LEBANON PLANNING BOARD
AUGUST 24, 2026 - 6:30 PM
COUNCIL CHAMBERS, CITY HALL OR REMOTE VIA VIRTUAL PLATFORM
LEBANONNH.GOV/LIVE

To participate in this meeting, please join live via Microsoft Teams or call 929-229-9356 (Access Code: 532 221 961#). If you have trouble accessing this meeting, please email Tim Corwin.

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1. Call to Order

2. Public Hearing Items

A. **City of Lebanon, 0 Barrows Street (Tax Map 77, Lot 106), zoned R-3:** Applicant requests Final Plat Review pursuant to Section 10.3 of the Subdivision Regulations of a proposed six (6)-lot Major Subdivision for a five (5)-dwelling unit development designed pursuant to the Pattern Zone Overlay District regulations set forth in Section 411 of the Zoning Ordinance, together with related site improvements. The proposed Pattern Zone development will replace the Major Subdivision, Site Plan, and Conditional Use Permit for a proposed 5-unit Cottage Development approved by the Planning Board on January 27, 2025 (PB2025-04-FMAJSPRCUP). **PB2026-36-FMAJ - Postponed from August 10, 2026.**

3. Study Items

A. Review and Adoption of 2027-2032 Capital Improvement Program (CIP)

4. Committee Reports

- --City Council Representative
  --Heritage Commission
  --Pedestrian & Bicyclist Advisory Committee
  --Upper Valley Lake Sunapee Regional Planning Commission
  --UV Subcommittee of the Connecticut River Joint Commissions
  --Upper Valley Transportation Management Association
  --Mascoma River Local Advisory Committee
  --West Lebanon Revitalization Advisory Committee
  --Planning & Development Department – Task Status
  --Class VI Roads Advisory Committee
  --Lebanon Energy Advisory Committee
  --Development Regulations
  --Minor Site Plan Committee

5. Other Business

A. **Master Plan Housing Chapter Update:** Discussion and possible adoption of proposed changes to the Lebanon Housing Chapter of the Master Plan following public hearing held on June 22, 2026.

B. River Park Development Progress Update as Required per the Notice of Action dated August 19, 2025 for PB2025-25-EXT - **Continued discussion from August 10, 2026**

C. Discussion re: Reminder about Oaths of office (appointments and reappointments)

6. Approval of Minutes

A. June 22, 2026

B. July 13, 2026

7. Adjournment

The order of agenda items is subject to change.

Meetings are open for in-person and remote attendance. Members of the public who wish to attend remotely may do so by going to LebanonNH.gov/Live where you will find instructions on how to enter the meeting. Members of the public will be able to participate and ask questions through the City's virtual platform or by phone. Please note: Should technical difficulties occur during the meeting that disrupt virtual or phone connection(s), the meeting will continue without remote access capabilities.
Any person with a disability who wishes to attend this public meeting and needs additional accommodation, please contact the ADA coordinator at City Hall by calling 603-448-4220 at least 72 hours in advance so that the City can make any necessary arrangements.

APPLICATION FOR

SPECIAL EXCEPTION	☐	☐	SITE PLAN REVIEW
VARIANCE	☐	☑	SUBDIVISION
MOTION FOR REHEARING	☐	☐	LOT LINE ADJUSTMENT
APPEAL OF AN ADMIN. DECISION	☐	☐	CONDITIONAL USE PERMIT

☐ OTHER _____

PROPERTY OWNER (APPLICANT):

NAME: City of Lebanon TEL

MAILING ADDRESS:

E-MAIL ADDRESS:

CO-APPLICANT, AGENT, OR LESSEE:

NAME: TEL.#:

MAILING ADDRESS:

E-MAIL ADDRESS:

PROJECT LOCATION:

TAX MAP #: 77 LOT#: 106 PLOT #: ZONE: R3

STREET ADDRESS OF PROJECT: 0 Barrows Street

IS THIS PROPERTY LOCATED IN THE: **WETLANDS** ☑ YES ☐ NO **HISTORIC DISTRICT** ☐ YES ☑ NO

FLOOD PLAIN ☐ YES ☑ NO

SCOPE OF PROJECT:

Pattern-zone subdivision for a 5-lot development.

TYPE OF OCCUPANCY:

EXISTING ☑ VACANT ☐ ONE FAMILY ☐ TWO FAMILY ☐ MULTI-FAMILY ☐ COMMERCIAL ☐ INDUSTRIAL

PROPOSED ☐ VACANT ☐ ONE FAMILY ☐ TWO FAMILY ☑ MULTI-FAMILY ☐ COMMERCIAL ☐ INDUSTRIAL

IF USE IS **COMMERCIAL** OR **INDUSTRIAL**, PLEASE NOTE **SPECIFIC** USE: Cottage Development

SIGNATURE BLOCK:

FOR PLANNING BOARD APPLICATIONS ONLY: I, the undersigned, hereby submit this application on the date noted below with the knowledge and understanding that the Planning Board shall determine if the submitted application is complete according to its regulations at its next regularly scheduled meeting on August 10, 2026, unless I personally request, in writing, that the Board delay its determination of completeness to a later date.

PROPERTY OWNER: David Brooks DATE: 7/13/26

NOTE: IF, AS OWNER, YOU WISH TO DESIGNATE AN AGENT TO ACT ON YOUR BEHALF, PLEASE READ THE FOLLOWING AND SIGN BELOW: I hereby designate the person listed above as my agent for the purpose of procuring the necessary local permits for the proposed work as described herein. Representations made by my agent may be accepted as though made by me personally, and I understand that I am bound by any official decision made on the basis of such representation.

PROPERTY OWNER: _____ DATE: _____

DATE RECEIVED	FILE # (MAP/LOT)	APPLICATION #	FEE - $ AMOUNT	DATE PAID	VOUCHER #

CITY MANAGER'S OFFICE
City of Lebanon, NH
51 North Park Street
Lebanon, NH 03766
(603) 448-4220 fax (603) 966-3122

TO: City of Lebanon Planning Board
FROM: David Brooks, Deputy City Manager
DATE: July 23, 2026
RE: Proposed Pattern Zoning Subdivision of City-Owned Property situated at 0 Barrows Street, Tax Map/Lot: 77-106

To the Lebanon Planning Board:

On April 21, 2022, the City Council unanimously adopted a "Resolution on Housing" directing the City Manager to take steps to enable, incentivize, and partner in addressing housing needs not currently being addressed by the market. Among the actions outlined in the Resolution is to "partner with the Lebanon Housing Authority and other residential developers to utilize city-owned properties for the development of new housing units, including the possibility of a 'demonstration project' on a city-owned parcel with high visibility and an opportunity for a reasonable number of units to help overcome barriers to affordability."

In February 2024, the City Council determined, in accordance with City Council Policy CC-102, Real Property Transactions, that several city-owned properties have redevelopment potential, and authorized the City Manager to pursue redevelopment of the properties, including two parcels located along Barrows Street (Tax Parcels 77-106 and 77-107). In May 2024, the Council discontinued a portion of Barrows Street, which separated the two city-owned properties, allowing them to be merged into a single +/-2.09-acre parcel. The City subsequently had survey work completed, including the boundary of the merged properties along with wetlands and topography.

In August 2024, the Lebanon Planning Board granted Site Plan approval allowing the City to complete preliminary site work including clearing, grading, and filling in advance of a proposed future residential development. Later in August, the NH Department of Environmental Services (NHDES) issued a Wetlands and Non-Site Specific Permit to authorize impacts to a small (<950 sqft), isolated wetland in the south-central portion of the property. Work authorized by the Planning Board and NHDES approvals was completed by early December 2024, and the site was stabilized in preparation for further development.

On January 27, 2025, the Planning Board granted conditional approval for a cottage development project consisting of five, one-story, detached residential units surrounding a central courtyard, each with approximately 930 square feet of gross living area, plus a full basement for additional storage or living space.

During the summer of 2025, the City issued a Request for Proposals (RFP) for modular housing units. The City received three responses and ultimately selected Preferred Building Systems (PBS) of Claremont, NH, and worked with the modular builder to finalize the cottage unit plans.

Later in the fall, the City issued RFPs for the remaining site work, and the sub-trades, including mechanical, electrical, and plumbing work, and finish carpentry, in order to develop more accurate cost estimates for each unit and for the overall project.

Based on the initial bid responses, the cost of each finished unit was estimated to be considerably higher than the project team was comfortable with. Subsequent efforts by the City to revise the project layout helped reduce the estimated finished costs to an amount comparable to other dwelling units currently available within the City, but still did not achieve the City's goals.

In February 2026, following press coverage of a City Council discussion on the status of the project, the City was contacted by several businesses expressing renewed interest in the project. Based on subsequent discussions with those businesses, the project team modified the proposed development concept to utilize the recently-adopted Pattern Zoning provisions instead of the Cottage Development provisions.

At this time, the City is returning to the Planning Board to seek approval of a six-lot subdivision in accordance with the Pattern Zoning provisions set forth in Section 411 of the Zoning Ordinance. As proposed, five lots will be created for single-family residential development. The sixth parcel, comprising the remainder of the property, which is predominately jurisdictional wetlands, will be retained by the City.

Unlike the prior cottage development project layout, the current proposal will involve internal lot boundaries and a short extension of the Barrows Street right-of-way, which will require compliance with the subdivision regulations. Nevertheless, we are once again requesting that the Planning Board waive the requirement for Design Review of a Preliminary Layout pursuant to Section 10.2.F of the Subdivision Regulations and allow this small project to proceed directly to Final Plat Review pursuant to Section 10.3 of the Regulations.

A preliminary project layout and the proposed dwelling unit design were presented to the Heritage Commission on May 13, 2026, and received a conditional Certificate of Approval. Subsequently, on July 22, 2026, the Heritage Commission received and accepted an updated dwelling unit design for the Barrows Street development and determined that the condition of approval had been satisfied.

With individual parcels, and limited common improvements, the new development is not expected to require a condominium form of ownership. Shared responsibility for common driveway serving Lots 2-5 will be built into the parcel deeds. Similarly, shared responsibility for the wastewater pump station that will serve all 5 parcels will also be addressed in the parcel deeds.

The enclosed application materials include the following:

- Application for Subdivision Review
- Certified Notification List
- Subdivision Technical Checklists
- List of written waiver requests pursuant to Section 7.15 of the Subdivision Regulations
- Digital copy of the plan set in .PDF format

City of Lebanon, New Hampshire
APPLICATION FOR WAIVERS

Office Use Only	Date Received: _____	File No.: _____

PROJECT INFORMATION

Name of Applicant: City of Lebanon

Project Name: Barrows Street Cottage Development

Project Address: 0 Barrows Street

WAIVER REGULATIONS

In order to grant a Waiver from a requirement of the City of Lebanon Site Plan Review or Subdivision Regulations, the Planning Board must find that the Waiver is justified under one of the following criteria *(See Article VII of the Site Plan Review Regulations and Section 7.15 of the Subdivision Regulations)*:

Criteria A. Strict conformity would pose an unnecessary hardship to the Applicant and waiver would not be contrary to the spirit and intent of the regulations;

OR

Criteria B. Specific circumstances relative to the site plan, or conditions of the land in such site plan, indicate that the waiver will properly carry out the spirit and intent of the regulations.

WAIVER REQUEST(S)

I (we) hereby request a Waiver from:

[You can respond in the space provided, or attach a separate statement. Please be prepared to address each request during your public hearing. You must show that you have justified granting the Waiver(s).]

1. Section 5. Driveway of the (*circle one*) Site Plan Review / ~~Subdivision~~ Regulations. A Waiver of this Section meets (*circle one*) Criteria A / ~~Criteria B~~ because strict compliance causes uncessary hardship due to the uniquness of the property and the goals of the Pattern Zones Overlay District.

2. Section 10.2F of the (*circle one*) Site Plan Review / ~~Subdivision~~ Regulations. A Waiver of this Section meets (*circle one*) Criteria A / ~~Criteria B~~ because the applicant requests to proceed directly to final plat layout as the 5-lot subdivision represents a straightfoward, low-density subdivision.

3. Section 10.4.A.1.h. of the (*circle one*) Site Plan Review / Subdivision Regulations. A Waiver of this Section meets (*circle one*) Criteria A / Criteria B because all features are identified on the plan within the property limits. All features within 200 feet of the property are not germane to the project.

4. Section 10.4.A.1.i. of the (*circle one*) Site Plan Review / Subdivision Regulations. A Waiver of this Section meets (*circle one*) Criteria A / Criteria B because existing water and wastewater mains, culverts, and drains on the property are identified on the plans.

5. Section 10.4.C.1.c. of the (*circle one*) Site Plan Review / Subdivision Regulations. A Waiver of this Section meets (*circle one*) Criteria A / Criteria B because the 5-lot subdivision only includes a minor extension of Barrows Street.

6. Section 10.4.C.1.j. of the (*circle one*) Site Plan Review / Subdivision Regulations. A Waiver of this Section meets (*circle one*) Criteria A / Criteria B because all open space and recreational areas are seflf-contained within the project boundaries.

7. Section 10.4.C.1.k. of the (*circle one*) Site Plan Review / Subdivision Regulations. A Waiver of this Section meets (*circle one*) Criteria A / Criteria B because the subdivision will have a negligible impact on the local transporation system.

8. Section 12.3. of the (*circle one*) Site Plan Review / Subdivision Regulations. A Waiver of this Section meets (*circle one*) Criteria A / Criteria B because the development aligns with the growth patterns envisioned in the City's Master Plan and infills an existing parcel already characterized by similar residential uses.

SIGNATURE

I (we) hereby submit this application to the Planning Board and attest that to the best of my (our) knowledge all of the information on this application form and in the accompanying application materials and documentation is true and accurate. As the applicant or as the agent of the applicant, I attest that I am duly authorized to act in this capacity.

Signature of Applicant: _____ Date: 8/3/2026

CITY OF LEBANON, NH SUBDIVISION REGULATIONS – TECHNICAL CHECKLIST FINAL MAJOR SUBDIVISION	
PROJECT NAME: Barrows Street Pattern-Zone Subdivision, Barrows Street, Lebanon, NH	
APPLICANT: City of Lebanon	**DATE:** July 13, 2026; Revised per Staff Review 8/3/2026
GENERAL SUBMISSION REQUIREMENTS:	

All applications to the Planning Board for Subdivision Review must be submitted by 12:00 Noon on the day of the filing cutoff. [§7.7.C] **Submissions must be accompanied by the following information or review of the application may be delayed:**

- ☑ **A properly completed and signed Application Form.** [§7.7.A(1)]
- N☑A **The appropriate filing fees.** [§7.7.A(2)]
- ☑ **A written project description.** [§7.7.A(3)]
- ☑ **A list of the names and mailing addresses of all persons to be notified, by certified mail, of the public hearing.** [§7.7.A(4)]
- ☑ **A completed and signed Technical Checklist.** [§7.7.B]
  [Applicants must complete the entire checklist to ensure that all necessary information and materials have been provided with the application or that written requests for waivers have been properly provided in accordance with Section 7.15 of the Subdivision Regulations, as appropriate.]
- ☑ **Eight (8) sets of project plans to be distributed for Staff Review.** [§10.4.A(1)]
  Digital *[A Staff Review meeting is held at City Hall one (1) week following the cutoff date. Staff Review meetings begin at 2:00PM, unless otherwise noted. All revised and/or additional information or materials must be submitted within one (1) week following the Staff Review meeting.]*
- ☑ **A digital copy of Subdivision plan in .PDF and .DWG format.** [§10.4.A(2)]

NOTE: Applications shall contain sufficient information to enable the City Staff and the Planning Board to evaluate the proposed development for compliance with the Zoning Ordinance, the Planning Board's Regulations, and other applicable City Codes, and for the Planning Board to make an informed decision.

All required application materials shall be submitted as a single inclusive package, including any appropriate waiver requests as permitted by the Regulations. Submission of a complete application package ensures that the review process by City Staff is as efficient and effective as possible.

The purpose of the filing deadline is to provide adequate time for City review of the proposal. Submission of any altered, additional, or substitute application materials required by the Regulations, subsequent to the filing deadline, other than as directed by City Staff, shall cause the application to be deemed untimely filed, and such application shall not be heard until a subsequent month.

PLAN SUBMITTAL TECHNICAL CHECKLIST:

NOTE: Final Major Subdivision plans shall include the information described below pursuant to Section 10 of the Lebanon Subdivision Regulations. Plans shall be submitted on sheets no larger than 24" x 36". Plan sets with multiple sheets shall include sheets of uniform size and be bound on the left edge. When more than three (3) sheets are required, an additional cover sheet shall be attached including a table of contents. The scale of the plans shall be appropriate to the size of the overall development. All lettering shall be of a size and type that is legible.

In order to facilitate the use of the City's Geographic Information System (GIS) for planning purposes, all surveys and engineered plans submitted for Subdivision Review shall utilize the NH State Plane Coordinate system and shall reference the North American Vertical Datum of 1988 (NAVD 88), unless prior approval to use an alternate coordinate system and/or vertical datum is granted by the Planning Office.

A written request for waiver shall be required, pursuant to Section 7.15 of the Subdivision Regulations, for any submission requirement for which the information or data is not provided by the applicant. [§10.4.A(3)]

Plan Requirements	**Info. Provided**	**Waiver Sought**
10.4.A(1)(a) - - Proposed subdivision name or identifying title; - Name of the City and County in which the subdivision is proposed; - A Locus map; - North arrow; - Scale of the plat; - Date of the plat and of any revisions to the plat shall be shown on the first page or cover page, if applicable; (NOTE: The date on the plat at the time of initial submission for application review shall be included on all subsequent submissions to the City. Any subsequent change(s) to the plat shall include a revision date and description of the revision(s).)	☑ ☑ ☑ ☑ ☑ ☑	☐ ☐ ☐ ☐ ☐ ☐
10.4.A(1)(b) - Names and mailing addresses of Applicant(s); Owner(s) of Record of subject properties; Owners of abutting properties, including tax map and lot references; and Holders of any easements, rights-of-way, or other restrictions.	☑	☐
10.4.A(1)(c) - Names and business addresses of the surveyor, including license number and seal, and of every engineer, architect, soil scientist, or wetlands scientist whose professional seal appears on any plan or document submitted to the Board.	☑	☐
10.4.A(1)(d) - Zoning District in which the subdivision is located, including district boundaries if in more than one district.	☑	☐

Plan Requirements *(cont.)*	**Info. Provided**	**Waiver Sought**
10.4.A(1)(e) - Boundary lines of the overall tract, and each of the proposed lots, including bearings and distances as determined by an actual field survey by a licensed land surveyor, including the date of the completion of the survey. All dimensions shall be shown in feet and decimals. Monuments shall be referenced on the plat as required under Section 13.5(A) of the Regulations.	☑	☐
10.4.A(1)(f) - Topographic contours, at intervals of 5 feet or less, including spot elevations on existing roads and a grading plan, if natural contours are to be changed by more than 2 feet. All contours and spot elevations shall be referenced to USGS or FEMA FIRM datums, as appropriate. Existing topographic information shall be prepared by a professional engineer or licensed land surveyor.	☐	☑
10.4.A(1)(g) - Location of existing structures, roads, easements, and trails on the property and within 200 feet of the property.	☐	☑
10.4.A(1)(h) - Location of existing natural features, such as permanent or intermittent watercourses, marshes, lakes, ponds, flood plains, wetlands, rock outcrops, wooded areas, and other significant features on the property and within 200 feet of the property. Indicate the approximate limits of clearing and those natural features to be removed, retained, or altered. Wetlands on the property, if any, shall be delineated by a NH Certified Wetlands Scientist, whose seal and signature shall appear on the plat.	☐	☑
10.4.A(1)(i) - Location of existing water and wastewater mains, culverts, and drains on the property and within 200 feet of the property with sufficient information, including pipe sizes and direction of flow, to allow the subdivision to be viewed in the context of existing City utilities.	☐	☑
10.4.A(1)(j) - If the application covers only a part of the applicant's entire holding, a map of the entire tract shall be drawn at a scale of not smaller than 1" = 400', showing all existing streets and an outline of the platted area.	N/A	☐
10.4.C(1)(a) - Final proposed lot lines and rights-of-way, with bearings and distances, and areas of each lot in square feet and acres.	☑	☐
10.4.C(1)(b) - Final width, location, and grades of all proposed streets or road rights-of-way.	☑	☐
10.4.C(1)(c) - Final profile of streets and cross-sections for construction of streets and sidewalks.		☑
10.4.C(1)(d) - Names of all proposed streets.	☑	☐
10.4.C(1)(e) - Final design, location and size of all proposed water lines, valves, hydrants, wastewater lines, manholes, and connections to existing public or private utility lines. Alternate means of water supply or wastewater disposal and treatment, including data on soil tests and final designs and locations, shall be provided if existing municipal systems are not available.	☑	☐
10.4.C(1)(f) - Typical lot layout(s) with building envelopes and location for on-site wastewater disposal facilities, if applicable.	N/A	☐

Plan Requirements *(cont.)*	**Info. Provided**	**Waiver Sought**
10.4.C(1)(g) - Final storm drainage plan, indicating the location and size of proposed catch basins, manholes, drainage lines, ditches, retention, detention, or infiltration systems and their profiles, connections to existing lines or ditches, and all other means of storm water management.	☑	☐
10.4.C(1)(h) - Final design and location of any proposed bridges or culverts.	☑	☐
10.4.C(1)(i) - Final plan for existing and proposed telephone, cable, and electric utilities, including municipal fire alarm systems.	☑	☐
10.4.C(1)(j) - Final location of proposed recreational or open space areas, including land proposed to be dedicated to public use. The plan shall also indicate the location of all existing publicly accessible recreation or open space areas within 1/4 mile (1,320 feet) of the property.	☐	☑
10.4.C(1)(k) - Final location and design of any proposed traffic control devices necessary in conjunction with the subdivision, as well as the location of all existing transit routes and transit stops located or passing within 1/4 mile (1,320 feet) of the property.		☑
10.4.C(1)(l) - Phasing lines, where applicable.	N/A	☐
10.4.C(1)(m) - Where applicable, there shall be shown on each lot whether or not there will be easements for water or wastewater mains, storm drainage of the proposed streets, or other improvements.	☑	☐
Supporting Documents and Information, Where Applicable	**Info. Provided**	**Not Applicable**
10.4.C(2)(a) - Final statement of the work required on existing streets and other off-site improvements to meet the minimum standards set forth in the Regulations, including cost estimates and the method of meeting such costs.	N/A	☐
10.4.C(2)(b) - Cost estimates for the completion of all on-site and off-site improvements which shall be subject to a Performance Security Agreement pursuant to Section 7.10 of the Regulations.	N/A	☐
10.4.C(2)(c) - Temporary Control Plan(s) to be implemented during the proposed construction period, such as traffic control, erosion control, dust control, and hours of operation.	☑	☐
10.4.C(2)(d) - Copy of any proposed covenants or deed restrictions, including Owners Association documents and Bylaws as described in Section 12.8 of the Regulations, as may be intended to apply to the property in whole or in part. Where applicable, such Owners Association documents or other legal instruments shall include provisions for the ownership and maintenance of open space as described in Section 12.2 of the Regulations.	N/A	☐
10.4.C(2)(e) - For phased developments, a final schedule for construction and completion of streets, utilities, and other required infrastructure improvements, as further set forth in Section 7.13.C of the Regulations.	N/A	☐
10.4.C(2)(f) - Any proposed street or roadway access to a State highway shall be approved by the NHDOT and provided to the Board prior to the recording of the approved final plat.	N/A	☐
10.4.C(2)(g) - Approvals, as prescribed by law, from any other City agency which may have jurisdiction, including but not limited to, wetland permits.	N/A	☐

Supporting Documents and Information, Where Applicable *(cont.)*	**Info. Provided**	**Not Applicable**
10.4.C(2)(h) - Where applicable to a specific subdivision, the Board may require a statement from telephone, cable, and electric utilities stating that services will be furnished and that arrangements have been made for installation of such utilities according to the plat as submitted by the applicant.	☐	☑

NOTE: THE APPLICANT IS RESPONSIBLE FOR PROVIDING THE REQUIRED INFORMATION PURSUANT TO SECTION 10 OF THE SUBDIVISION REGULATIONS. PLEASE BE AWARE THAT THIS CHECKLIST IS FOR INFORMATION AND GUIDANCE ONLY AND DOES NOT REPRESENT THE LAW DICTATING SUBMITTAL REQUIREMENTS NOR IS IT COMPLETE AND INCLUSIVE THEREOF.

Completed By: _____

Planning office Use Only:

Date Received___/___/___ Checklist Complete YES or NO Checked by:_____

(Last Revised 05/23/13)

CITY OF LEBANON
DEPARTMENT OF PUBLIC WORKS
193 Dartmouth College Highway
Lebanon, NH 03766

February 14, 2025

City of Lebanon, David Brooks, Deputy City Manager
51 N. Park Street
Lebanon, NH 03766

Re: Lebanon Sewer Permitting – New Residential Sewer Connection at 0 Barrows Street Lebanon, NH. (Tax Map 77 Lot 106)
Permit #:PS25-003

Dear Applicant,

Enclosed, please find the Notice of Allocation for sewer capacity, and the Sewer Use Permit for property located at 0 Barrows Street Lebanon, NH.

If you should have any questions, please do not hesitate to contact me.

Thank you,

Brian Vincent, P.E.
City Engineer
(603)448-3112
UtilityPermits@LebanonNH.gov

NOTICE OF ALLOCATION

This Notice of Allocation reserves sewer capacity for the applicants' use while other land use permits are attained in accordance with the provisions of Chapter 136 of the City Code. This Notice of Allocation is only valid for a period of two years. To retain this Allocation, the applicant must still apply for a Sewer Use Permit from the City of Lebanon.

Property location: 0 BARROWS STREET

Tax Map: 77 / **Lot:** 106

Applicant: City of Lebanon

Type of Sewer use (i.e., Commercial, residential, etc.): RESIDENTIAL

Average Daily Flow Reserved: 800 GPD

Sewer Units: 4

Issued By: Shaun Mulholland
Shaun Mulholland (Feb 13, 2025 15:32 AST)

Shaun Mulholland, City Manager

Date Issued: 02/14/2025

Date Expires: 02/14/2027

The issuance of a Notice of Allocation or Sewer Use Permit shall not be deemed to create any kind of vested or property right in the City-owned sewer system. The privileges conferred by such permits may not be assigned, traded, exchanged among properties, or applied to a materially different development without the approval of the City Manager acting on a revised application submitted under is section.

SEWER USE PERMIT

This Sewer Use Permit is issued for this location for the estimated flows enumerated below. The permit allows discharge of wastewater into the City's sewer system in accordance with the provisions of Chapter 136 of the City Code as well as applicable federal and state laws, rules, and regulations. This permit is valid unless otherwise revoked for the property and buildings as approved by the Lebanon Planning Board **(PS25-003 0 BARROWS STREET LEBANON, NH).** Any planned modifications to this property which result in additional sewer usage above the allocated amounts detailed below require the property owner to seek a permit modification from the Department of Public Works. Allocation shall be assessed as part of the Building Permit Process or Site Plan review. This permit shall remain valid regardless of a change in ownership of the property unless otherwise revoked by the City in accordance with the provisions of Chapter 136 of the Code of the City of Lebanon and applicable federal and state laws, rules, or regulations.

Sewer Use Permit Number: **PS25-003**

Property location: **0 BARROWS STREET LEBANON, NH (Tax Map 77 Lot 106)**

Permittee: **City of Lebanon**

Type of Sewer use (i.e., Commercial, Residential, etc.): **RESIDENTIAL**

Average Daily Permitted Flow: **800 GPD**

Sewer Units: **4**

Issued By: Shaun Mulholland
Shaun Mulholland (Feb 13, 2025 15:32 AST)

Date: Feb 13, 2025

Shaun Mulholland, City Manager

CITY OF LEBANON
DEPARTMENT OF PUBLIC WORKS
193 Dartmouth College Highway
Lebanon, NH 03766

February 13, 2025

City of Lebanon, David Brooks, Deputy City Manager
51 N. Park Street
Lebanon, NH 03766

Re: Lebanon Water Permitting for the property located on 0 Barrows Street Lebanon, NH (Tax Map 77 Lot 106).
Permit#: PW25-003

Dear Mr. Brooks,

Enclosed, please find your Water Use Permit for the property located at 0 Barrows Street Lebanon, NH.

If you should have any questions, please do not hesitate to contact me.

Thank you,

BJW

Brian Vincent, P.E.
City Engineer
(603)448-3112
UtilityPermits@LebanonNH.gov

WATER SERVICE PERMIT

This Water Service Permit is issued for this location for the estimated flows enumerated below. The permit allows use of municipal water originating from the City's water system in accordance with the provisions of Chapter 182 of the City Code as well as applicable federal and state laws, rules, and regulations. This permit is valid unless otherwise revoked for the property and buildings as approved by the Lebanon Planning and Development **(PW25-003 0 BARROWS STREET LEBANON, NH)**. Any planned modifications to this property which result in additional water demand above the allocated amounts detailed below require the property owner to seek a permit modification from the Department of Public Works. Water use shall be assessed as part of the Building Permit Process or Site Plan review. This permit shall remain valid regardless of a change in ownership of the property unless otherwise revoked by the City in accordance with the provisions of Chapter 182 of the Code of the City of Lebanon and applicable federal and state laws, rules, or regulations.

Water Service Permit Number: PW25-003

Property location: 0 BARROWS STREET LEBANON, NH

Tax Map: 77 **/ Lot:** 106

Permittee: DAVID BROOKS

Type of Water use (i.e., Commercial, Residential, etc.): RESIDENTIAL

Average Daily Permitted Flow: 800 GPD

Equivalent Sewer Units: 4

Issued By: Shaun Mulholland
Shaun Mulholland (Feb 13, 2025 15:32 AST)

Date: Feb 13, 2025

Shaun Mulholland, City Manager

WHEN RECORDED RETURN TO:
City of Lebanon
Planning & Development Department
51 North Park Street
Lebanon, NH 03766

MASTER DECLARATION OF EASEMENTS, COVENANTS, AND RESTRICTIONS

This Master Declaration of Easements, Covenants, and Restrictions ("Declaration") is made as of this ___ day of _____, 2026 (the "Effective Date"), by the City of Lebanon, New Hampshire ("City"), as the owner/subdivider of the Property identified herein.

1. Property; Parties; Purpose.

1.1 Property. The "Property" consists of Lots 1–5 (house lots) and Lot 6 (City-retained lot) located on or near Barrows Street in the City of Lebanon, New Hampshire, as shown on the plat titled, "Subdivision, Open Space, and Easement Plan for City of Lebanon – Tax Map 77, Lot 106," prepared by Pathways Consulting, LLC, dated July 10, 2026, revised _____, Proj. No. 13377, recorded in the Grafton County Registry of Deeds as Plan #_____ ("Subdivision Plan").

1.2 Parties. Declarant is the City of Lebanon, New Hampshire. Upon conveyance, each owner of Lots 1–5 shall be a party bound by, and benefiting from, this Declaration.

1.3 Purpose. This Declaration creates perpetual easements and covenants that run with the land to (a) provide legal access to rear Lots 3 and 4 via a shared driveway, (b) establish shared utility and drainage rights and obligations, (c) define ownership and operation and maintenance responsibilities of a wastewater pump station serving Lots 1–5, (d) memorialize affordability/stability covenants for Lots 1–5, and (e) reference open-space restrictions on portions of Lot 6.

2. Recitals; Background.

2.1 The Lebanon Planning Board pursuant to a Notice of Action dated August 24, 2026, for application PB2026-36-FMAJ, granted final Major Subdivision approval to the City of Lebanon, in accordance with the Lebanon Subdivision Regulations, for the development of the Property as

shown on plans titled "Barrows Street Pattern Zone Subdivision," prepared by the City of Lebanon Department of Public Works, dated June 18, 2026, last revised_____ ("Approved Plan Set"). The Notice of Action, including specific conditions of approval, is recorded in the Grafton County Registry of Deeds at Book ____, Page _____.

2.2 Lots 2–5 lie across Barrows Street from Lot 1; Lots 3 and 4 are rear lots and will access Barrows Street via a shared driveway over Lots 2 and 5.

2.3 A wastewater pump station serving Lots 1–5 is or will be located within the City's Barrows Street right-of-way ("Pump Station"). Owners of Lots 1–5 bear operation and maintenance responsibilities of the Pump Station per this Declaration. Separate municipal approval for installation and activity with the Barrows Street right-of-way is required.

2.4 The City wishes to avoid creating a homeowner's association. Accordingly, obligations herein are implemented through recorded easements and covenants that run with the land, with lien-enabled enforcement, a non-entity "Project Manager" backstop, and City third-party beneficiary status where noted.

3. Definitions.

3.1 "Shared Facilities" means the shared driveway; Pump Station Equipment; the Lot 1 Sewer Lateral; the Lots 2–5 Sewer Main; the On-Site Sewer Main (2–5); and the Drainage Pipe (2–5) and appurtenances.

3.2 "Lot 1 Sewer Lateral" means the dedicated sewer line extending from the Pump Station to Lot 1.

3.3 "Lots 2–5 Sewer Main" means the shared sewer line extending from the Pump Station to the edge of the Barrows Street right-of-way.

3.4 "On-Site Sewer Main (2–5)" means the private sewer main located within and serving Lots 2–5.

3.5 "Drainage Pipe (2–5)" means stormwater pipe(s) and appurtenances serving Lots 2–5.

3.6 "Routine O/M" means scheduled/typical maintenance up to $_____; "Capital Replacement" means larger work exceeding that threshold or full/major replacements.

4. Grant of Easements (Driveway; Utilities; Drainage).

4.1 Shared Driveway Easement. The Declarant hereby grants to the Owners of Lots 2, 3, 4, and 5 a perpetual, non-exclusive easement for ingress, egress, and vehicular access over and across the Shared Driveway Easement Area shown on the Subdivision Plan and described in Exhibit A (the "Shared Driveway Easement Area"). This easement is perpetual, runs with the land, and provides full vehicular access to each of Lots 2, 3, 4, and 5. The easement is intended to satisfy the rear-lot access requirement of Zoning Ordinance §411.6(C)(1) for Lots 3 and 4.

4.2 Utility Easements. Declarant hereby grants to the Owners of Lots 2, 3, 4, and 5, reciprocal, perpetual utility easements for the installation, operation, maintenance, repair, and replacement of domestic water, sewer, electric, telephone, and communications facilities across the Utility Easement Areas shown on the Subdivision Plan and described in Exhibit B (the "Utility Easement Areas") with rights of entry and restoration. The Utility Easement Areas include all segments necessary for connection of each Lot to public or private utilities, whether or not such utility facilities lie within the Shared Driveway Easement Area.

4.3 Drainage Easements. Declarant hereby grants to the Owners of Lots 2, 3, 4, and 5 reciprocal, perpetual drainage easements permitting the flow, maintenance, repair, and replacement of the Drainage Pipe (2–5) and appurtenances across the Drainage Easement Area shown on the Subdivision Plan in Exhibit C (the "Drainage Easement Areas") with rights of entry and restoration.

4.4 City Water Main Easement.

The City shall have a perpetual easement over those portions of Lots 2, 3, 4, and 5 necessary for the installation, operation, maintenance, repair, replacement, and access to the municipal water main shown on the Subdivision Plan (the "Water Main Easement"). The municipal water main located within the Water Main Easement is owned, operated, and maintained solely by the City. No Owner of any Lot shall have any responsibility for operation, maintenance, repair, or replacement of the municipal water main, and no costs relating to the City water main shall be allocated under Sections 8.1-8.4 of this Declaration.

The Water Main Easement shall not be affected by any private easements or covenants established in this Declaration, and all private rights herein shall be subordinate to the City's rights in the Water Main Easement.

5. Construction Standards; Addressing.

5.1 Standards. The shared driveway shall be constructed and maintained in accordance with the Approved Plan Set and the City of Lebanon Driveway Regulations.

5.2 E-911 Addressing. Lots accessed by the shared driveway shall comply with E-911 protocols and display any City-required signage.

6. Operations and Maintenance (O/M).

6.1 Shared Driveway (Lots 2–5). The owners of Lots 2–5 shall jointly and severally perform Routine O/M and Capital Replacement for the shared driveway and associated drainage, including snow/ice control, surface repairs/resurfacing, culvert cleaning, ditch maintenance, vegetation management, and turnaround upkeep.

6.2 Pump Station (Lots 1–5). The owners of Lots 1–5 operate, maintain, repair, and replace the Pump Station equipment and appurtenances in accordance with City standards and manufacturer specifications, including alarms/telemetry, power, emergency call-outs, and inspection logs.

6.3 Lot 1 Sewer Lateral (Lot 1 only). The owner of Lot 1 solely operates, maintains, repairs, and replaces the Lot 1 Sewer Lateral and its appurtenances and shall be solely responsible for obtaining any permits and approvals from the City that are needed to perform any such work with the Barrows Street right-of-way.

6.4 Lots 2–5 Sewer Main (Lots 2–5). The owners of Lots 2–5 jointly operate, maintain, repair, and replace the Lots 2–5 Sewer Main and appurtenances. The Owners of Lots 2–5 shall also be responsible for obtaining all required City permits and approvals for any work on the Lots 2–5 Sewer Main performed within the Barrows Street right-of-way.

6.5 On-Site Sewer Main (2–5) and Drainage Pipe (2–5). The owners of Lots 2–5 jointly operate, maintain, repair, and replace the On-Site Sewer Main (2–5) and the Drainage Pipe (2–5), including inspections, cleaning, and emergency repairs.

6.6 Access and Restoration. Easement holders have reasonable rights of entry for O/M and replacement, and must restore disturbed areas to pre-existing conditions, reasonable wear and tear excepted.

7. Ownership of Shared Facilities.

7.1 Pump Station Ownership (Lots 1–5). The wastewater Pump Station equipment located within the Barrows Street right-of-way (mechanical, electrical, control, alarm/telemetry components, valves, fittings, conduit, and appurtenances; collectively, "Pump Station Equipment"), excluding any interest in the underlying public right-of-way land, is owned by the Owners of Lots 1–5 as tenants-in-common, each holding an undivided ownership interest appurtenant to and inseparable from their respective Lot. All activities remain subject to municipal approvals and the City's dominant control of the right-of-way.

7.2 Lot 1 Sewer Lateral Ownership (Lot 1 only). The Lot 1 Sewer Lateral and appurtenances are owned solely by the Owner of Lot 1 and pass automatically with title to Lot 1.

7.3 Lots 2–5 Sewer Main Ownership (Lots 2–5 only). The Lots 2–5 Sewer Main and appurtenances are owned by the Owners of Lots 2–5 as tenants-in-common and pass automatically with title to each of Lots 2–5.

7.4 On-Site Sewer Main (2–5) and Drainage Pipe (2–5) Ownership. The On-Site Sewer Main (2–5) and the Drainage Pipe (2–5), with appurtenances, are owned by the Owners of Lots 2–5 as tenants-in-common.

7.5 Appurtenant Interests; No Separate Conveyance. Ownership interests described in Sections 7.1 through 7.4 are appurtenant to and inseparable from the respective Lots; they shall not be severed, partitioned, separately conveyed, or separately encumbered.

7.6 No Possessory Right-of-Way Interest. Ownership of equipment within the Barrows Street right-of-way conveys no possessory interest in the right-of-way. Installation, access, operation, maintenance, repair, replacement, or relocation are subject to City direction and approvals.

7.7 Risk of Loss; Insurance. Risk of loss or damage to the Pump Station Equipment shall be borne equally by the Owners of Lots 1, 2, 3, 4, and 5, each Owner bearing one-fifth (1/5) of such loss. Risk of loss or damage to the Lots 2–5 Sewer Main, the On-Site Sewer Main serving Lots 2–5, and the Drainage Pipe serving Lots 2–5 shall be borne equally by the Owners of Lots 2, 3, 4, and 5, each Owner bearing one-fourth (1/4) of such loss.

The Owners responsible for Shared Facilities under this Section 7 shall maintain commercially reasonable property insurance in amounts sufficient to repair or replace such Shared Facilities in the event of loss, naming the City as an additional insured for activities occurring within the public right-of-way.

7.8 Relationship to O/M Responsibilities. The ownership allocations in Section 7 are for title purposes only and do not alter or affect the operation, maintenance, repair, replacement, or cost-sharing obligations established in Section 8 of this Declaration. All responsibilities and cost allocations for the Shared Facilities shall be governed solely by Section 8, regardless of any ownership interests described in Section 7.

8. Cost Allocation; Budgets; Reserve.

8.1 Pump Station (Lots 1–5). Routine operation, maintenance, repair, and replacement costs for the Pump Station Equipment shall be shared equally among the Owners of Lots 1, 2, 3, 4, and 5, each Owner bearing one-fifth (1/5) of such costs.

8.2 Lot 1 Sewer Lateral. The Owner of Lot 1 shall bear one hundred percent (100%) of all costs of operation, maintenance, repair, and replacement of the Lot 1 Sewer Lateral.

8.3 Shared Sewer Facilities Serving Lots 2–5. Operation, maintenance, repair, and replacement costs for (a) the Lots 2–5 Sewer Main, (b) the On-Site Sewer Main serving Lots 2–5, and (c) the Drainage Pipe serving Lots 2–5 shall be shared equally among the Owners of Lots 2, 3, 4, and 5, each Owner bearing one-fourth (1/4) of such costs.

8.4 Shared Driveway Serving Lots 2–5. Operation, maintenance, repair, and replacement costs for the Shared Driveway Easement Area shall be shared equally among the Owners of Lots 2, 3, 4, and 5, each Owner bearing one-fourth (1/4) of such costs.

8.5 Annual O/M Plan. An annual written operation and maintenance plan and cost summary for the Shared Facilities shall be prepared each year by a majority of the affected Owners (Lots 1–5 for the Pump Station; Lots 2–5 for the Shared Driveway and shared sewer and drainage facilities). If the affected Owners fail to prepare such plan by March 1 of any year, the Project Manager designated under Section 10 may prepare the plan in their stead. The preparation or non-preparation of such plan does not alter or affect the cost allocations set forth in Sections 8.1 through 8.4

8.6 Reserve Account (Optional). The affected Owners may, but are not required to, maintain a non-entity reserve account for Pump Station Equipment, Shared Driveway, or shared sewer and drainage facilities. Any reserve contributions shall follow the same cost allocations stated above.

9. Collections; Assessment Lien; Enforcement.

9.1 Covenant Running with the Land. Each Owner's cost share is a covenant running with the land and binds successors and assigns.

9.2 Payment Terms. Invoices for Shared Facility costs shall be prepared and issued as follows:

(a) Pump Station Costs (Lots 1–5). For Pump Station Equipment costs, an invoice shall be prepared and issued by a majority of the Owners of Lots 1, 2, 3, 4, and 5. If such majority does not issue an invoice within thirty (30) days after costs are incurred, the Project Manager designated under Section 10 may prepare and issue the invoice.

(b) Shared Driveway and Shared Sewer and Drainage Costs (Lots 2–5). For costs relating to (i) the Shared Driveway Easement Area, (ii) the Lots 2–5 Sewer Main, (iii) the On-Site Sewer Main (2–5), and (iv) the Drainage Pipe (2–5), an invoice shall be prepared and issued by a majority of the Owners of Lots 2, 3, 4, and 5. If such majority does not issue an invoice within thirty (30) days after costs are incurred, the Project Manager may prepare and issue the invoice.

(c) Required Invoice Contents. Each invoice shall identify (i) the Shared Facility for which costs were incurred, (ii) the total cost, (iii) the Owner's equal share of such cost as required by Section 8, and (iv) the date payment is due.

(d) Payment Deadline. All invoices shall be due thirty (30) days after issuance. Unpaid sums shall accrue interest and late fees as set forth in Section 9.1 and may be enforced by Assessment Lien under Section 9.3.

9.3 Assessment Lien. The Project Manager under Section 10 may record a Notice of Assessment Lien against a defaulting Owner's Lot for unpaid amounts. The lien shall be subordinate to purchase-money first mortgages of record but enforceable by suit and foreclosure under NH law.

9.4 Attorney's Fees. The prevailing party in any enforcement action is entitled to recover reasonable attorney's fees and costs.

9.5 Injunctive Relief. Non-monetary obligations (e.g., prohibitions and performance covenants) may be enforced by injunctive relief.

10. Governance; Project Manager (Non-HOA).

10.1 Decisions. Routine actions affecting Shared Facilities: simple majority of affected Owners. Capital Replacements/material changes: supermajority [e.g., 3 of 4 for Lots 2–5 matters; 4 of 5 for Pump Station matters].

10.2 Project Manager. If Owners fail to perform Routine O/M or to respond to emergencies, the Project Manager may act solely to procure services, schedule work, and levy proportionate assessments consistent with Section 9, including recording Assessment Liens under Section 9.

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The Project Manager shall be a qualified pump-station and driveway maintenance contractor, or other qualified property services contractor, designated from time to time by a majority of the affected Owners (Lots 1–5 for Pump Station matters; Lots 2–5 for Shared Driveway and shared sewer and drainage matters). If the affected Owners fail to designate a Project Manager, or if the designated Project Manager is unwilling or unable to act, any affected Owner may nominate a qualified contractor to serve as Project Manager, and such contractor shall become the Project Manager upon receiving written approval from a majority of the affected Owners.

The Project Manager is authorized solely to (a) procure routine and emergency maintenance, repair, and replacement work for the Shared Facilities, (b) prepare and issue invoices under Section 9.2, (c) levy cost shares consistent with Section 8, and (d) record Assessment Liens under Section 9.3 for unpaid amounts. The Project Manager is not a homeowners association and has no governance authority beyond the ministerial duties described herein.

10.3 Dispute Resolution. Technical disputes shall be submitted to a neutral NH-licensed professional engineer jointly selected by affected Owners; the engineer's recommendation is binding absent manifest error.

11. Affordability & Stability Covenants (Lots 1–5).

11.1 Owner-Occupancy. Each dwelling on Lots 1–5 shall be continuously owner-occupied for five (5) years following issuance of its Certificate of Occupancy.

11.2 Short-Term Rentals Prohibited. "Short-term rental" means the rental, lease, or use of a dwelling for occupancy by any person or persons for a period of fewer than thirty (30) consecutive days, whether arranged directly or through any online rental platform or other booking service. Short-term rentals are prohibited on Lots 1–5.

11.3 Corporate Ownership Prohibited. Title shall not be held by a corporation, LLC, LLP or similar entity. Title may be held by an estate-planning trust with natural person beneficiaries, provided the dwelling remains owner-occupied. Temporary hardship exceptions may be granted by the City upon written request.

11.4 Enforcement; Third-Party Beneficiary. The City is an express third-party beneficiary of this Section 11 with standing to enforce by injunction and to recover reasonable attorney's fees and costs.

12. Open Space on Lot 6.

12.1 City Ownership; Restrictions. Lot 6 is retained by the City. Open Space Areas OS-1 (5,395 sq. ft.) and OS-2 (9,200 sq. ft.) are permanently restricted per the City's Open Space Covenants and Restrictions recorded in the Grafton County Registry of Deeds at Book ____, Page _____, prohibiting improvements to OS-1/OS-2, preserving perpetual open-space use, providing maintenance per the O/M plan, and prohibiting commercial enterprises admitting the public for a fee.

12.2 Notice Only. This Declaration incorporates the Open Space Covenants and Restrictions by reference for notice only; owners of Lots 1–5 acquire no fee interest in Lot 6 by virtue of this Declaration.

13. City Right-of-Way Activities.

13.1 Right-of-Way Authorization. Installation and operation within the Barrows Street right-of-way requires City authorization. The owners of Lots 1–5 shall comply with City conditions, standards, inspection rights, safety shutdowns, and restoration obligations applicable to the Pump Station and any facilities in the ROW.

13.2 Conflict. For any installation, access, operation, maintenance, repair, replacement, or relocation occurring within the public right-of-way, the City's permits, specifications, directives, and conditions shall control. This supremacy applies solely within the public right-of-way and does not affect private rights and obligations under this Declaration on private property.

14. Insurance; Indemnity.

14.1 Liability Insurance. Owners responsible for Shared Facilities shall maintain commercially reasonable liability insurance covering claims arising from O/M of those facilities. The City shall be named as additional insured for activities in the Barrows Street right-of-way.

14.2 Indemnity. Owners shall indemnify and hold harmless the City from claims arising out of Owners' O/M of the Pump Station and private facilities, except to the extent caused by the City's gross negligence or willful misconduct.

14.3 Property Insurance. Owners shall maintain property insurance sufficient to repair or replace Pump Station Equipment and other Shared Facilities as per Section 7.7.

15. Duration; Amendment; Successors; Notices; Miscellany.

15.1 Duration. This Declaration runs with the land in perpetuity.

15.2 Amendment. Amendments require a supermajority of affected Owners and, where applicable, City consent. No amendment shall impair public safety or compliance with subdivision/zoning approvals.

15.3 Successors. These covenants and easements bind and benefit successors and assigns. Each deed conveying Lots 1–5 shall state that the conveyance is subject to this Declaration.

15.4 Notices. Notices shall be delivered by certified mail or recognized courier to the addresses of record for each Lot Owner and the City.

15.5 Severability. If any provision is held invalid, the remainder continues in full force.

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15.6 Recording; Priority. Record this Declaration prior to any lot conveyance. Assessment liens recorded pursuant to Section 9 shall be subordinate to purchase-money first mortgages unless otherwise agreed by the mortgagee.

SIGNATURE:

CITY OF LEBANON

By:_____
Andrew Hosmer, City Manager
Duly Authorized by Vote of the
Lebanon City Council on _____, 2026

STATE OF NEW HAMPSHIRE
GRAFTON, SS.

On this _____ day of _____, 2026, before me, the undersigned officer, personally appeared Andrew Hosmer, known to me or satisfactorily proven to be the person whose name is subscribed in the foregoing instrument and acknowledged that he executed the same on behalf of the City of Lebanon as City Manager, being duly authorized to do so for the purposes therein contained.

Before me, _____
Justice of the Peace
Notary Public

EXHIBITS:

- Exhibit A — Driveway Easement Legal Description
- Exhibit B — Utility Easement Areas
- Exhibit C — Drainage Easement Areas

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BARROWS ST PATTERN ZONE NOTES

To be added to the Subdivision Plat prior to recording

1. Shared Driveway Easement - Lots 3 and 4 obtain legal access to Barrows Street via the Shared Driveway Easement Area across portions of Lots 2 and 5 as granted by the Master Declaration of Easements, Covenants, and Restrictions to be recorded in the Grafton County Registry of Deeds. The Shared Driveway Easement Area provides perpetual ingress and egress to Lots 2–5 pursuant to Zoning Ordinance §411.6(C)(1).

2. Utility Easements - Utility Easement Areas benefiting Lots 2, 3, 4, and 5 and burdening the lots as shown are established by the Master Declaration of Easements, Covenants, and Restrictions to be recorded in the Grafton County Registry of Deeds. These easements permit installation, operation, maintenance, repair, and replacement of domestic water, sewer, electric, telephone, and communications facilities.

3. Drainage Easements - Drainage Easement Areas benefiting Lots 2–5 and burdening the lots as shown are established by the Master Declaration of Easements, Covenants, and Restrictions to be recorded in the Grafton County Registry of Deeds. Drainage easements permit flow, maintenance, repair, and replacement of the Drainage Pipe serving Lots 2–5.

4. City Water Main Easement - Portions of Lots 2, 3, 4, and 5 are encumbered by a Water Main Easement benefiting the City of Lebanon as shown. The municipal water main located therein is owned, operated, and maintained solely by the City. No costs related to the City water main are borne by private lot owners.

5. Pump Station - A wastewater Pump Station serving Lots 1–5 is located within the Barrows Street right-of-way. Operation and maintenance are the responsibility of the Owners of Lots 1–5 pursuant to the Master Declaration of Easements, Covenants, and Restrictions to be recorded in the Grafton County Registry of Deeds. Any activity within the right-of-way requires City authorization.

6. Shared Sewer Facilities - Lots 2–5 share responsibility for the Lots 2–5 Sewer Main, the On-Site Sewer Main serving Lots 2–5, and the Drainage Pipe serving Lots 2–5 as described in the Master Declaration of Easements, Covenants, and Restrictions to be recorded in the Grafton County Registry of Deeds. Lot 1 is solely responsible for the Lot 1 Sewer Lateral.

7. Cost Allocation & Maintenance Responsibilities - Operation, maintenance, repair, and replacement responsibilities for all Shared Facilities (Shared Driveway, Pump Station, Shared Sewer Facilities, and shared drainage facilities) and related cost allocations are established by the Master Declaration of Easements, Covenants, and Restrictions to be recorded in the Grafton County Registry of Deeds.

8. Affordability & Stability Covenants (Lots 1–5) - Lots 1–5 are subject to affordability and stability covenants recorded in the Master Declaration of Easements, Covenants, and Restrictions to be recorded in the Grafton County Registry of Deeds, including: (a) five-year owner-occupancy

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requirement; (b) prohibition on short-term rentals; and (c) prohibition on corporate ownership except certain estate-planning trusts.

9. Open Space (Lot 6) - Open Space Areas OS-1 (5,395 sq. ft.) and OS-2 (9,200 sq. ft.) located on Lot 6 are permanently restricted per the Open Space Covenants and Restrictions to be recorded in the Grafton County Registry of Deeds. No improvements are permitted except as allowed by said instrument. Lot 6 is retained by the City and is not conveyed.

10. Master Declaration Cross-Reference. All easements and covenants governing Shared Facilities, access rights, utility rights, drainage rights, water main rights, cost allocations, owner-occupancy restrictions, and enforcement provisions are contained in the Master Declaration of Easements, Covenants, and Restrictions to be recorded in the Grafton County Registry of Deeds.

11. Driveway Construction - The Shared Driveway shall be constructed in accordance with the Lebanon Planning Board Notice of Action dated August 24, 2026, for application PB2026-36-FMAJ, to be recorded contemporaneously herewith, and with the plan set referenced in the Notice of Action titled "Barrows Street Pattern Zone Subdivision," prepared by the City of Lebanon Department of Public Works, dated June 18, 2026, last revised_____, and with the City of Lebanon Driveway Regulations.

12. E-911 Addressing - E-911 addressing for Lots 2–5 shall follow City requirements for common-driveway lots.

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WHEN RECORDED RETURN TO:
City of Lebanon
Planning and Development Department
51 North Park Street
Lebanon, NH 03766

DECLARATION OF RESTRICTIVE COVENANT

This Declaration of Restrictive Covenant ("Declaration") is made as of this ___ day of _____, 2026 (the "Effective Date"), by the City of Lebanon, New Hampshire ("City"), as the owner/subdivider of the Property identified herein.

RECITALS

A. The "Property" consists of Lots 1–5 (house lots) and Lot 6 (City-retained lot) located on or near Barrows Street in the City of Lebanon, New Hampshire, as shown on the plat titled, "Subdivision, Open Space, and Easement Plan for City of Lebanon – Tax Map 77, Lot 106," prepared by Pathways Consulting, LLC, dated July 10, 2026, revised _____, Proj. No. 13377, recorded in the Grafton County Registry of Deeds as Plan #_____ ("Subdivision Plan"). The City is the fee owner of Lot 6.

B. The Lebanon Planning Board, pursuant to a Notice of Action dated August 24, 2026, for application PB2026-36-FMAJ, granted final Major Subdivision approval for the development of the Property as shown on plans titled "Barrows Street Pattern Zone Subdivision," prepared by the City of Lebanon Department of Public Works, dated June 18, 2026, last revised_____ ("Approved Plan Set"). The Notice of Action, including specific conditions of approval, is recorded in the Grafton County Registry of Deeds at Book ____, Page _____.

C. In connection with the Major Subdivision approval for PB2026-36-FMAJ, the Lebanon Planning Board required that certain portions of Lot 6 as open space pursuant to Sections 12.2.D and E of the Lebanon Subdivision Regulations. This Declaration is executed specifically to satisfy condition of approval #_____ set forth in the Notice of Action and to implement the Planning Board's open space protection requirement. As shown on the Subdivision Plan, Lot 6 contains two designated open-space areas: OS-1 (+/-5,395 sq. ft.) and OS-2 (+/-9,200 sq. ft.) – which together comprise the "Open Space."

D. The City Council, at its meeting on _____, 2026, approved a motion authorizing the City Manager to execute and record this Declaration of Restrictive Covenant.

E. The Barrows Street development is subject to a Master Declaration of Easements, Covenants, and Restrictions recorded in the Grafton County Registry of Deeds at Book ___, Page ___ (the "Master Declaration"). This Declaration governs the Open Space on Lot 6 only, is separate from the Master Declaration, and supplements but does not conflict with it.

NOW, THEREFORE, in consideration of the foregoing premises and other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the City declares as follows:

1. Restrictive Covenants.

(a) From and after the Effective Date: (i) the Open Space shall be maintained in perpetuity by the City in an undeveloped and natural state; (ii) no structure, paving, or other improvements shall be constructed within the Open Space, and no modification or landscaping activity shall occur other than minor grubbing, debris clearing, pruning, sodding, seeding, vegetation management, or maintenance of any stormwater facilities as may be shown on the Approved Plan Set; (iii) the Open Space shall be used solely for passive open space purposes, including conservation, natural vegetation, wildlife habitat, and passive pedestrian use (e.g., footpaths, no constructed trails); (iv) the Open Space shall not be subdivided, reduced, or altered, nor may any lot line adjustment affect OS-1 or OS-2; and (v) no commercial enterprise admitting the public for a fee shall operate within the Open Space.

(b) The covenants set forth herein constitute a conservation restriction over OS-1 and OS-2 pursuant to RSA 477:22-a and RSA 477:45–47, and shall run with the land in perpetuity. This restriction is imposed as part of the Planning Board's subdivision approval and therefore constitutes a development restriction enforceable under RSA 674:21-a. The purpose of this conservation restriction is to permanently preserve the Open Space for natural vegetation, wildlife habitat, passive open-space use, and compliance with Section 12.2.D of the Lebanon Subdivision Regulations.

(c) This Declaration and the covenants set forth herein restricting the use and occupancy of the Open Space (i) shall be and are covenants running with, touching, and encumbering the Property, binding upon the City and all successors in interest or title, transferees, vendees, lessees, mortgagees, and assigns who are owners and/or users of the Property, and (ii) are not merely personal covenants of the City.

(d) Any and all requirements of the laws of the State to be satisfied in order for the provisions of this Declaration to constitute deed restrictions and covenants running with the land shall be deemed to be satisfied in full, and any requirements or privileges of estate are intended to be satisfied, or in the alternate, an equitable servitude has been created to insure that these restrictions run with the land. Each and every contract, deed, or other instrument

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hereafter executed conveying Lot 6 (excluding instruments granting security interests) shall expressly provide that such conveyance is subject to this Declaration, provided, however, that the covenants contained herein shall survive and be effective regardless of whether such contract, deed or other instrument hereafter executed conveying the Property or portion thereof provides that such conveyance is subject to this Declaration.

(e) All portions of Lot 6 lying outside OS-1 and OS-2 remain City-owned land free of these open space restrictions. All other governmental uses remain permissible outside OS-1 and OS-2 unless otherwise restricted.

2. Maintenance. The City may make reasonable efforts to maintain OS-1 and OS-2 in accordance with customary municipal open space practices, including vegetation management, stormwater facility upkeep (if applicable), hazard removal, and trash/debris removal. The City retains the right to enter the Open Space at any time for inspection, maintenance, environmental management, and stormwater operations.

3. Enforcement.

(a) The City of Lebanon and the fee owners of Lots 1 through 5 (collectively, "Enforcement Beneficiaries") shall each have independent standing as express third-party beneficiaries to enforce this Declaration. In the event of a breach or threatened breach, any Enforcement Beneficiary may institute proceedings at law or in equity, including injunctive relief, specific performance, or declaratory judgment.

(b) The City may also pursue enforcement actions on its own initiative without requiring action by other beneficiaries.

(c) In any such enforcement action, the prevailing party shall be entitled to recover reasonable attorneys' fees and costs.

(d) No delay or failure by any Enforcement Beneficiary shall operate as a waiver or estoppel of enforcement rights, and no verbal representations by any City official shall alter or waive these covenants except by duly adopted and recorded amendment pursuant to Section 4.

4. Amendment. These Covenants may be amended only by (i) majority vote of the City Council, and (ii) Planning Board approval, and (iii) recording of an amended instrument at the Grafton County Registry of Deeds. No amendment shall be effective unless consistent with RSA 674:21-a and applicable subdivision approvals.

5. Superiority. These covenants shall survive and remain fully effective after any foreclosure, deed of trust sale, tax sale, or other transfer of title affecting Lot 6. No mortgage, deed of trust, or other security instrument hereafter recorded against Lot 6 shall have priority over or extinguish this Declaration, and this Declaration shall continue to burden Lot 6 notwithstanding any such transfer. Nothing herein creates a lien on Lot 6; the covenants constitute restrictions running with the land and shall remain binding upon all successors and assigns in title or interest.

6. Owner Obligations and Release Upon Transfer. Any person or entity holding fee or leasehold title to Lot 6 shall be obligated to comply with this Declaration only during the period of such ownership or tenancy and shall be released from further obligations upon transfer of its interest, except that such person or entity shall remain liable for any violations or obligations that accrued during its period of ownership or tenancy. Notwithstanding the release of prior owners from future obligations, this Declaration and all covenants herein shall continue to encumber Lot 6 and shall bind all subsequent owners, successors, and assigns as restrictions running with the land.

7. Notices. Notices shall be delivered in person, by overnight courier, U.S. Mail postage prepaid, or electronic transmission, and shall be deemed delivered upon receipt or refusal. Notices to the City shall be delivered to the City Manager at Lebanon City Hall, 51 North Park Street, Lebanon, NH 03766.

8. Miscellaneous.

(a) Headings are for convenience only and shall not affect the terms of this Declaration.

(b) If any provision of this Declaration is held invalid, the remainder shall continue in full force and effect.

(c) This Declaration shall be governed and construed in accordance with the laws of the State of New Hampshire.

(d) This Declaration does not establish any rights of access in favor of the general public for any purposes whatsoever, or create any rights or benefits to any person not expressly granted herein.

(e) This Declaration constitutes the entire agreement concerning the Open Space and supersedes all prior discussions.

(f) These covenants shall be recorded at the _____ County Registry of Deeds and run with Lot 6 in perpetuity.

(g) This Declaration is consistent with, and supplemental to, the Master Declaration recorded at Book ___, Page ___, but governs exclusively the Open Space located on Lot 6.

(h) These covenants run with Lot 6 in perpetuity and bind the City and all successors, assigns, or future rights holders.

Signature on following page

DRAFT

SIGNATURE:

CITY OF LEBANON

By:_____
Andrew Hosmer, City Manager
Duly Authorized by Vote of the
Lebanon City Council on _____, 2026

STATE OF NEW HAMPSHIRE
GRAFTON COUNTY, SS.

On this _____ day of _____, 2026, before me, the undersigned officer, personally appeared Andrew Hosmer, known to me or satisfactorily proven to be the person whose name is subscribed in the foregoing instrument and acknowledged that he executed the same on behalf of the City of Lebanon as City Manager, being duly authorized to do so for the purposes therein contained.

Before me, _____
Justice of the Peace
Notary Public

DRAFT

CERTIFIED NOTIFICATION LIST

Notice shall be sent by certified mail to the Owner; Applicant, if different from Owner; Abutters; Holders of conservation, preservation, or agricultural preservation restrictions (as defined under RSA 477:45) on the subject property; the holders of easements, rights-of-way, and other restrictions; and every engineer, architect, land surveyor, or soil or wetlands scientist whose seal appears on any plan submitted to the Board; and any other persons required by RSA 676:4, I(d). The names and mailing addresses shall be furnished by the Applicant.

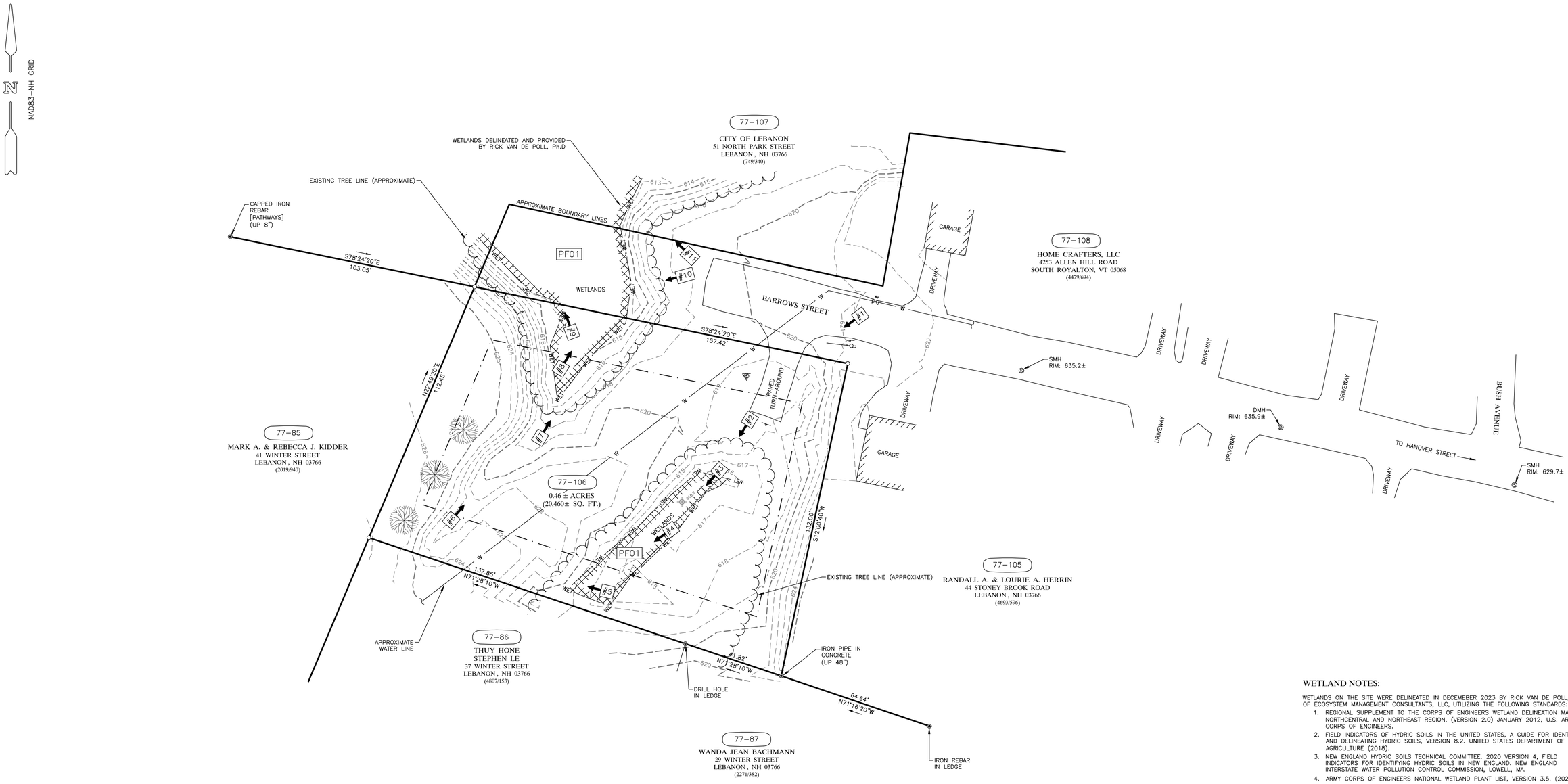
672:3 Abutter. – "Abutter" means any person whose property is located in New Hampshire and adjoins or is directly across the street or stream from the land under consideration by the local land use board. For purposes of receiving testimony only, and not for purposes of notification, the term "abutter" shall include any person who is able to demonstrate that his land will be directly affected by the proposal under consideration. For purposes of receipt of notification by a municipality of a local land use board hearing, in the case of an abutting property being under a condominium or other collective form of ownership, the term abutter means the officers of the collective or association, as defined in RSA 356-B:3, XXIII. For purposes of receipt of notification by a municipality of a local land use board hearing, in the case of an abutting property being under a manufactured housing park form of ownership as defined in RSA 205-A:1, II, the term "abutter" includes the manufactured housing park owner and the tenants who own manufactured housing which adjoins or is directly across the street or stream from the land under consideration by the local land use board.
Source. 1983, 447:1. 1986, 33:2. 2002, 216:1, eff. July 15, 2002.

PLEASE PROVIDE NAMES & MAILING ADDRESSES FOR ALL PERSONS LISTED ABOVE.

Map & Lot Number: 77-106	**Map & Lot Number:**
Property Owner: City of Lebanon 51 North Park Street Lebanon, New Hampshire 03766	Applicant, Co-Applicant, Agent, or Lessee:
Map & Lot Number: 48-1	**Map & Lot Number: 77-83**
Richard Marchese, Trustee Brickyard One Nominee Trust Post Office Box 720 Middleton, Massachusetts 01949	Max James Seidman & Angel Zhang 53 Winter Street Lebanon, New Hampshire 03766
Map & Lot Number: 77-85	**Map & Lot Number: 77-86**
Mark A. & Rebecca J. Kidder 41 Winter Street Lebanon, New Hampshire 03766	Thuy Hone & Stephen Le 37 Winter Street Lebanon, New Hampshire 03766

Map & Lot Number: 77-87	**Map & Lot Number: 77-105**
Wanda Jean Bachmann 29 Winter Street Lebanon, New Hampshire 03766	Randall A. & Lourie A. Herrin 44 Stoney Brook Road Lebanon, New Hampshire 03766
Map & Lot Number: 77-108	**Map & Lot Number: 77-109**
Toni M. Curry & Kyle L. Curry 47 Water Street, Unit B Lebanon, New Hampshire 03766	Michael J. & Margaret Thornton 17 Barrows Street Lebanon, New Hampshire 03766
Map & Lot Number: 77-111	**Map & Lot Number:**
Zenia Mae Valdiviezo 48 Juniper Circle, Unit 4210 Lebanon, New Hampshire 03766	NHDOT District 2 7 Hazen Drive Concord, New Hampshire 03302
Map & Lot Number: Engineer/Surveyor	**Map & Lot Number: Wetlands Scientist**
Pathways Consulting, LLC 240 Mechanic Street, Suite 100 Lebanon, New Hampshire 03766	Rick Van de Poll, Ph.D. Ecosystem Management Consultants of NE 30 North Sandwich Road Center Sandwich, New Hampshire 03227-3326
Map & Lot Number: Draftsmanship	**Map & Lot Number:**
Granite Engineering, LLC 150 Dow Street Tower 2, Suite 241 Manchester, New Hampshire 03101	
Map & Lot Number:	**Map & Lot Number:**
Map & Lot Number:	**Map & Lot Number:**

(Revised 2/8/2024)



LEGEND

EXISTING IRON PIPE OR REBAR	◉ AS NOTED
CAPPED REBAR TO BE SET	○
BOUNDARY LINE	
UTILITY POLE/GUY WIRE	
DRAIN MANHOLE	
SANITARY MANHOLE	
SIGN	
HYDRANT	
GATE VALVE	
HARDWOOD TREE	
SOFTWOOD TREE	
WETLANDS	WET WET WET
DEED REFERENCE	(BOOK/PAGE)
TAX MAP/LOT NO.	12–122
CONTOUR	500
APPROXIMATE LOCATION OF SITE PHOTOGRAPHS	#1

WETLAND NOTES:

WETLANDS ON THE SITE WERE DELINEATED IN DECEMEBER 2023 BY RICK VAN DE POLL, Ph.D. OF ECOSYSTEM MANAGEMENT CONSULTANTS, LLC, UTILIZING THE FOLLOWING STANDARDS:

1. REGIONAL SUPPLEMENT TO THE CORPS OF ENGINEERS WETLAND DELINEATION MANUAL: NORTHCENTRAL AND NORTHEAST REGION, (VERSION 2.0) JANUARY 2012, U.S. ARMY CORPS OF ENGINEERS.
2. FIELD INDICATORS OF HYDRIC SOILS IN THE UNITED STATES, A GUIDE FOR IDENTIFYING AND DELINEATING HYDRIC SOILS, VERSION 8.2. UNITED STATES DEPARTMENT OF AGRICULTURE (2018).
3. NEW ENGLAND HYDRIC SOILS TECHNICAL COMMITTEE. 2020 VERSION 4, FIELD INDICATORS FOR IDENTIFYING HYDRIC SOILS IN NEW ENGLAND. NEW ENGLAND INTERSTATE WATER POLLUTION CONTROL COMMISSION, LOWELL, MA.
4. ARMY CORPS OF ENGINEERS NATIONAL WETLAND PLANT LIST, VERSION 3.5. (2020)

THE FOLLOWING WETLANDS ARE PRESENT WITHIN SITE AREA (SEE PLAN FOR ABBREVIATIONS AND LIMITS):

PF01 = PALUSTRINE FORESTED, BROAD–LEAVED DECIDUOUS

GENERAL SURVEY NOTES:

1. HORIZONTAL DATUM: NH STATE PLANE GRID NAD83 (SURVEY FEET) FROM GPS OBSERVATION.
2. VERTICAL DATUM: NORTH AMERICAN VERTICAL DATUM 1988 (NAVD88) FROM GPS OBSERVATION.
3. UNDERGROUND UTILITIES ARE APPROXIMATE AND NOT WARRANTED TO BE EXACT OR COMPLETE AND ARE TO BE FIELD VERIFIED PRIOR TO ANY EXCAVATION OR SITE MODIFICATIONS.
4. PATHWAYS CONSULTING, LLC COLLECTED DATA FOR THIS PLAN IN DECEMBER 2023 AND JANUARY 2024 UNDER PARTIALLY SNOW COVERED CONDITIONS.

STATE OF NEW HAMPSHIRE · RICK D. VAN de POLL · No. 110 · CERTIFIED WETLAND SCIENTIST

STATE OF NEW HAMPSHIRE · SCOTT A. WILLIAMS No. 11900 LICENSED PROFESSIONAL ENGINEER

0 20 40 60 80 100
IN FEET

REVISION NO.	DATE	DESCRIPTION	MADE BY	CHECKED BY	APPROVED BY

EXISTING CONDITIONS PLAN FOR

CITY OF LEBANON - RESIDENTIAL DEVELOPMENT PROJECT

(TAX MAP 77, LOT 106)

0 BARROWS STREET, LEBANON, NEW HAMPSHIRE 03766

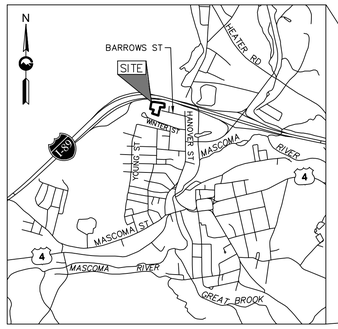
PATHWAYS CONSULTING, LLC
240 MECHANIC STREET, SUITE 100
LEBANON, NEW HAMPSHIRE 03766
(603) 448–2200

SCALE: AS SHOWN	2
DESIGNED BY:	
DRAWN BY: DAS	
CHECKED BY: SAW	
DATE: 04–05–24	
PROJ. NO. 13377	SHEET 2 OF 6

CITY OF LEBANON
BARROWS STREET
PATTERN ZONE SUBDIVISION
TAX MAP 77, LOT 106
LEBANON, NEW HAMPSHIRE
GRAFTON COUNTY

PERMITTING PLANS

JULY 21, 2026



LOCUS MAP
SCALE: ±1"=2000'



LOCATION PLAN
SCALE: N.T.S.

SHEET NO.	TABLE OF CONTENTS
0	COVER: TABLE OF CONTENTS, LOCATION PLAN, AND LOCUS MAP
–	BARROWS STREET PATTERN ZONE SUBDIVISION PLAN
1	GENERAL NOTES
2	OVERALL PLAN
3	DEMOLITION AND EROSION CONTROL PLAN
4	SITE PLAN
5	GRADING & DRAINAGE PLAN
6	UTILITY PLAN
7	WATER DETAILS
8	WASTEWATER DETAILS
9	DRAINAGE & MISCELLANEOUS DETAILS
10	EROSION CONTROL NOTES & SPECIFICATIONS
11	EROSION CONTROL DETAILS

CIVIL ENGINEER:
CITY OF LEBANON
DEPARTMENT OF PUBLIC WORKS
193 DARTMOUTH COLLEGE HIGHWAY
LEBANON, NEW HAMPSHIRE 03766
(603) 558–7123

APPLICANT, UTILITY OWNER & RECORD OWNER:
CITY OF LEBANON
DEPARTMENT OF PUBLIC WORKS
193 DARTMOUTH COLLEGE HIGHWAY
LEBANON, NEW HAMPSHIRE 03766

DRAFTSMANSHIP:
GRANITE ENGINEERING, LLC
150 DOW STREET
TOWER 2, SUITE 421
MANCHESTER, NEW HAMPSHIRE 03101
(603) 518–8030

SURVEYOR:
PATHWAYS CONSULTING, LLC
240 MECHANIC STREET, SUITE 100
LEBANON, NEW HAMPSHIRE 03766
(603) 448–2200

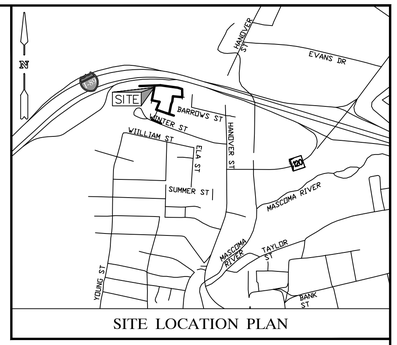
STAMP:

STATE OF NEW HAMPSHIRE
RODRICK J. FINLEY
No. 7466
LICENSED PROFESSIONAL ENGINEER

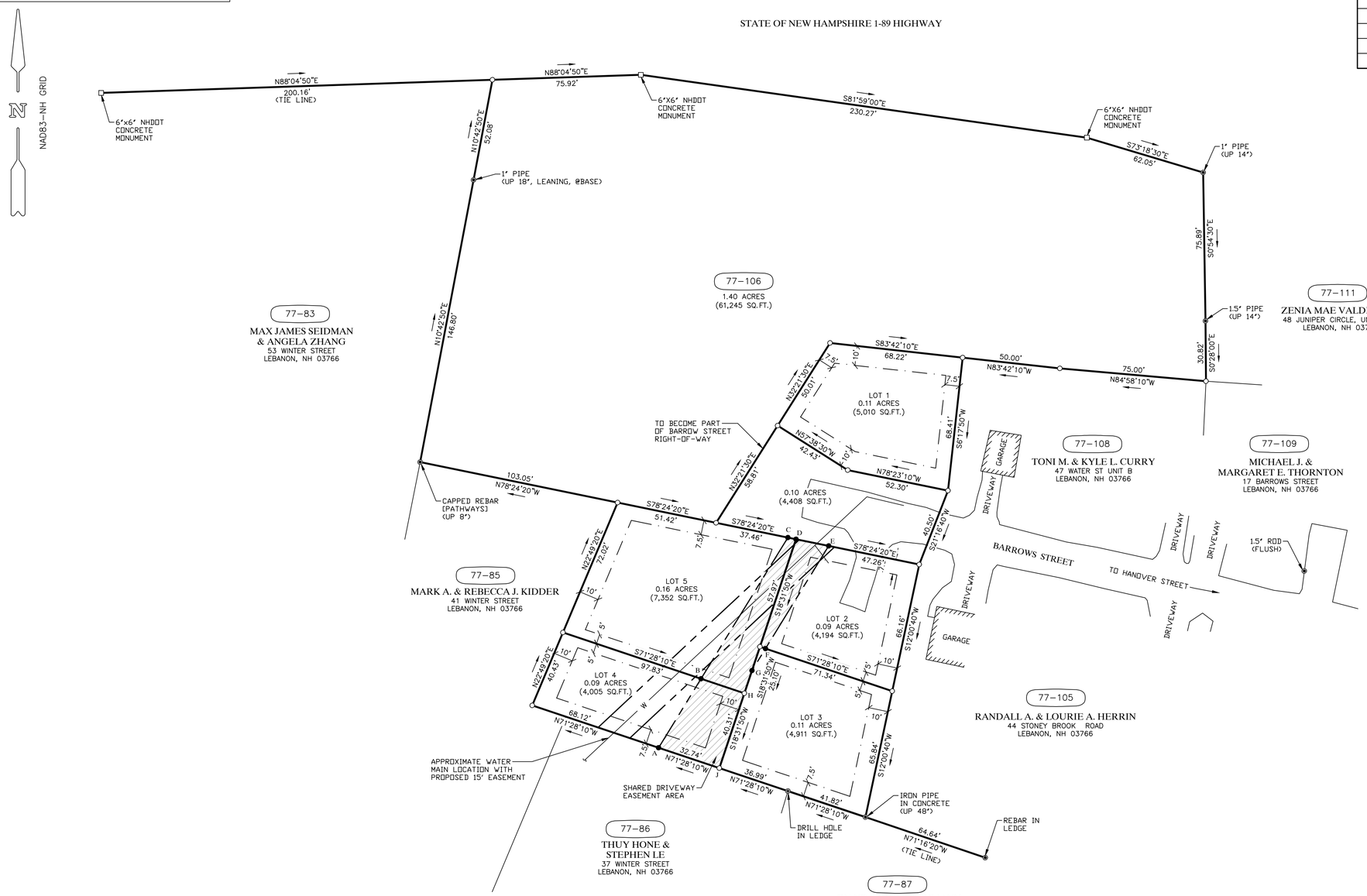
REVISIONS			
No.	DATE	COMMENTS	BY
1	08/03/26	STAFF REVIEW	RJF

BOUNDARY		
FROM – TO	BEARING	DISTANCE
C–D	S78° 24' 21.49"E	4.25
D–E	S78° 24' 21.49"E	17.04
F–H	S18° 31' 48.76"W	25.10

EASEMENT BOUNDARY		
FROM – TO	BEARING	DISTANCE
A–B	N31° 36' 05.94"E	41.39
B–C	N31° 36' 05.94"E	84.75
C–D	S78° 24' 21.49"E	4.25
D–E	S78° 24' 21.49"E	17.04
E–F	S31° 36' 05.94"W	61.62
F–G	S31° 36' 05.94"W	13.16
G–H	S18° 31' 48.76"W	12.28
H–J	S18° 31' 48.76"W	40.31
J–A	N71° 28' 11.24"W	32.74



SITE LOCATION PLAN



ZONING INFORMATION:

SUBJECT PROPERTY CONTAINED WITHIN CITY OF LEBANON, NEW HAMPSHIRE RESIDENTIAL THREE DISTRICT (R–3) ZONING DISTRICT [CLASS 1] AND IS SUBJECT TO ALL APPLICABLE CITY ZONING CODES, REGULATIONS, AND ORDINANCES. SUBJECT PROPERTY ALSO WITHIN THE PATTERN ZONE OVERLAY DISTRICT.

LEBANON ZONING ORDINANCE*
RESIDENTIAL THREE DISTRICT (R–3) [CLASS 1]

SITE RESTRICTIONS:
MINIMUM LOT SIZE = 4,000 SQ. FT.
MAXIMUM BUILDING HEIGHT = 45 FEET
MAXIMUM BUILDING COVERAGE = 60%

SETBACKS:

FRONT YARD	SIDE YARD/CORNER SIDE YARD	REAR YARD
10 FEET	5/7.5 FEET	10 FEET

*OBTAINED FROM LEBANON ZONING ORDINANCE LAST REVISED MARCH 11, 2026.

PLANS OF REFERENCE:

1. REFERENCE IS MADE TO THE FOLLOWING PLANS RECORDED AT THE GRAFTON COUNTY REGISTRY OF DEEDS:
   A. (PLAN) BOOK 895, PAGE 59 ENTITLED "PLAN OF LOTS SOLD BY THE TOWN OF LEBANON," PREPARED BY L.P. DAVIS, DATED MAY 8. 1957.

GENERAL SURVEY NOTES:

1. HORIZONTAL DATUM: NH STATE PLANE GRID NAD83 (SURVEY FEET) FROM GPS OBSERVATION.
2. VERTICAL DATUM: NORTH AMERICAN VERTICAL DATUM 1988 (NAVD88) FROM GPS OBSERVATION.
3. UNDERGROUND UTILITIES ARE APPROXIMATE AND NOT WARRANTED TO BE EXACT OR COMPLETE AND ARE TO BE FIELD VERIFIED PRIOR TO ANY EXCAVATION OR SITE MODIFICATIONS.
4. PATHWAYS CONSULTING, LLC COLLECTED DATA FOR THIS PLAN IN DECEMBER 2023 AND JANUARY 2024 UNDER PARTIALLY SNOW COVERED CONDITIONS AND IN OCTOBER 2024.

RECORD OWNER: CITY OF LEBANON
MAP 77, LOT 106
51 NORTH PARK STREET
LEBANON, NH, 03766

DEED REFERENCE:
BOOK 749, PAGE 340
BOOK 4871, PAGE 412 (VOLUNTARY MERGER OF LAND PB2024–24–VLM)
LEBANON CITY COUNCIL REGULAR SESSION MINUTES WEDNESDAY, MAY 1, 2024 7:00 P.M. (DISCONTINUOUS OF WESTERN PORTION BARROWS ROAD)

Date	Revision	By
8/3/26	STAFF COMMENTS	JLB

LEGEND:

EXISTING IRON PIPE OR REBARAS NOTED	◉
CONCRETE/STONE BOUNDARY MONUMENT	□ AS NOTED
CAPPED REBAR TO BE SET	○
COMPUTED POINT	●
DRILLED HOLE	◉
BOUNDARY LINE	———
BUILDING SETBACK	— · — · —
EASEMENT BOUNDARY	— — — —
WATER LINE	——— W ———
DEED REFERENCE	(BOOK/PAGE)
TAX MAP/LOT NO.	12–122

I HEREBY CERTIFY TO THE BEST OF MY BELIEF AND KNOWLEDGE THAT A NEW HAMPSHIRE RURAL CLASS SURVEY WAS PERFORMED ON PARCEL A ONLY SHOWN HEREON. BOUNDARY LINES ARE CONSISTENT WITH EXISTING MONUMENTATION AND THE REFERENCED DEEDS AND PLANS UNLESS NOTED OTHERWISE.

7/22/26
DATE

STEVEN L. CASEY, LLS 933

STATE OF NEW HAMPSHIRE — No. 933 — STEVEN L. CASEY — LAND SURVEYOR — SIGNATURE

STEVEN L. CASEY, LLS 933

BARROW STREET PATTERN ZONE SUBDIVISION PLAN FOR
CITY OF LEBANON
TAX MAP 77, LOT 106
BARROWS STREET, LEBANON, GRAFTON CO., NEW HAMPSHIRE

0 30' 60' 90' 120' 150'

JULY 10, 2026 SCALE: 1"= 30' PROJ. NO. 13377

PATHWAYS CONSULTING, LLC
240 MECHANIC STREET, SUITE 100
LEBANON, NEW HAMPSHIRE 03766
(603) 448–2200

PROJECT DESCRIPTION:

WORK TO BE PERFORMED UNDER THIS PROJECT INCLUDES THE CREATION OF A PATTERN ZONE SUBDIVISION FROM LOT TAX MAP 77, LOT 106 LOCATED ALONG BARROWS STREET. THIS PATTERN ZONE SUBDIVISION SHALL BE MADE OF 6 NEW LOTS AND INCLUDE THE CONSTRUCTION OF A LIVING STRUCTURE WITH WATER, WASTEWATER, DRAINAGE, AND ROADWAY INFRASTRUCTURE WITHIN THE SUBDIVISION ON 5 OF THE LOTS. THE ROADWAY SHALL BE IN THE FORM OF A SHARED DRIVE AND INDIVIDUAL DRIVEWAYS TO EACH LIVING STRUCTURE. WORK ALSO INCLUDES BUT IS NOT LIMITED TO, NEW TRAFFIC SIGNAGE AND LINE STRIPING IF NECESSARY, AND RETAINING WALL WORK.

SITE INFORMATION:

RECORD OWNER:	CITY OF LEBANON
TAX MAP AND LOT NUMBER:	77–106
ADDRESS:	BARROWS STREET
ZONING DISTRICT:	R–3 (RESIDENTIAL THREE DISTRICT)
EXISTING USE:	UNDEVELOPED
PROPOSED USE:	PATTERN ZONE SUBDIVISION
GROSS AREA OF PROPOSED BUILDINGS:	4,287 SQ. FT.
AREA OF LOT TO BE SUBDIVIDED:	2.09± ACRES (91,125± SQ. FT.)

MINIMUM LOT REQUIREMENTS AND MAXIMUM LIMITATIONS

CATEGORY	REQUIREMENT OR LIMITATION	PROPOSED
AREA	MIN. 4000 SQ. FT.	>4000 SQ. FT. ALL LOTS
FRONTAGE	MIN. 40 FT ON LOT THAT ABUTS A STREET MIN. 15 FT ON A FLAG SHAPED LOT	94.7± LOT 1 >15 FT LOTS 2–5
FRONT AND REAR YARD	MIN. 10'	>=10' ALL LOTS
SIDE YARD/SIDE YARD	MIN. 5'/MIN. 7.5'	>=5'/>=7.5' ALL LOTS
LOT COVERAGE % OF IMPERVIOUS COVER	MAX. 60% BY RIGHT 60%–80% BY SPECIAL EXCEPTION	VARIES 20% TO 50%
BUILDING HEIGHT	MAX. 45 FEET	<45 FEET

GENERAL NOTES:

1. THE OWNER, APPLICANT, AND ENGINEER FOR THIS PROJECT IS THE CITY OF LEBANON.
2. ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE APPROVED DRAWINGS, SPECIFICATIONS, AND ANY ISSUED ADDENDA.
3. HOURS OF CONSTRUCTION ACTIVITIES WILL BE LIMITED TO 7AM TO 7PM MONDAY THROUGH FRIDAY. CONSTRUCTION ACTIVITIES WILL NOT BE ALLOWED ON HOLIDAYS.
4. THE CONTRACTOR SHALL SCHEDULE AND ATTEND A PRE–CONSTRUCTION MEETING WITH THE CITY AND ENGINEER PRIOR TO PROCEEDING WITH WORK.
5. WRITTEN DIMENSIONS SHALL HAVE PRECEDENCE OVER SCALED DIMENSIONS. THE CONTRACTOR SHALL USE CAUTION WHEN SCALING REPRODUCED PLANS. IN CASE OF CONFLICT BETWEEN THIS PLAN SET AND ANY OTHER DRAWINGS AND SPECIFICATION. THE ENGINEER OR OWNER SHALL BE NOTIFIED IMMEDIATELY FOR CLARIFICATIONS.
6. ALL EXISTING WATER MAIN AND DRAINAGE COMPONENTS LOCATED WITHIN THE PROJECT LIMITS THAT ARE TO BE REPLACED BY NEW INFRASTRUCTURE SHALL BE REMOVED, UNLESS OTHERWISE INDICATED. ANY EXISTING STORM DRAIN LINES, CULVERTS, OR WATER LINE DAMAGED DURING CONSTRUCTION, AND NOT TO BE REPLACED SHALL BE REPAIRED BY THE CONTRACTOR AT NO ADDITIONAL COST TO THE OWNER. THE CONTRACTOR IS RESPONSIBLE FOR MAINTAINING DRAINAGE FLOWS THROUGHOUT THE DURATION OF CONSTRUCTION.
7. ALL STRUCTURES AND PIPELINES LOCATED ADJACENT TO THE TRENCH EXCAVATION SHALL BE PROTECTED AND FIRMLY SUPPORTED BY THE CONTRACTOR UNTIL THE TRENCH IS BACKFILLED. DAMAGE TO ANY SUCH STRUCTURES CAUSED BY, OR RESULTING FROM, THE CONTRACTORS OPERATIONS SHALL BE REPAIRED AT THE CONTRACTOR'S EXPENSE. ALL UTILITIES REQUIRING REPAIR, RELOCATION, OR ADJUSTMENT AS A RESULT OF THE PROJECT SHALL BE COORDINATED THROUGH THE RESPECTIVE UTILITY.
8. IN THOSE INSTANCES WHERE POWER OR TELEPHONE POLE SUPPORT IS REQUIRED, THE CONTRACTOR SHALL PROVIDE A MINIMUM 48 HOUR NOTIFICATION TO LIBERTY UTILITIES, COMCAST, OR CONSOLIDATED COMMUNICATIONS. NO ADDITIONAL PAYMENT WILL BE PROVIDED FOR TEMPORARY BRACING OF UTILITIES. THE CONTRACTOR SHALL COORDINATE RELOCATION OF TELEPHONE POLES WITH LIBERTY UTILITIES, CONSOLIDATED COMMUNICATIONS, COMCAST AND OTHER UTILITIES AS NEEDED. NO ADDITIONAL PAYMENT WILL BE PROVIDED TO THE CONTRACTOR DUE TO DELAYS CAUSED BY THE UTILITY COMPANIES.
9. THE CONTRACTOR SHALL INSTALL AND MAINTAIN PERMANENT AND TEMPORARY TRAFFIC CONTROL DEVICES AS NECESSARY AND IN MANNER CONSISTENT WITH THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (M.U.T.C.D).
10. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING TRAFFIC FLOW AT ALL TIMES. THE CONTRACTOR IS REQUIRED TO SUBMIT A TRAFFIC CONTROL PLAN TO THE CITY AND ENGINEER PRIOR TO START OF CONSTRUCTION. THE LEBANON POLICE DEPARTMENT (448–1212) AND FIRE DEPARTMENT (448–8810) ARE TO BE NOTIFIED AT LEAST 24 HOURS IN ADVANCE OF ANY STREET CLOSING OR DETOUR. UNIFORM TRAFFIC OFFICERS ARE NOT ANTICIPATED FOR THIS PROJECT. THE CONTRACTOR SHALL PROVIDE NECESSARY CERTIFIED FLAGGERS NEEDED TO SAFELY CONTROL THE FLOW OF TRAFFIC AND COMPLY WITH CITY EXPECTATIONS.
11. THE CITY IS RESPONSIBLE FOR OBTAINING ANY NECESSARY RIGHTS–OF–WAY AND EASEMENTS. THE CONTRACTOR SHALL VERIFY THAT HE NECESSARY EASEMENTS HAVE BEEN SECURED BY THE CITY. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO BE FAMILIAR WITH THE APPLICABLE PROVISIONS OF EACH EASEMENT AS THEY APPLY TO THE WORK PRIOR TO BIDDING AND ABIDE BY THOSE PROVISIONS DURING CONSTRUCTION. COPIES OF SUCH RIGHTS–OF–WAY AND EASEMENT ARE AVAILABLE FOR REVIEW FROM THE CITY OF LEBANON.
12. OPEN TRENCHES IN THE ROADWAY MUST BE BACKFILLED AT THE END OF EACH WORKDAY, UNLESS PERMISSION TO LEAVE THEM OPEN IS GIVEN IN WRITING BY THE CITY. ALL STREETS MUST BE BASE PAVED PRIOR TO WINTER SHUTDOWN. TEMPORARY PAVEMENT SHALL BE CONSIDERED INCIDENTAL TO THE CONTRACT.
13. COMPACTION TESTS SHALL BE PERFORMED IN ACCORDANCE WITH THE CONTRACT. ANY SETTLEMENT OCCURRING WITHIN ONE YEAR OF SUBSTANTIAL COMPLETION OF THE PROJECT WILL BE CORRECTED BY THE CONTRACTOR IN A MANNER ACCEPTABLE TO THE ENGINEER AT NO ADDITIONAL COST TO THE OWNER.
14. CONTRACTOR SHALL MITIGATE FUGITIVE DUST TO A TOLERABLE LIMIT. A WATER TRUCK IS EXPECTED TO BE ON–SITE AT ALL TIMES DURING THE WORK WITH APPLICATION SEVERAL TIMES A DAY AS NEEDED TO CONTROL DUST. CONTRACTOR SHALL NOT TRACK OR SPILL EARTH AND DEBRIS ON PUBLIC STREETS WITHIN AND/OR OUTSIDE THE PROJECT AREA. STREETS OPENED TO THE PUBLIC SHALL BE KEPT SWEPT AND FREE OF DEBRIS.
15. ALL AREAS (EXCEPT GRAVEL DRIVEWAYS) THAT ARE EXCAVATED, FILLED OR OTHERWISE DISTURBED BY THE CONTRACTOR AND ARE NOT TO BE PAVED OR FILLED WITH GRAVEL OR RIPRAP SHALL BE LOAMED, GRADED, LIMED, FERTILIZED, SEEDED AND MULCHED. ALL AREAS TO RECEIVE 4" MINIMUM OF SCREENED TOPSOIL. TOPSOIL SAMPLES MUST BE SUBMITTED FOR ANALYSIS BY A CERTIFIED LABORATORY EARLY IN CONSTRUCTION FOR DETERMINATION OF REQUIRED AMENDMENTS AND ORGANIC CONTENT. TOPSOIL FROM A MINIMUM OF 2 SOURCES SHALL BE PROVIDED.
16. THE CONTRACTOR SHALL BE RESPONSIBLE FOR RESETTING ALL EXISTING PROPERTY MONUMENTATION THAT IS DISTURBED BY THEIR OPERATIONS AT NO EXPENSE TO THE CITY. THE WORK IS TO BE DONE BY A LAND SURVEYOR LICENSED IN THE STATE OF NEW HAMPSHIRE. PROPERTY BOUNDS FOUND ARE SHOWN ON LAYOUT PLANS AND MAY NOT BE INCLUSIVE OF ALL BOUNDS THAT EXIST IN THE PROJECT AREA. IF ANY ADDITIONAL BOUNDS ARE FOUND, THE CONTRACTOR SHALL DOCUMENT THE LOCATION AND NOTIFY THE ENGINEER.
17. THE CONTRACTOR SHALL NOT HAVE ANY RIGHT OF PROPERTY OF ANY MATERIALS TAKEN FROM ANY EXCAVATION. SUITABLE EXCAVATED MATERIAL MAY BE INCORPORATED IN THE PROJECT. EXCESS MATERIAL IS TO BE TAKEN TO 370 PLAINFIELD ROAD (LEBANON LANDFILL) IF OWNER SO DESIRES, AT NO ADDITIONAL COST. THE CONTRACTOR SHALL DISPOSE OF UNSUITABLE AND EXCESS MATERIAL IN ACCORDANCE WITH THE APPLICABLE SECTIONS OF THE CONTRACT AND ALL STATE, FEDERAL, AND LOCAL REGULATIONS.
18. THE CONTRACTOR IS TO TAKE SPECIAL CARE NOT TO DAMAGE TREES, SHRUBS, OR OTHER PLANTINGS WITHIN THE CONSTRUCTION AREA UNLESS THEY ARE NOTED TO BE REMOVED.
19. THE CONTRACTOR WILL BE RESPONSIBLE FOR PROVIDING PROPER NOTICE TO RESIDENCE IF IN ADVANCE OF AN EXPECTED SHUTDOWN OF WATER SERVICE, IMPACT TO TRAFFIC, AND BLOCKING OF DRIVEWAYS. WRITTEN NOTICES SHALL BE PLACED ON DOORS AT A MINIMUM OF 48 HOURS PRIOR TO EXPECTED WORK NOTIFYING THEM OF ANTICIPATED IMPACT. DAILY COORDINATION WITH RESIDENTS IS VERY IMPORTANT AND IS INCIDENTAL TO THE WORK. THE CONTRACTOR SHALL MAINTAIN EMERGENCY ACCESS TO ALL AREAS AFFECTED BY THEIR WORK AT ALL TIMES. ONE LANE OF TRAFFIC SHALL BE MAINTAINED AT ALL TIMES BY THE CONTRACTOR UNLESS OTHERWISE APPROVED BY THE OWNER.
20. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE MEANS AND METHODS OF CONSTRUCTION AND FOR CONDITIONS AT THE SITE. THESE PLANS PREPARED BY THE CITY OF LEBANON DO NOT EXTEND TO OR INCLUDE SYSTEMS PERTAINING TO THE SAFETY OF THE CONSTRUCTION CONTRACTOR OR THEIR EMPLOYEES, AGENTS OR CITY'S REPRESENTATIVES IN THE PERFORMANCE OF THE WORK. THE SEAL OF THE SURVEYOR OR ENGINEER HEREON DOES NOT EXTEND TO ANY SUCH SAFETY SYSTEMS THAT MAY OR HEREAFTER BE INCORPORATED INTO THESE PLANS. THE CONSTRUCTION CONTRACTOR SHALL PREPARE OR OBTAIN THE APPROPRIATE SAFETY SYSTEMS WHICH MAY BE REQUIRED BY THE U.S. OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (OSHA), LOCAL REGULATIONS, AND/OR THE BOARD OF LABOR.
21. IT SHALL BE THE CONTRACTORS RESPONSIBILITY TO FAMILIARIZE THEMSELVES WITH THE PROJECT AREA AND ALL EXISTING CONDITIONS SURROUNDING IT THEREON.
22. THE ENGINEER SHALL BE NOTIFIED PRIOR TO CONSTRUCTION IF ARE ANY DISCREPANCIES IN PLANS OR EXISTING DATA. CONSTRUCTION SHALL NOT PROCEED WITHOUT WRITTEN PERMISSION FROM THE ENGINEER.
23. THE ENGINEER WILL PROVIDE THE CONTRACTOR WITH EXISTING CONTROL POINTS TO ESTABLISH THE CONSTRUCTION BASELINE. THE POINTS TO BE PROVIDED ARE INCLUDED WITH THESE DRAWINGS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING AND REESTABLISHING THESE POINTS FOR THE DURATION OF THE PROJECT. CONTROL POINT AND BENCH MARK ACCURACY WAS CONFIRMED AT THE TIME OF THE SURVEY AND IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY THE ACCURACY OF THESE POINTS PRIOR TO USING THEM FOR CONSTRUCTION OR RECORDING RECORD INFORMATION. IF THE CONTRACTOR FINDS ANY POINT PROVIDED TO BE INACCURATE, THE CONTRACTOR MUST NOTIFY THE ENGINEER IMMEDIATELY IN WRITING. THE ENGINEER ASSUMES NO RESPONSIBILITY FOR LAYOUT OF THE WORK AT THE PROJECT SITE.
24. PAVEMENT IS TO BE SAW–CUT AT ALL SIDE ROADS, PAVED DRIVES, AS WELL AS THE BEGINNING AND END OF THE PROJECT LIMITS. PAVEMENT GRINDINGS BEYOND THE SAW–CUT WILL BE REQUIRED AT ALL SIDE ROADS, AS WELL AS THE BEGINNING AND END OF THE PROJECT LIMITS. SEE DETAIL DRAWINGS GRIND PAVEMENT POINT. SAW–CUTTING IS INCIDENTAL TO EXCAVATION WORK.
25. IF THE CONTRACTOR ANTICIPATES AN OVERAGE IN MATERIAL QUANTITIES INCLUDED IN THE CONTRACT, THE CONTRACTOR MUST NOTIFY THE ENGINEER IMMEDIATELY PRIOR TO PROCEEDING.
26. ANY SURFACE OR SUBSURFACE FEATURES DAMAGED BY THE CONTRACTOR DURING CONSTRUCTION SHALL BE RESTORED TO A CONDITION AT LEAST EQUAL TO THAT IN WHICH THEY, WERE FOUND IMMEDIATELY PRIOR TO THE BEGINNING OF CONSTRUCTION. ALL COSTS ASSOCIATED WITH THE RESTORATION SHALL BE AT THE CONTRACTORS SOLE EXPENSE.
27. NO BLASTING SHALL OCCUR ON THIS PROJECT. IF BLASTING IS FOUND TO BE NEEDED THE CONTRACTOR MUST COORDINATE WITH THE ENGINEER IMMEDIATELY PRIOR TO PROCEEDING.
28. THE ENGINEER ASSUMES NO RESPONSIBILITY FOR WORK COMPLETED BY THE CONTRACTOR.

PROJECT RECORDS:

1. THE CONTRACTOR MUST PROVIDE PROPER INSTRUMENTATION TO RECORD ACCURATE COORDINATES AS WELL AS ELEVATIONS TO WITHIN 0.01' FOR ALL NEW INFRASTRUCTURE. THIS SHALL INCLUDE DRAINAGE PIPE INVERTS AT STRUCTURES AND RIM ELEVATIONS, UNDERDRAIN CLEANOUTS, FITTINGS, AND CHANGES IN DIRECTION AND ELEVATION, WATER VALVES, FITTINGS, HYDRANTS, SERVICE TAPS, CONNECTIONS TO EXISTING SERVICES, AND ALL CHANGES IN DIRECTION. DRAINAGE PIPE TO BE RECORDED AT THE INVERT. WATER PIPE AND FITTINGS TO BE RECORDED AT TOP OF PIPE. THIS INFORMATION MUST BE SUBMITTED IN AUTOCAD (.DWG) FORMAT AND GIS FORMAT TO THE ENGINEER PRIOR TO SUBSTANTIAL COMPLETION ON THE PROJECT. IF FINAL WEARING COURSE IS NOT YET COMPLETED, RIM ELEVATIONS CAN BE PROVIDED FOLLOWING FINAL PAVING. THE CONTRACTOR IS RESPONSIBLE FOR CHECKING THE ACCURACY OF THIS INFORMATION THROUGHOUT CONSTRUCTION. IF THE CONTRACTOR IS NOT CAPABLE OF COMPLETING THE RECORD WORK LISTED ABOVE, THEY MUST CONTRACT THIS WORK TO AN APPROPRIATE PARTY THAT HAS THE CAPABILITY AS SUBSIDIARY TO THIS WORK. SUBSTANTIAL COMPLETION WILL NOT BE AWARDED IF THIS IS NOT COMPLETED AND THE CONTRACTOR WILL BE SUBJECT TO LIQUIDATED DAMAGES.

2. THE CONTRACTOR SHALL PROVIDE FOUR (4) COPIES OF EACH MANUFACTURER'S DETAILED INSTRUCTIONS FOR MAINTENANCE AND OPERATION OF ALL MAJOR EQUIPMENT, MACHINERY, INSTRUMENTATION AND MONITORING DEVICES, CONTROLS AND INCIDENTALS PROVIDED UNDER THE CONTRACT. PREPARE ALL SUCH MANUALS IN ACCORDANCE WITH THE PROJECT CLOSEOUT REQUIREMENTS OF THE CONTRACT. SUCH MANUALS MUST BE PROVIDED PRIOR TO STARTUP AND ACTIVATION OF THE SYSTEMS WITH THE CITY.

PERMITS:

1. THE CONTRACTOR MUST PREPARE A STORMWATER POLLUTION AND PREVENTION PLAN (SWPPP) IN ACCORDANCE WITH THE EPA CONSTRUCTION GENERAL PERMIT. EROSION CONTROLS (TEMPORARY/PERMANENT), INSPECTIONS, AND REPORTING, MUST COMPLY WITH THE CONDITIONS OF THE PERMIT. COPIES OF REPORTS SHALL BE PROVIDED TO THE ENGINEER.
2. THE CONTRACTOR SHALL FAMILIARIZE THEMSELVES WITH THE PROJECT PERMITS AND ALL CONDITIONS LISTED THEREIN.

GENERAL EARTHWORK NOTES:

1. GENERAL EARTHWORK:
   - A. ALL MATERIAL SPECIFIED, BUT NECESSARY REVIEW FOR COMPLETION OF THE WORK SHALL CONFORM TO THE REQUIREMENTS OF THE NHDOT STANDARDS AND SPECIFICATIONS FOR ROADWAY AND BRIDGE CONSTRUCTION.
   - B. COMMON EXCAVATION SHALL CONSIST OF ALL EXCAVATION OTHER THAN ROCK AND BOULDER EXCAVATION THAT IS NOT SPECIFICALLY CLASSIFIED.
   - C. EXCAVATION TO SUBGRADE SHALL BE DONE SO THAT THE SUBGRADE MATERIAL DOES NOT BECOME SATURATED WITH WATER OR CONTAMINATED WITH ORGANIC MATTER TO A DEGREE THAT SUBGRADE IS UNSTABLE.
   - D. SUBGRADE SOILS MADE UNSTABLE BY ERROR OR NEGLIGENCE OF THE CONTRACTOR SHALL BE REMOVED AND REPLACED BY SELECT BACKFILL AT THE CONTRACTOR'S EXPENSE.
   - E. UNSUITABLE MATERIAL SHALL CONSIST OF DEPOSITS OF SATURATED OR UNSATURATED MIXTURES OF SOILS AND ORGANIC MATTER NOT SUITABLE FOR FOUNDATION MATERIAL REGARDLESS OF MOISTURE CONTENT. UNSUITABLE MATERIALS ENCOUNTERED DURING ROADWAY EXCAVATION SHALL BE REMOVED AND REPLACED BY COMMON OR SELECT BACKFILL, AS DIRECTED BY THE ENGINEER.
   - F. SUBGRADE SURFACES SHALL BE DRY AND FIRM BEFORE PLACING GRANULAR SURFACE MATERIALS. SUBGRADE MATERIAL DISTURBED DURING EXCAVATION SHALL BE THOROUGHLY COMPACTED IN ACCORDANCE WITH THE PROJECT SPECIFICATIONS.
   - G. ALL FILL MATERIAL SHALL BE SUBJECT TO APPROVAL BY THE ENGINEER.
   - H. BASE COURSE MATERIAL SHALL BE PLACED IN 8" MAXIMUM LIFTS AND THOROUGHLY COMPACTED AS REQUIRED PRIOR TO SUCCESSIVE LIFTS. CARE SHALL BE TAKEN TO PREVENT SEPARATION OF GRANULAR MATERIALS DURING PLACEMENT. SEGREGATED MATERIALS SHALL BE REMOVED AND REPLACED USING METHODS CALCULATED TO REDUCE THE SEPARATION OF AGGREGATES.
   - I. ROADWAY GRADING SHALL BE COMPLETED WITH A COMMERCIAL GRADER. THE OPERATOR SHALL HAVE SUFFICIENT EXPERIENCE TO COMPLETE THE WORK. ALL GRADING WORK SHALL BE APPROVED BY THE ENGINEER AND OWNER PRIOR TO PROVIDING PAYMENT. ALL AREAS GRADED IN ACCORDANCE WITH THE PLANS SHALL BE COMPACTED WITH A VIBRATORY ROLLER AFTER GRADING IS COMPLETE TO PREVENT WASHBOARDING AND EROSION OF THE ROADWAY.
   - J. GRAVEL (NHDOT ITEM 304.2): THE MAXIMUM SIZE OF STONE PARTICLES SHALL NOT EXCEED THREE–FOURTHS OF THE COMPACTED THICKNESS OF THE LAYER BEING PLACED BUT IN NO CASE LARGER THAN 6 INCHES. GRAVEL IS CHARACTERIZED AS HARD, DURABLE STONE WITH COARSE TO FINE SAND. SIEVE ANALYSIS BY WEIGHT AS FOLLOWS:

SIEVE SIZE	% PASSING BY WEIGHT	
6"	100%	
NO. 4	25–70%	
* NO 200	0–12%	(*BASED ON THE FRACTION PASSING NO. 4)

   - K. CRUSHED GRAVEL (NHDOT ITEM 304.3): AT LEAST 50 PERCENT OF THE MATERIAL RETAINED ON THE 1 INCH SIEVE SHALL HAVE A FRACTURED FACE. SIEVE ANALYSIS BY WEIGHT AS FOLLOWS:

SIEVE SIZE	% PASSING BY WEIGHT	
3"	100%	
2"	95–100%	
1"	55–85%	
NO. 4	27–52%	
* NO 200	0–12%	(*BASED ON THE FRACTION PASSING NO. 4)

   - L. SAND (NHDOT ITEM 304.1): THE MAXIMUM SIZE OF ANY STONE OR FRAGMENT SHALL NOT EXCEED THREE–FOURTHS OF THE COMPACTED DEPTH OF THE LAYER BEING PLACED BUT IN NO CASE LARGER THAN 6 INCHES. SAND SHALL CONSIST OF CLEAN, SHARP MINERAL PARTICLES FREE OF ORGANIC MATTER. SIEVE ANALYSIS BY WEIGHT AS FOLLOWS:

SIEVE SIZE	% PASSING BY WEIGHT	
6"	100%	
NO. 4	70–100%	
* NO 200	0–12%	(*BASED ON THE FRACTION PASSING NO. 4)

   - M. FINE CRUSHED STONE (NHDOT 304.4) AND COARSE CRUSHED STONE (NHDOT ITEM 304.5): SHALL BE CLEAN ANGULAR ROCK FRAGMENTS OBTAINED BY BREAKING AND CRUSHING ROCK MATERIAL. SIEVE ANALYSIS BY WEIGHT AS FOLLOWS.:

NHDOT 304.4		NHDOT ITEM 304.5	
SIEVE SIZE	% PASSING BY WEIGHT	SIEVE SIZE	% PASSING BY WEIGHT
2"	100%	3 ½"	100%
1–½"	85–100%	3"	85–100%
¾"	45–75%	1 ½"	60–90%
NO. 4	10–45%	¾"	40–70%
NO 200	0–5%	NO. 4	15–40%
		NO. 200	0–5%

2. PAVING
   - A. ALL PAVING SHALL CONFORM TO THE REQUIREMENTS OF THE NHDOT STANDARDS AND SPECIFICATIONS FOR ROADWAY AND BRIDGE CONSTRUCTION, AS WELL AS APPLICABLE TOWN STANDARDS.
   - B. A PRE–PAVING MEETING MUST BE SCHEDULED PRIOR TO ALL PAVING OPERATIONS ON THE PROJECT. CONTRACTOR TO REQUEST MEETING TO REVIEW THE WORK WITH THE CITY, ENGINEER, AND PAVING CONTRACTOR ONE WEEK PRIOR TO PAVING OPERATIONS.
   - C. BASE PAVEMENT SHALL NOT BE INSTALLED WHEN THE OUTSIDE AIR TEMPERATURE IS BELOW 45 DEGREES FAHRENHEIT, NOR WHEN THE ROAD BASE TEMPERATURE IS BELOW 40 DEGREES FAHRENHEIT. WEARING COURSE PAVEMENT SHALL NOT BE INSTALLED WHEN THE OUTSIDE AIR TEMPERATURE IS BELOW 55 DEGREES FAHRENHEIT, NOR WHEN THE ROAD BASE TEMPERATURE IS BELOW 50 DEGREES FAHRENHEIT. PAVEMENT SHALL NOT FALL BELOW 185 DEGREES FAHRENHEIT PRIOR TO COMPLETION OF THE ROLLING PROCESS. PAVEMENT SHALL NOT BE INSTALLED WHEN THE SUBGRADE IS FROZEN OR THE GRADES ARE INCORRECT. TRAFFIC SHALL NOT BE ALLOWED ONTO NEWLY PAVED SURFACES UNTIL COMPACTION IS COMPLETED AND PAVEMENT SURFACE TEMPERATURE IS LESS THAN 150 DEGREES FAHRENHEIT. PAVING WILL NOT BE ALLOWED WHEN IT IS RAINING OR FOLLOWING RAIN THAT LEAVES THE SUBGRADE SOFT, WET, OR WITH STANDING WATER. WEARING COURSE PAVEMENT WILL NOT BE ALLOWED AFTER OCTOBER 1 OR BEFORE MAY 1. THE CONTRACTOR SHALL PROVIDE 24 HOURS NOTICE TO THE ENGINEER AND THE CITY PRIOR TO PAVING OPERATIONS WITH CLARIFICATION OF WEATHER FORECAST. ASPHALT, AIR, AND SURFACE TEMPERATURES ARE TO BE MONITORED BY THE CONTRACTOR, ENGINEER AND/OR A THIRD–PARTY TESTING AGENCY DURING INSTALLATION. THE PAVING CONTRACTOR SHALL HAVE THEIR OWN DESIGNATED REPRESENTATIVE PRESENT AT ALL TIMES VERIFYING AND MANAGING QUALITY CONTROL OF THE WORK. FAILURE TO DO SO MAY RESULT IN DELAY OR REJECTION OF WORK.
   - D. SWEEPING FOR BASE PAVEMENT AND CLEANING FOR PLACEMENT OF WEARING COURSE IS THE RESPONSIBILITY OF THE CONTRACTOR.
   - E. ADJUSTMENT OF COVERS, VALVE BOXES, AND FRAMES AND GRATES FOR WEARING COURSE IS INCIDENTAL TO THE CONTRACT WORK.
   - F. PAVEMENT CORE TESTING WILL BE COMPLETED BY THE CITY'S THIRD–PARTY TESTING AGENCY. CORE SAMPLES ARE TO BE COLLECTED AT LOCATIONS DETERMINED BY THE ENGINEER. COMPACTION AND THICKNESS MUST COMPLY WITH THE DESIGN DRAWINGS AND NHDOT STANDARD SPECIFICATIONS. FAILURE TO MEET THE STANDARDS MAY RESULT IN REJECTION OF WORK OR REQUIRED ADJUSTMENTS TO PAYMENT AS DETERMINED BY THE CITY ENGINEER.
3. COMPACTION
   - A. MATERIAL DENSITY REQUIREMENTS SHALL BE FIELD DETERMINED IN ACCORDANCE WITH AASHTO T191 (SAND CONE) OR ASTM D2922/AASHTO T238–239 (NUCLEAR METHOD). MAXIMUM DENSITY SHALL BE DETERMINED BY ASTM D1557 MODIFIED PROCTOR. COMPACTION OF BACKFILL MATERIAL BELOW PAVEMENT AND STRUCTURES SHALL BE 95% OF THE MAXIMUM DENSITY.
   - B. FREQUENCY OF TESTING SHALL BE DETERMINED BY THE ENGINEER BASED UPON THE CONTRACTOR'S NOTIFICATION OF COMPLETED AREAS.
   - C. MATERIAL DENSITY TESTS WHICH INDICATE DEFICIENT MATERIAL OR INSUFFICIENT COMPACTION FOLLOWING A FIRST FAILURE SHALL BE PAID FOR BY THE CONTRACTOR. DENSITY TESTS RESULTING FROM A MATERIALS CHANGE BY THE CONTRACTOR OR REPEATED FAILURES SHALL BE PAID FOR BY THE CONTRACTOR.
   - D. MATERIAL WHICH DOES NOT MEET THE MINIMUM DENSITY REQUIREMENTS SHALL BE REWORKED IN ACCORDANCE WITH THE NHDOT SPEC. OR REMOVED AND REPLACED, AT THE CONTRACTOR'S EXPENSE, WITH ACCEPTABLE MATERIAL.
   - E. THE TAKING OF SAMPLES AND THE PERFORMING OF FIELD COMPACTION DENSITY TESTS SHALL BE DONE BY AN INDEPENDENT TESTING LABORATORY.
   - F. CONTRACTOR SHALL PROVIDE AT LEAST ONE QUALIFIED PERSON WHO SHALL BE PRESENT AT ALL TIMES DURING THE SOIL COMPACTION OPERATIONS AND WHO SHALL BE THOROUGHLY FAMILIAR WITH THE VARIOUS TYPES OF COMPACTION EQUIPMENT, PROPER COMPACTING TECHNIQUES AND METHODS, AND SOILS BEHAVIOR, AND WHO SHALL DIRECT THE COMPACTION OPERATIONS.
   - G. COMPACTION SHALL NOT TAKE PLACE IN FREEZING WEATHER OR WHEN MATERIALS TO BE COMPACTED ARE FROZEN, TOO WET OR MOIST, OR TOO DRY.
   - H. MOISTEN OR DRY EACH LAYER OF MATERIAL TO ACHIEVE OPTIMUM MOISTURE CONTENT. UNLESS OTHERWISE SPECIFIED OR DIRECTED BY ENGINEER. COMPACT EACH LAYER OF MATERIAL TO THE SPECIFIED REQUIREMENTS.
   - I. ROADS – ONE TEST FOR EACH LAYER OF COMPACTED FILL AND BASE MATERIAL.
   - J. TRENCHES – ONE TEST FOR TWO FEET OF BACKFILL.

CONSTRUCTION SEQUENCE/REQUIREMENTS:

1. ONCE THE CONTRACT IS SIGNED, THE PRIME CONTRACTOR IS RESPONSIBLE FOR PROVIDING A DETAILED CONSTRUCTION SCHEDULE TO THE ENGINEER AND OWNER FOR REVIEW PRIOR TO THE PRE–CONSTRUCTION MEETING.
2. THE CONTRACTOR SHALL ATTEND A PRE–CONSTRUCTION MEETING FOR THE PROJECT WITH THE CITY AND OTHER PROJECT PARTIES PRIOR TO MOBILIZING TO THE SITE AND STARTING CONSTRUCTION. THE PRIME CONTRACTOR'S MAJOR SUBCONTRACTORS ON THE PROJECT MUST ATTEND THE PRE–CONSTRUCTION MEETING.
3. THE CONTRACTOR SHALL SUBMIT ALL MATERIAL SUBMITTALS AND SHOP DRAWINGS TO THE CITY FOR APPROVAL PRIOR TO ANY MATERIALS BEING DELIVERED TO THE PROJECT SITE.
4. THE CONTRACTOR SHALL PREPARE A SWPPP IN ACCORDANCE WITH THE EPA CONSTRUCTION GENERAL PERMIT AND SUBMIT A NOTICE OF INTENT (NOI) TO THE EPA AT LEAST 14 DAYS PRIOR TO THE START OF CONSTRUCTION. A COPY MUST BE PROVIDED TO THE CITY AND THE ENGINEER.
5. THE PRIME CONTRACTOR SHALL ATTEND BI–WEEKLY MEETINGS TO BE HELD AT THE CITY OF LEBANON DEPARTMENT OF PUBLIC WORKS. THE CONTRACTOR AND MAJOR SUBCONTRACTOR'S ARE REQUIRED TO ATTEND ALL MEETINGS TO PROVIDE UPDATES AND DISCUSS OUTSTANDING ITEMS. THE CITY WILL BE RESPONSIBLE FOR MEETING AGENDAS AND RECORD MEETING MINUTES AS NEEDED.
6. REQUIRED EROSION CONTROL BEST MANAGEMENT PRACTICES MUST BE INSTALLED AND MAINTAINED THROUGHOUT CONSTRUCTION. PERIMETER CONTROLS MUST BE INSTALLED DOWNGRADIENT PRIOR TO ANY UPGRADIENT EARTH DISTURBANCES. CHECK DAMS MUST BE INSTALLED DIRECTLY FOLLOWING EARTH DISTURBANCES WITHIN ROADSIDE DITCHES. INLET PROTECTION DEVICES MUST BE INSTALLED IN ALL STRUCTURES WITH SURROUNDING EARTH DISTURBANCES OR ADJACENT TO CONSTRUCTION TRACKING ON–SITE.
7. ALL LAWNS AND GREEN SPACE MUST BE RE–VEGETATED TO 85% AS DETERMINED BY THE ENGINEER PRIOR TO FINAL COMPLETION ON THE PROJECT.
8. ALL STAGING AND LAYDOWN AREAS MUST BE RESTORED TO ORIGINAL CONDITION OR BETTER PRIOR TO FINAL COMPLETION ON THE PROJECT.
9. ALL TEMPORARY EROSION CONTROL COMPONENTS (I.E. SILT SOXX) MUST BE REMOVED AND DISPOSED OF OFF SITE FOLLOWING PERMANENT STABILIZATION AS DETERMINED BY THE ENGINEER.
10. RECORD COORDINATES AND ELEVATIONS MUST BE PROVIDED TO THE ENGINEER IN ACCORDANCE WITH THE PROJECT RECORD REQUIREMENTS PRIOR TO SUBSTANTIAL COMPLETION. THIS DATA MUST BE PROVIDED IN AUTOCAD AND GIS FORMAT.

EXISTING UTILITY NOTES:

1. UTILITY INFORMATION SHOWN HEREON WAS OBTAINED FROM THE BEST AVAILABLE SOURCE AND MAY OR MAY NOT BE EITHER ACCURATE OR COMPLETE. CONTRACTOR SHALL VERIFY THE EXACT LOCATION OF EXISTING UTILITIES AND SHALL BE RESPONSIBLE FOR ANY DAMAGE TO ANY UTILITY, PUBLIC OR PRIVATE, SHOWN OR NOT SHOWN HEREON. CONTRACTOR SHALL CONNECT OR RECONNECT ALL UTILITIES TO THE NEAREST SOURCE THROUGH COORDINATION WITH THE UTILITY OWNER. EXPLORATORY EXCAVATION SHALL BE REQUIRED TO VERIFY



N

LEGEND

- EX. CONTOUR
- EX. BOUNDARY LINE
- PROP. BOUNDARY AND RIGHT-OF-WAY LINE
- PROP. OPEN SPACE BOUNDARY

DIG SAFE
811
CALL TOLL FREE
DAMAGE PREVENTION SYSTEM
UTILITIES UNDERGROUND

GRAPHIC SCALE

100 0 50 100 200 400

(IN FEET)
1 inch = 100 ft.

PERMITTING PLANS

REVISIONS

No.	DATE:	COMMENTS	BY
1	08/03/26	STAFF COMMENTS	RJF

OWNER:
CITY OF LEBANON
DEPARTMENT OF PUBLIC WORKS
193 DARTMOUTH COLLEGE HIGHWAY
LEBANON, NEW HAMPSHIRE 03766

APPLICANT:
CITY OF LEBANON
DEPARTMENT OF PUBLIC WORKS
193 DARTMOUTH COLLEGE HIGHWAY
LEBANON, NEW HAMPSHIRE 03766

CITY OF LEBANON N.H. INCORPORATED JULY 4 1761 ESTABLISHED 1958

City of Lebanon
Department of Public Works
193 Dartmouth College Highway
Lebanon, New Hampshire 03766
lebanonnh.gov

STAMP:

STATE OF NEW HAMPSHIRE RODRICK J. FINLEY No. 7456 LICENSED PROFESSIONAL ENGINEER

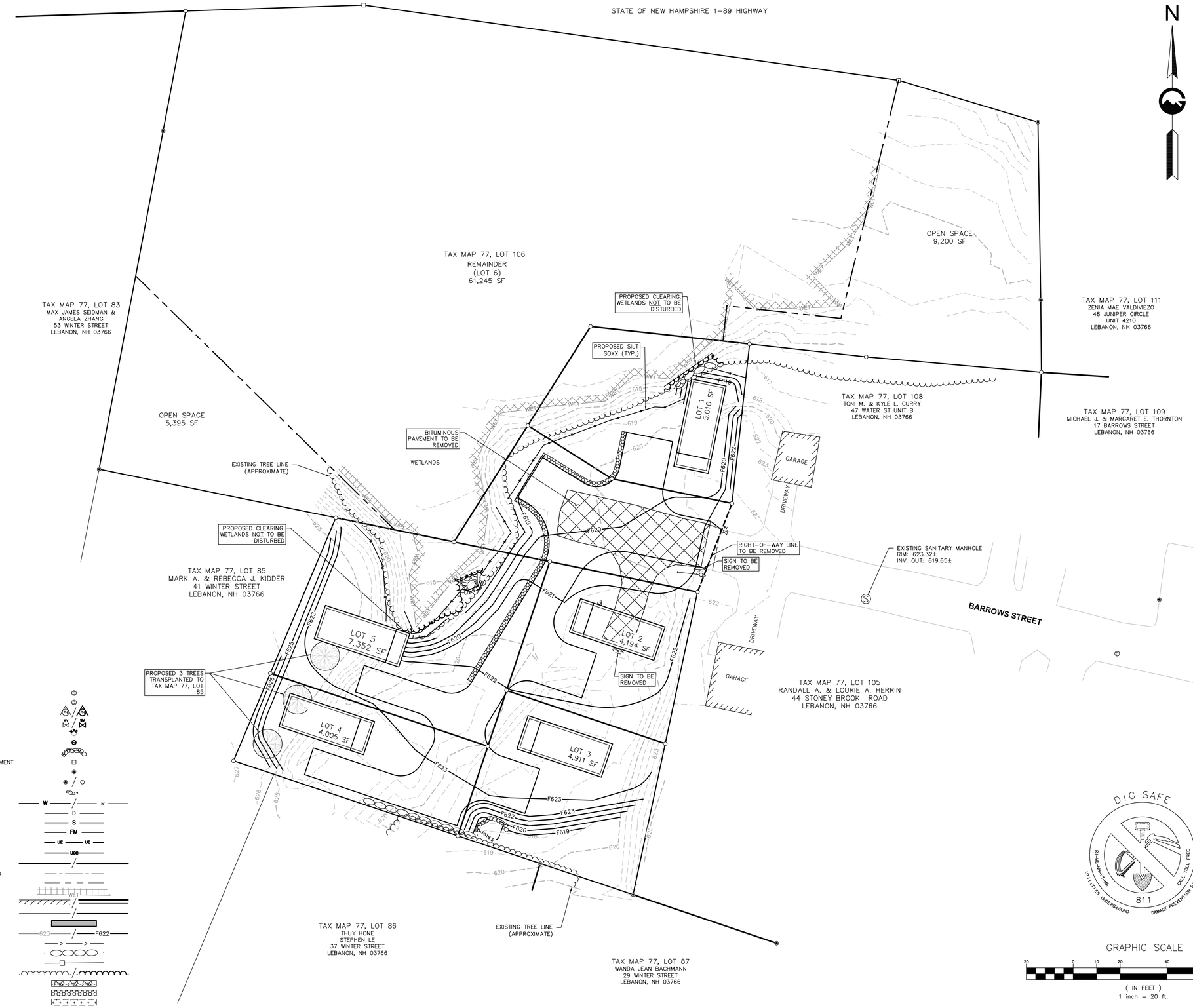
LOCATION:

TAX MAP 77, LOT 106
BARROWS STREET
LEBANON, NEW HAMPSHIRE
GRAFTON COUNTY

PROJECT:
BARROWS STREET PATTERN ZONE SUBDIVISION

TITLE:
OVERALL PLAN

PROJECT No.	DATE:	SCALE:
25-0103-1	JULY 21, 2026	AS SHOWN
SHEET:	2 OF 11	



PERMITTING PLANS

REVISIONS

No.	DATE:	COMMENTS	BY
1	08/03/26	STAFF COMMENTS	RJF

OWNER:
CITY OF LEBANON
DEPARTMENT OF PUBLIC WORKS
193 DARTMOUTH COLLEGE HIGHWAY
LEBANON, NEW HAMPSHIRE 03766

APPLICANT:
CITY OF LEBANON
DEPARTMENT OF PUBLIC WORKS
193 DARTMOUTH COLLEGE HIGHWAY
LEBANON, NEW HAMPSHIRE 03766

City of Lebanon
Department of Public Works
193 Dartmouth College Highway
Lebanon, New Hampshire 03766
lebanonnh.gov

STAMP:

STATE OF NEW HAMPSHIRE
RODRICK J. FINLEY
No. 7466
LICENSED PROFESSIONAL ENGINEER

LOCATION:

TAX MAP 77, LOT 106
BARROWS STREET
LEBANON, NEW HAMPSHIRE
GRAFTON COUNTY

PROJECT:

BARROWS STREET PATTERN ZONE SUBDIVISION

TITLE:

DEMOLITION AND EROSION CONTROL PLAN

PROJECT No.	DATE:	SCALE:
25-0103-1	JULY 21, 2026	AS SHOWN
SHEET:	3 OF 11	



LEGEND

- EX. SEWER MANHOLE
- EX. DRAIN MANHOLE
- EX./RELOCATED HYDRANT
- EX./PROP WATER VALVE
- PROP. WATER CURB STOP
- PROP. WATER CORPORATION
- PROP. HEADWALL
- EX. CONCRETE/STONE BOUNDARY MONUMENT
- EX. DRILL HOLE
- EX./PROP IRON PIPE OR REBAR
- EX. UTILITY POLE/ GUY WIRE
- EX./PROP WATER LINE
- PROP. DRAINAGE PIPE
- PROP. GRAVITY SANITARY PIPE
- PROP. FORCEMAIN SANITARY PIPE
- PROP. 3" ELECTRICAL CONDUIT
- PROP. 2" COMMUNICATIONS CONDUIT
- EX./PROP BOUNDARY LINE
- MUNICIPAL BOUNDARY BUILDING SETBACK
- PROP. OPEN SPACE BOUNDARY
- EX. WETLANDS
- PROP. BUILDING/PROP. BUILDING
- EX./PROP. EDGE OF PAVEMENT
- PROP. BITUMINOUS PAVEMENT
- EX./PROP. CONTOUR
- PROP. MICRO SWALE
- PROP. BOULDER (RETAINING) WALL
- PROP STOCKADE FENCE
- EX./PROP. TREE LINE
- PROP. RIP RAP
- PROP. STONE INFILTRATION TRENCH
- PROP. SNOW STORAGE
- PROP. PAVEMENT REMOVAL
- PROP. SHARED DRIVEWAY EASEMENT
- EX./PROP. HARDWOOD TREE
- EX. SIGN
- PROPOSED WORK

PROPOSED ITEM

IMPERVIOUS COVER	
LOT NO.	PERCENT IMPERVIOUS
1	19.7%
2	37.8%
3	21.7%
4	49.9%
5	27.2%

NOTES:

1. FUEL STORAGE TANKS (IF ANY) AND GARBAGE STORAGE CONTAINERS CAN NOT BE LOCATED IN FRONT YARDS.
2. ALL WORK ON BARROW STREET AND OTHER OFF–SITE IMPROVEMENTS SHALL MEET CITY OF LEBANON STANDARDS.
3. TOTAL OPEN SPACE (14,595 SF) = 16.0% OF EXISTING TAX MAP 77, LOT 106.

DIG SAFE
811
CALL TOLL FREE
DAMAGE PREVENTION SYSTEM
UTILITIES UNDERGROUND

GRAPHIC SCALE
20 0 10 20 40 80
(IN FEET)
1 inch = 20 ft.

PERMITTING PLANS

REVISIONS

No.	DATE:	COMMENTS	BY
1	08/03/26	STAFF COMMENTS	RJF

OWNER:
CITY OF LEBANON
DEPARTMENT OF PUBLIC WORKS
193 DARTMOUTH COLLEGE HIGHWAY
LEBANON, NEW HAMPSHIRE 03766

APPLICANT:
CITY OF LEBANON
DEPARTMENT OF PUBLIC WORKS
193 DARTMOUTH COLLEGE HIGHWAY
LEBANON, NEW HAMPSHIRE 03766

CITY OF LEBANON N.H. INCORPORATED JULY 4 1761 ESTABLISHED 1958

City of Lebanon
Department of Public Works
193 Dartmouth College Highway
Lebanon, New Hampshire 03766
lebanonnh.gov

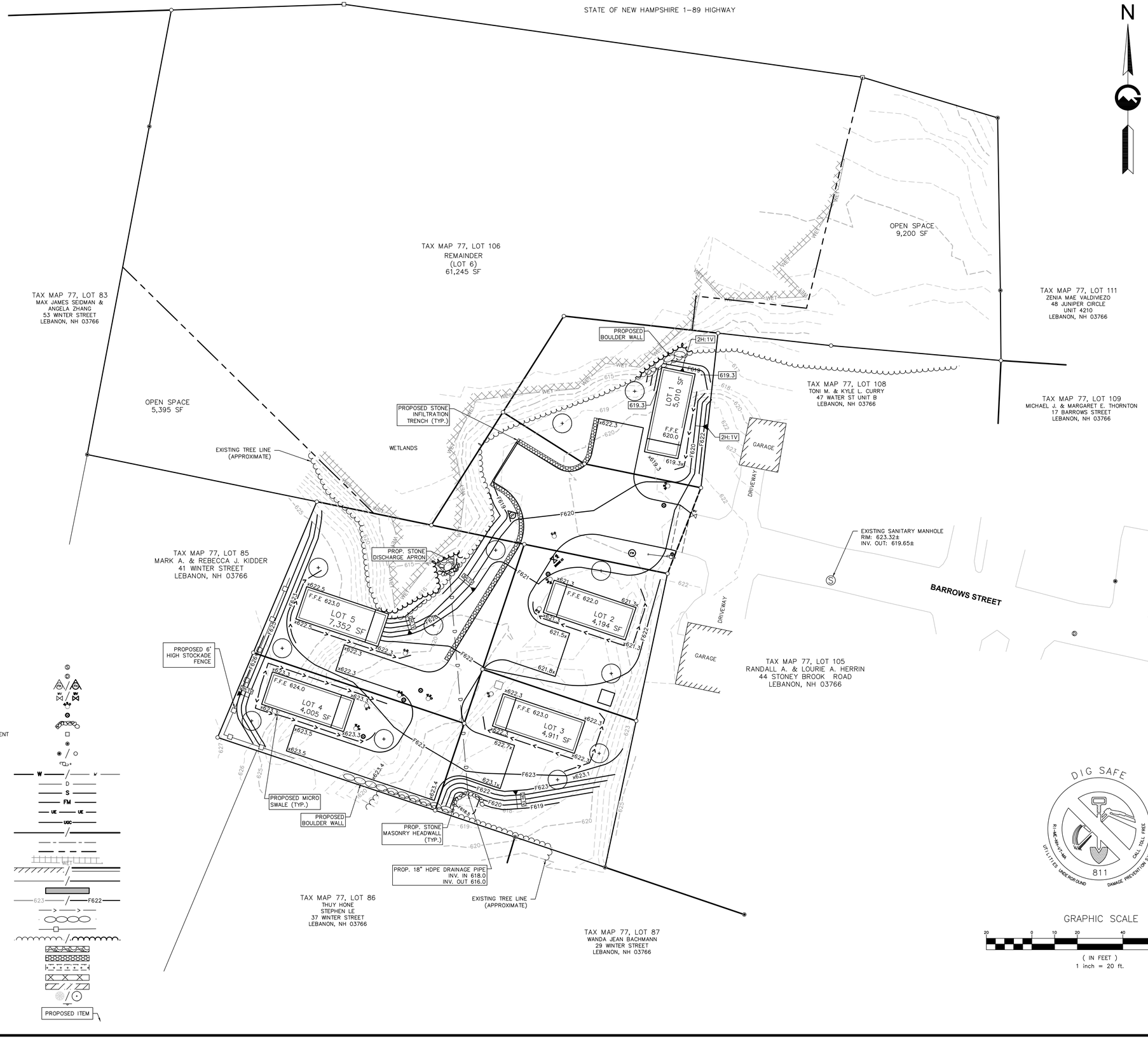
STAMP:
STATE OF NEW HAMPSHIRE RODRICK J FINLEY No. 7466 LICENSED PROFESSIONAL ENGINEER

LOCATION:
TAX MAP 77, LOT 106
BARROWS STREET
LEBANON, NEW HAMPSHIRE
GRAFTON COUNTY

PROJECT:
BARROWS STREET PATTERN ZONE SUBDIVISION

TITLE:
SITE PLAN

PROJECT No.	DATE:	SCALE:
25–0103–1	JULY 21, 2026	AS SHOWN
SHEET: 4 OF 11		



LEGEND

- EX. SEWER MANHOLE
- EX. DRAIN MANHOLE
- EX./RELOCATED HYDRANT
- EX./PROP WATER VALVE
- PROP. WATER CURB STOP
- PROP. WATER CORPORATION
- PROP. HEADWALL
- EX. CONCRETE/STONE BOUNDARY MONUMENT
- EX. DRILL HOLE
- EX./PROP IRON PIPE OR REBAR
- EX. UTILITY POLE/ GUY WIRE
- EX./PROP WATER LINE
- PROP. DRAINAGE PIPE
- PROP. GRAVITY SANITARY PIPE
- PROP. FORCEMAIN SANITARY PIPE
- PROP. 3" ELECTRICAL CONDUIT
- PROP. 2" COMMUNICATIONS CONDUIT
- EX./PROP BOUNDARY LINE
- MUNICIPAL BOUNDARY BUILDING SETBACK
- PROP. OPEN SPACE BOUNDARY
- EX. WETLANDS
- PROP. BUILDING/PROP. BUILDING
- EX./PROP. EDGE OF PAVEMENT
- PROP. BITUMINOUS PAVEMENT
- EX./PROP. CONTOUR
- PROP. MICRO SWALE
- PROP. BOULDER (RETAINING) WALL
- PROP STOCKADE FENCE
- EX./PROP. TREE LINE
- PROP. RIP RAP
- PROP. STONE INFILTRATION TRENCH
- PROP. SNOW STORAGE
- PROP. PAVEMENT REMOVAL
- PROP. SHARED DRIVEWAY EASEMENT
- EX./PROP. HARDWOOD TREE
- EX. SIGN
- PROPOSED WORK — PROPOSED ITEM

DIG SAFE
811
CALL TOLL FREE
DAMAGE PREVENTION SYSTEM
IT'S THE LAW!!! CALL
UTILITIES UNDERGROUND

GRAPHIC SCALE
20 0 10 20 40 80
(IN FEET)
1 inch = 20 ft.

PERMITTING PLANS

REVISIONS

No.	DATE:	COMMENTS	BY
1	08/03/26	STAFF COMMENTS	RJF

OWNER:
CITY OF LEBANON
DEPARTMENT OF PUBLIC WORKS
193 DARTMOUTH COLLEGE HIGHWAY
LEBANON, NEW HAMPSHIRE 03766

APPLICANT:
CITY OF LEBANON
DEPARTMENT OF PUBLIC WORKS
193 DARTMOUTH COLLEGE HIGHWAY
LEBANON, NEW HAMPSHIRE 03766

City of Lebanon
Department of Public Works
193 Dartmouth College Highway
Lebanon, New Hampshire 03766
lebanonnh.gov

STAMP:
STATE OF NEW HAMPSHIRE
RODRICK FINLEY
No. 7466
LICENSED PROFESSIONAL ENGINEER

LOCATION:
TAX MAP 77, LOT 106
BARROWS STREET
LEBANON, NEW HAMPSHIRE
GRAFTON COUNTY

PROJECT:
BARROWS STREET PATTERN ZONE SUBDIVISION

TITLE:
GRADING AND DRAINAGE PLAN

PROJECT No.	DATE:	SCALE:
25-0103-1	JULY 21, 2026	AS SHOWN
SHEET:	5 OF 11	

HOMEOWNER NOTES:

1. HOMEOWNERS TO EXECUTE AN AGREEMENT WITH THE CITY OF LEBANON FOR WASTEWATER PUMP STATION AND SEWER LINES WITHIN THE RIGHT-OF-WAY.
2. HOMEOWNERS OF LOTS 2 THROUGH 5 TO SHARE MAINTENANCE COSTS OF SEWER MAIN AND DRAINAGE PIPE.
3. HOMEOWNERS OF LOTS 2 THROUGH 5 TO EXECUTE EASEMENTS FOR WATER AND SEWER SERVICE CONNECTIONS.
4. HOMEOWNERS OF LOTS 2 THROUGH 5 TO EXECUTE EASEMENTS FOR ELECTRICAL, TELEPHONE, AND COMMUNICATION SERVICES.

STATE OF NEW HAMPSHIRE 1-89 HIGHWAY

N

TAX MAP 77, LOT 106
REMAINDER
(LOT 6)
61,245 SF

OPEN SPACE
9,200 SF

TAX MAP 77, LOT 83
MAX JAMES SEIDMAN &
ANGELA ZHANG
53 WINTER STREET
LEBANON, NH 03766

TAX MAP 77, LOT 111
ZENIA MAE VALDIVIEZO
48 JUNIPER CIRCLE
UNIT 4210
LEBANON, NH 03766

RELOCATE HYDRANT
8"X6" ANCHOR TEE, MJ
6" GATE VALVE, MJ W. BOX
6" DI PIPE
HYDRANT
8" DI PIPE
8" LONG BODY SOLID SLEEVE, MJ
RETAINER GLANDS

TAX MAP 77, LOT 108
TONI M. & KYLE L. CURRY
47 WATER ST UNIT B
LEBANON, NH 03766

TAX MAP 77, LOT 109
MICHAEL J. & MARGARET E. THORNTON
17 BARROWS STREET
LEBANON, NH 03766

OPEN SPACE
5,395 SF

LOT 1
5,010 SF

GARAGE

EXISTING TREE LINE
(APPROXIMATE)

WETLANDS

PROP. WATER SERVICE CONNECTION (TYP.)

EXISTING 8" DI WATER MAIN
(LOCATION TO BE VERIFIED BY CONTRACTOR PRIOR TO CONSTRUCTION)

PROP. CLEAN-OUT (TYP.)

MIN. 10' WATER MAIN & SEWER SEPARATION

PROPOSED WASTEWATER PUMP STATION
RIM: 620.75±
INV. IN: 612.83
INV. OUT: 614.08

EXISTING SANITARY MANHOLE
RIM: 623.32±
INV. OUT: 619.65±

TAX MAP 77, LOT 85
MARK A. & REBECCA J. KIDDER
41 WINTER STREET
LEBANON, NH 03766

PROPOSED BUILDING (TYP.)

PROP. TRANSFORMER

BARROWS STREET

DRIVEWAY

LOT 5
7,352 SF

LOT 2
4,194 SF

PROPOSED 1¼" CLASS 160 PVC FORCEMAIN
INV. @ EXIST. SMH = 620.00

PROPOSED 4" SDR 35 PVC SEWER (TYP.)
S=0.02 FT/FT MIN.

GARAGE

TAX MAP 77, LOT 105
RANDALL A. & LOURIE A. HERRIN
44 STONEY BROOK ROAD
LEBANON, NH 03766

INV. 615.78±

LOT 4
4,005 SF

LOT 3
4,911 SF

PROPOSED 3" ELECTRICAL CONDUIT (TYP.)

PROP. TRANSFORMER

PROP. CURB STOP (TYP.)

PROP. HANDHOLE

PROP. CORPORATION (TYP.)

PROPOSED 2" COMMUNICATION CONDUIT (TYP.)

PROPOSED 15' WATER MAIN MAINTENANCE EASEMENT CENTERED ON WATER MAIN TO CITY OF LEBANON.

EXISTING 8" DI WATER MAIN
(ONSITE LOCATION & DEPTH TO BE VERIFIED BY CONTRACTOR VIA EXPLORATORY EXCAVATION PRIOR TO CONSTRUCTION)

TAX MAP 77, LOT 86
THUY HONE
STEPHEN LE
37 WINTER STREET
LEBANON, NH 03766

EXISTING TREE LINE
(APPROXIMATE)

TAX MAP 77, LOT 87
WANDA JEAN BACHMANN
29 WINTER STREET
LEBANON, NH 03766

LEGEND

- EX. SEWER MANHOLE
- EX. DRAIN MANHOLE
- EX./RELOCATED HYDRANT
- EX./PROP WATER VALVE
- PROP. WATER CURB STOP
- PROP. WATER CORPORATION
- PROP. HEADWALL
- EX. CONCRETE/STONE BOUNDARY MONUMENT
- EX. DRILL HOLE
- EX./PROP IRON PIPE OR REBAR
- EX. UTILITY POLE/ GUY WIRE
- EX./PROP WATER LINE
- PROP. DRAINAGE PIPE
- PROP. GRAVITY SANITARY PIPE
- PROP. FORCEMAIN SANITARY PIPE
- PROP. 3" ELECTRICAL CONDUIT
- PROP. 2" COMMUNICATIONS CONDUIT
- EX./PROP BOUNDARY LINE
- MUNICIPAL BOUNDARY BUILDING SETBACK
- PROP. OPEN SPACE BOUNDARY
- EX. WETLANDS
- PROP. BUILDING/PROP. BUILDING
- EX./PROP. EDGE OF PAVEMENT
- PROP. BITUMINOUS PAVEMENT
- EX./PROP. CONTOUR
- PROP. MICRO SWALE
- PROP. BOULDER (RETAINING) WALL
- PROP STOCKADE FENCE
- EX./PROP. TREE LINE
- PROP. RIP RAP
- PROP. STONE INFILTRATION TRENCH
- PROP. SNOW STORAGE
- PROP. PAVEMENT REMOVAL
- PROP. SHARED DRIVEWAY EASEMENT
- EX./PROP. HARDWOOD TREE
- EX. SIGN
- PROPOSED WORK — PROPOSED ITEM

DIG SAFE
811
UTILITIES UNDERGROUND
DAMAGE PREVENTION SYSTEM
CALL TOLL FREE
RI-ME-NH-VT-MA

GRAPHIC SCALE
20 0 10 20 40 80
(IN FEET)
1 inch = 20 ft.

PERMITTING PLANS

REVISIONS

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1	08/03/26	STAFF COMMENTS	RJF

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DEPARTMENT OF PUBLIC WORKS
193 DARTMOUTH COLLEGE HIGHWAY
LEBANON, NEW HAMPSHIRE 03766

APPLICANT:
CITY OF LEBANON
DEPARTMENT OF PUBLIC WORKS
193 DARTMOUTH COLLEGE HIGHWAY
LEBANON, NEW HAMPSHIRE 03766

CITY OF LEBANON NH
INCORPORATED JULY 4 1761
ESTABLISHED 1958

City of Lebanon
Department of Public Works
193 Dartmouth College Highway
Lebanon, New Hampshire 03766
lebanonnh.gov

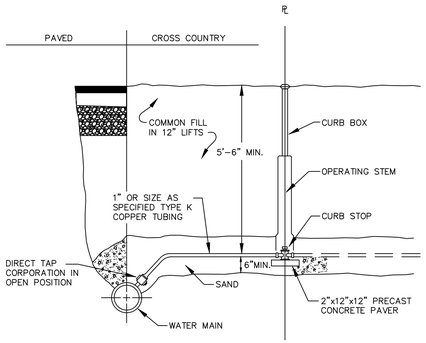
STAMP:
STATE OF NEW HAMPSHIRE
RODRICK J FINLEY No. 7466 LICENSED PROFESSIONAL ENGINEER

LOCATION:
TAX MAP 77, LOT 106
BARROWS STREET
LEBANON, NEW HAMPSHIRE
GRAFTON COUNTY

PROJECT:
BARROWS STREET PATTERN ZONE SUBDIVISION

TITLE:
UTILITY PLAN

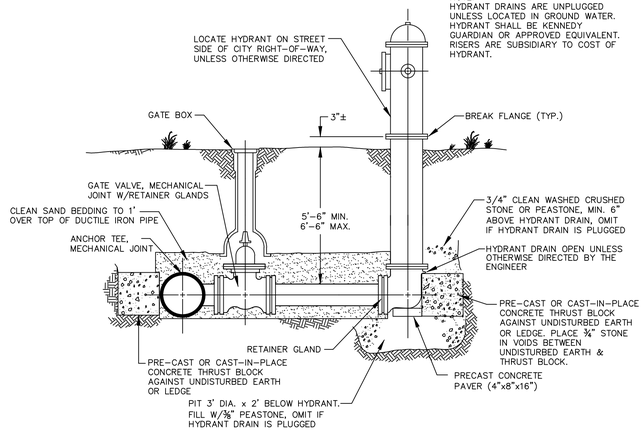
PROJECT No.	DATE:	SCALE:
25-0103-1	JULY 21, 2026	AS SHOWN
SHEET: 6 OF 11		



*PROVIDE LOCATABLE WATER TAPE FOR ALL SERVICE LINES.

SERVICE CONNECTION DETAIL

NOT TO SCALE



HYDRANT

NOT TO SCALE

WATER GENERAL NOTES:

A. THE CONTRACTOR SHALL NOT OPERATE ANY VALVES OR HYDRANTS WITHIN THE LEBANON WATER SYSTEM. ALL VALVES AND OR HYDRANTS SHALL BE OPERATED ONLY BY CITY OF LEBANON UTILITY MAINTENANCE DEPARTMENT PERSONNEL.

B. ALL WATER MAIN SHALL BE INSTALLED IN ACCORDANCE WITH CITY OF LEBANON AND AWWA STANDARDS.

C. PRIOR TO BACKFILLING, ALL WATER MAIN WORK AND SERVICES SHALL BE OBSERVED BY THE ENGINEER.

D. ALL WATER MAIN VALVES AND FITTINGS SHALL BE MECHANICAL JOINT CONSTRUCTION AND INSTALLED WITH RETAINER GLANDS AND THRUST BLOCKS.

E. DUCTILE IRON PIPE SHALL BE AWWA SPECIFICATION C-151, CLASS 52. PIPE LENGTHS SHALL BE SUPPLIED NOT EXCEEDING TWENTY (20) FEET IN LENGTH. ALL PIPE SHALL BE PUSH ON JOINTS WITH RUBBER GASKET COMPLYING WITH AWWA C-111. ALL PIPE AND FITTINGS SHALL HAVE A CEMENT MORTAR LINING AND ONE (1) MILLIMETER THICK BITUMINOUS SEAL COATING ON THE INSIDE AND ONE (1) MILLIMETER THICK BITUMINOUS SEAL COATING ON THE OUTSIDE. THE CEMENT LININGS SHALL BE IN ACCORDANCE WITH AWWA C104 AND BE ⅛" THICKNESS.

F. ALL VALVES SHALL BE OPEN COUNTER CLOCKWISE "LEFT".

G. ALL BELL JOINTS SHALL HAVE TWO SILICONE BRONZE SERRATED WEDGES INSTALLED FOR CONDUCTIVITY.

H. DUCTILE IRON FITTINGS SHALL CONFORM TO AWWA SPECIFICATIONS C-153 OR C-110. SOLID SLEEVES SHALL BE LONG BODY MECHANICAL JOINT ONLY.

I. 90° BENDS ARE NOT ALLOWED.

J. ALL HYDRANT BRANCHES SHALL BE INSTALLED WITH ANCHOR TEES. ALL HYDRANTS SHALL BE INSTALLED PLUMB, WITH THE BREAKAWAY MARKINGS SET EVEN WITH FINISH GRADE. GRADE ADJUSTMENT RISERS FOR HYDRANTS SHALL BE INCIDENTAL TO THE HYDRANT PAYMENT ITEMS AND ARE THE RESPONSIBILITY OF THE CONTRACTOR.

K. HYDRANT DRAIN PLUGS SHALL BE PULLED UNLESS OTHERWISE DIRECTED BY THE ENGINEER. THE CITY REQUIRES DRAIN PLUGS TO REMAIN IN PLACE IF GROUNDWATER IS PRESENT.

L. CHLORINATION/TESTING TAPS SHALL BE INSTALLED WITHIN 5' OF VALVES AND SHALL BE REMOVED FOLLOWING COMPLETION OF TESTING.

M. LEDGE AND LOOSE ROCK IN TRENCHES SHALL BE REMOVED TO 1' BELOW WATER MAIN AND SERVICE PIPING. LEDGE OR ROCK REMOVED SHALL NOT BE PLACED BACK INTO THE TRENCH.

N. ALL SERVICE LINE ADAPTORS USED TO MAKE CONNECTIONS FROM FROM NEW TO EXISTING PIPING SHALL BE COMPRESSION STYLE FITTINGS AND SHALL BE INCIDENTAL TO THE SERVICE LINE PAYMENT ITEM.

O. ALL EXISTING WATER MAIN IS TO BE EXCAVATED AND REMOVED FROM THE SITE IN ACCORDANCE WITH THE CONTRACT PAYMENT ITEM.

P. WATER LINE BEDDING/BLANKET MATERIAL (SAND) ASTM C33, FINE AGGREGATE. MATERIAL SHALL BE OBTAINED FROM APPROVED SOURCES, AND SHALL CONSIST OF SATISFACTORY GRADED, FREE DRAINING MATERIAL, REASONABLY FREE FROM LOAM, SILT, CLAY, AND ORGANIC MATERIAL. SIEVE ANALYSIS BY WEIGHT AS FOLLOWS:

SIEVE SIZE	% PASSING BY WEIGHT
NO. 4	100%
*NO 200	0-12% (*BASED ON THE FRACTION PASSING NO. 4)

Q. SERVICE CONNECTIONS ARE SHOWN FOR ESTIMATING PURPOSES ONLY AND TO INFORM THE CONTRACTOR OF THE NEED FOR A SERVICE AT THAT PROPERTY. THE ACTUAL LENGTH AND LOCATIONS WILL BE DETERMINED IN THE FIELD BY THE CONTRACTOR. THE CONTRACTOR SHALL MAKE ALL CONNECTIONS TO THE EXISTING SERVICE PIPES. SERVICES SHALL BE ONE INCH TYPE K COPPER UNLESS OTHERWISE SHOWN. ALL TAPS SHALL INCLUDE CORPORATION STOPS AND SHALL BE MADE "WET".

R. A MINIMUM VERTICAL SEPARATION OF 18 INCHES SHALL BE MAINTAINED BETWEEN WATER AND SEWER UTILITIES, INCLUDING SERVICES.

S. THE CONTRACTOR SHALL NOTIFY RESIDENTS 48 HOURS IN ADVANCE OF DISRUPTION OF SERVICE.

WATER LINE TESTING

A. THE CONTRACTOR SHALL NOTIFY THE CITY AT LEAST 24 HOURS IN ADVANCE OF BEGINNING TESTING OR DISINFECTION.

B. THE CONTRACTOR SHALL FURNISH ALL NECESSARY EQUIPMENT AND LABOR FOR CARRYING OUT A PRESSURE TEST AND LEAKAGE TEST ON THE PIPELINE IN ACCORDANCE WITH AWWA STANDARDS.

C. THE PIPE SHALL BE SUBJECTED TO A HYDROSTATIC PRESSURE OF ONE AND ONE-HALF (1½) TIMES THE WORKING PRESSURE, OR THE RATED PRESSURE, WHICHEVER IS GREATER, AND THIS PRESSURE MAINTAINED FOR AT LEAST TWO HOURS. THE LEAKAGE TEST SHALL BE CONDUCTED AT A PRESSURE AS DETERMINED BY THE ENGINEER AND THIS PRESSURE SHALL BE MAINTAINED FOR AT LEAST 120 MINUTES DURING THE TEST.

D. THE CONTRACTOR SHALL MAKE ANY TAPS AND FURNISH ALL NECESSARY CAPS, PLUGS, ETC., AS REQUIRED IN CONJUNCTION WITH TESTING. HE SHALL ALSO FURNISH A MOTORIZED TEST PUMP, GAUGES AND ANY OTHER EQUIPMENT REQUIRED IN CONJUNCTION WITH CARRYING ON THE HYDROSTATIC TESTS. HE SHALL AT ALL TIMES PROTECT THE NEW WATER MAINS AND THE EXISTING WATER MAINS AGAINST THE ENTRANCE OF POLLUTING MATERIAL.

E. TESTS TO BE MADE ONLY AFTER PARTIAL OR COMPLETE BACKFILLING OF TRENCHES.

F. POSITION OF ALL VALVES (FULLY OPENED OR CLOSED) IN SECTION OF LINE TO BE TESTED SHALL BE CHECKED IN THE PRESENCE OF THE CITY TO ENSURE THAT:

1. ALL HYDRANT BRANCH CONNECTIONS ARE OPEN TO THE HYDRANT (HYDRANT CLOSED, BRANCH CONNECTION VALVE OPEN).
2. ALL MAIN LINE VALVES ARE PROPERLY POSITIONED FOR SECTION OF LINE BEING TESTED.

G. TESTS NOT TO BE PERFORMED FOR AT LEAST SEVEN (7) DAYS AFTER LAST CONCRETE BLOCK OR ANCHOR HAS BEEN CAST.

H. FILL PIPELINES, FITTINGS, AND APPURTENANCES WITH WATER FOR TESTING SLOWLY.

I. EXPEL ALL AIR FROM PIPELINES, FITTINGS AND APPURTENANCES PRIOR TO PERFORMING TESTS. IF PERMANENT AIR VENTS ARE NOT LOCATED AT ALL HIGH POINTS, THE CONTRACTOR SHALL INSTALL CORPORATION STOPS AT HIS EXPENSE AT SUCH POINTS SO THAT THE AIR CAN BE EXPELLED AS THE LINE IS FILLED WITH WATER. THESE STOPS SHALL BE PROTECTED WITH A MASONRY BRIDGE TO PREVENT BREAKAGE DURING BACKFILLING. SUCH POINTS ARE TO BE REMOVED DOWN TO THE CORPORATION ONCE TESTING IS COMPLETE.

J. EXAMINATION UNDER PRESSURE: ALL EXPOSED PIPES, FITTINGS, VALVES, HYDRANTS, JOINTS SHALL BE EXAMINED CAREFULLY DURING THE HYDROSTATIC AND LEAKAGE TESTS.

K. ALLOWABLE LEAKAGE IN GALLONS PER HOUR SHALL BE AS DETERMINED BY THE FOLLOWING FORMULA:

$$L = \frac{SDP}{148{,}000}$$

WHERE L = ALLOWABLE LEAKAGE
S = LENGTH OF PIPE TESTED
D = PIPE DIAMETER IN INCHES
P = TEST PRESSURE

FOR FLANGED JOINTS: NO LEAKAGE ALLOWABLE.

THE CONTRACTOR AND THE ENGINEER SHALL COMPUTE THE ALLOWABLE LEAKAGE FOR EACH SECTION TO BE TESTED AND AGREE ON THE ALLOWABLE AMOUNT PRIOR TO PERFORMING ANY TESTS.

L. EVALUATION OF RESULTS/CORRECTIVE ACTIONS:

1. EXAMINATION UNDER PRESSURE: ALL EXPOSED PIPES, FITTINGS, VALVES, HYDRANTS, JOINTS SHALL BE EXAMINED CAREFULLY DURING THE HYDROSTATIC AND LEAKAGE TESTS.

   ANY DAMAGED OR DEFECTIVE PIPE, FITTINGS, VALVES OR HYDRANTS THAT ARE DISCOVERED DURING OR FOLLOWING THE HYDROSTATIC AND LEAKAGE TEST SHALL BE REPAIRED AT HIS EXPENSE AND THE TESTS SHALL BE REPEATED UNTIL THEY ARE SATISFACTORY TO THE ENGINEER.

2. EXAMINATION OF LEAKAGE: IF ANY LEAKAGE TEST OF SECTION OF THE SYSTEM DISCLOSES A LEAKAGE GREATER THAN THAT SPECIFIED HEREIN, THE CONTRACTOR SHALL, AT HIS OWN EXPENSE, LOCATE AND REPAIR OR REPLACE THE DEFECTIVE OR DAMAGED MATERIALS. HE SHALL THEN REPEAT THE ENTIRE TEST AND MAKE ADDITIONAL REPAIR AND TEST AND CONTINUE TO REPEAT UNTIL THE LEAKAGE IS WITHIN THE SPECIFIED ALLOWANCE.

3. ALL VISIBLE LEAKS ARE TO BE REPAIRED BY THE CONTRACTOR, AT HIS OWN EXPENSE, REGARDLESS OF THE AMOUNT OF LEAKAGE.

DISINFECTION

A. BEFORE BEING PLACED IN SERVICE, ALL NEW WATER PIPELINES SHALL BE CHLORINATED IN ACCORDANCE WITH ANSA/AWWA C-651 (RESENT REVISION), "STANDARD FOR DISINFECTING WATER MAINS." THE PROCEDURE SHALL BE DISCUSSED WITH THE CITY BEFORE DOING THE WORK AND SHALL BE APPROVED.

B. THE LOCATION OF THE CHLORINATION AND SAMPLING POINTS WILL BE DETERMINED BY THE CITY IN THE FIELD. TAPS FOR CHLORINATION AND SAMPLING SHALL BE UNCOVERED AND BACKFILLED BY THE CONTRACTOR AS REQUIRED. AT LEAST ONE SET OF SAMPLES SHALL BE COLLECTED FROM EVERY 1,200 FT OF THE NEW WATER MAIN, PLUS ONE SET FROM THE END OF THE LINE AND AT LEASE ONE SET FROM EACH BRANCH. ADDITIONAL SAMPLES MAY BE REQUIRED BY THE OWNER.

C. THE GENERAL PROCEDURE FOR CHLORINATION SHALL BE FIRST TO FLUSH ALL DIRTY OR DISCOLORED WATER FROM THE LINES AT A RATE OF AT LEAST 2.5 FPS. CHLORINE SHALL BE INTRODUCED THROUGH A TAP AT ONE END, WHILE WATER IS BEING WITHDRAWN AT THE OTHER END OF THE LINE. THE CHLORINE SOLUTION OF 50 PPM FREE CHLORINE SHALL REMAIN IN THE PIPELINE FOR ABOUT 24 HOURS. AT THE END OF THIS PERIOD THE RESIDUAL CHLORINE SHALL BE AT LEAST 10 PPM.

D. FOLLOWING THE CHLORINATION PERIOD, ALL WATER SHALL BE FLUSHED FROM THE LINES AT THEIR EXTREMITIES, AND REPLACED WITH WATER FROM THE DISTRIBUTION SYSTEM. BACTERIOLOGICAL SAMPLING OF THE REPLACEMENT WATER SHALL THEN BE COLLECTED BY THE CONTRACTOR AND TESTED BY THE APPROVED LABORATORY IN FULL ACCORDANCE WITH THE AWWA MANUAL C601. THE CONTRACTOR WILL BE REQUIRED TO RE-CHLORINATE AT THEIR COST, IF NECESSARY, AND THE LINE SHALL NOT BE PLACED IN SERVICE UNTIL THE REQUIREMENTS OF THE STATE WATER SUPPLY DIVISION ARE MET. A WRITTEN COPY THAT THE WATER SAMPLE PASSES THE BACTERIOLOGICAL TEST SHALL BE PROVIDED TO THE ENGINEER AND OWNER PRIOR TO ALLOWING THE MAIN TO BE ACTIVATED.

E. SPECIAL DISINFECTION PROCEDURES, SUCH AS SOAKING OR SWABBING, APPROVED BY THE CITY, SHALL BE USED IN CONNECTIONS TO EXISTING MAINS AND WHERE THE METHOD OUTLINED ABOVE IS NOT PRACTICABLE.

F. THE CONTRACTOR SHALL PROVIDE FOR AND ARRANGE FOR LABORATORY TO TEST ALL SAMPLES (2 SAMPLES FROM EACH LOCATION, ONE 24 HOURS AFTER THE LINE IS DISINFECTED AND THE SECOND AT 24 HOURS AFTER THE FIRST SAMPLE IS OBTAINED) FOR BACTERIOLOGICAL TESTING AS REQUIRED BY THIS SPECIFICATION AND REFERENCE STANDARDS INCLUDED THEREIN. THE APPROVED LAB IS ENDYNE LABRATORIES IN LEBANON, NH. ONCE THE SAMPLES ARE COLLECTED BY THE CONTRACTOR AND OBSERVED BY THE ENGINEER, SAMPLE BOTTLES ARE TO BE DELIVERED TO ENDYNE LABS BY THE CITY. THE CONTRACTOR SHALL FILL OUT ALL NECESSARY FORMS AND CHAIN OF CUSTODY IN RELATION TO THE SAMPLES. COPIES OF ALL RESULTS SHALL BE FURNISHED IMMEDIATELY UPON RECEIPT TO THE CITY.

G. DURING THE 24 HOUR STANDING PERIOD, ALL GATE VALVES WITHIN THE SECTION BEING TESTED SHALL BE OPERATED TO DISINFECT THE MECHANISM.

PERMITTING PLANS

REVISIONS

No.	DATE:	COMMENTS	BY
1	08/03/26	STAFF COMMENTS	RJF

OWNER:
CITY OF LEBANON
DEPARTMENT OF PUBLIC WORKS
193 DARTMOUTH COLLEGE HIGHWAY
LEBANON, NEW HAMPSHIRE 03766

APPLICANT:
CITY OF LEBANON
DEPARTMENT OF PUBLIC WORKS
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LEBANON, NEW HAMPSHIRE 03766

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Lebanon, New Hampshire 03766
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STAMP:

STATE OF NEW HAMPSHIRE — RODRICK I FINLEY No. 7466 LICENSED PROFESSIONAL ENGINEER

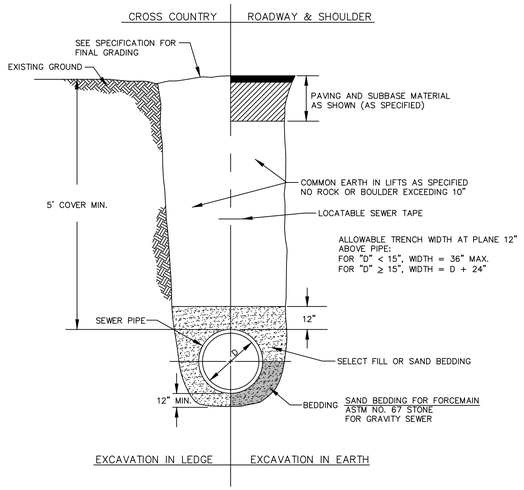
LOCATION:

TAX MAP 77, LOT 106
BARROWS STREET
LEBANON, NEW HAMPSHIRE
GRAFTON COUNTY

PROJECT:
BARROWS STREET PATTERN ZONE SUBDIVISION

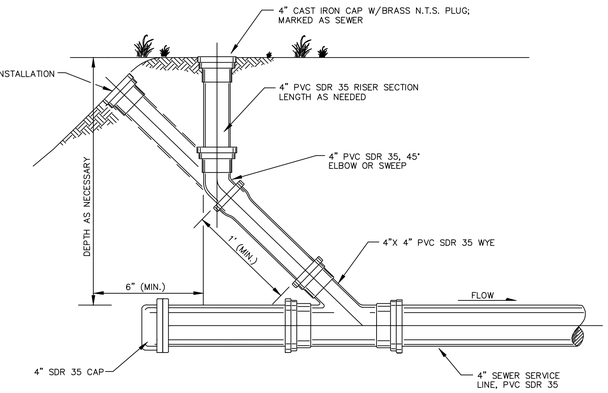
TITLE:
WATER DETAILS

PROJECT No.	DATE:	SCALE:
25-0103-1	JULY 21, 2026	AS SHOWN
SHEET:	7 OF 11	



SEWER TRENCH DETAIL

NOT TO SCALE

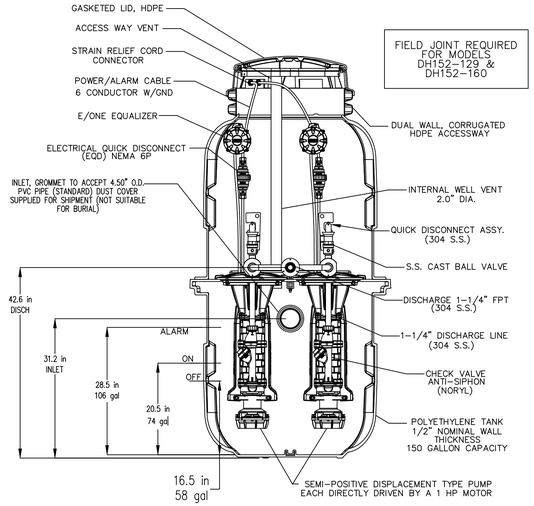


PVC SEWER SERVICE CLEANOUT DETAIL

NOT TO SCALE

NA0052P02

DH152



CONCRETE BALLAST MAY BE REQUIRED SEE INSTALLATION INSTRUCTIONS FOR DETAILS

NOTE: DIMENSIONS ARE FOR REFERENCE ONLY

JVL	JG	6/26/2024	G	1:16
DR BY	CHK'D	DATE	ISSUE	SCALE

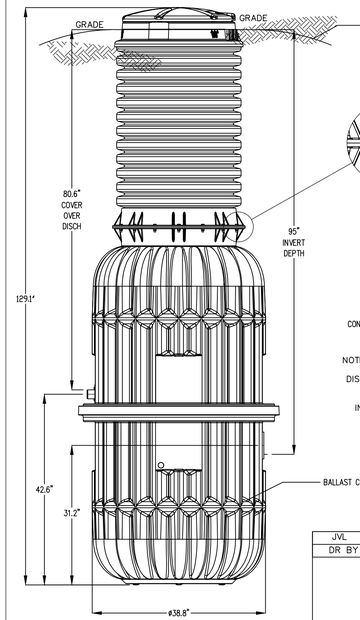
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SEWER SYSTEMS

MODEL DH152
DETAIL SHEET

NA0052P02

NA0052P05

DH152-129



JVL	JG	6/26/2024	D	1:16
DR BY	CHK'D	DATE	ISSUE	SCALE

e one
SEWER SYSTEMS

MODEL DH152-129

NA0052P05

WASTEWATER PUMP STATION DETAIL

NOT TO SCALE

PERMITTING PLANS

REVISIONS

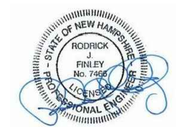
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APPLICANT:
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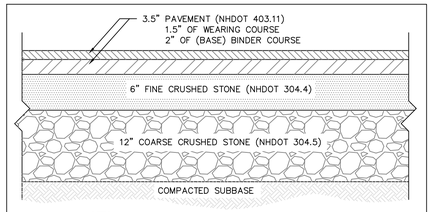
LOCATION:

TAX MAP 77, LOT 106
BARROWS STREET
LEBANON, NEW HAMPSHIRE
GRAFTON COUNTY

PROJECT:
BARROWS STREET PATTERN ZONE SUBDIVISION

TITLE:
WASTEWATER DETAILS

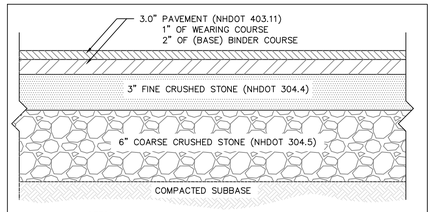
PROJECT No.	DATE:	SCALE:
25-0103-1	JULY 21, 2026	AS SHOWN
SHEET:	8 OF 11	



NOTES:
1. ALL GRAVELS AND SUBBASE TO BE COMPACTED TO 95%.

ROADWAY SECTION DETAIL

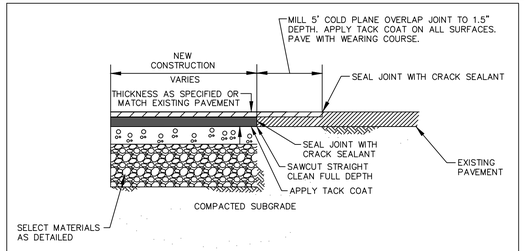
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NOTES:
1. ALL GRAVELS AND SUBBASE TO BE COMPACTED TO 95%.

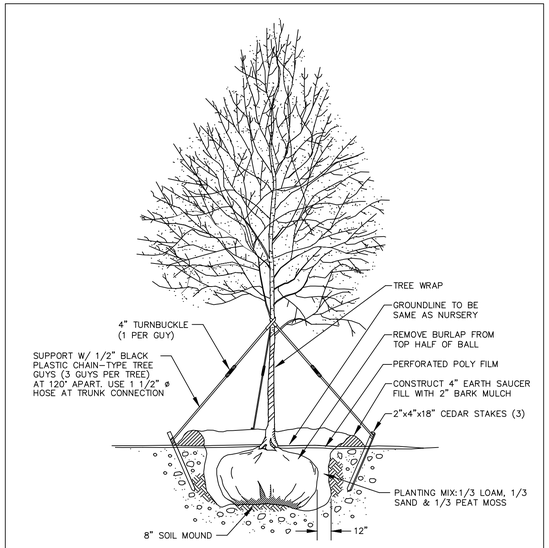
DRIVEWAY SECTION DETAIL

NOT TO SCALE



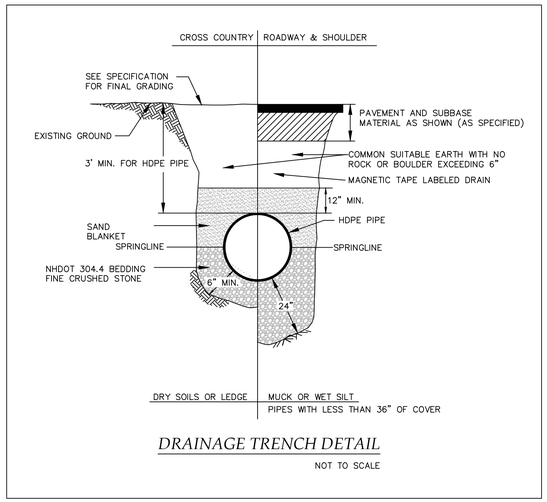
PAVEMENT SAWCUT JOINT DETAIL

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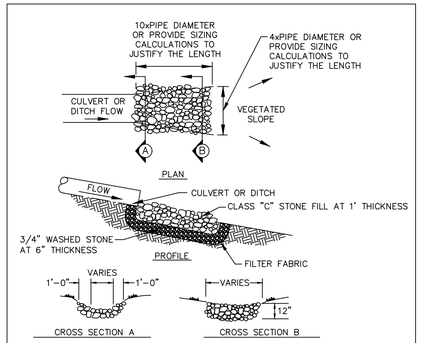
DECIDUOUS PLANTING DETAIL

NOT TO SCALE



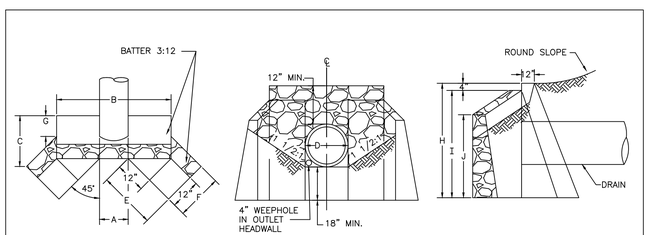
DRAINAGE TRENCH DETAIL

NOT TO SCALE



STONE DISCHARGE APRON DETAIL

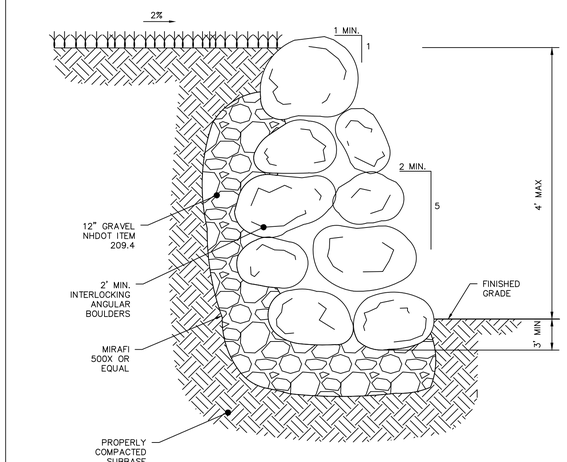
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DIA. D INCHES	DIMENSIONS								
	A	B	C	E	F	G	H	I	J
12"	1'-3"	4'-0"	2'-2"	2'-4"	1'-10"	0'-7"	4'-0"	3'-8"	3'-0"
15"	1'-6"	4'-3"	2'-2"	2'-4"	1'-10"	0'-7"	4'-0"	3'-8"	3'-0"
18"	1'-9"	4'-6"	2'-2"	2'-4"	1'-10"	0'-7"	4'-0"	3'-8"	3'-0"
24"	2'-3"	5'-0"	2'-2"	3'-0"	2'-0"	0'-6"	4'-6"	4'-0"	3'-4"
36"	3'-3"	6'-1"	2'-5"	3'-7"	2'-0"	0'-6"	5'-6"	5'-0"	4'-1"

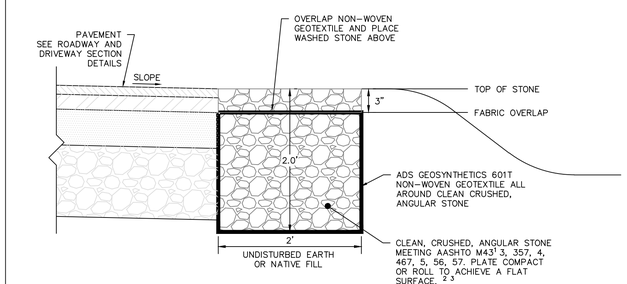
STONE MASONRY HEADWALL DETAIL

NOT TO SCALE



BOULDER WALL DETAIL

NOT TO SCALE



NOTES:
1. THE LISTED AASHTO DESIGNATIONS ARE FOR GRADATIONS ONLY. THE STONE MUST ALSO BE CLEAN, CRUSHED, ANGULAR. FOR EXAMPLE, A SPECIFICATION FOR #4 STONE WOULD STATE: "CLEAN, CRUSHED, ANGULAR NO. 4 (AASHTO M43) STONE".
2. COMPACTION REQUIREMENTS ARE MET FOR MATERIALS WHEN PLACED AND COMPACTED IN 6" (150 mm) (MAX) LIFTS USING TWO FULL COVERAGES WITH A VIBRATORY COMPACTOR.
3. WHERE INFILTRATION SURFACES MAY BE COMPROMISED BY COMPACTION, FOR STANDARD DESIGN LOAD CONDITIONS, A FLAT SURFACE MAY BE ACHIEVED BY RAKING OR DRAGGING WITHOUT COMPACTION EQUIPMENT.
4. PROTECT INFILTRATION TRENCH FROM SEDIMENT LADEN WATER. DO NOT ALLOW SEDIMENT LADEN WATER INTO SYSTEM.
5. DO NOT TRAFFIC EXPOSED SOIL SURFACE WITH CONSTRUCTION EQUIPMENT. IF FEASIBLE, PERFORM EXCAVATIONS WITH EQUIPMENT POSITIONED OUTSIDE THE LIMITS OF THE INFILTRATION COMPONENTS OF THE SYSTEM.

STONE INFILTRATION TRENCH DETAIL

NOT TO SCALE

PERMITTING PLANS

REVISIONS

No.	DATE:	COMMENTS	BY
1	08/03/26	STAFF COMMENTS	RJF

OWNER:
CITY OF LEBANON
DEPARTMENT OF PUBLIC WORKS
193 DARTMOUTH COLLEGE HIGHWAY
LEBANON, NEW HAMPSHIRE 03766

APPLICANT:
CITY OF LEBANON
DEPARTMENT OF PUBLIC WORKS
193 DARTMOUTH COLLEGE HIGHWAY
LEBANON, NEW HAMPSHIRE 03766

City of Lebanon
Department of Public Works
193 Dartmouth College Highway
Lebanon, New Hampshire 03766
lebanonnh.gov

STAMP:

STATE OF NEW HAMPSHIRE — RODRICK J FINLEY No. 7466 LICENSED PROFESSIONAL ENGINEER

LOCATION:

TAX MAP 77, LOT 106
BARROWS STREET
LEBANON, NEW HAMPSHIRE
GRAFTON COUNTY

PROJECT:
BARROWS STREET PATTERN ZONE SUBDIVISION

TITLE:
DRAINAGE & MISCELLANEOUS DETAILS

PROJECT No.	DATE:	SCALE:
25-0103-1	JULY 21, 2026	AS SHOWN
SHEET: 9 OF 11		

WINTER CONSTRUCTION NOTES

TO ADEQUATELY PROTECT WATER QUALITY DURING COLD WEATHER AND DURING SPRING RUNOFF, THE ADDITIONAL STABILIZATION TECHNIQUES SPECIFIED IN THIS SECTION SHALL BE EMPLOYED DURING THE PERIOD FROM OCTOBER 15 THROUGH MAY 1.

1. IF DURING CONSTRUCTION A WINTER SHUTDOWN IS NECESSARY, THE CONTRACTOR SHALL STABILIZE ALL INCOMPLETE WORK AND PROVIDE FOR SUITABLE METHODS OF DIVERTING RUNOFF IN ORDER TO ELIMINATE SHEET FLOW ACROSS FROZEN SURFACES.
2. AREA OF EXPOSED, UNSTABILIZED SOIL SHALL BE LIMITED TO ONE ACRE AND PROTECTED AGAINST EROSION BY THE METHODS DESCRIBED BELOW PRIOR TO ANY THAW OR SPRING MELT EVENT.
3. THE ALLOWABLE AREA OF EXPOSED SOIL MAY BE INCREASED IF A WINTER CONSTRUCTION PLAN IS DEVELOPED BY A QUALIFIED ENGINEER OR A CPESC SPECIALIST AND SUBMITTED TO THE DEPARTMENT FOR APPROVAL AS A REQUEST TO WAIVE THE ONE-ACRE LIMIT.
4. ALL PROPOSED VEGETATED AREAS HAVING A SLOPE OF LESS THAN 15% THAT DO NOT EXHIBIT A MINIMUM OF 85% VEGETATIVE GROWTH BY OCTOBER 15, OR THAT ARE DISTURBED AFTER OCTOBER 15, SHALL BE SEEDED AND COVERED WITH 3 TO 4 TONS OF HAY OR STRAW MULCH PER ACRE SECURED WITH ANCHORED NETTING OR TACKIFIER OR WITH AT LEAST 2 INCHES OF EROSION CONTROL MIX MEETING THE CRITERIA OF ENV-WQ 1506.05(b).
5. ALL PROPOSED VEGETATED AREAS HAVING A SLOPE OF 15% OR GREATER THAT DO NOT EXHIBIT A MINIMUM OF 85% VEGETATIVE GROWTH BY OCTOBER 15, OR THAT ARE DISTURBED AFTER OCTOBER 15, SHALL BE SEEDED AND COVERED WITH A PROPERLY INSTALLED AND ANCHORED EROSION CONTROL BLANKET OR WITH AT LEAST 4 INCHES OF EROSION CONTROL MIX MEETING THE CRITERIA OF ENV-WQ 1506.05(b).
6. ANCHORED HAY MULCH OR EROSION CONTROL MIX THAT MEETS THE CRITERIA OF ENV-WQ 1506.05(B) SHALL NOT BE INSTALLED OVER SNOW GREATER THAN ONE INCH IN DEPTH.
7. THE INSTALLATION OF EROSION CONTROL BLANKETS OR MULCH NETTING SHALL NOT OCCUR OVER ACCUMULATED SNOW OR ON FROZEN GROUND AND SHALL BE COMPLETED IN ADVANCE OF THAW OR SPRING MELT EVENTS.
8. ALL PROPOSED STABILIZATION IN ACCORDANCE WITH (D) OR (E), ABOVE, SHALL BE COMPLETED WITHIN A DAY OF ESTABLISHING THE GRADE THAT IS FINAL OR THAT OTHERWISE WILL EXIST FOR MORE THAN 5 DAYS.
9. ALL DITCHES OR SWALES WHICH DO NOT EXHIBIT A MINIMUM OF 85% VEGETATIVE GROWTH BY OCTOBER 15, OR WHICH ARE DISTURBED AFTER OCTOBER 15, SHALL BE STABILIZED TEMPORARILY WITH STONE OR EROSION CONTROL BLANKETS APPROPRIATE FOR THE DESIGN FLOW CONDITIONS.
10. AFTER OCTOBER 15, INCOMPLETE PARKING AREAS WHERE ACTIVE CONSTRUCTION HAS STOPPED FOR THE WINTER SHALL BE PROTECTED WITH A MINIMUM 3-INCH LATER OF BASE COURSE GRAVELS (NHDOT ITEM 304.1, 304.2, OR 304.3).

EROSION CONTROL NOTES

1. THE AREA OF DISTURBANCE SHALL BE KEPT TO A MINIMUM. EARTHWORK SHALL BE LIMITED TO THE AREAS WITHIN THE LIMITS OF CLEARING AS SHOWN ON THE PLAN. AT NO TIME SHALL MORE THAN FIVE (5) ACRES OF SITE AREA BE IN AN UNSTABLE CONDITION.IN AREAS WHERE FINAL GRADING HAS NOT OCCURRED, IMPLEMENT TEMPORARY STABILIZATION MEASURES WITHIN 7 DAYS AFTER INITIAL DISTURBANCE FOR EXPOSED SOIL AREAS WITHIN 100 FEET OF A SURFACE WATER BODY OR WETLAND AND NO MORE THAN 14 DAYS AFTER INITIAL DISTURBANCE FOR ALL OTHER AREAS.
2. APPROPRIATE EROSION AND SEDIMENT CONTROL MEASURES. INCLUDING PERIMETER CONTROLS SHALL BE INSTALLED PRIOR TO LAND DISTURBANCE.
3. ALL MEASURES IN THE PLAN SHALL MEET AS A MINIMUM THE BEST MANAGEMENT PRACTICES SET FORTH IN VOLUME 3 OF THE NEW HAMPSHIRE STORMWATER MANUAL "EROSION AND SEDIMENT CONTROLS DURING CONSTRUCTION" AS PUBLISHED AND AMENDED BY THE NEW HAMPSHIRE DEPARTMENT OF ENVIRONMENTAL SERVICES.
4. TEMPORARY EROSION CONTROL MEASURES SHALL BE INSTALLED IN STRICT ACCORDANCE WITH PROJECT PLANS.
5. IN NO WAY ARE THOSE TEMPORARY EROSION CONTROL MEASURES INDICATED ON THESE PLANS TO BE CONSIDERED ALL INCLUSIVE. THE CONTRACTOR SHALL USE JUDGEMENT IN INSTALLING SUPPLEMENTARY EROSION CONTROL MEASURES WHERE AND WHEN SPECIFIC SITE CONDITIONS AND/OR CONSTRUCTION METHODOLOGIES MAY WARRANT.
6. THE CITY OF LEBANON SHALL RESERVE THE RIGHT TO REQUIRE FURTHER EROSION CONTROL PRACTICES DURING CONSTRUCTION SHOULD THEY FIND IT NECESSARY.
7. THE PROJECT IS TO BE MANAGED IN A MANNER THAT MEETS THE REQUIREMENTS AND INTENT OF RSA 430:53 AND CHAPTER AGR 3800 RELATIVE TO INVASIVE SPECIES CONTROL.
8. WHENEVER PRACTICAL, NATURAL VEGETATION SHALL BE RETAINED, PROTECTED OR SUPPLEMENTED. THE STRIPPING OF VEGETATION SHALL BE DONE IN A MANNER THAT MINIMIZES SOIL EROSION.
9. MEASURES SHALL BE TAKEN TO CONTROL EROSION WITHIN THE PROJECT AREA. SEDIMENT IN RUNOFF WATER SHALL BE TRAPPED AND RETAINED WITHIN THE PROJECT AREA USING APPROVED MEASURES.
10. ALL TEMPORARY EROSION AND SEDIMENT CONTROL MEASURES SHALL BE MAINTAINED IN FUNCTIONING CONDITION UNTIL FINAL SITE STABILIZATION IS ACCOMPLISHED.
11. OFF-SITE SURFACE WATER AND RUNOFF FROM UNDISTURBED AREAS SHALL BE DIVERTED AWAY FROM DISTURBED AREAS WHERE FEASIBLE OR CARRIED NON EROSIVELY THROUGH THE PROJECT AREA. INTEGRITY OF DOWNSTREAM DRAINAGE SYSTEMS SHALL BE MAINTAINED
12. ANY PONDS AND SWALES SHALL BE INSTALLED EARLY ON IN THE CONSTRUCTION SEQUENCE (BEFORE ROUGH GRADING THE SITE).
13. ALL DITCHES AND SWALES SHALL BE STABILIZED PRIOR TO DIRECTING RUNOFF TO THEM.
14. TEMPORARY WATER DIVERSIONS (SWALES, BASINS, ETC.) MUST BE USED AS NECESSARY UNTIL AREAS ARE STABILIZED.
15. COVER STOCKPILES AT THE END OF EACH WORKING DAY (UNLESS TEMPORARY-SEEDED).
16. ALL TEMPORARY EROSION AND SEDIMENT CONTROL MEASURES SHALL BE REMOVED AFTER FINAL SITE STABILIZATION. TRAPPED SEDIMENT AND OTHER DISTURBED SOIL AREAS RESULTING FROM THE REMOVAL OF TEMPORARY MEASURES SHALL BE PERMANENTLY STABILIZED WITHIN 30 DAYS UNLESS CONDITIONS DICTATE OTHERWISE.
17. GRADED AREAS SHALL BE VEGETATED TO INSURE EROSION CONTROL BY SEEDING, MULCHING, AND FERTILIZING. DISTURBED AREAS SHALL BE PLANTED WITH SUITABLE PLANT MATERIALS.
18. ALL DISTURBED AREAS DESIGNATED TO BE TURF, SHALL RECEIVE THE REQUIRED AMOUNT OF LOAM (COMPACTED THICKNESS), PRIOR TO FINAL SEEDING AND MULCHING.
19. AN AREA SHALL BE CONSIDERED STABLE IF ONE OF THE FOLLOWING HAS OCCURRED:
    A. IN AREAS TO BE PAVED, BASE COURSE GRAVELS MEETING THE REQUIREMENTS OF NHDOT STANDARD FOR ROAD AND BRIDGE CONSTRUCTION, 2016, ITEM 304.2 HAVE BEEN INSTALLED;
    B. A MINIMUM OF 85% VEGETATED GROWTH HAS BEEN ESTABLISHED;
    C. A MINIMUM OF 3" OF NON-EROSIVE MATERIAL SUCH AS STONE OR RIP RAP HAS BEEN INSTALLED; OR EROSION CONTROL BLANKETS HAVE BEEN PROPERLY INSTALLED.
20. IF, DURING CONSTRUCTION, IT BECOMES APPARENT THAT ADDITIONAL EROSION AND SEDIMENT CONTROL DEVICES ARE REQUIRED, THE OWNER SHALL BE REQUIRED TO INSTALL THE NECESSARY DEVICES OR CONSULT WITH THE ENGINEER.
21. GRADING SHALL NOT EXCEED A RATIO OF 3 HORIZONTAL TO 1 VERTICAL WITHOUT SPECIAL EROSION CONTROL MEASURES. NETTING OR SIMILAR MATERIAL SHALL BE PROVIDED ON SLOPES WITH A RATION GREATER THAN 3:1 WHILE GROUND COVER IS BEING ESTABLISHED
22. JUTE MATTING INSTALLED TO CONFORM WITH THE RECOMMENDED BEST MANAGEMENT PRACTICE OUTLINED IN VOLUME 3 OF THE NEW HAMPSHIRE STORMWATER MANUAL "EROSION AND SEDIMENT CONTROLS DURING CONSTRUCTION" ON ALL 3:1 SLOPES OR GREATER.
23. PERMANENT STABILIZATION MUST BE IN PLACE NO MORE THAN 3 DAYS (72 HOURS) FOLLOWING THE COMPLETION OF FINAL GRADING OF EXPOSED SOIL AREAS.
24. ALL ROADWAYS SHALL BE STABILIZED WITHIN 72 HOURS.
25. ALL CUT AND FILL SLOPES SHALL BE SEEDED AND MULCHED WITHIN 72 HOURS.
26. IN THE EVENT THAT, DURING CONSTRUCTION OF ANY PORTION OF THIS PROJECT, A WINTER SHUTDOWN IS NECESSARY, THE CONTRACTOR SHALL STABILIZE ALL INCOMPLETE WORK AND PROVIDE FOR SUITABLE METHODS OF DIVERTING RUNOFF IN ORDER TO ELIMINATE SHEET FLOW ACROSS FROZEN SURFACES. ALSO SEE WINTER CONSTRUCTION NOTES.
27. DUST SHALL BE CONTROLLED BY THE USE OF WATER AS NECESSARY THROUGHOUT THE CONSTRUCTION PERIOD, IN ACCORDANCE WITH ENV-A 1000.

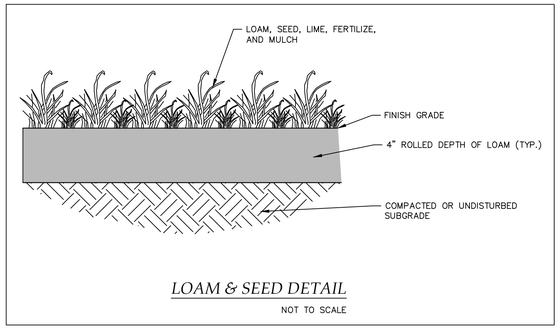
TURF ESTABLISHMENT SPECIFICATIONS

1. ALL AREAS TO BE SEEDED SHALL BE PREPARED TO PROVIDE A REASONABLY FIRM BUT FRIABLE SEED BED.
2. SLOPED AREAS SHALL NOT BE LEFT TOO SMOOTH; THE SURFACE SHALL BE LEFT IN A RUFFLED CONDITION SUCH AS MAY BE PRODUCED BY THE USE OF TRACKED VEHICLES RUN UP AND DOWN THE SLOPES. SMOOTH, COMPACTED SLOPES, SUCH AS FROM BLADING, WHICH MIGHT ALLOW THE FREE FLOW OF WATER DOWN THEM SHALL BE DISKED, HARROWED, DRAGGED WITH A CHAIN OR MAT, MACHINE-RAKED, OR HAND-WORKED TO GIVE THE EFFECT OF MINIATURE TERRACES, PARTICULARLY IN SILTY OR CLAYEY SOILS. THE SLOPES SHALL BE LEFT SMOOTH ENOUGH TO ENABLE MOWING.
3. LAWN AREAS, SUCH AS WHERE LOAM HAS BEEN SPREAD, SHALL BE PREPARED FOR SEEDING. THE LOAM SHALL BE SPREAD UPON THE PREVIOUSLY PREPARED SUBGRADE SURFACE TO THE DEPTH OF 4" ± 1/2" UNLESS OTHERWISE SPECIFIED AND SHALL BE RAKED CAREFULLY TO REMOVE ALL OBJECTIONABLE MATERIALS. LOAM SHALL BE SPREAD IN SUCH A MANNER AS TO ESTABLISH A LOOSE, FRIABLE SEEDBED. IN ORDER TO MAINTAIN A CONSISTENT GRADE, LOAM PLACED ADJACENT TO LAWNS OR WHERE DIRECTED SHALL BE COMPACTED WITH A ROLLER WEIGHING APPROXIMATELY 100 POUNDS PER FOOT OF ROLLER WIDTH. ALL DEPRESSIONS EXPOSED DURING THE ROLLING PROCEDURE SHALL BE FILLED WITH ADDITIONAL LOAM, AND ROLLED.
4. LOAM SHALL CONSIST OF LOOSE FRIABLE TOPSOIL WITH NO ADMIXTURE OF REFUSE OR MATERIAL TOXIC TO PLANT GROWTH. LOAM SHALL BE FREE OF VIABLE PARTS OF PROHIBITED INVASIVE PLANTS LISTED IN TABLE 3800.1 OF PART AGR 3800. LOAM SHALL BE GENERALLY FREE FROM STONES, LUMPS, STUMPS, OR SIMILAR OBJECTS LARGER THAN 2" IN GREATEST DIAMETER, SUBSOIL, ROOTS, AND WEEDS. THE MINIMUM AND MAXIMUM PH VALUE SHALL BE FROM 5.5 TO 7.6. LOAM SHALL CONTAIN A MINIMUM OF 3 PERCENT AND A MAXIMUM OF 10 PERCENT OF ORGANIC MATTER AS DETERMINED BY LOSS BY IGNITION. NOT MORE THAN 65 PERCENT SHALL PASS A NO. 200 SIEVE AS DETERMINED BY THE WASH TEST IN ACCORDANCE WITH ASTM D 1140. IN NO INSTANCE SHALL MORE THAN 20% OF THAT MATERIAL PASSING THE NO. 4 SIEVE CONSIST OF CLAY SIZE PARTICLES.
5. ALL AREAS TO BE SEEDED SHALL MEET THE SPECIFIED GRADES AND SHALL BE FREE OF GROWTH AND DEBRIS.
6. CARE SHALL BE TAKEN TO PREVENT THE FORMATION OF LOW PLACES AND POCKETS WHERE WATER WILL STAND.
7. WHERE RYEGRASS HAS BEEN PLANTED FOR TEMPORARY EROSION CONTROL AND HAS NOT BEEN ELIMINATED PRIOR TO THE COMPLETION OF THE WORK, SUCH AREAS SHALL BE DISC-HARROWED AT LEAST 3" DEEP AND SEEDED WITH PERMANENT GRASSES TO PREVENT THE RYEGRASS FROM RESEEDING AND BECOMING COMPETITIVE WITH AND RETARDING DEVELOPMENT OF THE PERMANENT COVER.
8. SEEDING AND INITIAL FERTILIZING SHALL BE DONE BETWEEN APRIL 1 AND JUNE 1, BETWEEN AUGUST 15 AND OCTOBER 14, OR AS PERMITTED. SEEDING SHALL NOT BE DONE DURING WINDY WEATHER OR WHEN THE GROUND IS FROZEN, EXCESSIVELY WET, OR OTHERWISE UNTILLABLE. IF SEEDING IS DONE DURING JULY OR AUGUST, ADDITIONAL MULCH MATERIAL MAY BE REQUIRED BY THE ENGINEER.
9. FERTILIZER SHALL BE UNIFORMLY APPLIED. THE RATE OF APPLICATION SHALL BE A RATE OF 2.0 POUNDS OF NITROGEN PER 1,000 SQUARE FEET. NOT LESS THAN THREE MONTHS SHALL ELAPSE BETWEEN THE INITIAL FERTILIZATION AND THE REFERTILIZATION. NO REFERTILIZATION WILL BE ALLOWED BETWEEN NOVEMBER 1, OR WHEN THE GROUND HAS FROZEN, AND THE FOLLOWING APRIL 1, OR BETWEEN JUNE 1 AND THE FOLLOWING SEPTEMBER 1. REFERTILIZATION WILL BE ALLOWED BETWEEN AUGUST 15 AND 31 ONLY WHEN IT IS DETERMINED THAT THE PERMANENT GRASSES HAVE DEVELOPED WELL AND FEW WEEDS HAVE APPEARED, AND SUCH REFERTILIZATION WILL NOT TEND TO PROMOTE THE GROWTH OF NOXIOUS WEEDS.
10. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTING AND CARING FOR SEEDED AREAS UNTIL ACCEPTANCE OF THE WORK. CONTRACTOR SHALL REPAIR AT HIS OWN EXPENSE ANY DAMAGE TO SEEDED AREAS CAUSED BY PEDESTRIAN OR VEHICULAR TRAFFIC OR OTHER CAUSES.
11. THE SEEDED AREAS SHALL BE CAREFULLY AND SUITABLY WATERED AS NECESSARY TO PRODUCE A SATISFACTORY GROWTH.
12. AREAS SEEDED WITH PARK SEED SHALL BE MOWED WHENEVER NECESSARY TO KEEP THE GROWTH BETWEEN 3 AND 6" IN ORDER TO ALLOW LIGHT TO PENETRATE TO THE SHORTER, SLOWER GROWING SPECIES IN THE MIXTURE.
13. AREAS SEEDED WITH SLOPE SEED MAY BE ORDERED MOWED WHENEVER THE CONTRACT EXTENDS INTO A SECOND GROWING SEASON. WEEDS GROWING IN AREAS SEEDED WITH THE SLOPE SEED SHALL BE CUT BACK TO PREVENT THEM FROM DOMINATING THE DESIRED GRASS PLANTS.
14. ALTHOUGH REED CANARY GRASS IS LISTED IN THE GREEN BOOK, IT IS A PROBLEMATIC SPECIES ACCORDING TO THE WETLANDS BUREAU AND THEREFORE SHOULD NOT BE SPECIFIED.
15. ACCEPTABLE SEED MIXTURES ARE AS FOLLOWS:

TYPICAL LAWN MIX			
	MINIMUM PURITY (%)	MINIMUM GERMINATION (%)	POUNDS/ACRE (TOTAL 120 LBS)
CREEPING RED FESCUE	96	85	40
PERENNIAL RYEGRASS	98	90	50
KENTUCKY BLUEGRASS	97	85	25
REDTOP	95	80	5

WILDFLOWER SLOPE SEED (3:1 OR GREATER NHDOT TYPE 45)			
KIND OF SEED	MINIMUM PURITY (%)	MINIMUM GERMINATION (%)	POUNDS/ACRE (TOTAL 95 LBS)
CREEPING RED FESCUE	96	85	35
PERENNIAL RYEGRASS	98	90	30
REDTOP	95	80	5
ALSIKE CLOVER	97	90	5
BIRDSFOOT TREFOIL	98	80	5
LANCE-LEAVED COREOPSIS	95	80	4
OXEYE DAISY	95	80	3
BLACKEYED SUSAN	95	80	4
WILD LUPINE	95	80	4

TYPICAL SLOPE SEED (3:1 OR GREATER NHDOT TYPE 44)			
	MINIMUM PURITY (%)	MINIMUM GERMINATION (%)	POUNDS/ACRE (TOTAL 80 LBS)
CREEPING RED FESCUE	96	85	35
PERENNIAL RYEGRASS	98	90	30
REDTOP	95	80	5
ALSIKE CLOVER	97	90	5
BIRDSFOOT TREFOIL	98	80	5



LOAM & SEED DETAIL

NOT TO SCALE

PERMITTING PLANS

REVISIONS

No.	DATE:	COMMENTS	BY
1	08/03/26	STAFF COMMENTS	RJF

OWNER:
CITY OF LEBANON
DEPARTMENT OF PUBLIC WORKS
193 DARTMOUTH COLLEGE HIGHWAY
LEBANON, NEW HAMPSHIRE 03766

APPLICANT:
CITY OF LEBANON
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193 DARTMOUTH COLLEGE HIGHWAY
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City of Lebanon
Department of Public Works
193 Dartmouth College Highway
Lebanon, New Hampshire 03766
lebanonnh.gov

STAMP:

STATE OF NEW HAMPSHIRE
RODRICK J FINLEY No. 7466 LICENSED PROFESSIONAL ENGINEER

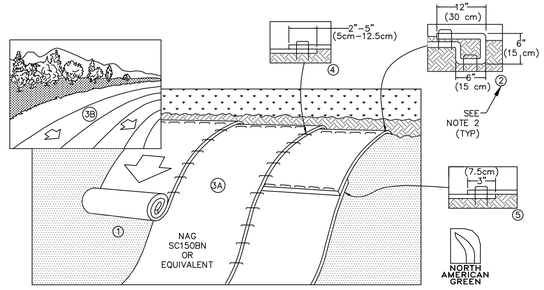
LOCATION:

TAX MAP 77, LOT 106
BARROWS STREET
LEBANON, NEW HAMPSHIRE
GRAFTON COUNTY

PROJECT:
BARROWS STREET PATTERN ZONE SUBDIVISION

TITLE:
EROSION CONTROL NOTES & SPECIFICATIONS

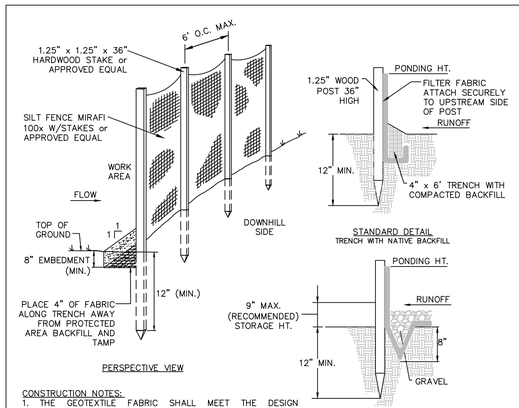
PROJECT No.	DATE:	SCALE:
25-0103-1	JULY 21, 2026	AS SHOWN
SHEET: 10 OF 11		



1. THERE SHALL BE NO PLASTIC, OR MULTI–FILAMENT OR MONOFILAMENT POLYPROPYLENE NETTING OR MESH WITH AN OPENING SIZE OF GREATER THAN 1/8 INCHES MATERIAL UTILIZED.
2. PREPARE SOIL BEFORE INSTALLING BLANKETS, INCLUDING ANY NECESSARY APPLICATION OF LIME, FERTILIZER, AND SEED.
3. BEGIN AT THE TOP OF THE SLOPE BY ANCHORING THE BLANKET IN A 6" (15cm) DEEP X 6" (15cm) WIDE TRENCH WITH APPROXIMATELY 12" (30cm) OF BLANKET EXTENDED BEYOND THE UP–SLOPE PORTION OF THE TRENCH. ANCHOR THE BLANKET WITH A ROW OF STAPLES/STAKES APPROXIMATELY 12" (30cm) APART IN THE BOTTOM OF THE TRENCH. BACKFILL AND COMPACT THE TRENCH AFTER STAPLING. APPLY SEED TO COMPACTED SOIL AND FOLD REMAINING 12" (30cm) PORTION OF BLANKET BACK OVER SEED AND COMPACTED SOIL. SECURE BLANKET OVER COMPACTED SOIL WITH A ROW OF STAPLES/STAKES SPACED APPROXIMATELY 12" (30cm) APART ACROSS THE WIDTH OF THE BLANKET.
4. ROLL THE BLANKETS (A) DOWN or (B) HORIZONTALLY ACROSS THE SLOPE. BLANKETS WILL UNROLL WITH APPROPRIATE SIDE AGAINST THE SOIL SURFACE. ALL BLANKETS MUST BE SECURELY FASTENED TO SOIL SURFACE BY PLACING STAPLES/ STAKES IN APPROPRIATE LOCATIONS AS SHOWN IN THE STAPLE PATTERN GUIDE. WHEN USING OPTIONAL DOT SYSTEM,STAPLES/STAKES SHOULD BE PLACED THROUGH EACH OF THE COLORED DOTS CORRESPONDING TO THE APPROPRIATE STAPLE PATTERN.
5. THE EDGES OF PARALLEL BLANKETS MUST BE STAPLED WITH APPROXIMATELY 2"–5" (5cm–12.5cm) OVERLAP DEPENDING ON BLANKET TYPE. TO ENSURE PROPER SEAM ALIGNMENT, PLACE THE EDGE OF THE OVERLAPPING BLANKET (BLANKET BEING INSTALLED ON TOP) EVEN WITH THE COLORED SEAM STITCH ON THE PREVIOUSLY INSTALLED BLANKET.
6. CONSECUTIVE BLANKETS SPLICED DOWN THE SLOPE MUST BE PLACED END OVER END (SHINGLE STYLE) WITH AN APPROXIMATE 3" (7.5cm) OVERLAP. STAPLE THROUGH OVERLAPPED AREA, APPROXIMATELY 12" (30cm) APART ACROSS ENTIRE BLANKET WIDTH. NOTE: *IN LOOSE SOIL CONDITIONS, THE USE OF STAPLE OR STAKE LENGTHS GREATER THAN 6" (15cm) MAY BE NECESSARY TO PROPERLY SECURE THE BLANKETS.

EROSION CONTROL BLANKET DETAIL

NOT TO SCALE

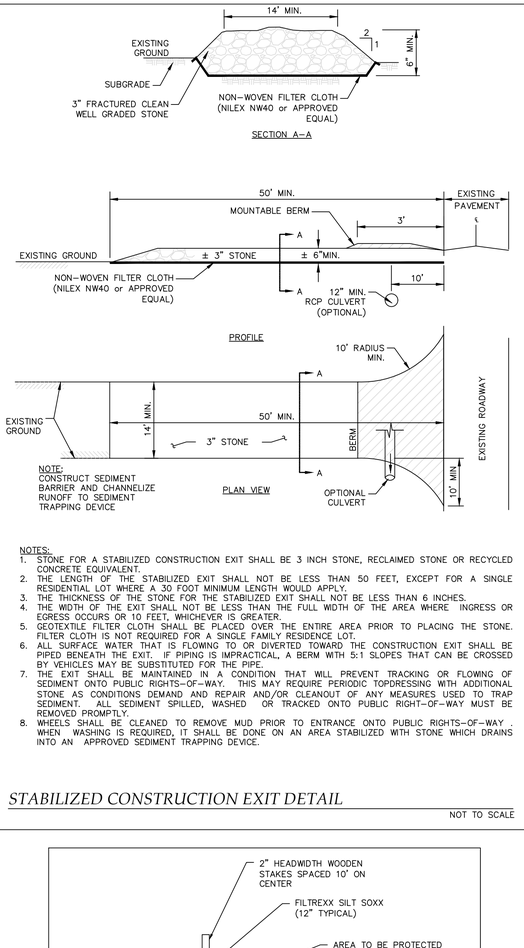


CONSTRUCTION NOTES:
1. THE GEOTEXTILE FABRIC SHALL MEET THE DESIGN CRITERIA FOR SILT FENCES.
2. THE FABRIC SHALL BE EMBEDDED A MINIMUM OF 8 INCHES INTO THE GROUND AND THE SOIL COMPACTED OVER THE EMBEDDED FABRIC.
3. WOVEN WIRE FENCE SHALL BE FASTENED SECURELY TO THE FENCE POSTS WITH WIRE TIE OR STAPLES WHERE NOTED OR AS DIRECTED BY DESIGN ENGINEER.
4. FILTER CLOTH SHALL BE FASTENED SECURELY TO THE WOVEN WIRE FENCE WITH TIES SPACED EVERY 24 INCHES AT THE TOP, MIDSECTION AND BOTTOM.
5. WHEN TWO SECTIONS OF FILTER CLOTH ADJOIN EACH OTHER, THEY SHALL BE OVERLAPPED BY 6 INCHES, FOLDED AND STAPLED.
6. FENCE POSTS SHALL BE A MINIMUM OF 36 INCHES LONG AND DRIVEN A MINIMUM OF 16 INCHES INTO THE GROUND. WOOD POSTS SHALL BE OF SOUND QUALITY HARDWOOD AND SHALL HAVE A MINIMUM CROSS SECTIONAL AREA OF 3.0 SQUARE INCHES.
7. MAINTENANCE SHALL BE PERFORMED AS NEEDED AND MATERIAL REMOVED WHEN "BULGES" DEVELOP IN THE SILT FENCE.

MAINTENANCE NOTES:
1. SILT FENCES SHALL BE INSPECTED IMMEDIATELY AFTER EACH RAINFALL AND AT LEAST DAILY DURING PROLONGED RAINFALL. ANY REPAIRS THAT ARE REQUIRED SHALL BE MADE IMMEDIATELY.
2. IF THE FABRIC ON A SILT FENCE SHOULD DECOMPOSE OR BECOME INEFFECTIVE DURING THE EXPECTED LIFE OF THE FENCE, THE FABRIC SHALL BE REPLACED PROMPTLY.
3. SEDIMENT DEPOSITS SHOULD BE INSPECTED AFTER EVERY STORM EVENT. THE DEPOSITS SHOULD BE REMOVED WHEN THEY REACH APPROXIMATELY ONE–HALF THE HEIGHT OF THE BARRIER.
4. SEDIMENT DEPOSITS THAT ARE REMOVED OR LEFT IN PLACE AFTER THE FABRIC HAS BEEN REMOVED SHALL BE GRADED TO CONFORM WITH THE EXISTING TOPOGRAPHY AND VEGETATED.

SILT FENCE DETAIL

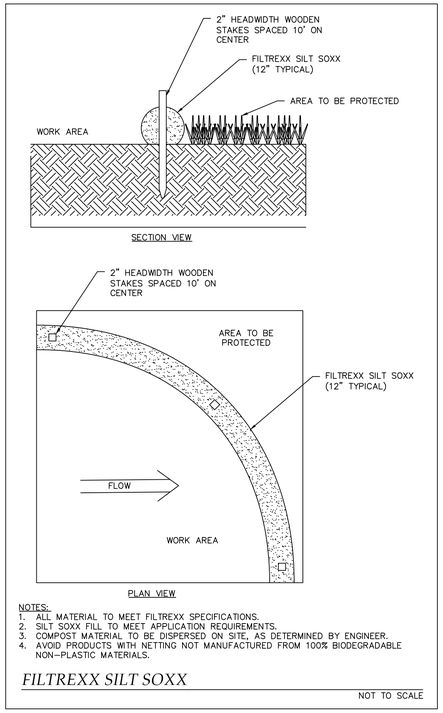
NOT TO SCALE



NOTES:
1. STONE FOR A STABILIZED CONSTRUCTION EXIT SHALL BE 3 INCH STONE, RECLAIMED STONE OR RECYCLED CONCRETE EQUIVALENT.
2. THE LENGTH OF THE STABILIZED EXIT SHALL NOT BE LESS THAN 50 FEET, EXCEPT FOR A SINGLE RESIDENTIAL LOT WHERE A 30 FOOT MINIMUM LENGTH WOULD APPLY.
3. THE THICKNESS OF THE STONE FOR THE STABILIZED EXIT SHALL NOT BE LESS THAN 6 INCHES.
4. THE WIDTH OF THE EXIT SHALL NOT BE LESS THAN THE FULL WIDTH OF THE AREA WHERE INGRESS OR EGRESS OCCURS OR 10 FEET, WHICHEVER IS GREATER.
5. GEOTEXTILE FILTER CLOTH SHALL BE PLACED OVER THE ENTIRE AREA PRIOR TO PLACING THE STONE. FILTER CLOTH IS NOT REQUIRED FOR A SINGLE FAMILY RESIDENCE LOT.
6. ALL SURFACE WATER THAT IS FLOWING TO OR DIVERTED TOWARD THE CONSTRUCTION EXIT SHALL BE PIPED BENEATH THE EXIT. IF PIPING IS IMPRACTICAL, A BERM WITH 5:1 SLOPES THAT CAN BE CROSSED BY VEHICLES MAY BE SUBSTITUTED FOR THE PIPE.
7. THE EXIT SHALL BE MAINTAINED IN A CONDITION THAT WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHTS–OF–WAY. THIS MAY REQUIRE PERIODIC TOPDRESSING WITH ADDITIONAL STONE AS CONDITIONS DEMAND AND REPAIR AND/OR CLEANOUT OF ANY MEASURES USED TO TRAP SEDIMENT. ALL SEDIMENT SPILLED, WASHED OR TRACKED ONTO PUBLIC RIGHT–OF–WAY MUST BE REMOVED PROMPTLY.
8. WHEELS SHALL BE CLEANED TO REMOVE MUD PRIOR TO ENTRANCE ONTO PUBLIC RIGHTS–OF–WAY . WHEN WASHING IS REQUIRED, IT SHALL BE DONE ON AN AREA STABILIZED WITH STONE WHICH DRAINS INTO AN APPROVED SEDIMENT TRAPPING DEVICE.

STABILIZED CONSTRUCTION EXIT DETAIL

NOT TO SCALE



NOTES:
1. ALL MATERIAL TO MEET FILTREXX SPECIFICATIONS.
2. SILT SOXX FILL TO MEET APPLICATION REQUIREMENTS.
3. COMPOST MATERIAL TO BE DISPERSED ON SITE, AS DETERMINED BY ENGINEER.
4. AVOID PRODUCTS WITH NETTING NOT MANUFACTURED FROM 100% BIODEGRADABLE NON–PLASTIC MATERIALS.

FILTREXX SILT SOXX

NOT TO SCALE

PERMITTING PLANS

REVISIONS

No.	DATE:	COMMENTS	BY
1	08/03/26	STAFF COMMENTS	RJF

OWNER:
CITY OF LEBANON
DEPARTMENT OF PUBLIC WORKS
193 DARTMOUTH COLLEGE HIGHWAY
LEBANON, NEW HAMPSHIRE 03766

APPLICANT:
CITY OF LEBANON
DEPARTMENT OF PUBLIC WORKS
193 DARTMOUTH COLLEGE HIGHWAY
LEBANON, NEW HAMPSHIRE 03766

City of Lebanon
Department of Public Works
193 Dartmouth College Highway
Lebanon, New Hampshire 03766
lebanonnh.gov

STAMP:

RODRICK J FINLEY No. 7468 LICENSED PROFESSIONAL ENGINEER STATE OF NEW HAMPSHIRE

LOCATION:
TAX MAP 77, LOT 106
BARROWS STREET
LEBANON, NEW HAMPSHIRE
GRAFTON COUNTY

PROJECT:
BARROWS STREET PATTERN ZONE SUBDIVISION

TITLE:
EROSION CONTROL DETAILS

PROJECT No.	DATE:	SCALE:
25–0103–1	JULY 21, 2026	AS SHOWN
SHEET:	11 OF 11	

MEMORANDUM

To: City of Lebanon

From: Rodrick Finley, P.E.

Date: June 17, 2026

Re: Barrows Street Pattern Zone Subdivision Hydrology Analysis
0 Barrows Street, Lebanon, NH
Tax Map 77, Lot 106

A Post-Construction Stormwater Analysis was performed for the two proposed stone infiltration trenches. The soil within the trench area was assumed to consist of existing on-site fill material exhibiting characteristics similar to the Windsor Soil Series. The limiting infiltration rate and Hydrologic Soil Group utilized in the hydrologic modeling were obtained from *Ksat Values for New Hampshire Soils*, Society of Soil Scientists of Northern New England Special Publication No. 5 (September 2009). Based on this publication, a saturated hydraulic conductivity (Ksat) value of 6 inches per hour was assigned to the Windsor Soil Series and used as the design infiltration rate.

A Hydrologic Soil Group (HSG) of C was assigned to the entire drainage area based on the attached NRCS Hydrologic Soil Group Report. A post-construction drainage analysis was completed using HydroCAD and the NRCS (SCS) Curve Number methodology. The results of the HydroCAD model indicate that the proposed stone infiltration trenches have sufficient storage and infiltration capacity to fully infiltrate the runoff volume generated by the 1-inch water quality storm event.

Table 1: Peak Flows/Volumes for Stone Infiltration Trenches

Scenario	Qin 1-inch (cfs)	Qout 1-inch (cfs)	Volume In 1-inch (cf)
Post-Construction Flow Stone Infiltration Trench 1 (ST1)	0.16cfs	0 cfs	357 cf [All infiltrated]
Post-Construction Flow Stone Infiltration Trench 2 (ST2) [All infiltrated]	0.07cfs	0 cfs	209 cf [All infiltrated]

A post-construction analysis was also performed at the inlet of the 18-inch southern bypass culvert to determine the peak 25-year storm flow reaching the culvert and to verify that the proposed pipe size provides adequate hydraulic capacity to convey the design flow. The results of this analysis are provided in the attached HydroCAD Report.

The following items are included within the drainage analysis:

- Post-Construction Drainage Figure
- Post-Construction 1-inch Storm HydroCad Full Reports for both Proposed Stone Infiltration Trenches
- Post-Construction 25 Storm HydroCad Full Report for Proposed Bypass Culvert
- NRCS Hydrologic Soil Report
- Ksat Values for New Hampshire Soils, Table A Numerical Legend
- Extreme Precipitation Estimates - Northeast Regional Climate Center

In appreciation of the benefits and limitations related to each of the various methods available to design professionals for estimating peak stormwater discharge rates for use in analysis and design, the TR-20 computer model was used. Values for Time of Concentration used in the analysis were estimated using the methodology contained within USDA-S.C.S. publication Urban Hydrology for Small Watersheds Technical Release No. 55 (TR 55).

All design and analysis calculations performed using the referenced methodologies are attached to this report. These calculations document each catchment area, a breakdown of surface type, time of concentration, rainfall intensity, peak discharge volume, Manning's "n" value, peak velocity, and other descriptive design data for each watershed and pipe segment evaluated. In addition, the Drainage figures graphically define and illustrate the extent of each watershed or catchment area investigated.

Post-Development Drainage Figure



N

HydroCAD LEGEND

DISCHARGE POINT — SN002

DRAINAGE AREA — 2S

FLOW LINK

TIME OF CONCENTRATION — A B

DRAINAGE AREA

IMPERVIOUS AREA

GRAPHIC SCALE

30 0 15 30 60 120

(IN FEET)
1 inch = 30 ft.

DIG SAFE
811
CALL TOLL FREE
UTILITIES UNDERGROUND
DAMAGE PREVENTION SYSTEM

PERMITTING PLANS

REVISIONS

No.	DATE	COMMENTS	BY

OWNER:
CITY OF LEBANON
DEPARTMENT OF PUBLIC WORKS
193 DARTMOUTH COLLEGE HIGHWAY
LEBANON, NEW HAMPSHIRE 03766

APPLICANT:
CITY OF LEBANON
DEPARTMENT OF PUBLIC WORKS
193 DARTMOUTH COLLEGE HIGHWAY
LEBANON, NEW HAMPSHIRE 03766

City of Lebanon
Department of Public Works
193 Dartmouth College Highway
Lebanon, New Hampshire 03766
lebanonnh.gov

STAMP:

RODRICK J FINLEY No. 7468 LICENSED PROFESSIONAL ENGINEER STATE OF NEW HAMPSHIRE

LOCATION:

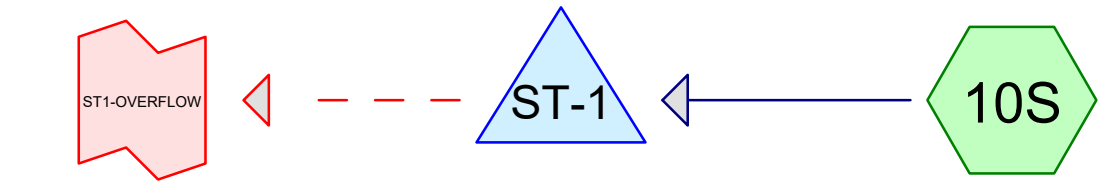
TAX MAP 77, LOT 106
BARROWS STREET
LEBANON, NEW HAMPSHIRE
GRAFTON COUNTY

PROJECT:
BARROWS STREET PATTERN ZONE SUBDIVISION

TITLE:
POST-DEVELOPMENT DRAIN AREAS PLAN

PROJECT No.	DATE:	SCALE:
25-0103-1	JUNE 17, 2026	HORIZ. 1"=30'
SHEET:	1 OF 1	

Post-Development 1-inch Storm HydroCad Summary Report for Proposed Stone Infiltration Trench 1 (ST1)



ST-1 Overflow | Stone Infiltration Trench 1 | Proposed On-Site & Exist. Off-Site DA

Subcat | Reach | Pond | Link

Routing Diagram for 26-06-15 _2501031 Barrows PatternZonePOST MODEL
Prepared by Granite Engineering, LLC, Printed 6/16/2026
HydroCAD® 10.20-6a s/n 10978 © 2024 HydroCAD Software Solutions LLC

Rainfall Events Listing (selected events)

Event#	Event Name	Storm Type	Curve	Mode	Duration (hours)	B/B	Depth (inches)	AMC	P2 (inches)
1	1-inch	Type II 24-hr		Default	24.00	1	1.00	2	2.50

Area Listing (selected nodes)

Area (sq-ft)	CN	Description (subcatchment-numbers)
5,557	74	>75% Grass cover, Good, HSG C - OFF-SITE (10S)
1,232	74	>75% Grass cover, Good, HSG C - ON-SITE (10S)
6,821	98	Paved roads, driveways, HSG C - OFF-SITE (10S)
417	98	Paved roads, sidewalks, patios, HSG C - ON-SITE (10S)
2,212	98	Roofs, HSG C - OFF-SITE (10S)
570	98	Roofs, HSG C - ON-SITE (10S)
108	74	STONE TRENCH, HSG C (10S)
16,917	**88**	**TOTAL AREA**

Soil Listing (selected nodes)

Area (sq-ft)	Soil Group	Subcatchment Numbers
0	HSG A	
0	HSG B	
16,917	HSG C	10S
0	HSG D	
0	Other	
16,917		**TOTAL AREA**

Time span=1.00-48.00 hrs, dt=0.01 hrs, 4701 points x 3
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Dyn-Stor-Ind method - Pond routing by Dyn-Stor-Ind method

Subcatchment10S: Proposed On-Site & Runoff Area=16,917 sf 59.23% Impervious Runoff Depth=0.25"
Flow Length=307' Tc=7.1 min CN=88 Runoff=0.16 cfs 357 cf

Pond ST-1: Stone Infiltration Trench 1 Peak Elev=618.72' Storage=80 cf Inflow=0.16 cfs 357 cf
Discarded=0.05 cfs 357 cf Secondary=0.00 cfs 0 cf Outflow=0.05 cfs 357 cf

Link ST1-OVERFLOW: ST-1 Overflow Inflow=0.00 cfs 0 cf
Primary=0.00 cfs 0 cf

Total Runoff Area = 16,917 sf Runoff Volume = 357 cf Average Runoff Depth = 0.25"
40.77% Pervious = 6,897 sf 59.23% Impervious = 10,020 sf

Summary for Subcatchment 10S: Proposed On-Site & Exist. Off-Site DA

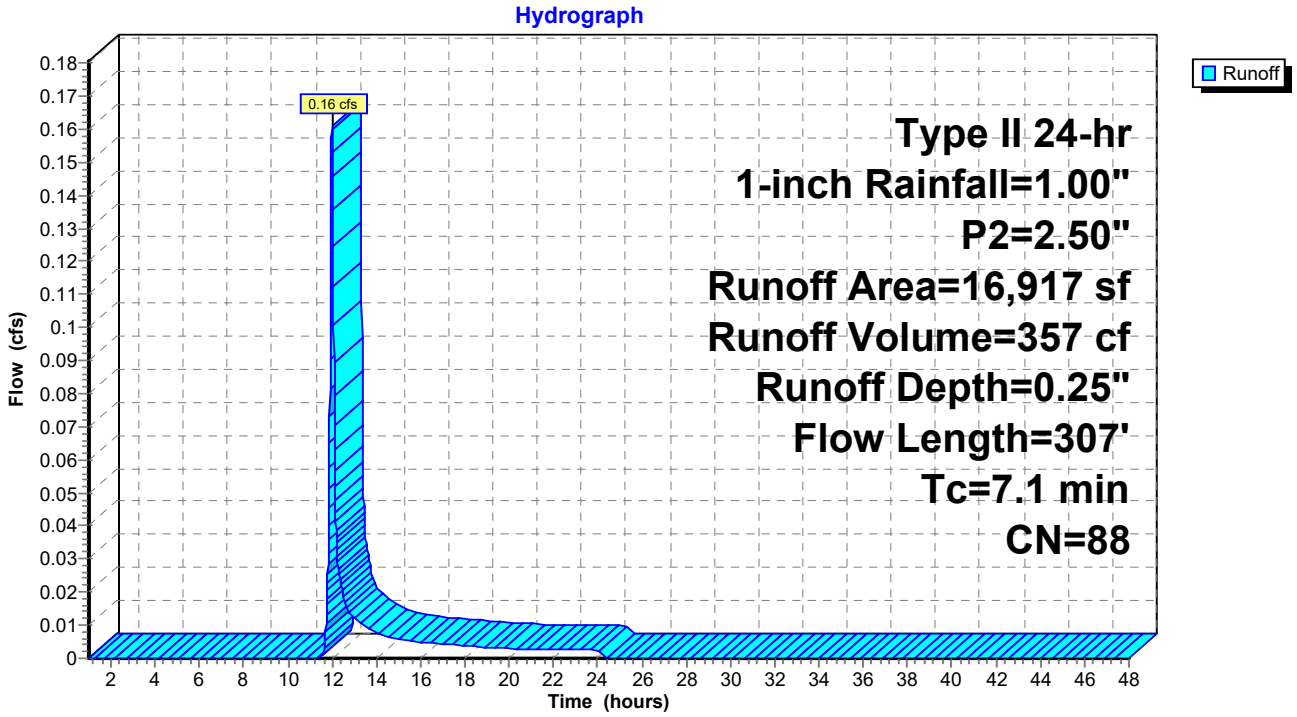
Runoff = 0.16 cfs @ 12.00 hrs, Volume= 357 cf, Depth= 0.25"
Routed to Pond ST-1 : Stone Infiltration Trench 1

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 1.00-48.00 hrs, dt= 0.01 hrs
Type II 24-hr 1-inch Rainfall=1.00", P2=2.50"

	Area (sf)	CN	Description
*	1,232	74	>75% Grass cover, Good, HSG C - ON-SITE
*	5,557	74	>75% Grass cover, Good, HSG C - OFF-SITE
*	108	74	STONE TRENCH, HSG C
*	570	98	Roofs, HSG C - ON-SITE
*	2,212	98	Roofs, HSG C - OFF-SITE
*	417	98	Paved roads, sidewalks, patios, HSG C - ON-SITE
*	6,821	98	Paved roads, driveways, HSG C - OFF-SITE
	16,917	88	Weighted Average
	6,897		40.77% Pervious Area
	10,020		59.23% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.4	50	0.0300	0.15		**Sheet Flow, A-B** Grass: Short n= 0.150 P2= 2.50"
0.5	52	0.0700	1.85		**Shallow Concentrated Flow, B-C** Short Grass Pasture Kv= 7.0 fps
1.2	205	0.0200	2.87		**Shallow Concentrated Flow, C-D** Paved Kv= 20.3 fps
7.1	307	Total			

Subcatchment 10S: Proposed On-Site & Exist. Off-Site DA



Summary for Pond ST-1: Stone Infiltration Trench 1

Inflow Area = 16,917 sf, 59.23% Impervious, Inflow Depth = 0.25" for 1-inch event
Inflow = 0.16 cfs @ 12.00 hrs, Volume= 357 cf
Outflow = 0.05 cfs @ 12.14 hrs, Volume= 357 cf, Atten= 71%, Lag= 8.8 min
Discarded = 0.05 cfs @ 12.14 hrs, Volume= 357 cf
Secondary = 0.00 cfs @ 1.00 hrs, Volume= 0 cf
Routed to Link ST1-OVERFLOW : ST-1 Overflow

Routing by Dyn-Stor-Ind method, Time Span= 1.00-48.00 hrs, dt= 0.01 hrs / 3
Peak Elev= 618.72' @ 12.14 hrs Surf.Area= 110 sf Storage= 80 cf
Flood Elev= 619.00' Surf.Area= 110 sf Storage= 92 cf

Plug-Flow detention time= 12.0 min calculated for 357 cf (100% of inflow)
Center-of-Mass det. time= 12.0 min (887.0 - 875.0)

Volume	Invert	Avail.Storage	Storage Description
#1	616.90'	92 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

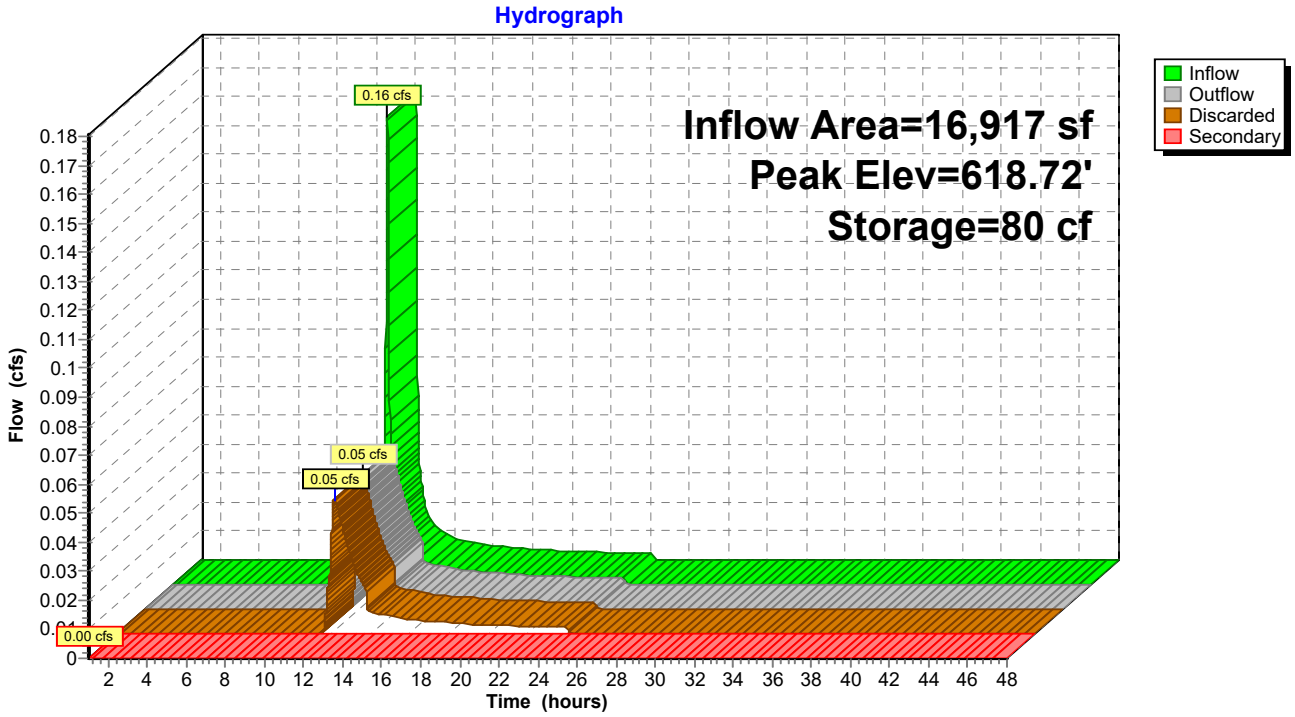
Elevation (feet)	Surf.Area (sq-ft)	Voids (%)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
616.90	110	0.0	0	0
618.90	110	40.0	88	88
619.00	110	40.0	4	92

Device	Routing	Invert	Outlet Devices
#1	Discarded	616.90'	**6.000 in/hr Infiltratiion over Surface area** Conductivity to Groundwater Elevation = 616.00' Phase-In= 0.01'
#2	Secondary	618.90'	**Overflow, Cv= 2.62 (C= 3.28)** Head (feet) 0.00 0.20 Width (feet) 93.00 93.00

Discarded OutFlow Max=0.05 cfs @ 12.14 hrs HW=618.72' (Free Discharge)
1=Infiltratiion (Controls 0.05 cfs)

Secondary OutFlow Max=0.00 cfs @ 1.00 hrs HW=616.90' TW=0.00' (Dynamic Tailwater)
2=Overflow (Controls 0.00 cfs)

Pond ST-1: Stone Infiltration Trench 1

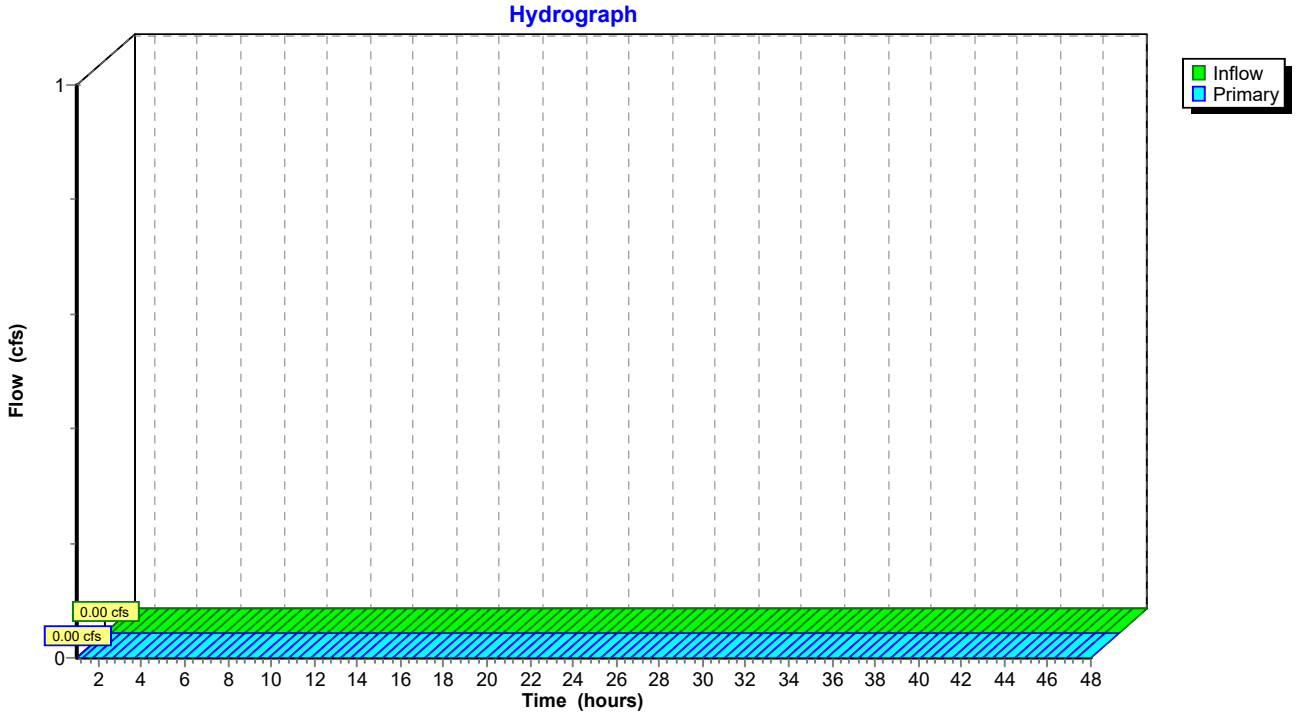


Summary for Link ST1-OVERFLOW: ST-1 Overflow

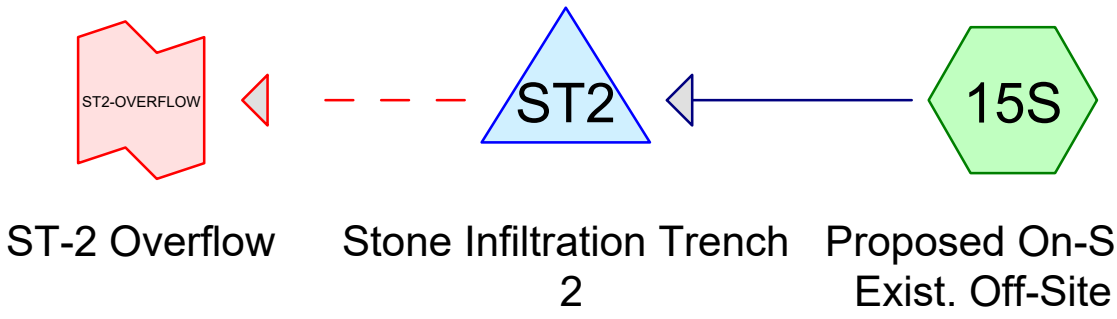
Inflow = 0.00 cfs @ 1.00 hrs, Volume= 0 cf
Primary = 0.00 cfs @ 1.00 hrs, Volume= 0 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 1.00-48.00 hrs, dt= 0.01 hrs

Link ST1-OVERFLOW: ST-1 Overflow



Post-Development 1-inch Storm HydroCad Summary Report for Proposed Stone Infiltration Trench 2 (ST2)



Subcat Reach Pond Link

Routing Diagram for 26-06-15 _2501031 Barrows PatternZonePOST MODEL
Prepared by Granite Engineering, LLC, Printed 6/16/2026
HydroCAD® 10.20-6a s/n 10978 © 2024 HydroCAD Software Solutions LLC

Rainfall Events Listing (selected events)

Event#	Event Name	Storm Type	Curve	Mode	Duration (hours)	B/B	Depth (inches)	AMC	P2 (inches)
1	1-inch	Type II 24-hr		Default	24.00	1	1.00	2	2.50

Area Listing (selected nodes)

Area (sq-ft)	CN	Description (subcatchment-numbers)
4,399	74	>75% Grass cover, Good, HSG C - OFF-SITE (15S)
7,047	74	>75% Grass cover, Good, HSG C - ON-SITE (15S)
22	98	Paved roads, driveways, HSG C - OFF-SITE (15S)
4,370	98	Paved roads, sidewalks, patios, HSG C - ON-SITE (15S)
713	98	Roofs, HSG C - OFF-SITE (15S)
2,280	98	Roofs, HSG C - ON-SITE (15S)
185	74	STONE TRENCH, HSG C (15S)
19,016	**83**	**TOTAL AREA**

Soil Listing (selected nodes)

Area (sq-ft)	Soil Group	Subcatchment Numbers
0	HSG A	
0	HSG B	
19,016	HSG C	15S
0	HSG D	
0	Other	
19,016		**TOTAL AREA**

Time span=1.00-48.00 hrs, dt=0.01 hrs, 4701 points x 3
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Dyn-Stor-Ind method - Pond routing by Dyn-Stor-Ind method

Subcatchment15S: Proposed On-Site & Runoff Area=19,016 sf 38.84% Impervious Runoff Depth=0.13"
Flow Length=203' Tc=7.5 min CN=83 Runoff=0.07 cfs 209 cf

Pond ST2: Stone Infiltration Trench 2 Peak Elev=617.19' Storage=22 cf Inflow=0.07 cfs 209 cf
Discarded=0.03 cfs 209 cf Secondary=0.00 cfs 0 cf Outflow=0.03 cfs 209 cf

Link ST2-OVERFLOW: ST-2 Overflow Inflow=0.00 cfs 0 cf
Primary=0.00 cfs 0 cf

Total Runoff Area = 19,016 sf Runoff Volume = 209 cf Average Runoff Depth = 0.13"
61.16% Pervious = 11,631 sf 38.84% Impervious = 7,385 sf

Summary for Subcatchment 15S: Proposed On-Site & Exist. Off-Site DA

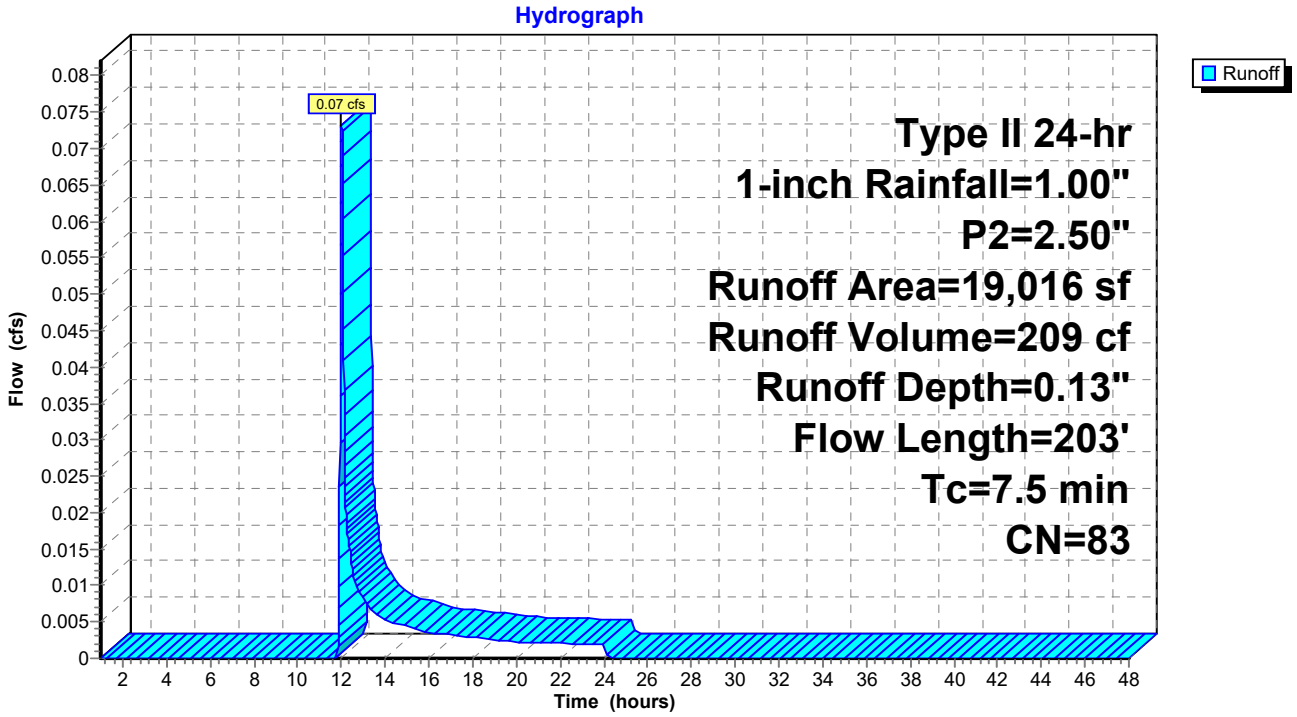
Runoff = 0.07 cfs @ 12.02 hrs, Volume= 209 cf, Depth= 0.13"
Routed to Pond ST2 : Stone Infiltration Trench 2

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 1.00-48.00 hrs, dt= 0.01 hrs
Type II 24-hr 1-inch Rainfall=1.00", P2=2.50"

	Area (sf)	CN	Description
*	7,047	74	>75% Grass cover, Good, HSG C - ON-SITE
*	4,399	74	>75% Grass cover, Good, HSG C - OFF-SITE
*	185	74	STONE TRENCH, HSG C
*	2,280	98	Roofs, HSG C - ON-SITE
*	713	98	Roofs, HSG C - OFF-SITE
*	4,370	98	Paved roads, sidewalks, patios, HSG C - ON-SITE
*	22	98	Paved roads, driveways, HSG C - OFF-SITE
	19,016	83	Weighted Average
	11,631		61.16% Pervious Area
	7,385		38.84% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.8	50	0.0250	0.14		**Sheet Flow, A-B** Grass: Short n= 0.150 P2= 2.50"
0.5	51	0.0600	1.71		**Shallow Concentrated Flow, B-C** Short Grass Pasture Kv= 7.0 fps
0.9	60	0.0250	1.11		**Shallow Concentrated Flow, C-D** Short Grass Pasture Kv= 7.0 fps
0.3	42	0.0100	2.03		**Shallow Concentrated Flow, D-E** Paved Kv= 20.3 fps
7.5	203	Total			

Subcatchment 15S: Proposed On-Site & Exist. Off-Site DA



Summary for Pond ST2: Stone Infiltration Trench 2

Inflow Area = 19,016 sf, 38.84% Impervious, Inflow Depth = 0.13" for 1-inch event
Inflow = 0.07 cfs @ 12.02 hrs, Volume= 209 cf
Outflow = 0.03 cfs @ 12.15 hrs, Volume= 209 cf, Atten= 64%, Lag= 8.1 min
Discarded = 0.03 cfs @ 12.15 hrs, Volume= 209 cf
Secondary = 0.00 cfs @ 1.00 hrs, Volume= 0 cf
Routed to Link ST2-OVERFLOW : ST-2 Overflow

Routing by Dyn-Stor-Ind method, Time Span= 1.00-48.00 hrs, dt= 0.01 hrs / 3
Peak Elev= 617.19' @ 12.15 hrs Surf.Area= 185 sf Storage= 22 cf
Flood Elev= 619.00' Surf.Area= 185 sf Storage= 155 cf

Plug-Flow detention time= 3.1 min calculated for 209 cf (100% of inflow)
Center-of-Mass det. time= 3.1 min (921.3 - 918.2)

Volume	Invert	Avail.Storage	Storage Description
#1	616.90'	155 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

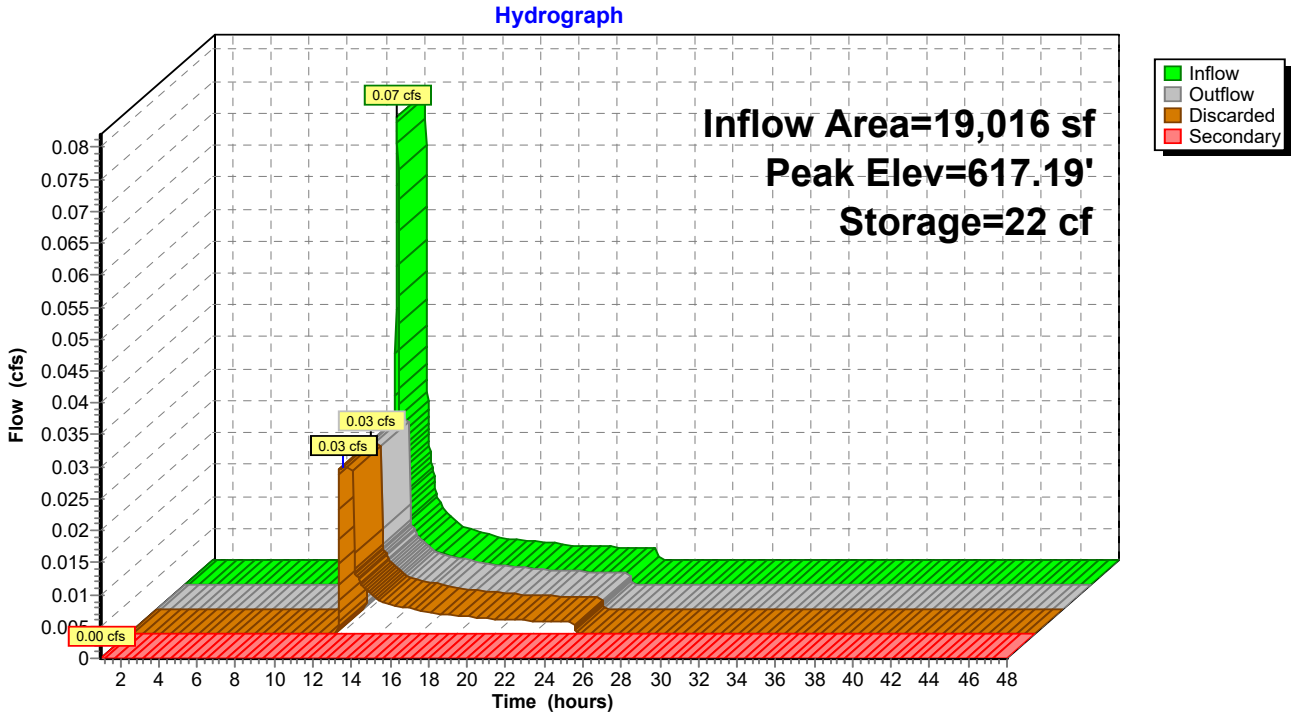
Elevation (feet)	Surf.Area (sq-ft)	Voids (%)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
616.90	185	0.0	0	0
618.90	185	40.0	148	148
619.00	185	40.0	7	155

Device	Routing	Invert	Outlet Devices
#1	Discarded	616.90'	**6.000 in/hr Infiltratiion over Surface area** Conductivity to Groundwater Elevation = 600.00' Phase-In= 0.01'
#2	Secondary	618.90'	**Overflow, Cv= 2.62 (C= 3.28)** Head (feet) 0.00 0.20 Width (feet) 93.00 93.00

Discarded OutFlow Max=0.03 cfs @ 12.15 hrs HW=617.19' (Free Discharge)
1=Infiltratiion (Controls 0.03 cfs)

Secondary OutFlow Max=0.00 cfs @ 1.00 hrs HW=616.90' TW=0.00' (Dynamic Tailwater)
2=Overflow (Controls 0.00 cfs)

Pond ST2: Stone Infiltration Trench 2

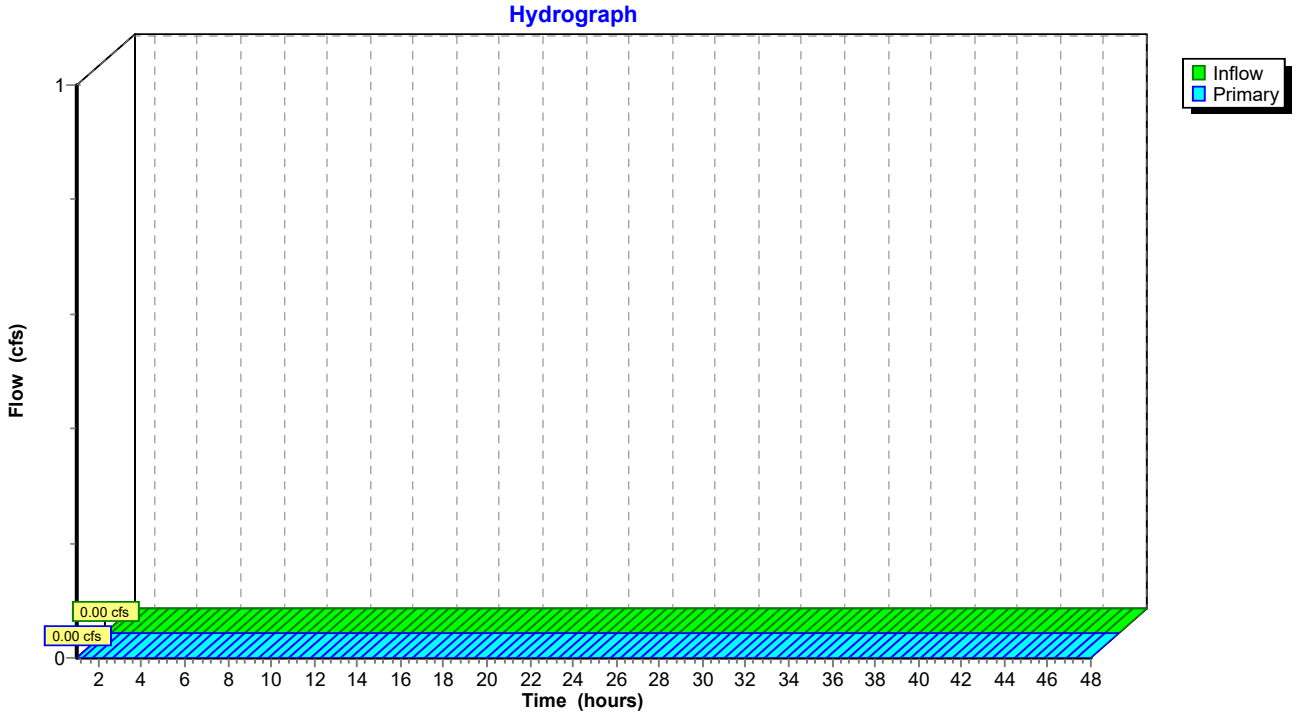


Summary for Link ST2-OVERFLOW: ST-2 Overflow

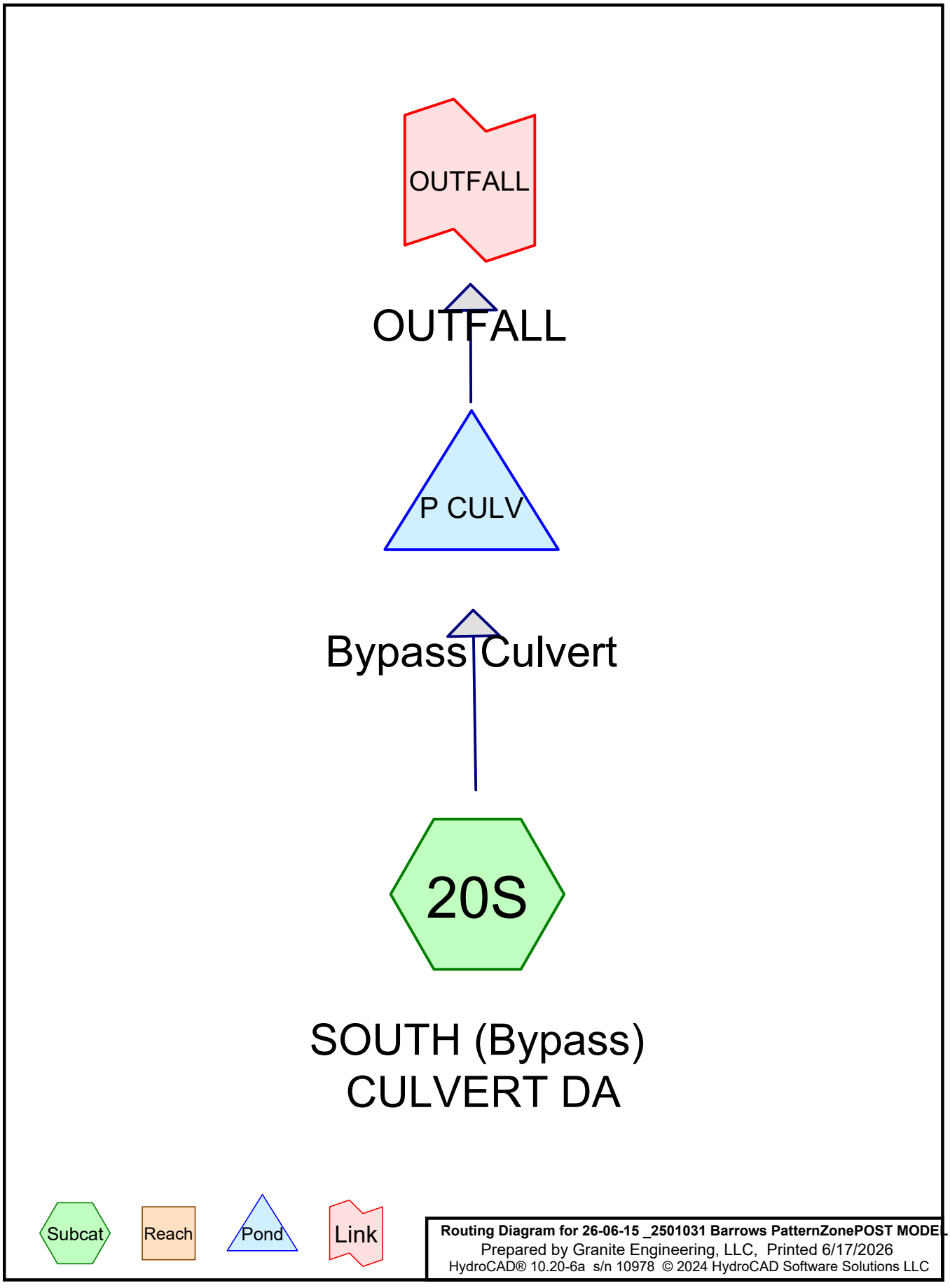
Inflow = 0.00 cfs @ 1.00 hrs, Volume= 0 cf
Primary = 0.00 cfs @ 1.00 hrs, Volume= 0 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 1.00-48.00 hrs, dt= 0.01 hrs

Link ST2-OVERFLOW: ST-2 Overflow



Post-Construction 25 Storm HydroCad Full Report for Proposed Bypass Culvert (P Culv)



Routing Diagram for 26-06-15 _2501031 Barrows PatternZonePOST MODEL
Prepared by Granite Engineering, LLC, Printed 6/17/2026
HydroCAD® 10.20-6a s/n 10978 © 2024 HydroCAD Software Solutions LLC

Rainfall Events Listing (selected events)

Event#	Event Name	Storm Type	Curve	Mode	Duration (hours)	B/B	Depth (inches)	AMC	P2 (inches)
1	25YR	Type II 24-hr		Default	24.00	1	4.40	2	2.50

Area Listing (selected nodes)

Area (sq-ft)	CN	Description (subcatchment-numbers)
64,919	74	>75% Grass cover, Good, HSG C - OFF-SITE (20S)
2,138	74	>75% Grass cover, Good, HSG C - ON-SITE (20S)
11,172	98	Paved roads, driveways, HSG C - OFF-SITE (20S)
10,334	98	Roofs, HSG C - OFF-SITE (20S)
10,914	70	Woods, Good, HSG C (20S)
99,477	**79**	**TOTAL AREA**

Soil Listing (selected nodes)

Area (sq-ft)	Soil Group	Subcatchment Numbers
0	HSG A	
0	HSG B	
99,477	HSG C	20S
0	HSG D	
0	Other	
99,477		**TOTAL AREA**

Time span=1.00-48.00 hrs, dt=0.01 hrs, 4701 points x 3
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Dyn-Stor-Ind method - Pond routing by Dyn-Stor-Ind method

Subcatchment20S: SOUTH (Bypass) Runoff Area=99,477 sf 21.62% Impervious Runoff Depth=2.29"
Flow Length=412' Tc=8.5 min CN=79 Runoff=8.52 cfs 19,007 cf

Pond P CULV: Bypass Culvert Peak Elev=619.59' Storage=605 cf Inflow=8.52 cfs 19,007 cf
18.0" Round Culvert n=0.013 L=100.0' S=0.0200 '/' Outflow=7.82 cfs 19,007 cf

Link OUTFALL: OUTFALL Inflow=7.82 cfs 19,007 cf
Primary=7.82 cfs 19,007 cf

Total Runoff Area = 99,477 sf Runoff Volume = 19,007 cf Average Runoff Depth = 2.29"
78.38% Pervious = 77,971 sf 21.62% Impervious = 21,506 sf

Summary for Subcatchment 20S: SOUTH (Bypass) CULVERT DA

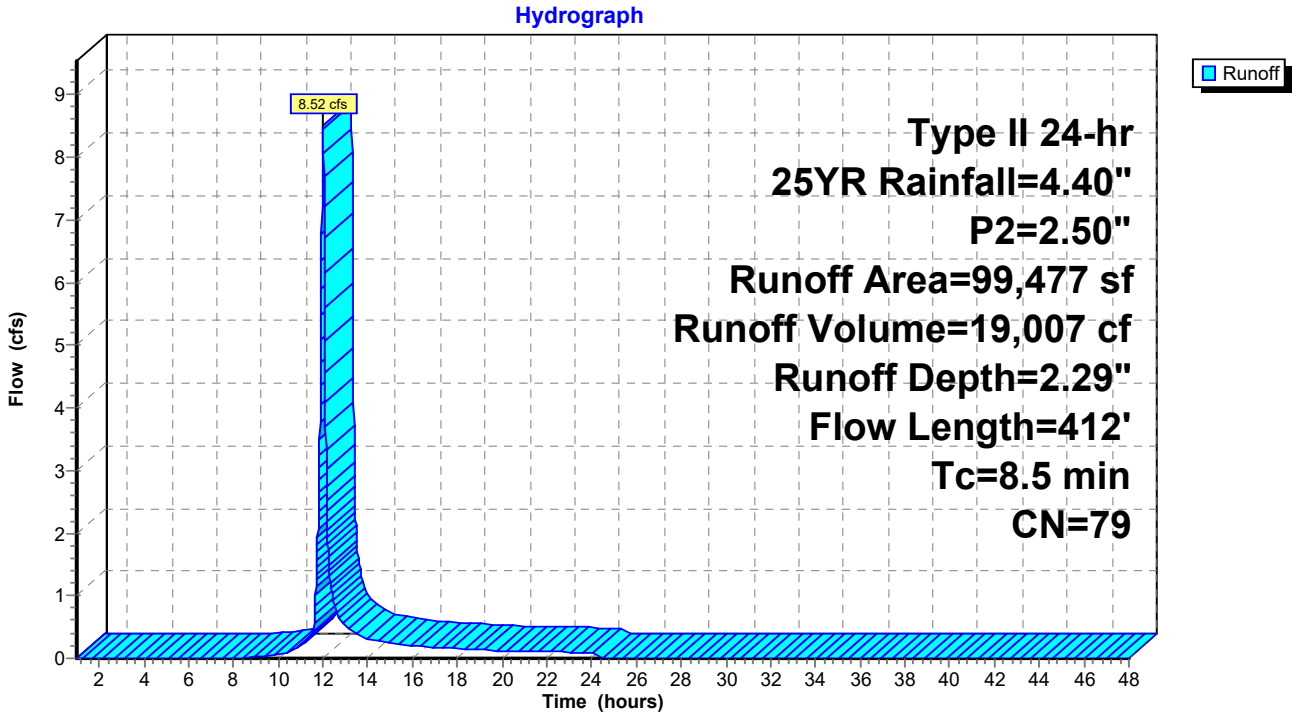
Runoff = 8.52 cfs @ 12.00 hrs, Volume= 19,007 cf, Depth= 2.29"
Routed to Pond P CULV : Bypass Culvert

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 1.00-48.00 hrs, dt= 0.01 hrs
Type II 24-hr 25YR Rainfall=4.40", P2=2.50"

	Area (sf)	CN	Description
*	2,138	74	>75% Grass cover, Good, HSG C - ON-SITE
*	64,919	74	>75% Grass cover, Good, HSG C - OFF-SITE
	10,914	70	Woods, Good, HSG C
*	10,334	98	Roofs, HSG C - OFF-SITE
*	11,172	98	Paved roads, driveways, HSG C - OFF-SITE
	99,477	79	Weighted Average
	77,971		78.38% Pervious Area
	21,506		21.62% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.4	50	0.0300	0.15		**Sheet Flow, A-B** Grass: Short n= 0.150 P2= 2.50"
1.1	155	0.1100	2.32		**Shallow Concentrated Flow, B-C** Short Grass Pasture Kv= 7.0 fps
0.1	31	0.0400	4.06		**Shallow Concentrated Flow, C-D** Paved Kv= 20.3 fps
0.5	65	0.0850	2.04		**Shallow Concentrated Flow, D-E** Short Grass Pasture Kv= 7.0 fps
1.3	96	0.0600	1.22		**Shallow Concentrated Flow, E-F** Woodland Kv= 5.0 fps
0.1	15	0.1300	2.52		**Shallow Concentrated Flow, G-H** Short Grass Pasture Kv= 7.0 fps
8.5	412	Total			

Subcatchment 20S: SOUTH (Bypass) CULVERT DA



Summary for Pond P CULV: Bypass Culvert

[44] Hint: Outlet device #1 is below defined storage

Inflow Area = 99,477 sf, 21.62% Impervious, Inflow Depth = 2.29" for 25YR event
Inflow = 8.52 cfs @ 12.00 hrs, Volume= 19,007 cf
Outflow = 7.82 cfs @ 12.04 hrs, Volume= 19,007 cf, Atten= 8%, Lag= 2.1 min
Primary = 7.82 cfs @ 12.04 hrs, Volume= 19,007 cf
Routed to Link OUTFALL : OUTFALL

Routing by Dyn-Stor-Ind method, Time Span= 1.00-48.00 hrs, dt= 0.01 hrs / 3
Peak Elev= 619.59' @ 12.04 hrs Surf.Area= 1,027 sf Storage= 605 cf

Plug-Flow detention time= (not calculated: outflow precedes inflow)
Center-of-Mass det. time= 0.3 min (829.7 - 829.4)

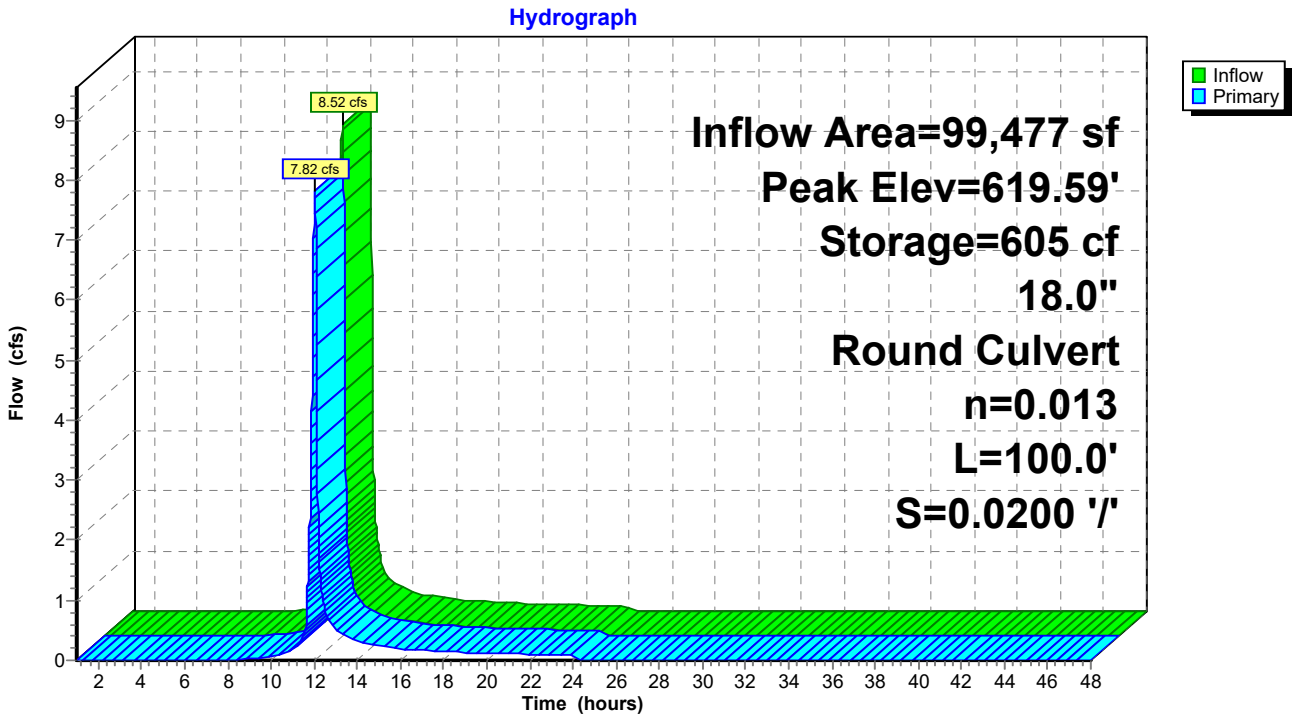
Volume	Invert	Avail.Storage	Storage Description
#1	618.50'	11,637 cf	**Custom Stage Data (Irregular)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Perim. (feet)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)	Wet.Area (sq-ft)
618.50	64	31.0	0	0	64
619.00	570	157.8	137	137	1,970
620.00	1,417	196.4	962	1,099	3,072
622.00	4,301	320.0	5,458	6,557	8,177
623.00	5,900	360.0	5,079	11,637	10,368

Device	Routing	Invert	Outlet Devices
#1	Primary	618.00'	**18.0" Round Bypass Culvert** L= 100.0' RCP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 618.00' / 616.00' S= 0.0200 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 1.77 sf

Primary OutFlow Max=7.81 cfs @ 12.04 hrs HW=619.59' TW=0.00' (Dynamic Tailwater)
1=Bypass Culvert (Inlet Controls 7.81 cfs @ 4.42 fps)

Pond P CULV: Bypass Culvert

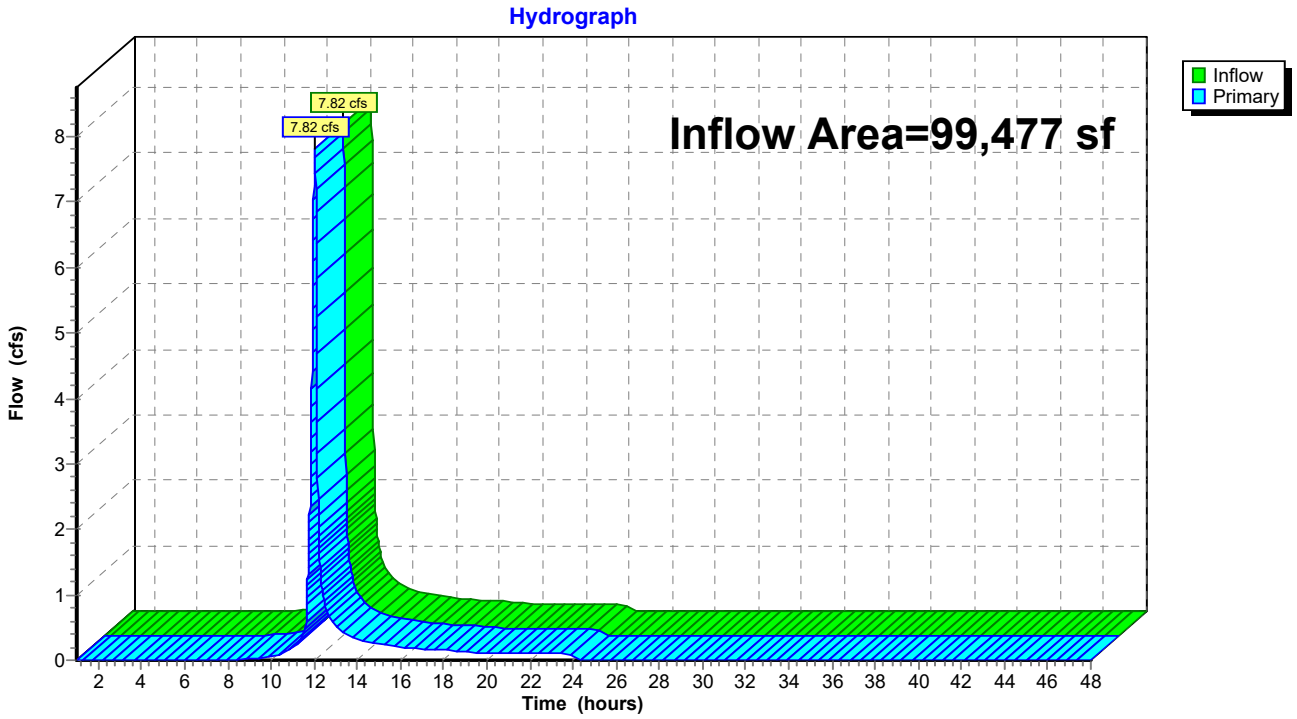


Summary for Link OUTFALL: OUTFALL

Inflow Area = 99,477 sf, 21.62% Impervious, Inflow Depth = 2.29" for 25YR event
Inflow = 7.82 cfs @ 12.04 hrs, Volume= 19,007 cf
Primary = 7.82 cfs @ 12.04 hrs, Volume= 19,007 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 1.00-48.00 hrs, dt= 0.01 hrs

Link OUTFALL: OUTFALL



NRCS Hydrologic Soil Report

Soil Map—Grafton County, New Hampshire
(Barrows Street Housing)



MAP LEGEND

Area of Interest (AOI)
- Area of Interest (AOI)

Soils
- Soil Map Unit Polygons
- Soil Map Unit Lines
- Soil Map Unit Points

Special Point Features
- Blowout
- Borrow Pit
- Clay Spot
- Closed Depression
- Gravel Pit
- Gravelly Spot
- Landfill
- Lava Flow
- Marsh or swamp
- Mine or Quarry
- Miscellaneous Water
- Perennial Water
- Rock Outcrop
- Saline Spot
- Sandy Spot
- Severely Eroded Spot
- Sinkhole
- Slide or Slip
- Sodic Spot
- Spoil Area
- Stony Spot
- Very Stony Spot
- Wet Spot
- Other
- Special Line Features

Water Features
- Streams and Canals

Transportation
- Rails
- Interstate Highways
- US Routes
- Major Roads
- Local Roads

Background
- Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:24,000.

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

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

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

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL:
Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Grafton County, New Hampshire
Survey Area Data: Version 28, Sep 3, 2024

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: May 27, 2020—Sep 16, 2020

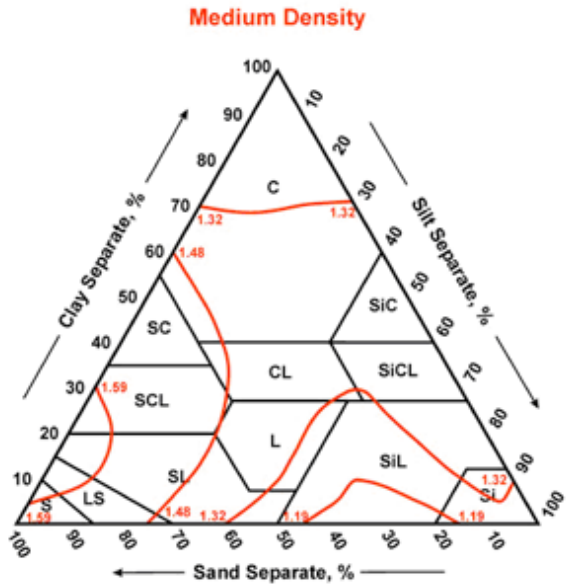
The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

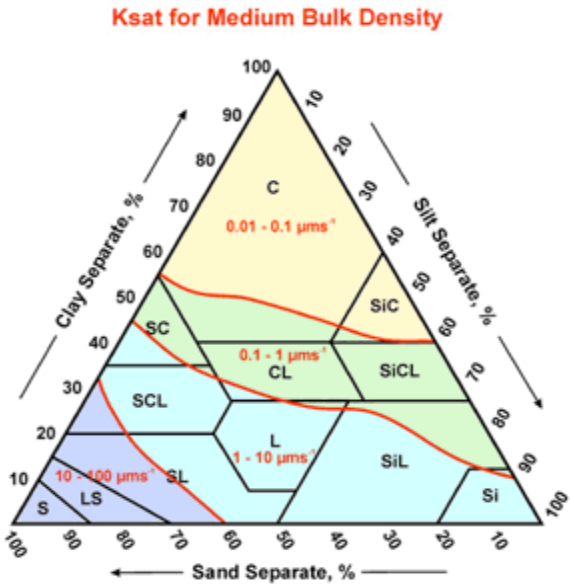
Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
330C	Bernardston silt loam, 8 to 15 percent slopes	1.3	100.0%
Totals for Area of Interest		**1.3**	**100.0%**

Ksat Values for New Hampshire Soils

K_{sat} VALUES
FOR
NEW HAMPSHIRE SOILS
(Including Hydrologic and DES Soil Lot Sizing Groups)





From: Guide for Estimating Ksat from Soil Properties (**Exhibit 618-9**). (http://soils.usda.gov/technical/handbook/contents/part618ex.html)

Sponsored by the Society of Soil Scientists of Northern New England
SSSNNE Special Publication No. 5
September, 2009

Soil Series	legend number	Ksat low - B in/hr	Ksat high - B in/hr	Ksat low - C in/hr	Ksat high - C in/hr	Hyd. Grp.	Group	Land Form	Temp.	Soil Textures	Spodosol ?	Other
Suffield	536	0.6	2.0	0.00	0.2	C	3	Sandy/loamy over silt/clay	mesic	silty over clayey	no	deep to clay C
Sunapee	168	0.6	2.0	0.60	6.0	B	3	Loose till, loamy textures	frigid	loamy	yes	
Sunapee var	269	0.6	2.0	0.60	6.0	B	3	Loose till, loamy textures	frigid	loamy	yes	frigid dystrudept
Suncook	2	6.0	20.0	6.00	20.0	A	1	Flood Plain (Bottomland)	mesic	sandy	no	occasionally flooded
Suncook	402	6.0	20.0	6.00	20.0	A	1	Flood Plain (Bottomland)	mesic	sandy	no	frequent flooding
Sunday	102	6.0	20.0	6.00	20.0	A	1	Flood Plain (Bottomland)	frigid	sandy	no	occasionally flooded
Sunday	202	6.0	20.0	6.00	20.0	A	1	Flood Plain (Bottomland)	frigid	sandy	no	frequently flooded
Surplus	669	0.6	2.0	0.00	0.6	C	3	Firm, platy, loamy till	cryic	loamy	yes	mwd, sandy loam in Cd
Sutton	68	0.6	6.0	0.60	6.0	B	3	Loose till, loamy textures	mesic	loamy	no	
Swanton	438	2.0	6.0	0.00	0.2	C	5	Sandy/loamy over silt/clay	frigid	co. loamy over clayey	no	
Telos	123	0.6	2.0	0.02	0.2	C	3	Firm, platy, silty till, schist & phyllite	frigid	loamy	yes	channery silt loam in Cd
Thorndike	84	0.6	2.0	0.60	2.0	C/D	4	Friable till, silty, schist & phyllite	frigid	loamy-skeletal	yes	less than 20 in. deep
Timakwa	393			6.00	100.0	D	6	Organic Materials - Freshwater	mesic	sandy or sandy-skeletal	no	organic over sand
Tunbridge	99	0.6	6.0	0.60	6.0	C	4	Loose till, bedrock	frigid	loamy	yes	20 to 40 in. deep
Unadilla	30	0.6	2.0	2.00	20.0	B	2	Terraces and glacial lake plains	mesic	silty	no	silty over gravelly
Vassalboro	150					D	6	Organic Materials - Freshwater	frigid	peat	no	deep organic
Walpole	546	2.0	6.0	6.00	20.0	C	5	Outwash and Stream Terraces	mesic	sandy	no	
Wareham	34	6.0	20.0	6.00	20.0	C	5	Outwash and Stream Terraces	mesic	sandy	no	
Warwick	210	2.0	6.0	20.00	100.0	A	1	Outwash and Stream Terraces	mesic	loamy-skeletal	no	loamy over slate gravel
Waskish	195					D	6	Organic Materials - Freshwater	frigid	peat	no	deep organic
Waumbeck	58	2.0	20.0	6.00	20.0	B	3	Loose till, sandy textures	frigid	sandy-skeletal	yes	very cobbly loamy sand
Westbrook	597			0.00	2.0	D	6	Tidal Flat	mesic	loamy	no	organic over loam
Whitman	49	0.0	0.2	0.00	0.2	D	6	Firm, platy, loamy till	mesic	loamy	no	mucky loam
Windsor	26	6.0	20.0	6.00	20.0	A	1	Outwash and Stream Terraces	mesic	sandy	no	
Winnecook	88	0.6	2.0	0.60	2.0	C	4	Friable till, silty, schist & phyllite	frigid	loamy-skeletal	yes	20 to 40 in. deep
Winooski	9	0.6	6.0	0.60	6.0	B		Flood Plain (Bottom Land)	mesic	silty over loamy	no	
Winooski	103	0.6	6.0	0.60	6.0	B	3	Flood Plain (Bottom Land)	mesic	silty	no	very fine sandy loam
Wonsqueak	995			0.20	2.0	D	6	Organic Materials - Freshwater	frigid	loamy	no	organic over loam
Woodbridge	29	0.6	2.0	0.00	0.6	C	3	Firm, platy, loamy till	mesic	loamy	no	sandy loam in Cd
Woodstock	93	2.0	6.0	2.00	6.0	C/D	4	Loose till, bedrock	frigid	loamy	no	less than 20 in. deep

no longer recognized
organic materials

Extreme Precipitation Estimates - Northeast Regional Climate Center

Extreme Precipitation Tables

Northeast Regional Climate Center

Data represents point estimates calculated from partial duration series. All precipitation amounts are displayed in inches.

Metadata for Point	
Smoothing	Yes
State	New Hampshire
Location	New Hampshire, United States
Latitude	43.650 degrees North
Longitude	72.256 degrees West
Elevation	180 feet
Date/Time	Fri Jan 24 2025 13:28:09 GMT-0500 (Eastern Standard Time)

Extreme Precipitation Estimates

	5min	10min	15min	30min	60min	120min		1hr	2hr	3hr	6hr	12hr	24hr	48hr		1day	2day	4day
1yr	0.26	0.40	0.50	0.66	0.82	1.02	**1yr**	0.71	0.93	1.17	1.43	1.76	2.15	2.42	**1yr**	1.90	2.32	2.69
2yr	0.31	0.47	0.59	0.78	0.98	1.22	**2yr**	0.84	1.11	1.39	1.70	2.07	2.50	2.81	**2yr**	2.21	2.70	3.15
5yr	0.37	0.57	0.71	0.96	1.22	1.53	**5yr**	1.06	1.40	1.75	2.13	2.57	3.07	3.47	**5yr**	2.71	3.34	3.86
10yr	0.41	0.65	0.82	1.11	1.45	1.83	**10yr**	1.25	1.67	2.09	2.54	3.03	3.58	4.08	**10yr**	3.17	3.92	4.52
25yr	0.49	0.78	0.99	1.37	1.82	2.30	**25yr**	1.57	2.11	2.63	3.18	3.77	4.40	5.05	**25yr**	3.90	4.85	5.55
50yr	0.56	0.90	1.15	1.61	2.16	2.74	**50yr**	1.86	2.51	3.14	3.78	4.45	5.15	5.93	**50yr**	4.56	5.71	6.49
100yr	0.63	1.03	1.33	1.88	2.56	3.27	**100yr**	2.21	3.00	3.75	4.49	5.24	6.02	6.98	**100yr**	5.33	6.71	7.59
200yr	0.73	1.20	1.55	2.21	3.05	3.90	**200yr**	2.63	3.58	4.46	5.32	6.18	7.05	8.21	**200yr**	6.24	7.89	8.89
500yr	0.88	1.45	1.89	2.74	3.84	4.91	**500yr**	3.31	4.54	5.62	6.66	7.68	8.68	10.18	**500yr**	7.68	9.79	10.95

Lower Confidence Limits

	5min	10min	15min	30min	60min	120min		1hr	2hr	3hr	6hr	12hr	24hr	48hr		1day	2day	4day
1yr	0.24	0.36	0.44	0.60	0.73	0.82	**1yr**	0.63	0.80	0.99	1.19	1.59	1.92	2.17	**1yr**	1.70	2.09	2.44
2yr	0.30	0.46	0.56	0.76	0.94	1.10	**2yr**	0.81	1.08	1.24	1.62	2.06	2.45	2.75	**2yr**	2.17	2.65	3.09
5yr	0.34	0.52	0.65	0.89	1.13	1.32	**5yr**	0.98	1.29	1.49	1.90	2.41	2.90	3.27	**5yr**	2.57	3.15	3.65
10yr	0.37	0.57	0.71	1.00	1.29	1.49	**10yr**	1.11	1.46	1.68	2.16	2.70	3.29	3.74	**10yr**	2.92	3.60	4.14
25yr	0.43	0.65	0.81	1.16	1.53	1.76	**25yr**	1.32	1.72	1.97	2.52	3.13	3.90	4.46	**25yr**	3.45	4.29	4.90
50yr	0.47	0.71	0.89	1.27	1.71	1.99	**50yr**	1.48	1.95	2.20	2.85	3.51	4.43	5.09	**50yr**	3.92	4.90	5.56
100yr	0.52	0.78	0.98	1.41	1.94	2.24	**100yr**	1.67	2.19	2.47	3.19	3.94	5.02	5.81	**100yr**	4.45	5.59	6.31
200yr	0.57	0.85	1.08	1.57	2.19	2.53	**200yr**	1.89	2.47	2.76	3.60	4.46	5.70	6.64	**200yr**	5.04	6.38	7.19
500yr	0.65	0.97	1.24	1.80	2.57	2.94	**500yr**	2.21	2.88	3.18	4.19	5.23	6.75	7.93	**500yr**	5.98	7.63	8.54

Upper Confidence Limits

	5min	10min	15min	30min	60min	120min		1hr	2hr	3hr	6hr	12hr	24hr	48hr		1day	2day	4day
1yr	0.29	0.45	0.54	0.73	0.90	1.03	**1yr**	0.78	1.01	1.19	1.52	1.89	2.32	2.63	**1yr**	2.05	2.53	2.88
2yr	0.32	0.49	0.61	0.82	1.01	1.19	**2yr**	0.88	1.17	1.36	1.73	2.18	2.57	2.87	**2yr**	2.27	2.76	3.23
5yr	0.40	0.61	0.76	1.04	1.33	1.56	**5yr**	1.15	1.53	1.73	2.16	2.72	3.24	3.66	**5yr**	2.87	3.52	4.08
10yr	0.48	0.73	0.91	1.27	1.64	1.94	**10yr**	1.42	1.90	2.14	2.61	3.22	3.88	4.41	**10yr**	3.43	4.24	4.89
25yr	0.61	0.93	1.16	1.65	2.17	2.60	**25yr**	1.87	2.55	2.84	3.34	4.05	4.94	5.66	**25yr**	4.37	5.45	6.20
50yr	0.73	1.12	1.39	2.00	2.69	3.25	**50yr**	2.32	3.18	3.54	4.02	4.82	5.91	6.84	**50yr**	5.23	6.57	7.43
100yr	0.89	1.34	1.68	2.43	3.34	4.08	**100yr**	2.88	3.99	4.42	4.85	5.75	7.09	8.26	**100yr**	6.28	7.95	8.91
200yr	1.08	1.62	2.05	2.97	4.15	5.11	**200yr**	3.58	4.99	5.52	5.86	6.86	8.50	9.98	**200yr**	7.53	9.59	10.69
500yr	1.40	2.08	2.67	3.89	5.52	6.91	**500yr**	4.77	6.76	7.42	7.52	8.62	10.84	12.82	**500yr**	9.59	12.33	13.59

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MEMORANDUM

TO: **Lebanon Planning Board**

FROM: **Tim Corwin, Deputy Planning and Development Director**

RE: **2027 – 2032 Capital Improvements Program**
August 25, 2025 Work Session – Agenda Item 3.A

MEMO DATE: **August 20, 2026**

Planning Board members:

Attached is City staff's proposed 2027-2032 Capital Improvements Program (CIP) and Other Capital Projects. At the August 24, 2026, work session, the Planning Board will review and discuss those projects from the proposed 2027-2031 CIP which meet the definition of a "CIP Item" as set forth in the Board's CIP Policy and Procedures document. The Board will review all proposed CIP Items regardless of which year(s) the projects are proposed for funding.

The CIP list includes projects anticipated for funding beyond the immediate 6-year time period in order to further enhance the usefulness of the CIP as a financial and community planning tool. Including projects beyond the typical 6-year time period is a component of the City Council's Debt Management Policy (Policy Number CC-107.1, last revised 12/13/2023).

The following CIP projects (which are listed in bold red text on the attached project list) are the projects that meet the definition of CIP Item and, therefore, require review by the Planning Board:

Department	**Project Description**
1. Airport	Taxiway A Extension Phase 4
2. Fire	Fire Station 2 Replacement
3. Public Works	Route 120–Etna Rd–Old Etna Rd Pedestrian Improvements
4. Public Works	Mechanic St/Slayton Hill Rd/Mascoma St Intersection Reconstruction
5. Public Works	Mechanic St Sidewalk – Buckingham Pl to Poverty Ln (Phase 1)
6. Public Works	Mechanic St Sidewalk – Rivermill Bus Stop to Slayton Hill Rd (Phase 3)
7. Public Works	Hanover Street Reconstruction and Improvements
8. Public Works	School Street / Meriden Road Safety Improvements
9. Public Works	Great Brook Road Bridge Replacement
10. Public Works	West Lebanon Main Street Improvements Phase 2: Bridge St Roundabout
11. Recreation, Arts and Parks	Mascoma River Greenway Extension
12. Recreation, Arts and Parks	MRG to Mascoma Street Path
13. Recreation, Arts and Parks	Civic Field Upgrades
14. Public Works	Large Groundwater Well and Water Treatment Facility
15. Public Works	Centerra Water Main Extension
16. Public Works	Landfill Expansion Phase 3 and 4 Design, Permitting and Construction

The Planning Board is asked to adopt the 6-year CIP, as it may amend, and to submit its recommendation for the 2027 capital budget to the City Council through the City Manager.

Attachments

- Lebanon Planning Board Capital Improvement Program Policies and Procedures
- City of Lebanon Capital Improvements Program and Other Capital Projects 2027-2032

LEBANON PLANNING BOARD

CAPITAL IMPROVEMENT PROGRAM POLICY AND PROCEDURES

CITY OF LEBANON, NEW HAMPSHIRE

ADOPTED: September 22, 2003
LAST REVISED: February 27, 2023

CITY OF LEBANON
CAPITAL IMPROVEMENT PROGRAM
POLICY AND PROCEDURES

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ARTICLE I – ENACTMENT AND GENERAL PROVISIONS

Authority

Under the general authority granted in the New Hampshire Revised Statutes Annotated Title LXIV, the Lebanon Planning Board adopts this Policy and Procedures Document, pursuant to RSA 674:5, after having adopted a Master Plan and having been authorized to annually prepare and amend a recommended program of municipal capital improvement projects by the Lebanon City Council on January 08, 1986. Pursuant to RSA 674:7, the Planning Board will confer, in a manner deemed appropriate by the Board, with the City Manager, Finance Director, municipal departments, and the Lebanon School District, and shall review the recommendations of the Master Plan in relation to the proposed Capital Improvement Program.

Such that the Planning Board is so authorized to execute the Capital Improvement Program, every municipal department and the Lebanon School District shall, upon request of the Planning Board, transmit to the Board a statement of all capital projects it proposes to undertake during the term of the Program (6 years). The Planning Board shall study each proposed capital project that qualifies as a Capital Improvement Program Item, as defined herein, and shall advise and make recommendations to the municipal department or School District concerning the relation of its project to the Capital Improvement Program being prepared.

Pursuant to RSA 674:8, the Planning Board will submit its Capital Improvement Program recommendations for the ensuing fiscal year through the City Manager to the City Council for consideration as part of the annual budget.

General Purpose

This Policy and Procedures Document authorizes the Planning Board to prepare and submit a Capital Improvement Program that supports and furthers the goals established in the City's Master Plan. This Policy and Procedures Document shall be administered to ensure orderly growth and development and supplement and facilitate the provisions in the City of Lebanon's Master Plan, Zoning Ordinance, and capital budget. This Policy and Procedures Document ensures that there is harmonious development of a City capital budget. The Capital Improvement Program does not create the capital budget, but is a recommendation to the City Council in preparation of the capital budget. This Policy and Procedures Document guides the Planning Board in creating and delivering the Capital Improvement Program to the City Council.

Definitions

For the purposes of this Policy & Procedures Document, in addition to the terms included in this Article, the meaning of terms used herein shall be as defined in the Lebanon City Code and RSA.

Board – The word 'Board' shall mean the Lebanon Planning Board.

Capital Improvement Program (CIP) – The words 'Capital Improvement Program' and the abbreviation 'CIP' shall mean the document authorized by the Board consisting of a first-year capital budget recommendation for CIP Items and a subsequent five-year plan for capital expenditures. Projects previously approved and fully funded for completion are not included in the current six-year plan.

Capital Improvement Program Items – CIP Items will be those items that pertain to planning and land use within the City only. CIP Items are to include:

a) Any Physical Public Betterment and studies relative thereto with an estimated cost or value in excess of $100,000;
b) Acquisition of land, regardless of estimated cost;
c) Construction of new buildings and facilities with an estimated value in excess of $100,000;
d) Facilities engineering design and other preconstruction costs in excess of $100,000, unless such costs are part of a project that does not result in more capacity for growth;
e) Reconstruction of existing facilities resulting in more capacity for City growth with an estimated cost or value in excess of $100,000.

Capital items that are operational in scope, vehicles for example, are not considered to be CIP Items.

Physical Public Betterment – The words 'Physical Public Betterment' shall mean any new use of land or infrastructure that is for the benefit of the community. **Excluded from this definition are operational maintenance and improvements accruing a benefit to the community, which do not increase capacity for growth, for example resurfacing a road, fixing a sidewalk, and other in-kind repairs.**

CIP Project List – The term 'CIP Project List' shall be the Planning Board's list communicating to the City those CIP Items deemed by the Board as important for capital budget funding for the ensuing six-year fiscal period.

Capital Budget Form – The term 'Capital Budget Form', created by the Finance Director, is the official request by the Board, submitted through city staff, for a CIP Item to be included in the CIP. For each proposed CIP Item, the Capital Budget Form submitted by the Department for that project shall, to the extent possible, establish a substantive relationship between what the Master Plan identifies as a capital need and the proposed CIP Item.

Compliance

No Capital Improvement Program shall be approved by the Planning Board unless such plan complies with all the provisions of this CIP Policy and Procedures document and state and federal laws.

No authority other than the Planning Board will be permitted to change the CIP.

This CIP Policy and Procedures document supersedes all other City Staff policies relative to the CIP.

ARTICLE II – CIP POLICY AND PROCEDURES

Purpose

This procedure allows timely submission and review of the Capital Improvement Program (CIP) by the Planning Board, City Council, City Manager, Finance Director, municipal departments, and the Lebanon School District. This procedure defines a process by which information is given to the Planning Board by municipal departments (through the City Manager) and the Lebanon School District and sets forth the schedule for the Board's review and adoption of the CIP by late August. By producing the CIP by late August, the City Council shall use the document for capital budget recommendations per City Policy 98-01-A.

Policy

The Planning Board may create a preliminary CIP Project List, which shall be provided to all departments. in accordance with the Procedure outlined below. All department proposals for CIP Items and other capital items shall be submitted to the Planning & Development Director by mid-May, approximately 180 days prior to the budget submission date of October 31st. The Finance Director, City Manager, Planning & Development Director, and appropriate designees shall evaluate and analyze the fiscal capacity and financial programming of the proposed CIP Items and other capital items and shall prepare a draft CIP for review and adoption by the Planning Board by late August.

Procedure

1. At the **January Planning Board Work Session**, the Board may prepare a preliminary CIP Project List for the ensuing six-year fiscal period. The Planning & Development Director shall distribute the Planning Board's preliminary CIP Project List to the City Manager, Finance Director, and all municipal departments for consideration in preparing each Department's proposed CIP Items and other capital items. The Board may evaluate up to the prior three (3) years' City Council-adopted Capital Budgets versus the Board's CIP Project List and identify changes and make recommendations relevant to the CIP.

2. **In early April:** The Planning & Development Director shall distribute the Capital Budget Form, guidelines, and instructions to all municipal departments and to the Lebanon School District, approximately 210 days prior to the budget submission.

3. **In mid-May:** Each Director of a municipal department and the Superintendent of the Lebanon School District shall inventory existing facilities; identify proposed new CIP Items and other capital items and determine the status of previously approved CIP Items; and shall prepare and submit to the Planning & Development Director Capital Budget Forms, with such supporting documentation, data, required analysis, and timelines as required by the City Manager and Planning & Development Department, approximately 180 days prior to the budget submission date.

4. **By late June:** The Planning & Development Director, City Manager, and Finance Director shall analyze fiscal capacity and financial programming of the proposed CIP Items and shall prepare a draft CIP. In accordance with RSA 674:6, the draft CIP shall classify projects according to the urgency and need for realization and recommend a time sequence for their implementation, and shall take into account public facility needs indicated by the prospective development shown in the master plan of the municipality or as permitted by other municipal land use controls.

5. **By early July:** The City Manager shall submit the draft CIP to the Planning Board. Each Planning Board member shall be given a copy of the draft CIP. The Planning & Development Department shall request that each municipal department and the Lebanon School District appear before the Planning Board at the July work session to answer questions and to discuss project proposals, as needed.

6. **By late August:** The full Planning Board shall review the draft CIP and shall make any revisions deemed appropriate by the Board. In reviewing the draft CIP, the Planning Board shall review the recommendations of the Master Plan in relation to the proposed CIP. The Planning Board shall adopt a final CIP and submit its first-year capital budget recommendations to the City Council through the City Manager.

7. Upon adoption, the Planning & Development Director shall cause a certified copy of the CIP to be filed with the New Hampshire Office of Planning & Development (NHOPD) in accordance with RSA 675:9.



CAPITAL IMPROVEMENTS PROGRAM

-AND-

OTHER CAPITAL PROJECTS

2027-2032

OVERVIEW OF THE 2027-2032 CAPITAL IMPROVEMENTS PROGRAM

GENERAL

A six-year Capital Improvements Program (CIP) is developed and updated annually. The following pages contain the City of Lebanon's 2027-2032 CIP and other capital projects.

In reviewing the CIP, it should be kept in mind that it is one of the community's most important physical and financial planning tools. Proposals set forth in this CIP and succeeding CIPs influence the standard of facilities and services the City of Lebanon provides its citizens in the future. As such, careful analysis and evaluation is necessary if it is to serve as a rational planning guideline for necessary community improvements. It should be noted that no formal action is required by the City Council on financing for years two through six of the CIP (2027-2032); only year one (2027) will be considered as part of the approval process of the 2027 Budget by the City Council.

This 2027-2032 Capital Improvements Program is an essential component of the City's financial planning effort and provides the long-range perspective and framework for addressing its capital improvements needs. As a companion to the annual budget, the CIP provides the mechanism for anticipating future facility and infrastructure requirements and ensuring that they are funded in a responsible and systematic fashion. The cost of individual projects is based on the best estimates available at the time this plan was prepared; actual project costs are a function of detailed study by architects and engineers.

LEGAL BASIS FOR CAPITAL PROGRAMMING

The 2027-2032 CIP is prepared pursuant to RSA Chapter 674:5 - 674:8, which in summary, grants to the City Council, as the City's legislative body, the authority to authorize the Planning Board to prepare and amend a recommended Capital Improvements Program for submission to the City Council to assist in its consideration of the annual budget.

***674:5 Authorization**. – In a municipality where the planning board has adopted a master plan, the local legislative body may authorize the planning board to prepare and amend a recommended program of municipal capital improvement projects projected over a period of at least 6 years. As an alternative, the legislative body may authorize the governing body of a municipality to appoint a capital improvement program committee, which shall include at least one member of the planning board and may include but not be limited to other members of the planning board, the budget committee, or the town or city governing body, to prepare and amend a recommended program of municipal capital improvement projects projected over a period of at least 6 years. The capital improvements program may encompass major projects being currently undertaken or future projects to be undertaken with federal, state, county and other public funds. The sole purpose and effect of the capital improvements program shall be to aid the mayor or selectmen and the budget committee in their consideration of the annual budget.*
-- Source. 1983, 447:1. 2002, 90:1, eff. July 2, 2002.

***674:6 Purpose and Description**. – The capital improvements program shall classify projects according to the urgency and need for realization and shall recommend a time sequence for their implementation. The program may also contain the estimated cost of each project and indicate probable operating and maintenance costs and probable revenues, if any, as well as existing sources of funds or the need for additional sources of funds for the implementation and operation*

of each project. The program shall be based on information submitted by the departments and agencies of the municipality and shall take into account public facility needs indicated by the prospective development shown in the master plan of the municipality or as permitted by other municipal land use controls.
-- Source. 1983, 447:1, eff. Jan. 1, 1984.

***674:7 Preparation**. –*
I. In preparing the capital improvements program, the planning board or the capital improvement program committee shall confer, in a manner deemed appropriate by the board or the committee, with the mayor or the board of selectmen, or the chief fiscal officer, the budget committee, other municipal officials and agencies, the school board or boards, and shall review the recommendations of the master plan in relation to the proposed capital improvements program.
II. Whenever the planning board or the capital improvement program committee is authorized and directed to prepare a capital improvements program, every municipal department, authority or agency, and every affected school district board, department or agency, shall, upon request of the planning board or the capital improvement program committee, transmit to the board or committee a statement of all capital projects it proposes to undertake during the term of the program. The planning board or the capital improvement program committee shall study each proposed capital project, and shall advise and make recommendations to the department, authority, agency, or school district board, department or agency, concerning the relation of its project to the capital improvements program being prepared.
-- Source. 1983, 447:1. 1995, 43:1. 2002, 90:2, eff. July 2, 2002.

***674:8 Consideration by Mayor and Budget Committee**. – Whenever the planning board or the capital improvement program committee has prepared a capital improvements program under RSA 674:7, it shall submit its recommendations for the current year to the mayor or selectmen and the budget committee, if one exists, for consideration as part of the annual budget.*
-- Source. 1983, 447:1. 2002, 90:3, eff. July 2, 2002.

CAPITAL IMPROVEMENT PROGRAM ITEMS

For the purpose of the Capital Improvements Program, Capital Improvement Program Items (CIP Items) will be those items that pertain to planning and land use within the City only. CIP Items include:

a) Any Physical Public Betterment and studies relative thereto with an estimated cost or value in excess of $100,000;
b) Acquisition of land, regardless of estimated cost;
c) Construction of new buildings and facilities with an estimated value in excess of $100,000;
d) Facilities engineering design and other preconstruction costs in excess of $100,000, unless such costs are part of a project that does not result in more capacity for growth;
e) Reconstruction of existing facilities resulting in more capacity for City growth with an estimated cost or value in excess of $100,000.

Capital items that are operational in scope, vehicles for example, are not considered to be CIP Items.

A ***Physical Public Betterment*** shall mean any new use of land or infrastructure that is for the benefit of the community. Excluded from this definition are operational maintenance and

improvements accruing a benefit to the community, which do not increase capacity for growth, for example resurfacing a road, fixing a sidewalk, and other in-kind repairs.

PLANNING BOARD

It is the Planning Board's responsibility to review, evaluate, rank, and revise the Capital Improvement Project List as presented by the Administration, and to develop the CIP with a view toward ensuring that proposed projects are compatible and complementary with the Master Plan.

REVIEW OF THE CIP

The CIP is drafted and reviewed according to the Capital Improvement Program Policy and Procedures document adopted by the Lebanon Planning Board on September 22, 2003 and revised on February 27, 2023. The procedure begins in February when the Planning Board evaluates the prior years' adopted Capital Budget and initiates the preliminary CIP Project List for the coming year and makes recommendations relevant to the CIP. In April, the Planning and Development Department distributes the preliminary CIP Project List and other materials to the departments and instructs them to prepare the description and documentation for each of the proposed projects for return to the Planning Department in May. In June, the Planning and Finance Departments and the City Manager review the submissions from the departments to analyze fiscal capacity and financial programming for the projects and submit the draft CIP to the Planning Board for evaluation in July. After review, the Planning Board shall adopt the CIP Project List and submit its recommendations along with the CIP to the City Council through the City Manager. A copy of the adopted CIP is also filed with the NH Office of Planning and Development in accordance with RSA 675:9.

SCHOOL DISTRICT CIP

The Lebanon School District provided the City with a copy of its Draft Facilities Improvements Plan for 2027-2031. With this information, the City can review proposed City capital expenditures along with proposed School District capital expenditures in order to better understand and evaluate the total impact on the community and to help maintain a level tax rate for the citizens of Lebanon.

ORGANIZATION OF THIS DOCUMENT

This document is organized into just one part, which lists all of the proposed Capital Improvements Program items and Other Capital Projects for review. Proposed projects that meet the Planning Board's definition of a Capital Improvement Program Item are listed in **red** in the attached spreadsheet. A summary of all projects that meet the Planning Board's definition of a Capital Improvement Program Item.

DRAFT

CITY OF LEBANON, NH

DRAFT

2027-2032 CAPITAL IMPROVEMENTS PROGRAM (CIP)

ADOPTED BY THE PLANNING BOARD ON _____, 2026

Department	Project Name	Total Appropriation pre 2026-2032	Appropriation Prior to 2026	Total Appropriation 2027-2032	2027	2028	2029	2030	2031	2032	2033+
	AIRPORT FUND										
AIR	South Apron Rehabilitation	$1,090,000	$0	$1,090,000	$1,090,000	$0	$0	$0	$0	$0	
AIR	Airfield Electrical Vault Replacement	$1,170,000	$0	$1,170,000	$0	$0	$0	$0	$1,170,000	$0	
NEW-AIR	***Taxiway A Extension Phase 4***	$2,400,000	$0	$2,400,000	$0	$0	$2,400,000	$0	$0	$0	
NEW-AIR	Maintenance Shop Roof Replacement	$120,000	$0	$120,000	$120,000	$0	$0	$0	$0	$0	
NEW-AIR	Taxiway A1 Relocation	$2,200,000	$0	$2,200,000	$0	$0	$0	$0	$2,200,000	$0	
	TOTAL AIRPORT	**$6,980,000**	**$0**	**$6,980,000**	**$1,210,000**	**$0**	**$2,400,000**	**$0**	**$3,370,000**	**$0**	**$0**
	GENERAL FUND										
FACILITIES											
FIRE	***Fire Station 2 Replacement***	$0	$0	$0	$0	$0	$0	$0	$0	$0	$14,000,000
DPW	City Hall Renovations Phase 5	$6,998,600	$6,998,600	$0	$0	$0	$0	$0	$0	$0	$654,000
FLEET & EQUIPMENT											
FIRE	Ambulance Replacement	NA	NA	$1,571,000	$471,000	$0	$0	$550,000	$0	$550,000	
FIRE	Personal Protective Equipment Replacement	NA	NA	$294,000	$0	$0	$294,000	$0	$0	$0	$350,000
DPW	Fleet Replacement	NA	NA	$4,200,000	$700,000	$700,000	$700,000	$700,000	$700,000	$700,000	
ROADS & BRIDGES											
DPW	***Route 120–Etna Rd–Old Etna Road Pedestrian Improvements***	$250,000	$250,000	$0	$0	$0	$0	$0	$0	$0	$1,377,000
DPW	Hanover Street/Route 120 Bridge Replacement #121-117	$3,069,000	$2,675,000	$394,000	$394,000	$0	$0	$0	$0	$0	
DPW	Estabrook Circle and Maple Street Stormwater Improvements	$0	$0	$0	$0	$0	$0	$0	$0	$0	$1,181,250
DPW	***Mechanic St/Slayton Hill Rd/Mascoma St Intersection Reconstruction***	$1,139,980	$425,000	$714,980	$0	$0	$0	$0	$291,500	$423,480	$5,071,450
DPW	***Mechanic St Sidewalk - Buckingham Pl to Poverty Ln (Phase 1)***	$250,000	$0	$250,000	$0	$250,000	$0	$0	$0	$0	$1,950,920
DPW	***Mechanic St Sidewalk - Rivermill Bus Stop to Slayton Hill Rd (Phase 3)***	$2,518,700	$0	$2,518,700	$152,230	$0	$139,390	$2,227,080	$0	$0	
DPW	***Hanover Street Reconstruction and Improvements***	$563,990	$0	$563,990	$0	$0	$0	$563,990	$0	$0	$5,717,250
DPW	Green Street and Shaw Street Reconstruction	$2,727,630	$0	$2,727,630	$0	$0	$0	$222,090	$7,000	$2,498,540	
DPW	Elm Street and Union Street Reconstruction	$0	$0	$0	$0	$0	$0	$0	$0	$0	$2,631,140
DPW	***School Street / Meriden Road Safety Improvements***	$0	$0	$0	$0	$0	$0	$0	$0	$0	$623,410
NEW-DPW	***Great Brook Road Bridge***	$0	$0	$0	$0	$0	$0	$0	$0	$0	$3,245,000
NEW-DPW	***West Lebanon Main St Improvements Phase 2: Bridge St Roundabout***	$0	$0	$0	$0	$0	$0	$0	$0	$0	$4,168,000
NEW-DPW	East Wilder Road Reconstruction	$0	$0	$0	$0	$0	$0	$0	$0	$0	$3,050,000
NEW-DPW	Hanover Street Culvert Replacement	$550,000	$0	$550,000	$550,000	$0	$0	$0	$0	$0	
NEW-DPW	Mascoma River 12A Bridge Expansion Joint	$0	$0	$0	$0	$0	$0	$0	$0	$0	$650,000
OTHER											
REC	***Mascoma River Greenway Extension***	$2,976,490	$465,000	$2,511,490	$18,900	$2,492,590	$0	$0	$0	$0	
REC	***MRG to Mascoma Street Path***	$0	$0	$0	$0	$0	$0	$0	$0	$0	$408,000
NEW-REC	***Civic Park Upgrades***	$319,000	$0	$319,000	$0	$319,000	$0	$0	$0	$0	
REC	Northern Rail Trail Retaining Wall	$275,000	$0	$275,000	$0	$275,000	$0	$0	$0	$0	
	TOTAL GENERAL FUND	**$21,638,390**	**$10,813,600**	**$16,889,790**	**$2,286,130**	**$4,036,590**	**$1,133,390**	**$4,263,160**	**$998,500**	**$4,172,020**	**$45,077,420**
	WATER FUND										
DPW-WATER	***Large Groundwater Well and Water Treatment Facility***	$1,910,000	$1,910,000	$0	$0	$0	$0	$0	$0	$0	$15,400,000
DPW-WATER	***Hanover Street Reconstruction - Route 120 to Mascoma Street***	$38,900	$0	$38,900	$0	$0	$0	$38,900	$0	$0	$756,180
DPW-WATER	***Centerra Water Main Extension***	$1,650,000	$0	$1,650,000	$0	$0	$0	$0	$0	$1,650,000	
DPW-WATER	Estabrook Circle and Maple Street Stormwater Improvements	$0	$0	$0	$0	$0	$0	$0	$0	$0	$1,012,500
DPW-WATER	Spring Street West Water Main Replacement	$275,000	$0	$275,000	$0	$0	$0	$0	$275,000	$0	
DPW-WATER	Green Street and Shaw Street Reconstruction	$2,337,970	$0	$2,337,970	$0	$0	$0	$190,370	$6,000	$2,141,600	
DPW-WATER	Elm Street and Union Street Reconstruction	$0	$0	$0	$0	$0	$0	$0	$0	$0	$2,255,260
DPW-WATER	Water Meter Upgrade	$929,000	$0	$929,000	$0	$0	$0	$929,000	$0	$0	
NEW-DPW-WATER	East Wilder Road Reconstruction	$0	$0	$0	$0	$0	$0	$0	$0	$0	$1,700,000
	TOTAL WATER FUND	**$7,140,870**	**$1,910,000**	**$5,230,870**	**$0**	**$0**	**$0**	**$1,158,270**	**$281,000**	**$3,791,600**	**$21,123,940**
	SEWER FUND										
DPW-SEWER	***Hanover Street Reconstruction - Route 120 to Mascoma Street***	$45,380	$0	$45,380	$0	$0	$0	$45,380	$0	$0	$882,200
DPW-SEWER	Fleet Replacement	NA	NA	$630,000	$0	$0	$80,000	$0	$0	$550,000	
DPW-SEWER	Estabrook Circle and Maple Street Stormwater Improvements	$0	$0	$0	$0	$0	$0	$0	$0	$0	$1,181,250
DPW-SEWER	Green Street and Shaw Street Reconstruction	$2,727,630	$0	$2,727,630	$0	$0	$0	$222,090	$7,000	$2,498,540	
DPW-SEWER	Elm Street and Union Street Reconstruction	$0	$0	$0	$0	$0	$0	$0	$0	$0	$2,631,140
DPW-SEWER	Water Meter Upgrade	$929,000	$0	$929,000	$0	$0	$0	$929,000	$0	$0	
DPW-SEWER	Westboro Stormwater Holding Facility Demolition	$200,000	$150,000	$50,000	$0	$50,000	$0	$0	$0	$0	
DPW-SEWER	Route 12A Pump Station	$8,520,000	$0	$8,520,000	$100,000	$120,000	$0	$0	$150,000	$8,150,000	
	TOTAL SEWER FUND	**$12,422,010**	**$150,000**	**$12,902,010**	**$100,000**	**$170,000**	**$80,000**	**$1,196,470**	**$157,000**	**$11,198,540**	**$4,694,590**
	SOLID WASTE FUND										
DPW-SOLID	***Landfill Phase 3 Design, Permitting, and Construction***	$17,101,000	$1,801,000	$15,300,000	$15,300,000	$0	$0	$0	$0	$0	
DPW-SOLID	Fleet Replacement	NA	NA	$1,160,000	$0	$450,000	$0	$460,000	$250,000	$0	
	TOTAL SOLID WASTE FUND	**$17,101,000**	**$1,801,000**	**$16,460,000**	**$15,300,000**	**$450,000**	**$0**	**$460,000**	**$250,000**	**$0**	**$0**
	TOTAL CITY CAPITAL IMPROVEMENTS PROGRAM	**$65,282,270**	**$14,674,600**	**$58,462,670**	**$18,896,130**	**$4,656,590**	**$3,613,390**	**$7,077,900**	**$5,056,500**	**$19,162,160**	**$70,895,950**
	TOTAL LEBANON SCHOOL 2027-2031* DISTRICT CAPITAL IMPROVEMENTS PROGRAM			**$12,428,700**	**$1,045,780**	**$1,366,680**	**$5,259,040**	**$1,713,720**	**$3,043,480**	**NA***	
	TOTAL 2027 - 2032* CAPITAL IMPROVEMENTS PROGRAM			**$70,891,370**	**$19,941,910**	**$6,023,270**	**$8,872,430**	**$8,791,620**	**$8,099,980**	**$19,162,160**	

*2032 figure for school district not provided

bold italicized project names reviewed by Planning Board as CIP Items

2027-2032 Capital Improvement Program

PROJECT REQUEST FORM #1

This form includes basic information for each department project request. It must be completed for each project whether for a **NEW PROJECT**, a **MODIFICATION OF AN EXISTING PROJECT**, **CONTINUATION OF AN ON-GOING PROJECT**, or **CANCELLATION OF A PREVIOUSLY APPROVED PROJECT**.

1. DEPARTMENT: Airport

2. PROJECT TITLE: Taxiway A Extension Phase 4 **-** *Extend TW A to the North, Remove TWs B1 and B2*

3. PURPOSE OF PROJECT REQUEST FORM: New Project

4. DEPARTMENT PRIORITY: Mandatory

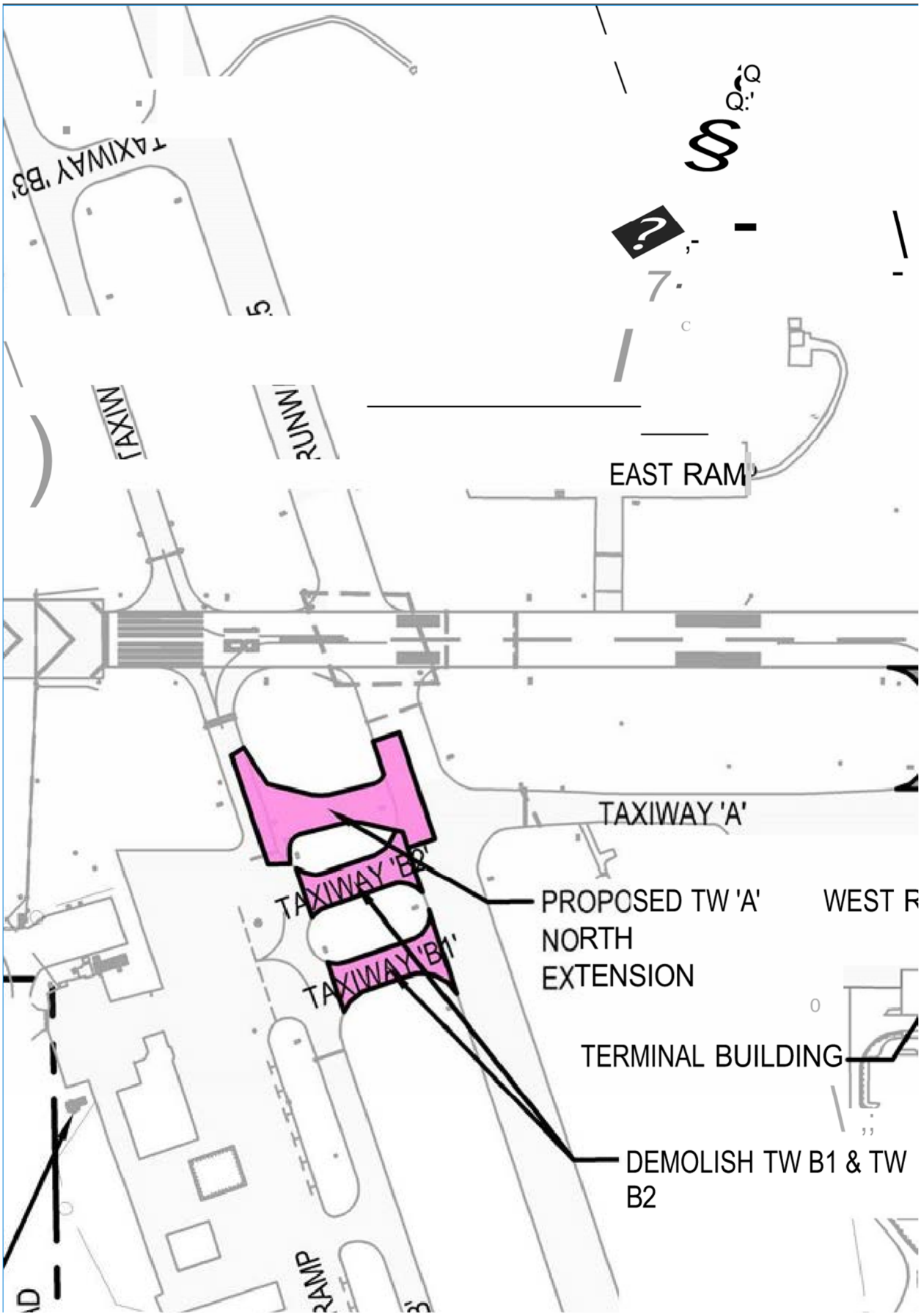
5. LOCATION: Taxiways. Taxiway A between Runway 7-25 and Taxiway B

6. PROJECT DESCRIPTION/JUSTIFICATION: Taxiways B1 and B2 have direct access from an apron to a runway. Current FAA design standards recommend the removal of these taxiways to prevent inadvertent runway incursions. Currently taxiway A ends at runway 7-25 and does not extend to the north end of the runway. This construction corrects this deficiency.

7. ONGOING MAINTENANCE & OPERATING EXPENSES (anticipated costs and funding sources):

The project will be maintained within the department's annual pavement marking and pavement crack sealing budget.

Source	Amount
Federal	$2,160,000
State	$120,000
Local	$120,000
Total	$2,400,000


EAST RAM
TAXIWAY 'A'
TAXIWAY 'B2'
TAXIWAY 'B1'
PROPOSED TW 'A' NORTH EXTENSION
TERMINAL BUILDING
DEMOLISH TW B1 & TW B2

2027-2032 Capital Improvement Program

PROJECT REQUEST FORM #2: Taxiway A Extension Phase 4

8. FINANCIAL PLAN AND PROJECT SCHEDULE

				2027	2028	2029	2030	2031	2032	2027-2032	2033+
EXPENDITURES											
Design/Engineering				**$0**	**$0**	**$650,000**	**$0**	**$0**	**$0**	$650,000	**$0**
Construction/Implementation				**$0**	**$0**	**$1,750,000**	**$0**	**$0**	**$0**	$1,750,000	**$0**
Property/Equipment Acquisition				**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	$0	**$0**
			TOTAL	**$0**	**$0**	**$2,400,000**	**$0**	**$0**	**$0**	**$2,400,000**	**$0**
FUNDING											
Current (Operating Budget)	Specify Fund:			**$0**	**$0**	**$0**		**$0**	**$0**	$0	**$0**
	Specify Fund:			**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	$0	**$0**
	Specify Fund:			**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	$0	**$0**
Debt	Supported by:	Taxes	Gfund	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	$0	**$0**
	Supported by:	Water Rates	Wfund	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	$0	**$0**
	Supported by:	Sewer Rates	Sfund	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	$0	**$0**
	Supported by:			**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	$0	**$0**
Capital Reserve Fund	Specify Fund:	Fire Department Vehicle/Equipment		**$0**	**$0**	**$0**		**$0**	**$0**	$0	**$0**
	Specify Fund:	Airport		**$0**	**$0**	**$120,000**	**$0**	**$0**	**$0**	$120,000	**$0**
	Specify Fund:			**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	$0	**$0**
	Specify Fund:			**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	$0	**$0**
Grants	Specify:	**NHDOT**		**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	$0	**$0**
	Specify:	**FAA**		**$0**	**$0**	**$2,160,000**	**$0**	**$0**	**$0**	$2,160,000	**$0**
	Specify:	**NHDOT Bureau of Aeronautics**		**$0**	**$0**	**$120,000**	**$0**	**$0**	**$0**	$120,000	**$0**
	Specify:			**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	$0	**$0**
Existing Funds	Specify:	**Water Investment Fees**		**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	$0	**$0**
	Specify:	**____ Public Facilities Impact Fees**		**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	$0	**$0**
	Specify:			**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	$0	**$0**
Other	Specify:	**____ Private Contributions**		**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	$0	**$0**
	Specify:			**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	$0	**$0**
			TOTAL	**$0**	**$0**	**$2,400,000**	**$0**	**$0**	**$0**	**$2,400,000**	**$0**

2027-2032 Capital Improvement Program

PROJECT REQUEST FORM #1

This form includes basic information for each department project request. It must be completed for each project whether for a **NEW PROJECT**, a **MODIFICATION OF AN EXISTING PROJECT**, **CONTINUATION OF AN ON-GOING PROJECT**, or **CANCELLATION OF A PREVIOUSLY APPROVED PROJECT**.

1. DEPARTMENT: Lebanon Fire Department

2. PROJECT TITLE: Station 2 Replacement

3. PURPOSE OF PROJECT REQUEST FORM: Maintenance

4. DEPARTMENT PRIORITY: High

5. LOCATION: Lebanon Fire Department

6. PROJECT DESCRIPTION/JUSTIFICATION:

In 2019 the City of Lebanon commissioned a Public Safety Facility Study. This study resulted in a recommendation that both current city fire stations be replaced. Both stations have significant health concerns and are no longer sized appropriately for the current needs of the Lebanon Fire Department. The City is currently (2024) in the process of replacing the central fire station. Station 2 is still a high priority and will need to be completed in the coming years. Given the current city debt service this project has been placed in the CIP parking lot for future consideration.

The fire station needs to remain in the same general area in which it's currently located. Currently the West Lebanon district of the city is seeing increased call volume in the North End of the district (Rt. 10 North of the Wilder Dam) all thy way to the Hanover Town line. There is expected growth in residential population in that area over the next few years which will only increase the emergency service demand. Currently the Lebanon Fire Department response times in that area of the city are subpar in comparison to national standards and best practice standards in both Fire and Ems. Although the City is preparing for significant growth along the 12A corridor the relocation of the Station any further south from where it is now will more negatively impact the Northern District. The city attempted to complete this project in 2021, however was unsuccessful. The estimated cost of the project in 2021 was 6.5 million dollars. Most construction projects have increased by 5% annually since that time. If this project was to be approved for 2031 that would mean this project would be estimated at 14.2 million not including land

acquisition. A fiscal estimate will need to be completed to fully understand what the true cost might be.

Estimated Cost = $14,000,000









2027-2032 Capital Improvement Program

PROJECT REQUEST FORM #2: *Fire Station 2 Replacement*

8. FINANCIAL PLAN AND PROJECT SCHEDULE

				2027	2028	2029	2030	2031	2032	2027-2032	2033+
EXPENDITURES											
Design/Engineering				**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	$0	**$1,000,000**
Construction/Implementation				**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	$0	**$13,000,000**
Property/Equipment Acquisition				**$0**	**$0**	**$0**	**$0**		**$0**	$0	**$0**
			TOTAL	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$14,000,000**
FUNDING											
Current (Operating Budget)	Specify Fund:			**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	$0	**$0**
	Specify Fund:			**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	$0	**$0**
Debt	Supported by:	Taxes	Gfund	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	$0	**$14,000,000**
	Supported by:	Water Rates	Wfund	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	$0	**$0**
	Supported by:	Sewer Rates	Sfund	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	$0	**$0**
	Supported by:			**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	$0	**$0**
Capital Reserve Fund	Specify Fund:			**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	$0	**$0**
	Specify Fund:			**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	$0	**$0**
Grants	Specify:	**NHDOT**		**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	$0	**$0**
	Specify:	**FAA**		**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	$0	**$0**
	Specify:	**NHDOT Bureau of Aeronautics**		**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	$0	**$0**
	Specify:			**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	$0	**$0**
Existing Funds	Specify:	**Water Investment Fees**		**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	$0	**$0**
	Specify:	**____ Public Facilities Impact Fees**		**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	$0	**$0**
	Specify:			**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	$0	**$0**
Other	Specify:	**____ Private Contributions**		**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	$0	**$0**
	Specify:			**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	$0	**$0**
			TOTAL	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$14,000,000**

2027-2032 Capital Improvement Program

PROJECT REQUEST FORM #1

1. **DEPARTMENT:** Public Works

2. **PROJECT TITLE & NUMBER:** Route 120–Etna Rd–Old Etna Rd Pedestrian Improvements

3. **PURPOSE OF PROJECT REQUEST FORM:** New Project

4. **DEPARTMENT PRIORITY:** New Service

5. **LOCATION:** Etna Road from Rte 120 to #67-69 driveway (~850 LF)
   Old Etna Road from Wolf Road to Rte 120 (~1150 LF)

6. **PROJECT DESCRIPTION/JUSTIFICATION:**

   Through conversations with NHDOT and its consultant working on the Route 120/Exit 18 project, the state has verbally committed to installing pedestrian crossing improvements at the Route 120/Etna Road intersection as part of the overall corridor project, which is anticipated to be constructed in FY2028-29. However, it is expected that the City will provide and maintain necessary pedestrian and bicyclist improvements leading to and from the intersection on each side of Route 120 to support the project. It should be noted that Etna Road is a State Right of Way (ROW) and as such, close coordination with NHDOT is necessary during the design, permitting and construction phases.

   The proposed project includes the design and permitting phases of pedestrian and bicyclist improvements, as follows:

   Phase 1 (Complete to Labombard Road Intersection): Etna Road from Route 120 to the driveway of 67-69 Etna Road (Treetops condominiums and a separate office building). Program year: 2024. Constructed in 2025. Note that the south end of Phase 1 is slightly shortened such that it can be properly constructed with the pending NHDOT Route 120/Exit 18 Project design and construction.

   Phase 2: Old Etna Road from Route 120 to Wolf Road, where it connects with the City's existing sidewalk network. Program year: post 2031.

   Not counting the crossing improvements within the Route 120 right-of-way to be designed and installed by NHDOT, the City's pedestrian and bicyclist improvements would be approximately 2000 linear feet. The final alignment of the improvements would be determined during the design and permitting process and

will factor in wetlands and drainage impacts, right-of-way availability, and other issues.

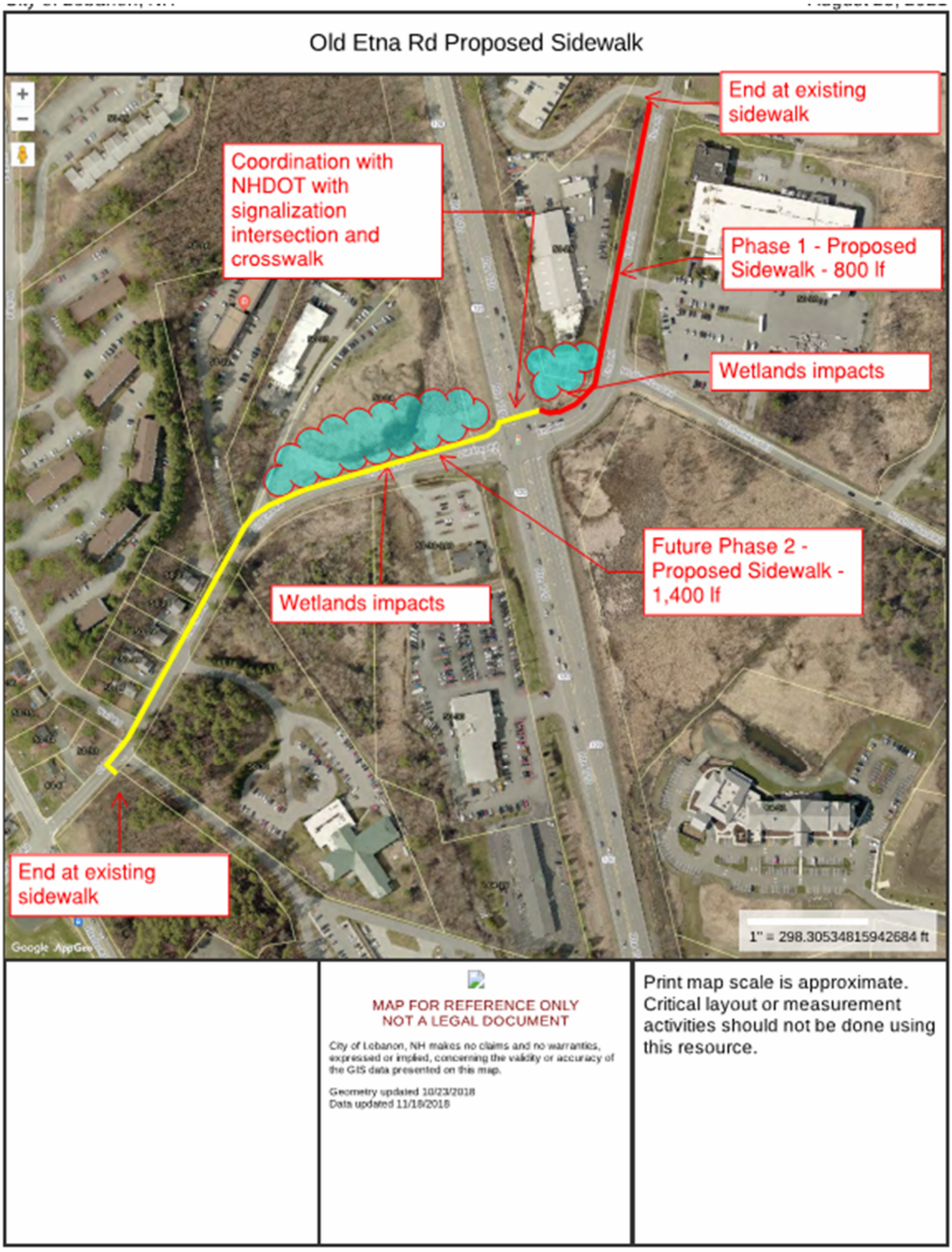
Throughout the City's 2012 Master Plan there are numerous references to the overall importance of a network of walk-bikeways as a major asset for the City for recreation, improved public health, and as a means to provide some relief for traffic congestion by creating alternative transportation options (Section 2|D-1f). The Master Plan also notes that "improved pedestrian and bicycle circulation is one of the core concepts listed on the first page of this plan and should be one of the City's highest priorities." (Section 3|D-4).

Other Master Plan statements supporting the need for an accessible and well-connected multi-modal transportation network include:

- Section 9|D-3 (Pedestrian and Bicycle Facilities) recommends thatthe City encourage and promote the development of interconnected networks of sidewalks, bicycle routes and paths, and recreational trails that facilitate better transportation throughout the community, especially to meet the needs of the young, elderly and other populations who do not drive. This initiative is especially critical to ensure that the City is in compliance with the Americans with Disabilities Act (ADA).

For cost estimating purposes, it is assumed that the remaining phases of the project will be permitted using the NHDOT LPA process.

7. **ONGOING MAINTENANCE AND OPERATING EXPENCES:** Maintenance and operating (O&M) expenses following comprehensive sidewalk reconstruction—typically constitute a notable long-term budgetary commitment, often requiring annual investments of **1-2% of the total asset replacement value.** Proactive maintenance is critical, as deferred maintenance can cost 3–5 times more than timely repairs. O&M is included in DPW's budget.


Old Etna Rd Proposed Sidewalk
End at existing sidewalk
Coordination with NHDOT with signalization intersection and crosswalk
Phase 1 - Proposed Sidewalk - 800 lf
Wetlands impacts
Future Phase 2 - Proposed Sidewalk - 1,400 lf
Wetlands impacts
End at existing sidewalk
1" = 298.30534815942684 ft
MAP FOR REFERENCE ONLY
NOT A LEGAL DOCUMENT
City of Lebanon, NH makes no claims and no warranties, expressed or implied, concerning the validity or accuracy of the GIS data presented on this map.
Geometry updated 10/23/2018
Data updated 11/18/2018
Print map scale is approximate. Critical layout or measurement activities should not be done using this resource.

2027-2032 Capital Improvement Program

PROJECT REQUEST FORM #2: Route 120–Etna Rd–Old Etna Rd Pedestrian Improvements

FINANCIAL PLAN AND PROJECT SCHEDULE

Previously Allocated:$250,000 ($50,000 remaining)				2027	2028	2029	2030	2031	2032	2027-2032	2032+
EXPENDITURES											
Design/Engineering/Permitting				**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$153,000**
Construction/Implementation				**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	$0	**$1,224,000**
Property/Equipment Acquisition				**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**
			TOTAL	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	$0	**$1,377,000**
FUNDING										$0	
Current (Operating Budget)	Specify Fund:			**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**
	Specify Fund:			**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**
	Specify Fund:			**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**
	Specify Fund:			**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**
Debt	Supported by:	Taxes	Gfund	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$225,400**
	Supported by:	Water Rates	Wfund	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**
	Supported by:	Sewer Rates	Sfund	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**
	Supported by:			**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**
	Supported by:			**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**
	Supported by:			**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**
Capital Reserve Fund	Specify Fund:			**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**
	Specify Fund:			**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**
	Specify Fund:			**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**
	Specify Fund:			**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**
Grants	Specify:	**NHDOT**		**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$1,101,600**
	Specify:	**FAA**		**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**
	Specify:	**NHDOT Bureau of Aeronautics**		**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**
	Specify:			**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**
Existing Funds	Specify:	**Water Investment Fees**		**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**
	Specify:	**____ Public Facilities Impact F**		**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**
	Specify:			**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**
Other	Specify:	**Development Exactions**		**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**
	Specify:	Current Allocation		**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$50,000**
	Specify:			**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**
	Specify:			**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**
			TOTAL	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$1,377,000**

2027-2032 Capital Improvement Program

PROJECT REQUEST FORM #1

1. **DEPARTMENT:** Public Works

2. **PROJECT TITLE & NUMBER:** Mechanic St/Slayton Hill Rd/Mascoma St Intersection Reconstruction

3. **PURPOSE OF PROJECT REQUEST FORM:** New Project

4. **DEPARTMENT PRIORITY:** Improve Efficiency

5. **LOCATION:** Mechanic Street/Slayton Hill Road/Mascoma St. Intersection

6. **PROJECT DESCRIPTION/JUSTIFICATION:** Improvements to Mechanic Street have been in the State's 10-year plan since 1998. An Engineering Study was conducted for the Mechanic Street corridor, from just east of the Interstate 89 Exit 19 southbound ramps to approximately 200-feet east of the High Street intersection at the Mascoma Street bridge, in 2018. Walkabouts, public outreach, and informational meetings were held as part of the study stage to gain public input and select a preferred alternative to present to the State. Due to the cost of the entire corridor project, and lack of funding, the State requested that the City consider separating the project into phases. There are currently two phases included in the 10-year plan. Phase 1 is the Mechanic Street/Mascoma Street/High Street Roundabout project (separate CIP project) and Phase 2 is the Mechanic Street/Slayton Hill Road/Mascoma Street Intersection project.

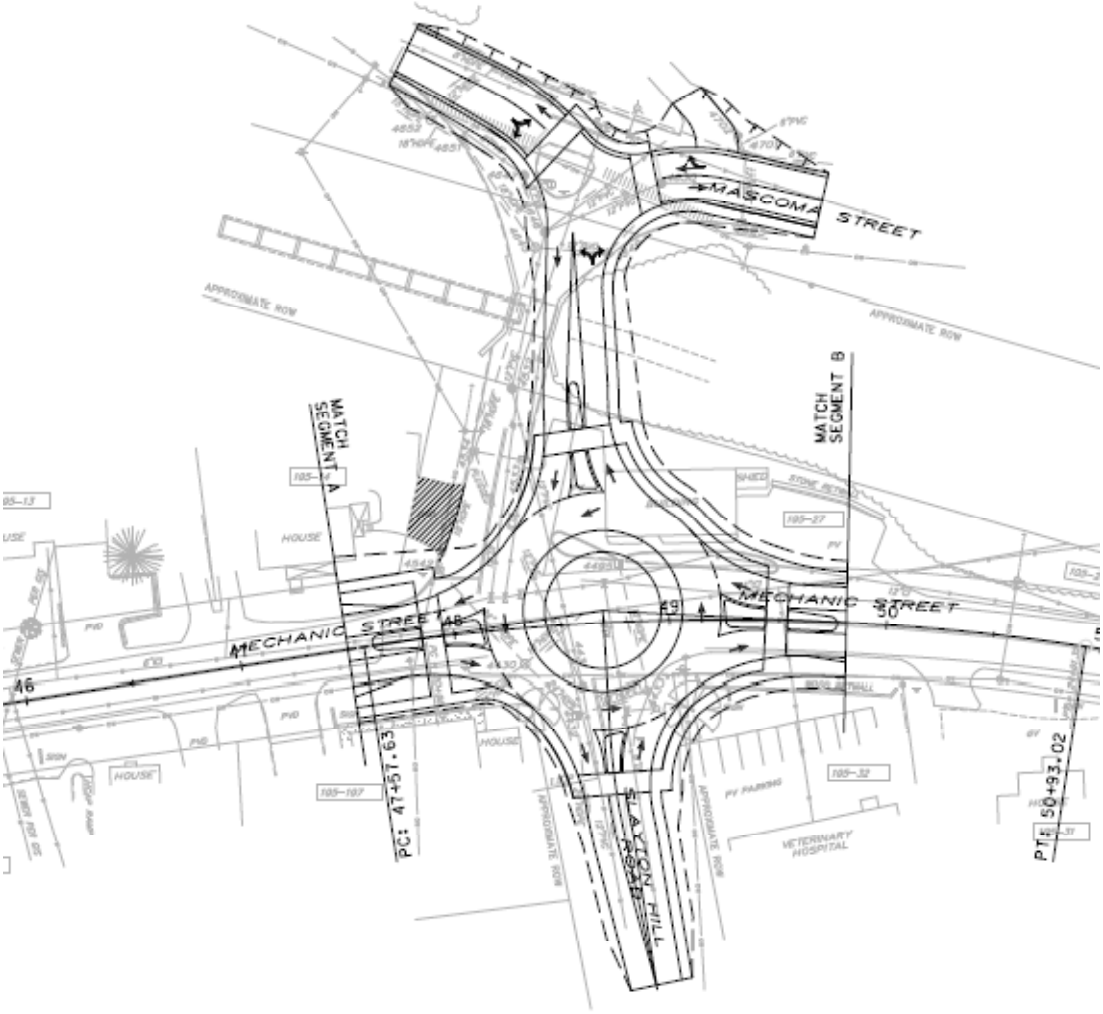
   The NHDOT's 10-year plan includes $5.79M for the Mechanic Street/Slayton Hill Road/Mascoma Street Intersection project. The 2026-2031 CIP reflects the NHDOT's 10-year plan funding including $426K in Engineering/Design costs in 2031 & 2032, $290K in ROW costs in 2032, and $5.08M in construction costs in 2034. The project is municipally managed and receives up to 80% Federal funding by reimbursement.

7. **ONGOING MAINTENANCE AND OPERATING EXPENCES:** Maintenance and operating (O&M) expenses following comprehensive road reconstruction—including new sidewalks, water, sewer, and drainage systems—typically constitute a significant long-term budgetary commitment, often requiring annual investments of **1-2% of the total asset replacement value.** Proactive maintenance is critical, as deferred maintenance can cost 3–5 times more than timely repairs. O&M is included in DPW's budget.

2027-2032 Capital Improvement Program

Slayton Hill at the Mechanic Street Intersection:





2027-2032 Capital Improvement Program

PROJECT REQUEST FORM #2: Mechanic St/Slayton Hill Rd/Mascoma St Intersection Reconstruction

7. FINANCIAL PLAN AND PROJECT SCHEDULE

				2027	2028	2029	2030	2031	2032	2027-2032	2032+
EXPENDITURES											
Design/Engineering				$0	$0	$0	$0	$291,500	$134,270	$425,770	$0
Construction/Implementation				$0	$0	$0	$0	$0	$0	$0	$5,071,447
Property/Equipment Acquisition				$0	$0	$0	$0	$0	$289,205	$289,205	$0
			TOTAL	$0	$0	$0	$0	$291,500	$423,475	$714,975	$5,071,447
FUNDING											
Current (Operating Budget)	Specify Fund:			$0	$0	$0	$0	$0	$0	$0	$0
	Specify Fund:			$0	$0	$0	$0	$0	$0	$0	$0
	Specify Fund:			$0	$0	$0	$0	$0	$0	$0	$0
	Specify Fund:			$0	$0	$0	$0	$0	$0	$0	$0
Debt	Supported by:	Taxes	Gfund	$0	$0	$0	$0	$58,300	$84,695	$142,995	$1,014,289
	Supported by:	Water Rates	Wfund	$0	$0	$0	$0	$0	$0	$0	$0
	Supported by:	Sewer Rates	Sfund	$0	$0	$0	$0	$0	$0	$0	$0
	Supported by:			$0	$0	$0	$0	$0	$0	$0	$0
	Supported by:			$0	$0	$0	$0	$0	$0	$0	$0
	Supported by:			$0	$0	$0	$0	$0	$0	$0	$0
Capital Reserve Fund	Specify Fund:			$0	$0	$0	$0	$0	$0	$0	$0
	Specify Fund:			$0	$0	$0	$0	$0	$0	$0	$0
	Specify Fund:			$0	$0	$0	$0	$0	$0	$0	$0
	Specify Fund:			$0	$0	$0	$0	$0	$0	$0	$0
Grants (80%of $4,712,731)	Specify:	**NHDOT**		$0	$0	$0	$0	$233,200	$338,780	$571,980	$4,057,158
	Specify:	**FAA**			$0			$0		$0	$0
	Specify:	**NHDOT Bureau of Aeronautics**		$0	$0	$0	$0	$0	$0	$0	$0
	Specify:			$0	$0	$0	$0	$0	$0	$0	$0
Existing Funds	Specify:	**Water Investment Fees**		$0	$0	$0	$0	$0	$0	$0	$0
	Specify:	**____ Public Facilities Impact Fe**		$0	$0	$0	$0	$0	$0	$0	$0
	Specify:			$0	$0	$0	$0	$0	$0	$0	$0
Other	Specify:	**____ Private Contributions**		$0	$0	$0	$0	$0	$0	$0	$0
	Specify:			$0	$0	$0	$0	$0	$0	$0	$0
	Specify:			$0	$0	$0	$0	$0	$0	$0	$0
	Specify:			$0	$0	$0	$0	$0	$0	$0	$0
			TOTAL	$0	$0	$0	$0	$291,500	$423,475	$714,975	$5,071,447

PROJECT REQUEST FORM #1

1. **DEPARTMENT:** Public Works

2. **PROJECT TITLE & NUMBER:** Mechanic St Sidewalk - Buckingham Place to Poverty Lane (Segment 1)

3. **PURPOSE OF PROJECT REQUEST FORM:** New Project

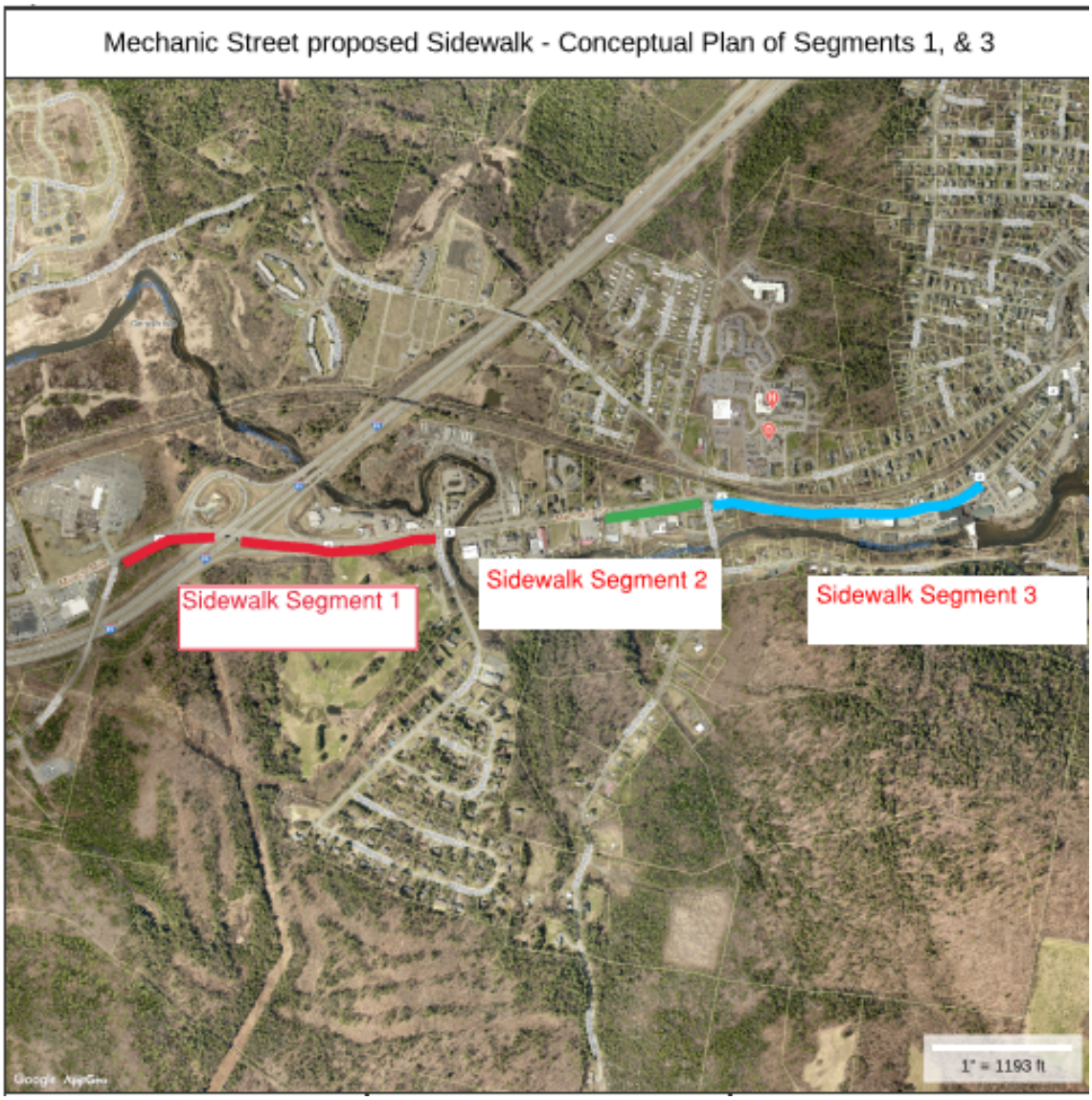
4. **DEPARTMENT PRIORITY:** Improve Efficiency

5. **LOCATION:** Mechanic Street between Buckingham Place to Poverty Lane

6. **PROJECT DESCRIPTION/JUSTIFICATION:** The Master Plan vision calls for sidewalks and bicycle facilities throughout the City. This includes a critical missing link between Buckingham Place and Poverty Lane. The vision also calls for enhancement of pedestrian transportation as well as multimodal transportation. The Mechanic Street Sidewalk project accounts for these visions.

   Currently, the 2027-2032 CIP reflects the funding needed for the Mechanic Street Sidewalk from Buckingham Place to Poverty Lane. The sidewalk is 2,750' long. The City received a FY 2026 Congressionally Directed Spending Request through U.S. Representative Maggie Goodlander's office. The City was informed that $250K of funding was granted.

7. **ONGOING MAINTENANCE AND OPERATING EXPENCES:** Maintenance and operating (O&M) expenses following the construction of new sidewalks typically constitute a significant long-term budgetary commitment, often requiring annual investments of 1-2% of the total asset replacement value**.** Proactive maintenance is critical, as deferred maintenance can cost 3–5 times more than timely repairs. O&M is included in DPW's budget.


Mechanic Street proposed Sidewalk - Conceptual Plan of Segments 1, & 3
Sidewalk Segment 1
Sidewalk Segment 2
Sidewalk Segment 3
1" = 1193 ft

2027-2032 Capital Improvement Program

PROJECT REQUEST FORM #2: Mechanic St Sidewalk - Buckingham Pl to Poverty Ln (Phase 1)

7. FINANCIAL PLAN AND PROJECT SCHEDULE

				2027	2028	2029	2030	2031	2032	2027-2032	2032+
EXPENDITURES											
Design/Engineering				$0	$250,000	$0	$0	$0	$0	$250,000	$33,225
Construction/Implementation				$0	$0	$0	$0	$0	$0	$0	$1,888,166
Property/Equipment Acquisition				$0	$0	$0	$0	$0	$0	$0	$0
			TOTAL	$0	$250,000	$0	$0	$0	$0	$250,000	$1,921,391
FUNDING											
Current (Operating Budget)	Specify Fund:			$0	$0	$0	$0	$0	$0	$0	$0
	Specify Fund:			$0	$0	$0	$0	$0	$0	$0	$0
	Specify Fund:			$0	$0	$0	$0	$0	$0	$0	$0
	Specify Fund:			$0	$0	$0	$0	$0	$0	$0	$0
Debt	Supported by:	Taxes	Gfund	$0	$0	$0	$0	$0	$0	$0	$1,950,918
	Supported by:	Water Rates	Wfund	$0	$0	$0	$0	$0	$0	$0	$0
	Supported by:	Sewer Rates	Sfund	$0	$0	$0	$0	$0	$0	$0	$0
	Supported by:			$0	$0	$0	$0	$0	$0	$0	$0
	Supported by:			$0	$0	$0	$0	$0	$0	$0	$0
	Supported by:			$0	$0	$0	$0	$0	$0	$0	$0
Capital Reserve Fund	Specify Fund:			$0	$0	$0	$0	$0	$0	$0	$0
	Specify Fund:			$0	$0	$0	$0	$0	$0	$0	$0
	Specify Fund:			$0	$0	$0	$0	$0	$0	$0	$0
	Specify Fund:			$0	$0	$0	$0	$0	$0	$0	$0
Grants	Specify:	NHDOT		$0	$0	$0	$0	$0	$0	$0	$0
	Specify:	FAA		$0	$0	$0	$0	$0	$0	$0	$0
	Specify:	NHDOT Bureau of Aeronautics		$0	$0	$0	$0	$0	$0	$0	$0
	Specify:	Congressionally Directed Spending Request		$0	$250,000	$0	$0	$0	$0	$250,000	$0
Existing Funds	Specify:	Water Investment Fees		$0	$0	$0	$0	$0	$0	$0	$0
	Specify:	____ Public Facilities Impact Fees		$0	$0	$0	$0	$0	$0	$0	$0
	Specify:			$0	$0	$0	$0	$0	$0	$0	$0
Other	Specify:	____ Private Contributions		$0	$0	$0	$0	$0	$0	$0	$0
	Specify:			$0	$0	$0	$0	$0	$0	$0	$0
	Specify:			$0	$0	$0	$0	$0	$0	$0	$0
	Specify:			$0	$0	$0	$0	$0	$0	$0	$0
			TOTAL	$0	$250,000	$0	$0	$0	$0	$250,000	$1,950,918

2027-2032 Capital Improvement Program

PROJECT REQUEST FORM #1

1. **DEPARTMENT:** Public Works

2. **PROJECT TITLE & NUMBER:** Mechanic Street Sidewalk – Rivermill Bus Stop to Slayton Hill Road (Phase 3)

3. **PURPOSE OF PROJECT REQUEST FORM:** New Project

4. **DEPARTMENT PRIORITY:** Improve Efficiency

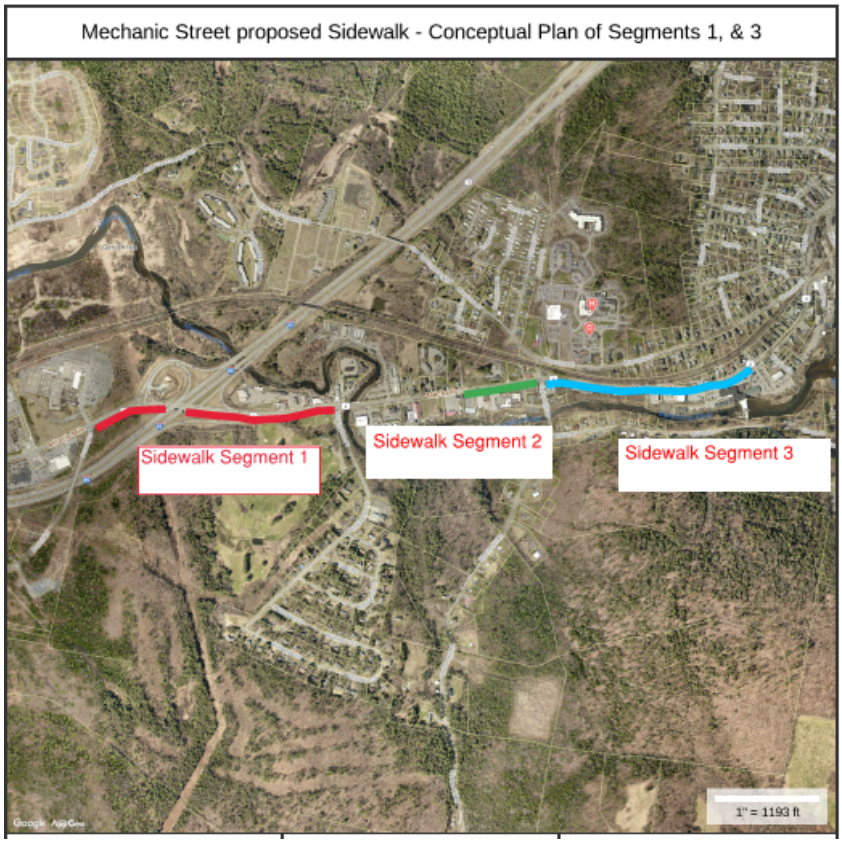
5. **LOCATION:** Mechanic Street between Rivermill Bus Stop and Slayton Hill Road

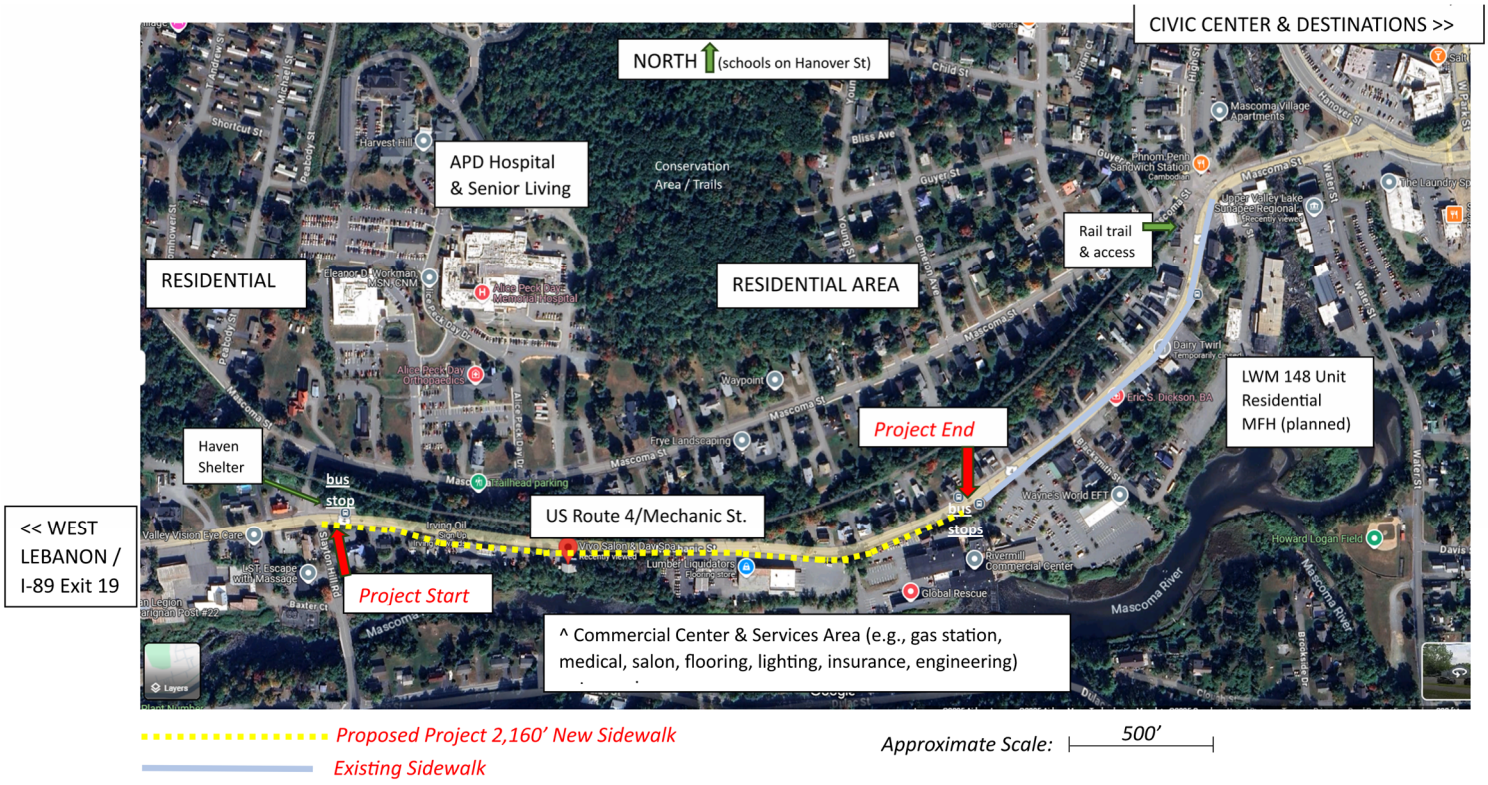
6. **PROJECT DESCRIPTION/JUSTIFICATION:** The Master Plan vision calls for sidewalks and bicycle facilities throughout the City. This includes a critical missing link between the Rivermill Bus Stop and Slayton Hill Road along Mechanic Street. The vision also calls for enhancement of pedestrian transportation as well as multimodal transportation. The Mechanic Street Sidewalk project accounts for these visions.

   The project extends a 2,160' sidewalk along Mechanic Street from the Rivermill bus stop shelter to Slayton Hill Road. The City submitted a Transportation Alternatives Program (TAP) Application to the New Hampshire Department of Transportation (NHDOT) on January 24, 2025. The NHDOT and RPC completed scoring of the TAP projects in the spring of 2025. The Mechanic Street Sidewalk – Rivermill Bus Stop to Slayton Hill Road project was the highest scored project in the State and is included in the draft Ten Tear Plan. Total funding listed in the Draft Ten Year Plan is $2,518,682. The NHDOT pays for 80% of the project and the City pays for 20% of the project. Funding is not guaranteed until the Governor signs the plan in Summer of 2026.

7. **ONGOING MAINTENANCE AND OPERATING EXPENCES:** Maintenance and operating (O&M) expenses following the construction of new sidewalks typically constitute a significant long-term budgetary commitment, often requiring annual investments of **1-2% of the total asset replacement value.** Proactive maintenance is critical, as deferred maintenance can cost 3–5 times more than timely repairs. O&M is included in DPW's budget.

2027-2032 Capital Improvement Program





2027-2032 Capital Improvement Program

PROJECT REQUEST FORM #2: Phase 3 - Mechanic Street Sidewalk from Rivermill Bus Stop to Slayton Hill Road

7. FINANCIAL PLAN AND PROJECT SCHEDULE

				2027	2028	2029	2030	2031	2032	2027-2032	2033+
EXPENDITURES											
Design/Engineering				$152,230	$0	$71,110	$0	$0	$0	$223,340	$0
Construction/Implementation				$0	$0	$0	$2,227,075	$0	$0	$2,227,075	$0
Property/Equipment Acquisition				$0	$0	$68,274	$0	$0	$0	$68,274	$0
			TOTAL	$152,230	$0	$139,384	$2,227,075	$0	$0	$2,518,689	$0
FUNDING											
Current (Operating Budget)	Specify Fund:			$0	$0	$0	$0	$0	$0	$0	$0
	Specify Fund:			$0	$0	$0	$0	$0	$0	$0	$0
	Specify Fund:			$0	$0	$0	$0	$0	$0	$0	$0
	Specify Fund:			$0	$0	$0	$0	$0	$0	$0	$0
Debt	Supported by:	Taxes	Gfund	$0	$0	$0	$0	$0	$0	$0	
	Supported by:	Water Rates	Wfund	$0	$0	$0	$0	$0	$0	$0	$0
	Supported by:	Sewer Rates	Sfund	$0	$0	$0	$0	$0	$0	$0	$0
	Specify:	Transportation Alternatives Program (TAP)		$121,784	$0	$111,507	$1,781,660	$0	$0	$2,014,951	$0
Existing Funds	Specify:	Water Investment Fees		$0	$0	$0	$0	$0	$0	$0	$0
	Specify:	____ Public Facilities Impact Fee		$0	$0	$0	$0	$0	$0	$0	$0
	Specify:			$0	$0	$0	$0	$0	$0	$0	$0
Other	Specify:	____ Private Contributions		$0	$0	$0	$0	$0	$0	$0	$0
	Specify:	Downtown TIF		$30,446	$0	$27,877	$445,415	$0	$0	$503,738	$0
	Specify:			$0	$0	$0	$0	$0	$0	$0	$0
	Specify:			$0	$0	$0	$0	$0	$0	$0	$0
			TOTAL	$152,230	$0	$139,384	$2,227,075	$0	$0	$2,518,689	$0

2027 - 2032 Capital Improvement Program

PROJECT REQUEST FORM #1

1. **DEPARTMENT:** Public Works

2. **PROJECT TITLE:** Hanover Street Improvements – Road / Sidewalks / Curbing / Drainage / Sewer / Water

3. **PURPOSE OF PROJECT REQUEST FORM:** New Project including Infrastructure Improvements

4. **DEPARTMENT PRIORITY:** Improve Efficiency

5. **LOCATION:** Hanover Street from Route 120 to Mascoma Street

6. **PROJECT DESCRIPTION/JUSTIFICATION:** A visioning study was completed in 2016 for the downtown area including improvements to Hanover Street.

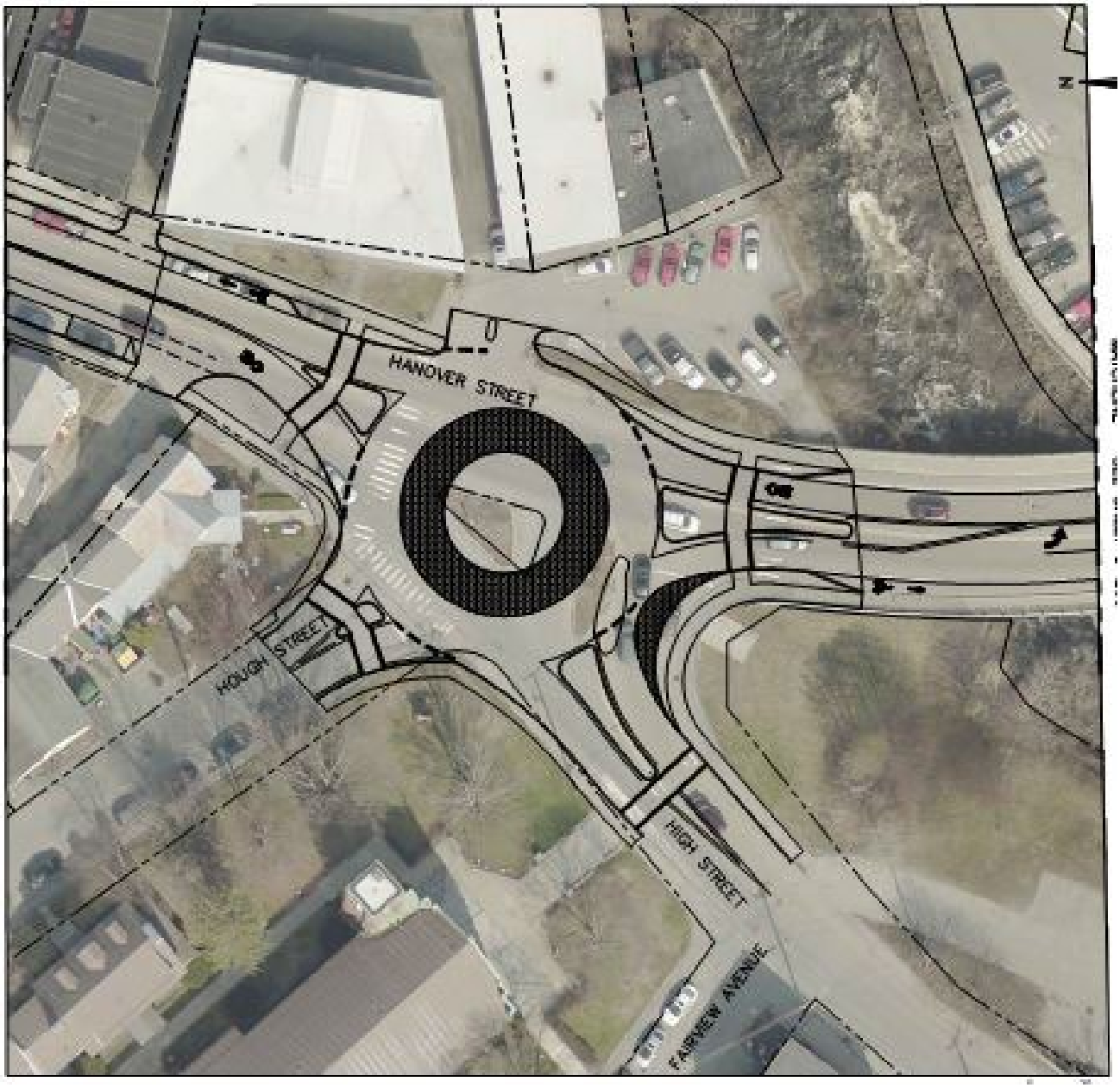
   In 2020, several design options to Hanover Street were evaluated including alternatives for the intersections of Route 120, High Street, and Mascoma Street at the entrance to the Fire Station. Proposed improvements to Hanover Street will include the design and reconstruction of the roadway, drainage infrastructure, water and sewer infrastructure, pedestrian and biking accommodations, landscaping, and streetlights.

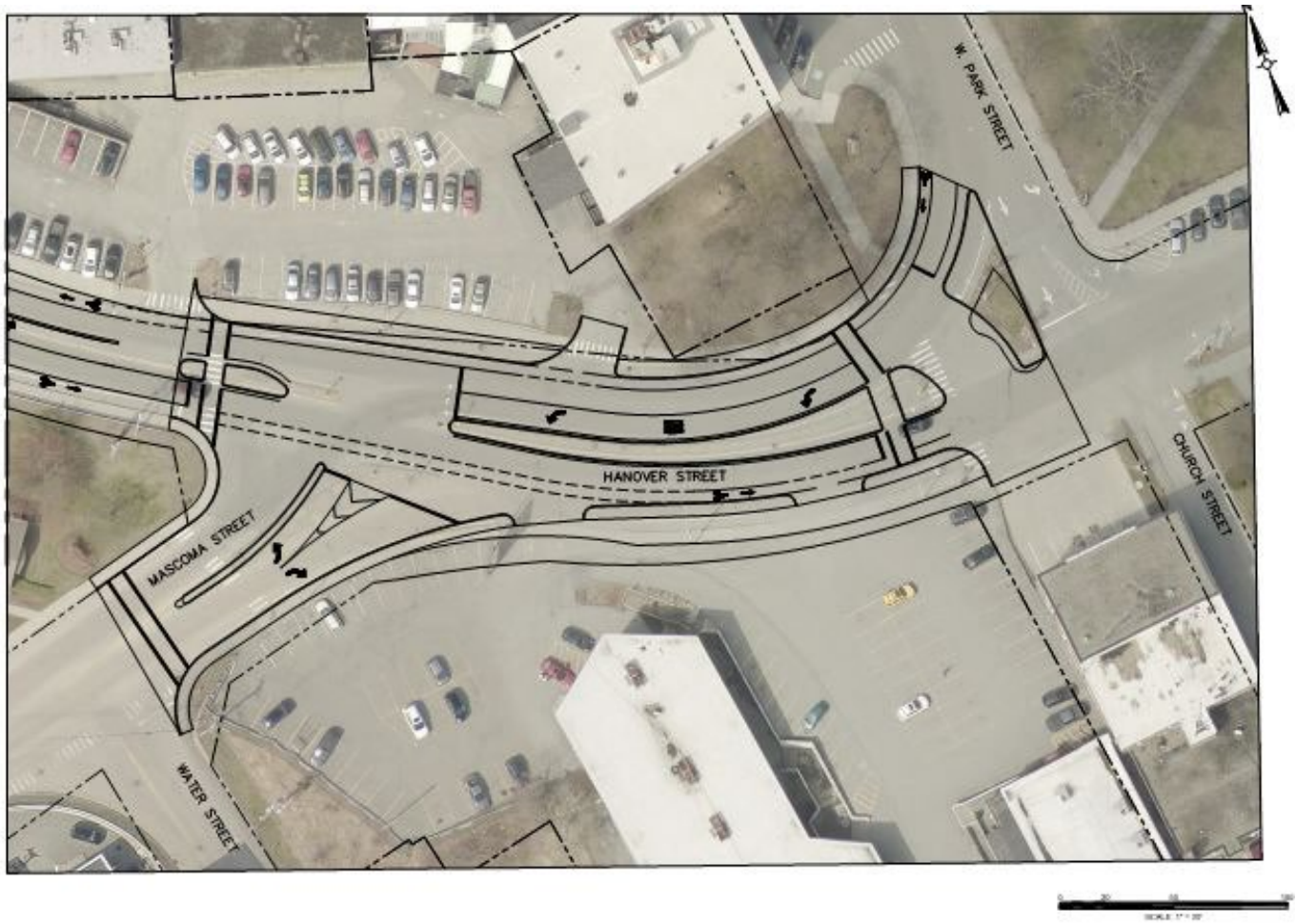
   The construction of a reconfigured intersection at Route 120 and Hanover Street is now included in the NHDOT's Exit 18 reconstruction project. The Hanover Street improvements project includes the reconstruction of Hanover Street from the limits of NHDOT's improvements at the intersection of Route 120 to High Street using the complete street cross section, the construction of a new roundabout at the intersection of Hanover Street and High Street, and the realignment of the intersection of Hanover Street and Mascoma Street.

   On March 20, 2023, the UVLSRPC TAC preliminarily ranked the Hanover Street reconstruction project as their **#1 regional priority** for inclusion in the NHDOT's Ten-Year Transportation Plan. The NHDOT's Project Review Committee provided summary recommendations for projects proposed by the UVLSRPC for the 2027-2036 NHDOT Ten Year Transportation Plan. The project is recommended to commence with Preliminary Engineering in 2030, with ROW planned in 2034 and Construction beginning in 2036. The proposed project would use $5,353,652 (80% of $6,692,065 total) of the regional allocation for the 2027-2036 Ten Year Transportation Plan. The project also includes replacement of the water and sewer infrastructure which are not NHDOT eligible. The funding breakdown for the eligible portion of the NHDOT project as estimated:

$5,353,652 (Federal funds) + $1,338,959 (City funds) = $6,692,611 (total Ten year Plan project costs).
Total project cost, including water and sewer, is estimated to be $7.36M consisting of $6.649M for Construction, $648K for Design, and $63K for Property/Equipment Acquisition.

7. **ONGOING MAINTENANCE AND OPERATING EXPENCES:** Maintenance and operating (O&M) expenses following comprehensive road reconstruction—including new sidewalks, water, sewer, and drainage systems—typically constitute a significant long-term budgetary commitment, often requiring annual investments of 1-2% of the total asset replacement value**.** Proactive maintenance is critical, as deferred maintenance can cost 3–5 times more than timely repairs. O&M is included in DPW's budget.


HANOVER STREET
HOUGH STREET
HIGH STREET
FAIRVIEW AVENUE
N


W. PARK STREET
HANOVER STREET
CHURCH STREET
MASCOMA STREET
WATER STREET

2027 - 2032 Capital Improvement Program

PROJECT REQUEST FORM #2 Hanover Street Reconstruction and Improvements

7. FINANCIAL PLAN AND PROJECT SCHEDULE

			Previous appropriation:	2027	2028	2029	2030	2031	2032	2027-2032	2032+
EXPENDITURES			$355,000.00								
Design/Engineering				$0	$0	$0	$648,260	$0	$0	$648,260	$0
Construction/Implementation				$0	$0	$0	$0	$0	$0	$0	$7,292,972
Property/Equipment Acquisition				$0	$0	$0	$0	$0	$0	$0	$62,652
			TOTAL	$0	$0	$0	$648,260	$0	$0	$648,260	$7,355,624
FUNDING										$0	
Current (Operating Budget)	Specify Fund:			$0	$0	$0	$0	$0	$0	$0	$0
	Specify Fund:			$0	$0	$0	$0	$0	$0	$0	$0
	Specify Fund:			$0	$0	$0	$0	$0	$0	$0	$0
	Specify Fund:			$0	$0	$0	$0	$0	$0	$0	$0
Debt	Supported by:	Taxes 35% Gfund		$0	$0	$0	$45,378	$0	$0	$45,378	$882,204
	Supported by:	Water Rates 30% Wfund		$0	$0	$0	$38,896	$0	$0	$38,896	$756,175
	Supported by:	Sewer Rates 35% Sfund		$0	$0	$0	$45,378	$0	$0	$45,378	$882,204
	Supported by:			$0	$0	$0	$0	$0	$0	$0	$0
Grants	Specify:	NHDOT (80% of 10-Year Plan Funding)		$0	$0	$0	$518,608	$0	$0	$518,608	$4,835,041
	Specify:	FAA		$0	$0	$0	$0	$0	$0	$0	$0
	Specify:	NHDOT Bureau of Aeronautics		$0	$0	$0	$0	$0	$0	$0	$0
	Specify:			$0	$0	$0	$0	$0	$0	$0	$0
Existing Funds	Specify:	Water Investment Fees		$0	$0	$0	$0	$0	$0	$0	$0
	Specify:	____ Public Facilities Impact Fees		$0	$0	$0	$0	$0	$0	$0	$0
	Specify:			$0	$0	$0	$0	$0	$0	$0	$0
Other	Specify:	____ Private Contributions		$0	$0	$0	$0	$0	$0	$0	$0
	Specify:			$0	$0	$0	$0	$0	$0	$0	$0
	Specify:			$0	$0	$0	$0	$0	$0	$0	$0
	Specify:			$0	$0	$0	$0	$0	$0	$0	$0
			TOTAL	$0	$0	$0	$648,260	$0	$0	$648,260	$7,355,624

2027-2032 Capital Improvement Program

PROJECT REQUEST FORM #1

This form includes basic information for each department project request. It must be completed for each project whether for a **NEW PROJECT**, a **MODIFICATION OF AN EXISTING PROJECT**, **CONTINUATION OF AN ON-GOING PROJECT**, or **CANCELLATION OF A PREVIOUSLY APPROVED PROJECT**.

See accompanying instructions.

1. **DEPARTMENT:** Public Works

2. **PROJECT TITLE & NUMBER:** School St / Meriden Rd Safety Improvements

3. **PURPOSE OF PROJECT REQUEST FORM:** New Project

4. **DEPARTMENT PRIORITY:** Improve Efficiency

5. **LOCATION:** Start at the School Street - Messenger Street intersection and extend to the Goodwin Park Entrance

6. **PROJECT DESCRIPTION/JUSTIFICATION:** The intent of the "Meriden Road Safety Improvements" project is to construct a 5-foot wide, approximately 700-foot-long paved shoulder to serve bicycle lane from where Messenger Street connects to School Street (Meriden Road) and extends down to the Goodwin Park entrance on Meriden Road. This shoulder widening would be as wide as possible while minimizing impacts to Right-Of-Way (ROW), and costs such as extensive retaining walls or slope cut.

   NH Route 120, Meriden Rd., is a north-south major collector through Lebanon with an AADT of approximately 3,550. This area primarily serves significant through traffic to downtown Lebanon and surrounding residential neighborhoods. The existing typical section includes two 11-foot-wide travel lanes, 6" to 3' shoulders going southbound and 1 foot to 4-foot shoulders in the northbound direction. The posted speed limit is 25 mph and pedestrian, and bicycle facilities exist north of the Messenger St. /Meriden Rd. intersection. Guardrail exists on the southbound side of the road for the length of the project, with breaks for driveway openings. Overhead utilities, a closed drainage system and City water services are located on the northbound side.

   Existing connectivity in this area is lacking. The existing sidewalk and bike lane ends north of the proposed project location. Many residents living in-town wish to access Goodwin Park and many residents that live just outside of the sidewalk area wish to access the amenities of downtown using alternative modes of transportation. Connecting the southeast side of downtown Lebanon will also allow

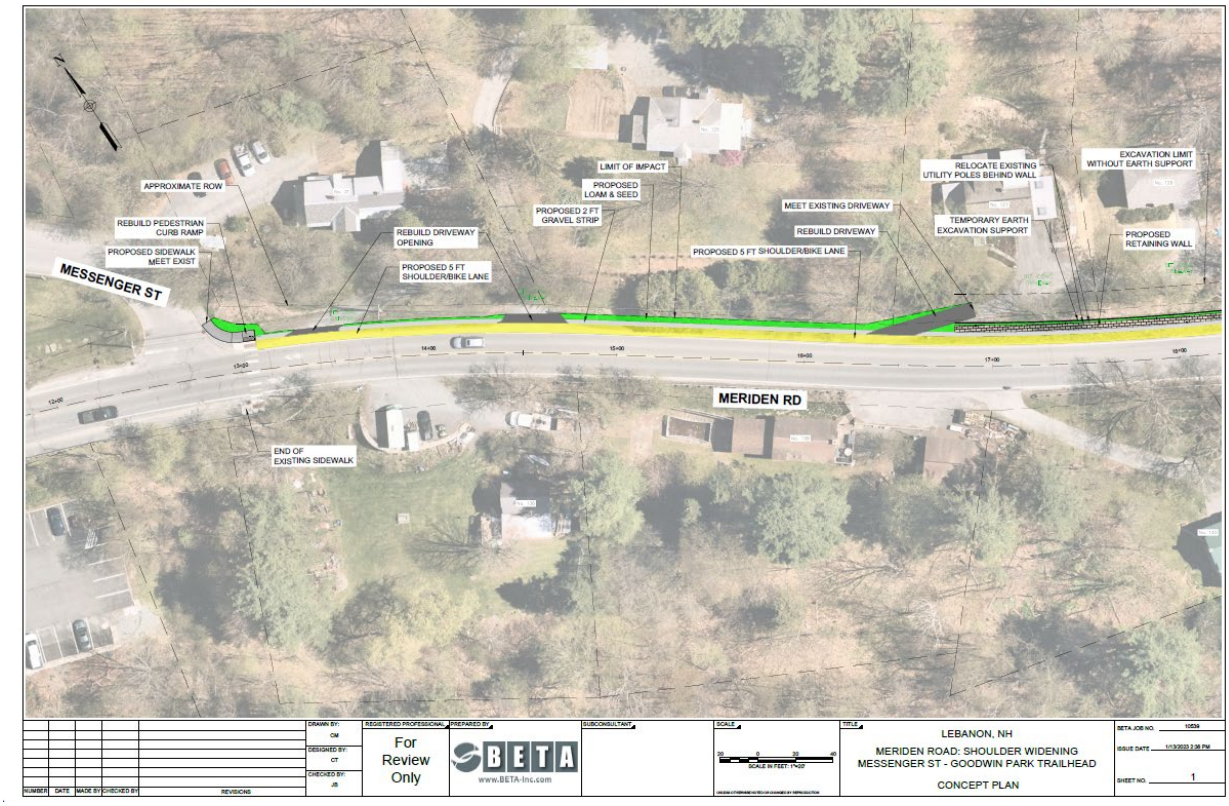
residents to access the Goodwin Park trail system and thus Storrs Hill Ski area safely without having to use their vehicles.

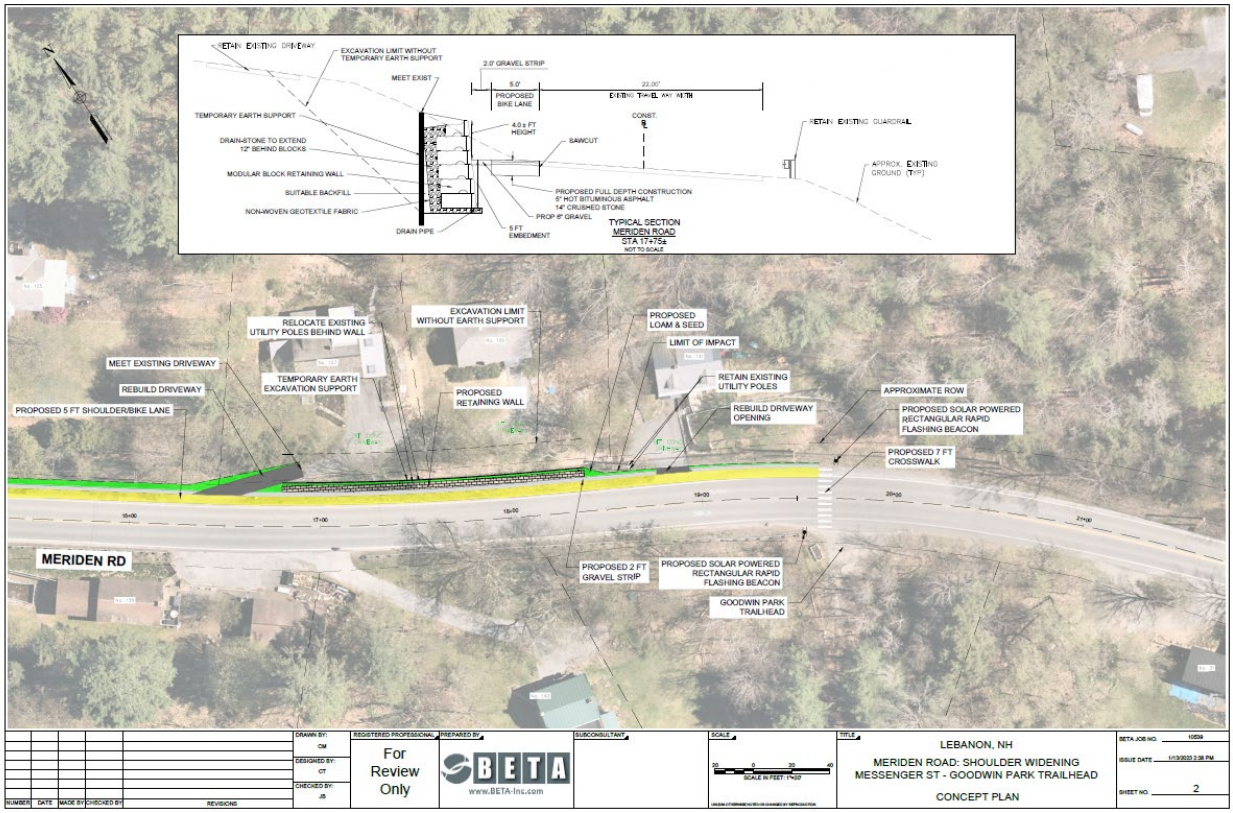
Improvements and widening to the eastern shoulder of Meriden Rd. from Messenger St. to the entrance of Goodwin Park is recommended versus the western shoulder as this is the most feasible side to provide a connection from the existing pedestrian and bike facilities along Meriden Rd. Given existing roadway features, alignment, dimensions, and the local terrain, it is not economically viable to add pedestrian and bike accommodations on both sides of the road without extensive impacts to abutters. The proposed construction on the east side of Meriden Rd. will require full depth box widening, excavation, utility pole relocation, a retaining wall, surface restoration and shoulder restriping to accommodate a 5-foot bike lane and 2-foot clear zone. This connection from Messenger St. to Goodwin Park will provide a safer and more inviting experience for bicyclists.

The *Walk Bike Ride Lebanon Plan* (WBRL; final draft, May 2023) identified this project as a priority. The WBRL plan includes a more detailed description of engineering review, and conceptual project costs that are enclosed here. Total project cost (including engineering, survey, permitting, right of way and construction) is approximately $456,000 in 2023 dollars and $624,000 in 2035 dollars using 2.8% inflation per year. 20% indirect costs have been added to the project costs for administration and construction engineering. It assumes LPA process and associated cost escalation, should the project be funded in part with a federal grant.

7. **ONGOING MAINTENANCE AND OPERATING EXPENCES:** Maintenance and operating (O&M) expenses following road widening typically constitute a significant long-term budgetary commitment, often requiring annual investments of 1-2% of the total asset replacement value**.** Proactive maintenance is critical, as deferred maintenance can cost 3–5 times more than timely repairs. O&M is included in DPW's budget.

Concept Plan:


APPROXIMATE ROW
REBUILD PEDESTRIAN CURB RAMP
PROPOSED SIDEWALK MEET EXIST
MESSENGER ST
REBUILD DRIVEWAY OPENING
PROPOSED 5 FT SHOULDER/BIKE LANE
LIMIT OF IMPACT
PROPOSED LOAM & SEED
PROPOSED 2 FT GRAVEL STRIP
MEET EXISTING DRIVEWAY
REBUILD DRIVEWAY
PROPOSED 5 FT SHOULDER/BIKE LANE
RELOCATE EXISTING UTILITY POLES BEHIND WALL
TEMPORARY EARTH EXCAVATION SUPPORT
EXCAVATION LIMIT WITHOUT EARTH SUPPORT
PROPOSED RETAINING WALL
MERIDEN RD
END OF EXISTING SIDEWALK
DRAWN BY: CM
DESIGNED BY: CT
CHECKED BY: JS
REGISTERED PROFESSIONAL
PREPARED BY
For Review Only
BETA
www.BETA-Inc.com
SUBCONSULTANT
SCALE
SCALE IN FEET: 1"=20'
TITLE
LEBANON, NH
MERIDEN ROAD: SHOULDER WIDENING
MESSENGER ST - GOODWIN PARK TRAILHEAD
CONCEPT PLAN
BETA JOB NO. 10539
ISSUE DATE 1/13/2023 2:38 PM
SHEET NO. 1
NUMBER DATE MADE BY CHECKED BY REVISIONS


RETAIN EXISTING DRIVEWAY
EXCAVATION LIMIT WITHOUT TEMPORARY EARTH SUPPORT
MEET EXIST
2.0' GRAVEL STRIP
5.0' PROPOSED BIKE LANE
22.00' EXISTING TRAVEL WAY WIDTH
TEMPORARY EARTH SUPPORT
4.0± FT HEIGHT
SAWCUT
CONST. ℄
RETAIN EXISTING GUARDRAIL
DRAIN-STONE TO EXTEND 12" BEHIND BLOCKS
MODULAR BLOCK RETAINING WALL
SUITABLE BACKFILL
NON-WOVEN GEOTEXTILE FABRIC
APPROX. EXISTING GROUND (TYP)
PROPOSED FULL DEPTH CONSTRUCTION
5" HOT BITUMINOUS ASPHALT
14" CRUSHED STONE
PROP 6" GRAVEL
DRAIN PIPE
5 FT EMBEDMENT
TYPICAL SECTION
MERIDEN ROAD
STA 17+75±
NOT TO SCALE
RELOCATE EXISTING UTILITY POLES BEHIND WALL
EXCAVATION LIMIT WITHOUT EARTH SUPPORT
PROPOSED LOAM & SEED
LIMIT OF IMPACT
MEET EXISTING DRIVEWAY
TEMPORARY EARTH EXCAVATION SUPPORT
REBUILD DRIVEWAY
PROPOSED RETAINING WALL
RETAIN EXISTING UTILITY POLES
REBUILD DRIVEWAY OPENING
APPROXIMATE ROW
PROPOSED SOLAR POWERED RECTANGULAR RAPID FLASHING BEACON
PROPOSED 5 FT SHOULDER/BIKE LANE
PROPOSED 7 FT CROSSWALK
MERIDEN RD
PROPOSED 2 FT GRAVEL STRIP
PROPOSED SOLAR POWERED RECTANGULAR RAPID FLASHING BEACON
GOODWIN PARK TRAILHEAD
DRAWN BY: CM
DESIGNED BY: CT
CHECKED BY: JS
REGISTERED PROFESSIONAL
PREPARED BY
For Review Only
BETA
www.BETA-Inc.com
SUBCONSULTANT
SCALE
SCALE IN FEET: 1"=20'
TITLE
LEBANON, NH
MERIDEN ROAD: SHOULDER WIDENING
MESSENGER ST - GOODWIN PARK TRAILHEAD
CONCEPT PLAN
BETA JOB NO. 10539
ISSUE DATE 1/13/2023 2:38 PM
SHEET NO. 2
NUMBER DATE MADE BY CHECKED BY REVISIONS

2027-2032 Capital Improvement Program

PROJECT REQUEST FORM #2: School St / Meriden Rd Safety Improvements

7. FINANCIAL PLAN AND PROJECT SCHEDULE

				2027	2028	2029	2030	2031	2032	2027-2032	2033+
EXPENDITURES											
Design/Engineering				$0	$0	$0	$0	$0	$0	$0	$ 90,550.00
Construction/Implementation				$0	$0	$0	$0	$0	$0	$0	$ 523,800.00
Property/Equipment Acquisition				$0	$0	$0	$0	$0	$0	$0	$ 9,060.00
			TOTAL	$0	$0	$0	$0	$0	$0	$0	$ 623,410.00
FUNDING											
Current (Operating Budget)	Specify Fund:			$0	$0	$0	$0	$0	$0	$0	$ -
	Specify Fund:			$0	$0	$0	$0	$0	$0	$0	$ -
	Specify Fund:			$0	$0	$0	$0	$0	$0	$0	$ -
	Specify Fund:			$0	$0	$0	$0	$0	$0	$0	$ -
Debt	Supported by:		Taxes Gfund	$0	$0	$0	$0	$0	$0	$0	$ 623,410.00
	Supported by:		Water Rates Wfund	$0	$0	$0	$0	$0	$0	$0	$ -
	Supported by:		Sewer Rates Sfund	$0	$0	$0	$0	$0	$0	$0	$ -
	Supported by:			$0	$0	$0	$0	$0	$0	$0	$ -
	Supported by:			$0	$0	$0	$0	$0	$0	$0	$ -
	Supported by:			$0	$0	$0	$0	$0	$0	$0	$ -
Capital Reserve Fund	Specify Fund:			$0	$0	$0	$0	$0	$0	$0	$ -
	Specify Fund:			$0	$0	$0	$0	$0	$0	$0	$ -
	Specify Fund:			$0	$0	$0	$0	$0	$0	$0	$ -
	Specify Fund:			$0	$0	$0	$0	$0	$0	$0	$ -
Grants	Specify:	**NHDOT (TBD)**		$0	$0	$0	$0	$0	$0	$0	$ -
	Specify:			$0	$0	$0	$0	$0	$0	$0	$ -
	Specify:			$0	$0	$0	$0	$0	$0	$0	$ -
	Specify:			$0	$0	$0	$0	$0	$0	$0	$ -
Existing Funds	Specify:	**Water Investment Fees**		$0	$0	$0	$0	$0	$0	$0	$ -
	Specify:	**____ Public Facilities Impact Fees**		$0	$0	$0	$0	$0	$0	$0	$ -
	Specify:			$0	$0	$0	$0	$0	$0	$0	$ -
Other	Specify:	**____ Private Contributions**		$0	$0	$0	$0	$0	$0	$0	$ -
	Specify:			$0	$0	$0	$0	$0	$0	$0	$ -
	Specify:			$0	$0	$0	$0	$0	$0	$0	$ -
	Specify:			$0	$0	$0	$0	$0	$0	$0	$ -
			TOTAL	$0	$0	$0	$0	$0	$0	$0	$ 623,410.00

2027-2032 Capital Improvement Program

PROJECT REQUEST FORM #1

This form includes basic information for each department project request. It must be completed for each project whether for a **NEW PROJECT**, a **MODIFICATION OF AN EXISTING PROJECT**, **CONTINUATION OF AN ON-GOING PROJECT**, or **CANCELLATION OF A PREVIOUSLY APPROVED PROJECT**.

1. **DEPARTMENT:** Public Works

2. **PROJECT TITLE:** Great Brook Road Bridge

3. **PURPOSE OF PROJECT REQUEST FORM:** New Project to replace red-listed bridge.

4. **DEPARTMENT PRIORITY:** Mandatory (RED-LISTED BRIDGE)

5. **LOCATION:** Great Brook Road near the intersection of Meriden Road

6. **PROJECT DESCRIPTION/JUSTIFICATION:** The Great Brook Road Bridge is a single-span, one-lane bridge located along Great Brook Road, approximately 350' west of the intersection with Meriden Road/NH Route 120. The bridge was originally constructed in 1936, and crosses over Great Brook. Since 1936, portions of the bridge have been rehabilitated or replaced, including a superstructure replacement in 1993. The existing superstructure consists of longitudinal steel girders supporting a transverse laminated wood deck.

   The bridge was placed on the NHDOT Red List following a 2024 inspection by NHDOT. The inspection report rated the deck, superstructure, and substructure at condition level 4 (poor). The most recent bridge inspection was performed by NHDOT on October 30, 2025, and the condition level of both the superstructure and substructure was reduced to 3 (serious). In a critical deficiency letter dated January 23, 2026, NHDOT recommended the City consult professional engineering services for an updated load rating of the bridge, which is currently underway.

   The 2027-2032 CIP includes funding for full replacement of the existing superstructure and substructure. The bridge replacement assumes a new two-lane bridge with a slightly longer span than the existing structure, with new abutments and wingwalls having footings protected from scour and frost.

   The project would require closure of the road at the bridge site during construction. Estimated construction duration would be 3-4 months, with significant lead time to

procure materials such as bridge components and rails. The bridge will be designed based on a 120-year lifecycle with proper annual maintenance, bridge preservation, and full rehabilitation after 60 years.

The 2027-2032 CIP includes $460K for design and engineering in 2028, $25K for property acquisition in 2029, and $2.76M for construction in 2030.

7. **ONGOING MAINTENANCE AND OPERATING EXPENCES:** Maintenance and operating (O&M) expenses following bridge reconstruction typically constitute a significant long-term budgetary commitment, often requiring annual investments of 1-2% of the total asset replacement value**.** Proactive maintenance is critical, as deferred maintenance can cost 3–5 times more than timely repairs. O&M is included in DPW's budget.





2027-2032 Capital Improvement Program

PROJECT REQUEST FORM #2: Great Brook Road Bridge Replacement

8. FINANCIAL PLAN AND PROJECT SCHEDULE

					2027-2032	2033+
EXPENDITURES						
Design/Engineering					**$0**	**$460,000**
Construction/Implementation					**$0**	**$2,760,000**
Property/Equipment Acquisition					**$0**	**$25,000**
				TOTAL	**$0**	**$3,245,000**
FUNDING						
Current (Operating Budget)	Specify Fund:				$0	**$0**
	Specify Fund:				$0	**$0**
	Specify Fund:				$0	**$0**
	Specify Fund:				$0	**$0**
Debt	Supported by:		Taxes	Gfund	**$0**	**$3,245,000**
	Supported by:		Water Rates	Wfund	$0	**$0**
	Supported by:		Sewer Rates	Sfund	$0	**$0**
	Supported by:				$0	**$0**
	Supported by:				$0	**$0**
	Supported by:				$0	**$0**
Capital Reserve Fund	Specify Fund:	Fire Department Vehicle/Equipment			$0	**$0**
	Specify Fund:				$0	**$0**
	Specify Fund:				$0	**$0**
	Specify Fund:				$0	**$0**
Grants	Specify:	**NHDOT**			$0	**$0**
	Specify:	**FAA**			$0	**$0**
	Specify:	**NHDOT Bureau of Aeronautics**			$0	**$0**
	Specify:				$0	**$0**
Existing Funds	Specify:	**Water Investment Fees**			$0	**$0**
	Specify:	**____ Public Facilities Impact Fees**			$0	**$0**
	Specify:				$0	**$0**
Other	Specify:	**____ Private Contributions**			$0	**$0**
	Specify:				$0	**$0**
	Specify:				$0	**$0**
	Specify:				$0	**$0**
				TOTAL	**$0**	**$3,245,000**

2027-2032 Capital Improvement Program

PROJECT REQUEST FORM #1

1. DEPARTMENT: Public Works

2. PROJECT TITLE & NUMBER: West Lebanon Main Street Improvements
Phase 2: Bridge Street Roundabout

3. PURPOSE OF PROJECT REQUEST FORM: New Project

4. DEPARTMENT PRIORITY: Improve Efficiency

5. LOCATION: West Lebanon Main Street/Bridge Street Intersection

6. PROJECT DESCRIPTION/JUSTIFICATION:

The need and support for streetscape improvements along Main Street dates back several decades. In a West Lebanon Main Street - Market Perspectives Report prepared in 2008, retailers commented on the need for streetscape improvements and traffic quieting among other observations for the area. The West Lebanon CBD chapter (Ch. 4) of the 2012 Master Plan includes several references to the need and desire to improve Main Street:

- Redevelopment of single-use sites, along with traffic calming, access management, streetscape and pedestrian improvements, and related amenities, would enhance the vitality and economic viability of the West Lebanon Central Business District. [4 | B-1]

- Invest in the downtown by constructing and upgrading the infrastructure, such as including centrally located public parking, sidewalks, decorative street lighting, benches, public transit shelters, and parks, street trees, and other streetscape amenities. [4.1.S3]

- Consider separating sidewalks from the roadway with landscape buffers and ensure that the sidewalk network and streetscape improvements are well maintained and interconnected. [4.1.S19]

During the 2019 West Lebanon Village Visioning Charrette, a “better streetscape” was the most cited suggestion for what would make downtown West Lebanon better. In addition, as part of the pre-charrette survey, more than 71% of respondents expressed support for relocating some of the on-street parking on Main Street to another nearby location if doing so enabled safety and streetscape improvements, such as street trees, sitting areas, wider sidewalks, and

accessibility improvements. Survey respondents also commented that improving the condition of Main Street could help people take more pride in their community and enjoy spending more time there.

In March 2022, the City submitted the West Lebanon Main Street Improvements project to Congresswoman Kuster's Office for possible funding through the Congressionally Directed Community Project Funding program. In March 2023, the Main Street Improvements project received a Community Project Funding award of $2.329M.

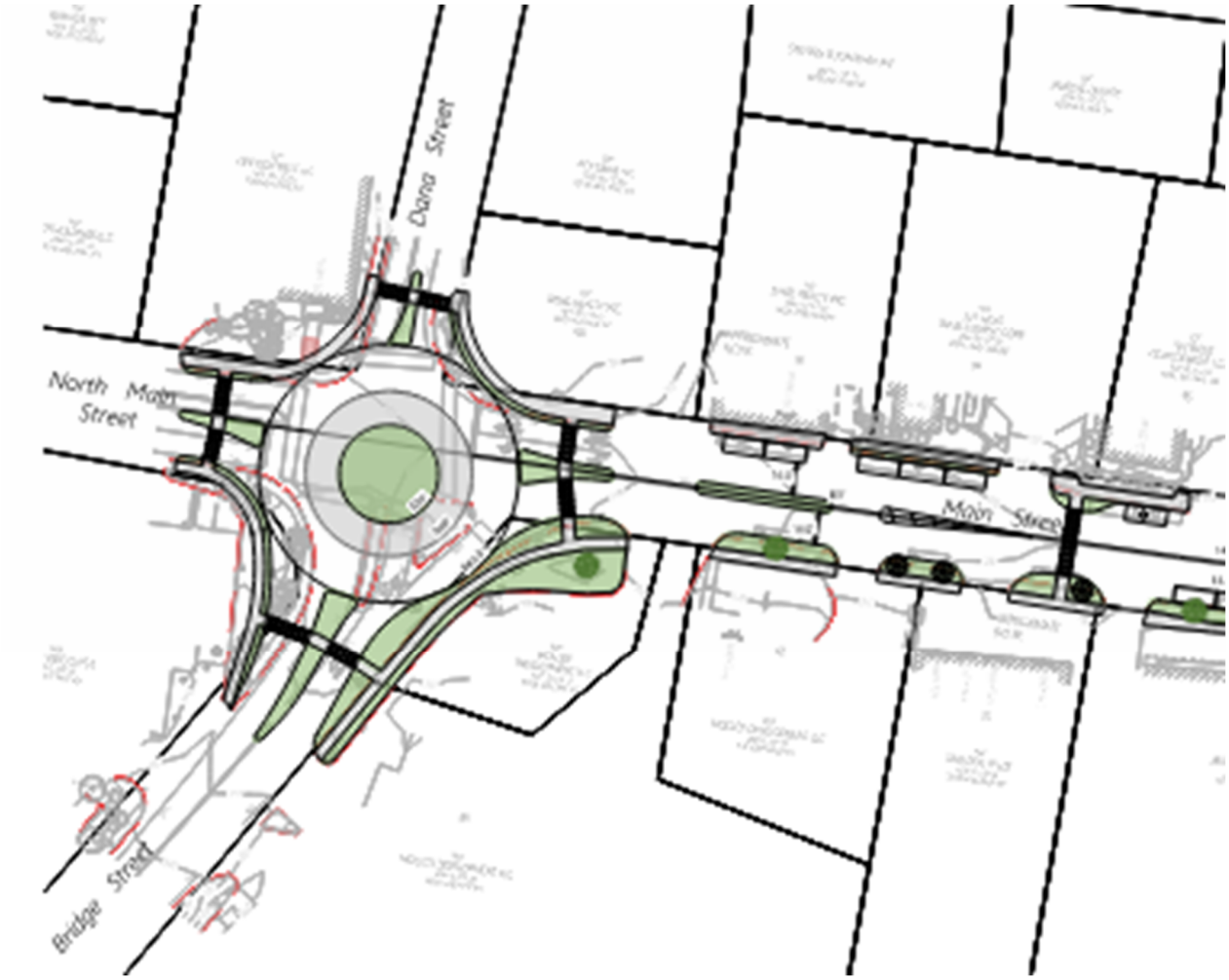
The City Council appropriated $4.096M in support of the Main Street Improvements. Due to the total estimated cost of the improvements, the project was separated into two phases. Phase 1 improvements started at the bottom of Seminary Hill, at the Maple Street intersection, and extended to the Country Cobbler at 75 Main Street. Phase 2 includes a roundabout at the Main Street, Bridge Street, North Main Street, and Dana Street intersection. Phase 1 construction commenced on June 10, 2025, and is scheduled to be completed by June 30, 2026.

2027-2032 CIP funding will support the construction of a modern roundabout at the currently failing intersection of Main Street, Bridge Street, North Main Street, and Dana Street. The location is a critical regional transportation gateway between Vermont and New Hampshire, carrying traffic between Interstate 89, U.S. Route 4 / NH Route 10, and NH Route 12A, while also serving as the front door to a long-overlooked village center burdened by congestion and deteriorating infrastructure. Replacing this inefficient and unsafe intersection addresses community plans that call for improved regional mobility and economic revitalization in West Lebanon's historic commercial core.

The Roundabout will: replace the existing signalized intersection and slip lanes with a single-lane roundabout; shorten pedestrian crossing distances with refuge islands; reduce vehicle speeds through geometric design; improve multimodal safety and accessibility; create space for landscaping and gateway features; and reconstruct intersection approaches as needed to ensure ADA compliance and drainage coordination.

In March 2026, The City made another Community Project Funding Request in support of the Roundabout project. For the 2027-2032 CIP, the project has been placed int the unfunded column (2033+) as funding sources for the project have not yet been identified.

7. **ONGOING MAINTENANCE AND OPERATING EXPENCES:** Maintenance and operating (O&M) expenses following comprehensive road reconstruction—including new sidewalks, water, sewer, and drainage systems—typically constitute a significant long-term budgetary commitment, often requiring annual investments of 1-2% of the total asset replacement value**.** Proactive maintenance is critical, as deferred maintenance can cost 3–5 times more than timely repairs. O&M is included in DPW's budget.



2027-2032 Capital Improvement Program



2027-2032 Capital Improvement Program

PROJECT REQUEST FORM #2: West Lebanon Main Street Streetscape Improvements - Phase 2 Bridge Street Roundabout

7. FINANCIAL PLAN AND PROJECT SCHEDULE

					Previous Appropriation	2027-2032	2033+
EXPENDITURES							
Design/Engineering					**$0**	**$0**	**$100,000**
Construction/Implementation					**$0**	**$0**	**$4,003,000**
Property/Equipment Acquisition					**$0**	**$0**	**$65,000**
				TOTAL	**$0**	**$0**	**$4,168,000**
FUNDING							
Current (Operating Budget)	Specify Fund:				**$0**	$0	**$0**
	Specify Fund:				**$0**	$0	**$0**
	Specify Fund:				**$0**	$0	**$0**
	Specify Fund:				**$0**	$0	**$0**
Debt	Supported by:		Taxes	Gfund	**$0**	**$0**	**$4,168,000**
	Supported by:		Water Rates	Wfund	**$0**	$0	**$0**
	Supported by:		Sewer Rates	Sfund	**$0**	$0	**$0**
	Supported by:				**$0**	$0	**$0**
	Supported by:				**$0**	$0	**$0**
	Supported by:				**$0**	$0	**$0**
Capital Reserve Fund	Specify Fund:				**$0**	$0	**$0**
	Specify Fund:				**$0**	$0	**$0**
	Specify Fund:				**$0**	$0	**$0**
	Specify Fund:				**$0**	$0	**$0**
Grants	Specify:	**NHDOT**			**$0**	$0	**$0**
	Specify:	**FAA**			**$0**	$0	**$0**
	Specify:	**NHDOT Bureau of Aeronautics**			**$0**	$0	**$0**
	Specify:				**$0**	$0	**$0**
Existing Funds	Specify:	**Water Investment Fees**			**$0**	$0	**$0**
	Specify:	**____ Public Facilities Impact Fees**			**$0**	$0	**$0**
	Specify:				**$0**	$0	**$0**
Other	Specify:	**____ Private Contributions**			**$0**	$0	**$0**
	Specify:				**$0**	$0	**$0**
	Specify:				**$0**	$0	**$0**
	Specify:				**$0**	$0	**$0**
				TOTAL	**$0**	**$0**	**$4,168,000**

2027-2032 Capital Improvement Program

PROJECT REQUEST FORM #1

This form includes basic information for each department project request. It must be completed for each project whether for a **NEW PROJECT**, a **MODIFICATION OF AN EXISTING PROJECT**, **CONTINUATION OF AN ON-GOING PROJECT**, or **CANCELLATION OF A PREVIOUSLY APPROVED PROJECT**.

1. DEPARTMENT: Recreation Arts & Parks

2. PROJECT TITLE: Mascoma River Greenway Extension

3. PURPOSE OF PROJECT REQUEST FORM: Continuation of an existing project

4. DEPARTMENT PRIORITY: Maintenance

5. LOCATION: Glen Rd western terminus of the MRG to 12a at the Powerhouse Mall

6. PROJECT DESCRIPTION/JUSTIFICATION: The Mascoma River Greenway (MRG) is currently 2.3 miles long, but envisioned as a 4 mile long section of the Northern Rail Trail, already identified as a high recreation and transportation priority for the city. It follows the former Boston and Maine corridor from the previous terminus of the Northern Rail Trail at Spencer Street, and moves west to the current terminus at Glen Road. As a 10-12 foot wide paved path, completed in 2018, and hosting 240 users in an average day (according to UVLSRPC 2020 counts), the strategic East-West alignment provides residents and visitors a viable non-motorized method to both recreate and reach places they want to go. With the completion of this proposed expansion to 12A, and future hopes to reach Main St West Lebanon, the MRG will be the core transportation corridor for bikes and pedestrians through the heart of Lebanon and West Lebanon, connecting Lebanon's neighborhoods with workplaces, schools, child care centers, open spaces, shopping areas, medical center and transit stops.

The City of Lebanon entered into an Agreement for Trail Use with the NH DOT in the Fall of 2012 for the existing MRG. It allows for our perpetual use of the corridor assuming the corridor remains officially "abandoned". We have been actively pursuing NH DOT's participation in the process of extending that Agreement for Trail Use and rail abandonment to the area adjacent to Riverside Community Park, where we will slope down off the rail corridor and into Lebanon's most popular park. Upgrading the existing riverfront trail within Riverside Community Park to the Powerhouse Mall enables us to reach Rt 12A with a riverside path through the Powerhouse Mall property. NH DOT has officially signed the US Surface Transportation Board's (STB) abandonment application, and the application has been filed with the STB.

The project also includes a new Rt 4 link to the MRG via Lebanon Ford's land. The City will have an easement crossing the small section of land owned by Lebanon Ford connecting us to the NH DOT bridge over the MRG. The bridge will be reconditioned with new decking and railings, and the path from the bridge to the MRG will be upgraded to MRG standards.

The City applied for and was awarded 80/20 funding from the Congestion Mitigation Air Quality (CMAQ) Federal funding program starting November 2024 and ending September 2028.

The Mascoma River Greenway is mentioned or referenced throughout the Master Plan. It positively impacts Conservation Lands, Air Quality, Energy Conservation, Linkages of Parks and Green Infrastructure, Community Health - in particular the health of children, and Providing Transportation Choice:

- Support efforts to enhance the character of existing centers and improve public health by upgrading and increasing recreational facilities such as parks, green spaces, and walk-bikeways. (2.1.S7)
- Encourage the Rail Road to consider the needs of residents and business owners, and recognize the benefits of using railroad rights-of-way as bicycle pedestrian trails. (2.1.S12)
- Support efforts to promote the Mascoma River as a scenic and recreation asset. (2.4.S2)
- Develop system of paths and bikeways connecting neighborhoods, parks and CBD. (3.1.S13)
- Improve access to Mascoma River frontage. (3.1.S17)
- Create and improve bikeway linkages, such as extending the Northern Rail Trail/Mascoma River Greenway to West Lebanon. (3.1.S18)
- Identify bike routes off main streets in an effort to make transportation more accessible for riders. (3.1.S19)
- Focus on the Mascoma River and highlight it through urban design. (3.1.S26)
- Invest in the West Lebanon downtown by constructing and upgrading the infrastructure, including parks. (4.1.S3)
- Promote linkages with West Leb CBD as well as recreation areas and Lebanon CBD with bike and pedestrian pathways. (4.1.S17)
- Support land use patterns that promote alternatives to vehicles. (5.1.S13)
- Cooperate with groups, such as Friends of the Northern Rail Trail and the Upper Valley Trails Alliance, to maintain and extend the existing rail trail from Lebanon to West Lebanon. (9.3.S1)
- Promote improved pedestrian facilities throughout the City. (9.4.S4)
- Develop additional safe multi-use trails to offer connectivity throughout the City and to other UV towns. (10.1.S10)
- Provide opportunities along walking and biking trails for non-structured uses. (10.1.S12)
- Address walkability and bikability in conjunction with traffic planning. (10.1.S14)
- Continue to provide recreational opportunities for all users, including people with disabilities and others needing special accommodation. (10.2.S1)

- Support efforts to extend the Northern Rail Trail/Mascoma River Greenway from downtown Lebanon to West Lebanon. (11.1.S13)

Lebanon's Principals for a Sustainable Community
Principle #2: Sense of Place
Principle #3: Environmental Responsibility and Energy Efficiency
Principle #4: Intelligent, Coordinated Development and Transportation
Principle #5: Economic Vitality

Project phases are described below. The estimate on Form 2 is based on cost estimates provided by Stantec in 2022 and adjusted for inflation to 2026.

PHASE 1: 2026-2027
- Engineering design and permitting.
- Clearing vegetation.
- Remove railroad tracks.

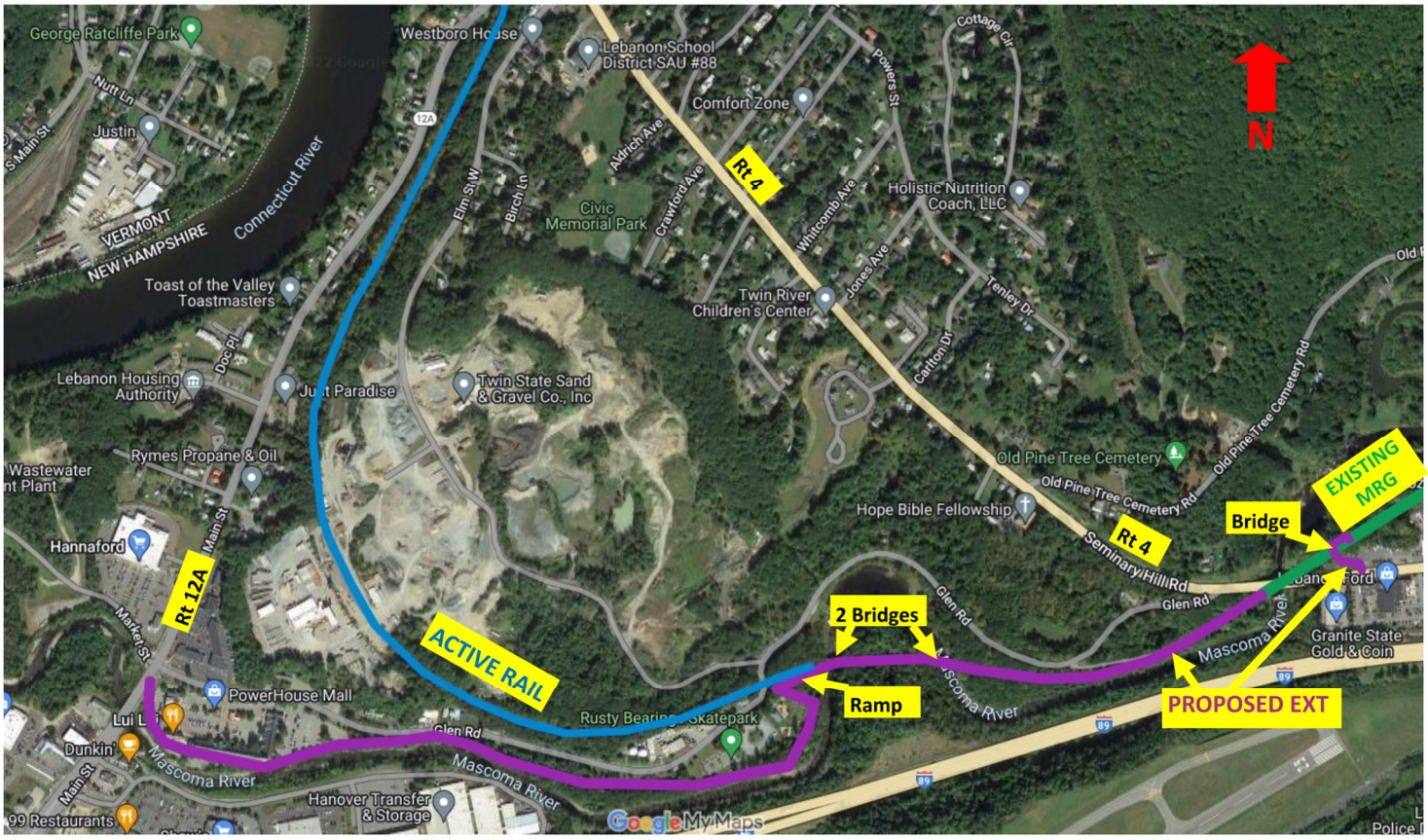
PHASE 2: 2028
- Work will begin at the western end of the bridge over the Mascoma River under Route 4. From that point, the trail will follow the existing rail corridor ending at Riverside Park. The trail will leave the rail corridor after the second Mascoma River Crossing, sloping down to meet existing grades at Riverside Park. This estimate assumes that portion of the trail will be built into the existing side slope of the rail corridor. The trail will be wide enough to allow pickup truck access, and will attempt to meet full ADA requirements. Approximately 1,800 feet, including the path to the park. There are approximately 250 feet of bridges in this segment.
- Widen the existing riverwalk along the Mascoma River at Riverside Community Park to at least 8' but preferably 10'. This is approximately 2,650 feet to the Powerhouse Mall. An additional 500 feet of trail is included as a potential secondary route in order to bypass pinch points that will not allow the minimum widening.
- Construct new path through Powerhouse Mall parking and riverside access road, and up to existing sidewalk on Rt 12A.
- Lebanon Ford connector bridge receives new decking and railing to handle a bicycle and pedestrian load. Approach path upgraded to connect to existing MRG.
- Paving

7. ONGOING MAINTENANCE AND OPERATING EXPENSES (anticipated costs and funding sources): Additional 2 hours of staff time per winter snow event for trail clearing and grooming. Additional 2 hour per week staff time for inspections, litter pick-up, graffiti removal, leaf clearing.

   6 new benches@ $1100 each = $6600
   2 new kiosks @ $3600 each = $7200

   Private donations

MASCOMA RIVER GREENWAY EXTENSION



500 feet

Proposed Extension and connector

Existing MRG extends East to Lebanon and Concord

Active Railroad

2027-2032 Capital Improvement Program

PROJECT REQUEST FORM #2: *Mascoma River Greenway Extension*

8. FINANCIAL PLAN AND PROJECT SCHEDULE

				Previous Appropriation	2027	2028	2027-2032	2033+
EXPENDITURES								
Design/Engineering				**$300,000**	**$18,900**	**$0**	$18,900	**$0**
Construction/Implementation				**$165,000**	**$0**	**$2,492,590**	$2,492,590	**$0**
Property/Equipment Acquisition				**$0**	**$0**	**$0**	$0	**$0**
			TOTAL	**$465,000**	**$18,900**	**$2,492,590**	**$2,511,490**	**$0**
FUNDING								
Current (Operating Budget)	Specify Fund:			**$0**	**$0**	**$0**	$0	**$0**
	Specify Fund:			**$0**	**$0**	**$0**	$0	**$0**
Debt	Supported by:	Taxes	Gfund	**$0**	**$0**	**$0**	$0	**$0**
	Supported by:			**$0**	**$0**	**$0**	$0	**$0**
Capital Reserve Fund	Specify Fund:			**$0**	**$0**	**$0**	$0	**$0**
	Specify Fund:			**$0**	**$0**	**$0**	$0	**$0**
Grants	Specify:	**CMAQ Grant**		**$372,000**	**$15,120**	**$1,994,120**	$2,009,240	**$0**
	Specify:			**$0**	**$0**	**$0**	$0	**$0**
Existing Funds	Specify:	**Recreation Impact Fees Fu**		**$93,000**	**$3,780**	**$265,470**	$269,250	**$0**
	Specify:			**$0**	**$0**	**$0**	$0	**$0**
Other	Specify:	**Private Contributions**		**$0**	**$0**	**$233,000**	$233,000	**$0**
	Specify:			**$0**	**$0**	**$0**	$0	**$0**
			TOTAL	**$465,000**	**$18,900**	**$2,492,590**	**$2,511,490**	**$0**

2027-2032 Capital Improvement Program

PROJECT REQUEST FORM #1

This form includes basic information for each department project request. It must be completed for each project whether for a **NEW PROJECT**, a **MODIFICATION OF AN EXISTING PROJECT**, **CONTINUATION OF AN ON-GOING PROJECT**, or **CANCELLATION OF A PREVIOUSLY APPROVED PROJECT**.

1. DEPARTMENT: Recreation Arts and Parks

2. PROJECT TITLE: MRG to Mascoma Street Path

3. PURPOSE OF PROJECT REQUEST FORM: New Project

4. DEPARTMENT PRIORITY: Improve Efficiency and Connectivity

5. LOCATION: 226 Mascoma St to the Mascoma River Greenway west of the I-89 overpass

6. PROJECT DESCRIPTION/JUSTIFICATION:

The intent of the "Mascoma Street Connector" project is to construct a 10-foot wide, approximately 1,000-foot-long paved bicycle path from just north of the bridge where the Mascoma River Greenway crosses I-89 to Mascoma St., along the north side of the I-89 right of way corridor (adjacent to Valley Cemetery). The path will then cross along the western boundary of property recently purchased by the City and connect to the access driveway of the Boston Lot trails/conservation area onto Mascoma St.

The Mascoma River Greenway (MRG) is a 4-mile multi-use separated pathway starting from the current terminus of the Northern Rail Trail at Spencer Street in downtown Lebanon. The MRG is a core. transportation corridor for bikes and pedestrians through the heart of Lebanon and West Lebanon, connecting Lebanon's neighborhoods with workplaces, schools, open spaces, shopping areas, restaurants, a medical center and transit stops. There are current projects planned that will connect the MRG to 12A at Powerhouse Mall. The Boston Lot Conservation area comprises 436 acres with seven miles of trail and recreational access to Dartmouth Hitchcock Medical Center and surrounding neighborhoods.

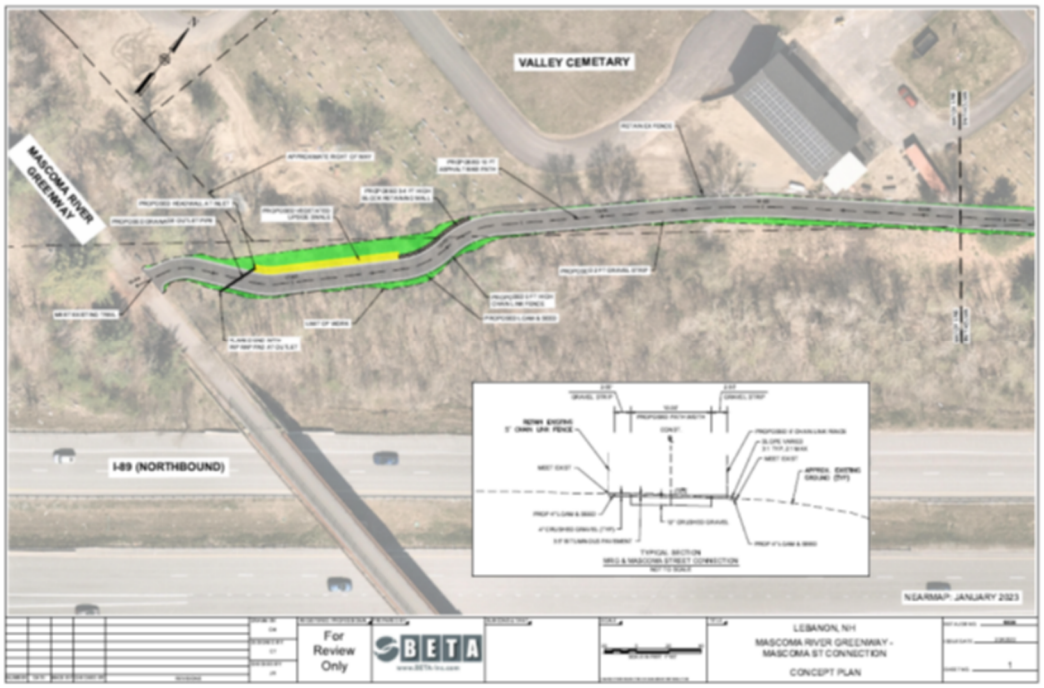
The proposed path alignment is currently wooded and undeveloped land, sloping upwards from I-89 to the back portion of the Valley Cemetery, and flat grades on top of the highway embankment from the cemetery to Mascoma St. There are remnants of an old access road that part of the new path will be located on. The exact location of NHDOT and City right of way (ROW) is unknown, ROW lines have been obtained from tax map information but a more accurate re-establishment of the ROW through deed research and survey will be needed in the future. The City Planning and RAP departments have talked

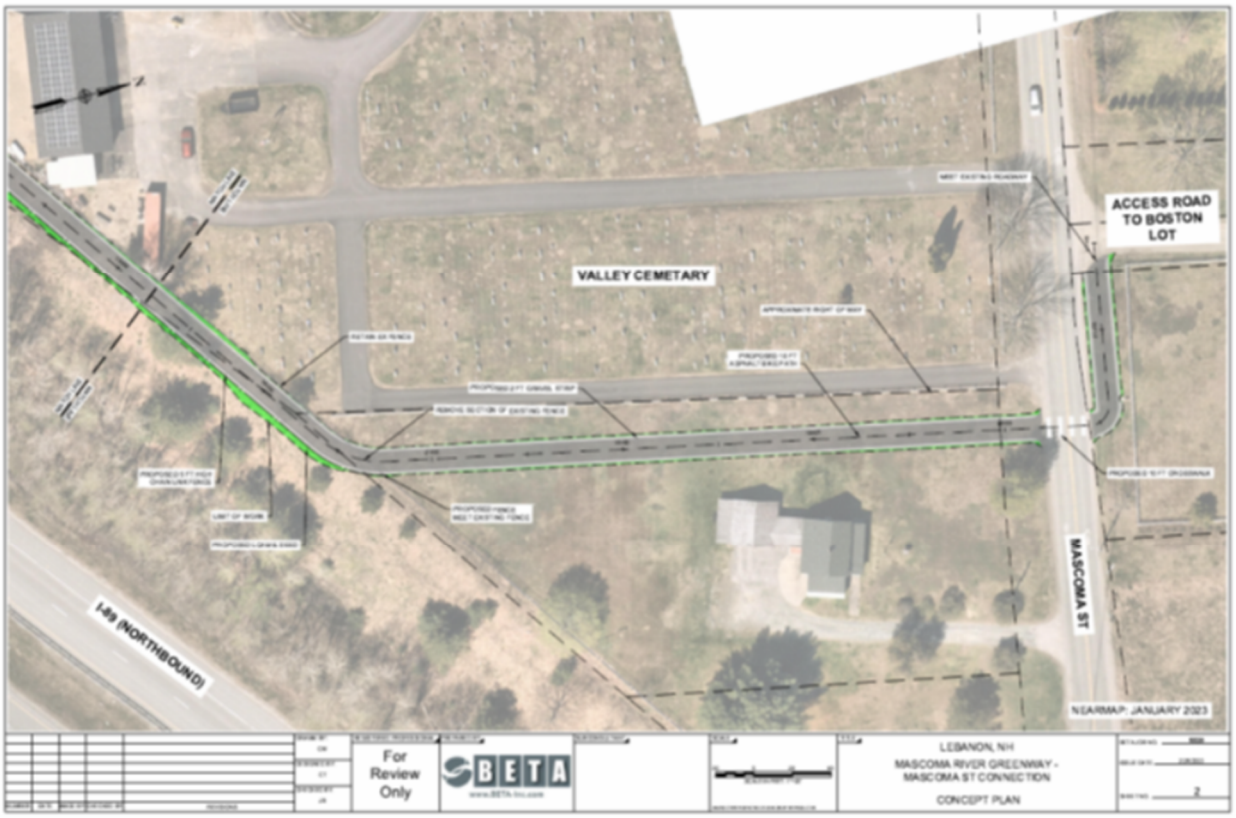
to the State DOT about permitting for this project and they seem favorable. There is an existing chain link fence that runs along the eastern boundary of the cemetery to Mascoma St. The City of Lebanon has recently purchased the property of 226 Mascoma St. and anticipates using a portion of the property to build the bike path.

The *Walk Bike Ride Lebanon Plan* (WBRL; final draft, May 2023) identified this project as a priority through an extensive engagement process that included interdepartmental City staff and multiple public outreach efforts. This path connection will provide Mascoma Street-area residents access to the MRG and allow MRG users a safe and convenient access to the Boston Lot, which is open to hiking, biking, snowshoeing, ski touring, as well as hunting, fishing, and camping. As a matter of equity, the path would provide direct non-vehicular access to the Boston Lot, which currently is accessed most readily by vehicles. The project will also help address a long-standing City concern about people cutting through the cemetery to travel between the MRG and Mascoma Street/Boston Lot and causing related damage to that land. This path will also help connect the residential developments on Mascoma Street/Old Pine Tree Cemetery Road to access the MRG and thus Downtown, Alice Peck Day Hospital, and 12A/West Lebanon.

The WBRL plan includes a more detailed description of engineering review, and conceptual project costs that are enclosed here. Total project cost (including engineering, survey, permitting, right of way and construction) is approximately $293,000 in 2023 dollars and $408,000 in 2035 dollars using 2.8% inflation per year. 10% indirect costs have been added to the project costs for administration and construction engineering. It assumes LPA process and associated cost escalation, should the project be funded in part with a federal grant. Private contributions are anticipated to be an important factor in the successful funding of this project, to provide any local match requirements to the greatest extent possible, focusing on stakeholders with recreational interests.

Concept Plan:





7. ONGOING MAINTENANCE AND OPERATING EXPENSES (anticipated costs and funding sources):

Consistent with MRG general maintenance, this added connector will add approximately 20 minutes to each winter storm event for clearing, and 20 minutes to warm weather weekly path inspections and cleaning.

2027-2032 Capital Improvement Program

PROJECT REQUEST FORM #2: *MRG to Mascoma Street Path*

8. FINANCIAL PLAN AND PROJECT SCHEDULE

					Previous Appropriation	2027-2032	2033+
EXPENDITURES							
Design/Engineering					**$0**	$0	**$61,200**
Construction/Implementation					**$0**	$0	**$346,800**
Property/Equipment Acquisition					**$0**	$0	**$0**
				TOTAL	**$0**	**$0**	**$408,000**
FUNDING							
Current (Operating Budget)	Specify Fund:				**$0**	$0	**$0**
	Specify Fund:				**$0**	$0	**$0**
Debt	Supported by:	Taxes	Gfund		**$0**	$0	**$328,000**
	Supported by:				**$0**	$0	**$0**
	Supported by:				**$0**	$0	**$0**
	Supported by:				**$0**	$0	**$0**
Capital Reserve Fund	Specify Fund:				**$0**	$0	**$0**
	Specify Fund:				**$0**	$0	**$0**
	Specify Fund:				**$0**	$0	**$0**
	Specify Fund:				**$0**	$0	**$0**
Grants	Specify:	**Recreation Trails Program (RTP)**			**$0**	$0	**$80,000**
	Specify:				**$0**	$0	**$0**
	Specify:				**$0**	$0	**$0**
	Specify:				**$0**	$0	**$0**
Existing Funds	Specify:	**Water Investment Fees**			**$0**	$0	**$0**
	Specify:	**____ Public Facilities Impact Fees**			**$0**	$0	**$0**
	Specify:				**$0**	$0	**$0**
Other	Specify:	**____ Private Contributions**			**$0**	$0	**$0**
	Specify:				**$0**	$0	**$0**
	Specify:				**$0**	$0	**$0**
	Specify:				**$0**	$0	**$0**
				TOTAL	**$0**	**$0**	**$408,000**

2027-2032 Capital Improvement Program

PROJECT REQUEST FORM #1

This form includes basic information for each department project request. It must be completed for each project whether for a **NEW PROJECT**, a **MODIFICATION OF AN EXISTING PROJECT**, **CONTINUATION OF AN ON-GOING PROJECT**, or **CANCELLATION OF A PREVIOUSLY APPROVED PROJECT**.

1. DEPARTMENT: Recreation Arts and Parks

2. PROJECT TITLE: Civic Park Upgrades

3. PURPOSE OF PROJECT REQUEST FORM: New Project

4. DEPARTMENT PRIORITY: Improve Efficiency and Connectivity

5. LOCATION: Civic Park, 4 Aldrich Avenue, West Lebanon

6. PROJECT DESCRIPTION/JUSTIFICATION: Civic Park was originally created in 1975 in partnership with the federal Land Water Conservation Fund (LWCF). Additional improvements to the park over the years have also capitalized on the availability of the LWCF. Unfortunately, the original funding grant in 1975 established park boundaries that are inconsistent with actual property lines. This discrepancy is a major issue for the City and LWCF and must be resolved. The only viable mechanism for achieving that correction is to open a new LWCF project on the site and submit for a new property line adjustment. This has the potential to become a win/win scenario for the City and residents of West Lebanon. LWCF funding provides a 50/50 match for projects that are at least $300,000 in total.

The Civic Park Upgrades project will create/include:

- A 2,850 feet trail that circumnavigates the park and part of the SAU88 parcel.
- A 240 feet ADA path will connect parking to the new playground, and the new playground to the restroom facility.
- Parking for the playground and playing fields will be created in the area adjacent to the playground.
- Paving the maintenance driveway.
- Installation of a barrier arm to control vehicle access around the garage.
- New basketball hoop backboard structures.
- Fencing around the new playground.
- Softball field dugouts.
- Clay/sand/silt softball infield mix.

The idea for a trail that circles the park was born out of the Civic Plays committee that came together in 2024 to help design the new Civic Playground. Park visitors will have a new facility for exercise in West Lebanon. The Center for Disease Control has found that people are 50% more likely to exercise when they live within ½ mile of a trail like the Civic Trail, and hundreds of other visitors drive to Civic Park for their children's sports programs, also making them likely candidates for social exercise.

The ADA pathway from the parking lot and playground to the restroom building is required under ADA regulations. The path is designed to follow natural contours of the land that meet ADA slope criteria without the need for retaining walls.

The establishment of parking that can expand into grass overflow parking is vital for Civic Park. During the soccer season, we often need overflow for 80 cars on game days. The popularity of the Civic Playground and tennis courts also necessitates some dedicated parking for those destinations. A barrier arm gate cutting off parking access to the garage area will enable staff to use the maintenance building without being hindered by park visitor's cars. Paving the maintenance lot and turnaround area helps reduce long term maintenance on the heavily impacted area.

New basketball hoop equipment for the outdoor basketball court area replaces the 40 year old steel structures. The fence around the playground is a planned addition in response to public feedback as to what would help make the new playground more secure for children of varying abilities.

The softball field dugouts do not meet ADA standards and are 40+ years old. This is a good opportunity to replace them along with an infield surface that is more playable and matches what is being used on SAU88 and Lebanon Youth Baseball facilities.

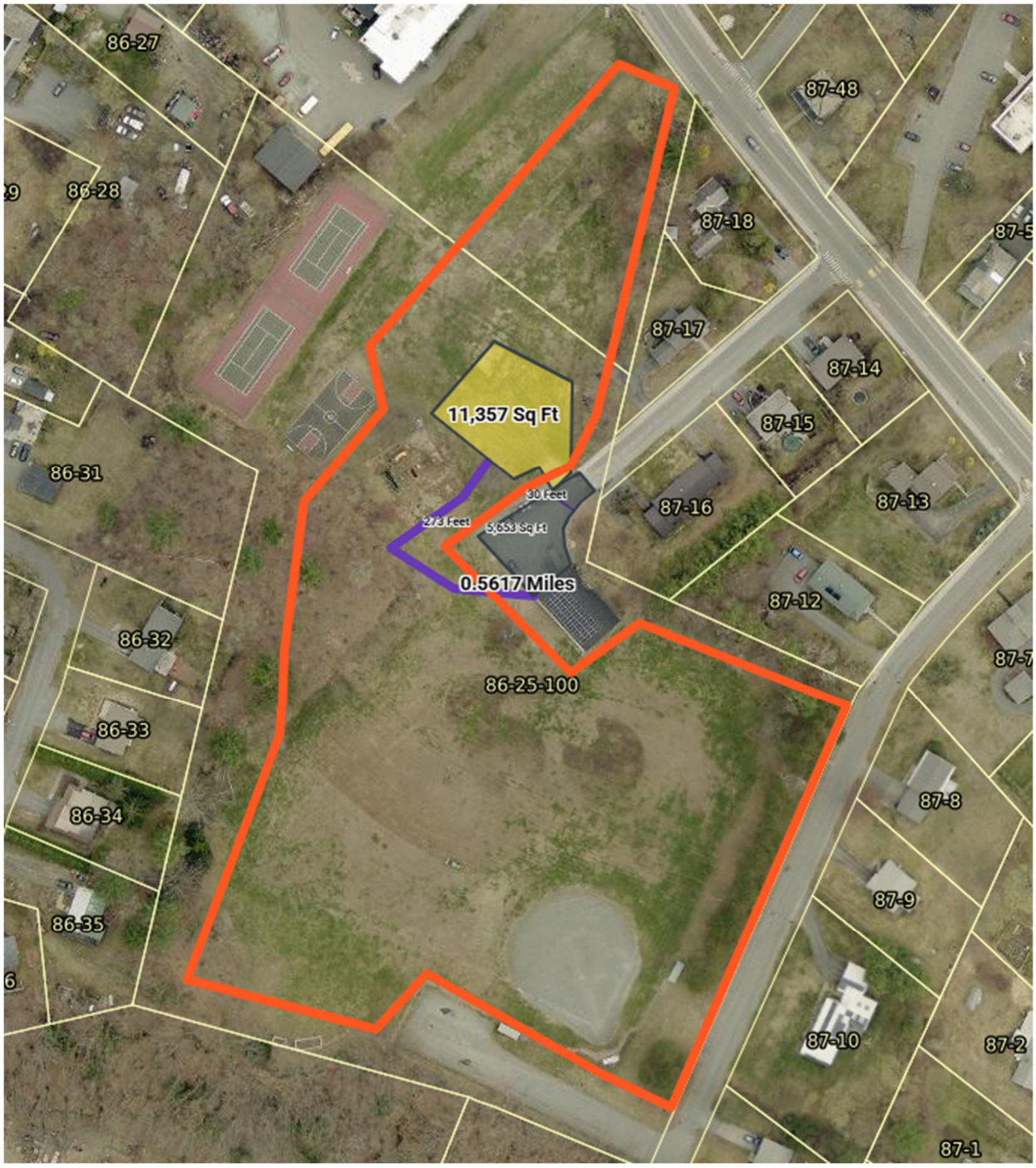
Sources of funding do not impact the Lebanon tax rate. The LWCF program, if awarded, would fund 50% of the total $319,000 cost. Funding of the City's $159,500 share of the cost will come from a variety of sources: Civic Plays (playground fundraising) balance, Adult Softball revolving fund, recreation impact fees, and in-kind City labor and equipment.

7. ONGOING MAINTENANCE AND OPERATING EXPENSES (anticipated costs and funding sources):

Maintenance will require extra care mowing around the new paths. New cinder surfaces may require refresher material every 2 or 3 years. New softball infield mix also requires refresher material that will be more expensive than our current mix.

Total $500 per year, plus labor.

2027-2032 Capital Improvement Program



Key:

- Orange line – ½ mile 5' wide exercise path
- Purple line – ADA path connecting parking, playground, and restroom building
- Yellow – Parking for playground and overflow for fields
- Grey – Paved maintenance driveway

2027-2032 Capital Improvement Program

PROJECT REQUEST FORM #2 *Civic Park Upgrades*

8. FINANCIAL PLAN AND PROJECT SCHEDULE

				Previous Appropriation	2027	2028	2027-2032	2033+
EXPENDITURES								
Design/Engineering				**$0**	**$0**	**$0**	$0	**$0**
Construction/Implementation				**$0**	**$0**	**$319,000**	$319,000	**$0**
Property/Equipment Acquisition				**$0**	**$0**	**$0**	$0	**$0**
			TOTAL	**$0**	**$0**	**$319,000**	**$319,000**	**$0**
FUNDING								
Current (Operating Budget)	Specify Fund:			**$0**	**$0**	**$0**	$0	**$0**
	Specify Fund:			**$0**	**$0**	**$0**	$0	**$0**
Debt	Supported by:	Taxes	Gfund	**$0**	**$0**	**$0**	$0	**$0**
	Supported by:			**$0**	**$0**	**$0**	$0	**$0**
	Supported by:			**$0**	**$0**	**$0**	$0	**$0**
	Supported by:			**$0**	**$0**	**$0**	$0	**$0**
Capital Reserve Fund	Specify Fund:			**$0**	**$0**	**$0**	$0	**$0**
	Specify Fund:			**$0**	**$0**	**$0**	$0	**$0**
	Specify Fund:			**$0**	**$0**	**$0**	$0	**$0**
	Specify Fund:			**$0**	**$0**	**$0**	$0	**$0**
Grants	Specify:	**LWCF**		**$0**	**$0**	**$159,500**	$159,500	**$0**
	Specify:			**$0**	**$0**	**$0**	$0	**$0**
	Specify:			**$0**	**$0**	**$0**	$0	**$0**
	Specify:			**$0**	**$0**	**$0**	$0	**$0**
Existing Funds	Specify:	**Civic Plays Donations**		**$0**	**$0**	**$66,000**	$66,000	**$0**
	Specify:	**Recreation Revolving Fund**		**$0**	**$0**	**$23,500**	$23,500	**$0**
	Specify:	Recreation Impact Fee		**$0**	**$0**	**$20,000**	$20,000	**$0**
Other	Specify:	**City In-Kind Labor / Equipment**		**$0**	**$0**	**$50,000**	$50,000	**$0**
	Specify:			**$0**	**$0**	**$0**	$0	**$0**
	Specify:			**$0**	**$0**	**$0**	$0	**$0**
	Specify:			**$0**	**$0**	**$0**	$0	**$0**
			TOTAL	**$0**	**$0**	**$319,000**	**$319,000**	**$0**

2027-2032 Capital Improvement Program

PROJECT REQUEST FORM #1

1. **DEPARTMENT:** Public Works - Water Distribution

2. **PROJECT TITLE & NUMBER:** Large Groundwater Well and Water Treatment Facility

3. **PURPOSE OF PROJECT REQUEST FORM:** New Project

4. **DEPARTMENT PRIORITY:** Mandatory

5. **LOCATION:** Confluence of the Connecticut River and Mascoma Rivers

6. **PROJECT DESCRIPTION/JUSTIFICATION:** The development of a large groundwater well, as the City's primary water source, provides water system redundancy. Having a single water source places the City in a potentially vulnerable situation. However, it is noted that there are emergency interconnections available with the Towns of Hanover and Hartford if a water emergency were to occur. In fact, a water booster pump station and pressure reducing valve (PRV) bypass is under construction this year capable of pumping water to the Dartmouth Hitchcock Medical Center/Centerra water storage tank as well as back feeding the Town of Hanover's Greensboro Road pressure zone through a PRV during emergency or maintenance situations.

   This project began in 2001 when a second source water study was completed identifying several potential high-yield alternative groundwater sources. During this phase of the project, three locations along the Connecticut River were studied as potential alternative high-yield groundwater supply sites. Each site was evaluated by installing small diameter test wells and completing short-term pump tests. Of these three sites, one site showed potential yields that could serve all the City's drinking water needs well into the future.

   In 2021, the City Council appropriated $145,000 to evaluate the potential of the new groundwater well using Riverbank Infiltration Technology.

   In 2023, the City Council appropriated an additional $175,000 for the installation of a large groundwater production well, long term pump testing, water quality analysis, and installation of four nearby monitoring wells. The large groundwater production well is schedule to be installed this summer. The water quality analysis will allow NHDES to determine treatment that will be required as part of the permitting process.

The proposed location of the large groundwater production well is at the confluence of the Connecticut River and Mascoma Rivers and within the FEMA regulated floodway. A meeting was held between DPW and FEMA to understand the required permitting for the wellhead. The wellhead area will be filled to raise the site to the 500-year elevation and to construct the access road. The fill pile will be armored with stone rip rap and the wellhead protected with concrete-filled steel bollards. The electrical panel will be remote, outside of the floodway, as well as any control building or treatment plant. The fill volume within the floodway will need to be offset by an excavated area expanding the floodplain to provide a compensatory storage volume. Compensatory storage will be required so that the City can complete a 'no rise' certificate to FEMA. Additionally, FEMA will require a Conditional Letter of Map Revision based on Fill (CLOMR-F) to remove the wellhead area from the floodway and a Hydrologic and Hydraulic (H/H) Study.

In 2024, the City Council appropriated an additional $150,000 to complete a topographic survey of the wellhead site and the compensatory storage volume area and the H&H study.

In 2025, the City Council appropriated an additional $1,440,000 to complete the permitting of the well with the NHDES. Once the well is permitted, the engineering design of the water treatment facility, booster pump station, and infrastructure to tie the water source into the existing Prospect Hill pressure zone can occur.

Additional appropriations to purchase a property to locate the water treatment facility and construct the water treatment facility, booster pump station, and infrastructure will be requested when funding is identified. As such, the project has been moved to the unfunded column (2033+) for the 2027-2032 CIP.

7. **ONGOING MAINTENANCE AND OPERATING EXPENCES:** Maintenance and operating (O/M) expenses following a major water infrastructure project—including a production well, water mains, and water treatment plant—typically constitute a significant long-term budgetary commitment, often requiring annual investments of 2-4% of the total asset replacement value**.** Proactive maintenance is critical, as deferred maintenance can cost 3–5 times more than timely repairs. O/M is included in DPW's budget.

2027-2032 Capital Improvement Program

PROJECT REQUEST FORM #2: Large Groundwater Well and Water Treatment Facility

7. FINANCIAL PLAN AND PROJECT SCHEDULE

				Previous Appropriation	2027-2032	2033+
EXPENDITURES						
Design/Engineering				$1,910,000	**$0**	**$0**
Construction/Implementation					**$0**	**$14,400,000**
Property/Equipment Acquisition					**$0**	**$1,000,000**
			TOTAL		**$0**	**$15,400,000**
FUNDING						
Current (Operating Budget)	Specify Fund:				**$0**	**$0**
	Specify Fund:				**$0**	**$0**
	Specify Fund:				**$0**	**$0**
	Specify Fund:				**$0**	**$0**
Debt	Supported by:	Taxes	Gfund		**$0**	**$0**
	Supported by:	Water Rates	Wfund		**$0**	**$15,400,000**
	Supported by:	Sewer Rates	Sfund		**$0**	**$0**
	Supported by:				**$0**	**$0**
	Supported by:				**$0**	**$0**
	Supported by:				**$0**	**$0**
Capital Reserve Fund	Specify Fund:				**$0**	**$0**
	Specify Fund:				**$0**	**$0**
	Specify Fund:				**$0**	**$0**
	Specify Fund:				**$0**	**$0**
Grants	Specify:	**NHDES Strategic Planning Grant**			**$0**	**$0**
	Specify:	**FAA**			**$0**	**$0**
	Specify:	**NHDOT Bureau of Aeronautics**			**$0**	**$0**
	Specify:	**DWSRF Loan**			**$0**	**$0**
Existing Funds	Specify:	**Water Investment Fees**			**$0**	**$0**
	Specify:	**____ Public Facilities Impact Fees**			**$0**	**$0**
	Specify:				**$0**	**$0**
Other	Specify:	**____ Private Contributions**			**$0**	**$0**
	Specify:				**$0**	**$0**
	Specify:				**$0**	**$0**
	Specify:				**$0**	**$0**
			TOTAL		**$0**	**$15,400,000**

2027-2032 Capital Improvement Program

PROJECT REQUEST FORM #1

CENTERRA WATER MAIN EXTENSION

1. **DEPARTMENT:** Public Works

2. **PROJECT TITLE & NUMBER:** Centerra Water Main Extension

3. **PURPOSE OF PROJECT REQUEST FORM:** Extend Cities Infrastructure to generate water supply redundancy and reliability.

4. **DEPARTMENT PRIORITY:** Redundancy

5. **LOCATION:** Centerra Park to Route 120

6. **PROJECT DESCRIPTION/JUSTIFICATION:**

   This project would be to construct an 8” municipal water main from its current terminus at the north end of Centerra Parkway to the existing water main located within the Route 120 corridor near 367 NH Route 120. Currently, Centerra Business Park and Altaria are serviced by a single 12” water main extending from Lahaye Drive across Route 120. This water main extension would create a water main loop which would create redundancy (a way to back feed) in the event that there is a water main failure or break within the Lahaye Drive corridor or in almost any location within the Centerra Business Park.

7. **ONGOING MAINTENANCE AND OPERATING EXPENCES:** Maintenance and operating (O&M) expenses following watermain construction typically constitute a significant long-term budgetary commitment, often requiring annual investments of **1-2% of the total asset replacement value.** Proactive maintenance is critical, as deferred maintenance can cost 3–5 times more than timely repairs. O&M is included in DPW’s budget.


120
0.2643 Miles
120
Centerra Pkwy
Lafayette St

2027-2032 Capital Improvement Program

PROJECT REQUEST FORM #2: Centerra Water Main Extension

7. FINANCIAL PLAN AND PROJECT SCHEDULE

					Previous Allocatio	2032	2027-2032	2033+
EXPENDITURES								
Design/Engineering					**$0**	**$250,000**	$250,000	
Construction/Implementation					**$0**	**#########**	#########	
Property/Equipment Acquisition					**$0**	**$0**	$0	
				TOTAL	**$0**	**#########**	#########	
FUNDING								
Current (Operating Budget)	Specify Fund:				**$0**	**$0**	$0	
	Specify Fund:				**$0**	**$0**	$0	
	Specify Fund:				**$0**	**$0**	$0	
	Specify Fund:				**$0**	**$0**	$0	
Debt	Supported by:		Taxes	Gfund	**$0**	**$0**	$0	
	Supported by:		Water Rates	Wfund	**$0**	**$500,000**	$500,000	
	Supported by:		Sewer Rates	Sfund	**$0**	**$0**	$0	
	Supported by:				**$0**	**$0**	$0	
	Supported by:				**$0**	**$0**	$0	
	Supported by:				**$0**	**$0**	$0	
Capital Reserve Fund	Specify Fund:				**$0**	**$0**	$0	
	Specify Fund:				**$0**	**$0**	$0	
	Specify Fund:				**$0**	**$0**	$0	
	Specify Fund:				**$0**	**$0**	$0	
Grants	Specify:	**NHDOT**			**$0**	**$0**	$0	
	Specify:	**FAA**			**$0**	**$0**	$0	
	Specify:	**NHDOT Bureau of Aeronautics**			**$0**	**$0**	$0	
	Specify:	**DH/SAD**			**$0**	**#########**	#########	
Existing Funds	Specify:	**Water Investment Fees**			**$0**	**$0**	$0	
	Specify:	**____ Public Facilities Impact Fees**			**$0**	**$0**	$0	
	Specify:				**$0**	**$0**	$0	
Other	Specify:	**____ Private Contributions**			**$0**	**$0**	$0	
	Specify:				**$0**	**$0**	$0	
	Specify:				**$0**	**$0**	$0	
	Specify:				**$0**	**$0**	$0	
				TOTAL	**$0**	**#########**	#########	

2027-2032 Capital Improvement Program

PROJECT REQUEST FORM #1

1. **DEPARTMENT:** Public Works/Solid Waste Division

2. **PROJECT TITLE & NUMBER:** Landfill Expansion Phase 3 Design, Permitting & Construction **(PHASE 4 HAS BEEN REMOVED FROM THIS CIP)**

3. **PURPOSE OF PROJECT REQUEST FORM:** Extend the life expectancy of the landfill and evaluate additional disposal capacity at the Lebanon landfill.

4. **DEPARTMENT PRIORITY:** This project is a high priority as the Lebanon Regional Solid Waste Facility (Landfill) has an estimated remaining life capacity of 3 years. It is imperative that the City complete the permitting phase to obtain approval from NHDES in accordance with their Solid Waste Rules to increase the Landfill's lifespan. Construction should be started at least 2 years before the end of its current life capacity/expectancy of the existing cell capacity as construction schedule will be a two and a half-year period for the new Phase 3 cell.

5. **LOCATION:** Lebanon Landfill – Phase 3

6. **PROJECT DESCRIPTION/JUSTIFICATION:** Based on recent Landfill waste capacity reports, a conservative estimate of the airspace remaining at the Landfill is approximately 3 years. Because the Landfill is only permitted through Phase II-C, the City is currently in the NHDES permitting process to permit additional capacity for Phase III to meet its long-term solid waste management goals. Phase III is expected to be located south of Phase II-C. The comprehensive permitting process can take years, and, to provide a buffer between the next phase of construction and airspace depletion, the city started the data gathering portion of the permitting process in 2020.

   In 2020 the first step was initiated to start the permitting process. This step continued into 2021 and involved a hydrogeological work plan. A study to characterize site geologic and hydrogeologic conditions of the new development areas began in 2023 and was completed in 2025. For the Phase III areas, the hydrogeological study did the following:

   1) Evaluated the suitability of the area for landfill development
   2) Provided data for landfill design; and
   3) Served as the basis for recommendations regarding the locations for groundwater monitoring wells.

   In 2025, the final permitting and design of Phases III began. In late 2025 the Phase III Type II Permit Application was submitted to NHDES. NH DES review

and formal permitting process will occur throughout 2026 with construction beginning in the spring/summer of 2027 work once NHDES approval is granted.

Based on hydrogeological work performed in the State of New Hampshire at other landfill sites, and the similarities between what we anticipate being required by the NHDES, the following tasks have occurred as part of the design and permitting of Phase 3 of the landfill (Tasks are shown in escalated Dollars):

1) Phase III Type II Permit Application and Construction Documents and permit Support. $267,000

The Phase III area is approximately 14.5 acres and approximate construction costs are about $15,300,000 and will take approximately 2 years to construct.

The Phase III expansion is a Mandatory Priority for Public Works. Without the NHDES permitted expansion, the facility will close as an active landfill and transition to a transfer station operation.

7. ONGOING MAINTENANCE AND OPERATING EXPENSES (anticipated costs and funding sources): Once completed and waste is being placed in the Phase III cell, the operating cost will be included in the annual operating cost for the Solid Waste facility. Operating costs will be funded through the Enterprise Fund user fees.



2027-2032 Capital Improvement Program

PROJECT REQUEST FORM #2: Landfill Expansion Phase 3 Design, Permitting &

7. FINANCIAL PLAN AND PROJECT SCHEDULE

Previous Appropriation: $1,801,000.00

					2027	2027-2032	2033+
EXPENDITURES							
Design/Engineering					**$0**	$0	**$0**
Construction/Implementation					**$15,300,000**	$15,300,000	**$0**
Property/Equipment Acquisition					**$0**	$0	**$0**
				TOTAL	**$15,300,000**	**$15,300,000**	**$0**
FUNDING							
Current (Operating B	Specify Fund:				**$0**	$0	**$0**
	Specify Fund:				**$0**	$0	**$0**
	Specify Fund:				**$0**	$0	**$0**
	Specify Fund:				**$0**	$0	**$0**
Debt	Supported by:		Taxes	Gfund	**$0**	$0	**$0**
	Supported by:		Water Rates	Wfund	**$0**	$0	**$0**
	Supported by:		Sewer Rates	Sfund	**$0**	$0	**$0**
	Supported by:		Solid Waste Fund	SWFund	**$15,300,000**	$15,300,000	**$0**
	Supported by:		Jnassigned Fund Balance		**$0**	$0	**$0**
	Supported by:				**$0**	$0	**$0**
Capital Reserve Fun	Specify Fund:				**$0**	$0	**$0**
	Specify Fund:				**$0**	$0	**$0**
	Specify Fund:				**$0**	$0	**$0**
	Specify Fund:				**$0**	$0	**$0**
Grants	Specify:	**NHDOT**			**$0**	$0	**$0**
	Specify:	**FAA**			**$0**	$0	**$0**
	Specify:	**NHDOT Bureau of Aeronautics**			**$0**	$0	**$0**
	Specify:				**$0**	$0	**$0**
Existing Funds	Specify:	**Water Investment Fees**			**$0**	$0	**$0**
	Specify:	**____ Public Facilities Impact Fees**			**$0**	$0	**$0**
	Specify:				**$0**	$0	**$0**
Other	Specify:	**____ Private Contributions**			**$0**	$0	**$0**
	Specify:				**$0**	$0	**$0**
	Specify:				**$0**	$0	**$0**
	Specify:				**$0**	$0	**$0**
				TOTAL	**$15,300,000**	**$15,300,000**	**$0**

Lebanon School District Capital Improvement Plan 2026-2031*

School	Total Appropriated	2027	2028	2029	2030	2031	2032
MLS	$ 2,891,137.97	$ 164,540.00	$ 179,200.00	$ 428,656.00	$ 328,215.68	$ 1,205,882.15	
HSS	$ 2,648,911.51	$ 251,540.00	$ 370,000.00	$ 464,400.00	$ 455,917.00	$ 542,054.51	
LMS	$ 2,459,169.35	$ 33,000.00	$ 102,000.00	$ 68,000.00	$ 115,000.00	$ 200,000.00	
LHS	$ 3,457,807.61	$ 105,000.00	$ 380,000.00	$ 935,676.00	$ 297,290.00	$ 609,272.70	
SAU	$ 4,106,272.00	$ -	$ 175,000.00	$ 3,100,000.00	$ 316,000.00	$ 486,272.00	
District Equipment	$ 881,780.72	$ 92,700.00	$ 160,481.00	$ 262,303.93	$ 201,295.79	$ -	
District Total	**$ 16,445,079.16**	**$ 646,780.00**	**$ 1,366,681.00**	**$ 5,259,035.93**	**$ 1,713,718.47**	**$ 3,043,481.36**	**0**

Total from Each Funding Source:	Code	2027	2028	2029	2030	2031
General Fund	GF	$ 953,080.00	$ 986,200.00	$ 834,124.50	$ 935,222.68	$ 681,209.36
Capital Reserve Fund	CRF	$ -	$ 285,000.00	$ 4,326,566.00	$ 677,200.00	$ 962,272.00
Bond	Bond	$ -	$ -	$ -	$ -	$ 1,400,000.00
Capital Lease	CL	$ 92,700.00	$ 95,481.00	$ 98,345.43	$ 101,295.79	$ -
District Total	**$ 13,393,096.76**	**$ 1,045,780.00**	**$ 1,366,681.00**	**$ 5,259,035.93**	**$ 1,713,718.47**	**$ 3,043,481.36**	**0**

Total from Each Project Type:	Total Appropriated	2027	2028	2029	2030	2031	
Mandatory	$ 255,000.00	$ -	$ 55,000.00	$ 200,000.00	$ -	$ -	
Maintenance	$ 991,810.00	$ 91,000.00	$ 70,000.00	$ 560,610.00	$ 196,200.00	$ 24,000.00	
Replacement	$ 5,706,018.72	$ 673,700.00	$ 437,481.00	$ 1,912,869.93	$ 993,295.79	$ 1,067,272.00	
New Service	$ 6,440,268.04	$ 281,080.00	$ 804,200.00	$ 2,585,556.00	$ 524,222.68	$ 1,952,209.36	
District Total	**$ 13,393,096.76**	**$ 1,045,780.00**	**$ 1,366,681.00**	**$ 5,259,035.93**	**$ 1,713,718.47**	**$ 3,043,481.36**	**$ -**

**abbreviated and condensed by Planning and Development Department staff*



LIVING IN LEBANON 2035

A **Housing Chapter** for the City of Lebanon Master Plan

Adopted _____

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Acknowledgments

This Housing Chapter was developed through a collaborative effort involving the City of Lebanon Planning Department, the Lebanon Housing Task Force, community participants, and the consultant team, Resilience Planning and Design and RKG Associates. The Planning Department provided leadership and coordination throughout the process, while the Housing Task Force helped guide the chapter through review of housing data, identification of housing challenges and opportunities, and discussion of future housing needs and strategies. ***The City extends its appreciation to everyone who contributed their time, expertise, feedback, and perspectives throughout the development of this chapter.***

Housing Task Force Members:

Timothy McNamara, City Councilor
Andrew Faunce, Planning Board Representative and City Councilor
Sarah Riley, Conservation Commission Representative
Tia Winter, DEI Commission Representative
John D'Entremont, Lebanon School Board Representative
Ryan Dube, Lebanon Housing Authority Representative
David Duncan, Business Member Representative
Ellen Smith Ahern, Resident Representative

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SETTING THE STAGE

Lebanon's ***existing housing stock***, along with ***the housing units developed over the next decad***e, will be defining factors in the city's future. The composition and availability of housing shape who is able to live in Lebanon, how neighborhoods change over time, and how effectively the local economy operates. As a regional center for employment, healthcare, and education, Lebanon's ability to provide a range of housing options directly affects ***workforce retention and attraction, economic competitiveness, and long-term community stability.*** The recent adoption of Pattern Zones Overlay District was an important step in the right direction.

Lebanon residents and decision makers are serious about addressing the documented housing supply issues, and this **Housing Chapter** establishes a clear framework for how housing related actions will support the community's broader vision. Doing so will ensure that growth is aligned with local values, that new development activity reinforces and enhances the existing development patterns, that pathways to ownership exist so residents build equity and contribute to community stability, and that residents across income levels and life stages have access to appropriate housing options.

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KEY POINTS:

- Housing shapes Lebanon's ***community composition*** and ***economic stability***
- ***Municipal influence*** over housing production is important but ***limited***
- ***Market pressures*** are driving housing challenges
- A coordinated, policy-driven ***housing strategy*** is needed
- Core guiding principles focus on ***housing diversity, neighborhood character***, and ***greater accessibility***

A ***glossary of planning and housing related terms*** has been included at the end of this chapter. Some key terms are also explained within the body of this chapter.

The **VISION** for Lebanon's housing future is as follows:

Lebanon is a community that retains its socioeconomic diversity while maximizing opportunities for home ownership; a community where people can find housing that meets their needs at every stage of life, supported by a housing supply that balances economic growth and workforce retention with neighborhood stability, and guided by development patterns that reinforce walkability, reflect local character, ensure equity, and make efficient use of land.

To achieve this vision, five housing goals have been identified:

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GOAL 1: Improve ***Housing Affordability***

GOAL 2: Expand ***Housing Diversity***

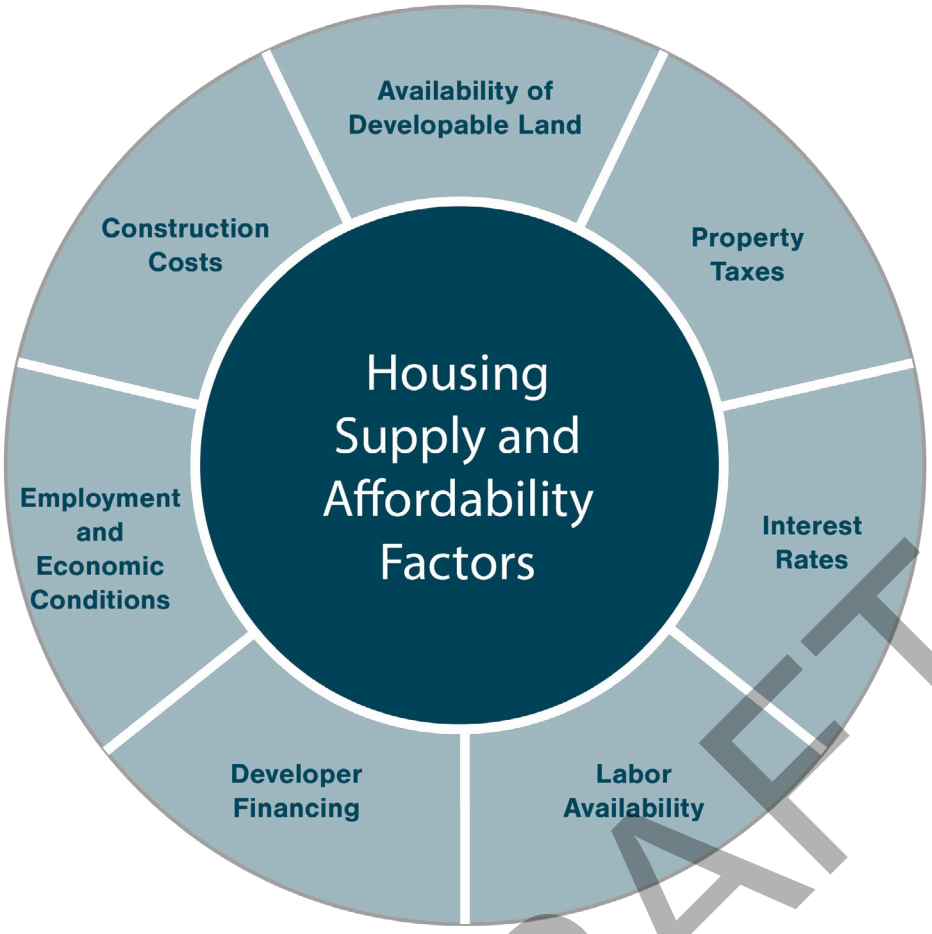
GOAL 3: Increase ***Housing Supply***

GOAL 4: Direct Growth ***Appropriately***

GOAL 5: Remove ***Regulatory Barriers***

The **implementation actions** found at the end of this Chapter clarify the steps that need to be taken to achieve these goals and the housing vision over the next decade.



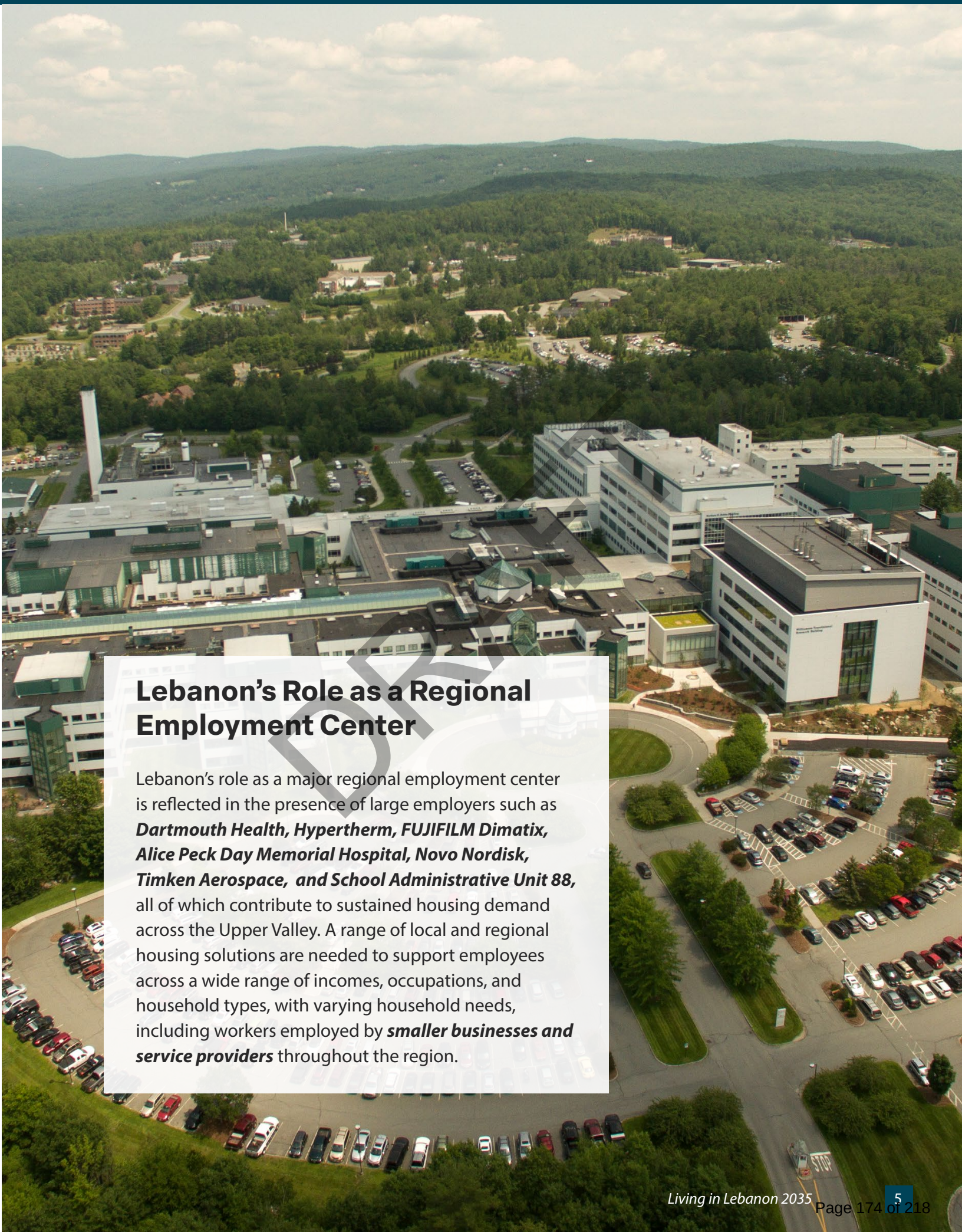


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Limits of Municipal Influence on Housing Solutions

While the City of Lebanon plays an important role in shaping housing outcomes through its authority over land use regulations, zoning, and the development review and approval process, ***its influence over the broader topic of housing supply is inherently limited and should be noted***. Many of the factors that ultimately determine whether housing is built, the type of units produced, and at what price point are driven by external forces beyond municipal control. These include ***market dynamics*** such as construction costs, interest rates, labor availability, and developer financing, as well as ***regional demand pressures*** tied to employment and economic conditions. In addition, ***individual preferences***—such as choices about location, housing type, and tenure (owner occupied or rental)— and the tax rate ***further shape how the market responds***.

As a result, while the city cannot fully dictate the pace, scale, or affordability of housing development on its own, it can create a ***regulatory and policy environment*** that enables and encourages desired housing outcomes. This underscores the importance of partnerships, incentives, and coordinated regional approaches required to make Lebanon's housing vision a reality.



Lebanon's Role as a Regional Employment Center

Lebanon's role as a major regional employment center is reflected in the presence of large employers such as ***Dartmouth Health, Hypertherm, FUJIFILM Dimatix, Alice Peck Day Memorial Hospital, Novo Nordisk, Timken Aerospace, and School Administrative Unit 88,*** all of which contribute to sustained housing demand across the Upper Valley. A range of local and regional housing solutions are needed to support employees across a wide range of incomes, occupations, and household types, with varying household needs, including workers employed by ***smaller businesses and service providers*** throughout the region.

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The Role of Housing in the Master Plan

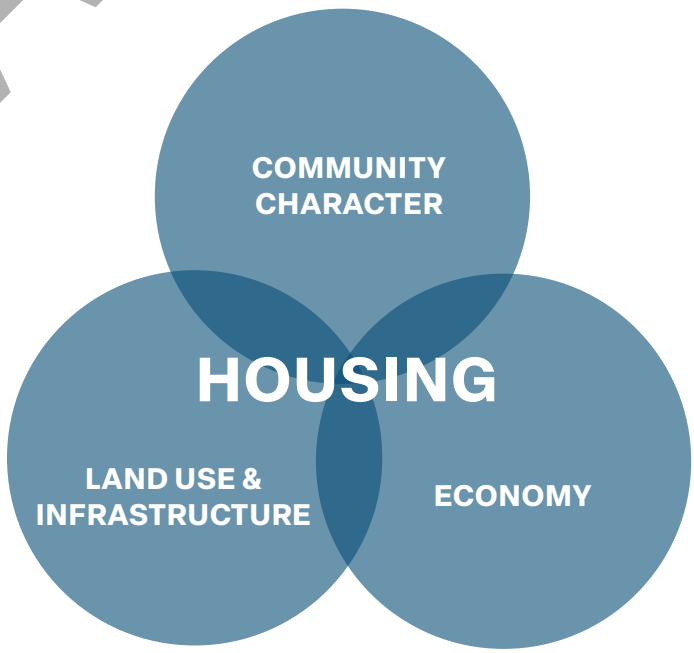
Housing is not a standalone issue.

It is a foundational component of the Master Plan that intersects with land use, economic development, infrastructure, taxes, and community character. Lebanon's housing market reflects its role as the Upper Valley's primary employment center, with strong demand driven by major employers and regional in-migration.

At the same time, the city is experiencing changes that are placing ***sustained pressure*** on the housing supply:

- ***Population growth*** and an influx of new residents, including young professionals, are increasing demand for housing units.
- ***Household sizes are declining***, with a growing share of one- and two-person households that are seeking new housing opportunities.
- ***Rising housing and construction costs,*** combined with ***limited supply*** across housing types, are creating ***barriers*** for renters, first-time homebuyers, moderate-income households, and residents wishing to age-in-place.
- ***A mismatch between available housing and the evolving needs of residents***—particularly a lack of larger units and ownership opportunities—is limiting options for families and contributing to challenges in retaining residents over time.
- ***Development projects are constrained by market conditions***, and guided by local regulations, with most new construction skewing toward larger multifamily projects while smaller-scale and "missing middle" housing types remain difficult to deliver.
- ***Regional employment dynamics and in-migration of higher-income households*** are intensifying ***competition*** for housing, with implications for workforce retention and access to housing for local residents.

These trends reinforce the need for a **coordinated housing strategy** that balances growth with affordability, supports economic vitality, retains Lebanon's distinct character, and maintains quality of life.



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Purpose of The Housing Chapter

The purpose of this chapter is to establish a policy and planning framework that guides housing decisions over the next decade.

It provides the foundation for ***regulatory updates, investment priorities, and partnership strategies*** that will shape Lebanon's housing landscape. By aligning housing with land use, economic development, transportation, energy, natural resource and other community goals, this chapter ensures that future growth contributes to a more balanced, inclusive, and sustainable city. A city that can accommodate continued housing demand while preserving the qualities that define Lebanon's distinct character and quality of life.



HOUSING ISSUES AND PRIORITIES

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Lebanon's housing conditions reflect a combination of sustained regional demand, shifting demographics, and structural constraints in the housing market. Organized around the most consistent and actionable ***six housing themes*** identified, this section of the Housing Chapter provides a framework that integrates ***existing conditions, key issues, and priority outcomes*** to guide Lebanon's future housing strategies and implementation efforts.





This chapter was informed by the following work products created during the Living in Lebanon project funded in 2025/26 through a Housing Opportunity Planning Grant, and each document is included in the Appendix:

- **Housing Needs Assessment:** Evaluates current and projected housing demand, identifying gaps between available housing and the needs of residents across income levels, household types, and life stages.

- **Market Analysis:** Examines housing market conditions, including pricing, supply trends, vacancy rates, and development activity, to understand how the local market is functioning and responding to demand.

- **Fiscal Impact Analysis:** Assesses the costs and revenues associated with different types of housing development, helping to understand how housing growth affects municipal finances and service delivery.

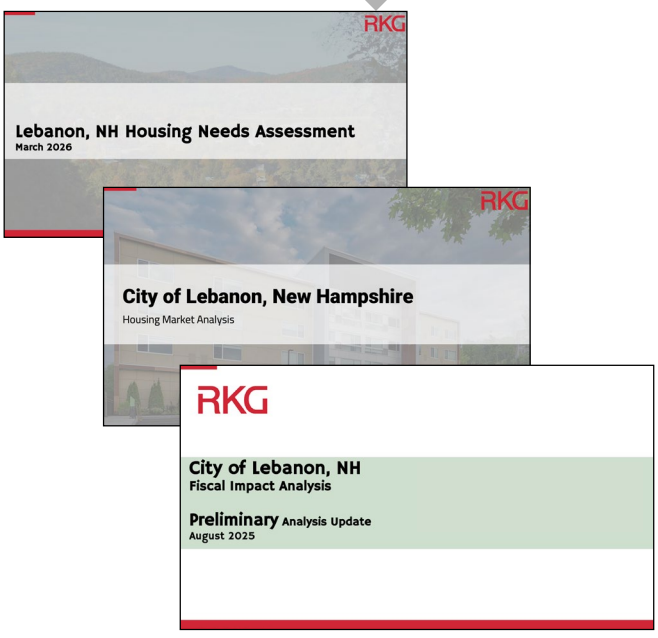
- **Policy and Regulatory Audit:** Reviews existing zoning, land use regulations, and development processes to identify barriers, inconsistencies, and opportunities to better support housing production and diversity.

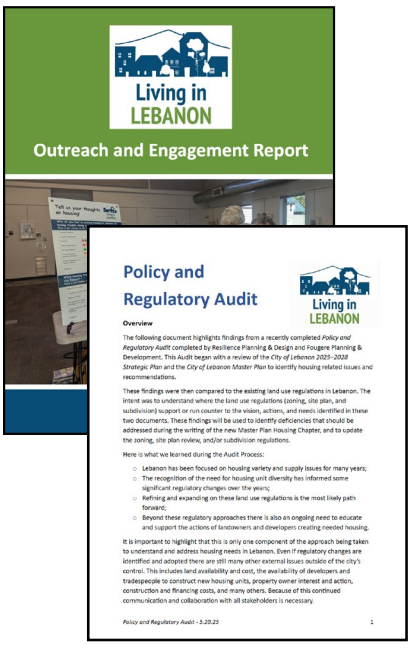
- **Outreach Summary:** Synthesizes input from Livable Lebanon community engagement efforts—including surveys, focus groups, and public events—to capture resident experiences, priorities, and preferences related to housing.

KEY POINTS:

- ***Housing demand continues to outpace supply***, resulting in a constrained and highly competitive market.
- ***Affordability pressures are widespread***, with rising costs outpacing incomes across household types.
- ***Workforce housing gaps*** are impacting economic stability, employee retention, and access for essential workers.
- ***Changing household composition is reshaping demand***, with increased need for smaller, flexible, and accessible housing options.
- ***The housing stock lacks diversity***, particularly in missing middle and smaller-scale housing types, and units desirable to families.
- ***Regulatory, financial, and market barriers*** continue to limit housing production and access.
- ***Community feedback*** emphasized a desire for increasing housing options while maintaining affordability, neighborhood character, and quality of life.

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Issue #1: Persistent Supply and Demand Imbalance

Housing demand in Lebanon continues to outpace supply, driven by steady population growth, workforce in-migration, and the city's role as the Upper Valley's primary employment and service center. Over the past decade, population growth of approximately 9% and continued projections of growth through 2030 have reinforced ***sustained demand for housing across all types.***

At the same time, housing production—while active—has not kept pace with this demand. Multifamily development has increased significantly, particularly since 2015, positioning Lebanon as the focal point for regional rental housing. ***However, overall production remains insufficient, especially for ownership opportunities and smaller-scale infill development.***

These conditions have resulted in a ***constrained housing market*** characterized by ***low vacancy rates, rising prices, and intense competition*** for available units. A significant share of homes sell above asking price, and rental units are quickly absorbed. This imbalance between supply and demand is the primary driver of broader housing challenges, limiting housing choice and increasing barriers to entry across income levels.

Median home prices more than

DOUBLED

since 2015 (from **$205,000 to $451,000**), far outpacing local income growth

Median Monthly Rent:

$2,923

Source: 2024 NH Housing Data

Median Household Income:

$92,288 - $121,300

Source: 2024 American Community Survey

Source: 2025 U.S. Dept. of Housing and Urban Development

TENURE PATTERNS

Lebanon has a ***nearly even split between renters and homeowners.*** This balance distinguishes Lebanon from many surrounding communities and reinforces its role as a regional housing center that supports a broad mix of households, housing needs, and life stages. Many of Lebanon's renters tend to be younger and more transient, while homeowners are more likely to be older and longer-term residents. This distinction has implications for housing demand, unit types, and neighborhood stability.

Strategic Priorities: ***Expand overall housing supply through a range of housing types and scales, with a focus on infill development, redevelopment, and adaptive reuse in areas with existing infrastructure and services.***

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Issue #2: Widespread Affordability Pressures

Housing affordability is a central issue affecting households across the income spectrum. Rising rents, home prices, property taxes, and utility costs have become a primary concern for residents, influencing their ability to remain in or move to Lebanon.

A significant portion of renters are cost-burdened, with approximately one in five households spending more than 30% of their income on housing. While household incomes have increased in recent years, these gains have not kept pace with escalating housing costs. Higher-income households have driven overall income growth, while lower- and moderate-income households face increasing difficulty accessing housing that aligns with their budgets. These conditions have created a widening affordability gap, reducing housing mobility and limiting options for first-time homebuyers, renters, and moderate-income households.

MARKET CONDITIONS

Lebanon's housing market is characterized by strong demand and constrained supply:

- Rising Prices and Rents: Home prices have increased substantially over the past decade, while rents continue to climb in response to sustained demand.
- Low Vacancy Rates: Rental vacancy rates remain low, indicating limited availability and a highly competitive market.
- High Competition: A significant share of home sales are above asking price, and rental units are quickly absorbed, reflecting intense competition for available housing.

These conditions collectively limit housing choice and increase barriers to entry for both renters and homebuyers.

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18%

of **HOMEOWNERS** are cost-burdened in Lebanon, spending more than 30% of their incomes on housing

43%

of **RENTERS** are cost-burdened in Lebanon, spending more than 30% of their incomes on housing

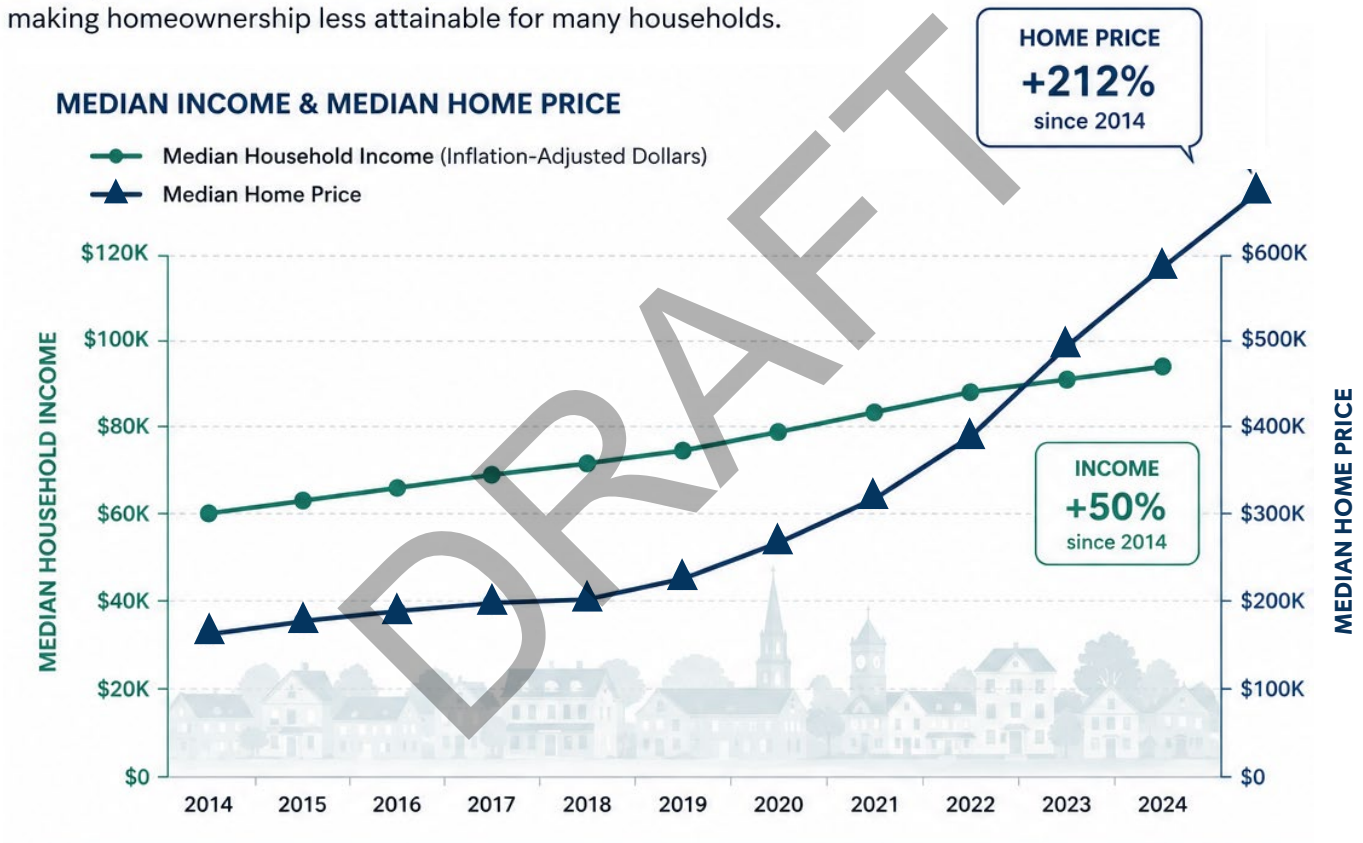
<u>Strategic Priorities:</u> Improve affordability and access by preserving existing affordable housing, incentivizing mixed-income and workforce housing, and reducing financial and regulatory barriers that contribute to cost burdens.

The growing gap between household income and housing costs in Lebanon highlights an increasing affordability challenge affecting households across the community. While household incomes have increased over the past decade, median home values and housing costs have risen at a substantially faster rate, making homeownership increasingly difficult for many residents, area employees, older adults, and first-time homebuyers. Current data indicates that the ***median assessed value of a single-family home*** in Lebanon is approximately ***$470,200***, with a median ***annual property tax bill*** of roughly ***$10,123.*** Based on current housing cost estimates, purchasing a median-priced home in Lebanon would require the equivalent of two individuals each working full-time at approximately $34.00 per hour to afford the estimated housing cost of $3500 per month.

LEBANON, NH

Median Income vs. Median Home Price: A Decade of Change

Home prices have increased substantially faster than incomes, making homeownership less attainable for many households.



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MEDIAN HOME PRICE
+212%
increase
(2014–2024)

MEDIAN INCOME
+50%
increase
(2014–2024)

THE GAP IS WIDENING
Home prices have risen over
4x faster
than incomes.

Rising home prices make it harder for local workers, young families, and first-time buyers to achieve homeownership in Lebanon.

SOURCES:
American Community Survey (ACS) 5-Year Estimates
Zillow Home Value Index (ZHVI) – Lebanon, NH
Note: 2014 dollars adjusted for inflation using CPI-U-RS.

Issue #3: Workforce Housing Constraints

Lebanon's economy is closely tied to major employment sectors, including ***healthcare, education, and professional services.*** These sectors generate sustained demand for housing and shape both the scale and type of housing needed in the city.

However, a mismatch exists between wages—particularly for lower- and moderate-income workers—and available housing options. Many employees in essential sectors face difficulty finding housing within the community, leading to longer commutes, reduced retention, and challenges in workforce recruitment.

This issue is particularly pronounced given Lebanon's role as a ***regional employment hub,*** drawing workers from across the Upper Valley. The lack of accessible workforce housing has direct implications for economic stability and the ability of employers to attract and retain staff.

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<u>Strategic Priorities:</u> Strengthen workforce housing solutions through partnerships with employers, housing organizations, and regional stakeholders, and explore tools such as employer-assisted housing and targeted development incentives.

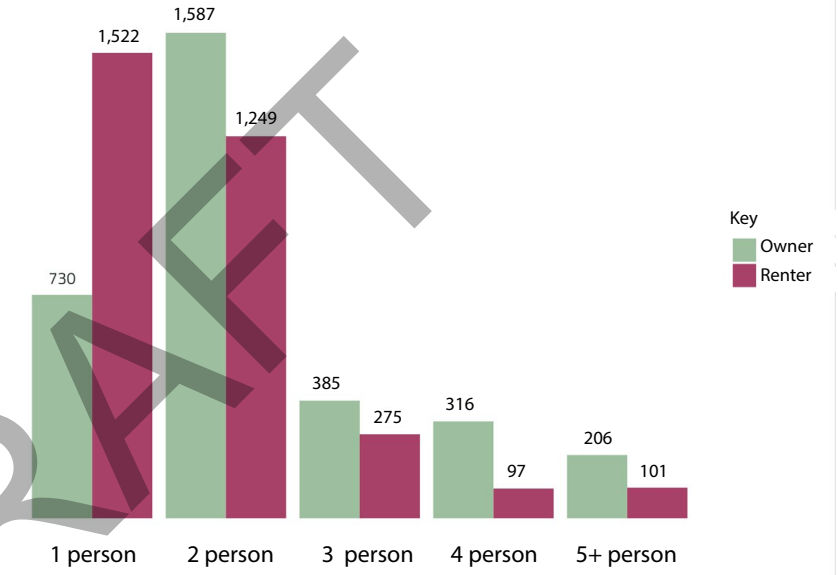
Issue #4: Changing Household Composition

Demographic trends in Lebanon are reshaping housing demand. ***Household sizes are decreasing,*** with one- and two-person households now representing approximately 80% of all households. At the same time, the community is experiencing both an ***aging population*** and an ***influx of younger, working-age residents.***

These shifts are increasing demand for ***smaller, more flexible housing options***, including rental units, downsizing opportunities, and housing that supports aging in place. However, gaps remain in the availability of family-sized units and accessible housing options for seniors and individuals with disabilities.

This evolving demographic profile requires ***a housing stock that can accommodate a wider range of life stages and household needs.*** These new units should be encouraged in locations that have the necessary infrastructure, and reinforce the desired development pattern.

Household Size by Ownership



Source: US Census Bureau ACS 5-Year Estimates, 2018 and 2023

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Lebanon has a high concentration of smaller households.

Across owner and renter units in Lebanon there is a high proportion of smaller households, with **80%** consisting of one or two people. However, the many studio and one-bedroom units constructed may be contributing to this trend.

Strategic Priorities: ***Expand housing options that reflect changing household needs, including smaller units, accessible housing, and housing that supports aging in place, while maintaining adequate supply of family-oriented housing.***

What is Missing Middle Housing?

Missing middle housing refers to a range of multi-unit housing types that fall between single-family homes and large apartment buildings. These housing forms are typically compatible in scale with traditional neighborhoods, but provide more units and a greater diversity of housing options.

Core Characteristics

- Moderate density (generally 2–12 units per building or lot)
- Residential scale (similar height and massing to single-family homes)
- Often integrated into existing neighborhoods rather than large standalone developments
- Supports both rental and ownership opportunities

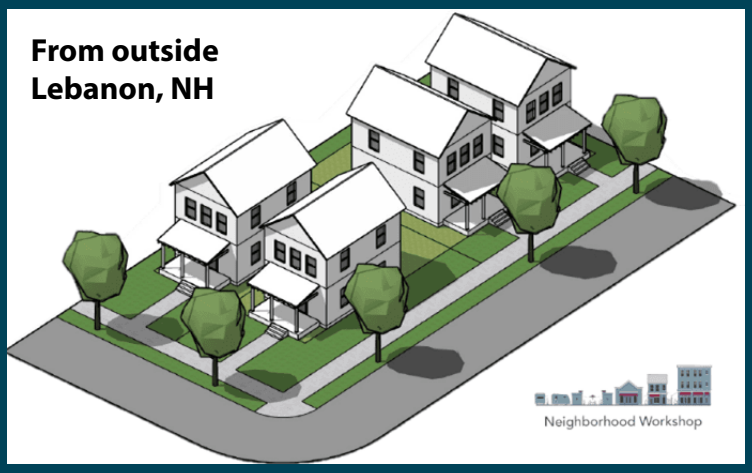
Common Missing Middle Housing Types

- Duplexes, triplexes. and fourplexes
- Townhouses and rowhouses
- Cottage courts (small homes clustered around a shared open space)
- Small multiplex buildings (e.g., 6–12 units)
- Live/work units

Below Images: Examples of Missing Middle Housing Types







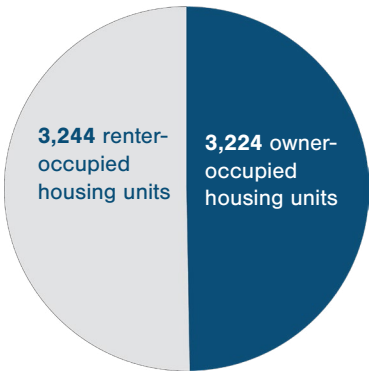


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Issue #5: Limited Diversity of Housing Types

Lebanon's housing stock includes a mix of traditional single-family homes and a growing share of multifamily developments. While this reflects its role as a regional center, ***the range of available housing types remains limited relative to current and emerging needs.***

Development activity has increasingly favored larger multifamily structures, while smaller-scale housing options—such as accessory dwelling units (ADUs), duplexes, townhouses, and other missing middle housing types—remain underrepresented. This limits the availability of intermediate housing options that can bridge the gap between single-family homes and large apartment buildings. As a result, the housing supply does not consistently provide a mix of unit types, tenures, and price points needed to support a diverse population.





The total number of 1 and 2-person households increased by

10 percent

between 2013 and 2023.

GAPS IN THE HOUSING SUPPLY

Despite ongoing development activity, significant gaps remain between the housing supply and community needs:

- **Small Units:** Demand for smaller units is increasing due to changing household composition, yet supply remains limited relative to need.
- **Family-Sized Housing:** There is a lack of larger rental units and ownership options suitable for families.
- **Entry-Level Homeownership:** Rising home prices and limited inventory restrict access for first-time homebuyers.
- **Senior Housing:** Aging residents require accessible, downsized, or supportive housing options that are currently limited.
- **Workforce Housing:** A mismatch persists between available housing and the needs of moderate-income and essential workers.

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<u>Strategic Priorities:</u> Expand housing diversity by enabling and incentivizing missing middle housing, smaller-scale multifamily development, and a broader mix of ownership and rental opportunities.

Housing Production Trends

Lebanon's housing production patterns have shifted significantly in recent decades, with substantially lower rates of single-family home construction and a notable increase in multifamily housing development.

While single-family construction since 2020 has remained relatively consistent with the previous decade, multifamily production has accelerated considerably, reflecting growing demand for a wider range of housing types, household sizes, and price points. In addition, more than 900 housing units are currently identified within the development pipeline, indicating continued development pressure and the potential for substantial housing growth in the coming years. This trend highlights the increasing importance of long-range planning efforts related to infrastructure capacity, transportation, housing affordability, workforce needs, and maintaining a socially, economically, and generationally diverse year-round population.

Below: Table illustrating historic housing production trends in Lebanon and modelled future projections provided by the City of Lebanon

Year Units Built	Single-Family Units	Multi-Family Units
2026-2029 (projected)	*130*	*1,768*
2020-2025	65	884
2010-2019	126	521
2000-2009	409	420
1990-1999	220	169
1980-1989	509	489
1970-1979	447	477
1960-1969	488	84



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Recent housing development activity in Lebanon may have influenced the community's household size trends, particularly the increase in one- and two-person households identified in recent demographic data. Several of the larger residential projects constructed in recent years were heavily weighted toward studio and one-bedroom units, which are more likely to attract single occupants or smaller households by design. For example, The Merek includes 123 studio units and 127 one-bedroom units, Hanover Place Residences consists entirely of 120 studio apartments, One Mechanic Street includes 17 studio units, and Heater Landing includes 30 one-bedroom units. As a result, the construction of these housing types may have contributed to or accelerated demographic trends showing growth in smaller household sizes, rather than solely reflecting an organic shift in the composition of existing residents or families within the community.

Issue #6: Barriers to Housing Access and Development

A variety of barriers continue to limit both access to housing and the production of new units. For many households, ***competition, eligibility requirements, and financial constraints*** restrict access to available housing, particularly for lower-income and nontraditional applicants.

From a development perspective, ***regulatory complexity, development costs, and approval processes*** can constrain housing production—especially for smaller-scale or infill projects. In some instances, requirements related to ***zoning, permitting, and site development*** can make it difficult to deliver the types of housing most needed by the community. These barriers contribute to both limited supply and reduced accessibility, reinforcing Lebanon's broader housing challenges.

RELEVANT TRENDS

- Stakeholders report that Lebanon's housing is both ***too expensive and too limited***, with essential workers often living far away, buyers priced out, and renters unable to find units in the $1,800–$2,000 per month range.
- High development costs, long permitting timelines, and regulatory barriers are ***limiting new construction***, pushing builders to pursue projects in other communities.
- Since 2015, ***nearly all new housing growth has been in rental units***, while owner-occupied development has remained modest and inconsistent.

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Key Findings from the Policy and Regulatory Audit of the Lebanon Master Plan and Land Use Regulations:

- Lebanon has been focused on addressing housing variety and supply issues for many years;
- The city's recognition of the need for housing unit diversity has informed some significant regulatory changes over the years;
- Further refining and expanding on these land use regulations over the coming decade is the most likely path forward; and
- Beyond these regulatory approaches, there is also an ongoing need to educate and support the actions of landowners and developers creating needed housing.

Strategic Priorities: ***Continue to modernize zoning and development regulations to reduce constraints, streamline approvals, and enable a wider range of housing types, particularly small-scale and infill development.***

COMMUNITY INTEREST AND GUIDING PRINCIPLES

Community engagement efforts completed during the Livable Lebanon initiative—including focus groups, community conversations, tabling events, and a citywide survey—collected input from over 1,000 participants, offering a broad perspective on housing needs and priorities.

Respondents consistently identified ***housing costs and availability as major concerns***, while also expressing a strong desire for housing solutions that align with neighborhood character, walkability, and quality of life. There is clear support for ***increasing housing options across a range of types and price points***, particularly in walkable, service-rich areas.

Community feedback also emphasized the importance of housing that supports ***different life stages***, including young professionals, families, and older adults, as well as interest in ***balancing growth with livability*** through thoughtful design and location of new development.

1,000+ participants

engaged in all outreach activities conducted for the Living in Lebanon Housing Chapter

"We need housing to be affordable. Essential staff often make low wages. If they can't afford to live close to work because of high housing costs, then they are less likely to remain in this area."

"It's really hard to want to stay here when it feels like we will never save enough for a down payment to buy a house, when we are paying $2800+ in rent a month."

"Pricing and availability are an issue. With the increase in inflation, everything is getting harder to afford. My income level stays the same."

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Together, Lebanon's ***housing issues and strategic priorities*** provide a comprehensive understanding of the city's housing landscape and establish a clear foundation for action.

They highlight the need to expand and diversify housing supply, improve affordability and access, support workforce housing, respond to demographic shifts, remove barriers to development, and better align housing efforts with broader community priorities.

The following guiding principles are intended to help frame future housing decisions, policies, investments, and implementation efforts throughout the city.

Guiding Principles

1. Provide a Range of Housing Options

As a city, Lebanon must support a ***diverse mix of housing types***, ***sizes, and price points*** to meet the needs of a changing population. This includes rental and ownership opportunities, smaller units for individuals and couples, and larger units for families. A broader housing mix will better reflect the city's evolving household composition and workforce needs, while also addressing gaps in the existing housing supply identified through market analysis and community feedback.

2. Support Community Character and Neighborhood Quality

Housing development should reinforce Lebanon's ***existing neighborhood patterns***, maintain ***human-scale design***, and integrate with ***surrounding land uses***. New housing should contribute positively to neighborhood form, support safe and accessible public spaces, and reflect the community's expectations for design, scale, and livability. Land use regulations, zoning, and partnerships with private and public housing developers should help guide these outcomes.







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3. Promote Walkability and Access to Services

Future housing should be directed toward areas with ***existing infrastructure, services, and transportation options***. Encouraging infill, redevelopment, multi-family, and mixed-use development in walkable areas will reduce reliance on automobiles, improve access to jobs and services, and support more sustainable growth patterns. This approach also aligns with broader goals in the Master Plan to focus development in established areas rather than expanding into undeveloped land.

4. Maintain and Enhance Quality of Life

Housing policy should support ***stable, safe, inclusive, and resilient neighborhoods for all people,*** including marginalized communities***.*** This includes ensuring that residents can remain in the community as their housing needs change, supporting aging in place, and addressing cost pressures that affect household stability. Community input highlights that housing affordability, availability, and overall cost of living are central to residents' ability to stay in Lebanon.

**Marginalized communities are groups of people often excluded from mainstream social, economic, cultural, and political life, often relegated to the periphery of society due to systemic discrimination. They face unequal power relationships and reduced access to resources, opportunities, and rights based on factors like race, gender, disability, or low income. (National Institutes of Health)*

Building on this framework, ***the implementation section translates these needs into a coordinated set of actions.*** These actions are designed to be practical and achievable, reflecting both market realities and the City's regulatory role, while also identifying opportunities for partnerships and targeted investments. Grounded in both data and community input, this approach positions Lebanon to continue to thoughtfully respond to evolving housing needs and to guide future growth in a way that supports long-term economic stability and community well-being.

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IMPLEMENTATION

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This section serves as the **implementation framework** for Lebanon's housing vision. These identified strategies build on and respond to data analysis findings and community priorities presented in this chapter and its appendices. The intent is to guide policy, regulatory updates, partnerships, and investment decisions that collectively shape a more balanced, accessible, and resilient housing system.

Implementation Strategies

Lebanon's housing vision seeks to expand and diversify the housing supply by increasing production across a range of housing types, scales, and price points. This includes supporting missing middle housing, multifamily development, and the adaptive reuse of existing structures—particularly in areas with existing infrastructure, services, and transportation access. Directing housing development to these locations reinforces walkable neighborhoods, supports an efficient land use pattern, and strengthens Lebanon's downtown, neighborhoods, and key development corridors as priority areas for investment.

KEY POINTS:

- Strategies and actions reinforce the ***Housing Chapter's Vision***
- A ***multi-faceted approach*** is what will help "move the needle"
- Housing solutions must also support the area's ***workforce***
- ***Land use regulations*** play a key role in shaping the housing landscape
- ***Housing stability*** and meeting ***life cycle needs*** are core priorities
- Implementation must respond to ***broader system level factors***

Improving housing affordability and access is a core priority and will require a multi-faceted approach. This includes preserving existing affordable housing, incentivizing new workforce and mixed-income development, and addressing financial and regulatory barriers that limit access for a broad range of households. Expanding the diversity of housing types—including smaller units, multifamily housing, and missing middle formats—will help ensure the housing stock reflects changing household needs while creating both rental and ownership opportunities at a scale that better aligns with demand. Supporting homeownership and exploring tools such as employer-assisted housing will further strengthen access and long-term stability for residents.

Supporting workforce and community-based housing solutions is also essential to implementation. Strengthening partnerships with employers, housing authorities, nonprofit organizations, and regional stakeholders will be critical to advancing projects, leveraging funding, and aligning housing production with economic development goals. These partnerships will help address workforce retention challenges while ensuring that housing solutions respond to both local and regional dynamics.

Modernizing zoning and development regulations is a key enabling strategy. Removing unnecessary constraints, streamlining approval processes, and allowing a broader range of housing types will be necessary to support housing production—particularly smaller-scale, infill, and context-sensitive development. These regulatory improvements should be paired with a continued focus on aligning new development with neighborhood character, ensuring that housing growth reinforces the scale, form, and identity of existing areas while accommodating needed change.

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Supporting housing stability and lifecycle needs ensures that residents can access appropriate housing at different stages of life. This includes expanding options for aging in place, downsizing, family housing, and transitional or supportive housing where needed. In parallel, protecting and maintaining the existing housing stock through rehabilitation programs, quality standards, and long-term occupancy strategies will help preserve affordability and strengthen neighborhood stability.

Finally, implementation must respond to broader system-level factors that influence housing outcomes. This includes addressing market pressures such as short-term rentals, vacancies, and speculative ownership patterns, as well as coordinating housing growth with infrastructure capacity, capital planning, and fiscal sustainability. Ongoing outreach and education will support these efforts by building community understanding, increasing transparency, and fostering support for housing initiatives.

Together, these strategies establish a clear and integrated framework for action—one that expands and diversifies housing supply, improves affordability and access, strengthens partnerships, aligns growth with infrastructure and land use, and supports residents throughout all stages of life while maintaining Lebanon's distinct character and quality of life.

#	Action	Priority	Responsible Party	Secondary Party	Approaches Addressed	Action Status
1. Addressing Persistent Supply and Demand Imbalance						
1.1	Create housing production opportunities for households of all sizes and income levels using a variety of additional unit types including: ADUs, duplexes, triplexes/quadplexes, cottage courts, rowhouses, co-housing, shared living, boarding/rooming houses, modular/ manufactured homes, and tiny homes where appropriate.					
1.2	Incentivize multifamily, small-scale infill, mixed-use, missing middle, and upper-story residential redevelopment in walkable and service-rich areas. Doing so will prioritize development and redevelopment in downtown neighborhoods and established development areas before greenfield expansion.					
1.3	Encourage the conversion of underutilized or overbuilt commercial sites and vacant buildings to residential uses.					
1.4	Assess and plan for water, sewer, utilities, transportation, and emergency service capacity to support projected housing unit development.					
1.5	Align housing growth with capital improvement planning and fiscal sustainability to ensure that higher-density housing is directed to areas already served by infrastructure and existing transit options.					
1.6	Regulate short-term rentals and other uses that remove units from the long-term housing stock available to residents.					
1.7	Encourage local ownership and management practices that enhance resident stability. Incentivize occupancy and revitalization of vacant housing units, structures, or storefronts.					
2. Responding to Widespread Affordability Pressures						
2.1	Preserve and expand the availability of affordable rental and ownership housing options, including subsidized housing, workforce housing, and homeownership programs. Reduce financial barriers to enable construction or redevelopment projects that will deliver affordable/workforce housing developments through fee waivers, tax relief, incentives, and impact fee adjustments.					

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#	Action	Priority	Responsible Party	Secondary Party	Approaches Addressed	Action Status
2.2	Explore new ways to provide renter assistance (deposits, documentation, stabilization supports).					
2.3	Commit to strengthening the inspection/quality standards for rental units in Lebanon.					
2.4	Expand options for transitional, short-term, and supportive housing for unhoused or precariously housed populations.					
2.5	Evaluate the adequacy of the seasonal winter shelter system and explore options for more consistent year-round shelter and supportive services for unhoused residents.					
2.6	Stabilize rent escalation and promote consistent property management standards.					
2.7	Preserve and improve multimodal access and regional transit opportunities accessible to residential areas to reduce auto dependence.					
2.8	Ensure that new housing developments provide a net fiscal benefit to the city, reducing the tax burden per resident.					
2.9	Review assessment and tax policies to avoid any disproportionate burdens on homeowners. Advocacy at the state level for tax structure improvements should continue to focus on allowing appropriate distribution of municipal cost burdens between businesses, residents, and other parties.					
3. Expanding Workforce Housing Opportunities						
3.1	Expand partnerships with Lebanon Housing Authority, nonprofits, employers, and developers to deliver affordable and community-focused housing solutions.					
3.2	Coordinate with major regional and local employers to forecast and monitor housing demand and collaborate on solutions. This should include addressing housing barriers affecting recruitment and retention in essential sectors.					
3.3	Explore employer-supported nonprofit housing models that allow local employers to partner in acquiring, rehabilitating, and maintaining affordable housing.					

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#	Action	Priority	Responsible Party	Secondary Party	Approaches Addressed	Action Status
3.4	Encourage employer-owned or sponsored, employer-adjacent, or workforce-dedicated housing and provide a regulatory path for the creation of these housing units. This could include options for both short-term/rotational workers and long-term employees.					
4. Adapting to Changing Household Needs						
4.1	Create new pathways to homeownership using both regulatory and non-regulatory strategies and incentives. This should be in addition to traditional single-family detached homes in order to promote additional owner-occupied housing types such as townhomes, small-lot starter homes, cottage courts, limited-equity models, rent-to-own, etc.					
4.2	Incentivize the inclusion of a percentage of ownership units in larger residential rental developments.					
4.3	Support downsizing options, intergenerational housing, and home-sharing/co-housing models.					
4.4	Explore programs that help homeowners finance repairs, conversions, or accessory units that allow them to create rental housing while remaining in their homes.					
4.5	Assist homeowners with rehabilitation and accessibility improvements to remain in their homes. This could include the adoption of a revitalization tax incentive for existing older residential structures.					
5. Encouraging a Greater Diversity of Housing Types						
5.1	Promote mixed-income and mixed-tenure developments (rental and ownership) to improve housing opportunities for all household types.					
5.2	Incentivize or encourage the creation of family-sized housing options (2+ bedrooms) in both rental and owner-occupied housing.					
5.3	Enable a streamlined process for the conversion of existing buildings or large homes into multi-unit housing.					

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#	Action	Priority	Responsible Party	Secondary Party	Approaches Addressed	Action Status
5.4	Reduce or eliminate regulatory barriers to the development or conversion of existing structures or the creation of new structures to support alternative living arrangements (boarding houses, co-housing, etc.).					
5.5	Integrate or improve green space, safe outdoor access, and trail/ open space connectivity within existing neighborhoods and into new developments.					
5.6	Advocate for expanded weatherization, electrical upgrade, lead paint remediation, and home rehabilitation programs that allow older housing units to remain safe and habitable.					
5.7	Partner with housing focused nonprofits or cooperatives to acquire and rehabilitate homes while keeping them out of speculative markets.					
6. Reducing Barriers to Housing Access and Development						
6.1	Update zoning to allow a wider range of housing types and lot configurations by right or through a streamlined approval process.					
6.2	Reduce or eliminate dimensional, parking, design, and building code mandates that add unnecessary development or regulatory cost.					
6.3	Offer density bonuses or other incentives for workforce and affordable housing unit creation.					
6.4	Simplify subdivision and site plan review processes for smaller projects through the expansion of staff-level approvals.					
6.5	Relocate parking and architectural standards to site plan regulations to provide greater flexibility.					
6.6	Balance housing growth with protection of wetlands, steep slopes, wildlife corridors, and agricultural lands.					
6.7	Consider the use of conservation subdivision design, transfer of development rights (TDRs), and other regulatory tools to direct housing development and to protect natural resource areas.					
6.8	Review the Policy and Regulatory Audit Finding generated in 2025 through the Housing Opportunity Planning Grant for additional specific regulatory amendments.					

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#	Action	Priority	Responsible Party	Secondary Party	Approaches Addressed	Action Status
7. Responding to Strong Community Interest in Housing Solutions						
7.1	Maintain a variety of ongoing, accessible engagement efforts on housing city-wide (tabling, surveys, focus groups, forums, etc.).					
7.2	Provide clear and accessible information about housing programs, processes, and resources.					
7.3	Use real stories and local examples to build broader understanding and support for local housing solutions, and promote regional cooperation on housing solutions.					
7.4	Research and promote the concept of home-sharing through a partnership with a dedicated organization that can provide coordination and oversight.					
7.5	Continue pursuing all appropriate municipal, state, and federal funding sources to develop local infrastructure and housing projects and explore innovative financing tools to allow sustainable growth.					
7.6	Explore the potential for cooperative or community-based housing ownership opportunities and management models.					
7.7	Coordinate regionally with neighboring communities on housing supply and transportation strategies, share best practices, and learn from peer communities to deliver improved outcomes.					
7.8	Within established neighborhoods require context-appropriate designs that reinforce a human-scale and help maintain the existing character, but do not drive-up construction costs.					

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GLOSSARY

Accessory Dwelling Unit (ADU): A smaller, secondary housing unit located on the same lot as a primary residence. ADUs may be attached to, detached from, or located within the main home.

Adaptive Reuse: The conversion of an existing building or structure into a new use, such as transforming a commercial or industrial building into housing.

Affordable Housing: Housing that costs no more than 30% of a household's gross income, including rent or mortgage payments and basic utilities.

Aging in Place: The ability for individuals to remain in their homes and communities safely and comfortably as they grow older.

Area Median Income (AMI): The midpoint of household incomes within a region, as calculated annually by the U.S. Department of Housing and Urban Development (HUD). AMI is commonly used to determine eligibility for housing assistance and affordable housing programs.

Co-Housing: A housing model in which residents have private living spaces but share common facilities, amenities, or open spaces to encourage community interaction.

Community Character: The overall identity and feel of a community, shaped by factors such as building patterns, architecture, scale, public spaces, natural features, and cultural identity.

Context-Sensitive Development: Development designed to fit the scale, character, and surrounding conditions of an existing neighborhood or area.

Cost-Burdened Household: A household spending more than 30% of its income on housing costs. Severe cost burden typically refers to spending more than 50% of income on housing.

Density Bonus: A regulatory incentive that allows additional housing units or development intensity in exchange for providing public benefits such as affordable or workforce housing.

Duplex: A residential building containing two separate dwelling units, either side-by-side or stacked vertically.

Employer-Assisted Housing: Housing programs or initiatives supported by employers to help employees secure housing, often through financial assistance, partnerships, or dedicated housing development.

Family-Sized Housing: Housing units designed to accommodate larger households, typically including two or more bedrooms and sufficient living space for families.

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Housing Diversity: A range of housing types, sizes, tenures, and price points that can meet the needs of households at different income levels and life stages.

Human-Scale Design: Development designed to be comfortable and accessible for people, emphasizing walkability and bikeability, building proportions, and streetscape quality.

Infill Development: New development occurring on vacant or underutilized land within already developed areas that are served by existing infrastructure and services.

Live/Work Unit: A building or dwelling designed to accommodate both residential living and small-scale commercial or professional work activities.

Missing Middle Housing: A range of housing types between single-family homes and large apartment buildings, such as small single family units, duplexes, triplexes, townhouses, and cottage courts, that provide moderate-density housing options.

Mixed-Income Housing: Housing developments that include units affordable to households with a variety of income levels within the same project or neighborhood.

Mixed-Use Development: Development that combines multiple land uses, such as residential, commercial, office, or civic uses, within a single building or area.

Mixed-Tenure Housing: Housing developments that include both rental and owner-occupied units within the same project or neighborhood.

Modular Housing: Housing constructed in sections within a factory and assembled on-site. Modular homes are built to the same building codes as traditional site-built homes.

Multifamily Housing: Residential buildings containing three or more dwelling units, such as apartment buildings or condominium complexes.

Short-Term Rental (STR): A dwelling unit rented for short periods of time, typically fewer than 30 days, often through online rental platforms.

Subsidized Housing: Housing supported through public funding or financial assistance programs to make it more affordable for lower- or moderate-income households.

Supportive Housing: Housing combined with support services intended to assist individuals or households facing challenges such as disabilities, chronic homelessness, or health-related needs.

Tenure: The legal status under which a household occupies housing, most commonly categorized as owner-occupied or renter-occupied.

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Townhouse / Rowhouse: Attached single-family housing units that share one or more walls with adjacent units but have separate entrances and ownership arrangements.

Transitional Housing: Temporary housing intended to provide stability and support for individuals or families moving from homelessness or unstable living situations toward permanent housing.

Triplex / Quadplex: Residential buildings containing three or four separate dwelling units within a single structure.

Upper-Story Residential: Housing units located above ground-floor commercial or nonresidential uses, commonly found in downtowns and mixed-use areas.

Walkability: The extent to which an area supports safe, convenient, and comfortable walking access to destinations such as housing, jobs, services, parks, and businesses.

Workforce Housing: Housing affordable to households earning moderate incomes, including many essential and local workers, based on regional income levels and housing costs.

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LEBANON PLANNING BOARD
COUNCIL CHAMBERS, CITY HALL OR
REMOTE VIA MICROSOFT TEAMS
LEBANONNH.GOV/LIVE
MONDAY, JUNE 22, 2026 6:30PM

MEMBERS PRESENT: Karen Zook (Chair), Wes Achord (Vice Chair), Patrick Kennelly, Andrew Faunce (City Council Rep), Max Terzano, Don Collins

MEMBERS ABSENT: Kellen Appleton (City Council Rep alt), Kathie Romano (alt)

STAFF PRESENT: Tim Corwin (Deputy Planning Director)

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1. CALL TO ORDER

Chair Zook called the meeting to order at 6:30pm.

2. PUBLIC HEARING ITEMS

A. Master Plan Housing Chapter Update: A public hearing will be held for the purpose of receiving input and taking action on proposed changes to the Lebanon Housing Chapter of the Master Plan.

Nathan Reichert, Planning Director; Catheryn Hembree, Associate Planner; Steve Whitman, consultant; and Ryan Dubee, Task Force, reviewed the draft Housing Chapter of the Master Plan.

The Board closed the public hearing at 7:33pm.

The Board agreed to retake this item at its July work session to consider it further. Feedback from Board members should be sent to Mr. Corwin.

B. Zoning Amendments: A public hearing will be held for the purpose of receiving input and taking action on proposed zoning amendments:

Amendment 1: Changes to Section 205 “One Principal Structure Per Residential Lot”

Amendment 2: Changes to Section 604 “Group Day Care Facilities”

Mr. Reichert explained that the urgency of having an off cycle zoning amendment process is due to some upcoming funding opportunities, such as a CDBG application which is due by the end of July. The first item deals with one use on one lot in the R3 Zone as is in considering a project at the SAU 88 site. This amendment would allow a daycare facility use to be a second primary use on a residential lot in all residential districts. The second item deals with parking and allowing for a shared parking arrangement to take place on multiple parcels. As the Boys & Girls Club project moves forward, they are hesitant to commit to a final design without clarity on if the project can

move forward based on parking concerns. This compressed zoning change timeline is proposed to be brought back to the City Council at its August 18th meeting.

Mr. Reichert explained that, in the case of the SAU building, there is a property line leading to one section being partially owned by the City, and one section being partially owned by the School District. If parking spills onto the City property and the primary uses is on the school's property, this is not permissible within the R3 zone. These are mostly technical amendments needed in order to allow for the proposed use to occur specifically at SAU 88, but also within other residential zones. From a planning perspective, having daycare services in residential zones is a benefit to the City because it allows for more direct access to quality daycare.

Chair Zook asked if easements would be needed for any cross parking arrangements, as it usually is. Ms. Hembree explained that this would be agreement between the parties. Mr. Reichert stated that the lease, in this case, will define the underlying use.

Chair Zook asked for public comment. There was none at this time.

A MOTION was made by Wes Achord that the Planning Board endorse the amendments to Section 205 and Section 604. The MOTION was seconded by Patrick Kennelly.

****The MOTION was approved (6-0).***

C. City of Lebanon, 5 Airpark Road (Tax Map 131, Lot 1), zoned IND-L: Pursuant to NH RSA 674:54 (Governmental Land Uses), applicant requests advisory Site Plan Review to construct a +/-153 sq. ft. isolation valve building on a site located on the west side of Poverty Lane, south of the Lebanon Police Station. The building will service control of the flow of water to the Farnum Hill Water Storage tank. **PB2026-34-GOV**

Rod Finley, City Engineer, reviewed his project for the Poverty Lane Isolation Control Building. The intention is to improve water quality in the Farnum Hill tank. Currently, the main water tank, the Prospect Hill tank, bypasses the Farnum Hill tank and goes across the airport and down. The proposal will have an automated valve that closes during the day and forces water to come out of the Farnum Hill tank. At night, the valve will open and the Farnum Hill tank will be filled. This will improve water quality. The proposal includes a small, 10'x20' prefabricated building to be located beyond the Police Station on the right side of Poverty Lane on Airport property. A lease lot will be created, which is technically a subdivision, in order to put the building on the Airport property. Rent will be paid to the airport for the building. This was previously discussed with the City Council, as it does not meet the currently zoning in the Light Industrial Zone, which requires a two acre lot size, a certain amount of frontage, and a 40' setback. This building will be 15' behind the water main and closer than 40' to the right of way.

Chair Zook asked for public comment. There was none at this time.

The Board expressed support for the project.

4. OTHER BUSINESS - *The Board took up this item at this time.*

A. Presentation by the Lebanon Energy Advisory Committee (LEAC) on proposed Electric Vehicle (EV) Site Plan Regulations

Clifton Below, LEAC, explained that last year the City Council updated the Zoning Ordinance with the intent to simplify the requirements for EV charging facilities. The role of the Planning Board in the site plan regulations is to make sure that future developments keep pace with the EV demand as it grows but not require the developer to spend a lot on infrastructure up front, until the demand is there.

Sherry Boschert, LEAC, explained that the zoning changes watered down the previous requirements in the Ordinance, such as by reducing the full Level 2 requirements to Low Car Level 2 requirements, and reducing the requirement to 5% of spaces needing to be EV based on what is required by the Planning Board.

Mr. Below reviewed a proposed Lebanon Woolen Mill EVSE site plan to show how additional charging opportunities could be built into a plan while reducing upfront costs for the developer. This allows developers to consider how to plan for future EV needs.

Mr. Achord expressed concern regarding letting each development design what its triggers will be. This will be difficult to administer. There are experts in the City who can define these triggers to be reasonable across developments. There should also be a requirement for developers to provide annual reporting. Items #1-3 seem reasonable, but #4 should have firmer requirements. Mr. Below stated that this would be a first pass which could be standardized in the future. The intention is to not hold up developments that are subject to the new zoning regulations.

The Board discussed potentially revisions to Item #4. It would read in part, "The plan shall include annual reporting to the Planning Department of the number of dwelling units, tenants, or residents using EV charging on site and the number of EVSE-Ready or EVSE-Installed spaces provided, in order to assess compliance with the Zoning Ordinance regulations."

The Board also discussed the need to see an EV specific diagram submittal as part of these requirements.

The Board agreed to schedule the necessary public hearings to then adopt the proposed amendments.

3. COMMITTEE REPORTS

A. City Council Subcommittees: – *This item was not addressed at this time.*

--Class VI Roads Advisory Committee
--Lebanon Energy Advisory Committee

B. Other Subcommittees: – *This item was not addressed at this time.*

--City Council Representative
--Heritage Commission
--Pedestrian & Bicyclist Advisory Committee
--Upper Valley Lake Sunapee Regional Planning Commission
--UV Subcommittee of the Connecticut River Joint Commissions
--Upper Valley Transportation Management Association
--Mascoma River Local Advisory Committee
--West Lebanon Revitalization Advisory Committee
--Planning & Development Department – Task Status

C. Development Regulations

It was agreed that Chair Zook and Mr. Achord had interest in sitting on the Development Regulations Subcommittee.

D. Minor Site Plan Committee

It was agreed that Chair Zook would sit on the Master Plan Subcommittee.

E. Housing Task Force – *This item was not addressed at this time.*

5. APPROVAL OF MINUTES

A. May 26, 2026
B. June 8, 2026

A MOTION was made by Andrew Faunce to approve the May 26, 2026, and June 8, 2026, meeting minutes, as presented. The MOTION was seconded by Max Terzano.

****The MOTION was approved (6-0).***

6. ADJOURNMENT

A MOTION was made by Andrew Faunce to adjourn the meeting at 9:18pm. The MOTION was seconded by Don Collins.

****The MOTION was approved (6-0).***

Respectfully submitted,
Kristan Patenaude
Recording Secretary

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LEBANON PLANNING BOARD
COUNCIL CHAMBERS, CITY HALL OR
REMOTE VIA MICROSOFT TEAMS
LEBANONNH.GOV/LIVE
MONDAY, JULY 13, 2026 6:30PM

MEMBERS PRESENT: Karen Zook (Chair), Patrick Kennelly, Andrew Faunce (City Council Rep), Max Terzano, Don Collins, Kathie Romano (alt)

MEMBERS ABSENT: Wes Achord (Vice Chair), Kellen Appleton (City Council Rep alt)

STAFF PRESENT: Tim Corwin (Deputy Planning Director); Brian Vincent (City Engineer)

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1. CALL TO ORDER

Chair Zook called the meeting to order at 6:30pm.

Kathie Romano sat as a voting member.

2. NOTICE OF REGIONAL IMPACT

Mr. Corwin reviewed the NORIs received. Staff recommends that none of these applications have the potential for regional impact.

A. **City of Lebanon, 0 Barrows Street (Tax Map 77, Lot 106), zoned R-3:** Applicant requests approval of a proposed five (5)-lot Major Subdivision for a 5-unit Cottage Development that was approved by Conditional Use Permit on January 27, 2025 (PB2025-04-FMAJSPRCUP). The proposed 5-lot subdivision will replace the Major Subdivision and Site Plan that was approved contemporaneously with the Cottage Development Conditional Use Permit. **PB2026-36-FMAJ**

B. **The Muse Lebanon, LLC (applicant), City of Lebanon (property owner), 20 Spencer Street (Tax Map 92, Lot 31), zoned LD**: Pursuant to Section 9.1 of the Site Plan Review Regulations, applicant requests modifications to a Site Plan for a proposed 80-unit multi-family dwelling, originally approved on September 16, 2024 (PB2024-36-SPR), including minor site layout changes and the removal of conditional of approval #25 requiring an on-site playground area. **PB2026-37-SPA**

C. **The Muse Lebanon, LLC (applicant), City of Lebanon (property owner), 20 Spencer Street (Tax Map 92, Lot 31), zoned LD**: For the 80-unit multi-family development approved on September 16, 2024 (PB2024-36-SPR), applicant requests a Conditional Use Permit pursuant to Section 307.8.C of the Zoning Ordinance to allow the height of the first floor to be 10 ft. 2 in. height where a minimum of 12 ft. is required for new buildings in the LD District. **PB2026-38-CUP**

A MOTION was made by Andrew Faunce that none of the applications received have the potential for regional impact. The MOTION was seconded by Kathie Romano.

****The MOTION was approved (6-0).***

3. PUBLIC HEARING ITEMS

A. **Russell & Christine Lary,** 300 Meriden Road (Tax Map 138, Lot 1), zoned RL-1 & RL-2: Request for a two (2)-lot Minor Subdivision. **PB2026-27-MIN - Applicant is requesting a postponement to August 10, 2026**

This application was postponed to August 10, 2026.

B. **Stewart's Shops Corp (applicant and property owner) and EB Realty II, LLC (property owner), 97 N Main Street (Tax Map 72, Lot 30) and 99 N Main Street (Tax Map 72, Lot 31), zoned CB:** Request for Site Plan Review per Section 3.1.D of the Site Plan Review Regulations to demolish the existing structures on the subject properties and construct a +/-4,500 sq. ft. retail/convenience store and a vehicular refueling station with four (4) fuel dispenser islands with an overhead canopy, together with associated site improvements. **PB2026-29-SPR - Postponed from June 8**

Mr. Corwin stated that staff would recommend that this application is complete enough for the Board to accept jurisdiction and commence review.

A MOTION was made by Patrick Kennelly that the application is complete and ready for review. The MOTION was seconded by Max Terzano.

****The MOTION was approved (6-0).***

Chuck Marshall, Director of Real Estate for Stewart's Shops Corps, and Andrew Rodriguez addressed the Board. Mr. Marshall explained that they acquired 97 N Main St. in December 2024. The proposal appeared in a sketch plan capacity in October 2025. They worked with the owner of 99 N Main St., EB II Realty, LLC, on the development of a site plan. Both lots are in the City's CB District which allows for retail gasoline as a non-conforming use. However, staff notes illustrate that the nonconformity will be decreased through this proposal, going from four pumps to three, while effectively maintaining the position and staying on the same parcel. There is a proposed freestanding sign to be on the southernmost portion of the Stewart's Shops' property. The existing parcels have four pumps, a building in the center, and parking on both sides. In the fall of 2025, the proposal looked to bring the building all the way to the property line along N Main Street or mirroring what currently exists, with parking on both sides. At that time, the Board requested that the applicant proceed with a pedestrian accommodation, pulling the building all the way to the east. This is effectively the plan currently being proposed. There is an existing crosswalk that comes from the plaza to the south, terminating at an asphalt path to the north and a concrete path to the west. There is a City-owned hydrant at the landing of that crosswalk on the sidewalk. The proposal is for the Bridge St. sidewalk to terminate on the western side of the Stweart's Shops' driveway at a flat area. There is a request from staff that the sidewalk continue all the way to the west. The applicant is okay installing this but is currently proposing it to land on a flat spot. If this is continued to the end, it may be in the driveway of the equipment rental facility.

The sidewalk would stop approximately 10' from the property line. The applicant is happy extend this as requested. The proposed site would not be impacted by a roundabout, if installed.

Mr. Marshall stated that the largest number of waivers deal with the landscape plan, including the 10' screening to the multifamily development to the north, the 5' screening around the mechanical dumpster, mechanical work in the dumpster, the 15' minimum overall, a shade tree every 30', and trees spaced no greater than 40 feet'. On the western side, from the edge of the pavement to the property line is only 8'. On the eastern side, between the property line and the overhang is 5'. On the southern boundary, there are some existing trees. The applicant is willing to plant some additional trees in the right of way but believes that the property line is already planted.

Board members expressed concern that the proposal seems to try to fit this site into an area that it does not fit. If the applicant took part of the lot and used it for plantings, there would be plenty of room, but the applicant instead decided that the lot must conform to the plan rather than the regulations. This site looks like many other Stewart's Shops sites, but it may not work for Lebanon. Mr. Marshall stated that there is a willingness to plant within the right of way and the applicant would take responsibility to maintain these. A planting strip could be placed along the inside of the property line, if the Board so chooses.

Mr. Corwin stated that there is a proposed condition of approval to speak to maintenance of plantings by the applicant.

Mr. Marsahll explained that the photometric plan seeks a waiver from the uniformity ratio. The maximum footcandle is not achieved but the gas station standards are achieved.

There was discussion regarding snow storage on the site and any potential melting. Mr. Marshall stated that a trench drain is proposed across the driveway and a yard drain could also be considered. It was explained that the site will likely have double wall, fiberglass tanks with interstitial monitoring systems to make sure there is no discharge in the interstitial space before it exits. There will also be positive limiting barriers in which concentric rings are etched around the drive pad where the fueling happens on the concrete. A certain volume will stay within the pad, and the stormwater system acts as a separate overflow mechanism for any spill containment. As part of the stormwater treatment system, there is a hard valve which can be closed. If there is a large spill and it gets into the drainage system, this can be separated off and will not go into the municipal system.

There was discussion regarding the waiver for parking in the front yard. It was explained that the site plan review regulations require for new construction that the parking is to the side or rear of the building, leading to the waiver request. The plan meets the requirement along the N Main Street side of the building, but there is parking in between the building and Bridge Street, leading to the waiver request. Don Collins expressed that the City should start using these rules to maintain the CB District as it is intended to be by the regulations. Mr. Marshall explained that, in the instance of gasoline fueling, he disagrees with this requirement. When it comes to gasoline filling, the IT Trip Generation Manual assigns a 65% pass by assignment for gasoline filling stations. If the existing site is mirrored and the building is brought into the smaller corner of the site, it would further force the driveways to the west on Bridge Street, thus requiring the delivery area and the driveway to share a space. Mr. Marshall stated that operationally and aesthetically, it would be a bad business decision to put the gas in-between this building and what would what would remain at 105 N Main.

In response to a question from Kathie Romano, Mr. Marshall stated that there are currently 15 parking spaces on the site, and the current plan proposes 24 spaces. The current parking configuration allows for perpendicular parking to the building, where the proposed configuration utilizes the space a bit better. He suggested eliminating spaces #1 and #2 and providing a tree well and a bench. This will improve the pedestrian view and then remove some of the potential conflicts.

Mr. Corwin noted that staff's comment on the waivers is that due to a miscommunication to the applicant, one extra waiver was requested. The seventh waiver request listed is duplicative of waiver request #3, to allow for parking in the front yard area.

Chair Zook noted a number of amendments that have occurred through the Board's discussion process this evening including Extending the sidewalk, trees in the right of way based on recommendations from the Tree Advisory Board, elimination of the two parking spaces, and the snow drainage item.

Chair Zook asked for public comment. There was none at this time.

A MOTION was made by Kathie Romano to approve the waiver to Section 6.2.B.6 – landscape buffer requirements. The MOTION was seconded by Andrew Faunce.

****The MOTION was approved (5-1 with Don Collins opposed).***

A MOTION was made by Andrew Faunce to approve the waiver to Section 6.2.B.8 – requiring screening for mechanical equipment, contingent upon the applicant working with the Tree Advisory Board on the appropriate plantings for additional trees. The MOTION was seconded by Kathie Romano.

****The MOTION was approved (5-1 with Don Collins opposed).***

A MOTION was made by Kathie Romano to approve the waiver to Section 6.5.E.7 – prohibiting parking in the front yard, based on Criterion B. The MOTION was seconded by Andrew Faunce.

****The MOTION was approved (5-1 with Don Collins opposed).***

A MOTION was made by Patrick Kennelly to approve the waiver to Section 6.7.C.1 – parking area lighting uniformity ratio requirements, based on Criterion A. The MOTION was seconded by Andrew Faunce.

****The MOTION was approved (5-1 with Don Collins opposed).***

A MOTION was made by Andrew Faunce to approve the waiver to Section 6.2.B.1 – perimeter landscaping requirements, based on meeting Criterion B. The MOTION was seconded by Patrick Kennelly.

****The MOTION was approved (5-1 with Don Collins opposed).***

A MOTION was made by Andrew Faunce to approve the waiver to Section 6.2.B.10 – requiring the placement of trees along the front no more than 40 ft. apart, based on meeting Criterion B and contingent on the applicant working with the Tree Advisory Board on this item. The MOTION was seconded by Max Terzano.

****The MOTION was approved (5-1 with Don Collins opposed).***

Chair Zook closed the public hearing.

A MOTION was made by Patrick Kennelly that the Lebanon Planning Board APPROVE the application of Stewart's Shops Corp. (applicant and property owner) and EB II Realty, LLC (property owner), regarding 97 N Main Street (Tax Map 72, Lot 30) and 99 N Main Street (Tax Map 72, Lot 31), zoned CB, PB2026-29-SPR, for Site Plan Review per Section 3.1.D of the Site Plan Review Regulations to demolish the existing structures on the subject properties and construct a +/-4,500 sq. ft. retail/convenience store and a vehicular refueling station with three (3) fuel dispenser islands with an overhead canopy, together with associated site improvements as shown on a plan set titled "Proposed Stewart's Shops," dated May 11, 2026, last revised June 11, 2026, prepared by MSK Engineers (29 sheets), including any and all submissions and testimony provided for and during the public hearing.

In support of its decision, the Board finds that the applicant has submitted plans, testimony, technical data, information, reports, and studies that together satisfactorily demonstrate compliance with the applicable requirements of the Site Plan Review Regulations, except as may reasonably be addressed through the imposition of certain conditions of approval, set forth below, and except as may have been waived pursuant to Section 7.1.

This approval is subject to the following conditions:

General Conditions

1. ***This approval shall automatically expire and be deemed void upon failure to meet any of the conditions of approval set forth herein within the timeframes specified. It shall be the applicant's responsibility to be familiar with and aware of these conditions of approval, and it shall be the applicant's responsibility to satisfy these conditions of approval and to satisfy them within the relevant timeframes outlined below.***

2. ***The development is subject to the Site Plan Review Regulations adopted May 13, 1991, last revised March 23, 2026, and the Zoning Ordinance adopted January 16, 2013, last amended March 11, 2026, which are the regulations in effect at the time the application was submitted.***

3. ***A building permit must be applied for and issued within three (3) years of the date of this approval (Section 4.10.A.1), subject to an extension if applied for by the applicant and if approved by the Planning Board per Section 4.10.A.2.a.***

4. ***"Active and substantial development," as defined in Section 8.4.A.1 of the Site Plan Review Regulations, shall be achieved within three (3) years of the date of this approval (per Section 8.4.A.2), subject to an extension if applied for by the applicant and if approved by the Planning Board per Section 8.4.A.3. If active and substantial development is not achieved within three (3) years of the date of the Planning Board's***

approval, the development shall be subject to any changes in the City's land use regulations.

5. ***"Substantial completion," as defined in Section 8.4.B.1 of the Site Plan Review Regulations, shall be achieved within seven (7) years of the date of this approval (per Section 8.4.B.2). If substantial completion is not achieved within seven (7) years of the date of the Planning Board's approval, the development shall be subject to any changes in the City's land use regulations.***

6. ***All required landscape plantings shall meet the minimum size requirements for such plantings set forth in Section 6.2.B of the Site Plan Review Regulations at the time of installation.***

7. ***The applicant shall implement and maintain NHDES Site Specific Best Management Practices before, during, and after construction.***

8. ***Prior to the start of any construction activities on the property, erosion control measures, including edge-of-disturbance fencing if applicable, shall be installed and maintained before and during any site work, to be verified by the City Engineer or City's third-party inspector on site.***

9. ***The property owner is responsible for the maintenance and operation of the stormwater management system in accord with the O&M plan, and such responsibility shall run with the land. (Section 6.6.H.2.b of the Site Plan Review Regulations).***

10. ***Changes to underground utilities that do not impact surface conditions may be approved administratively unless determined by the Reviewing Engineer and the Planning and Development Department to materially alter the development and the approved site plan, in which case such changes shall be reviewed pursuant to Article IX of the Site Plan Review Regulations.***

11. ***The development shall be subject to City of Lebanon Impact Fees, pursuant to Section 213 of the Zoning Ordinance, in an amount to be calculated based on the Impact Fee Schedule adopted on May 20, 2024.***

12. ***Pursuant to Section 607 of the Zoning Ordinance, the applicant shall obtain a permit for all business signage prior to installation. All such signage shall be substantially similar to the signage as shown in the approved site plan set. Notwithstanding this approval, the applicant, in connection with the submission of a sign permit application, shall independently demonstrate compliance with the Section 607 sign regulations to the satisfaction of the Zoning Administrator.***

<u>Conditions to be Satisfied Prior to Application for a Building Permit and Prior to the Start of Any Construction Activities</u>

13. ***Within 45 days of the Planning Board's approval, the applicant shall address the comments of the City Engineer as set forth in the Planning Board staff memo to the satisfaction of the City Engineer.***

14. ***Within 45 days of the Planning Board's approval, the applicant shall address the comments of the Fire Department as set forth in the Planning Board staff memo to the satisfaction of the Fire Department.***

15. ***The applicant shall apply to the Planning and Development Department for a voluntary merger of the subject properties (i.e. tax parcels 72-30 and 72-31). Upon approval, the voluntary merger shall be recorded at the Grafton County Registry of Deeds.***

16. ***Within 45 days of the Planning Board's approval, the applicant shall make the following revisions to the plan set to the satisfaction of the Planning and Development Department, the City Engineer and the Fire Department:***
    - ***a. Any changes made or necessitated per Conditions of Approval #13 and #14 above.***
    - ***b. Amend the Cover Sheet to:***
        - ***i. Ensure the Table of Contents matches the order of sheets in plan set***
        - ***ii. Amend the Site Information Table to:***
            1. ***Provide existing and proposed building heights. (5.1.E.4.e.8)***
            2. ***Provide correct Tax Map numbers. (5.1.E.4.e.2)***
            3. ***Change lot coverage maximum to "N/A" and identify existing and proposed lot coverage as a percentage and in square feet. (5.1.E.4.e.12)***
            4. ***Add maximum building coverage per Section 306.3 of the Zoning Ordinance and identify existing and proposed building coverage.***
    - ***c. Amend the Site Plan to:***
        - ***i. Extend the proposed Bridge Street sidewalk along the full length of the property's frontage.***
        - ***ii. Remove "security camera on light pole" notation at the N Main Street entrance where no light pole is proposed.***
        - ***iii. Add a note providing that the pavement arrows will be painted and provide detail (length, width, dimensions, and color/paint type).***
    - ***d. Amend the Landscaping Plan to:***
        - ***i. Make more visible the existing vegetation within the right-of-way that is proposed to remain.***
        - ***ii. Add additional vegetation along the 97 N Main Street right-of-way and Bridge Street right-of-way in consultation with the Tree Advisory Board.***
    - ***e. Amend the plans to remove parking spaces 1 and 2 and replace with a tree well and a bench facing North Main Street.***
    - ***f. Adjust Sheets C-104, C-105, and C-110 to ensure that snow drainage enters the proposed trench drain to minimize impact on abutting properties.***
    - ***g. Amend the cover sheet to provide description of plan revisions (5.1.E.4.d).***

The applicant shall provide the Planning and Development Department with one (1) full size copy of the revised plan set, and a digital copy of the revised plan set saved in a PDF-A format for archival purposes.

17. ***The applicant shall provide a letter or certification from the engineer of record or other qualified design professional confirming that the approved plan set meets the accessibility standards of the State of New Hampshire Building Code.***

18. The applicant shall obtain approval from the City Council or the City Manager's office for any additional water and/or sewer flows in accordance with the applicable Chapter 136 and 182 of the City Code.

19. All engineering review fees shall be paid in full as required by Section 4.7.E.1 of the Site Plan Review Regulations. (Note: applicant can request an invoice from the Department of Public Works).

20. The applicant shall apply for an Excavation Permit, a Driveway Permit, and, if determined by the Department of Public Works to be required in accordance with City Code Chapter 124, a Stormwater Permit.

Conditions to be Satisfied Prior to the Issuance of a Building Permit

21. Prior to the start of any construction activities on the property, the applicant shall record in the Grafton County Registry of Deeds notice of the stormwater management and erosion and sediment control plans as required per Section 6.6.H.2.d of the Site Plan Review Regulations. Such notice shall be reviewed by the Planning and Development Department prior to recording.

22. Prior to the start of any construction activities on the property for which construction inspection is required pursuant to this decision or any applicable ordinance or code, the City shall retain the services of an independent third-party inspector, for which the applicant shall be responsible for all inspection fees related to (a) on-site work related to sewer, water, temporary sedimentation and erosion control, and drainage improvements, and (b) all off-site work within the City's right-of-way (including but not limited to water, sewer, driveways, drainage), in accordance with Section 8.2 of the Site Plan Review Regulations. The applicant shall provide funding for inspection services in a form and amount acceptable to the City and shall sign an Infrastructure Inspection Agreement.

23. In lieu of providing electric vehicle (EV) parking spaces and infrastructure as required by Section 607.8.C of the Zoning Ordinance, the applicant shall, pursuant to Section 607.8.C.4.d, make a contribution to a common fund managed by the City of Lebanon for installing public EV charging stations at a separate site, with the contribution amount to be determined by the City.

24. All water and sewer fees shall be paid as set forth in City Code Chapter 68.

25. The applicant shall obtain an Excavation Permit, a Driveway Permit, and, if determined by the Department of Public Works to be required in accordance with City Code Chapter 124, a Stormwater Permit.

26. Prior to the start of any construction activities on the property, the applicant shall obtain or update (if appropriate) any required Federal or State approvals, including but not limited to an NHDES underground storage tank permit.

Conditions to be Satisfied Prior to the Issuance of a Certificate of Occupancy

27. Unless otherwise agreed to by the Department of Public Works, the applicant shall be responsible for maintaining all improvements constructed by the applicant within the public right-of-way, including but not limited to utility infrastructure and landscaping. If deemed advisable by the City's legal counsel, maintenance responsibilities and ownership shall be memorialized in writing in a form acceptable to the Department of Public Works and the City's legal counsel.

28. The impact fee calculated pursuant to Condition of Approval #11 shall be paid.

29. Third-party engineer or design engineer inspection reports and as-built drawings provided by the applicants (PDF format and CAD .dwg format, using the NH State Plane Coordinate System), including tie sheets, shall be reviewed and approved by the City Engineer.

30. All improvements depicted on the plan shall be completed and shall be constructed as depicted on the approved plan, including any modifications to the plan as may be approved by the Planning Board in accordance with the Site Plan Review Regulations.

The MOTION was seconded by Kathie Romano.

****The MOTION was approved (5-1 with Don Collins opposed).***

The Board took a five minute recess.

C. Last One, LLC and Nous Trois, LLC, 207 Mechanic Street (Tax Map 105, Lot 115) and 213 Mechanic Street (Tax Map 105, Lot 116), zoned GC: Request for approval of a Lot Line Adjustment. **PB2026-31- LLA - Application to be postponed to August 10, 2026**

This application was postponed to August 10, 2026.

D. Execusuite, LLC, 22 School Street (Tax Map 92, Lot 2), zoned R-O: Applicant requests Site Plan Review to convert the use of the building to a 12-unit multi-family dwelling and to construct associated site improvements. **PB2026-32-SPR - Application to be postponed to August 10, 2026**

This application was postponed to August 10, 2026.

E. Mason Storage, LLC, 38 Spencer Street (Tax Map 78, Lot 39), zoned LD: Applicant requests an amendment to a previously approved site plan (PB2021-13-SPR) to install four (4) mechanical pads at the rear of the building. **PB2026-33-SPA**

Mr. Corwin stated that staff recommends that the application is technically complete and can be heard, however, either as an initial matter or at some point prior to making a determination on the application, the applicant should provide an updated landscape plan. Any plan sheet that is impacted by proposed changes to the plan set, should be reflected throughout. The applicant should submit an updated landscape plan to show how the changes impact what was approved. Secondarily, the site plan sheet submitted is inaccurate, as it shows certain features that are not on

the ground today. It is not clear from the site plan sheet submitted as to what is changing. Staff would like to see a site plan sheet that clearly shows what was built, what are the existing conditions are that the applicant is requesting approval of, and what is different from what was approved originally.

Mr. Corwin explained that when staff conducted a site visit in connection with a request to issue a Certificate of Occupancy, it was discovered that there were concrete pads installed within the setback along the rear of the building, and mechanical equipment installed on top of those pads. Those by themselves were in violation of the zoning ordinance, and the approved site plan. The applicant took steps to address the zoning violation and obtained a variance from the Zoning Board to allow those concrete pads to remain within the 10' minimum required setback, but they also require multiple waivers from the Planning Board and an amendment to the site plan because these were not shown on the original site plan.

A MOTION was made by Patrick Kennelly that the application is complete and ready for review. The MOTION was seconded by Max Terzano.

****The MOTION was approved (6-0).***

Dan Nash, consultant, and Amye Mason, owner of Mason Storage, LLC, addressed the Board. The Board asked why the City was not advised to the change. Ms. Mason explained that the request is for approval of an amendment to the previously approved site plan so that it accurately reflects the product that was ultimately constructed, along with the associated waivers that accompany those changes. During construction, the location of certain mechanical equipment, such as HVAC systems, evolved from what was shown on the originally approved plans. After being identified during the Certificate of Occupancy process, they worked with City staff following their guidance and obtained the required variance from the Zoning Board of Adjustment for setbacks. The equipment is now located behind the building in the least visible and least impactful location on the site. It is screened by the building itself, an existing berm, and the surrounding topography and foliage. There are no residential abutters immediately behind the property. There have been no complaints regarding the equipment, and its current placement minimizes the visibility from Spencer St. and the surrounding neighborhood. In fact, this cannot be seen at all from Spencer St. This project represents a substantial private investment in downtown Lebanon, transforming an older warehouse property into a modern facility that contributes to the tax base and provides a service to local residents and businesses. The goal is to update the approved plans to accurately reflect the completed project and address any remaining Planning Board requirements. She does not know why the City was not advised to the change but believes this was an oversight.

Don Collins noted that he rode his bike past the property and the mechanical equipment is loud and will not be screened in the winter in its current location from the rail trail. The regulations state that they should be screened. Andrew Faunce asked about if the units could be placed on the roof, as originally designed. Ms. Mason stated that she believes it was determined by the contractors that the best placement would be the back of the building. It is possible that the building may not be able to support the units. Mr. Nash stated that his original plan showed them on the side of the building, but it appears they needed to be moved. The units may have interfered with safe egress from the building, as originally proposed. Chair Zook stated that both the egress and the original location proposed for the units should have been shown on the plan. Interference with the egress

would have been noticed if both were shown on the plan. Mr. Nash stated that the Fire Department does not do a full review on life safety and egress until they get the building plans.

Chair Zook asked why the Planning Board is being shown plans that have not been fully reviewed in terms of the building code. Mr. Nash stated that builders always hold off on a full building design until there is a site plan approval in hand, as there could be costs associated.

Mr. Vincent stated that it is not uncommon for the approved Planning Board application package to change once going to construction. The process to address that is a site plan amendment application. In this case, it must not have been realized or thought through to that extent, so this did not happen. The project was constructed and during a review prior to issuance of a Certificate of Occupancy, this was recognized as an issue. Ideally, it would be addressed through a site plan amendment application prior to construction.

Andrew Faunce stated that generally, once an approval is in hand, one would anticipate there would be engineering to verify that that presented site plan is constructable. It does not seem this occurred in this case. If it had, perhaps someone with an understanding of the mechanical requirements for the units that are now on the back of the property could have advised if there was sufficient structure to install them on the roof, as originally planned. Mr. Nash noted that the City's building inspection department had to approve the mechanical unit plan. If there had been some interface with the Planning Department regarding the differences, there potentially could have been some interface to have prevented this.

Mr. Corwin explained that the Board is not here to arbitrate or decide upon a code violation. The substance of the request is for the Board to imagine that the improvements are not there. It is not the Board's job to review that the improvements were constructed without approval. It is the Board's job to make a determination based on whether or not the request meets the applicable criteria, regardless of the fact that it is already installed.

Don Collins stated that this request seems contrary to the both the spirit and intent of the regulations. He does not believe the applicant has a basis for appealing it based on the criteria.

Mr. Nash explained that, in terms of the landscaping, the setbacks are essentially the same for the LD and CB District, which are 0' except for 10' in the rear. Following that, there is absolutely no room for landscaping in downtown properties. In this case, the owner took the bare slivers of 3'-5' of property on the sides and the excessive front setback and installed $66,000 worth of landscaping.

Mr. Corwin explained that, in order for the Planning Department to approve the issuance of a Certificate of Occupancy for a project that has obtained site plan review, an on-site visit has to be conducted to verify that the project has been built in conformance with the approved plan. The approved plan is not a suggestion. Currently, relative to the landscape plan, the issue is that what has been planted, while it may be perfectly sufficient, is not in line with the approved landscape plan. The recommendation remains that the landscape plan should be updated in connection with this application and approved accordingly by the Planning Board.

In terms of issuing a final Certificate of Occupancy for this property, Mr. Corwin explained that there are the following issues: The applicant obtained a variance for the mechanical equipment and

pads in the back, thus resolving the zoning violation. However, the pads in the back require a site plan amendment and waivers from the perimeter landscaping requirement and the mechanical equipment screening requirement. Next, the tanks which line the sides of the building were not on the approved site plan. The site plan review regulations, both in the general landscaping regulations Section 6.2 and the Lebanon Downtown District design regulations, require screening of those tanks. Thus, a waiver is needed from that screening requirement. Third, the mechanical equipment, the air compressors at the front of the building, also require waivers from the landscaping screening requirements, both under the general Section 6.2 landscaping standards and the Section 6.10 Lebanon Downtown District design standards. The mechanical equipment also requires a waiver from placing mechanical equipment in the front yard in the Lebanon Downtown District.

Mr. Corwin explained that, from a planning policy perspective, the most concerning of the three issues is the mechanical equipment in the front of the building. This is an existing, non-conforming use warehouse which is inconsistent with the overall vision for Spencer Street in downtown Lebanon. It was significantly expanded by special exception of the Zoning Board. The City Council took action to limit the authority of the Zoning Board to grant expansions of non-conforming uses, as they did with this application. Thus, to waive the design regulations in the Lebanon Downtown District is significant. The purpose of those Lebanon Downtown design regulations should be taken into account when the Board considers the waiver requests, especially as this is a substantially non-conforming use within the Lebanon Downtown District.

Chair Zook stated that the Planning Board needs a site plan that accurately reflects the site and reasons for why the changes made were necessary.

Andrew Faunce stated that the issue of the pads and the mechanical units in the setback, the tanks on the side, and the HVAC units in the front may not require a landscape plan in order for the Board to understood if they should be waived or not. He believes the landscaping is secondary to those items of primary difficulty.

A MOTION was made by Andrew Faunce to extend the meeting to 9:40pm. The MOTION was seconded by Patrick Kennelly.

****The MOTION was approved (6-0).***

Chair Zook stated that she would like to see a site plan which accurately reflects the site and justification for meeting the criteria. Kathie Romano suggested that the applicant could also include what they would be willing to alter to more closely match the requirements. There was agreement that additional information should be submitted by the applicant prior to the next meeting.

There was no public comment.

A MOTION was made by Andrew Faunce to continue this hearing to August 10, 2026. The MOTION was seconded by Kathie Romano.

****The MOTION was approved (6-0).***

F. Robert J. Oakes, Laplante Road (Tax Map 138, Lot 27), zoned R-3, RL-1 & RL-2: Pursuant to NH RSA 676:4, I(i), applicant requests a hearing to verify compliance with conditions of approval #19, 20, 21, 22, 24 and 30 as set forth in the Notice of Action for Heritage Way, a 13-unit Planned Unit Residential Development (PURD) Major Subdivision, conditionally approved on April 27, 2026. **PB2026-09-FMAJ - Application to be postponed to August 10, 2026**

This application was postponed to August 10, 2026.

A MOTION was made by Andrew Faunce to extend the meeting to 10:00pm. The MOTION was seconded by Patrick Kennelly.

****The MOTION was approved (6-0).***

4. OTHER BUSINESS

A. Nomination to the Upper Valley Lake Sunapee Regional Planning Commission

A MOTION was made by Max Terzano to renominate Dan Nash to the Upper Valley Lake Sunapee Regional Planning Commission. The MOTION was seconded by Andrew Faunce.

****The MOTION was approved (6-0).***

5. APPROVAL OF MINUTES

A. June 22, 2026

The Board tabled discussion of the minutes to the next meeting.

6. ADJOURNMENT

A MOTION was made by Don Collins to adjourn the meeting at 9:31pm. The MOTION was seconded by Kathie Romano.

****The MOTION was approved (6-0).***

Respectfully submitted,
Kristan Patenaude
Recording Secretary