours, or days, of peak parking for the uses are sufficiently different that a lower total will provide adequately for all uses or activities served by the parking lot.

6. Amending Section 3.17 Multi-family Overlay District by replacing the tables in Subsection 3.17.5 Dimensional Regulations with the tables below, with all other text, including footnotes, contained in Subsection 3.17.5 to remain unamended unless noted below:

3.17.5. Dimensional Regulations

Replace the table in Subsection 3.17.5.1 Lot Area, Frontage and Setback Requirements with the tables below:

Table 1A. Lot Area, Frontage and Setback Requirements

	A-1	B	ASB-MF	HAB	IND
Minimum Lot Area (square feet)	20,000	10,000	10,000	10,000	10,000
Minimum Lot Frontage (feet)	120	80	80	80	80
Minimum Front Setback (feet) from the front property line	25	10	Minimum 10 Maximum 15 ^d	20	25
Minimum Side and Rear Setback (feet)	20	20 ^{a, b}	10 ^{a, c}	20 ^{a, b}	20 ^{a, b}

Table 1B. Lot Area, Frontage and Setback Requirements

	CSB-E	CSB-W	CSB-GS	IND - C
Minimum Lot Area (square feet)	10,000	10,000	10,000	10,000
Minimum Lot Frontage (feet)	80	80	80	80
Minimum Front Setback (feet) from the front property line	Minimum of 5 feet or average of setbacks within 100 feet, whichever is smaller	Minimum of 5 feet or average of setbacks within 100 feet, whichever is smaller	Minimum of 10 feet or average of setbacks within 100 feet, whichever is smaller	25
Minimum Side and Rear Setback (feet)	20 (side) 30 (rear) ^{a, b}	20 ^{a, b}	20 ^{a, b}	20 ^{a, b}

And delete footnote (d).

And renumber footnote (e) as footnote (d).

Replace the table in Subsection 3.17.5.2 Building Height Requirements with the tables below:

Table 2A. Building Height Requirements

	A-1	B	ASB-MF	HAB	IND
Maximum Building Height (stories) ^d	4.0	4.0 4.5 with commercial ground floor or see 3.17.8.1	3.0 ^c	3.0	3.0
Maximum Building Height (feet) a, b, d	50	50 55 with commercial ground floor or see 3.17.8.1	40 ^c	40	40

Table 2B. Building Height Requirements

	CSB-E	CSB-W	CSB-GS	IND - C
Maximum Building Height (stories) ^d	3.0 3.5 with commercial ground floor or see 3.17.8.1	4.0 4.5 with commercial ground floor or see 3.17.8.1	3.0 3.5 with commercial ground floor or see 3.17.8.1	3.0
Maximum Building Height (feet) ^{a, b, d}	40 45 with commercial ground floor or see 3.17.8.1	50 55 with commercial ground floor or see 3.17.8.1	40 45 with commercial ground floor or see 3.17.8.1	40

And add new footnote (d):

(d) The requirements of Subsection 4.4.7 Business Use in Other Districts are not applicable to commercial ground floor uses in the MFOD.

Replace the table in Subsection 3.17.5.3 **Building Bulk and Other Requirements** with the tables below:

Table 3A. Building Bulk and Other Requirements

	A-1	B	ASB-MF	HAB	IND
Floor Area Ratio (FAR)	1.0	2.0	1.3 ^{b, c}	1.0	1.0
Maximum Building Coverage (%)	N/A	N/A	N/A	N/A	N/A
Maximum Dwelling Units per Acre ^a	36	48	44 ^d	24	24

Table 3B. Building Bulk and Other Requirements

	CSB-E	CSB-W	CSB-GS	IND - C
Floor Area Ratio (FAR)	2.0	2.0	2.00	0.75
Maximum Building Coverage (%)	N/A	N/A	N/A	N/A
Maximum Dwelling Units per Acre ^a	N/A	N/A	N/A	24

7. Amending Section 3.17 Multi-family Overlay District by inserting in Subsection 3.17.6 a new subsection (b), to read as follows:

(b) In addition to the parking required under section (a), above, each and every non-residential component of a Mixed-Use Building shall be required to provide a minimum number of off-street parking spaces calculated in accordance with Section 5.1.

and to re-letter existing subsections (b) through (f) in appropriate alphabetical order to account for this insertion.

8. Amending Section 3.17 Multi-family Overlay District by adding the following to Subsection 3.17.7 **Development Standards**, to read as follows:

(o) For a mixed-use building, entrances to ground-floor dwelling units shall be located on the side or rear of the building, not from any side facing the street, or the entrances may be from a first-floor lobby serving other uses in the building.

(p) For a mixed-use building, the ground floor of the front facade shall contain only retail or restaurant uses allowed by right or by special permit.

9. Amending Section 3.17 Multi-family Overlay District by adding a new paragraph to Subsection 3.17.8.1 **Provision of Affordable Housing**, immediately following the first paragraph, to read as follows:

3.17.8.1 Provision of Affordable Housing.

In the B and CSB subdistricts, an Applicant may provide an additional 7.5% of units as Workforce Housing Units in place of the requirement for a commercial ground floor to achieve the additional allowable height listed in Tables 2A and 2B under Subsection 3.17.5.2 Building Height Requirements.

10. Amending Section 3.17 Multi-family Overlay District by modifying the first line of Subsection 3.17.8.2 Affordable Housing Development Standards to read as follows:

Affordable Units, including Workforce Housing Units, shall be:

Or take any other action relative thereto.

ARTICLE 4: **AMEND ZONING BY-LAW – MAP CHANGE FOR MULTI-FAMILY OVERLAY DISTRICT (NEIGHBORHOOD HOUSING PLAN)**

To see if the Town will vote to amend the Needham Zoning By-Law by amending the Zoning Map, inclusive of those changes adopted under Article 2, as follows:

- (a) Place in the CSB-W Subdistrict of the Multi-family Overlay District a portion of land now zoned Chestnut Street Business and located directly to the west of Chestnut Street as shown on Needham Town Assessors Map 47, Parcels 72, 74-03, 74-04, 76, 77, 78, 79, 80, 83, 84, 85, 86, 87, 88, and 91, and Needham Town Assessors Map 46, Parcels 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 58, 59, 60, and 61, superimposing that district over the existing Chestnut Street Business district and removing the existing CSB Subdistrict of the Multi-family Overlay District, said description being as follows:

Beginning at the point of intersection of the easterly sideline of M.B.T.A and the southerly sideline of Keith Place; thence running southeasterly by the southerly sideline of Keith Place to the intersection with westerly sideline of Chestnut Street; southwesterly by the westerly sideline of Chestnut Street to the intersection with northerly sideline of property of M.B.T.A; northeasterly by the northerly sideline of M.B.T.A; northeasterly by the easterly sideline of M.B.T.A. to the point of beginning.

- (b) Place in the CSB-E Subdistrict of the Multi-family Overlay District a portion of land now zoned Chestnut Street Business and Single Residence B and located directly to the east of Chestnut Street as shown on Needham Town Assessors Map 46, Parcels 12, 13, 14, 15, 16, 17, 18, 19, 32, 33 and 34 superimposing that district over the existing Chestnut Street Business and Single Residence districts and removing the existing CSB Subdistrict of the Multi-family Overlay District, said description being as follows:

Beginning at the point on the easterly sideline of Chestnut Street, approximately four hundred and ninety-five 88/100 (495.88) feet from the intersection with southerly sideline of School Street; southeasterly by the southerly property line of Deaconess-Glover Hospital Corporation, one hundred and eighty-seven 68/100 (187.68) feet, more or less; southwesterly by the easterly property line of Deaconess-Glover Hospital Corporation, ninety-six 74/100 (96.74) feet, more or less; southwesterly by the westerly property line of Chaltanya Kadem and Shirisha Meda, eighty-two 80/100 (82.80) feet, more or less; southwesterly by the westerly property line of Huard, eighty-two 80/100 (82.80) feet, more or less; southwesterly by the westerly property line of Reidy, ninety-seven 40/100 (97.40) feet, more or less; northeasterly by the northerly property line of L. Petrini & Son Inc, fifteen 82/100 (15.82) feet, more or less; southwesterly by easterly property line of L. Petrini & Son Inc, one hundred and seventy-seven 77/100 (177.77) feet, more or less; northeasterly by the easterly property line of L. Petrini & Son Inc, one hundred and two 59/100 (102.59) feet, more or less; southwesterly by the easterly property line of L. Petrini & Son Inc, fifty 16/100 (50.16) feet, more or less; northeasterly by the easterly property line of L. Petrini & Son Inc, seven 39/100 (7.39) feet, more or less; southwesterly by the easterly property of Briarwood Property LLC, seventy-five (75.00) feet, more or less; northeasterly by the easterly property of Briarwood Property LLC, one hundred (100) feet, more or less; southwesterly by the easterly property of Briarwood Property LLC, two hundred and forty-nine 66/100 (249.66) feet, more or less; southeasterly by the southerly property of Briarwood Property LLC, two hundred ninety-three (293.28) feet, more or less; southwesterly by the easterly property of Veterans of Foreign Wars, one hundred and fifty (150) feet, more or less; northeasterly by the southerly property line of Veterans of Foreign Wars, eighty-five (85) feet, more or less; southwest by the easterly property of M.B.T.A, one hundred and sixty (160) feet, more or less; southeasterly by the northerly sideline of Junction Street to

intersection with easterly sideline of Chestnut; northeasterly by the easterly sideline of Chestnut Street to the point of beginning.

- (c) Place in the CSB-E Subdistrict of the Multi-family Overlay District a portion of land now zoned Chestnut Street Business and located at 433 Chestnut Street as shown on Needham Town Assessors Map 45, Parcel 6, superimposing that district over the existing Chestnut Street Business district and removing the existing CSB Subdistrict of the Multi-family Overlay District, said description being as follows:

Starting at the point of intersection of the westerly sideline of Chestnut Street and the southerly sideline of M.B.T.A.; southerly by the westerly sideline of Chestnut Street to the intersection with northerly sideline of M.B.T.A; southwesterly by the southerly property line of Castanea Dentata LLC, two hundred and twenty-eight 81/100 (228.81) feet, more or less; southwesterly by the southerly property line of Castanea Dentata LLC, one hundred and eight 53/100 (108.53) feet, more or less; northwesterly by the southerly property line of Castanea Dentata LLC, one hundred and thirty-six 6/100 (136.06) feet, more or less; northwesterly by the southerly property line of Castanea Dentata LLC, one hundred and ten 10/100 (110.10) feet, more or less; running northeasterly by the easterly sideline of M.B.T.A. to the point of beginning.

- (d) Place in the CSB-GS Subdistrict of the Multi-family Overlay District a portion of land now zoned Chestnut Street Business and located directly to the east of Garden Street as shown on Needham Town Assessors Map 51, Parcels 17, 20, 22, 23, superimposing that district over the existing Chestnut Street Business district and removing the existing CSB Subdistrict of the Multi-family Overlay District, said description being as follows:

Beginning at the point of intersection of the westerly sideline of M.B.T.A. and the northerly sideline of Great Plain Ave; thence running southwesterly by the northerly sideline of Great Plain Ave, nine 32/100 (9.32) feet, more or less; northeasterly by the westerly property line of Town of Needham, fifty-three 17/100 (53.17) feet, more or less; northeasterly by the westerly property line of Town of Needham, fifty-six 40/100 (56.40) feet, more or less; northeasterly by the westerly property line of Town of Needham, fifty-six 92/100 (56.92) feet, more or less; northwesterly by the westerly property line of Town of Needham, on an arch length one hundred and twelve 99/100 (112.99) feet, more or less; northeasterly by the westerly property line of Town of Needham, fifteen 10/100 (15.10) feet, more or less; northeasterly by the westerly property line of Town of Needham, one hundred and thirty-eight 83/100 (138.83) feet, more or less; southeasterly by the northerly property line of Town of Needham, thirty-three 42/100 (33.42) feet, more or less; northwesterly by the southerly property line of Eaton Square Realty LLC, forty (40) feet, more or less; northwesterly by the southerly property line of Eaton Square Realty LLC, eighty-one 99/100 (81.99) feet, more or less; northwesterly by the southerly property line of Eaton Square Realty LLC, fifty-eighty 31/100 (58.31) feet, more or less; northeasterly by the easterly sideline of Garden Street to intersection with May Street; northeasterly by the southerly sideline of May Street, sixty-one 33/100 (61.33) feet, more or less; southwesterly by the westerly sideline of M.B.T.A to the point of beginning.

- (e) Place in the A-1 Subdistrict of the Multi-family Overlay District a portion of land now zoned Industrial and Single Residence B and located directly to the south and east of Denmark Lane as shown on Needham Town Assessors Map 132, Parcel 2, superimposing that district over the existing Industrial and Single Residence B districts, and removing the existing IND Subdistrict of the Multi-family Overlay District, said description being as follows:

Beginning at the point of intersection of the westerly sideline of M.B.T.A. and the southerly sideline of Great Plain Ave; thence running southwesterly by the westerly line of M.B.T.A, four hundred

thirty-seven 24/100 (437.24) feet, more or less; southwesterly by the southerly property line of Denmark Lane Condominium, one hundred and eleven 17/100 (111.17) feet, more or less; northeasterly by the easterly property line of Denmark Lane Condominium, two hundred (200) feet, more or less; northwesterly by the southerly property line of Denmark Lane Condominium, one hundred and thirty-nine 75/100 (139.75) feet, more or less; northeasterly by the easterly sideline of Maple Street, one hundred and thirty-five (135) feet, more or less; southeasterly by the northerly property line of Denmark Lane Condominium, one hundred and forty (140) feet, more or less; southwesterly by the northerly property line of Denmark Lane Condominium, fifteen 20/100 (15.2) feet, more or less; northeasterly by the northerly property line of Denmark Lane Condominium, two 44/100 (2.44) feet, more or less; southwesterly by the northerly property line of Denmark Lane Condominium, thirty-three 35/100 (33.35) feet, more or less; northeasterly by the northerly property line of Denmark Lane Condominium, seventy-nine (79) feet, more or less; northwesterly by the northerly property line of Denmark Lane Condominium, thirteen 28/100 (13.28) feet, more or less; northeasterly by the northerly property line of Denmark Lane Condominium, forty-seven 50/100 (47.50) feet, more or less; northeasterly by the northerly property line of Denmark Lane Condominium, eighty-one 91/100 (81.91) feet, more or less; northeasterly by the southerly sideline of Great Plain Ave, twelve 28/100 (12.28) feet to the point of beginning.

- (f) Place in the A-1 Subdistrict of the Multi-family Overlay District a portion of land now zoned Single Residence B and located directly to the west of Highland Avenue and north of Hunnewell Street as shown on Needham Town Assessors Map 69, Parcel 37, superimposing that district over the existing Single Residence B district, said description being as follows:

Beginning at the point of intersection of the easterly sideline of the M.B.T.A and the northerly sideline of Hunnewell Street; thence running northwesterly by the easterly sideline of the M.B.T.A., on an arch one hundred and twenty-one 22/100 (121.22) feet, more or less; southeasterly by the northerly property line of The Suites of Needham LLC, one hundred and sixty 23/100 (160.23) feet, more or less; southwesterly by the easterly sideline of Highland Avenue to the intersection with northerly sideline of Hunnewell Street; northwesterly by the northerly sideline of Hunnewell Street to the point of beginning.

- (g) Remove from the A-1 Subdistrict of the Multi-family Overlay District a portion of land now zoned Apartment A-1 and Single Residence B and located east and west of Highland Avenue at Cottage Avenue as shown on Needham Town Assessors Map 70, Parcels 24 and 25, said description being as follows:

Beginning at the point on the westerly sideline of Highland Avenue, two hundred and seventeen 63/100 (217.63) from the arch on Webster Street; thence running southwesterly by the westerly sideline of Highland Avenue, three hundred and seventeen (317) feet, more or less; southeasterly across Highland Avenue, fifty (50) feet to a point on the easterly sideline of Highland Avenue; southeasterly by the northerly property line of Avery Park Condominium, two hundred and seventy-eight 75/100 (278.75) feet, more or less; northeasterly by the northerly property line of Avery Park Condominium, sixty-one (61.51) feet, more or less; northeasterly by the northerly property line of Avery Park Condominium, one hundred and seventy-nine 70/100 (179.70) feet, more or less; southwesterly by the westerly sideline of Webster Street, thirty-one 16/100 (31.16) feet, more or less; southwesterly by the southerly property line of Avery Park Condominium, one hundred and sixty-six 51/100 (166.51) feet, more or less; southwesterly by the southerly property line of Avery Park Condominium, one hundred and five 59/100 (105.59) feet, more or less; southwesterly by the southerly property line of Avery Park Condominium, one hundred and forty-four 62/100 (144.62) feet, more or less; northwesterly by the southerly property line of Avery Park Condominium, two hundred and seventy-seven 29/100 (277.29) feet, more or less; northwesterly

across Highland Avenue, fifty (50) feet to a point on the westerly side of Highland Avenue: northwesterly by the southerly property line of Hamilton Highlands LLC, one hundred and fifty-nine 45/100 (159.45) feet, more or less; southwesterly by the southerly property line of Hamilton Highlands LLC, ninety-seven 33/100 (97.33) feet, more or less; northwesterly by the northerly sideline of Cottage Avenue, forty (40) feet, more or less; southwesterly by the southerly property line of Hamilton Highlands LLC, fifteen (15) feet, more or less; northwesterly by the southerly property line of Hamilton Highlands LLC, twenty-five 54/100 (25.54) feet, more or less; northeasterly by the easterly sideline of M.B.T.A., five hundred and seventy-five 57/100 (575.57) feet, more or less; southeasterly by the northerly property line of Hamilton Highlands LLC, one hundred and forty-five 2/100 (145.02) feet, more or less; northeasterly by the northerly property line of Hamilton Highlands LLC, one hundred and one 57/100 (101.57) feet, more or less; southeasterly by the northerly property line of Hamilton Highlands LLC, one hundred and eighty 18/100 (180.18) feet, more or less; southeasterly by the northerly property line of Hamilton Highlands LLC, fifty-six 57/100 (56.57) feet to the point of beginning.

- (h) Place in the IND-C Subdistrict of the Multi-family Overlay District a portion of land now zoned Industrial and Single Residence B and located at Crescent Road as shown on Needham Town Assessors Map 98, Parcels 40 and 41, and Needham Town Assessors Map 99, Parcels 38, 39, 40, 61, 62, 63, and 88, superimposing that district over the existing Industrial and Single Residence B districts, and removing the existing IND Subdistrict of the Multi-family Overlay District, said description being as follows:

Beginning at the bound on easterly side of Hunnewell Street, approximately three hundred and thirty-two 35/100 (332.35) feet from the intersection with Hillside Avenue; thence running southwesterly by the easterly property line of Microwave Development Laboratories Inc, one hundred and ninety-one 13/100 (191.13) feet, more or less; southeasterly by the easterly property line of Microwave Development Laboratories Inc, sixty-eight 68/100 (68.75) feet, more or less; southeasterly by the easterly property line of Microwave Development Laboratories Inc, one hundred and thirty (130) feet, more or less; southeasterly by the easterly property line of Drack Realty LLC, seventy-three (73) feet, more or less; southwesterly by the easterly property line of Drack Realty LLC, one hundred and forty (140) feet, more or less; northeasterly by the northerly property line of Lally, forty-one (41) feet, more or less; southeasterly by the easterly property line of Lally, seventy-five (75) feet, more or less; southwesterly by the southerly property line of Lally, one hundred (100) feet, more or less; southwesterly to the center of Crescent Road, twenty (20) feet, more or less; southeasterly by the center of Crescent Road, twenty-nine (29) feet, more or less; southwesterly to a bound located twenty-nine feet from the angle point on the easterly side of Crescent Road; southwesterly by the southerly property line of 66 Crescent Road LL, four hundred and fifteen 60/100 (415.60) feet, more or less; northwesterly by the easterly property line of Town of Needham, fifty-two 37/100 (52.37) feet, more or less; northwesterly by the easterly property line of Town of Needham, one hundred and sixty-two 37/100 (162.37) feet, more or less; southwesterly by the easterly property line of Town of Needham, forty-five 76/100 (45.76) feet, more or less; northwesterly by the easterly property line of Town of Needham, one hundred and forty-three 92/100 (143.92) feet, more or less; northwesterly by the easterly property line of Town of Needham, fifteen 71/100 (15.71) feet, more or less; southwesterly by the easterly property line of Town of Needham, two hundred and forty-eight 40/100 (248.40) feet, more or less; northwesterly by the easterly property line of Town of Needham, fifty-three 33/100 (53.33) feet, more or less; northeasterly by the northerly property line of 166 Crescent Road LLC, five hundred and fifty-five 68/100 (555.68) feet, more or less; northeasterly to the center of Crescent Road, twenty (20) feet, more or less; northwesterly by the center of Crescent Road, fifty-six 47/100 (56.47) feet, more or less; northeasterly to the bound located four 38/100 (4.38) feet from the end of the Crescent Road; northeasterly by the northerly property line of Microwave Development Laboratories Inc, one

hundred and forty-six 29/100 (146.29) feet, more or less; southeasterly by the northerly property line of Microwave Development Laboratories Inc, fifty-four 82/100 (54.82) feet, more or less; northeasterly by the northerly property line of Microwave Development Laboratories Inc, fifty-four 21/100 (54.21) feet, more or less; southeasterly by the easterly property line of Microwave Development Laboratories Inc, one hundred and ninety-five 81/100 (195.81) feet, more or less; northeasterly by the easterly property line of Microwave Development Laboratories Inc, seven (7) feet, more or less; southeasterly by the easterly property line of Microwave Development Laboratories Inc, ninety-one (91) feet, more or less; northeasterly by the easterly property line of Microwave Development Laboratories Inc, one hundred and forty-two (142) feet, more or less; southeasterly by the easterly sideline of Hunnewell Street, twenty (20) feet to the point of beginning.

Or take any other action relative thereto.

7. ADMINISTRATION

7.1 Enforcement

This By-Law shall be enforced by the Board of Selectmen or by a Building Commissioner appointed by the Board. Any request for enforcement of this By-Law shall be in writing.

7.2 Building or Use Permit

7.2.1

No building or structure shall be constructed, relocated, added to or demolished without a permit having been issued by the Building Commissioner. No such permit shall be issued until such construction, alteration or use, as proposed, shall comply in all respects with the provisions of this By-Law or with a decision rendered by the Board of Appeals. Any application for such a permit shall be accompanied by a plot plan in triplicate, drawn to a scale of one (1) inch = forty (40) feet, showing the actual shape, area and dimensions of the lot to be built upon, the exact location and size of all buildings or structures already on the lot, the location of new buildings or structures to be constructed, together with the distance from said areas to the nearest point of the proposed structure, the existing and intended use of each building or structure and all streets and ways on, and adjacent to, the lot.

7.2.2

Simultaneous Issuance of a Demolition Permit and a Building Permit - The Building Commissioner is authorized to issue a building permit either simultaneously with or prior to a permit to demolish a structure on the same lot of land prior to the demolition of the existing structure. No construction of the new structure shall start, including excavation, until the demolition of the existing structure and proper disposal of the resulting debris has been completed and the Building Commissioner has closed out the demolition permit.

7.2.3

Plot plans shall show existing and approved abutting street grades, driveway locations and grades for any new construction, the proposed elevation of the top of the foundation and of existing and proposed buildings or structures and existing sewers, gas, water and other public utilities in the abutting street. Plot plans shall also show such other information as may be necessary to provide for the verification of compliance with the applicable provisions and the enforcement of this By-Law, including, but not limited to, off-street parking, screening and fencing. The Building Commissioner may waive any of the above requirements when they are not applicable. Plot plans shall be certified by a Massachusetts registered land surveyor. A record of all applications, plans and permits shall be kept on file by the Building Commissioner.

7.2.4

Construction or operations under a building or special permit shall conform to any subsequent amendment of this By-Law unless the use or construction authorized by this permit is commenced within a period of six (6) months after the issuance of the permit and in cases involving construction, unless such construction is continued through to completion as continuously and expeditiously as is reasonable.

7.2.5

Permit applications for all new structures and outdoor uses, exterior additions, exterior alterations and exterior changes in all areas zoned as a Business District, Industrial District, Industrial-1 District, Highway Commercial 1 District, or Institutional District (excluding single and two-family uses), which require a building permit under the Massachusetts State Building Code – but which are not related to construction projects previously reviewed by the Design Review Board as “Major” or “Minor Projects” under Section 7.4 Site Plan Review – shall be reviewed by the Design Review Board. (See Section 7.7 Design Review of this By-Law.) Prior to application to the Building Commissioner for such permits, an application to the Design Review Board for design review shall be made in accordance with the procedures described in Subsection 7.7.3. No application for such a building or use permit shall be made by the applicant nor accepted by the Building Commissioner, and no such permit shall be issued, until an advisory report has been received from the Design Review Board.

7.3 Occupancy Permit

7.3.1

No premises and no building erected, altered or in any way changed as to construction or use, under a permit or otherwise, shall be occupied or used without an occupancy permit signed by the Building Commissioner. Such permit shall not be issued until the premises, building or structure, and its uses and accessory uses comply in all respects with this By-Law. A record of all applications and occupancy permits shall be kept on file by the Building Commissioner.

7.3.2

An occupancy permit shall be conditional on the maintenance of full compliance with the provisions of this By-Law in effect at the time of issuance or with restrictions imposed in a decision of the Board of Appeals or Planning Board and shall lapse if such compliance fails.

7.4 Site Plan Review

7.4.1 Purpose

The purpose of this Section is to provide a comprehensive review procedure for construction projects, herein defined, to insure compliance with the goals and objectives of the Master Plan, and the provisions of the Zoning By-Law, to minimize adverse impacts of such development, and to promote development which is harmonious with surrounding areas.

7.4.2 Definitions

For the purposes of this Section the following definition of terms should apply to any construction project excluding single and two family homes.

MAJOR PROJECT – Any construction project which involves: the construction of 10,000 or more square feet gross floor area; or an increase in gross floor area by 5,000 or more square feet; or any project which results in the creation of 25 or more new off-street parking spaces.

In a Chestnut Street Business District, a **MAJOR PROJECT** is any construction project which involves: the new construction or reconstruction of any amount of gross floor area; or an increase in gross floor area of 1,000 or more square feet; or any project which results in the creation of 10 or more new off-street parking spaces; or any project which results in any new curb- or driveway-cut.

In a Business, Avery Square Business, or Hillside Avenue Business District, a **MAJOR PROJECT** is any construction project which involves a new building; or an addition which increases gross floor area of an existing building by 1,000 or more square feet; or any project which results in the creation of 10 or more new off-street parking spaces; or any project which results in any new curb- or driveway-cut.

In the Center Business District, a **MAJOR PROJECT** is any construction project which creates or adds gross floor area; or any project which involves a change in part or all of an existing building or lot from one use category to another as defined under Subsection 3.2.2 of this By-Law and which results in an increase in the number of required parking spaces by 10 or more new off-street parking spaces or which results in an increase in the required number of loading spaces; or any project which results in the construction of any additional off-street parking spaces; or any project which results in any new curb- or driveway-cut. Notwithstanding the aforementioned, if a special permit is otherwise required under Subsection 1.4 or Subsection 3.2.2 of this By-Law, the Planning Board shall be the Special Permit Granting Authority as to the use.

In the Neighborhood Business District, a **MAJOR PROJECT**, is any construction project which creates or adds gross floor area; or any project which involves a change in part or all of an existing building or lot from one use category to another as defined under Subsection 3.2.3 of this

By-Law and which results in an increase in the number of required parking spaces by 4 or more new off-street parking spaces or which results in an increase in the required number of loading spaces; or any project which results in the construction of any additional off-street parking space; or any project which results in any new curb- or driveway-cut.

In the Needham Center Overlay District, Lower Chestnut Street Overlay District, or Garden Street Overlay District, a **MAJOR PROJECT** shall be as defined above in the Center Business District.

In the Elder Services Zoning District a **MAJOR PROJECT** shall be defined as any construction project which involves the construction of 10,000 or more square feet gross floor area; or increase in gross floor area by 5,000 or more square feet; or any project which results in the creation of 25 or more off-street parking spaces; or any project that results in any new curb or driveway cut.

MINOR PROJECT – Any construction project which involves: the construction of more than 5,000 but less than 10,000 square feet gross floor area; or an increase in gross floor area such that the total gross floor area, after the increase, is 5,000 or more square feet – and the project cannot be defined as a Major Project.

In a Chestnut Street Business District, a **MINOR PROJECT** is any construction project which involves an increase in gross floor area of less than 1,000 square feet – and the project cannot be defined as a Major Project.

In a Business, Avery Square Business, or Hillside Avenue Business District, a **MINOR PROJECT** is any project which results in the construction of a new parking lot or expansion of an existing lot and the addition of from 1 to 9 new off-street parking spaces – and the project cannot be defined as a Major Project.

In the Center Business District, a **MINOR PROJECT** is any construction project which involves a change in the exterior façade of a building and the project is not a Major Project as defined by this By-Law. Notwithstanding any provision of this Section 7.4 requiring site plan approval by the Planning Board, any construction project which only involves a change in the exterior façade of a building shall be subject to review by and approval of the Design Review Board. Any person aggrieved by a decision of the Design Review Board may seek de novo review of the façade change from the Planning Board, which may approve or disapprove the façade change, by filing an application with the Planning Board within ten (10) days of the Design Review Board's filing of its decision with the Building Commissioner. At least seven days prior to the Planning Board's meeting scheduled to review the application (see next sentence), if the aggrieved party is the original applicant, said original applicant shall post a Planning Board approved form of notice of the meeting in a publicly visible location upon the subject building and place a copy of said approved form of notice in a local paper. Within twenty (20) days of receipt of the application, the Planning Board shall hold a meeting, to which the original applicant shall be invited, for the purpose of conducting a review of the proposed façade changes. Within fifteen (15) days of the

meeting, the Planning Board shall issue its decision and deliver copies of same to the applicant, the Design Review Board and the Building Commissioner.

In the Medical Overlay District, a **MAJOR PROJECT** is any construction project that involves the creation of twenty (20) or more new off-street parking spaces, any project that results in any new curb or driveway cut, or an increase in gross floor area of 5,000 or more square feet. A **MINOR PROJECT** is any construction project that involves an increase in gross floor area of more than 2,500 square feet but less than 5,000 square feet, and the project cannot be defined as a Major Project.

In the Needham Center Overlay District, Lower Chestnut Street Overlay District, or Garden Street Overlay District, a **MINOR PROJECT** shall be as defined above in the Center Business District.

In the Elder Services District a **MINOR PROJECT** shall be defined as any construction project which involves the construction of more than 5,000 but less than 10,000 square feet gross floor area; or an increase in gross floor area such that the total gross floor area after the increase is 5,000 or more square feet - and the project cannot be defined as a Major Project.

In the New England Business Center, Highland Commercial-128, Highway Commercial 1 District and Mixed Use-128 Districts a **MAJOR PROJECT** is any construction project that involves: the construction of 10,000 or more square feet gross floor area, an increase in gross floor area of 5,000 or more square feet, or any project that results in the creation of 25 or more new off-street parking spaces. A **MINOR PROJECT** is any construction project that involves the construction of more than 2,500 but less than 10,000 square feet gross floor area, an increase in gross floor area such that the total gross floor area after the increase is 5,000 or more square feet, and the project cannot be defined as a Major Project. Further, projects that require a building permit under the Massachusetts State Building Code, but which are not related to construction projects previously reviewed by the Design Review Board as “Major” or “Minor Projects” under Section 7.4 site plan review, shall be reviewed by the Design Review Board.

7.4.3 Requirements

A Site Plan Review shall be performed by the Planning Board for each major and minor project prior to the filing of an application for a building permit.

MINOR PROJECT WHICH REQUIRES A SPECIAL PERMIT FROM THE BOARD OF APPEALS UNDER SECTION 3.2 – In the case of a minor project which requires a special permit from the Board of Appeals, as identified in Section 3.2. Schedule of Use Regulations, the Planning Board shall perform a Site Plan Review and submit its recommendations to the Board of Appeals within thirty-five (35) days of the date of filing with the Planning Board; otherwise failure to make such recommendations shall be deemed a lack of opposition thereto. In the event the public hearing by the Board of Appeals is held prior to the expiration of the thirty-five (35) day period, the Board of Appeals shall continue the hearing to permit the submission of

recommendations within that period. The decision of the Board of Appeals shall contain explanatory reasons for its action if it is contrary to the recommendations of the Planning Board. The Planning Board may schedule a meeting(s) with the applicant during the review period.

MINOR PROJECTS – In the case of a minor project not requiring a special permit from the Board of Appeals and except as provided otherwise in Section 7.4.2 for a minor project that only involves a change in the exterior façade of a building in the Center Business District, the Planning Board shall conduct the Site Plan Review and issue a report to the applicant with a copy of said report to the Building Commissioner within thirty-five (35) days from the date of filing of the Site Plan. Failure of the Board to issue said report within the 35 days shall be construed as satisfying this section.

MAJOR PROJECTS – No building, use or occupancy permit for any improvement to real property which constitutes a Major Project under this By-Law shall be issued, except in accordance with the terms of a special permit for such project, after site plan review as further set forth herein. A special permit shall be required for every Major Project, regardless of whether the contemplated use thereof is designated as permissible, as of right or by special permit, under the table of uses set forth in Section 3.2 of this By-Law. The special permit granting authority for all permits the issuance of which is necessary for the construction or use of a Major Project shall be the Planning Board, which, for such purposes, shall have all the powers conferred upon such special permit granting authorities by General Laws Chapter 40A, and shall conduct its business in accordance with the notice, hearing and decisional requirements there set forth, and in accordance with the requirements of this By-Law.

Prior to issuance of a Certificate of Occupancy by the Building Department, the Building Commissioner or his designee shall transmit an approval of the completed project as conforming to the approved site plan special permit to the Planning Board.

7.4.4 Procedure

An application for Site Plan Review and ten (10) copies shall be submitted to the Planning Board concurrent with the submission of a copy to the Town Clerk. At the same time application materials shall be submitted to the Design Review Board, along with an application for design review, in accordance with the procedures described in Subsection 7.7.3 of Section 7.7. Design Review.

The applicant shall include in the application an itemized list of sections of the By-Law under which relief by special permit is or may be required for the construction or use of the project. The applicant shall certify either: (i) that the project can be constructed and/or the proposed use thereof commenced, without need for the issuance of any variance from any provision of this By-Law by the Zoning Board of Appeals, or (ii) that any and all variances necessary for the construction and/or use of the proposed project have been secured, and the period established by law for appeal from the granting thereof has expired without notice of any such appeal having been filed in the office of the Town Clerk.

Upon receipt of an application, the Planning Board shall transmit a set of application materials to the Department of Public Works, Town Engineer, Fire Department, Design Review Board and to any other Town agency as deemed appropriate. Within thirty-five (35) days of receipt of said application materials for Major Projects, each of the Town agencies named above shall review and recommend in writing to the Planning Board regarding the proposed Site Plan(s).

In addition to a preliminary design review report from the Design Review Board, as described in Section 7.7, the Design Review Board shall also submit a final design review report within seventy-five (75) days of the date of its having received an application for design review related to a Major Project.

In the case of Minor Projects, each of the Town agencies named above except the Design Review Board shall review and recommend in writing to the Planning Board within fifteen (15) days of receipt of said application materials regarding the proposed Site Plan. The advisory report of the Design Review Board shall be transmitted directly to the applicant and Building Commissioner within thirty-five (35) days of receipt of the application for Site Plan Review.

The application for Site Plan Review shall be accompanied by a site plan with supporting documentation which shall show, among other data, the following:

- (a) locus plan;
- (b) location of structures within 100 feet of property line;
- (c) existing and proposed building showing setback from property lines;
- (d) building elevation, to include penthouses, parapet walls and roof structures; floor plans of each floor; cross and longitudinal views of the proposed structure(s) in relation to proposed site layout, together with an elevation line to show the relationship to the center of the street;
- (e) existing and proposed contour elevations in one foot increments;
- (f) parking areas, including type of space, dimensions of typical spaces, and width of maneuvering aisles and landscaped setbacks;
- (g) driveways and access to site, including width of driveways and driveways openings;
- (h) facilities for vehicular and pedestrian movement;
- (i) drainage;
- (j) utilities;

- (k) landscaping including trees to be retained and removed;
- (l) lighting;
- (m) loading and unloading facilities;
- (n) provisions for refuse removal;
- (o) projected traffic volume in relations to existing and reasonably anticipated conditions;
and
- (p) other information as may be necessary to determine compliance with the provisions of the Zoning By-Law.

Upon request the Planning Board may, at its discretion, waive the submission by the applicant of any of the required information.

7.4.6 Review Criteria

In conducting the Site Plan Review, the Planning Board shall consider the following matters:

- (a) Protection of adjoining premises against seriously detrimental uses by provision for surface water drainage, sound and sight buffers and preservation of views, light, and air;
- (b) Convenience and safety of vehicular and pedestrian movement within the site and on adjacent streets, the location of driveway openings in relation to traffic or to adjacent streets and, when necessary, compliance with other regulations for the handicapped, minors and the elderly;
- (c) Adequacy of the arrangement of parking and loading spaces in relation to the proposed uses of the premises;
- (d) Adequacy of the methods of disposal of refuse and other wastes resulting from the uses permitted on the site;
- (e) Relationship of structures and open spaces to the natural landscape, existing buildings and other community assets in the area and compliance with other requirements of this By-Law; and
- (f) Mitigation of adverse impacts on the Town's resources including the effect on the Town's water supply and distribution system, sewer collection and treatment, fire protection, and streets; and may require when acting as the Special Permit Granting Authority or recommend in the case of minor projects, when the Board of Appeals is

acting as the Special Permit Granting Authority, such appropriate conditions, limitations, and safeguards necessary to assure the project meets the criteria of a through f.

7.5 Board of Appeals

The Board of Appeals consists of three (3) regular members and two (2) associate members as authorized and established by General Laws, Chapter 40A, the Special Home Rule Charter Act and Article VIII of the General By-Laws is the Board of Appeals intended and referred to in this By-Law. Subject to and consistent with all the authority, power and duties imposed upon the Board of Appeals by said General Laws, Special Home Rule Charter Act and the General By-Laws, said Board of Appeals shall exercise and perform the authority, powers and duties set forth therein, elsewhere in this By-Law and the following:

7.5.1 Appeals

To hear and decide an appeal taken by any person aggrieved by reason of his (her) inability to obtain a permit or enforcement action from the Building Commissioner under the provisions of General Laws, Chapter 40A and/or this By-Law, by the Metropolitan Area Planning Council or by any person including an officer or board of the Town of Needham or of any abutting city or town aggrieved by an order or decision of the Building Commissioner in violation of any provision of the General Laws, Chapter 40A or this By-Law.

7.5.2 Special Permits

To hear and decide an application for a special permit for a use, building, structure, off-street parking or loading, modification of dimensional standards, screening or landscaping, or other activity where it would not otherwise be permitted but only in those cases where this By-Law specifically refers to a change from the provisions of this By-Law by the granting of a special permit and only in those cases where the Board of Appeals makes the finding and determination set forth in subparagraph 7.5.2.1. An applicant is not entitled to a special permit and the Board of Appeals, in its discretion, may decline to grant a special permit if it is unable to make a positive finding and determination as required in subparagraph 7.5.2.1.

A special permit shall lapse within a specified period of time, not more than two years, and including any time required to pursue or await the determination of an appeal pursuant to General Laws, Chapter 40A, Section 17, and if a substantial use thereof has not sooner commenced except for good cause or in the case of a permit for construction has not begun within the period except for good cause.

7.5.2.1 Finding and Determination

Prior to granting a special permit, the Board of Appeals shall make a finding and determination that the proposed use, building, structure, off-street parking or loading, modification of dimensional standards, screening or landscaping, or other activity, which is the subject of the application for the special permit:

- (a) complies with such criteria or standards as may be set forth in the section of this By-Law which refers to the granting of the requested special permit;
- (b) is consistent with: 1) the general purposes of this By-Law as set forth in subparagraph 1.1, and 2) the more specific objectives and purposes applicable to the requested special permit which may be set forth elsewhere in this By-Law, such as, but not limited to, those at the beginning of the various sections;
- (c) is designed in a manner that is compatible with the existing natural features of the site and is compatible with the characteristics of the surrounding area.

Where the Board of Appeals determines that one or more of the following objectives are applicable to the particular application for a special permit, the Board of Appeals shall make a finding and determination that the objective will be met:

- (d) the circulation patterns for motor vehicles and pedestrians which would result from the use or structure which is the subject of the special permit will not result in conditions that unnecessarily add to traffic congestion or the potential for traffic accidents on the site or in the surrounding area; and
- (e) the proposed use, structure or activity will not constitute a demonstrable adverse impact on the surrounding area resulting from:
 - 1) excessive noise, level of illumination, glare, dust, smoke, or vibration which are higher than levels now experienced from uses permitted in the surrounding area,
 - 2) emission or discharge of noxious or hazardous materials or substances, or
 - 3) pollution of water ways or ground water.

7.5.2.2 Conditions for Approval of a Special Permit

In addition to the conditions, standards and criteria as may be set forth in the section of this By-Law that refers to the granting of the special permit, the Board of Appeals may impose additional conditions and limitations, as it deems necessary to insure that the finding and determination that it must make under subparagraph 7.5.2.1 is complied with, including but not limited to:

- (a) screening or landscaping of structures or of principal or accessory uses from view from adjoining lots or from a street, by planting, walls, fences or other devices; planting of larger planting strips, with more or larger plant materials or higher walls or fences than that required in Sections 4.2.14 and 4.4.8.5;
- (b) modification of the exterior features or appearance of a building or structure to ensure compatibility with surrounding buildings and uses;
- (c) limitations on the size, number of occupants or employees, method or hours of operation, extent of facilities or other operating characteristics of a use;
- (d) regulation of the number, design and location of access drives or other traffic features of the proposed use;
- (e) provision of a greater number of parking spaces or loading bays with estimates based on the ITE Parking Generation Manual, 2nd Edition, or an alternative technical source determined by the Board of Appeals to be equally or more applicable, but only in such cases that the Board of Appeals makes a finding that the proposed use generates parking demand in excess of that required by the By-Law;
- (f) limitations on construction activities, such as but not limited to, the hours during which construction activity may take place, the movement of trucks or heavy equipment on or off the site, measures to control dirt, dust, erosion and to protect existing vegetation on the site;
- (g) requirements for independent monitoring, at the expense of the applicant, and reporting to the Building Commissioner, if necessary to insure continuing compliance with the conditions of a special permit or of this By-Law;
- (h) limitations on the period of time the special permit shall be in effect; and
- (i) such other limitation as may be reasonably related to reducing any adverse impact on, or increasing the compatibility of the proposed use, structure or activity with, the surrounding area.

7.5.2.3 Security for Special Permits

The Board of Appeals, as a condition of granting a special permit may require that the performance of the conditions and observance of the safeguards of such special permit be secured by one, or in part by one and in part by the other, of the methods described in the following clauses (a) and (b). The Board of Appeals shall administer this securing of performance.

- (a) Bond or Deposit: By a proper bond or a deposit of money or negotiable securities or letter of credit, sufficient in the opinion of the Board of Appeals to secure performance of the conditions and observance of the safeguards of such special permit.
- (b) Covenant: By a covenant running with the land, executed and duly recorded by the owner of record, whereby the conditions and safeguards included in such special permit shall be performed before any lot may be conveyed other than by mortgage deed. Nothing herein shall be deemed to prohibit a conveyance by a single deed, subject to such covenant of the entire parcel of land, the development of which is governed by the special permit.

7.5.2.4 Reduction of Security

Until completion of the development, the penal sum of any deposit or security held under clause 7.5.2.3 (a) above may from time to time be reduced by the Board of Appeals by an amount not to exceed 85% of the value of work originally estimated.

7.5.2.5 Release of Security

Upon the completion of the development or upon performance of the conditions and safeguards imposed by such special permit, security for the performance of which was given, the applicant shall send by registered mail to the Board of Appeals an affidavit that the conditions and safeguards in connection with which such security has been given have been complied with. If the Board of Appeals determines that the conditions and safeguards of the special permit have been complied with, it shall release the interest of the Town in such security, return or release the security to the person who furnished the same, or release the covenant by appropriate instrument, duly acknowledged. If the Board of Appeals determines that the conditions or safeguards included in the special permit have not been complied with, it shall specify the conditions or safeguards with which the applicant has not complied in a notice sent by registered or certified mail, to the applicant.

7.5.2.6 Board of Appeals Failure to Act

If the Board of Appeals fails to send such a notice within sixty days after it receives the applicant affidavit, all obligations under the security shall cease and terminate, any deposit shall be returned and any such covenant become void.

7.5.2.7 Applicant Failure to Complete Work

Upon failure of the applicant to complete such work to the satisfaction of the Board of Appeals in accordance with all applicable plans, regulations and specifications, the Town shall be

entitled to enforce such bond or to realize upon such securities to the extent necessary to complete all such work without delay.

7.5.3 Variances

To hear and decide a petition with respect to particular land or structures for a variance from the terms of this By-Law, including a variance authorizing a use or activity not otherwise permitted in a particular zoning district, where the Board specifically finds that owing to circumstances relating to soil conditions, shape or topography of such land or structures and especially affecting such land or structures but not affecting generally the zoning district in which it is located, a literal enforcement of the provisions of the By-Law would involve substantial hardship, financial or otherwise, to the petitioner or appellant, and that desirable relief may be granted without substantial detriment to the public good and without nullifying or substantially derogating from the intent or purpose of this By-Law. The Board of Appeals may impose conditions, safeguards and limitations both in time and use, including the continued existence of any particular structures but excluding any condition, safeguard or limitations based upon the continued ownership of the land or structure to which the variance pertains by the applicant, petitioner or any owner. If the rights authorized by a variance are not exercised within one year of the date of the authorization, they shall lapse and may be re-established only after a new notice and hearing.

In the case of every appeal made to the Board of Appeals, every petition for a variance, and every application for a special permit to said Board under the provisions of this By-Law, the Board shall hold a public hearing thereon. Notice of the hearing shall be given by publication in a newspaper of general circulation in the Town once in each of two successive weeks, the first publication to be not less than fourteen days before the day of the hearing and by posting said notice in the Town Hall for a period of not less than fourteen days before the day of the hearing. Notice shall be sent by mail, postage prepaid, to parties in interest including the petitioner, abutters, owners of land directly opposite on any public or private street or way, owners of land within three hundred (300) feet of the property line including owners of land in another municipality all as they appear on the most recent applicable tax lists, the Planning Board, and the Planning Board of every abutting municipality. The assessors shall certify to the Board the names and addresses of the parties in interest.

In the case of an appeal from a decision of the Building Commissioner and of a variance, a petition shall be filed with the Town Clerk, who shall forthwith transmit it to the Board of Appeals. The Board shall hold a public hearing within sixty-five (65) days of receipt of the petition from the Town Clerk and shall render a decision within one hundred (100) days from the date of filing, unless said time limits for holding the public hearing or rendering a decision have been extended by written mutual agreement between the petitioner and the board, such agreement(s) having been filed with the Town Clerk. Failure by the Board to take final action upon a petition within the one-hundred day period, or any mutually extended time period, shall be deemed to be a grant of the appeal or the variance applied for. (See M.G.L., Ch. 40A, S.15 as amended for further procedural requirements.)

In case of a special permit, an application shall be filed with the Town Clerk who shall forthwith transmit it to the Board of Appeals. The Board shall hold a public hearing within sixty-five (65) days of the filing date and shall render a decision within ninety (90) days from the date of the public hearing, unless said time limits for holding the public hearing or rendering the decision have been extended by written mutual agreement between the petitioner and the Board, such agreement(s) having been filed with the Town Clerk. Failure to take final action upon an application within the said ninety-day period shall be deemed to be a grant of the permit applied for. (See M.G.L., Ch. 40A, S. 9 as amended for further procedural requirements.)

7.6 Planning Board

7.6.1 Special Permit Granting Authority

The Planning Board shall act as a Special Permit Granting Authority only where so designated in Sections 3.4, 3.8, 3.9, 3.10, 3.14, 3.16, 4.2.10, 4.2.11, 4.2.12, 4.4.5, 4.4.9, 4.4.10, 5.1.1.6, 6.6, 6.8 and 7.4 of this By-Law. In all other cases, the Board of Appeals shall act as the Special Permit Granting Authority. Procedures and decision criteria for the Planning Board shall be the same as specified in Section 7.5.2 and Section 7.5.3 (second and fourth paragraphs) for special permits acted on by the Board of Appeals, except where alternative or supplemental criteria are specified, such as at Sections 3.4 and 6.6.

7.6.2 Recommendations to the Board of Appeals

Any application filed with the Board of Appeals under Section 7.5 hereof shall be referred upon acceptance of the application by the Board of Appeals to the Planning Board for a report and recommendation relative thereto as provided by General Laws, Chapter 41, Section 81-I, and Chapter 40A, Section 11. The Planning Board shall make its report to the Board of Appeals by the date of the public hearing. Failure to make recommendations within thirty-five (35) days of receipt of the application by the Planning Board shall be deemed lack of opposition thereto.

7.7 Design Review

7.7.1 Purpose

It is the intent of this Section to provide for a detailed design review of structures and that aspect of design related to uses having substantial impact on the Town, upon its traffic, infrastructure and property values, thereby affecting the public health, safety and general welfare; to prevent blight; to enhance the natural and aesthetic qualities of the Town; to conserve the value of land and buildings; and to protect and preserve the historic and cultural heritage of the Town.

7.7.2 Design Review Board

7.7.2.1 Composition

For the purposes of this Section 7.7, there shall be a Design Review Board appointed by the Planning Board and Board of Selectmen and consisting of five regular members plus two alternate members. Three regular members of the Design Review Board shall be appointed by the Planning Board and two regular members plus the two alternate members shall be appointed by the Board of Selectmen. Each of the persons appointed shall be a resident of the Town of Needham. In part, the persons appointed as regular members shall have the following backgrounds and skills:

- (a) Two members qualified by training or education and experience in the art or design professions – one to be appointed by the Planning Board and one by the Board of Selectmen;
- (b) One member qualified by training or education and experience in the fine arts or landscape design to be appointed by the Planning Board;
- (c) One member doing retail business in the Town to be appointed by the Board of Selectmen.

Upon the initial formation of the Board, the Planning Board and Board of Selectmen shall appoint two alternates and one regular member to 1-year terms, two regular members to 2-year terms, and two regular members to 3-year terms; their successors shall be appointed for terms of three years. Three members shall constitute a quorum for meetings, and all actions of the Design Review Board shall require an affirmative vote of three or more members. In the event a regular member is unable or refuses to sit, the Chairman of the Design Review Board shall designate an alternate to sit in place of that absent member.

7.7.2.2 Authority and Specific Powers

The Design Review Board shall review requests for site plan review and approval submitted in accordance with Section 7.4 Site Plan Review and requests for special permits in accordance with Section 4.2.11 Planned Residential Development, Section 4.2.10 Flexible Development and Section 6.11 Retaining Walls and, for a minor project that only involves a change in the exterior façade of a building in the Center Business District, shall review and may approve such façade change.

The Design Review Board shall review permit applications for all new structures and outdoor uses, exterior additions, exterior alterations and exterior changes in all areas zoned as a Business District, Chestnut Street Business District, Lower Chestnut Street Overlay District, Garden Street Overlay District, Center Business District, Needham Center Overlay District, Avery Square Business District, Hillside Avenue Business District, Neighborhood Business District, New England

Business Center District, Highland Commercial-128 District, Mixed Use-128 District, Industrial District, Elder Services Zoning District, Industrial-1 District, Highway Commercial 1 District or Institutional District (excluding single and two-family uses), which require a building permit under the Massachusetts State Building Code – but which are not related to projects previously reviewed as “Major” or “Minor Projects” under Site Plan Review. The Design Review Board shall review requests from the Building Commissioner, as required under Section 3.16.3.2 of the By-Law. The Design Review Board shall also review requests for all sign permits, as required under Article 5 of the Needham General By-Laws.

It shall evaluate such requests based on Subsection 7.7.4 Design Criteria below. Its findings and recommendations, along with any suggested restrictions and conditions, shall be transmitted to the applicant and Planning Board, acting as a special permit granting authority for “Major Projects” under Site Plan Review, Planned Residential Developments and Flexible Developments and to the applicant and Board of Appeals, acting as a special permit granting authority, under Section 6.11 Retaining Walls. Such advisory reports of the Design Review Board shall be transmitted to the Building Commissioner and applicant in all other instances as described in the two paragraphs above for “Minor Projects” under Site Plan Review, building permits in all non-residential districts, requests from the Building Commissioner under Section 3.16.3.2 and sign permits. For a minor project that only involves a change in the exterior of a building in the Center Business District, the Design Review Board shall be the review and approval entity for such façade changes.

7.7.3 Procedure

An application for Design Review shall be submitted to the Design Review Board simultaneously with any application submitted to the Planning Board for Site Plan Review, Planned Residential Development or Flexible Development, or prior to any application for a building permit or any construction activity as described in the second paragraph of Subsection 7.7.2.2 (See Section 7.2 of the By-Law for application procedure for such building permits and Article 5 of the General By-Laws for application procedure for all sign permits.)

Within twenty (20) days of receipt of a Design Review application, the Design Review Board shall hold a meeting, to which the applicant shall be invited, for the purpose of conducting a review of the proposed project or activity. Within fifteen (15) days of the meeting, a preliminary design review report shall be sent both to the applicant and to the Planning Board, when a special permit is required under Sections 7.4, 4.2.11 and 4.2.10. However, if the proposed project or activity involves only a building permit or sign permit from the Building Commissioner, or is a “Minor Project” under Site Plan Review (all as described in Subsection 7.7.2.2), no preliminary report is required and the written advisory report of the Design Review Board to the applicant and the Building Commissioner shall be a final report.

In connection with the Design Review Board’s authority to review and approve exterior façade changes in the Center Business District pursuant to Section 7.4.2, an application shall be submitted to the Design Review Board. At least seven days prior to the Design Review Board meeting scheduled to review the application (see next sentence), the applicant shall post a Planning

Board approved form of notice of the meeting in a publicly visible location upon the subject building and place a copy of said approved form of notice in a local paper. Within twenty (20) days of receipt of the application, the Design Review Board shall hold a meeting, to which the applicant shall be invited, for the purpose of conducting a review of the proposed exterior façade changes. Within fifteen (15) days of the meeting, the Design Review Board shall issue its decision and deliver copies of same to the applicant, the Planning Board and the Building Commissioner.

In the case of a Special Permit for Site Plan Review, Planned Residential Development or Flexible Development, a preliminary design review report shall be submitted to the Planning Board, with a copy to the applicant, within thirty-five (35) days of the date of receipt of the application. A final advisory report shall be issued to the applicant and to the Planning Board within seventy-five (75) days of the date of receipt of the application for Design Review.

In addition to the submission materials listed in Sections 4.2.11 Planned Residential, 7.4 Site Plan Review or 7.2 Building or Use Permit, respectively, an application for Design Review shall contain the requisite number of materials listed in the “Rules and Regulations” of the Design Review Board.

7.7.4 Design Criteria

The Design Review Board shall review requests for site plan reviews and special permits, as well as for building permits for certain construction activities, all as described in Subsection 7.7.2.2, based on the following standards:

- (1) Preservation and enhancement of landscaping – The landscaping shall be preserved in its natural state, insofar as practicable, by minimizing tree and soil removal, and any grade changes shall be in keeping with the general appearance of neighboring developed areas.
- (2) Relation of buildings to environment – Proposed development shall be related harmoniously to the terrain and to the use, scale and architecture of existing buildings in the vicinity that have functional or visual relationship to the proposed buildings. Proposed buildings shall be related to their surroundings with respect to:
 - (a) height
 - (b) street façade
 - (c) spatial relationships of solids and voids
 - (d) spacing of buildings or signs
 - (e) materials, textures and colors
 - (f) roof slopes
 - (g) scale

- (3) Open Space – All open space (landscaped and usable) shall be designed to add to the visual amenities of the area by maximizing its visibility for persons passing the site or overlooking it from nearby area properties.
- (4) Signs and advertising devices – The size, location, design, color, texture, lighting and materials of signs and advertising devices shall be in harmony with significant architectural features of existing and proposed buildings and structures and with surrounding properties.
- (5) Heritage – Protection and enhancement of historic, traditional or significant uses, structures, or architectural elements shall be considered insofar as practicable.

In addition, to paragraph (4) above, the Design Review Board shall review requests for sign permits according to the design guidelines listed in Section 3.5 of Article 5 of the General By-Laws.

For requests for site plan reviews and special permits in the Needham Center Overlay District, the Lower Chestnut Street Overlay District and the Garden Street Overlay District, the Design Review Board shall consider, in addition to paragraphs (1) through (5) above, the design guidelines set forth in Sections 3.8, 3.9 and 3.10 of this By-Law.

7.8 Repetitive Petitions

7.8.1

No proposed change in this By-Law which has been unfavorably acted upon by the Town Meeting shall be considered on its merits by the Town Meeting within two (2) years after the date of such unfavorable action unless adoption of the proposed change is recommended in the final report of the Planning Board.

7.8.2

No appeal, application or petition which has been unfavorably and finally acted upon by the Board of Appeals shall be acted favorably upon within two years after the date of final unfavorable action unless (1) all but one of the members of the Planning Board consent to a repetition after notice is given to parties in interest of the time and place of the proceedings to consider consent and (2) the Board of Appeals finds specific and material changes in the conditions upon which the previous unfavorable action was based, describes such changes in its records and similarly consents.

7.9 Penalties

Any person, firm or corporation violating any section or provision of this By-Law shall be subject to a fine not exceeding one hundred dollars (\$100.00) for the first offense and three hundred dollars (\$300.00) for each subsequent offense. Each day, or part thereof, that any violation continues shall constitute a separate offense.

7.10 Amendment

This By-Law may be amended from time to time at an Annual or Special Town Meeting. An amendment may be initiated by the submission to the Board of Selectmen of a proposed change by the Board of Selectmen, the Board of Appeals, an individual owning land in the Town to be affected by the amendment, registered voters of the Town pursuant to General Laws, Chapter 39, Section 10, the Planning Board and the Metropolitan Area Planning Council. Within fourteen (14) days of the receipt of the proposed change, the Board of Selectmen shall submit it to the Planning Board. A public hearing shall be held within sixty-five (65) days after the proposed change is submitted to the Board.

7.11 Severability

The invalidity of any section or provision of this By-Law shall not invalidate any other section or provisions thereof.

7.12 Effective Date

The effective date of an amendment to this By-Law shall be the date on which such amendment was adopted by a favorable two-thirds vote of Town Meeting, subject to its approval by the Attorney General and its publication in a town bulletin or pamphlet and posting or publication in a newspaper pursuant to General Laws, Chapter 40, Section 32.

8. Temporary Moratorium on the Sale and Distribution of Recreational Marijuana

8.1 Purpose

By vote at the State election on November 8, 2016, the voters of the Commonwealth approved Chapter 334 of the Acts of 2016, which was amended by Chapter 351 of the Acts of 2016, regulating the cultivation, distribution, possession and use of marijuana for recreational purposes. The law as amended provides that it is effective on December 15, 2016 and the Cannabis Control Commission is required to issue regulations regarding implementation by March 15, 2018.

Currently under the Zoning By-Law, Recreational Marijuana Establishments and Marijuana Retailers are not a permitted use in the Town and any regulations promulgated by the State Cannabis Control Commission are expected to provide guidance to the Town in regulating Recreational Marijuana Establishments and Marijuana Retailers. Further, Chapter 334 establishes two important provisions that relate to ballot action that the Town may wish to take prior to the adoption of Zoning By-Law amendments relating to Recreational Marijuana Establishments. First, under Section 3 of General Laws Chapter 94G inserted by Section 5 of Chapter 334 the Town may, by ballot, determine whether it will adopt a By-Law that will limit the number of marijuana establishments in the Town or govern the time, place and manner of marijuana establishment operations in such a way as to require a vote of the voters of the Town and second, by ballot that cannot occur prior to November 6, 2018, the next biennial state election, on whether to allow on-site consumption of marijuana products.

The regulation of Recreational Marijuana Establishments and Marijuana Retailers raise novel and complex legal, planning, and public safety issues and the Town needs time to study and consider the regulation of Recreational Marijuana Establishments and Marijuana Retailers and address such novel and complex issues, as well as to address the potential impact of the State regulations on local zoning and to undertake a planning process to consider amending the Zoning By-Law regarding regulation of Recreational Marijuana Establishments and Marijuana Retailers and other uses related to the regulation of recreational marijuana. The Town intends to adopt a temporary moratorium on the use of land and structures in the Town for Recreational Marijuana Establishments and Marijuana Retailers so as to allow the Town sufficient time to engage in a planning process to address the effects of such structures and uses in the Town and to adopt provisions of the Zoning By-Law in a manner consistent with sound land use planning goals and objectives.

8.2 Definitions

“Manufacture”, to compound, blend, extract, infuse or otherwise make or prepare a marijuana product.

“Marijuana accessories”, equipment, products, devices or materials of any kind that are intended or designed for use in planting, propagating, cultivating, growing, harvesting, manufacturing, compounding, converting, producing, processing, preparing, testing, analyzing, packaging, repackaging, storing, containing, ingesting, inhaling or otherwise introducing marijuana into the human body.

“Marijuana cultivator”, an entity licensed to cultivate, process and package marijuana, to deliver marijuana to marijuana establishments and to transfer marijuana to other marijuana establishments, but not to consumers.

“Marijuana establishment”, a marijuana cultivator, marijuana testing facility, marijuana product manufacturer, marijuana retailer or any other type of licensed marijuana-related business, not including any registered or medical marijuana dispensary as authorized by Chapter 369 of the

Acts of 2012 – An Act for the Humanitarian Medical Use of Marijuana or as regulated by Massachusetts Department of Public Health Regulations 105 CMR 725.000.

“Marijuana product manufacturer”, an entity licensed to obtain, manufacture, process and package marijuana and marijuana products, to deliver marijuana and marijuana products to marijuana establishments and to transfer marijuana and marijuana products to other marijuana establishments, but not to consumers.

“Marijuana products”, products that have been manufactured and contain marijuana or an extract from marijuana, including concentrated forms of marijuana and products composed of marijuana and other ingredients that are intended for use or consumption, including edible products, beverages, topical products, ointments, oils and tinctures.

“Marijuana testing facility”, an entity licensed to test marijuana and marijuana products, including certification for potency and the presence of contaminants.

“Marijuana retailer”, an entity licensed to purchase and deliver marijuana and marijuana products from marijuana establishments and to deliver, sell or otherwise transfer marijuana and marijuana products to marijuana establishments and to consumers, not including any registered or medical marijuana dispensary as authorized by Chapter 369 of the Acts of 2012 – An Act for the Humanitarian Medical Use of Marijuana or as regulated by Massachusetts Department of Public Health Regulations 105 CMR 725.000.

8.3 Temporary Moratorium.

For the reasons set forth above and notwithstanding any other provision of the Zoning By-Law to the contrary, the Town hereby adopts a temporary moratorium on the use of land or structures for Recreational Marijuana Establishments and Marijuana Retailers and the sale of marijuana, but not including any marijuana sold for medical purposes by a registered or medical marijuana dispensary as authorized by Chapter 369 of the Acts of 2012 – An Act for the Humanitarian Medical Use of Marijuana or as regulated by Massachusetts Department of Public Health Regulations 105 CMR 725.000. The moratorium shall be in effect through December 31, 2018. During the moratorium period, the Town shall undertake a planning process to address the potential impacts of recreational marijuana in the Town, consider the Cannabis Control Commission regulations regarding Recreational Marijuana Establishments and Marijuana Retailers and related uses, determine whether the town shall limit the number of marijuana establishments in the Town or govern the time, place and manner of marijuana establishment operations, determine whether the town will prohibit on-site consumption at Recreational Marijuana Establishments and Marijuana Retailers and shall consider adopting new provisions of the Zoning By-Law to address the impact and operation of Recreational Marijuana Establishments and Marijuana Retailers and related uses.

8.4 Severability.

The provisions of this By-Law are severable. If any provision, paragraph, sentence, or clause of this By-Law or the application thereof to any person, establishment, or circumstances shall be held invalid.

District	Units developed since the Needham Center Plan was implemented, upgrading the zoning, 2009	Base Plan: Likely Built	Base Plan: Full Build	NHP: Likely Build	NHP: Full Build
Apartment A1	0	0	526	82	877
Business	0	43	210	111	305
Avery Square Business	0	189	189	189	189
Chestnut Street East	0	50	370	137	547
Chestnut Street West	5			560	732
Chestnut Street Business - Garden	0			33	75
Center Business	10	N/A	N/A	N/A	N/A
Hillside Avenue Business	0	8	80	6	62
Industrial – Crescent	0	121	495	79	184
Industrial - Hillside	0			91	325
TOTAL UNITS	15	411	1,870	1,288	3,296

MEMORANDUM

TO: Needham Planning Board
FROM: Katie King, Deputy Town Manager
SUBJECT: MBTA Communities Act Zoning Proposals School Enrollment Analysis
DATE: September 20, 2024

Putting Zoning Projections into Context

The goal of analyzing a zoning proposal is to provide the Town with projections, not exact predictions.

As you know, zoning bylaws establish options of what an owner can do with their property relative to the size and number of buildings and how they are used. The Planning Board's zoning proposals under the MBTA Communities Act add options for property owners to those that already exist in the Town's zoning bylaw. Zoning sets parameters for what is possible, but ultimately it is up to each owner to decide if they will (re)develop their property and how based on the various options available to them.

Unlike zoning proposals that are prompted by a site-specific development project, the zoning proposals before the Planning Board set a proactive vision for the possibility of development across roughly 100 acres near the Needham Junction, Needham Center, and Needham Heights commuter rail stations.

Since this is zoning and not a specific development proposal, there are many variables that cannot be known. However, the Town can make reasonable assumptions about these variables to give a directional sense of what to anticipate in the future. These projections help inform decision makers about potential trade-offs and benefits of the zoning proposals. The Town will also use these projections as a starting point for operational and capital planning and will update assumptions annually as zoning possibilities materialize into actual projects and new, more specific information is known.

Updated Unit and Student Projections

At your September 17th meeting, the Board voted to retain a floor area ratio (FAR) of 1.3, by right, in the Avery Square Business District (100 West Street parcel) but capped the number of allowable units at 190. A maximum dwelling units per acre of 44 was applied to this district in the draft zoning language to accomplish this goal, which resulted in 189 units under the MBTA Communities Act compliance model. This zoning change results in a decrease of 54 units and a decrease of 7 students in each scenario below. There are no other changes in these projections compared to those presented at the Board's public hearing on September 5.

RKG Projections (updated 09/19/2024)	Units	Students
Base Compliance Plan: Likely Build	411	55
Base Compliance Plan: Full Build	1,870	236
Neighborhood Housing Plan: Likely Build	1,288	164
Neighborhood Housing Plan: Full Build	3,296	415

School Enrollment Projections vs. Actuals

At your September 17th meeting, I presented a more detailed analysis of the student enrollment projections from RKG Associates compared with the student generation rates that Needham has experienced over the last five years from three large multi-family housing developments. This analysis concluded that the RKG projections are consistent with Needham's experience over the last five years. Appendix 1, *Student Projections vs. Actuals, Updated 09/19/2024*, has been updated to reflect the reduction of units and students due to the unit cap in the Avery Square Business District (100 West St).

Future School Needs Committee

Needham's Future School Needs Committee, including members from the School Committee, Select Board, and Finance Committee, meets annually with the School Superintendent and the Assistant Superintendent for Finance & Operations to review enrollment projection assumptions that will be used to generate updated enrollment forecasts for the district. The Committee has begun its process for the 2025/26 - 2039/40 Enrollment Forecast.¹

McKibben Demographics is the Needham Public Schools' consultant who is responsible for the annual enrollment forecasts. To ensure that McKibben and RKG are using pupil generation multipliers consistently, Lee Newman, Director of Planning and Community Development, Anne Gulati, NPS Assistant Superintendent for Finance & Operations, and I met with McKibben. McKibben agreed with the assumptions used in RKG's calculations and will use these multipliers in the updated forecast, which is anticipated to be finalized in December 2024.

School Capacity Analysis

At your September 17th meeting, I also presented a school capacity analysis to put student projections into context of the Needham Public School's Master Plan to better understand potential capital impacts. The methodology used to project if the school master plan would be able to accommodate additional students was as follows:

- Start with McKibben's peak enrollment projection for NPS over the next 15 years.
- Add the RKG student projections to get a total enrollment projection.
- Compare that total enrollment projection to the school capacity of the preferred School Master Plan Scenarios C1a (renovate Pollard for grades 6-8, High Rock becomes a 6th elementary school, Mitchell renovated as 3-section school) and C2 (C1a, but with a 4-section Mitchell School).

The most conservative aspect of the School Capacity Analysis methodology was the proportion of the RKG students applied to each school level. All projected students were assumed to enter the elementary level (46% of current NPS students are at the elementary level), all projected students were assumed to enter the middle school (23% of current NPS students are in middle school), and half of the projected students were assumed to enter high school (30% of current NPS students are in high school). This methodology overestimates the likely impact at each school level, providing a worst-case scenario. This approach was particularly conservative on the middle school level out of recognition that the Pollard School is in the process of transitioning from a concept in the School Master Plan to a building project.

¹ A. Gulati memo, Future School Needs Committee, 09/17/2024
<https://docs.google.com/document/d/1eyCesz24EdcRgl11njFtb31uZTf8Bd5/edit>

The analysis concluded that the School Committee's preferred master plan scenarios (C1a and C2) would accommodate the student projections for both the Base Plan and the Neighborhood Housing Plan Likely build outs at the elementary and middle school levels. The student projections from the Neighborhood Housing Plan Likely build out would exceed high school capacity (1800 seats) by 11 students (or < 1%).

MSBA Pollard Reconstruction

In December 2023, the Massachusetts School Building Authority (MSBA) invited the Town of Needham into its Eligibility Period for the Pollard Middle School. This is the beginning of the MSBA's grant approval process, through which they will decide on whether to partner with the Town in funding a new or renovated Pollard. One step in this process is an agreement between the MSBA and the Town on what student enrollment number the new building, if funded, would be designed to accommodate. On September 17, the MSBA provided the Town with its final enrollment figure for a Grade 6-8 Pollard School at 1,335 students.

The MSBA's letter (enclosed) indicates that its original enrollment projection was 1,290 students but after further discussions with the school district, enrollment was adjusted upwards to reflect fluctuations in out-of-district enrollment patterns (10 students added), new housing developments in town (15 students added), and potential zoning changes due to the MBTA Communities Act (20 students added).

Appendix 2, *School Capacity Analysis, Updated 09/19/2024*, has been updated to reflect the MSBA's conclusions that 20 students will enter middle school due to the zoning and the Pollard capacity is 1,335 students. An assumption of 60 students entering middle school under the Neighborhood Likely Build is extrapolated from the 20 applied to the Base scenario, representing three times the figure in the Base and roughly one third of the RKG student projection for the Neighborhood Likely Build Out. The analysis has also been updated to reflect the reduction of units and students due to the unit cap in the Avery Square Business District (100 West St). The specific numbers in these analyses will continue to move over time, as McKibben updates enrollment forecasts annually and planning documents (including both the zoning proposals and the School Master Plan) evolve into more concrete projects.

Under this updated analysis, student projections from the Base Compliance Plan Likely Build Out would exceed the MSBA enrollment capacity by 34 students (2.5%). Student projections from the Neighborhood Housing Plan Likely Build Out would exceed the MSBA enrollment capacity by 74 students (5.5%).

The Town's most recent project in partnership with the Massachusetts School Building Authority was the Sunita Williams Elementary School. The MSBA's final enrollment for the design of SWES was 430 students. The current enrollment at SWES is 534 students (24% above the design capacity). The school district regularly manages some amount of fluctuation in student populations within each school.

MBTA Communities Act Zoning
Student Projections vs. Actuals Updated 09/19/2024

◊ 09/19/2024 updates include a decrease of 54 units and a decrease of 7 students in each scenario due to the addition of a unit cap in the Avery Square Business District (100 West St. parcel).
◊ RKG Associates projections are consistent with the student generation rates that Needham has experienced over the last five years from three large multi-family housing developments in town.
◊ The Town conferred with McKibben Demographics, the consultant responsible for annual enrollment projections for the Needham Public Schools. McKibben agreed with the assumptions below.

RKG Projections (updated 09/19/2024)	Units	Students
Base Compliance Plan: Likely Build	411	55
Base Compliance Plan: Full Build	1,870	236
Neighborhood Housing Plan: Likely Build	1,288	164
Neighborhood Housing Plan: Full Build	3,296	415

Actuals: Children Attending NPS from Specific Developments	FY21	FY22	FY23	FY24	FY25	Average	Units	student generation rate per unit
Charles River Landing (300 2nd Avenue)	18	14	14	17	21	16.8	350	0.048
Kendrick (275 2nd Avenue)	46	50	58	50	45	49.8	390	0.128
Modera (700 Greendale Ave)	41	41	38	45	45	42	136	0.309
Total	105	105	110	112	111	108.6	876	0.124

Source: Needham Public Schools

Actuals: Unit Distribution	studio & one-bed	%	two-bed	%	three-bed	%	Total Units	
Charles River Landing (300 2nd Avenue)	244	70	106	30	0	0	350	25% affordable
Kendrick (275 2nd Avenue)	202	52	149	38	39	10	390	25% affordable
Modera (700 Greendale Ave)	19	14	103	76	14	10	136	25% affordable
Total	465	53%	358	41%	53	6%	876	

Source: Town of Needham

RKG Assumptions: Unit Distribution	studio & one-bed	55%	two-bed	35%	three-bed	10%		
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Source: CoStar (note: 10% studios, 45% one-beds)

MBTA Communities Act Zoning
Student Projections vs. Actuals Updated 09/19/2024

RKG Assumptions: Student Generation (this example is the Neighborhood Housing Plan Likely Build Out)	Unit Breakdown	Unit Breakdown: Detailed		% unit type assumptions	projected # units	RKG student rate	projected # students	Student Generation Rate per Unit
total number of units	1288	MARKET (87.5% of total units)	studio	10	112.70	0.00	0.00	
total market (87.5%)	1127		one bed	45	507.15	0.00	0.00	
total affordable (12.5%)	161		two bed	35	394.45	0.16	63.11	
			three bed	10	112.70	0.50	56.35	
				<i>Subtotal</i>	1127.00		119.46	
		AFFORD- ABLE (12.5% of total)	studio	10	16.10	0.00	0.00	
			one bed	45	72.45	0.00	0.00	
			two bed	35	56.35	0.38	21.41	
			three bed	10	16.10	1.20	19.32	
				<i>Subtotal</i>	161.00		40.73	
				Total	1288		160	0.124
				w/rounding	1288		164	0.127

Sources: Student rates from Residential Demographic Multipliers, Needham Public Schools actuals. Assumptions affirmed by McKibben Demographics. Market vs. affordable % determined by the zoning language.

MBTA Communitas Act Zoning
School Capacity Analysis - Updated 09/19/24

◊ 09/19/2024 updates include (1) a decrease of 7 students in each scenario due to the addition of a unit cap in the Avery Square Business District (100 West St. parcel), (2) changes in the number of RKG projected students assumed to be entering middle school based on 9/17/24 MSBA letter, and (3) the School Master Plan capacity for middle school is replaced with the MSBA final Pollard enrollment capacity.

◊ Student enrollment projections are put into context of the Needham Public Schools' Master Plan to understand potential capital impacts.

◊ The School Committee's preferred master plan scenarios (renovate Pollard for grades 6-8, High Rock becomes a 6th elementary school, Mitchell renovated as 3- or 4-section school) would accommodate the student projections for both the Base Plan and the Neighborhood Housing Plan Likely build outs at the elementary level.

◊ The total enrollment projection for middle school would exceed the MSBA capacity for the Pollard School by 34 students (2.5%) under the Base Plan Likely build out and by 74 students (5.5%) under the Neighborhood Plan Likely build out.

◊ The student projections from the Neighborhood Housing Plan Likely Build Out would exceed Needham High School capacity (1800 seats) by 7 students (< 1%).

Data & Assumptions	Elementary	Middle	High School	Sources
McKibben peak enrollment projections through 2039	2628	1349	1725	McKibben Report, Dec 2023; elementary peak is 2038-39, middle peak is 2030-31, high school peak is 2034-35.
RKG student projections due to zoning (see below)				figures updated 09/19/2024
% NPS student enrollment by level (2024-25)	46%	23%	30%	McKibben Report, Dec 2023
Addition of RKG projections to McKibben peak enrollment	Assumes ALL students generated from zoning enter elementary school at the same time.	Assumes 20 students for Base Likely Build Out and 60 students for Neighborhood Likely Build Out enter middle school.	Assumes HALF students generated from zoning enter high school at the same time.	The MSBA concluded that 20 students would be generated at the middle school level due to the zoning. An assumption of 60 students entering middle school under the Neighborhood Likely Build is extrapolated from the 20, representing three times the figure in the Base and roughly 1/3 of the RKG student projection for the Neighborhood Likely Build Out. Applied students at elementary and high school levels are conservative.
School Capacity	2854	1335	1800	Elementary Capacity from School Master Plan Scenario C1a (Dore & Whittier). Middle capacity from Massachusetts School Building Authority enrollment capacity for Pollard Middle School project. High School figure is current capacity.

MBTA Communitas Act Zoning
School Capacity Analysis - Updated 09/19/24

BASE COMPLIANCE PLAN LIKELY BUILD	Elementary	Middle	High School
McKibben peak enrollment projection (FY25-39)	2628	1349	1725
additional RKG enrollment projection	55	20	28
Total Enrollment Projection	2683	1369	1753
School Capacity	2854	1335	1800
Capacity vs. Enrollment	171	(34)	48

NEIGHBORHOOD HOUSING PLAN LIKELY BUILD	Elementary	Middle	High School
McKibben peak enrollment projection (FY25-39)	2628	1349	1725
additional RKG enrollment projection	164	60	82
Total Enrollment Projection	2792	1409	1807
School Capacity	2854	1335	1800
Capacity vs. Enrollment	62	(74)	(7)



Massachusetts School Building Authority

Deborah B. Goldberg
Chair, State Treasurer

James A. MacDonald
Chief Executive Officer

Mary L. Pichetti
Executive Director / Deputy CEO

September 17, 2024

Ms. Kate Fitzpatrick, Town Manager
Needham Town Hall
1471 Highland Avenue
Needham, MA 02492

Re: Town of Needham, Pollard Middle School

Dear Ms. Fitzpatrick:

I would like to thank representatives of the Town of Needham (the “District”) for meeting with Massachusetts School Building Authority (the “MSBA”) staff on July 15, 2024, to review enrollment projections and methodologies for the Pollard Middle School project (the “Proposed Project”) and for the follow-up materials provided the day of the meeting. As discussed, the next critical step is for the MSBA and the District to agree on a study enrollment for the Proposed Project.

The MSBA works with local communities to create affordable, sustainable, and energy-efficient schools across Massachusetts. A critical early component in achieving these objectives begins with an appropriate design enrollment that positions the District to efficiently meet space capacity needs throughout potential future enrollment variations.

The MSBA uses a data-driven enrollment projection methodology based on the widely accepted modified grade-to-grade cohort survival methodology (the “enrollment methodology”). The MSBA’s enrollment methodology generates a baseline enrollment projection as discussed during the July 15, 2024, enrollment meeting, and as further described on the MSBA’s website found under the ‘Building With Us’, ‘MSBA Enrollment Methodology’ section.

Based on information supplied by the District, data from sources such as the Department of Elementary and Secondary Education (“DESE”) and Department of Public Health, and discussion with the District, the MSBA has been able to create an enrollment projection for the Proposed Project, as follows.

The Pollard Middle School presently serves the District’s grade 7 and 8 enrollment. The MSBA understands that in addition to the current grade configuration, the District would like the Feasibility Study to also evaluate a grade 6 through 8 configuration. Accordingly, this analysis will be focused on the enrollment projections for grade 6 through 8 enrollment.

The table below illustrates the District’s K-12 enrollment during the most recent ten-year period, including enrollment for the school year 2023-2024, as reported by the District.

School Year	K-5	6-8	9-12	Total
2014-2015	2,516	1,307	1,612	5,435
2015-2016	2,542	1,290	1,664	5,495
2016-2017	2,552	1,297	1,659	5,508
2017-2018	2,593	1,304	1,686	5,583
2018-2019	2,640	1,281	1,716	5,637
2019-2020	2,586	1,391	1,655	5,631
2020-2021	2,468	1,295	1,669	5,432
2021-2022	2,497	1,278	1,669	5,444
2022-2023	2,531	1,264	1,645	5,440
2023-2024	2,512	1,327	1,622	5,461

A version of the above table with more detail regarding the District's historic enrollment may also be found in the District's Enrollment Projection package.

The total grade 6 through 8 enrollment in the Town of Needham as reported by the District for the 2023-2024 school year was 1,327 students, which reflects a decrease of 64 students (-4.6%) from the maximum grade 6 through 8 enrollment reported during the preceding ten years. Additionally, the 2023-2024 grade 6 through 8 enrollment reflects an increase of 24 students (+1.8%) from the average grade 6 through 8 enrollment reported during the preceding ten-year period. The MSBA understands that the District proposed an enrollment to accommodate approximately 1,400 students in grades 6 through 8 at the Pollard Middle School. The enrollment in grades 6 through 8 reported to DESE for the 2023-2024 school year was 1,327 students.

With respect to future enrollments, the MSBA's base enrollment projection indicates the District's grade 7-8 and grade 6-8 enrollments will trend slightly downward through the 2034-2035 school year. In accordance with the MSBA's Enrollment Methodology, the baseline enrollment is calculated using the ten-year average of projected enrollments. As such, the average base enrollment projections for the Proposed Project through the 2034-2035 school year are as follows:

- Grade 7-8 base enrollment projection: 845 students
- Grade 6-8 base enrollment projection: 1,290 students

As a result of a sensitivity analysis performed by the MSBA on this base enrollment projection and further discussion with the District, the following adjustment has been made to the base enrollment projection:

Out-of-District Enrollment

- In order to adjust for fluctuations in the out-of-district enrollment patterns of the District's residents over time, the MSBA has made an additional adjustment to the base enrollment projection.

- In order to make this adjustment, the MSBA adjusted the grade-to-grade survival ratios for grade K through 3 enrollment by a total of 3.3% throughout a four-year period in the projection.
- This adjustment added the following numbers of students to the base enrollment as compared to the projection without this adjustment:
 - Pollard Middle School current configuration of Grade 7-8 enrollment: the adjustment added approximately ten students
 - Pollard Middle School proposed configuration of Grade 6-8 enrollment: the adjustment added approximately ten students

Development

- Based on the discussions between the District and the MSBA regarding new housing developments and the potential zoning changes accommodating transit-oriented development, as well as the development information provided by the District, the MSBA enrollment model has been adjusted.
 - The MSBA's default methodology projects kindergarten enrollment utilizing the most recent five-year average Birth-to-Kindergarten cohort survival ratio.
 - In order to account for trends observed in the District's Birth-to-Kindergarten survival ratio and District reported expectations regarding housing turnover in the Town of Needham, the MSBA's base model has been adjusted to utilize the most recent three-year average Birth-to-Kindergarten survival ratios.
 - This adjustment added the following totals to the projected averages for the District's proposed grade configurations as compared to the base enrollment projection:
 - Pollard Middle School current configuration of Grade 7-8 enrollment: the adjustment added approximately 10 students
 - Pollard Middle School proposed configuration of Grade 6-8 enrollment: the adjustment added approximately 15 students
 - The MSBA's base model was also adjusted to use the five-year 75th percentile cohort survival rate for 2025 and 2026, rather than the five-year average cohort survival rate, which is utilized throughout the base enrollment forecast to account for new students associated with potential impacts related to MBTA Communities zoning changes.
 - This adjustment added the following totals to the projected average for the District's proposed grade configurations as compared to the base enrollment projection:
 - Pollard Middle School current configuration of Grade 7-8 enrollment: the adjustment added approximately 15 students
 - Pollard Middle School proposed configuration of grade 6-8 enrollment: the adjustment added approximately 20 students

As a result of the analysis of the base enrollment forecast, the historical enrollment trends of the District, and the adjustments described above, the MSBA recommends for planning and study purposes only, study enrollments for the Proposed Project as follows:

- Pollard Middle School current configuration of Grade 7 and 8 enrollment: 880 students
- Pollard Middle School proposed configuration of Grade 6 through 8 enrollment: 1,335 students

Please note that these recommendations for study enrollments do not represent an affirmation by the MSBA for approval and/or funding of any of these options and are intended only to provide a framework to inform the feasibility study to be conducted as a means of determining the most cost-effective and educationally sound solution to be agreed upon by the District and the MSBA. The MSBA's study enrollment recommendations assume full utilization of all remaining school facilities.

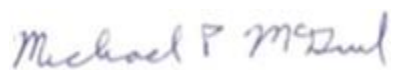
If the grade 6-8 enrollment configuration is determined to be the Preferred Solution, the District will be required to document in the Preferred Schematic Report that the Preferred Solution has been approved by the School Committee and necessary local officials. Further, the MSBA will require a written plan from the District describing the process for determining local support for the preferred grade configuration. Upon approval of the District's Preferred Solution, the MSBA will forward a design enrollment certification that is specific to the grade configuration associated with the approved Preferred Solution.

Both the MSBA's enabling legislation, M.G.L. c. 70B, and the MSBA's regulations, 963 CMR 2.00 et seq. specifically address the issue of past MSBA-funded projects. Pursuant to these requirements and depending on the District's ultimate plan for the existing Pollard Middle School, which was the subject of an MSBA-funded roof repair project, the MSBA may recover a pro-rated portion of the financial assistance that the District has received for the previous grant. The substantial completion for the prior project at the Pollard Middle School was on October 28, 2011. The exact amount recovered will be established at the conclusion of Module 4 – Schematic Design.

The MSBA believes that these study enrollment recommendations will position the District to efficiently meet space capacity needs throughout future enrollment variations. Please sign and return the attached certification within 14 calendar days to confirm agreement on these study enrollment recommendations. If the District feels that this study enrollment recommendation does not meet the needs of the District, please respond to this letter via e-mail Sarah Przybylowicz and propose three meeting/conference call times for which the District can be available to discuss enrollment.

If you have any questions regarding this matter, please do not hesitate to contact me or Sarah Przybylowicz (Sarah.Przybylowicz@massschoolbuildings.org) at 617-720-4466.

Sincerely,



Michael McGurl
Director of Capital Planning

Page 5
September 17, 2024
Needham, Pollard Middle School Enrollment Letter

Cc: Legislative Delegation
Kevin Keane, Chair, Needham Select Board
Elizabeth Lee, Chair, Needham School Committee
Dr. Daniel E. Gutekanst, Superintendent, Needham Public Schools
Hank Haff, Needham Director of Design and Construction
Anne Gulati, Assistant Superintendent for Finance and Operations, Needham Public Schools
File: 10.2 Letters (Region 4)

Funding at risk per M.G.L. Chapter 40A Section 3A

Municipalities who are not compliant with the MBTA Communities Act are not eligible for:

1. Housing Choice Initiative

Needham was designated as a Housing Choice Community in 2022, giving the Town access to additional grant funds for planning and zoning initiatives and public infrastructure construction projects. Grant opportunities range from \$25,000 - \$250,000. Needham received a 5-year designation until 2027 but would not be able to receive funds unless the Town adopts compliant zoning.

2. Local Capital Projects Fund

3. MassWorks infrastructure program

This is a competitive State grant program that offers the largest and most flexible source of capital funds for municipal infrastructure projects. Grants support projects that spur housing production, new jobs, or private development and range from \$500,000 to \$5 million. The Town received a \$1.675M grant for 1st Avenue and anticipates applying to this program in the future.

4. HousingWorks infrastructure program

Funding at risk per Executive Office of Housing and Livable Communities Guidelines

The following discretionary grant programs will take compliance with the law into consideration when making grant awards:

5. Community Planning Grants, EOHLIC,
6. Massachusetts Downtown Initiative, EOED,
7. Urban Agenda, EOED,
8. Rural and Small Town Development Fund, EOED,
9. Brownfields Redevelopment Fund, MassDevelopment,
10. Site Readiness Program, MassDevelopment,
11. Underutilized Properties Program, MassDevelopment,
12. Collaborative Workspace Program, MassDevelopment,
13. Real Estate Services Technical Assistance, MassDevelopment,
14. Commonwealth Places Programs, MassDevelopment,
15. Land Use Planning Grants, EOEEA,
16. Local Acquisitions for Natural Diversity (LAND) Grants, EOEEA, and
17. Municipal Vulnerability Preparedness (MVP) Planning and Project Grants, EOEEA

Per the guidelines, “**determinations of compliance also may inform other funding decisions by EOED, EOHLIC, the MBTA and other state agencies** which consider local housing policies when evaluating applications for discretionary grant programs or making other discretionary funding decisions.”¹

¹ <https://www.mass.gov/info-details/section-3a-guidelines>

Funds at risk at the discretion of the awarding authorities

The Town has become aware of a growing list of funding opportunities, that are not under the direct control of the Executive Office of Housing and Livable Communities, whose awarding authorities have chosen to factor compliance with the MBTA Communities Act into their funding decisions.

This may be the greatest source of funding risk to the Town.

18. Federal Community Project Funding accessed through Congressman Auchincloss

The Congressman's Office confirmed that he will not support future CPF project requests in the MA-04 from municipalities that are not in compliance with the MTBA Communities Act. The CPF is a program where members of the US House of Representatives have been able to direct federal agency funds to specific programming within their districts.

In 2022, Congressman Auchincloss secured \$2 million in design funds for the replacement of the Centre Street/Central Avenue Bridge between Needham and Dover. Recently, the Congressman secured \$1.1 million in the House budget for Needham for green infrastructure and stormwater best management practices throughout town for flood mitigation and water quality improvements. The Town is awaiting further legislative action. These funds are not at risk, but future requests would be.

19. Boston Region Metropolitan Planning Organization (MPO) Transportation Improvement Program (TIP)

The TIP is the rolling capital plan for all transportation projects that will receive federal funding in the region over the next five years. Projects in the TIP include those supported by Regional Target funds—the federal transportation dollars that the MPO has direct discretion over—and federally funded projects of the Massachusetts Department of Transportation, the Massachusetts Bay Transportation Authority, the MetroWest Regional Transit Authority, and the Cape Ann Transportation Authority.

Needham is currently in the TIP vetting process, requesting funding for the redesign and construction of Highland Avenue from Webster Street to Great Plain Avenue. The project cost is estimated at \$20 million.

This document will be updated as the Town becomes aware of any changes.

NEEDHAM PLANNING BOARD MINUTES

August 14, 2024

The Needham Planning Board meeting, held in the Charles River Room of the Public Services Administration Building and virtually using Zoom, was called to order by Natasha Espada, Chairman, on Wednesday, August 14, 2024, at 7:00 p.m. with Messrs. Alpert, Crocker, Block and McCullen, Planner, Ms. Newman and Assistant Planner, Ms. Clee.

Ms. Espada noted this is an open meeting that is being held in a remote manner per state guidelines. She reviewed the rules of conduct for all meetings. This meeting does not include any public hearings and public comment will not be allowed. If any votes are taken at the meeting the vote will be conducted by roll call.

MBTA Communities (Section 3A of MGL c. 40A) Zoning Initiative

- **Overview of Comments Received from Executive Office of Housing and Livable Communities (EOHLC), Lee Newman, Director of Planning and Community Development and Town Counsel, Christopher Heep.**
- **Presentation of staff recommended MBTA zoning by-law revisions required to address comments received from EOHLC and Attorney General, Town Counsel, Christopher Heep.**
- **Presentation of Revised Zoning Changes Requested for 100 West Street, Tim Sullivan**
- **Overview of Site Plan Approval Framework and Planning Board Permitting Authority, Town Counsel, Christopher Heep.**

Ms. Newman stated a letter was received from the state with comments regarding livable communities. She had a conversation with Town Counsel Christopher Heep and Assistant Town Manager Katie King, who were there to clarify responsibilities, and she feels they are in good shape. There were some discrepancies with labeling. With the 110-foot setback for 100 West Street she wanted to make sure the state would allow the full 187 units on that site. The state assured her that would not be a problem and did not see the setback as an impediment. There is no change to that. The Board set the affordable housing provision at 12½%. The state staff looked it over and were comfortable with that percentage.

Town Counsel Christopher Heep noted the definition of family. The existing definition in the Zoning By-Law caps the number of unrelated occupants to either 3 or 5 and allows for up to 2 others. The EOHLC's position is the MBTA zoning cannot include a cap on a number of occupants. Section 3A notes all housing under the MBTA Zoning needs to be suitable for families with children and cannot be capped. Mr. Alpert commented he is amenable to have a provision for children but does not want to jump and say any number of college students. A discussion ensued regarding what prevents this from becoming a rooming house. Mr. Crocker noted there was something like a half-way house on Webster Street with multiple people living there. Mr. McCullen noted that was licensed by the state. Mr. Alpert stated it was allowable as an exception to the By-Law. Mr. Heep stated that is protected by state and federal law and unrelated to the MBTA Zoning. He noted, under EOHLC, age, or the number of occupants, cannot be limited. He was told by EOHLC they cannot impose a cap, and they would need to address the definition of family in other respects. The easiest is to eliminate the cap on occupants in the MBTA Zoning.

Mr. Alpert noted the Board could pass the zoning with the current language and have the state come back saying the zoning does not comply. Mr. Heep stated a lot of work went into this and very few comments came back. It would be a shame to take all that work and still be out of compliance. Ms. Espada noted the Massachusetts Building Code, and the Health Department, has a limit on the number of people. Mr. Block noted the Board should proactively call out the restrictions at Town Meeting. It would be productive and helpful for Town Meeting to know what other controls there are to prevent this. Mr. Alpert stated he has never seen a provision that the size of a bedroom can be limited and asked why they are concerned about that. Other issues noted were the numbers in the model dwelling unit per acre should not have been there, there are fields missing in the GIS fields and Town Counsel was asked to look at the site plan approval process the town has. Mr.

Heep stated he reviewed it but did not find anything wrong. He asked the EOHLC and was informed that was a boilerplate comment. He reviewed it and is comfortable.

Ms. Espada reviewed the draft and did not see anything that stuck out. Mr. Heep walked through the changes from the EOHLC comments, and the Attorney General comments. He noted a definition is being added to 3.17.3 for multi-family housing. The Board already has a definition of multi-family dwellings. There was a comment to reconcile the 2 comments. He took out multi-family housing from 1.3 and put in a new Section 3.17. Everything is internally consistent and 3.17 only complies to the MBTA Communities. On page 6 there is a change to 3.17.5.5. Changes were made due to a comment regarding a cap on occupants from a prior discussion. The language as drafted says the Town of Needham cannot impose age restrictions. Mr. Alpert noted a developer can restrict age. The question is can a developer put in a senior living community in an MBTA Community. Mr. Heep will look into the question of whether an applicant can put in an age restricted project. This should not be drafted as an age restricted project now. Mr. Alpert stated the job right now is to pass a zoning by-law that complies with the guidelines in the statute. The rest can be dealt with if a site plan review comes in front of the Board. Mr. Crocker feels it is better to know up front. Mr. Block would like Town Counsel to speak with the state and resolve if it is compliant for a developer to choose to restrict age and what the authority is for determining the parking standard. He wants the state to comment as he feels that is important.

Mr. Alpert commented that he reads the statute as they cannot have age restrictions on multi-family housing in the MBTA Zoning. Mr. Crocker noted the Board has to find out, if an applicant comes in with age restrictions, what happens. It will be good to get clarity. Mr. Heep noted multi-family housing is the use allowed for this zoning and multi-family housing does not allow age restrictions. Mr. Block feels it should say multi-family projects shall prohibit age restrictions. Mr. Alpert noted the definition of multi-family housing will be in this By-Law. He would suggest in the definition it include multi-family housing that complies with MA General laws Ch. 40A, Section 3A and the rules and regulations there under. Mr. Heep feels that is sufficient to address this concern. He noted “a building with 3 or more residential dwelling units in each building, that complies with the requirements of MGL Ch. 40A, Section 3A and the regulations and rules there under.”

Ms. Espada noted Section 3.17.9.1 on page 9. Mr. Heep stated the changes were in response to the Attorney General’s comments. He wants to make it extra clear that site plan review is under Section 3.17 only and not under Section 7.4 of the existing Zoning-By-Law. There is no harm in making it clear. In Section 7.7, the Design Review Board (DRB) section, it is intended MBTA projects will be subject to design review. That needs to be made clear. There will be a time constraint, so the DRB need to get their comments back quickly. Mr. Heep noted there are 2 map change warrant articles. The MBTA Overlay District is changed to Multi-Family Overlay District for consistency. In the Neighborhood Plans, the definition of mixed-use building in Section 1.3 has been revised. The existing definition speaks to districts where you can do that. This needs to be added into the existing definition as it is allowed here.

Mr. Heep noted the changes in 3.17.4.1 and 3.17.4.2, for the use of personal fitness establishments, which copies exactly the use in the existing district now. It duplicates exactly how it appears in the underlying zoning. Mr. Block stated a concern he has is a mixed-use building with residential above and a commercial use on the first floor. There is a high likelihood a parking waiver would be required. He is ok requiring that as a function of a special permit but does not want to make the use effectively prohibited. Mr. Heep noted it does not prohibit as it is permissive with a special permit. Section 3.17.4.1(b) makes clear a mixed-use building in the MBTA Communities must have commercial only on the first floor and mixed-use housing on all upper floors. This is not necessarily true for other mixed-use districts, so he wanted to make that clear.

Mr. Alpert stated the definition of a mixed-use building in the mixed-use overlay and other districts states retail must be facing the street. Ms. Newman feels that should be left alone. That definition was created for other districts that we do not want to change. Mr. Block noted where Bertucci’s is located is not street facing. Mr. Alpert stated if they want multi-family housing there it can only be done under the multi-family overlay and Bertucci cannot be there as it is not street facing. In 3.17.42 it should say “a mixed-use building containing commercial uses listed below on the ground floor whether facing the street or otherwise and provided that all upper floors shall be used as multi-family housing. In the revised definition of mixed-use in 1.3, a defined term subject to additional qualifications that may be included in the applicable overlay district. All members agree.

Upon a motion made by Mr. Block, and seconded by Mr. McCullen, it was by a vote of the five members present unanimously:

VOTED: to accept the recommendations with the changes made this evening.

Ms. Espada noted Attorney Tim Sullivan, of Goulston & Storrs, sent an email, dated 7/31/24, with some questions the Board had incorporated. Mr. Sullivan noted a number of things had been talked about, he revised the draft to address those and has submitted a revised draft. The first change incorporated was to clarify allowing for flexibility on the maximum front setback. It is 70% of the main datum line of the front façade and will maintain that 15 feet and, if more than that, it would need a special permit. Ms. Espada clarified the Board had the number recommendation at the last meeting. Mr. Sullivan noted there was a recommendation to require a special permit if there was a new curb cut on Highland Avenue or West Street proposed. He noted the requirement that the height overrun for roof top mechanicals be capped at 15 feet was put in so it is consistent with other districts. He noted an applicant can ask for a special permit for a fourth floor if peaked, stepped back or has another architectural element incorporated. In the prior draft it only referred to Highland Avenue, so he clarified it also applies to West Street. Ms. Espada noted that is also a recommendation the Board made.

Mr. Block stated this is the one site across town ready for change yet consultants for HONE stated it is unlikely to turn but we are imposing significant restrictions. He feels this is a defeat to the underlying principal act and could be problematic for the market. Ms. Espada stated the fabric of that area has to be followed. Mr. Block feels they should loosen the restrictions but Ms. Espada stated the Board has loosened restrictions. This is just clarifying some final issues. Mr. Block noted this pushes into the special permit process. Ms. Espada clarified only for the fourth floor and curb cuts. She noted at the last meeting the FAR was increased from 1.3 to the 1.7 that was requested and other things that were asked such as the height overrun and the datum line. These are some recommendations they requested to make it better and are now back to clarify. A discussion ensued.

Mr. Sullivan noted all changes talked about are for multi-family housing and not memory care/nursing. Mr. Alpert asked if, by having the fourth floor by special permit, is the Board violating the MBTA zoning law that says there cannot be a special permit. Mr. Sullivan stated no, as they are getting credit for only the 187 units that are as of right. Mr. Heep stated, to comply with the MBTA zoning, they need to set a floor for the amount of housing that can be built. If the Board wants to allow for more than that number, it can be done by special permit. Mr. Alpert noted all amendments are to Section 1.37 only. Mr. Heep stated there are a couple of options developers can choose from. They can choose one or the other but cannot mix.

Mr. Sullivan stated the initial comment on parking garages should be excluded for FAR. There was concern by the Board, if excluded in an as of right scenario, the garage would have to be screened. The change he proposed is garages that are screened, or parking in the interior portion of the building, would be excluded from FAR. If trying to exclude something else such as a portion of the garage that is not screened there would need to be a special permit requested. He feels they do need to carve a garage out of the FAR on this site due to how constrained it is. They are trying to work within that and address the Board's concerns with screening so that is what he is proposing. Ms. Espada feels that is fine because it is a small site and there is not much left of it. They should say "no part of the parking garage should be on either of the two streets." Mr. McCullen agrees with Mr. Block they are imposing restrictions counter to what is needed. He does not have a problem with any parking structures not being included in the FAR. He feels the garage would be along the tracks and not on Highland Avenue. Ms. Espada is fine with the way it is.

Mr. Alpert stated Highland Avenue is a pedestrian area. He agrees with Ms. Espada. With a screen people will still see a parking garage. Ms. Espada asked if the Board has a say in what the screening would look like. Mr. Heep noted that could be addressed a couple of ways. Mr. Crocker noted a minimum standard objective could be spelled out. He asked why the Board is giving an allowance for parking they do not really want. Ms. Espada stated most are ok with parking not included in the FAR. She does not want to say no parking garage on either Highland Avenue or West Street. Mr. Sullivan commented the garage is not going to be on Highland Avenue and the housing units on the tracks. The site is only so wide. There will need to be structured parking on this site but how is it determined if it is on Highland Avenue or not. Ms. Espada suggested saying "screening compatible with the building." Mr. Heep noted screening could be many things such as vegetation or slats between the floors. If there is something in mind it is better to include it in the instructions. Mr. Alpert does not like

to do that. Screening today may not be available in 3, 4 or 5 years from now. It is aesthetics. Mr. Sullivan suggested using the language Ms. Espada proposed “screening compatible with the building.” Flexibility is important. It could be “screened in a manner compatible with the architecture of the building from Highland Avenue to West Street.” Mr. Crocker commented he would have to see what the public says.

Upon a motion made by Mr. Block, and seconded by Mr. McCullen, it was by a vote of the five members present unanimously:

VOTED: to accept the changes as recommended by Attorney Tim Sullivan with the added changes tonight.

Upon a motion made by Mr. McCullen, and seconded by Mr. Block, it was by a vote of the five members present unanimously:

VOTED: to send the Article to the Select Board, as revised under 40A, for the purpose of holding a public hearing on 9/5/24 on zoning at the Broadmeadow School.

Review and approve final MBTA Communities zoning language for transmittal to Select Board and initiation of the public hearing process.

Ms. Espada gave an overview of the site plan approval framework. Mr. Heep gave a brief rundown of site plan review, how it works, what the Planning Board power and authority is and he flagged some differences between site plan review and special permit review. It is important for the purposes of MBTA zoning. The MBTA can require site plan review but not a special permit. There is long-standing practice in Needham of the Planning Board doing both at the same time. The special permit type of zoning relief authorized under 40A, Section 9 applies to a use that may be allowed in some cases and may be disallowed in other cases. It turns on the discretion of the permitting Board. A site plan review type of review is a use by right. It does not exist in 40A. It was invented by numerous local by-laws all over Massachusetts some time ago. This is a use by right and can only involve reasonable regulation of the use and it can just about never involve an actual denial or rejection of use. He gave a quick history noting Prudential versus Westwood. Reasonable regulation and not outright prohibition is the first thing to keep in mind.

Mr. Block asked what is reasonable regulation and what did the court mean when it refers to reasonable regulation? Mr. Heep stated it involves imposing conditions on a use that are responsive to specific impacts associated with the use on a particular piece of property and that does not go so far as to interfere with the use itself, the density of use allowed under the zoning or what is effectively the use allowed by right. He gave the example of Castlehill Apartments versus the Town of Holyoke in 2006. He noted there are 2 exceptions to the rule: 1) when the applicant fails to submit the information required under the By-Law and 2) which is very rare, the project presents a problem that is so big it cannot be solved through the imposition of conditions on the project. An intractable problem is the term for this type of issue.

The Board discussed storm water and traffic impacts on and off the property and what the Board can do to mitigate off site impacts. Mr. Heep noted the Board has some leverage through site plan review to require some off site traffic mitigation. The impacts would be if they are feasible and sufficiently affordable so as to not make the project uneconomical and something that can be achieved by the applicant, if responsive, to the specific impacts contributed to the road system by the particular project. This would be studied on an application by application basis. Mr. Block feels the need to provide the framework that Mr. Heep just identified which includes there be a professional that has identified a specific problem arising as a result of these plans or as a result of a particular development. Mr. McCullen does not feel the Board would ever be able to have a traffic analysis done during the site plan review timeframe. Ms. Newman noted there is a 6-month timeframe but the Planning Board is usually much quicker than that.

Mr. Alpert stated, once 100 West Street is built, the Board knows there may not be issues at Central and West but there will be issues at Highland and West, especially West and Hillside and to some extent the MBTA crossing. He feels all members should keep that in the back of their minds. These are problem intersections now and the building is empty. Ms. Espada commented they should include that the Board wants the project done by a professional engineer. Mr. Alpert feels the intersection of Hillside and West will be a huge issue. Mr. McCullen informed the Board the Select Board approved a 4-way stop, recommended by the Transportation Safety Board, last night. They are looking at the issue of whether doing a

study of the queue of cars would back up onto the MBTA right of way and are looking at grant money to have signals coordinated. This would be happening anyway even without 100 West Street.

Board of Appeals – August 15, 2024

6 Brook Road – Tail Waggers Pet Care, Inc., applicant

Upon a motion made by Mr. Alpert, and seconded by Mr. McCullen, it was by a vote of the five members present unanimously:

VOTED: “No comment.”

Discussion of & Vote to approve Large House Study Committee charge and committee composition.

Mr. McCullen stated he took a look at the membership and the number 13 is an unwieldy number. Ms. Espada stated the Board reviewed the charge and composition at the last meeting. It was agreed to take off the Historical Commission as information can still be received from them. Mr. Block stated he spoke with Town Counsel and the Ethics Office regarding his occupation and if he can participate. He has accepted a position as Director of Real Estate for a non-profit based in Boston that develops low-income housing. He is no longer an active Real Estate Agent so he is not trading in Needham. On that basis he feels he can participate without conflict. He also feels such a large committee is not needed. He would support reducing the number of people. He sees the role the Zoning Board of Appeals (ZBA) plays and the Board can consult with the Historical Commission but he is not sure about the Finance Committee. There would need to be a fiscal impact analysis on the value of the acquired lot and the value of the new home to be sold on the market. This is not affordability or sustainability. They are talking about reducing the size of a home.

Mr. Block stated he would strike the last sentence that says “to the detriment” on page 101 of the packet. A discussion ensued. Ms. Espada asked if the Board should say they heard from Town Meeting the town goals on affordability or per the Housing Study Master Plan. She would recommend referring to the Housing Plan rather than saying “detrimental to the Town.” Mr. Alpert suggested “to the detriment of the housing goals as stated in the Housing Study Master Plan.” Ms. Espada agreed. The Housing Plan has one whole section on large homes. Mr. Block stated the purpose is to reduce the size of the home and not to make them affordable. Ms. Espada noted the charge of the group is to try to incentivize people to not tear down homes. Mr. Block stated this Board needs to give clarity to the Housing Committee, so they know what their goals are. It does not sound like the members are clear as a Board. The Board needs to set out quantifiable goals. Mr. Alpert stated there is a committee to determine what those quantitative goals should be. Mr. Block feels the Board is giving ambiguous directions. Tying this into affordability and sustainability as goals is a mistake. He disagrees with that. Mr. Alpert suggested taking out “overly permissive.” All agreed. It should say “may not appropriately regulate house size. This is to the detriment of the Town’s goals as set forth in the Town of Needham Housing Plan previously adopted, December 2022.” Ms. Espada noted the Large House Committee can then go through the housing plan. She is comfortable with the changes.

Ms. Espada noted the Finance Committee can be asked for information so they can be removed from the group. Mr. Alpert feels whether to have the Finance Committee is a political question. The Board did it for Muzi and for HONE. They felt having a member of the Finance Committee was important. He does not want the Finance Committee saying they were blindsided by this. Ms. Espada would recommend getting rid of the Historical Commission and one Citizen at Large. All agreed. Mr. Alpert would like to see Joe Matthews on this committee but not be the only Citizen at Large. Ms. Espada wants the members assigned by the Planning Board. Mr. Alpert wants diversity of opinion and feels 2 citizens makes sense. The Committee will have 12 members and “appointed by the Planning Board” will be added. Consultant services will be provided on an as needed basis. Ms. Newman stated she has an appropriation of \$80,000. Mr. Block suggested adding “budget consulting expenses to the extent possible will be paid out of the department budget or such other appropriation as needed.” All agreed.

Upon a motion made by Mr. McCullen, and seconded by Mr. Block, it was by a vote of the five members present unanimously:

VOTED: to accept the charter as amended.

Minutes

Upon a motion made by Mr. McCullen, and seconded by Mr. Alpert, it was by a vote of the five members present unanimously:

VOTED: to approve the minutes of 6/18/24 as written.

Upon a motion made by Mr. McCullen, and seconded by Mr. Alpert, it was by a vote of the five members present unanimously:

VOTED: to approve the minutes of 7/11/24 as written.

Correspondence

Ms. Espada noted the following correspondence for the record: a letter, dated 8/13/24, from Susan and Michael Herman regarding 100 West Street; an Open Meeting Law Complaint, dated 8/2/24, noting the law was not violated; and a press release on ADUs. There may need to be a few changes made.

Report from Planning Director and Board members

Ms. Newman stated GPI has completed a traffic study for the likely build out under HONE. She invited them to the next meeting for a presentation. There will be a public hearing at the Broadmeadow School on 9/5/24 for HONE.

Upon a motion made by Mr. Block, and seconded by Mr. McCullen, it was by a vote of the five members present unanimously:

VOTED: to adjourn the meeting at 9:56 p.m.

Respectfully submitted,
Donna J. Kalinowski, Notetaker

Artie Crocker, Vice-Chairman and Clerk

DRAFT

Alexandra Clee

From: noreply@civicplus.com
Sent: Tuesday, September 17, 2024 11:41 AM
To: Alexandra Clee; Lee Newman; Elisa Litchman
Subject: Online Form Submittal: Contact Planning Board

Contact Planning Board

Please use this form to contact the Planning Board. Thank you.

Contact Information

Full Name: Jennifer Manning

Email Address: jennmann@hotmail.com

Address: 18 Morton Street

City/Town: Needham

State: MA

Zip Code: 02494

Telephone Number: 617-710-8052

Comments / Questions

Lack of transparency and proper planning. The FAR of 1.4 was the initial proposal for the Avery project. With 187 units the stress to the heights area has not been adequately addressed. Further it was susceptible and deceptive in nature to increase the FAR to 1.7 for 243 units without adequate due diligence or disclosure for public comment. The area does not support sufficient parking at the projected increases and the overall infrastructure upgrades required, traffic patterns and many other elements . Preserving the integrity of the heights neighborhoods is key . The town can constructively accommodate the needs to meet the MBTA requirements without jeopardizing the infrastructure and intricate fabricate of the heights.

Respectfully, I am not in support of the increase and request that the FAR remain within the prior limits of 1.4 as initially discussed and disclosed.

Jennifer Manning

18 Morton Street Needham
617-710-8052

Email not displaying correctly? [View it in your browser.](#)

September 24, 2024

Natasha Espada
Chair of Needham Planning Board,

Members of the Needham Planning Board,

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

RE: Proposed Zoning Bylaw Changes Regarding Compliance with MGL Ch 40A §3A:
Multi-Family Housing in MBTA Zones

Dear Chair Espada, Planning Board Members, and Ms. Newman,

I write to follow up on the discussion of the proposed zoning bylaws changes related to site plan review in the Multi-Family Overlay District at the September 17 meeting., and to add to my earlier comments. I appreciated the consideration of the submissions the Board received. After hearing the information presented at the meeting, I wanted to add some additional information to my earlier comments.

Criteria for Site Plan Review

Under the current bylaws, Needham applies the criteria in section 7.4 **and** 7.5 to major projects whether the proposed use is allowed as of right **or** requires a special permit. Generally speaking, site plan review allows only the conditioning of projects, while Special Permitting allows the town to completely deny a proposal. In actual practice, the Planning Board has applied the criteria included in the current bylaw sections and approved nearly every application brought before it, generally working with the proponents and adding only conditions required to protect the interests of the town. The town's practice is in fact in line with the requirements of a site plan review process: permitting proposals while allowing reasonable conditions to protect the town's legitimate municipal interests.

The wording of site plan review bylaws determines the scope of the town's authority to review projects. The terms in Needham's current bylaws mirror language that has been considered and approved as appropriate by court cases considering site plan review. Language

requiring (a) Protection of adjoining premises against detrimental or offensive uses on the site. (b) Convenience and safety of vehicular and pedestrian movement within the site, and in relation to adjacent streets, property or improvements. has been approved. See: *Y.D. Dugout, Inc v. Board of Appeals of Canton*, 357 Mass. 25 (1970). Site plan review bylaws may include consideration of the purposes of the bylaws, whether the architectural and design features of the proposed structure are in harmony with the prevailing character and scale of buildings in the neighborhood and town and afford adequate light, air, circulation, and separation between buildings, and whether adverse effects on abutting lots, the neighborhood, and the town, including obstruction of views, are minimized. See: *Muldoon v. Planning Board of Marblehead*, 72 Mass. App. Ct 372 (2008). The language in the bylaws allows a town under site plan review to reasonably require adjustments beyond the minimums set by the dimensional requirements or other pieces of the zoning bylaws in order to meet the needs of a particular site and allow the project. That is the very purpose of site plan review.

Simply including the MFOD in the current bylaw framework, while making clear that the Planning Board would only conduct site plan review, would assure that the town's interests are as protected when considering projects proposed under this section as they currently are under any other section. Alternatively, the proposed site plan review bylaws could include all of the sections of the current bylaws within the proposed section. This would include the purpose of the bylaws sections as framed in section 7.4.1 and 7.5.2.1 (Section 7.4.1 provides: "The purpose of this Section is to provide a comprehensive review procedure for construction projects, herein defined, to insure compliance with the goals and objectives of the Master Plan, and the provisions of the Zoning By-Law, to minimize adverse impacts of such development, and to promote development which is harmonious with surrounding areas). The proposed bylaws should also incorporate the specific criteria listed in these two sections, including section 7.4.6 (e), which requires consideration of "Relationship of structures and open spaces to the natural landscape, existing buildings and other community assets in the area and compliance with other requirements of this By-Law" and 7.5.(i) such other limitations as may be reasonably related to reducing any adverse impact on, or increasing the compatibility of the proposed use, structure or activity with, the surrounding area."

The inclusion of this criteria allows the Board to review projects when they are presented with the relevant individual circumstances at that time. The criteria would be applied to fashion reasonable conditions to permit the project. While the specific requirements of the bylaws certainly are intended to address what is permitted in a particular zone, site plan review exists as a tool to make sure the town can permit desired projects while controlling adverse consequences at a particular site. This is especially important when the scope of the designs and projects in the proposed MFOD are not yet known.

The Time Frame for Decision Making

Last week's meeting also discussed the proposed inclusion of a six month timeline from application to approval within the bylaws and the consequences of not meeting that deadline.

The EOHLC Guidelines for the implementation of MGL ch. 40A s.3A provide that the EOHLC may rescind a determination of district compliance if EOHLC determines that “**a board...** in the MBTA community does not issue permits, or otherwise acts or **fails to act, to allow construction** of a multi-family housing project that is allowed as of right in the multi-family zoning district...” (Guidelines, Section 10. 4). While this section of the Guidelines has yet to be applied, much less interpreted by the Courts, the plain language warns that a “failure to act,” could be found to be a violation of the Guidelines. The unintended consequence of missing a six months from application to filed decision deadline could be the triggering of a determination by the EOHLC that the town is out of compliance with § 3A, potentially risking financial penalties in state funding.

Eliminating the six month deadline would avoid this possibility completely. Alternatively, the proposed language could be amended to explicitly state that “The lack of a decision by the Board within six months shall not constitute a constructive approval of an application, nor a failure to act to allow construction of a project.”

Thank you for your consideration.

Holly Clarke
617-816-0607



Compose

mbta rezoning



From Joseph F. Tierney Jr. <jtierneyjr@aol.com> ✓

To planning@@needhamma.gov ×

Cc Bcc

mbta rezoning

AA B I U

Hello BUILD BABY BUILD the obama biden harris INVASION is on!!!—OPEN BORDERS —OPEN BORDERS—many many many more invaders and illegal voters are on the way—TRUMP had most secure border—do not build more save NEEDHAM— vote TRUMP SAVE AMERICA—oh and the woke peoples, blm cancel culture, vaccine mandate, my PRONOUNS ARE —LGBFJB—that is let's go brandon fuck joe biden—STOP THE OPEN BORDER INVASION—thanks JTjr—ps if anyone can tell me how TRUMP is a threat to democracy please tell—no opinions no fake news just the facts

PS 2 THANK YOU PLANNING BOARD
FOR ALL YOUR TIME AND INPUT INTO

Send

Attach

 Add
GIF Add
stationery

Spelling ... More

Save
10:4
AM

KEEPING NEEDHAM A GREAT TOWN

THANK YOU Joe Tierney

Today on AOL

New Mail 1.2K

Old Mail

Starred

Drafts 3

Sent

Spam

Recently Deleted

^ Less

Views Show

Folders Hide

+ New Folder

Saved Mail

Archive

SavedIMs



Highland Ave Today- heading **North** past St Joseph Parish, then passing Doherty's Funeral Home flag on left



Licensed architect's rendering of *same* location using state mandated rezoning guidelines with heights and setbacks to scale

AS A NEEDHAM RESIDENT, ARE YOU AWARE?

The suburban nature of our beloved town is in jeopardy. Consider these concerns:

- **Rezoning Mandate:** Specifies 1,754 new multi-family housing units, yet the Housing Needham Advisory Group (HONE) proposed 88% more units (3,294) than required.
- **Traffic and Congestion:** Assumptions about the already untenable traffic, congestion, and future parking concerns have not been peer-reviewed by an independent third-party expert, nor have they been assigned a capital improvement cost estimate.
- **Occupancy Concerns:** No limits on the number of occupants, unit size, or cap on the number of bedrooms per unit. Is this essentially a high-occupancy living arrangement, like rooming houses?
- **Taxes Increases and Debt:** How much will this proposed rezoning affect our debt and taxes, given the required infrastructure improvements, traffic mitigation requirements, and growth in the number of school-age children?
- **Loss of Local Control:** Once rezoned, we will have little to no influence over what gets built. Do we really want a state agency (EOHLC) controlling our land?
- **Timing:** Town meeting vote is October 21st. Sign the petition today at NRTZ.Org and refer it back—let's get it right! Email your concerns today Planning@NeedhamMA.gov

**WE SUPPORT MORE HOUSING IN NEEDHAM,
WE DISAGREE ON HOW TO GET THERE**

➤ Prepared by Needham Residents for Thoughtful Zoning at NRTZ.org

MBTA Communities Act Zoning Bylaw:

Policy Implications for Needham

This is an unfunded mandate; a windfall for developers; assumptions may not be accurate

Affordability: This Act is not an affordable housing initiative. Needham should do more to incentivize affordable development within the town.

Burden on Taxpayers: Transforming approximately 100 acres of Needham into by-right high-density multi-family housing will likely have a detrimental impact on property values **and** shift the financial burden onto every property owner in town.

School Capacity: The assumed student projections are unrealistically low and cannot be verified. The school masterplan already estimates costs in the hundreds of millions over the next decade and has not sufficiently addressed a realistic influx of school age children.

Loss of Commercial Space: There is no provision in these articles to prevent a loss of our existing commercial space. Needham residents deserve development that preserves existing commercial businesses.

Distributional Equity: If approved, this rezoning would allow the development of a campus of multi-story buildings in the already congested Highland Ave. area extending through Chestnut Street.

Fiscal Impact: The fiscal analysis commissioned by HONE group did not include an independent 3rd party peer review capital investment analysis. This should be required for each of the two proposed articles.

Lack of Design Guidelines: The proposals lack meaningful protections to ensure future developments respect the visual identity and unique character of existing neighborhoods. Referring this back would allow town officials to craft binding design guidelines that foster a harmonious relationship between new construction and the existing neighborhood fabric.

Save Suburban Needham - Oppose this mandate and send it back
let's get it right – tell the state NO

We support more housing in Needham,
we disagree on how to get there
Please Sign the Petition at NRTZ.Org

If you are surprised by this, you are not alone. Beacon Hill guidelines favor developers, not residents.
We would not want to have to initiate a citizen-referendum here in Needham.

Prepared by Needham Residents for Thoughtful Zoning at **NRTZ.org**