SITE PLAN REVIEW TECHNICAL ADVISORY COMMITTEE
PORTSMOUTH, NEW HAMPSHIRE

CONFERENCE ROOM A
CITY HALL, MUNICIPAL COMPLEX, 1 JUNKINS AVENUE

Members of the public also have the option to join the meeting over Zoom
*(See below for more details)**

2:00 PM **July 7, 2026**

AGENDA

I. APPROVAL OF MINUTES

A. Approval of the June 2, 2026 Site Plan Review Technical Advisory Committee meeting minutes.

II. OLD BUSINESS

A. REQUEST TO POSTPONE The request of **Rafferty Investment Group LLC (Owner)**, for property located at **64 Bridge Street** requesting Site Plan Review approval for demolition of the existing structure and construction of a ten (10) room three-story Inn with associated site improvements. Said property is located on Assessor Map 126 Lot 55 and lies within the Mixed Residential Business (MRB) District, Character District 4 (CD4) and Downtown Overlay District. **REQUEST TO POSTPONE** (LU-26-36)

III. NEW BUSINESS

A. The request of **Marissa Valverde (Owner)**, for property located at **20 Central Avenue** requesting Preliminary and Final Subdivision approval and Site Plan Review approval for the subdivision of one lot into three lots, each with a single-family dwelling and associated site improvements. Said property is located on **Assessor Map 209 Lot 30** and lies within the General Residence A (GRA) and Highway Noise Overlay Districts. (LU-26-84)

B. The request of **Alea LLC (Owner)**, for property located at **238 Austin Street** requesting Preliminary and Final Subdivision approval to subdivide one lot into two lots and demolition of the existing structures to construct a single-family dwelling on each lot. Said property is located on **Assessor Map 135 Lot 61** and lies within the General Residence C (GRC) District. (LU-25-177)

C. The request of **124 Group Inc (Owner),** for property located at **124 Heritage Avenue** requesting amended Site Plan approval for minor site improvements including a garden, ADA accessible ramp, parking lot re-striping, stormwater conveyance modifications, lighting and landscaping. Said property is located on Assessor Map 284 Lot 8 and lies within the Industrial (I) District. (LU-26-61)

D. The request of **Colonial Properties LLC (Owner)**, for property located at **833 Islington Street** requesting a Parking Conditional Use Permit to allow 9 parking spaces where 21 are required. Said property is located on Assessor Map 165 Lot 6 and lies within the Character District 4-W (CD4-W). (LU-26-85)

IV. ADJOURNMENT

**Members of the public also have the option to join this meeting over Zoom, a unique meeting ID and password will be provided once you register. To register, click on the link below or copy and paste this into your web browser:*

https://us06web.zoom.us/webinar/register/WN_7J6p95zZTgq4pXl1RRJeug

SITE PLAN REVIEW TECHNICAL ADVISORY COMMITTEE
PORTSMOUTH, NEW HAMPSHIRE

CONFERENCE ROOM A
CITY HALL, MUNICIPAL COMPLEX, 1 JUNKINS AVENUE

2:00 PM **June 2, 2026**

MEMBERS PRESENT:
Peter Stith, Chairperson, Assistant Planning Director; David Desfosses, Project Manager – Engineering & Operations; Chad Putney, Acting Deputy Fire Chief; Peter Britz, Director of Planning & Sustainability; Shanti Wolph, Chief Building Inspector; Zachary Cronin, Assistant City Engineer, Eric Eby, Parking and Transportation Engineer; Mike Maloney; Deputy Police Chief; Vincent Hayes; Planner II – Development Compliance

MEMBERS ABSENT:

ADDITIONAL STAFF PRESENT: Kate Homet, Environmental Planner and Sustainability Coordinator; Jennifer Crockett, Administrative Assistant I

MINUTES

I. APPROVAL OF MINUTES

A. Approval of the **April 7, 2026** meeting minutes.

P. Britz moved to approve the April 7, 2026 meeting minutes as presented, seconded by S. Wolph.

II. OLD BUSINESS

A. REQUEST TO POSTPONE The request of **Rafferty Investment Group LLC (Owner)**, for property located at **64 Bridge Street** requesting Site Plan Review approval for demolition of the existing structure and construction of a ten (10) room three-story Inn with associated site improvements. Said property is located on Assessor Map 126 Lot 55 and lies within the Mixed Residential Business (MRB) District, Character District 4 (CD4) and Downtown Overlay District. **REQUEST TO POSTPONE** (LU-26-36)

DISCUSSION AND DECISION OF THE BOARD

P. Britz made a motion to postpone the request to the July meeting. Z. Cronin seconded the motion. The motion passed unanimously.

B. The request of **RIGZ Enterprises LLC (Owner)**, for property located at **806 US Route 1 Bypass** requesting a fourth 1-Year Extension to the Site Plan approval originally granted on June 23, 2022. The third extension will expire on June 23, 2026.

[Timestamp 1:06] *M. Maloney arrived at the meeting.*

SPEAKING TO THE APPLICATION

[Timestamp 1:20] Engineer Alex Ross from Ross Engineering and General Contractor Dave Grzybowski came to present the project. Mr. Ross reviewed the history of the project. Chair Stith asked if any changes have been made to the project and about the back fence. Mr. Ross explained that over the winter snow had damaged the chain-link fence. They received feedback from the neighbors to change the material of the fence, so they used vinyl and matched the fence to the one installed at 822 US Route 1 Bypass. Mr. Ross noted that most of the heavy lifting for the project was completed with the work done for 822 US Route 1 Bypass. P. Britz asked if the use will be the same for the addition. Mr. Grzybowski explained that the addition will be used as storage. P. Britz asked if they had identified a user yet. Mr. Grzybowski said that they had not and would keep it listed as the same until the owner decides, as the owner will use the space as storage for 822 US Route 1 Bypass. He said that if they change the use they will have to come back for that change. P. Britz asked about a sewer line that had to be run underneath. Mr. Grzybowski confirmed that a sewer line was run at the bridge along with a drainage tie-in.

DISCUSSION AND DECISION OF THE BOARD

P. Britz made a motion to recommend approval to the Planning Board to continue the 1-year extension process and add one more year extension to the approval that was originally granted on June 23,2022 with the changes as described with the fence. D. Desfosses seconded the motion. The motion passed unanimously.

[Timestamp 5:18] Mr. Ross and Mr. Grzybowski also noted that the front landscaping had to change due to some of the proposed plantings being in the NHDOT ROW. P. Britz asked if the previous plantings were in the approved plan. Mr. Ross confirmed that they were. Chair Stith confirmed that the submitted plans were updated with the plantings removed. It was determined that this did not impact open space calculations as the plantings were not on the property.

III. ADJOURNMENT

The meeting adjourned at 2:06 PM.

RAFFERTY INVESTMENT GROUP

Technical Advisory Committee
1 Junkins Avenue
Portsmouth, NH 03801

Dear TAC Members,

Rafferty Investment Group respectfully requests a postponement of our July TAC meeting regarding the property located at 64 Bridge Street, Portsmouth, NH 03801. (0126/ 0055/ 0000)

Our engineering team requires additional time to complete the necessary project requirements and finalize materials needed for review with the Board and City staff. We appreciate the Board's time and consideration of this request and look forward to continuing to work collaboratively with the City as the project progresses.

Thank you for your consideration.

Sincerely,

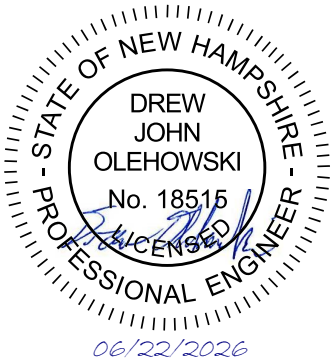
McKayla Glazier
Rafferty Investment Group

HALEY WARD

APPLICATION FOR SITE PLAN REVIEW AND SUBDIVISION APPROVAL

TO THE CITY OF PORTSMOUTH
FOR 20 CENTRAL AVENUE
Map 209, Lot 30 | Portsmouth, NH

APPLICANT:
Copley Properties, LLC
94 Portsmouth Avenue, Stratham, NH 03885



June 22, 2026
JN: 5010658.001

APPLICATION PREPARED BY:
Haley Ward, Inc.
200 Griffin Road, Unit 14 | Portsmouth, NH 03801

June 22, 2026

Peter Stith, TAC Committee Chair
City of Portsmouth
1 Junkins Avenue
Portsmouth, NH 03801

RE: Request for TAC Review
20 Central Avenue
Site Plan Review

Dear Mr. Stith and Technical Advisory Committee (TAC) Members,

On behalf of Copley Properties (Copley) we are pleased to submit the attached plan set for **Site Plan and Subdivision Review** for the above-mentioned project and request that we be placed on the agenda for your **July 7, 2026,** meeting. The project is the demolition of the existing dwelling, subdivision of the lot, and proposed new construction of three (3) single-family homes with the associated and required site improvements.

Within this application we have provided a drawing set that includes depictions of both the parcel's existing and proposed conditions. The proposed conditions include the three dwellings and associated driveways, utilities, grading/stormwater, landscaping, and typical notes/details. This application includes submission items as required for Site Plan and Subdivision review per the City's Review Checklists.

PROJECT OVERVIEW

The project consists of subdividing the existing residential lot located at 20 Central Avenue into three lots for residential development. The existing site has a total area of 28,972 square feet. The existing home, the garage/shed, and westerly driveway will be removed, and the lot will be subdivided with three single family homes. We are requesting the Technical Advisory Committee (TAC) review the project as a part of the approval process, prior to a completed Subdivision application at the site, and we look forward to an in-person presentation and the TAC Committee review of this submission.

Once subdivided, the project includes the construction of 3 single-family dwellings with associated walkways and driveways on each lot. Preliminary building footprints, site layouts, drainage and utilities are shown in the attached submittal to show compliance with the ordinance. Final layouts and design will be prepared and submitted with the building permits. The development of the site will comply with the applicable design, safety, and operational standards, including building code compliance. We believe that the additional residential development will complement the surrounding neighborhood.

SITE ZONING

The project is within the City of Portsmouth General Residential A (GRA) District which allows for residential development. The proposed project is consistent with the

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surrounding neighborhood which is predominantly single family residential. As proposed with the subdivided lot, the project meets all zoning requirements.

PARKING

Each residence will have a two-car garage in addition to one surface space for a total of three spaces per unit. The overall project will include nine total parking spaces.

VEHICULAR AND PEDESTRIAN CIRCULATION

The proposed developments will be accessed by a 20-foot-wide paved driveway with a turnaround for each property. Access to the southerly and easterly properties will be from Beechwood Street; the northerly property access will be from Central Avenue.

TRAFFIC

A trip generation letter has been prepared for the AM and PM peak hour trips based on the Institute of Transportation Engineer's (ITE) publication, Trip Generation, 12th Edition and is included in this submission. The analysis demonstrates no significant change from existing traffic volumes or patterns.

NOISE

The property is located in a Highway Noise Overlay District. A Conditional Use Permit has been prepared to meet Noise Analysis requirements. The Noise Analysis was prepared by Reuters Associates and demonstrates the proposed development will comply with Ordinance sound level limits for indoor and outdoor activity. This permit will be submitted for Planning Board review following TAC review.

SCREENING AND LANDSCAPING

The proposed landscaping provides a blend of street trees and shrubs to enhance the property while providing screening around the perimeter. A proposed landscaping plan, prepared by a registered landscape architect, has been provided.

WATER AND SEWAGE SYSTEMS

The development will be served by municipal water and sewer located within Central Avenue and Beechwood Street. New tie-ins will be extended into the site from the existing 8" PVC sewer in Beechwood Street to collect the laterals for each dwelling unit. Locations of the tie-ins will be confirmed with the Portsmouth Department of Public Works (DPW). All onsite sewers will be 6" PVC SDR 35 gasketed pipe. A 1" domestic water line will be extended into the property to serve each dwelling.

STORMWATER MANAGEMENT

The proposed stormwater will decrease runoff flow while maintaining existing flow patterns and continue to discharge to the southeast into the existing municipal system. Refer to the Stormwater Management and Erosion Control Plan includes as part of this submittal for additional details related to the stormwater design.

SITE LIGHTING

Site lighting will be wall mounted and designed at minimum levels to provide a welcoming and safe pedestrian experience and not create excess lighting within the neighborhood. No pole mounted lighting is proposed as part of this project.

SITE UTILITIES

Each building will be served by underground electric/communications services. Included in the submission is a "will serve" letter for the project from Unitil. Included in the submission is a copy of the Eversource work order.

SOLID WASTE

Solid waste will be collected through Portsmouth curb side pickup.

SUBMISSION

The submission includes Plans, the Subdivision Application Checklist, a Tax Map, an Aerial Map and a Drainage Management and Erosion Control Plan.

The following drawings are included in our submission:

- C000 – Cover Sheet
- C001 – General Notes, Legend & Abbreviations
- Subdivision Plan – This plan shows the proposed subdivision and easements.
- V101 – Conditions Plan – This plan shows the existing conditions at the site.
- C101 – Demolition Plan – This plan shows the proposed demolition and construction preparations.
- C102 – Site Layout & Utility Plan – This plan shows proposed site layout and utilities.
- C103 – Grading & Drainage Plan – This plan shows the proposed stormwater improvements.
- C501 & C502 – Construction Details
- C701 & C702 – Pre- & Post-Development Hydrology Plans – These plans show the existing and proposed drainage areas and flow paths.

We look forward to Technical Advisory Committee review of this submission and look forward to an in-person presentation at your meeting.

Sincerely,
Haley Ward, Inc.

Drew Olehowski, PE
Project Manager

City of Portsmouth, New Hampshire

Site Plan Application Checklist

This site plan application checklist is a tool designed to assist the applicant in the planning process and for preparing the application for Planning Board review. The checklist is required to be completed and uploaded to the Site Plan application in the City's online permitting system. A pre-application conference with a member of the planning department is strongly encouraged as additional project information may be required depending on the size and scope. The applicant is cautioned that this checklist is only a guide and is not intended to be a complete list of all site plan review requirements. Please refer to the Site Plan review regulations for full details.

Applicant Responsibilities (Section 2.5.2): Applicable fees are due upon application submittal along with required attachments. The application shall be complete as submitted and provide adequate information for evaluation of the proposed site development. Waiver requests must be submitted in writing with appropriate justification.

Name of Applicant: Copley Properties Date Submitted: June 22, 2026

Application # (in City's online permitting): _____

Site Address: 20 Central Avenue Map: 209 Lot: 30

Application Requirements			
☑	**Required Items for Submittal**	**Item Location (e.g. Page or Plan Sheet/Note #)**	**Waiver Requested**
☒	Complete application form submitted via the City's web-based permitting program (2.5.2.1**(2.5.2.3A)**	Online	N/A
☒	All application documents, plans, supporting documentation and other materials uploaded to the application form in viewpoint in digital Portable Document Format (PDF). One hard copy of all plans and materials shall be submitted to the Planning Department by the published deadline. **(2.5.2.8)**	Online & Delivered	N/A

Site Plan Review Application Required Information			
☑	**Required Items for Submittal**	**Item Location (e.g. Page/line or Plan Sheet/Note #)**	**Waiver Requested**
☒	Statement that lists and describes "green" building components and systems. **(2.5.3.1B)**	Green Building Narrative Included	
☒	Existing and proposed gross floor area and dimensions of all buildings and statement of uses and floor area for each floor. **(2.5.3.1C)**	Architectural Plans	N/A
☒	Tax map and lot number, and current zoning of all parcels under Site Plan Review. **(2.5.3.1D)**	Site Plans	N/A

Site Plan Review Application Required Information			
☑	**Required Items for Submittal**	**Item Location (e.g. Page/line or Plan Sheet/Note #)**	**Waiver Requested**
☒	Owner's name, address, telephone number, and signature. Name, address, and telephone number of applicant if different from owner. **(2.5.3.1E)**	**Cover Sheet C000**	N/A
☒	Names and addresses (including Tax Map and Lot number and zoning districts) of all direct abutting property owners (including properties located across abutting streets) and holders of existing conservation, preservation or agricultural preservation restrictions affecting the subject property. **(2.5.3.1F)**	**Existing Conditions Plan V101**	N/A
☒	Names, addresses and telephone numbers of all professionals involved in the site plan design. **(2.5.3.1G)**	**Cover Sheet C000**	N/A
☒	List of reference plans. **(2.5.3.1H)**	**Cover Sheet C000**	N/A
☒	List of names and contact information of all public or private utilities servicing the site. **(2.5.3.1I)**	**Cover Sheet C000**	N/A

Site Plan Specifications			
☑	**Required Items for Submittal**	**Item Location (e.g. Page/line or Plan Sheet/Note #)**	**Waiver Requested**
☒	Full size plans shall not be larger than 22 inches by 34 inches with match lines as required, unless approved by the Planning Director.. **(2.5.4.1A)**	Required on all plan sheets	N/A
☒	Scale: Not less than 1 inch = 60 feet and a graphic bar scale shall be included on all plans. **(2.5.4.1B)**	Required on all plan sheets	N/A
☒	GIS data should be referenced to the coordinate system New Hampshire State Plane, NAD83 (1996), with units in feet. **(2.5.4.1C)**	**Complies**	N/A
☒	Plans shall be drawn to scale and stamped by a NH licensed civil engineer. **(2.5.4.1D)**	Required on all plan sheets	N/A
☐	Wetlands shall be delineated by a NH certified wetlands scientist and so stamped. **(2.5.4.1E)**	**No Wetlands Onsite**	N/A
☒	Title (name of development project), north point, scale, legend. **(2.5.4.2A)**	**All Sheets**	N/A
☒	Date plans first submitted, date and explanation of revisions. **(2.5.4.2B)**	**All Sheets**	N/A
☒	Individual plan sheet title that clearly describes the information that is displayed. **(2.5.4.2C)**	Required on all plan sheets	N/A
☒	Source and date of data displayed on the plan. **(2.5.4.2D)**	**Existing Conditions Plan V101**	N/A

Site Plan Specifications – Required Exhibits and Data			
☑	**Required Items for Submittal**	**Item Location (e.g. Page/line or Plan Sheet/Note #)**	**Waiver Requested**
☒	**1. Existing Conditions: (2.5.4.3A)** • Surveyed plan of site showing existing natural and built features; • Existing building footprints and gross floor area; • Existing parking areas and number of parking spaces provided; • Zoning district boundaries; • Existing, required, and proposed dimensional zoning requirements including building and open space coverage, yards and/or setbacks, and dwelling units per acre; • Existing impervious and disturbed areas; • Limits and type of existing vegetation; • Wetland delineation, wetland function and value assessment (including vernal pools); • SFHA, 100-year flood elevation line and BFE data, as required.	**Existing Conditions Plan V101**	
☒	**2. Buildings and Structures: (2.5.4.3B)** • Plan view: Use, size, dimensions, footings, overhangs, 1st fl. elevation; • Elevations: Height, massing, placement, materials, lighting, façade treatments; • Total Floor Area; • Number of Usable Floors; • Gross floor area by floor and use.	**Architectural Plans**	
☒	**3. Access and Circulation: (2.5.4.3C)** • Location/width of access ways within site; • Location of curbing, right of ways, edge of pavement and sidewalks; • Location, type, size and design of traffic signing (pavement markings); • Names/layout of existing abutting streets; • Driveway curb cuts for abutting prop. and public roads; • If subdivision; Names of all roads, right of way lines and easements noted; • AASHTO truck turning templates, description of minimum vehicle allowed being a WB-50 (unless otherwise approved by TAC).	**Site Layout Plan C101**	
☒	**4. Parking and Loading: (2.5.4.3D)** • Location of off street parking/loading areas, landscaped areas/buffers; • Parking Calculations (# required and the # provided).	**Site Layout Plan C101**	
☒	**5. Water Infrastructure: (2.5.4.3E)** • Size, type and location of water mains, shut-offs, hydrants & Engineering data; • Location of wells and monitoring wells (include protective radii).	**Utility Plan C102**	
☒	**6. Sewer Infrastructure: (2.5.4.3F)** • Size, type and location of sanitary sewage facilities & Engineering data, including any onsite temporary facilities during construction period.	**Utility Plan C102**	

☒	**7. Utilities: (2.5.4.3G)** • The size, type and location of all above & below ground utilities; • Size type and location of generator pads, transformers and other fixtures.	**Utility Plan C102**	
☒	**8. Solid Waste Facilities: (2.5.4.3H)**	**City Curbside Pickup**	
	• The size, type and location of solid waste facilities.	**Note on C102**	
☒	**9. Storm water Management: (2.5.4.3I)** • The location, elevation and layout of all storm-water drainage. • The location of onsite snow storage areas and/or proposed off-site snow removal provisions. • Location and containment measures for any salt storage facilities • Location of proposed temporary and permanent material storage locations and distance from wetlands, water bodies, and stormwater structures.	**Grading & Drainage Plan C103**	
☒	**10. Outdoor Lighting: (2.5.4.3J)** • Type and placement of all lighting (exterior of building, parking lot and any other areas of the site) and photometric plan.	**Wall Mounted Residential Lighting Only. Note On C102**	
☒	**11.** Indicate where dark sky friendly lighting measures have been implemented. **(10.1)**	**Note On C102**	
☒	**12. Landscaping: (2.5.4.3K)** • Identify all undisturbed area, existing vegetation and that which is to be retained; • Location of any irrigation system and water source.	**Landscape Plan L-101**	
☒	**13. Contours and Elevation: (2.5.4.3L)** • Existing/Proposed contours (2 foot minimum) and finished grade elevations.	**Grading & Drainage Plan C103**	
☒	**14. Open Space: (2.5.4.3M)** • Type, extent and location of all existing/proposed open space.	**Site Layout Plan C101**	
☒	**15. All easements, deed restrictions and non-public rights of ways. (2.5.4.3N)**	**Existing Conditions Plan V101**	
☐	**16. Character/Civic District (All following information shall be included): (2.5.4.3P)** • Applicable Building Height (10.5A21.20 & 10.5A43.30); • Applicable Special Requirements (10.5A21.30); • Proposed building form/type (10.5A43); • Proposed community space (10.5A46).	**N/A**	
☐	**17. Special Flood Hazard Areas (2.5.4.3Q)** • The proposed development is consistent with the need to minimize flood damage; • All public utilities and facilities are located and construction to minimize or eliminate flood damage; • Adequate drainage is provided so as to reduce exposure to flood hazards.	**N/A**	

Other Required Information			
☑	**Required Items for Submittal**	**Item Location (e.g. Page/line or Plan Sheet/Note #)**	**Waiver Requested**
☒	Traffic Impact Study or Trip Generation Report, as required. **(3.2.1-2)**	**Trip Generation Letter**	
☒	Indicate where Low Impact Development Design practices have been incorporated. **(7.1)**	**Drainage Analysis**	
☐	Indicate whether the proposed development is located in a wellhead protection or aquifer protection area. Such determination shall be approved by the Director of the Dept. of Public Works. **(7.3.1)**	**N/A**	
☒	Stormwater Management and Erosion Control Plan. **(7.4)**	**Grading & Drainage Plan C102**	
☒	Inspection and Maintenance Plan **(7.6.5)**	**Drainage Analysis**	

Final Site Plan Approval Required Information			
☑	**Required Items for Submittal**	**Item Location (e.g. Page/line or Plan Sheet/Note #)**	**Waiver Requested**
☒	All local approvals, permits, easements and licenses required, including but not limited to: • Waivers; • Driveway permits; • Special exceptions; • Variances granted; • Easements; • Licenses. **(2.5.3.2A)**	**Cover Sheet C000**	
☒	Exhibits, data, reports or studies that may have been required as part of the approval process, including but not limited to: • Calculations relating to stormwater runoff; • Information on composition and quantity of water demand and wastewater generated; • Information on air, water or land pollutants to be discharged, including standards, quantity, treatment and/or controls; • Estimates of traffic generation and counts pre- and post-construction; • Estimates of noise generation; • A Stormwater Management and Erosion Control Plan; • Endangered species and archaeological / historical studies; • Wetland and water body (coastal and inland) delineations; • Environmental impact studies. **(2.5.3.2B)**	**Included In Online Submittal**	
☒	A document from each of the required private utility service providers indicating approval of the proposed site plan and indicating an ability to provide all required private utilities to the site. **(2.5.3.2D)**	**Included In Online Submittal**	

Final Site Plan Approval Required Information			
☑	**Required Items for Submittal**	**Item Location (e.g. Page/line or Plan Sheet/Note #)**	**Waiver Requested**
☒	A list of any required state and federal permit applications required for the project and the status of same. **(2.5.3.2E)**	**Cover Sheet C000**	
☒	A note shall be provided on the Site Plan stating: "All conditions on this Plan shall remain in effect in perpetuity pursuant to the requirements of the Site Plan Review Regulations." **(2.5.4.2E)**	**Site Layout Plan C101**	N/A
☐	For site plans that involve land designated as "Special Flood Hazard Areas" (SFHA) by the National Flood Insurance Program (NFIP) confirmation that all necessary permits have been received from those governmental agencies from which approval is required by Federal or State law, including Section 404 of the Federal Water Pollution Control Act Amendments of 1972, 33 U.S.C. 1334. **(2.5.4.2F)**	**N/A**	
☐	Plan sheets submitted for recording shall include the following notes: a. "This Site Plan shall be recorded in the Rockingham County Registry of Deeds." b. "All improvements shown on this Site Plan shall be constructed and maintained in accordance with the Plan by the property owner and all future property owners. No changes shall be made to this Site Plan without the express approval of the Portsmouth Planning Director." **(2.13.3)**	**Site Layout Plan C101**	N/A

Applicant's Signature: _____ **Date:** June 22, 2026

Applicants Agent

City of Portsmouth, New Hampshire

Subdivision Application Checklist

This subdivision application checklist is a tool designed to assist the applicant in the planning process and for preparing the application for Planning Board review. A pre-application conference with a member of the planning department is strongly encouraged as additional project information may be required depending on the size and scope. The applicant is cautioned that this checklist is only a guide and is not intended to be a complete list of all subdivision review requirements. Please refer to the Subdivision review regulations for full details.

Applicant Responsibilities (Section III.C): Applicable fees are due upon application submittal along with required number of copies of the Preliminary or final plat and supporting documents and studies. Please consult with Planning staff for submittal requirements.

Owner: Marissa Valverde Date Submitted: 06/22/2026

Applicant: Copley Properties, c/o Drew Goddard

Phone Number: 603-380-5288 E-mail: drew@copleyproperties.com

Site Address 1: 20 Central Avenue Map: 209 Lot: 30

Site Address 2: _____ Map: _____ Lot: 30

Application Requirements			
☑	**Required Items for Submittal**	**Item Location (e.g. Page or Plan Sheet/Note #)**	**Waiver Requested**
✔	Completed Application form. **(III.C.2-3)**	Submitted Online	N/A
✔	All application documents, plans, supporting documentation and other materials provided in digital Portable Document Format (PDF) on compact disc, DVD or flash drive. **(III.C.4)**	Submitted Online	N/A

Requirements for Preliminary/Final Plat				
☑	**Required Items for Submittal**	**Item Location (e.g. Page/line or Plan Sheet/Note #)**	**Required for Preliminary / Final Plat**	**Waiver Requested**
✔	Name and address of record owner, any option holders, descriptive name of subdivision, engineer and/or surveyor or name of person who prepared the plat. **(Section IV.1/V.1)**	C000 Cover Sheet	☑ Preliminary Plat ☑ Final Plat	N/A

Requirements for Preliminary/Final Plat				
☑	**Required Items for Submittal**	**Item Location (e.g. Page/line or Plan Sheet/Note #)**	**Required for Preliminary / Final Plat**	**Waiver Requested**
✔	**Preliminary Plat** Names and addresses of all adjoining property owners. **(Section IV.2)** **Final Plat** Names and addresses of all abutting property owners, locations of buildings within one hundred (100) feet of the parcel, and any new house numbers within the subdivision. **(Section V.2)**	Subdivision Plan and C102 Site Layout & Utility Plan	☑ Preliminary Plat ☑ Final Plat	N/A
✔	North point, date, and bar scale. **(Section IV.3/V3)**	Required on all Plan Sheets	☑ Preliminary Plat ☑ Final Plat	N/A
✔	Zoning classification and minimum yard dimensions required. **(Section IV.4/V.4)**	Subdivision Plan and C102 Site Layout & Utility Plan	☑ Preliminary Plat ☑ Final Plat	N/A
✔	**Preliminary Plat** Scale (not to be smaller than one hundred (100) feet = 1 inch) and location map (at a scale of 1" = 1000'). **(Section IV.5)** **Final Plat** Scale (not to be smaller than 1"=100'), Location map (at a scale of 1"=1,000') showing the property being subdivided and its relation to the surrounding area within a radius of 2,000 feet. Said location map shall delineate all streets and other major physical features that my either affect or be affected by the proposed development. **(Section V.5)**	Subdivision Plan and C102 Site Layout & Utility Plan	☑ Preliminary Plat ☑ Final Plat	N/A
✔	Location and approximate dimensions of all existing and proposed property lines including the entire area proposed to be subdivided, the areas of proposed lots, and any adjacent parcels in the same ownership. **(Section IV.6)**	Subdivision Plan and C102 Site Layout & Utility Plan	☑ Preliminary Plat ☑ Final Plat	
✔	Dimensions and areas of all lots and any and all property to be dedicated or reserved for schools, parks, playgrounds, or other public purpose. Dimensions shall include radii and length of all arcs and calculated bearing for all straight lines. **(Section V.6/ IV.7)**	Subdivision Plan and C102 Site Layout & Utility Plan	☑ Preliminary Plat ☑ Final Plat	N/A
✔	Location, names, and present widths of all adjacent streets, with a designation as to whether public or private and approximate location of existing utilities to be used. Curbs and sidewalks shall be shown. **(Section IV.8/V.7)**	Subdivision Plan and C102 Site Layout & Utility Plan	☑ Preliminary Plat ☑ Final Plat	

Requirements for Preliminary/Final Plat				
☑	**Required Items for Submittal**	**Item Location (e.g. Page/line or Plan Sheet/Note #)**	**Required for Preliminary / Final Plat**	**Waiver Requested**
✔	Location of significant physical features, including bodies of water, watercourses, wetlands, railroads, important vegetation, stone walls and soils types that my influence the design of the subdivision. **(Section IV.9/V.8)**	Subdivision Plan and C102 Site Layout & Utility Plan	☑ Preliminary Plat ☑ Final Plat	
✔	**Preliminary Plat** Proposed locations, widths and other dimensions of all new streets and utilities, including water mains, storm and sanitary sewer mains, catch basins and culverts, street lights, fire hydrants, sewerage pump stations, etc. **(Section IV.10)** **Final Plat** Proposed locations and profiles of all proposed streets and utilities, including water mains, storm and sanitary sewer mains, catchbasins and culverts, together with typical cross sections. Profiles shall be drawn to a horizontal scale of 1"=50' and a vertical scale of 1"=5', showing existing centerline grade, existing left and right sideline grades, and proposed centerline grade. **(Section V.9)**	C102 Site Layout & Utility Plan and C103 Grading & Drainage Plan	☑ Preliminary Plat ☑ Final Plat	
✔	When required by the Board, the plat shall be accompanied by profiles of proposed street grades, including extensions for a reasonable distance beyond the subject land; also grades and sizes of proposed utilities. **(Section IV.10)**	N/A	☑ Preliminary Plat ☑ Final Plat	
✔	Base flood elevation (BFE) for subdivisions involving greater than five (5) acres or fifty (50) lots. **(Section IV.11)**	N/A	☑ Preliminary Plat ☑ Final Plat	
✔	For subdivisions of five (5) lots or more, or at the discretion of the Board otherwise, the preliminary plat shall show contours at intervals no greater than two (2) feet. Contours shall be shown in dotted lines for existing natural surface and in solid lines for proposed final grade, together with the final grade elevations shown in figures at all lot corners. If existing grades are not to be changed, then the contours in these areas shall be solid lines. **(Section IV.12/ V.12)**	V101 Ex. Cond. Plan and C103 Grading & Drainage Plan	☑ Preliminary Plat ☑ Final Plat	

Requirements for Preliminary/Final Plat				
☑	**Required Items for Submittal**	**Item Location (e.g. Page/line or Plan Sheet/Note #)**	**Required for Preliminary / Final Plat**	**Waiver Requested**
✔	Dates and permit numbers of all necessary permits from governmental agencies from which approval is required by Federal or State law. **(Section V.10)**	C000 Cover Sheet	☐ Preliminary Plat ☑ Final Plat	
✔	For subdivisions involving greater than five (5) acres or fifty (50) lots, the final plat shall show hazard zones and shall include elevation data for flood hazard zones. **(Section V.11)**	N/A	☐ Preliminary Plat ☑ Final Plat	
✔	Location of all permanent monuments. **(Section V.12)**	Subdivision Plan	☐ Preliminary Plat ☑ Final Plat	

General Requirements[1]			
☑	**Required Items for Submittal**	**Item Location (e.g. Page/line or Plan Sheet/Note #)**	**Waiver Requested**
☐	**1. Basic Requirements: (VI.1)** a. Conformity to Official Plan or Map b. Hazards c. Relation to Topography d. Planned Unit Development	C102 Site Layout & Utility Plan	
☐	**2. Lots: (VI.2)** a. Lot Arrangement b. Lot sizes c. Commercial and Industrial Lots	Subdivision Plan	
☐	**3. Streets: (VI.3)** a. Relation to adjoining Street System b. Street Rights-of-Way c. Access d. Parallel Service Roads e. Street Intersection Angles f. Merging Streets g. Street Deflections and Vertical Alignment h. Marginal Access Streets i. Cul-de-Sacs j. Rounding Street Corners k. Street Name Signs l. Street Names m. Block Lengths n. Block Widths o. Grade of Streets p. Grass Strips	Subdivision Plan	
☐	**4. Curbing: (VI.4)**	C102 Site Layout & Utility Plan	
☐	**5. Driveways: (VI.5)**	C102 Site Layout & Utility Plan	
☐	**6. Drainage Improvements: (VI.6)**	C103 Grading & Drainage Plan	
☐	**7. Municipal Water Service: (VI.7)**	C102 Site Layout & Utility Plan	
☐	**8. Municipal Sewer Service: (VI.8)**	C102 Site Layout & Utility Plan	
☐	**9. Installation of Utilities: (VI.9)** a. All Districts b. Indicator Tape	C102 Site Layout & Utility Plan	
☐	**10. On-Site Water Supply: (VI.10)**	N/A	
☐	**11. On-Site Sewage Disposal Systems: (VI.11)**	N/A	
☐	**12. Open Space: (VI.12)** a. Natural Features b. Buffer Strips c. Parks d. Tree Planting	C102 Site Layout & Utility Plan	
☐	**13. Flood Hazard Areas: (VI.13)** a. Permits b. Minimization of Flood Damage c. Elevation and Flood-Proofing Records d. Alteration of Watercourses	N/A Not in a Flood Hazard Area	
☐	**14. Erosion and Sedimentation Control (VI.14)**	C103 Grading & Drainage Plan	

☑	Required Items for Submittal	Item Location (e.g. Page/line or Plan Sheet/Note #)	Waiver Requested
☐	**15. Easements (VI.15)** a. Utilities b. Drainage	Subdivision Plan	
☐	**16. Monuments: (VI.16)**	Subdivision Plan	
☐	**17. Benchmarks: (VI.17)**	V101	
☐	**18. House Numbers (VI.18)**	TBD	

Design Standards			
	Required Items for Submittal	**Indicate compliance and/or provide explanation as to alternative design**	**Waiver Requested**
☐	**1. Streets have been designed according to the design standards required under Section (VII.1).** a. Clearing b. Excavation c. Rough Grade and Preparation of Sub-Grade d. Base Course e. Street Paving f. Side Slopes g. Approval Specifications h. Curbing i. Sidewalks j. Inspection and Methods	No proposed streets.	
☐	**2. Storm water Sewers and Other Drainage Appurtenances have been designed according to the design standards required under Section (VII.2).** a. Design b. Standards of Construction	Stormwater designed to reduce offsite runoff up to the 50-yr storm.	
☐	**3. Sanitary Sewers have been designed according to the design standards required under Section (VII.3).** a. Design b. Lift Stations c. Materials d. Construction Standards	Two individual services are proposed.	
☐	**4. Water Mains and Fire Hydrants have been designed according to the design standards required under Section (VII.4).** a. Connections to Lots b. Design and Construction c. Materials d. Notification Prior to Construction	No hydrants are proposed.	

Applicant's/Representative's Signature:_____ **Date:** 06/22/2026

[1] See City of Portsmouth, NH Subdivision Rules and Regulations for details.

Docusign Envelope ID: 99998426-7520-4B10-B271-5D907BCC1E0D

Letter of Authorization

I, Marissa Valverde, owner of the property located at 20 Central Avenue Portsmouth, NH 03801, do hereby authorize the following parties to act as agents on our behalf for the above-described property in order to apply for any necessary federal, state and local applications or permits on the subject property relative to the development of said parcel:

Ambrosia Development & Investments and/or assigns and his hired parties to include but not limited to:

Haley Ward Engineering Portsmouth, NH

Exeter Environmental Newfields, NH

And all other engineers, surveyors, and agents as appointed by Ambrosia Development & Investments, LLC and/or assigns as agents to act on my behalf in matters to be discussed with the City of Portsmouth, State Departments and other Land Use Boards concerning the property previously mentioned and to access the subject property for completion of Due Diligence and in accordance with any work required for said permits.

I hereby appoint the above referenced parties as my agent to act on my behalf in the review process, to include any required signatures.

DocuSigned by:
Marissa Valverde
65A41364221B490...

3/24/2026

Marissa Valverde

Date

Site Plan Review Application Fee – FY25

Project: **Map/Lot:**

Applicant:

All development

Base fee $600			$600.00
Plus $5.00 per $1,000 of site costs			
Site costs	$200,000	+	$1,000.00
Plus $10.00 per 1,000 S.F. of site development area			
Site development area	29,000 S.F.	+	$290.00
		Fee	**$1,890.00**

Maximum fee: $20,000.00

Fee received by: _____ Date: _____

Note: Initial application fee may be based on the applicant's estimates of site costs and site development area. Following site plan approval, the application fee will be recalculated based on the approved site plan and site engineer's corresponding site cost estimate as approved by the Department of Public Works, and any additional fee shall be paid prior to the issuance of a building permit.

Construction Cost Estimate

Haley Ward, Inc

Date: June 22, 2026

Project: Proposed Multifamily Development Job No: 5010658.001

Location: 20 Central Avenue, Portsmouth, NH - **On Site**

Scope: **Site Cost Estimate**

ITEM NO	DESCRIPTION	UNIT	AMOUNT	UNIT COST	TOTAL
1	Mobilization	EA	1	$10,000.00	$10,000.00
2	Site Clearing & Demolition	LS	1	$20,000.00	$20,000.00
3	SiltSoxx	LF	390	$8.00	$3,120.00
4	Base Gravel (Type A)	CY	50	$50.00	$2,500.00
5	Common Borrow	CY	300	$30.00	$9,000.00
6	Surface Asphalt	TN	50	$110.00	$5,500.00
7	6" SDR-35 Sanitary Sewer	LF	190	$120.00	$22,800.00
8	Water Service	LF	190	$145.00	$27,550.00
9	Underground Electric & Cable	LF	300	$85.00	$25,500.00
10	Manhole Modifications	EA	2	$1,000.00	$2,000.00
11	Rain Garden	EA	2	$5,000.00	$10,000.00
12	Landscaping	LS	1	$30,000.00	$30,000.00
13	Loam & Seed	SY	1400	$21.00	$29,400.00
	TOTAL				**$197,370**

SITE PHOTOS
20 CENTRAL AVENUE
PORTSMOUTH, NH 03801

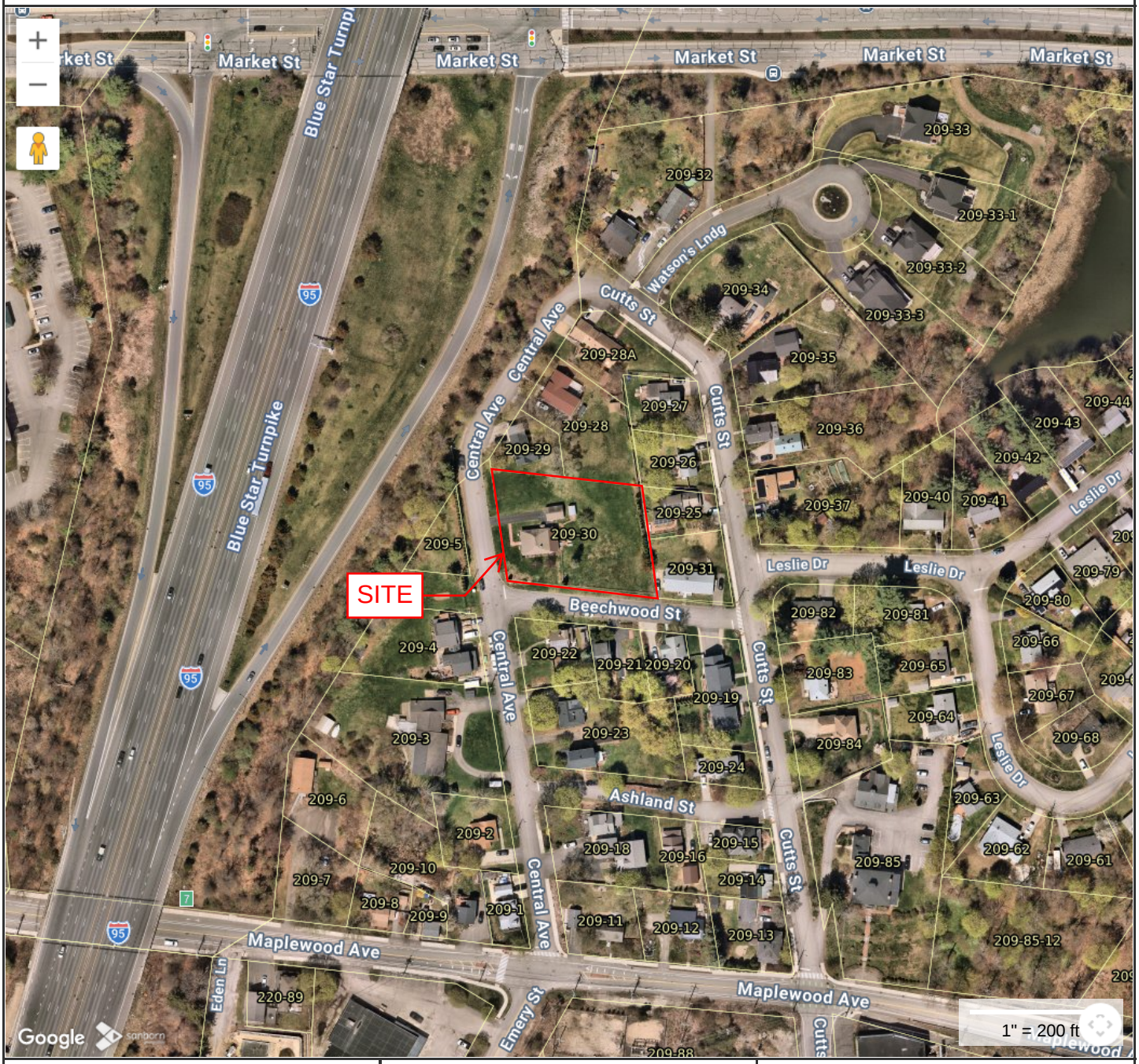
Figure 1 – Site view from Central Avenue, looking southeast.

Figure 2 – Site view from the intersection of Central Avenue and Beechwood Street, looking north.

Figure 3 – Site view from the intersection of Central Avenue and Beechwood Street, looking east.

Figure 4 - Site view from Beechwood Street, looking northwest.

Tax Map



MAP FOR REFERENCE ONLY
NOT A LEGAL DOCUMENT

City of Portsmouth, 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 03/06/2026

Print map scale is approximate. Critical layout or measurement activities should not be done using this resource.

Zoning Map

MAP FOR REFERENCE ONLY
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Geometry updated 03/06/2026

Print map scale is approximate. Critical layout or measurement activities should not be done using this resource.

Map Theme Legends

Zoning

June 22, 2026

Peter Stith, TAC Committee Chair
City of Portsmouth
1 Junkins Avenue
Portsmouth, NH 03801

RE: Trip Generation Letter
20 Central Avenue
Proposed Multifamily Development

INTRODUCTION

On behalf of Copley Properties (Copley), we hereby submit this Trip Generation Letter in support of the applicant's filing with the Portsmouth Technical Advisory Committee for Site Plan approval. Copley seeks to construct 3 single-family residential units under a condominium agreement at the site, which is currently occupied by the owner, Marissa Valverde.

TRIP GENERATION

Trip Generation for the site has been calculated using the Institute of Transportation Engineer's (ITE) publication, Trip Generation, 12th Edition. Land Use Code (LUC) 180 – Specialty Trade Contractor was selected for the existing use and 210 – Single-Family Detached Housing was selected for the proposed use. Below is a summary of the existing and proposed AM and PM Peak Hour Trips for the site.

EXISTING TRAFFIC

Weekday AM Peak Hour of Generator = 0.75 Trips per Dwelling Unit (LUC 210)
Dwelling Units = 1
1 X 0.75 Trip Ends = **1 trip** (27% entering, 73% exiting)

Weekday PM Peak Hour of Generator = 0.97 Trips per Dwelling Unit (LUC 210)
Dwelling Units = 1
1 X 0.97 Trip Ends = **1 trip** (63% entering; 37% exiting)

PROPOSED TRAFFIC

Weekday AM Peak Hour of Generator = 0.75 Trips per Dwelling Unit (LUC 210)
Dwelling Units = 3
3 X 0.75 Trip Ends = **3 trips** (27% entering, 73% exiting)

Weekday PM Peak Hour of Generator = 0.97 Trips per Dwelling Unit (LUC 210)
Dwelling Units = 3

200 GRIFFIN RD. UNIT 14, PORTSMOUTH, NH 03802 603.430.9282 | HALEYWARD.COM

3 X 0.97 Trip Ends = **3 trips** (63% entering; 37% exiting)

CONCLUSION

As demonstrated above, the proposed project will result in an insignificant increase for the number of trips in both the Weekday AM and PM Peak hours. Therefore, the proposed development will not affect the traffic patterns of the surrounding neighborhood.

Sincerely,
Haley Ward, Inc.

Drew Olehowski, PE
Project Manager

Land Use: 210
Single-Family Detached Housing

Description

A single-family detached housing site includes any single-family detached home on an individual lot. A typical site surveyed is a suburban subdivision.

Specialized Land Use

Data have been submitted for several single-family detached housing developments with homes that are commonly referred to as patio homes. A patio home is a detached housing unit that is located on a small lot with little (or no) front or back yard. In some subdivisions, communal maintenance of outside grounds is provided for the patio homes. The three patio home sites total 299 dwelling units with overall weighted average trip generation rates of 5.35 vehicle trips per dwelling unit for weekday, 0.26 for the AM adjacent street peak hour, and 0.47 for the PM adjacent street peak hour. These patio home rates, based on a small sample of sites, are lower than those for single-family detached housing (Land Use 210), lower than those for single-family attached housing (Land Use 215), and higher than those for senior adult housing—single-family (Land Use 251). (Source 1008)

Additional Data

The sites were surveyed in the 1990s, the 2000s, the 2010s, and the 2020s in Alabama, Arizona, British Columbia (CAN), California, Delaware, Illinois, Kentucky, Massachusetts, Minnesota, Montana, New Jersey, New York, North Carolina, Ontario (CAN), Oregon, Pennsylvania, South Carolina, South Dakota, Vermont, and West Virginia.

Source Numbers

356, 357, 367, 384, 387, 407, 435, 522, 550, 552, 579, 598, 601, 603, 614, 637, 711, 716, 720, 728, 735, 868, 869, 903, 925, 936, 1005, 1007, 1008, 1010, 1033, 1066, 1077, 1078, 1079, 1204, 1221, 1225, 1236, 1251, 1265, 1267

Single-Family Detached Housing
(210)

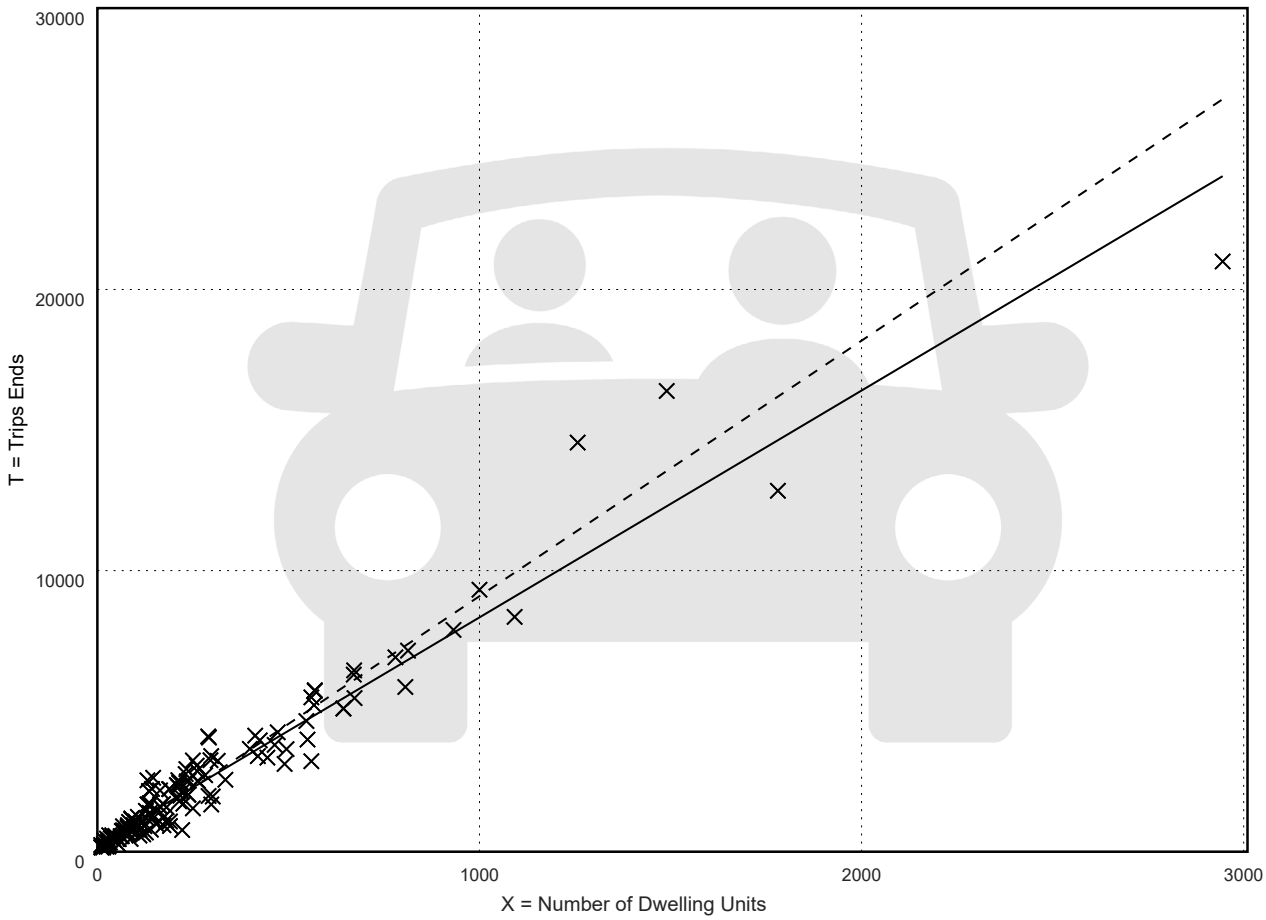
Vehicle Trip Ends vs: **Dwelling Units**
On a: **Weekday**

Setting/Location: **General Urban/Suburban**
Number of Studies: 155
Avg. Num. of Dwelling Units: 261
Directional Distribution: 50% entering, 50% exiting

Vehicle Trip Generation per Dwelling Unit

Average Rate	Range of Rates	Standard Deviation
9.09	3.47 - 23.80	2.29

Data Plot and Equation



Fitted Curve Equation: T = 8.07(X) + 265.45

R^2= 0.94

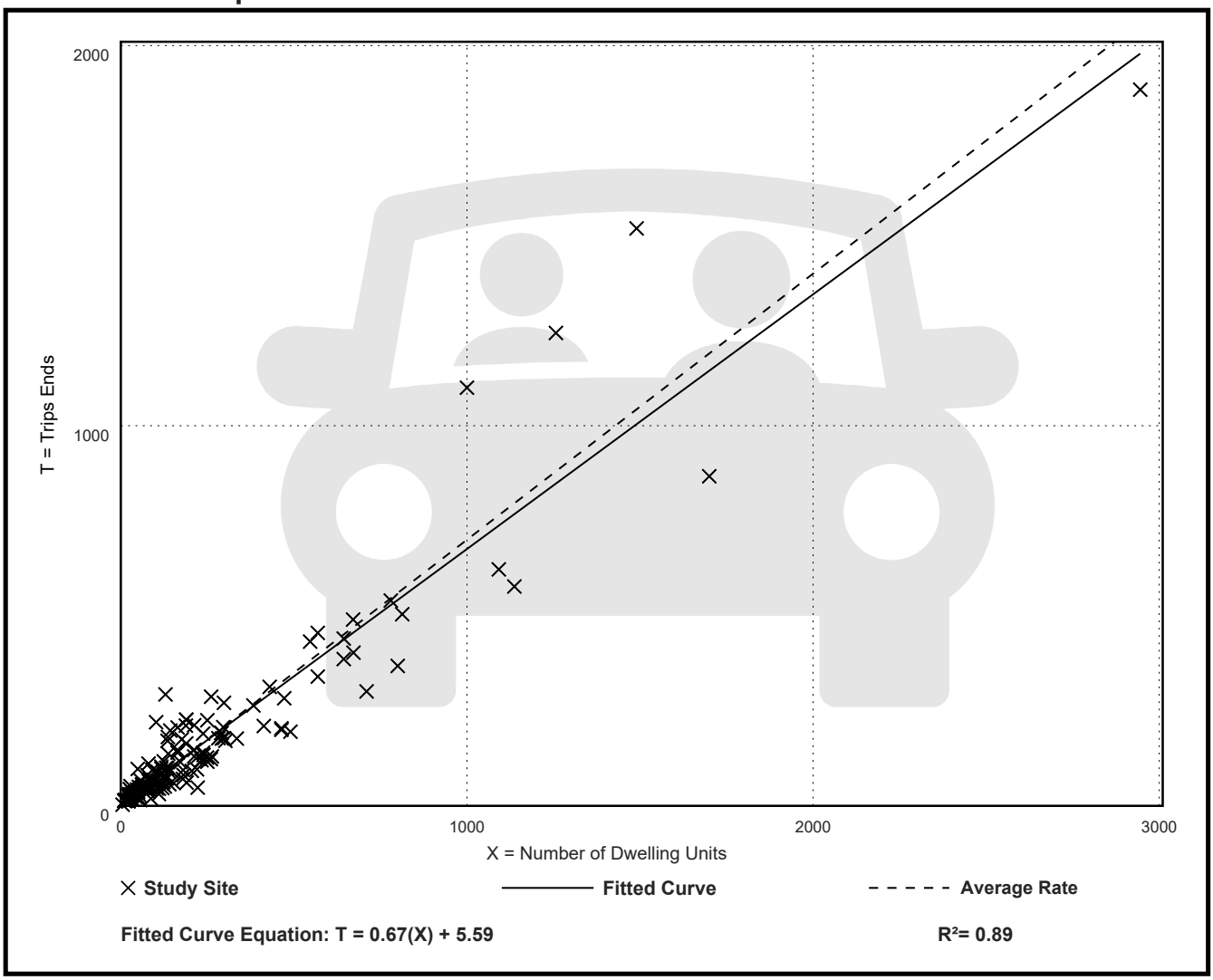
Single-Family Detached Housing
(210)

Vehicle Trip Ends vs:	**Dwelling Units**
On a:	**Weekday,**
	Peak Hour of Adjacent Street Traffic,
	One Hour Between 7 and 9 a.m.
Setting/Location:	**General Urban/Suburban**
Number of Studies:	153
Avg. Num. of Dwelling Units:	239
Directional Distribution:	27% entering, 73% exiting

Vehicle Trip Generation per Dwelling Unit

Average Rate	Range of Rates	Standard Deviation
0.70	0.22 - 2.27	0.26

Data Plot and Equation



Fitted Curve Equation: T = 0.67(X) + 5.59

R^2= 0.89

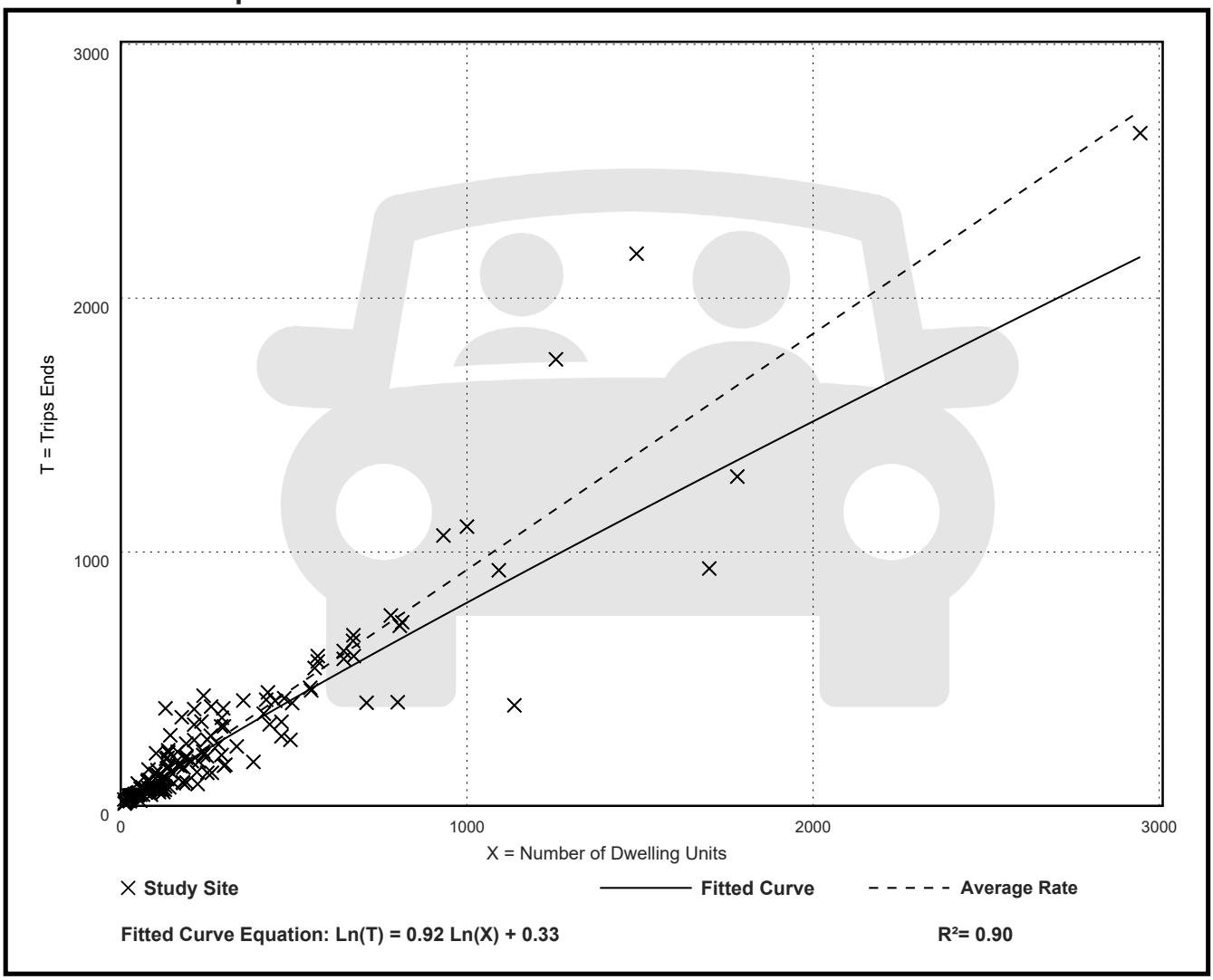
Single-Family Detached Housing
(210)

Vehicle Trip Ends vs:	**Dwelling Units**
On a:	**Weekday,**
	Peak Hour of Adjacent Street Traffic,
	One Hour Between 4 and 6 p.m.
Setting/Location:	**General Urban/Suburban**
Number of Studies:	166
Avg. Num. of Dwelling Units:	266
Directional Distribution:	62% entering, 38% exiting

Vehicle Trip Generation per Dwelling Unit

Average Rate	Range of Rates	Standard Deviation
0.93	0.35 - 2.98	0.33

Data Plot and Equation



Single-Family Detached Housing
(210)

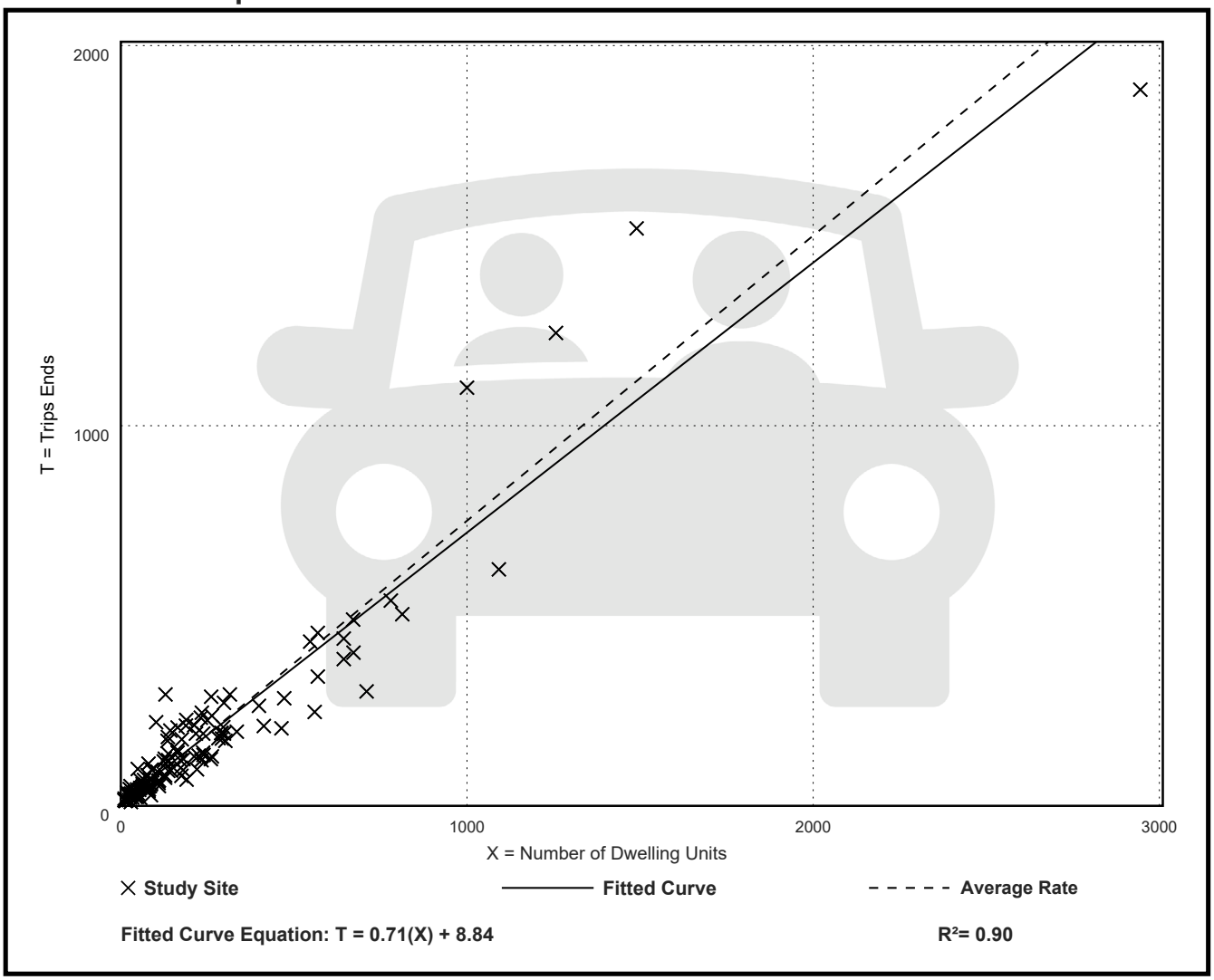
Vehicle Trip Ends vs: **Dwelling Units**
On a: **Weekday,**
AM Peak Hour of Generator

Setting/Location: **General Urban/Suburban**
Number of Studies: 132
Avg. Num. of Dwelling Units: 232
Directional Distribution: 27% entering, 73% exiting

Vehicle Trip Generation per Dwelling Unit

Average Rate	Range of Rates	Standard Deviation
0.75	0.32 - 2.27	0.26

Data Plot and Equation



Fitted Curve Equation: T = 0.71(X) + 8.84

R^2= 0.90

Single-Family Detached Housing
(210)

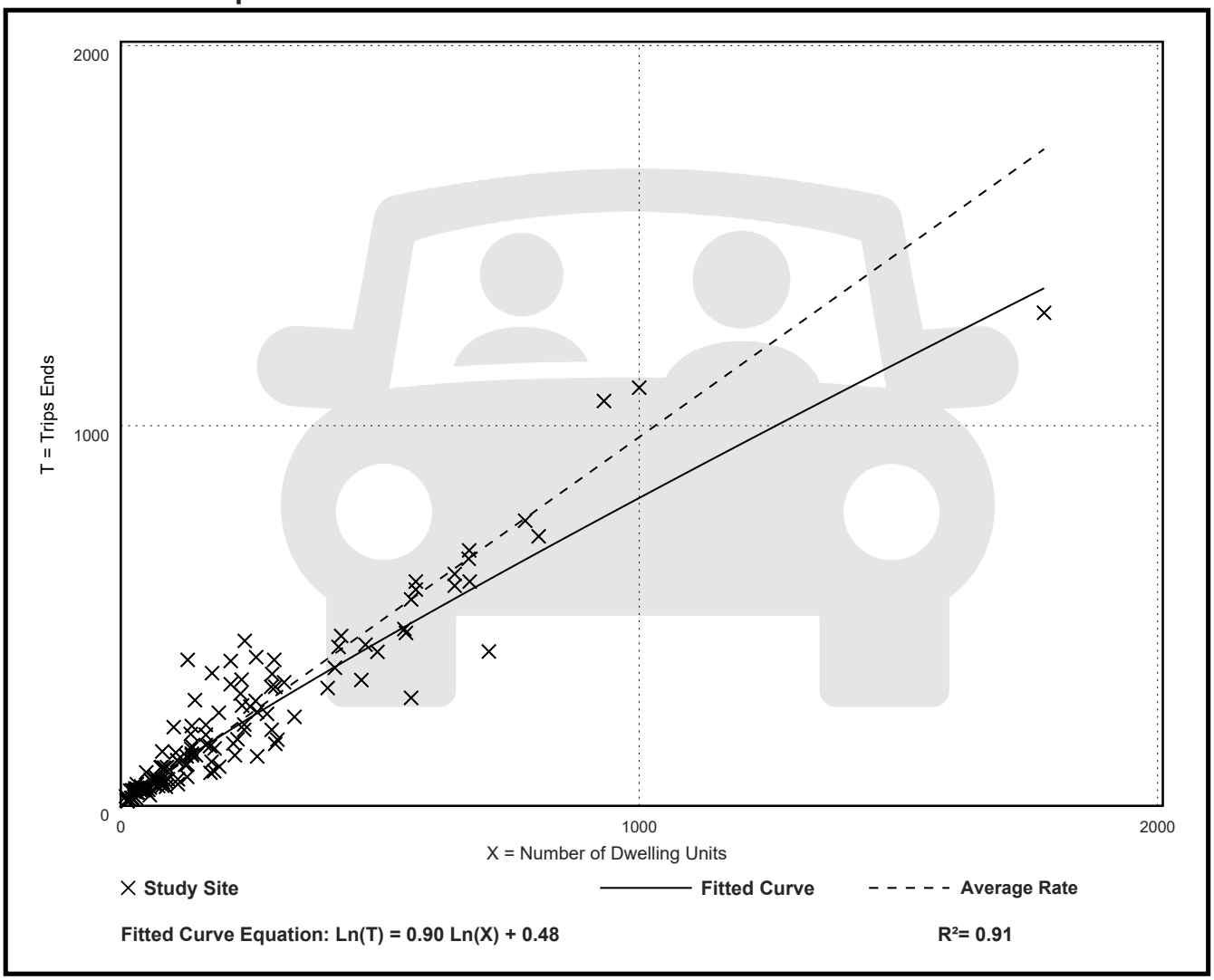
Vehicle Trip Ends vs: **Dwelling Units**
On a: **Weekday,**
PM Peak Hour of Generator

Setting/Location: **General Urban/Suburban**
Number of Studies: 138
Avg. Num. of Dwelling Units: 214
Directional Distribution: 63% entering, 37% exiting

Vehicle Trip Generation per Dwelling Unit

Average Rate	Range of Rates	Standard Deviation
0.97	0.49 - 2.98	0.32

Data Plot and Equation



Fitted Curve Equation: Ln(T) = 0.90 Ln(X) + 0.48

R^2= 0.91

Single-Family Detached Housing
(210)

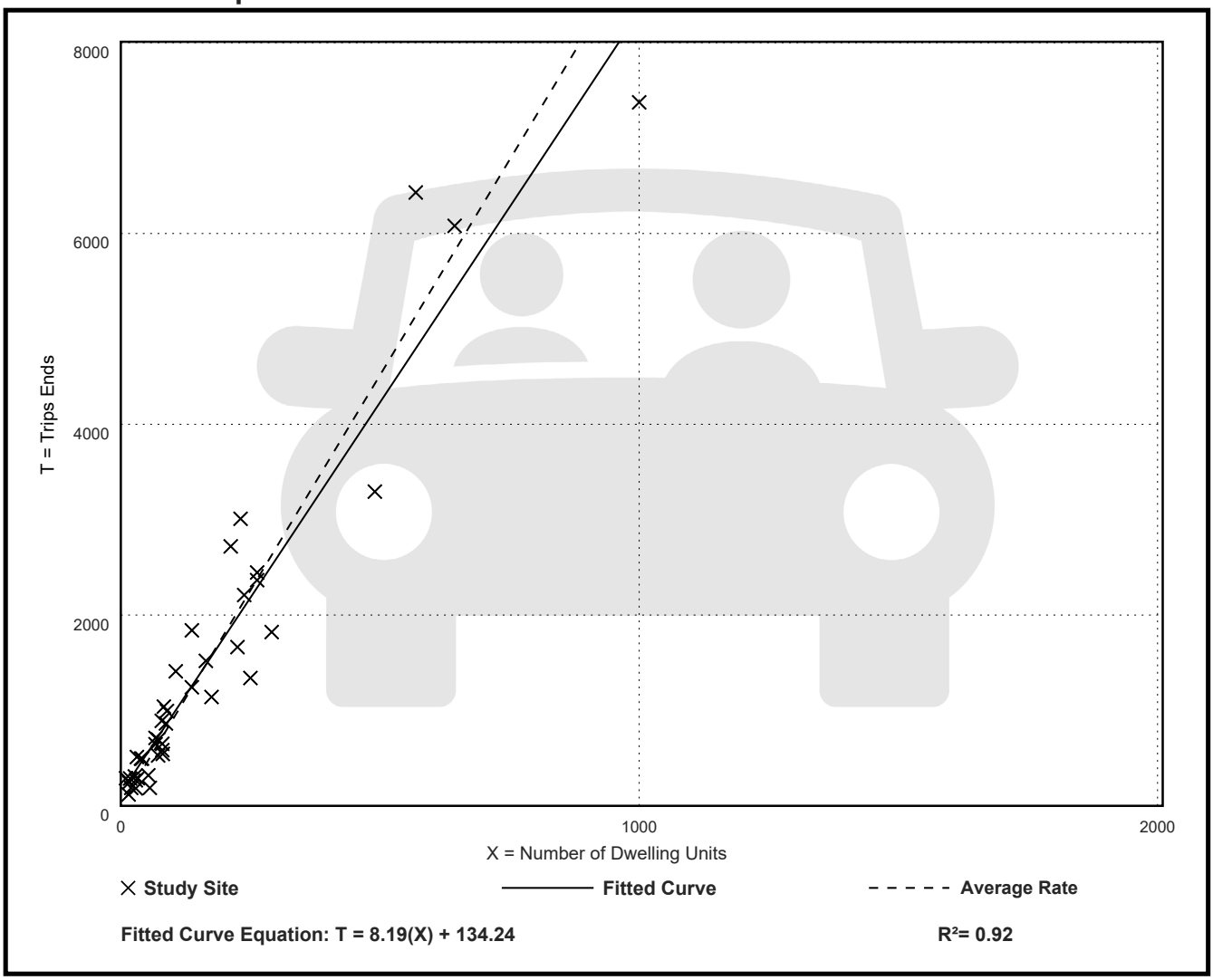
Vehicle Trip Ends vs: **Dwelling Units**
On a: **Saturday**

Setting/Location: **General Urban/Suburban**
Number of Studies: 42
Avg. Num. of Dwelling Units: 159
Directional Distribution: 50% entering, 50% exiting

Vehicle Trip Generation per Dwelling Unit

Average Rate	Range of Rates	Standard Deviation
9.03	3.36 - 28.90	2.51

Data Plot and Equation



Fitted Curve Equation: T = 8.19(X) + 134.24

R^2= 0.92

Single-Family Detached Housing
(210)

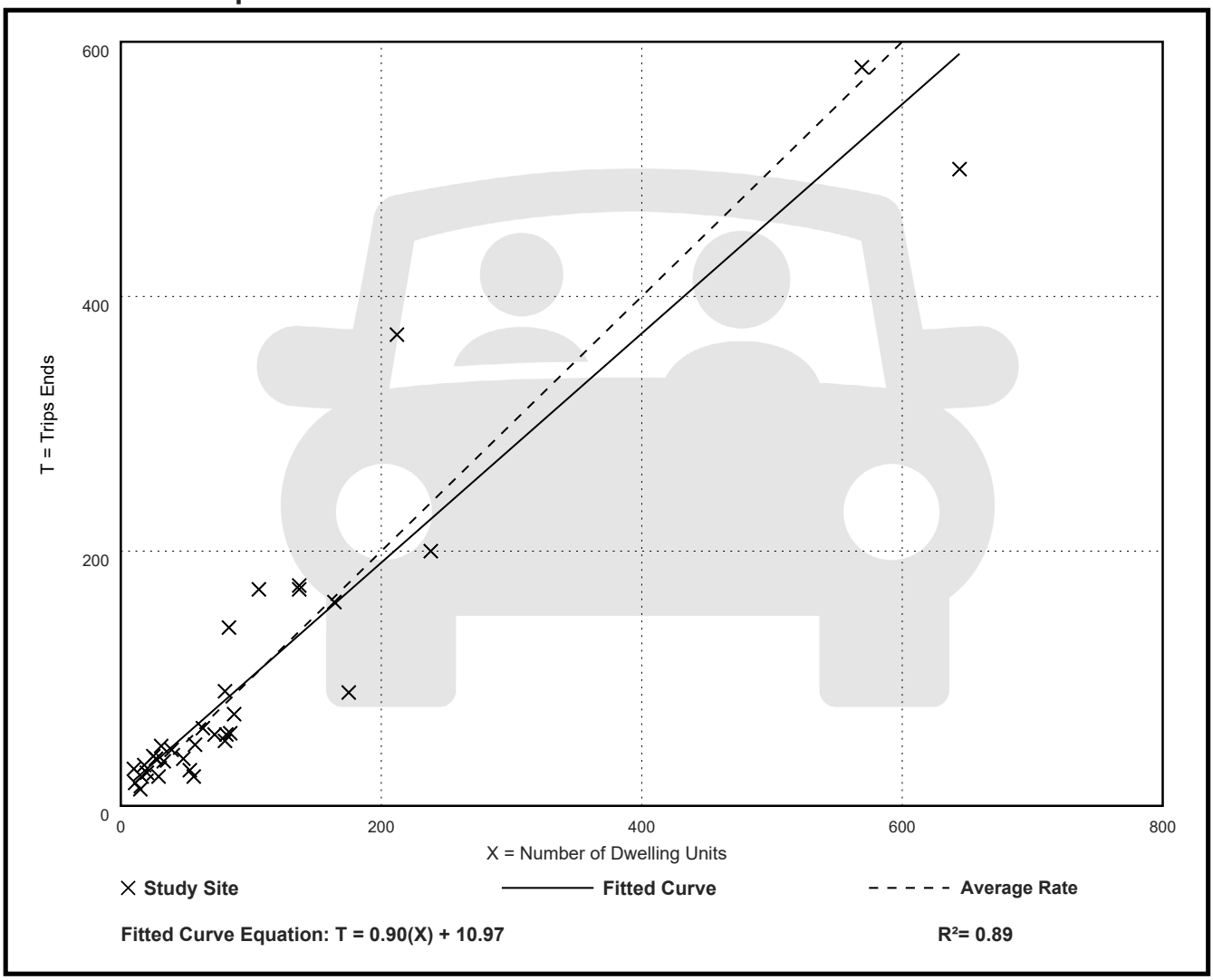
Vehicle Trip Ends vs: **Dwelling Units**
On a: **Saturday, Peak Hour of Generator**

Setting/Location: **General Urban/Suburban**
Number of Studies: 33
Avg. Num. of Dwelling Units: 106
Directional Distribution: 53% entering, 47% exiting

Vehicle Trip Generation per Dwelling Unit

Average Rate	Range of Rates	Standard Deviation
1.00	0.41 - 2.90	0.36

Data Plot and Equation



Fitted Curve Equation: T = 0.90(X) + 10.97

R^2= 0.89

Single-Family Detached Housing
(210)

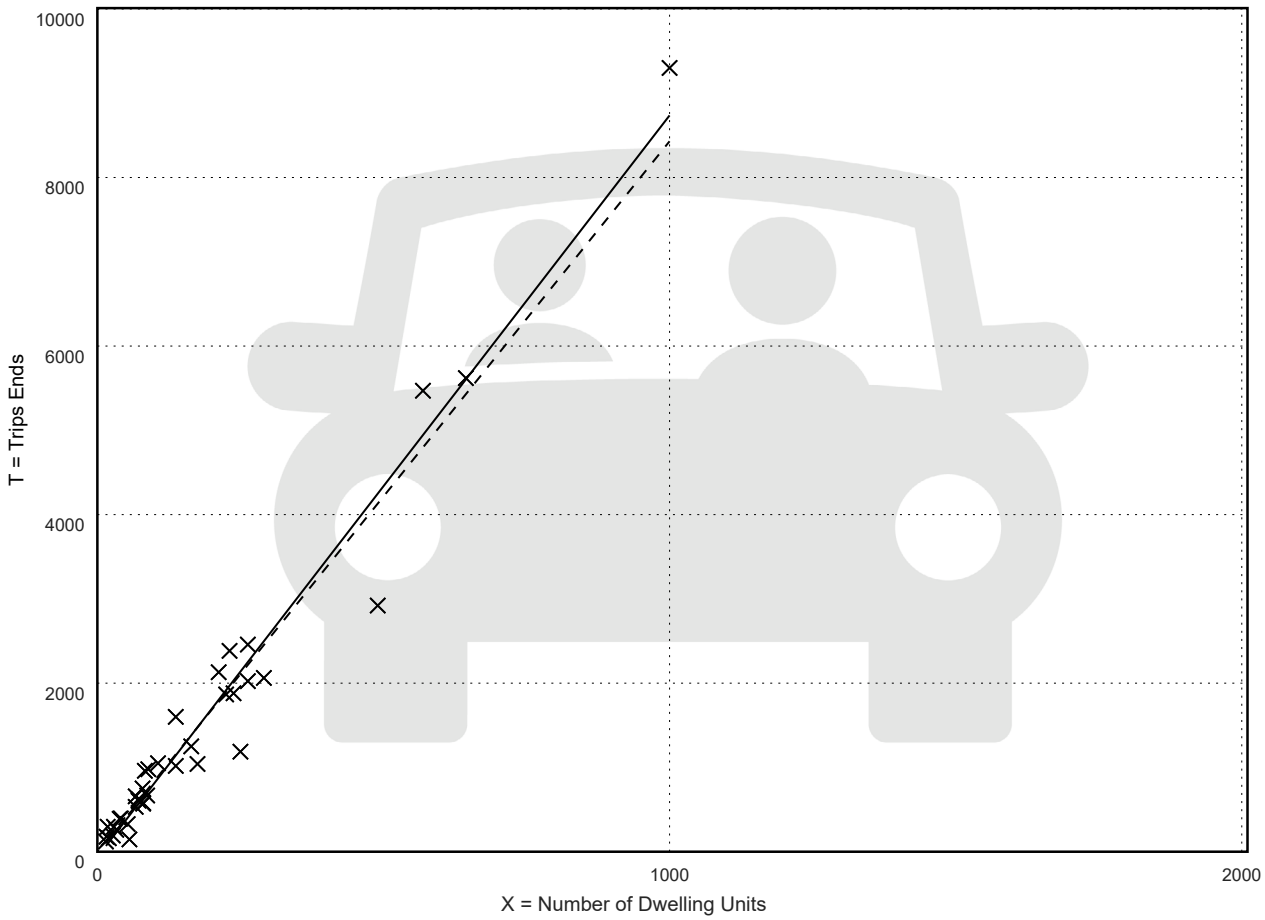
Vehicle Trip Ends vs: **Dwelling Units**
On a: **Sunday**

Setting/Location: **General Urban/Suburban**
Number of Studies: 38
Avg. Num. of Dwelling Units: 172
Directional Distribution: 50% entering, 50% exiting

Vehicle Trip Generation per Dwelling Unit

Average Rate	Range of Rates	Standard Deviation
8.43	2.61 - 16.44	1.73

Data Plot and Equation



Fitted Curve Equation: T = 8.80(X) - 63.18

R^2= 0.96

Single-Family Detached Housing
(210)

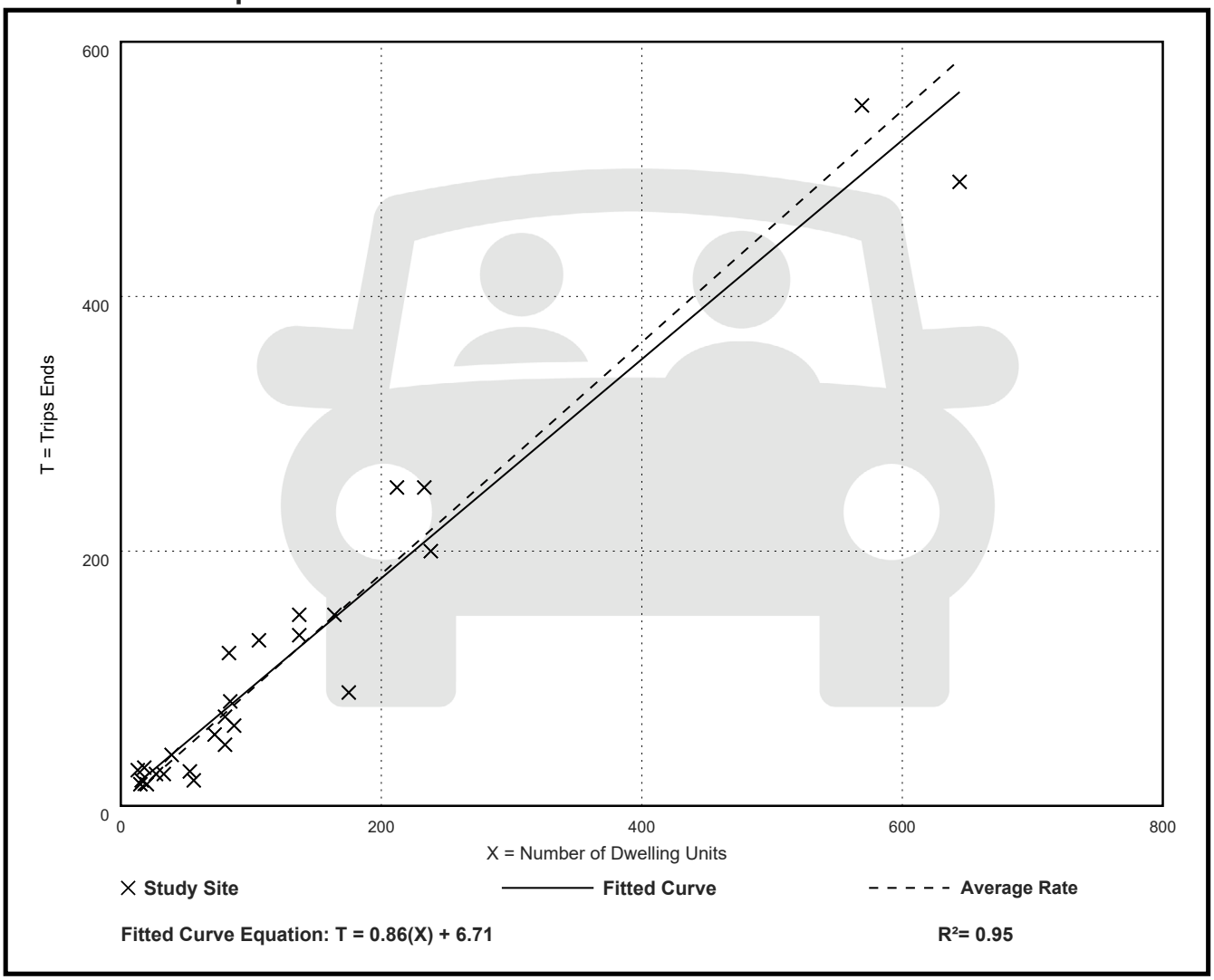
Vehicle Trip Ends vs: **Dwelling Units**
On a: **Sunday, Peak Hour of Generator**

Setting/Location: **General Urban/Suburban**
Number of Studies: 26
Avg. Num. of Dwelling Units: 130
Directional Distribution: 53% entering, 47% exiting

Vehicle Trip Generation per Dwelling Unit

Average Rate	Range of Rates	Standard Deviation
0.91	0.36 - 2.15	0.23

Data Plot and Equation



Single-Family Detached Housing
(210)

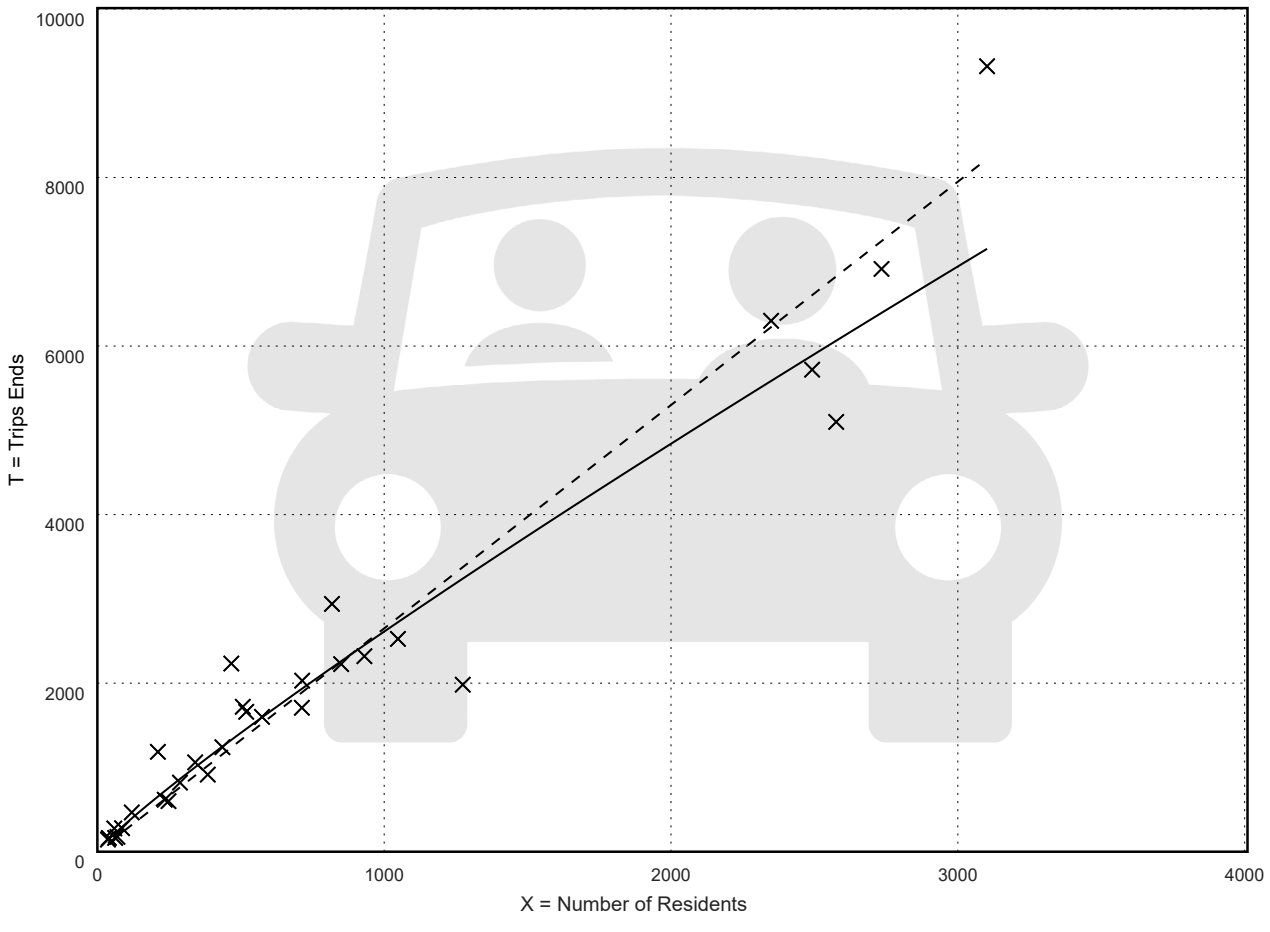
Vehicle Trip Ends vs: **Residents**
On a: **Weekday**

Setting/Location: **General Urban/Suburban**
Number of Studies: 30
Avg. Num. of Residents: 810
Directional Distribution: 50% entering, 50% exiting

Vehicle Trip Generation per Resident

Average Rate	Range of Rates	Standard Deviation
2.65	1.56 - 5.62	0.64

Data Plot and Equation



Fitted Curve Equation: Ln(T) = 0.89 Ln(X) + 1.72

R^2= 0.96

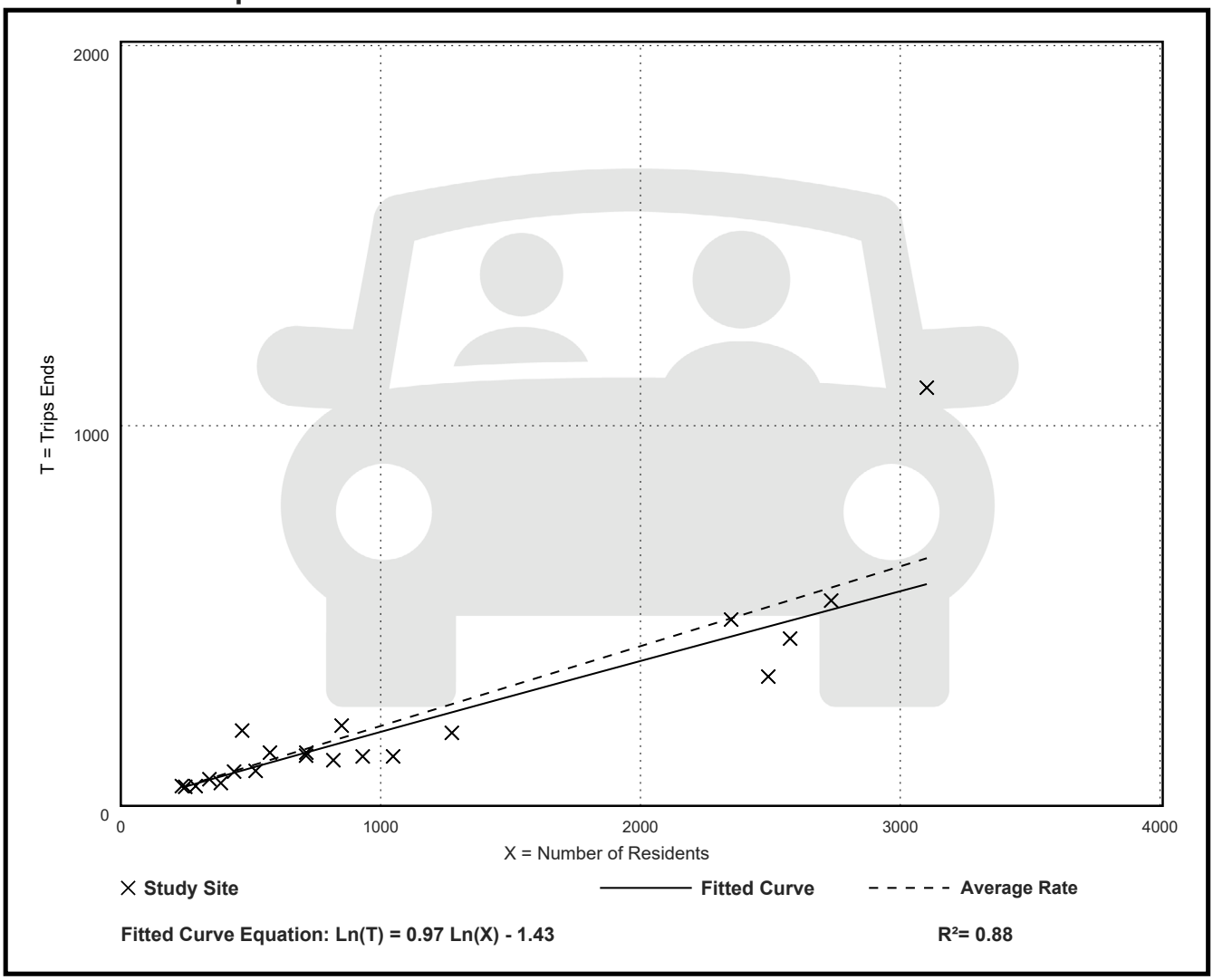
Single-Family Detached Housing
(210)

Vehicle Trip Ends vs:	**Residents**
On a:	**Weekday,**
	Peak Hour of Adjacent Street Traffic,
	One Hour Between 7 and 9 a.m.
Setting/Location:	**General Urban/Suburban**
Number of Studies:	21
Avg. Num. of Residents:	1100
Directional Distribution:	31% entering, 69% exiting

Vehicle Trip Generation per Resident

Average Rate	Range of Rates	Standard Deviation
0.21	0.12 - 0.42	0.08

Data Plot and Equation



Fitted Curve Equation: Ln(T) = 0.97 Ln(X) - 1.43

R^2= 0.88

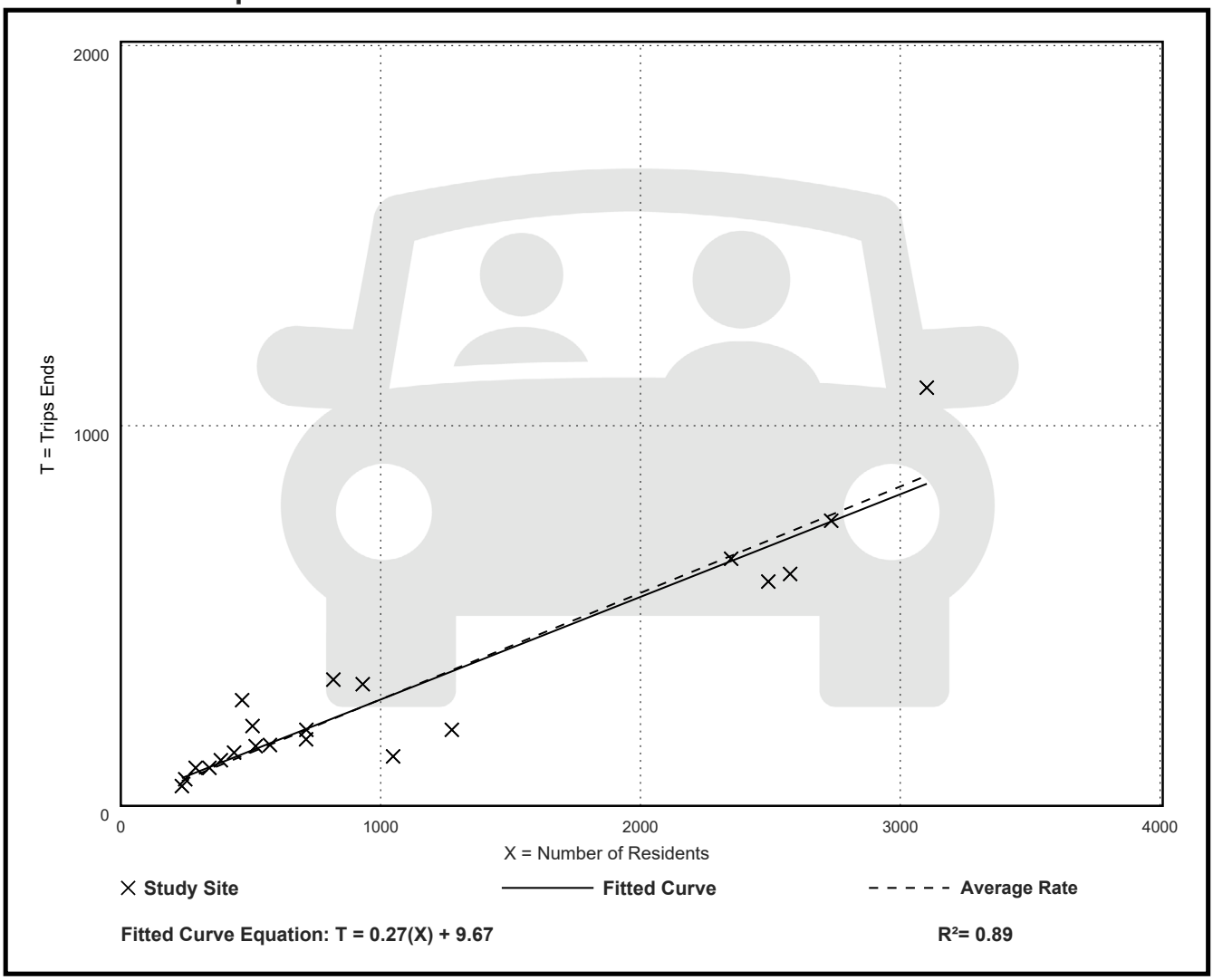
Single-Family Detached Housing
(210)

Vehicle Trip Ends vs:	**Residents**
On a:	**Weekday,**
	Peak Hour of Adjacent Street Traffic,
	One Hour Between 4 and 6 p.m.
Setting/Location:	**General Urban/Suburban**
Number of Studies:	21
Avg. Num. of Residents:	1083
Directional Distribution:	66% entering, 34% exiting

Vehicle Trip Generation per Resident

Average Rate	Range of Rates	Standard Deviation
0.28	0.12 - 0.60	0.08

Data Plot and Equation



Fitted Curve Equation: T = 0.27(X) + 9.67

R^2= 0.89

Single-Family Detached Housing
(210)

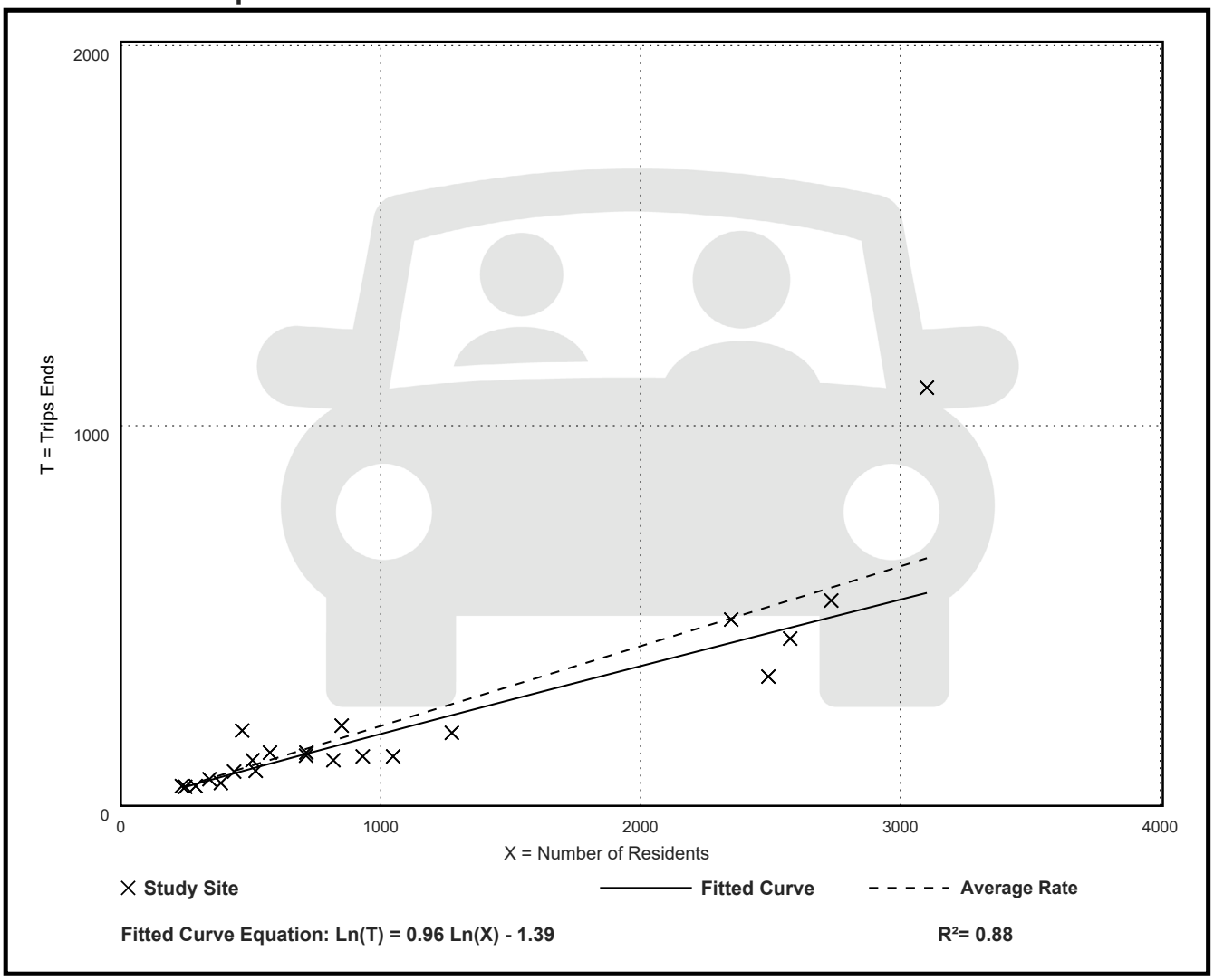
Vehicle Trip Ends vs: **Residents**
On a: **Weekday,**
AM Peak Hour of Generator

Setting/Location: **General Urban/Suburban**
Number of Studies: 22
Avg. Num. of Residents: 1073
Directional Distribution: 30% entering, 70% exiting

Vehicle Trip Generation per Resident

Average Rate	Range of Rates	Standard Deviation
0.21	0.12 - 0.42	0.08

Data Plot and Equation



Fitted Curve Equation: Ln(T) = 0.96 Ln(X) - 1.39

R^2= 0.88

Single-Family Detached Housing
(210)

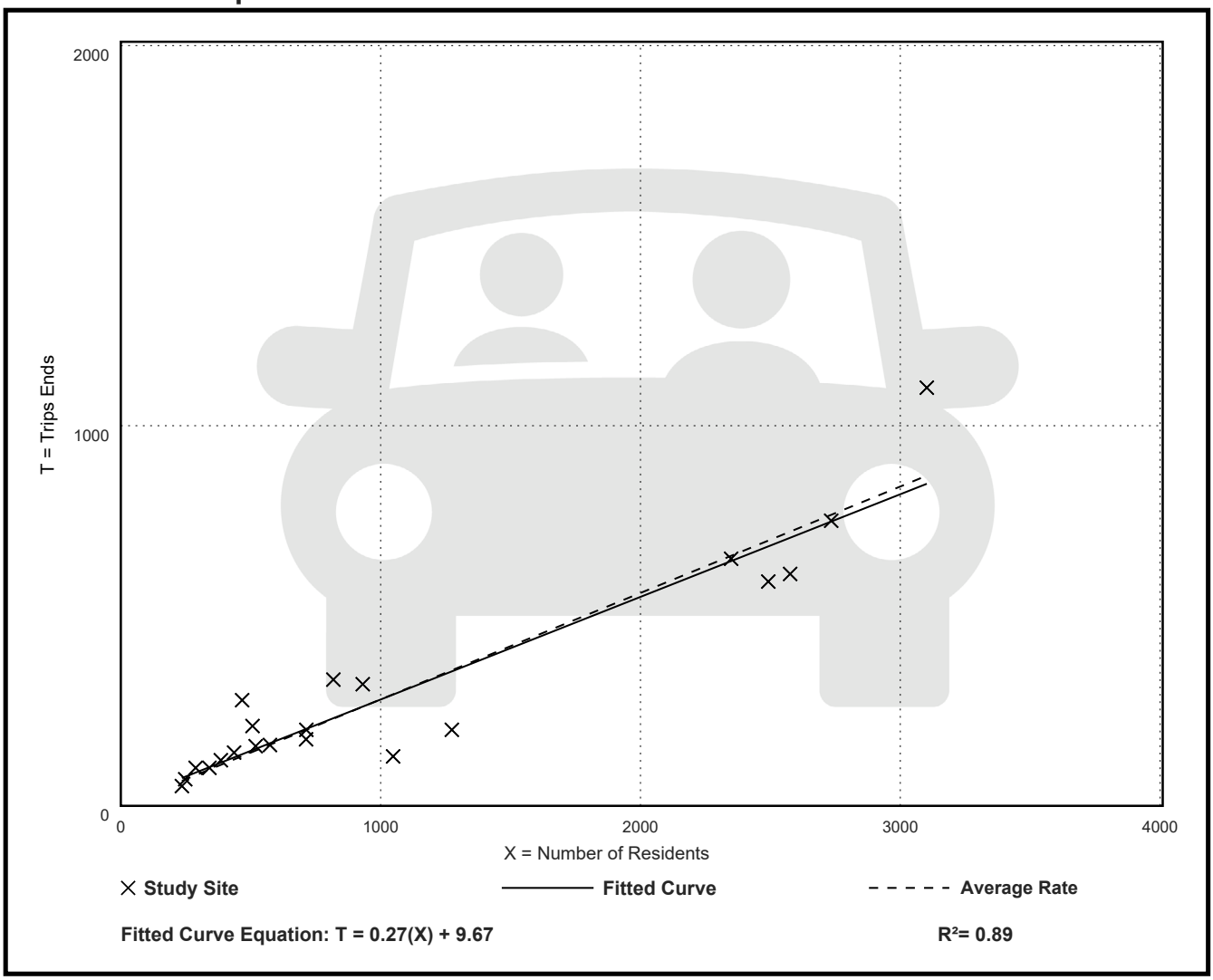
Vehicle Trip Ends vs: **Residents**
On a: **Weekday,**
PM Peak Hour of Generator

Setting/Location: **General Urban/Suburban**
Number of Studies: 21
Avg. Num. of Residents: 1083
Directional Distribution: 66% entering, 34% exiting

Vehicle Trip Generation per Resident

Average Rate	Range of Rates	Standard Deviation
0.28	0.12 - 0.60	0.08

Data Plot and Equation



Fitted Curve Equation: T = 0.27(X) + 9.67

R^2= 0.89

Single-Family Detached Housing
(210)

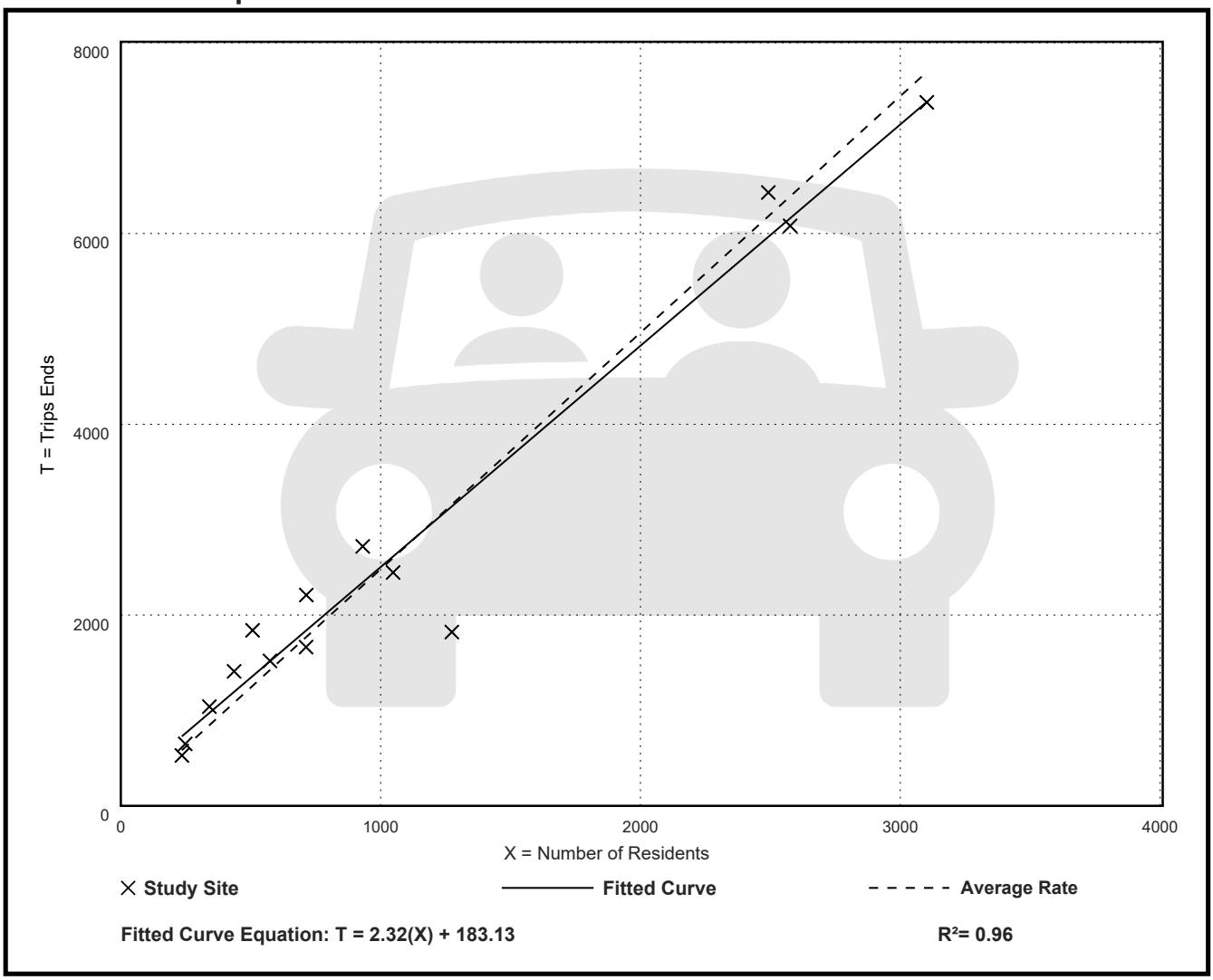
Vehicle Trip Ends vs: **Residents**
On a: **Saturday**

Setting/Location: **General Urban/Suburban**
Number of Studies: 14
Avg. Num. of Residents: 1085
Directional Distribution: 50% entering, 50% exiting

Vehicle Trip Generation per Resident

Average Rate	Range of Rates	Standard Deviation
2.48	1.43 - 3.63	0.46

Data Plot and Equation



Fitted Curve Equation: T = 2.32(X) + 183.13

R^2= 0.96

Single-Family Detached Housing
(210)

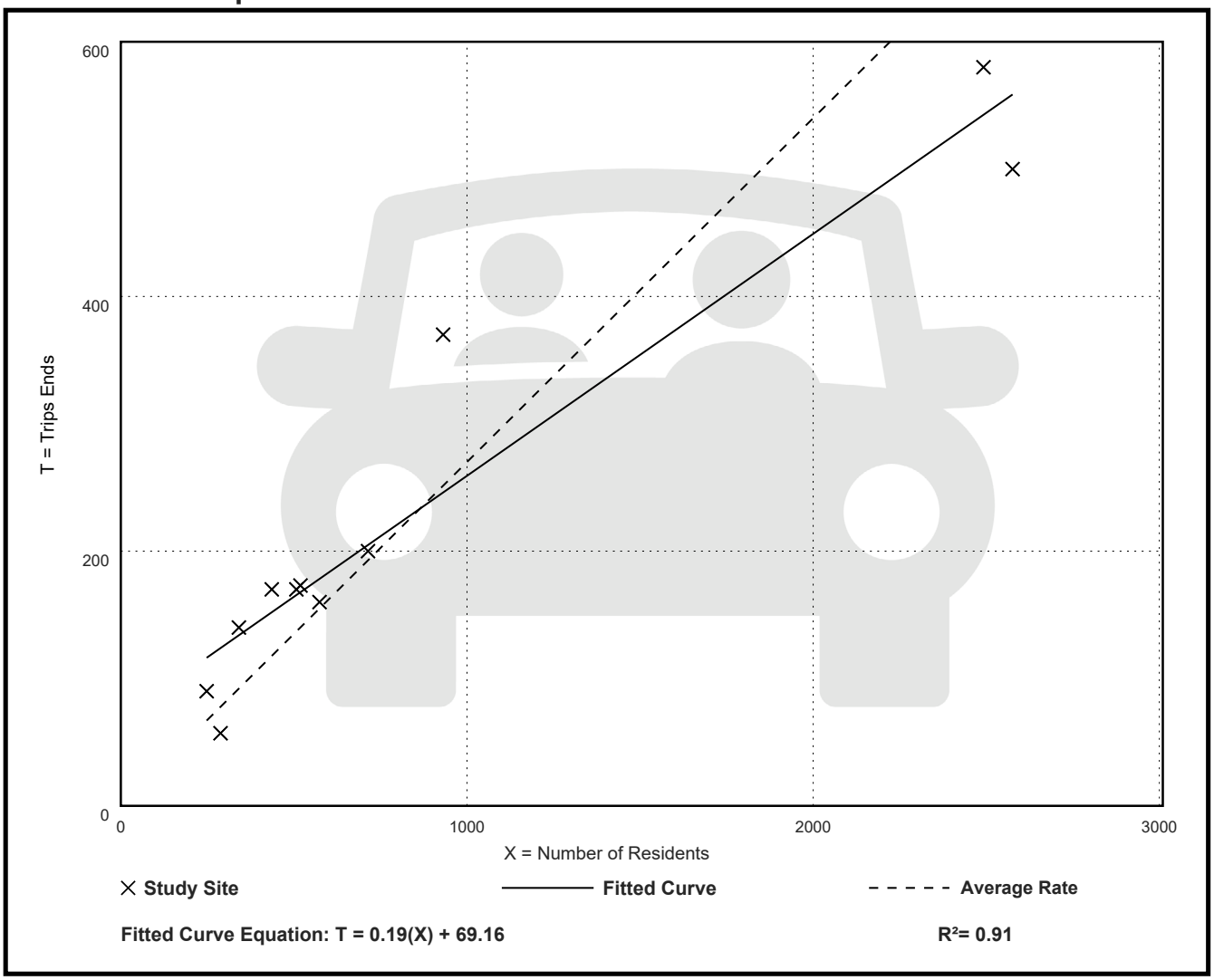
Vehicle Trip Ends vs: **Residents**
On a: **Saturday, Peak Hour of Generator**

Setting/Location: **General Urban/Suburban**
Number of Studies: 11
Avg. Num. of Residents: 875
Directional Distribution: 54% entering, 46% exiting

Vehicle Trip Generation per Resident

Average Rate	Range of Rates	Standard Deviation
0.27	0.19 - 0.41	0.08

Data Plot and Equation



Fitted Curve Equation: T = 0.19(X) + 69.16

R^2= 0.91

Single-Family Detached Housing
(210)

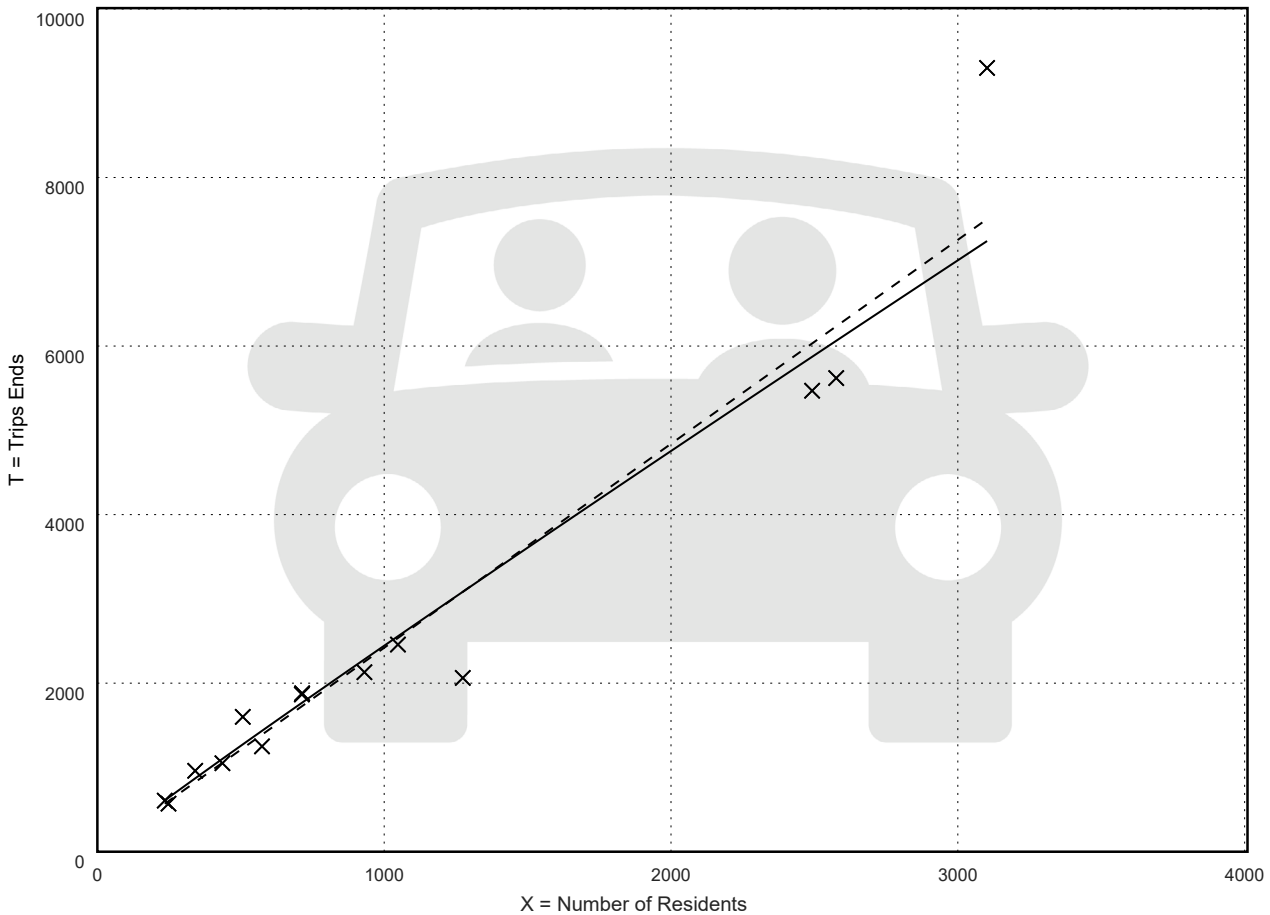
Vehicle Trip Ends vs: **Residents**
On a: **Sunday**

Setting/Location: **General Urban/Suburban**
Number of Studies: 14
Avg. Num. of Residents: 1085
Directional Distribution: 50% entering, 50% exiting

Vehicle Trip Generation per Resident

Average Rate	Range of Rates	Standard Deviation
2.42	1.62 - 3.16	0.43

Data Plot and Equation



Fitted Curve Equation: Ln(T) = 0.96 Ln(X) + 1.17

R^2= 0.96

Single-Family Detached Housing
(210)

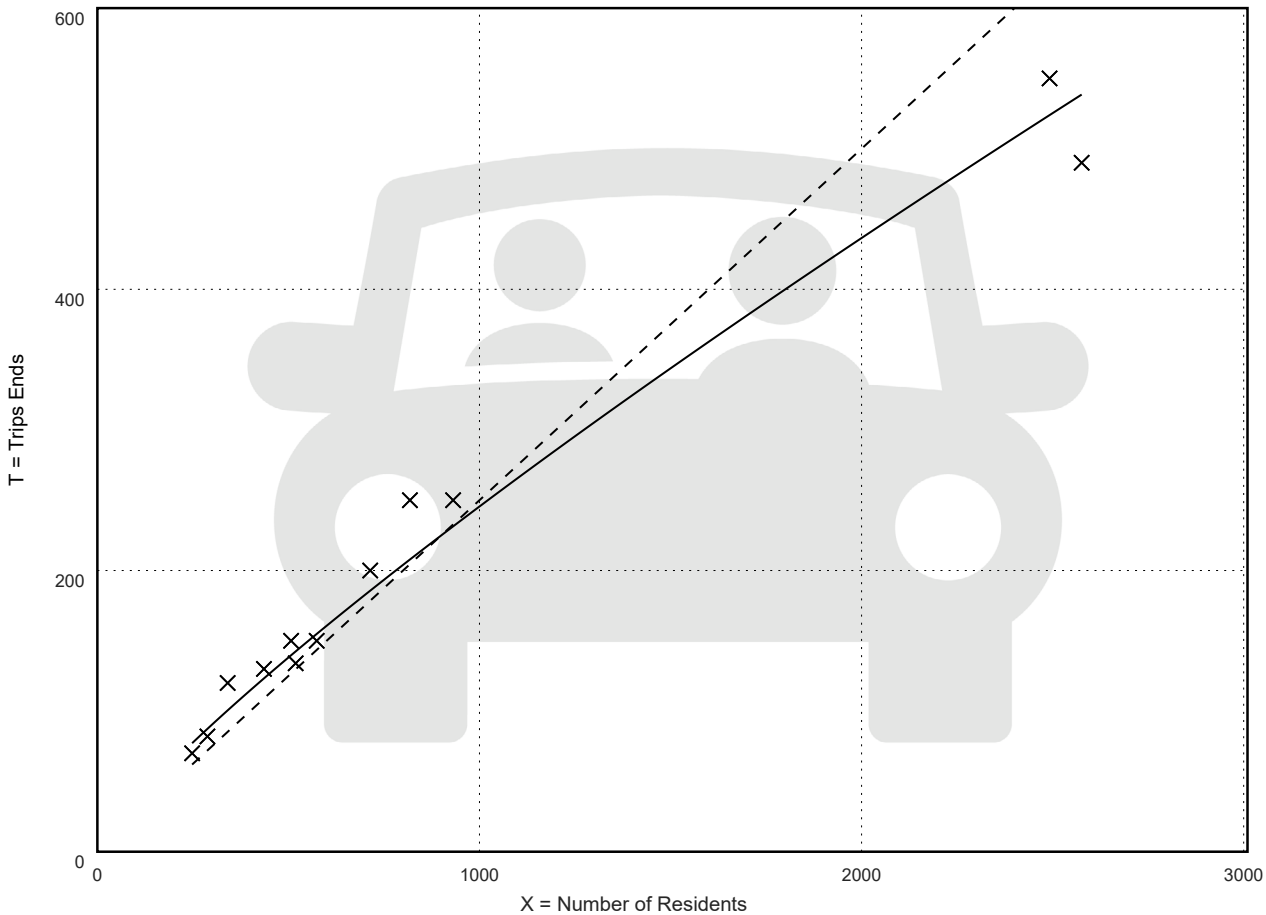
Vehicle Trip Ends vs: **Residents**
On a: **Sunday, Peak Hour of Generator**

Setting/Location: **General Urban/Suburban**
Number of Studies: 12
Avg. Num. of Residents: 870
Directional Distribution: 50% entering, 50% exiting

Vehicle Trip Generation per Resident

Average Rate	Range of Rates	Standard Deviation
0.25	0.19 - 0.35	0.05

Data Plot and Equation



Fitted Curve Equation: Ln(T) = 0.83 Ln(X) - 0.23

R^2= 0.98

Outlook

Work Request Submission Confirmation #26357235

From Eversource Do Not Reply <noreply@notifications.eversource.com>
Date Wed 5/6/2026 11:58 AM
To Paul Dimmick <pdimmick@haleyward.com>

You don't often get email from noreply@notifications.eversource.com. Learn why this is important

EVERSOURCE

Work Request Submission Confirmation

Work Request Type:
Customer Requested Work (Private)

Work Request Number:
26357235

Job Location:
20 CENTRAL AVENUE

Dear Valued Customer,

We received your work request with the following information:

* Request Type: Customer Requested Work (Private)
* Request Number: 26357235
* Work Requested Date: 2026-05-06
* Job Location: 20 CENTRAL AVENUE
* Contractor Name: PAUL DIMMICK
* Contractor Phone Number: 6034309282

NOTE: This email confirms we received your request and does not imply that work will be performed.

Log into your Eversource.com account to track the status of your request. For questions or to cancel your request, call or email us and we'll be happy to assist you.

Sincerely,
Eversource Electric Service Support Center.
18003627764
NHNewService@eversource.com

Please save this confirmation email for your records.
This is an unmonitored mailbox - please do not reply.

May 6, 2026

Paul Dimmick
Haley Ward
200 Griffin Rd Unit 14
Portsmouth NH 03801

RE: Natural Gas Availability to 20 Central Ave Portsmouth NH

Dear Paul,

Unitil's natural gas division has reviewed the requested site for natural gas service.

Unitil hereby confirms natural gas service will be available to 20 Central Ave,Portsmouth NH to serve a three unit residential project. Our closest natural gas main is on Maplewood Ave, roughly 550' away.

Installation is pending the receipt of natural gas load information, an installation agreement with the owner and a street opening approval from the City of Portsmouth DPW.

Let me know if you have any questions. You can email me at oliver@unitil.com. My phone number is 603-294-5174.

Sincerely,

Janet Oliver
Senior Business Development Representative

CUSTOMER ENERGY SOLUTIONS
325 West Road
Portsmouth, NH 03801

T 888.486.4845 www.unitil.com

"GREEN" BUILDING STATEMENT, 20 CENTRAL AVENUE, PORTSMOUTH, NH

LOCATION AND TRANSPORTATION

Walkable Destinations: 20 Central Avenue is located adjoining Maplewood Avenue. It is walkable to downtown Portsmouth.

Bicycles: This is a bike friendly part of the city.

Ride sharing: Although this location is not serviced directly by public transportation, there are numerous bus stops along Maplewood Avenue. The address also allows easy access and is a quickly identifiable for cabs or shared transportation services.

SITE

Stormwater: The existing site has stormwater collection that services the neighborhood. Runoff currently sheet flows from north of the site to the southeast to a catch basin. The proposed development will include a increase in stormwater controls to manage the increase of impervious cover from the proposed development. The proposed stormwater design will include the installation of two rain gardens with new orifices leading to the existing stormwater drains that serve as stormwater control for the neighborhood.

Reuse: The existing site is a single-family home. The proposed project will redevelop the site with three single-family homes that is more cohesive with the surrounding residential developments.

Landscaping: A professionally produced landscaping plan includes shrubbery, grass, and a multitude of trees that currently do not exist. An irrigation system to maintain grass and plantings is included.

Zoning: This project is in the GRA zone.

UTILITIES AND FIRE PROTECTION

Water: New water-saving plumbing fixtures will be installed as per the current plumbing code.

Sewer: Tying into public sewer in Central Avenue and Beechwood Street.

Electric: Tying into existing overhead lines on Central Avenue and Beechwood Street.

Gas or heating oil: Heating oil will be provided.

ENERGY:

Heating and Air Conditioning:

System: Forced Hot Air with Central A/C.

Furnace: Gas fired, Rheem or similar.

Zones: 3 zones; first and second floor, to be determined by plan. Additional zones available as an upgrade.

Insulation: ENERGY STAR Certified

Ceiling: R-49 fiberglass or R-30 in slopes, Upgrades available.

Exterior Walls: "Flash and Batt" 2" spray foam polyurethane insulation w/3.5" R-13 fiberglass, R32 +/-.

Basement: R-30 fiberglass in ceiling.

Garage Ceiling: R-30 fiberglass with conditioned space above only.

Lighting: LED lighting will be used throughout.

Kitchen Appliances: All kitchen appliances will be energy-star certified.

Fenestration: Windows and doors that are state-of-the-art and shall have a U-value below .30, meeting or exceeding energy-star requirements. Proposed windows are to exceed Energy Star 7 window requirements for this region.

Please note that the building energy information provided above is preliminary and subject to change prior to final Planning Board approval.

Opal Marquise Classic with Wing, 30x28

370.127.v5 GR (5/14/2026)

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603-431-9559

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This design may not yet have Construction Drawings (as defined in the Terms), and is, therefore, only available as a Design Drawing (as defined in the Terms and together with Construction Drawings, "Drawings'). It is possible that during the conversion of a Design Drawing to a final Construction Drawing, changes may be necessary including, but not limited to, dimensional changes. Please see Plan Data Explained on www.artform.us to understand room sizes, dimensions and other data provided. We are not responsible for typographical errors.

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Facade Changes:
• To maintain design integrity, we pay particular attention to features on the front facade, including but not limited to door surrounds, window casings, finished porch column sizes, and roof friezes. While we may allow builders to add their own flare to aesthetic elements, we don't allow our designs to be stripped of critical details. Any such alterations require the express written consent of Art Form.
• Increasing ceiling heights usually requires adjustments to window sizes and other exterior elements.
Floor plan layout and/or Structural Changes:
• Structural changes always require the express written consent of Art Form
• If you wish to move or remove walls or structural elements (such as removal of posts, increases in house size, ceiling height changes, addition of dormers, etc), please do not assume it can be done without other additional changes (even if the builder or lumber yard says you can).

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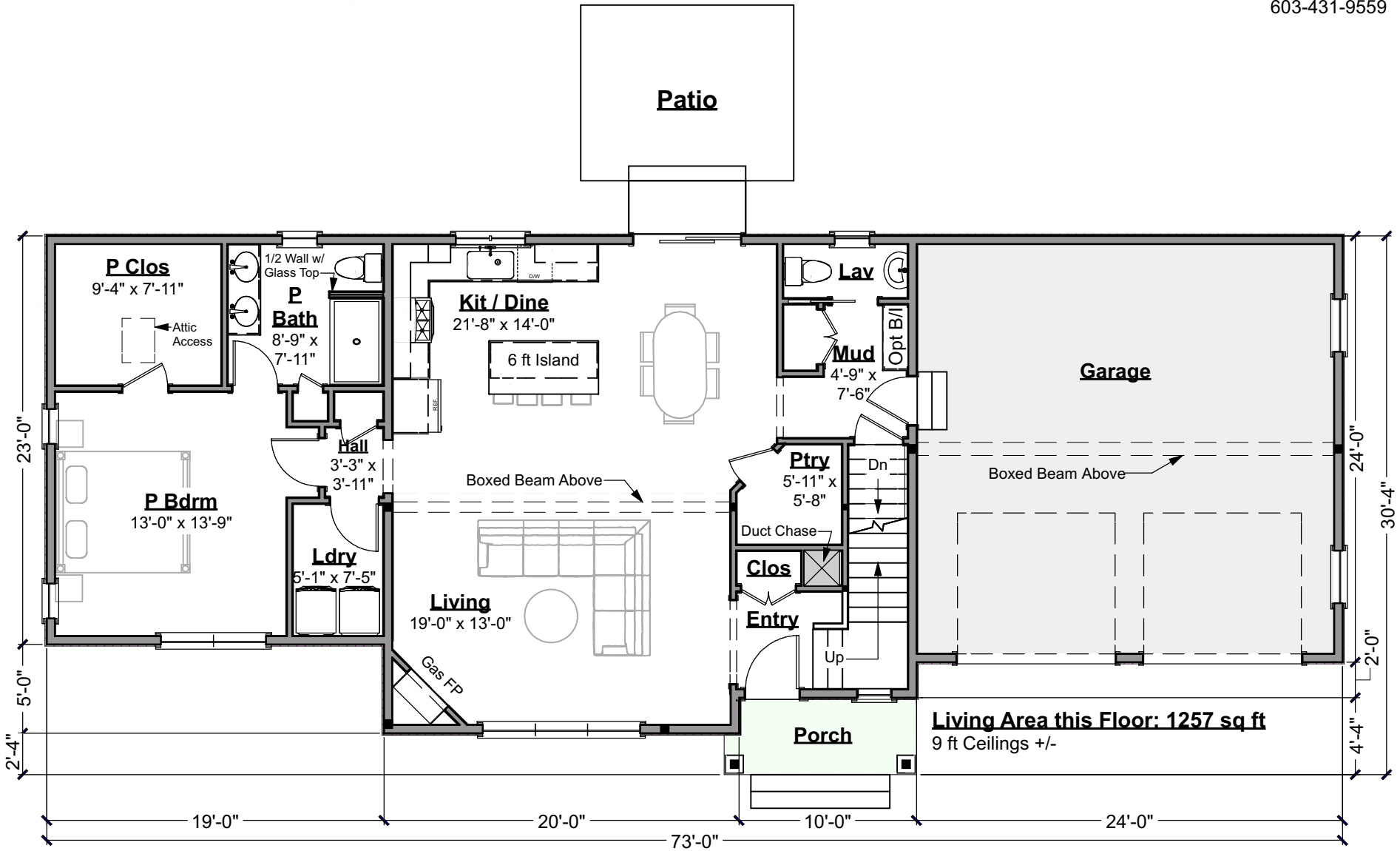

First Floor Plan

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

5/14/2026

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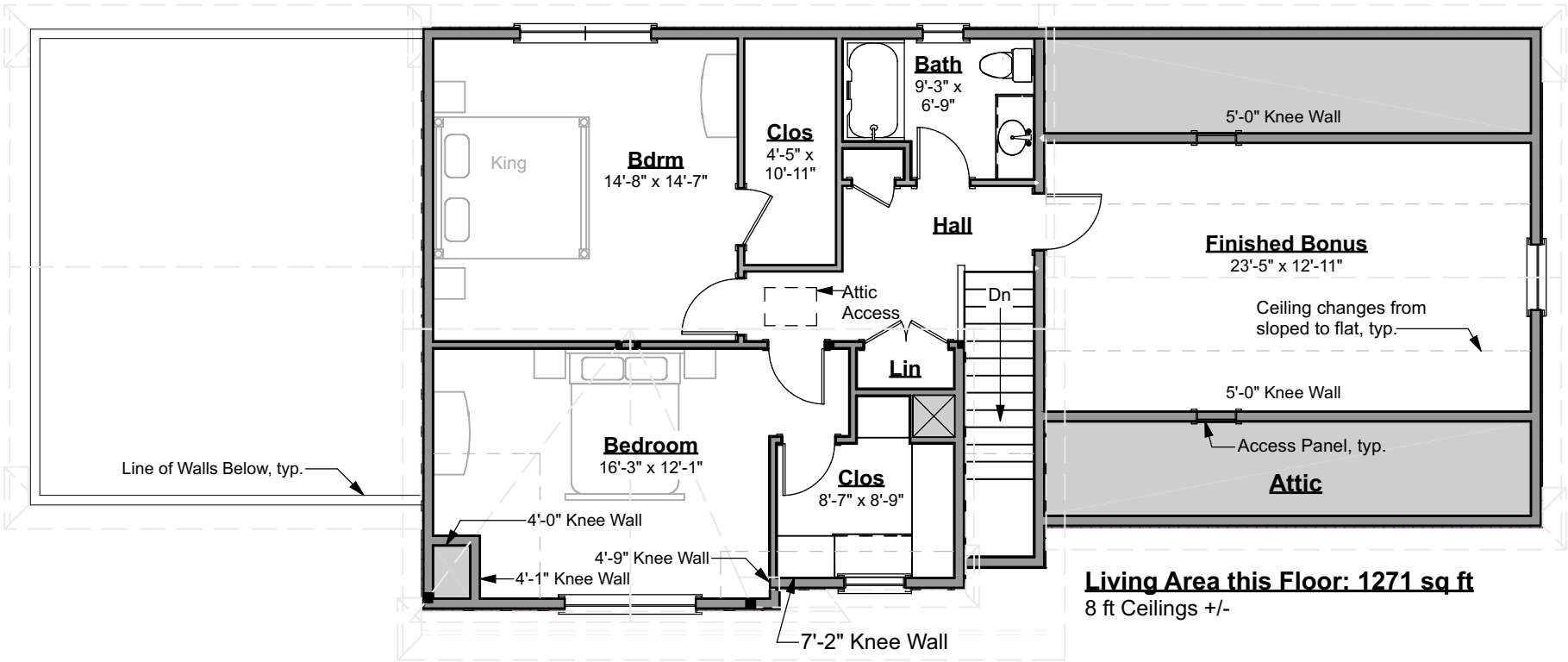

Living Area this Floor: 1271 sq ft

8 ft Ceilings +/-

Second Floor Plan

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

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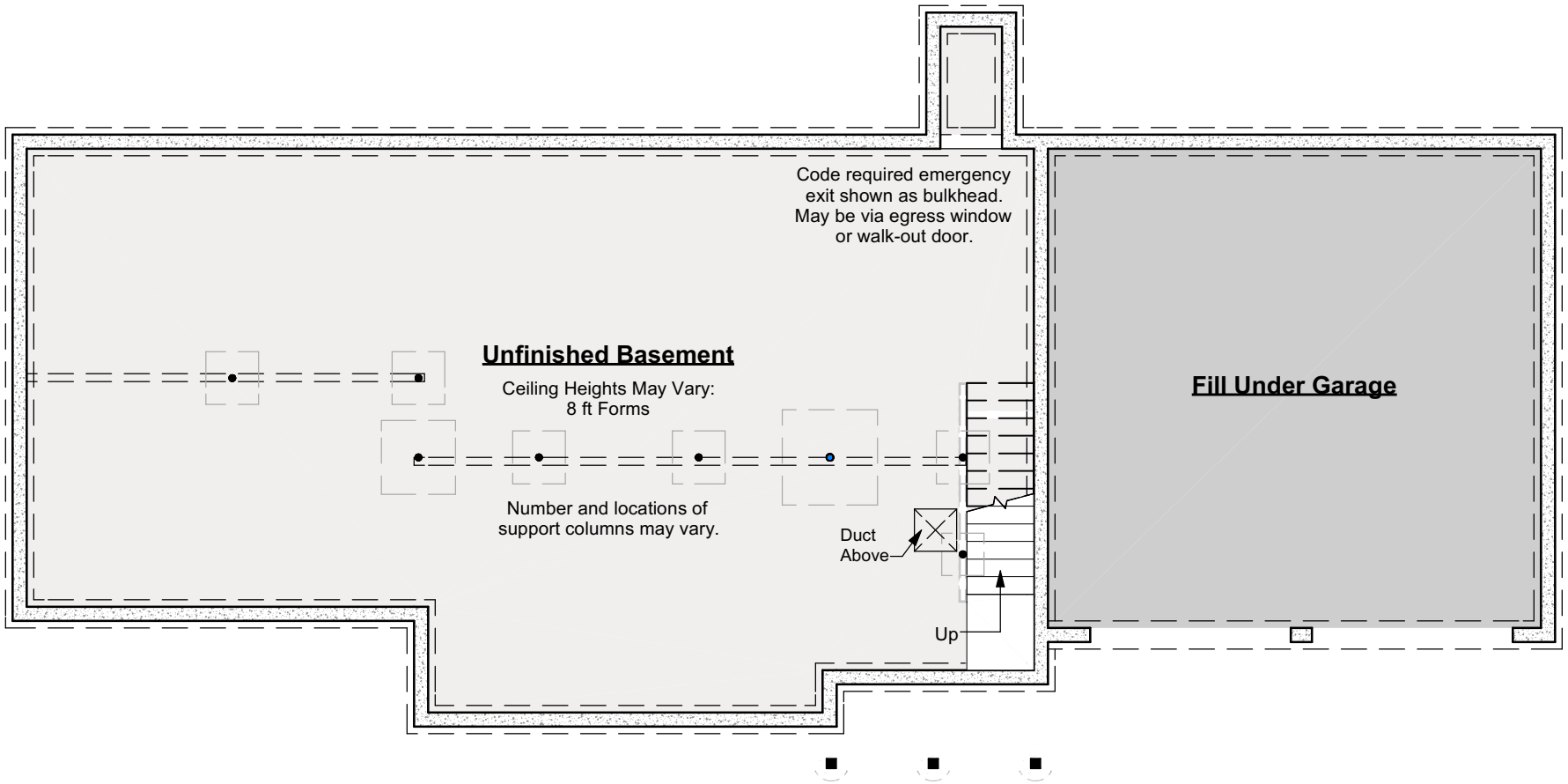

Foundation Plan

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

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Front Elevation

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

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Right Elevation

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

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Rear Elevation

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

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Left Elevation

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

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SHERLOCK
387.124.v25 GR

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Width 48.00 FT | **Depth** 36.00 FT | **Height** 33.16 FT

LIVING AREA	2446 FT	**BEDROOMS**	4	**BATHROOMS**	2.5
Main	2445 FT	Main	4	Main	2.5
Future	1 FT	Future	0	Future	0
2nd Unit	0 FT	2nd Unit	0	2nd Unit	0

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SHERLOCK - REAR RENDER

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SHERLOCK - 1ST FLOOR

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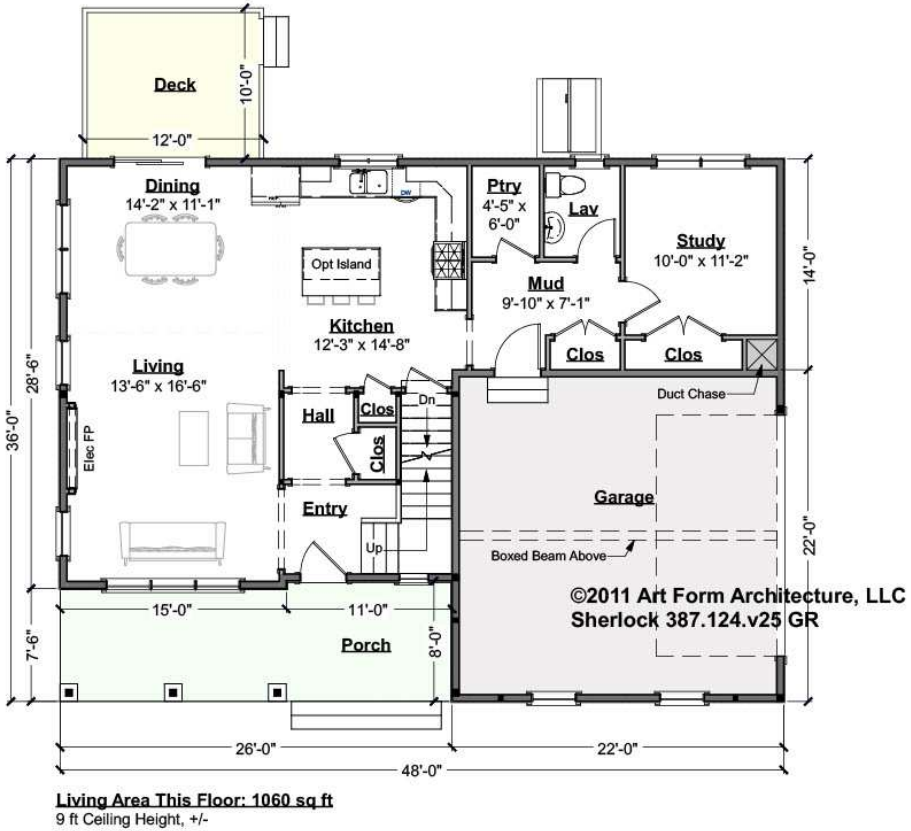

Living Area This Floor: 1060 sq ft
9 ft Ceiling Height, +/-

CLG HT SHOWN 9'-0" **CLG HT POSSIBLE** 8'-0"

** Major Change Fee, see website plan page for cost*

F1 LIVING AREA	1061 FT
Main	1060.00 FT
Future	1.00 FT
2nd Unit	FT

F1 BEDROOMS	0
Main	
Future	
2nd Unit	

F1 BATHROOMS	0.5
Main	0.50
Future	
2nd Unit	

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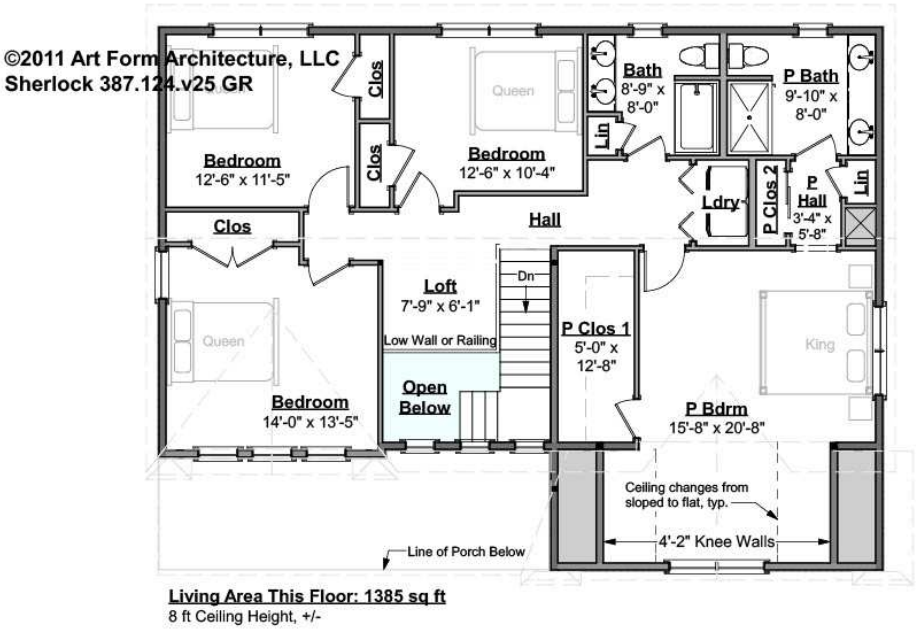

CLG HT SHOWN 8'-0" **CLG HT POSSIBLE** 9'-0"

** Major Change Fee, see website plan page for cost*

F1 LIVING AREA	1385 FT
Main	1385.00 FT
Future	FT
2nd Unit	FT

F1 BEDROOMS	4
Main	4.00
Future	
2nd Unit	

F1 BATHROOMS	2
Main	2.00
Future	
2nd Unit	

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SHERLOCK - BASEMENT

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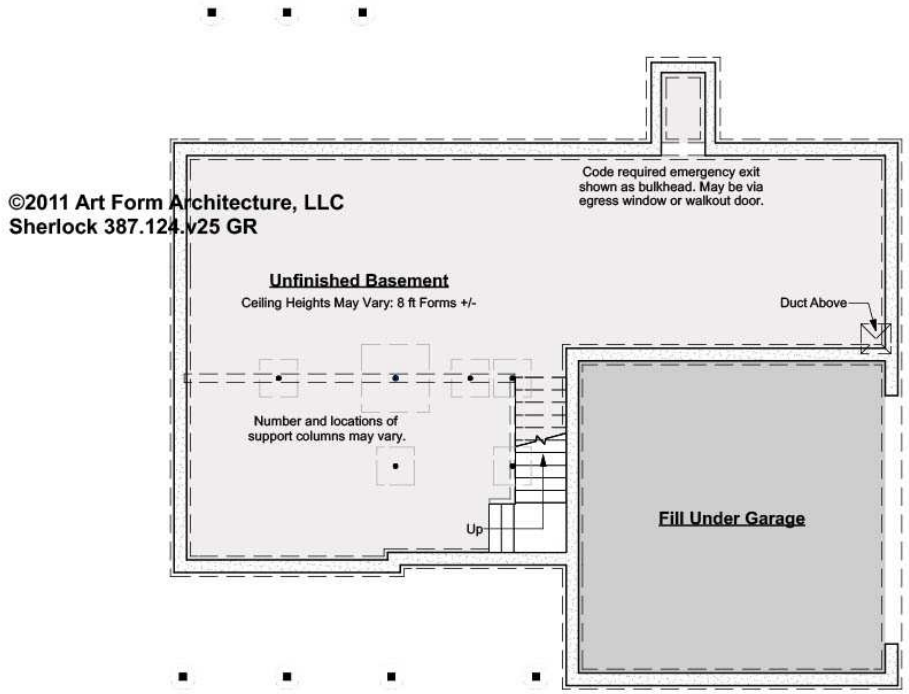

CLG HT SHOWN 7'-8" **CLG HT POSSIBLE** 10' & Up

** Major Change Fee, see website plan page for cost*

F1 LIVING AREA	0 FT
Main	FT
Future	FT
2nd Unit	FT

F1 BEDROOMS	0
Main	
Future	
2nd Unit	

F1 BATHROOMS	0
Main	
Future	
2nd Unit	

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SHERLOCK - FRONT ELEVATION
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SHERLOCK - RIGHT ELEVATION

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SHERLOCK - REAR ELEVATION

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SHERLOCK - LEFT ELEVATION

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HALEY WARD

STORMWATER MANAGEMENT AND EROSION CONTROL PLAN

TO THE CITY OF PORTSMOUTH
FOR 20 CENTRAL AVENUE
Map 209, Lot 30 | Portsmouth, NH

APPLICANT:
Copley Properties, LLC
94 Portsmouth Avenue, Stratham, NH 03885

June 22, 2026
JN: 5010658.001

REPORT PREPARED BY:
Haley Ward, Inc.
200 Griffin Road, Unit 14 | Portsmouth, NH 03801

EXECUTIVE SUMMARY

This drainage analysis examines the pre-development (existing) and post-development (proposed) stormwater drainage patterns for the proposed residential redevelopment project at 20 Central Avenue in Portsmouth, NH. The site is shown on the City of Portsmouth Assessor's Tax Map 209 as Lot 30. The total size of the existing lot is approximately 28,972 square feet.

The development will subdivide the existing lot and provide for the construction of three (3) single-family homes, with associated landscaping, utilities, and driveways. The new buildings will be serviced by public water and sewer. The development has the potential to increase stormwater runoff to adjacent properties and therefore must be designed in a manner to prevent that occurrence. This will be done primarily by capturing stormwater runoff and routing it through appropriate stormwater facilities, designed to ensure that there will be no significant increase in peak runoff from the site as a result of this project.

The intent of this stormwater design is to comply with the requirements of Section 7.6.1.4 of the City of Portsmouth Site Plan Review Ordinance as related to post-development peak rate of runoff reduction and to improve the overall stormwater system as part of the redevelopment.

INTRODUCTION / PROJECT DESCRIPTION

This drainage report is designed to assist the owner, planning board, contractor, regulatory reviewer, and others in understanding the impact of the proposed development project on local surface water runoff. Bounding the site to the north and east are developed residential properties. The site is bound to the south and west by Central Avenue and Beechwood Street, respectively.

The proposed development will include the construction of single-family homes, decks, driveways, and walkways causing an increase in impervious cover. To offset the increase, two rain gardens have been designed for Proposed Lot 2 and 3. The rain gardens will collect roof runoff from either drip strips or gutters with downspouts. The rain gardens will be equipped with a beehive grate to guide flow for filtration into the existing stormwater systems. The site layouts and drainage designs are preliminary and intended for planning purposes only to show compliance with the zoning ordinances.

The applicant shall submit final site/stormwater design plans with an Operations and Maintenance Plan for review and approval as part of the Building Permit application.
This report includes information about the existing site necessary to analyze stormwater runoff. The report includes maps of pre- development and post-development

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watersheds, subcatchment areas and calculations of runoff. The report provides a narrative of the stormwater runoff and describes numerically and graphically the surface water runoff patterns for this site. Proposed stormwater structures and methods will also be described, as well as erosion and sediment control practices. Included within the submittal is an Inspection and Long-Term Maintenance Plan for the proposed project. To fully understand the proposed site development the reader should also review the complete site plan set in addition to this report.

METHODOLOGY

"Extreme Precipitation" values from The Northeast Regional Climate Center (Cornell University) have been used for modeling purposes. These values have been used in this analysis, with a 15% addition to comply with local ordinances.

This report uses the US Soil Conservation Service (SCS) Method for estimating stormwater runoff. The SCS method is published in The National Engineering Handbook (NEH), Section 4 "Hydrology" and includes the Technical Release No. 20, (TR-20) "Computer Program for Project Formulation Hydrology", and Technical Release No. 55 (TR-55) "Urban Hydrology for Small Watersheds" methods. This report uses the HydroCAD version 10.20 program, written by HydroCAD Software Solutions LLC, Chocorua, N.H., to apply these methods for the calculation of runoff and for pond modeling. Rainfall data and runoff curve numbers are taken from "The Stormwater Management and Erosion Control Handbook for Urban and Developing Areas in New Hampshire."

Time of Concentration (Tc) is calculated by entering measured flow path data such as flow path type, length, slope and surface characteristics into the HydroCAD program. For the purposes of this report, a minimum time of concentration of 5 minutes is used.

The storm events used for the calculations in this report are the 2-year, 10-year, 25-year, and 50-year (24-hour) storms. Watershed basin boundaries have been delineated using topographic maps prepared by Haley Ward and field observations to confirm.

SITE SPECIFIC INFORMATION

Based on the United States Department of Agriculture (USDA) Natural Resources Conservation Service (NRCS), Soil Survey of Rockingham County, New Hampshire the site is made up of one soil type:

Soil Symbol	Soil Name and Slopes
799	Urban land-Canton complex (3-15% slopes)

A "Type B" hydrologic rating was assumed for the stormwater modelling.

The physical characteristics of the existing lot consist of slopes from 3 to 15%, with the lot generally sloping down from Northwest to Southeast towards Beechwood Street. Elevations on the site range from 14 to 24 feet above mean sea level. The surrounding stormwater collects in the two (2) existing stormdrain easements, located on the southerly portion of the property and flowing west to east.

According to the Federal Emergency Management Agency (FEMA) Flood Insurance Rate Map, Panel 33015C0259F, the project site is not in a special flood hazard area.

There are no protected natural resources on or directly adjacent to the subject property.

PRE-DEVELOPMENT DRAINAGE

In the pre-development condition, the site has been analyzed as two (2) subcatchment watershed basins based on localized topography and discharge location. A Pre-Development Hydrology map and HydroCAD model results have been provided.

Subcatchment 1 represents majority of the flow and the undeveloped grass area of the site. The flow area is generally from northwest to southeast with the northerly abutting area draining onto the site and the flow connecting into the existing catch basin, a part of the City's stormwater system and noted as Summation Point 1 (SP1). SP1 represents the southerly easement that exists along the southern boundary of the lot, generally flowing west to east.

Subcatchment 2 represents the southwest area, including majority of the existing dwelling on site. The flow area leads south onto Beechwood Street and is collected in the City's stormwater system, denoted as Summation Point 2 (SP2). SP2 represents the northerly easement that exists along the southern boundary of the lot that runs parallel with SP1.

POST-DEVELOPMENT DRAINAGE

The proposed development has been designed to match the pre-development drainage patterns to the greatest extent feasible. In the post-development condition, the site has been analyzed as two (2) subcatchment basins. A Post-Development Hydrology map and HydroCAD model results have been provided.

Subcatchment 1A continues to represent the stormwater flow from the northerly abutting properties.

Subcatchment 1B represents the proposed swale along the northerly boundary of the property and culvert leading to the catch basin within Proposed Lot 3.

Subctachment 1C represents the proposed grass area between dwellings and draining to a rain garden connected to the existing catch basin within Proposed Lot 3.

Subcatchments 1D, 1E, and 1F represent the roof runoff from the proposed drip trench collection systems along the abutting edge of each property.

Subcatchment 2A continues to represent the reduced western half of the site which drains into a rain garden and directly into the northerly stormwater easement.

Subcatchment 2B represents the flow generally from the proposed driveway and southerly grassed area of Lot 2, leading to Beechwood Street and into the City's stormwater system.

RUNOFF COMPARISON

Table 1: Pre-Development to Post-Development Comparison

	Q2 (CFS)		Q10 (CFS)		Q25 (CFS)		Q50 (CFS)		
Design Point	**Pre**	**Post**	**Pre**	**Post**	**Pre**	**Post**	**Pre**	**Post**	**Description**
SP1	0.67	0.54	2.06	1.96	3.34	3.20	4.66	4.47	Southern Stormwater System
SP2	0.22	0.04	0.55	0.47	0.84	0.76	1.14	1.01	Northern Stormwater System

As shown in Table 1, post-development runoff rates are similar or less than those observed under pre-development conditions.

EROSION AND SEDIMENT CONTROL PRACTICES

During construction, the potential for erosion exists due to stormwater runoff. The

contractor will be required to inspect and maintain all necessary erosion control measures, as well as installing any additional measures as required. All erosion control practices shall conform to "The Stormwater Management and Erosion Control Handbook for Urban and Developing Areas in New Hampshire." Some examples of erosion and sediment control measures to be utilized for this project during construction may include:

- Silt Soxx (or approved alternative) located at the toe of disturbed slopes
- Stabilized construction entrance at access point to the site
- Temporary mulching and seeding for disturbed areas
- Spraying water over disturbed areas to minimize wind erosion

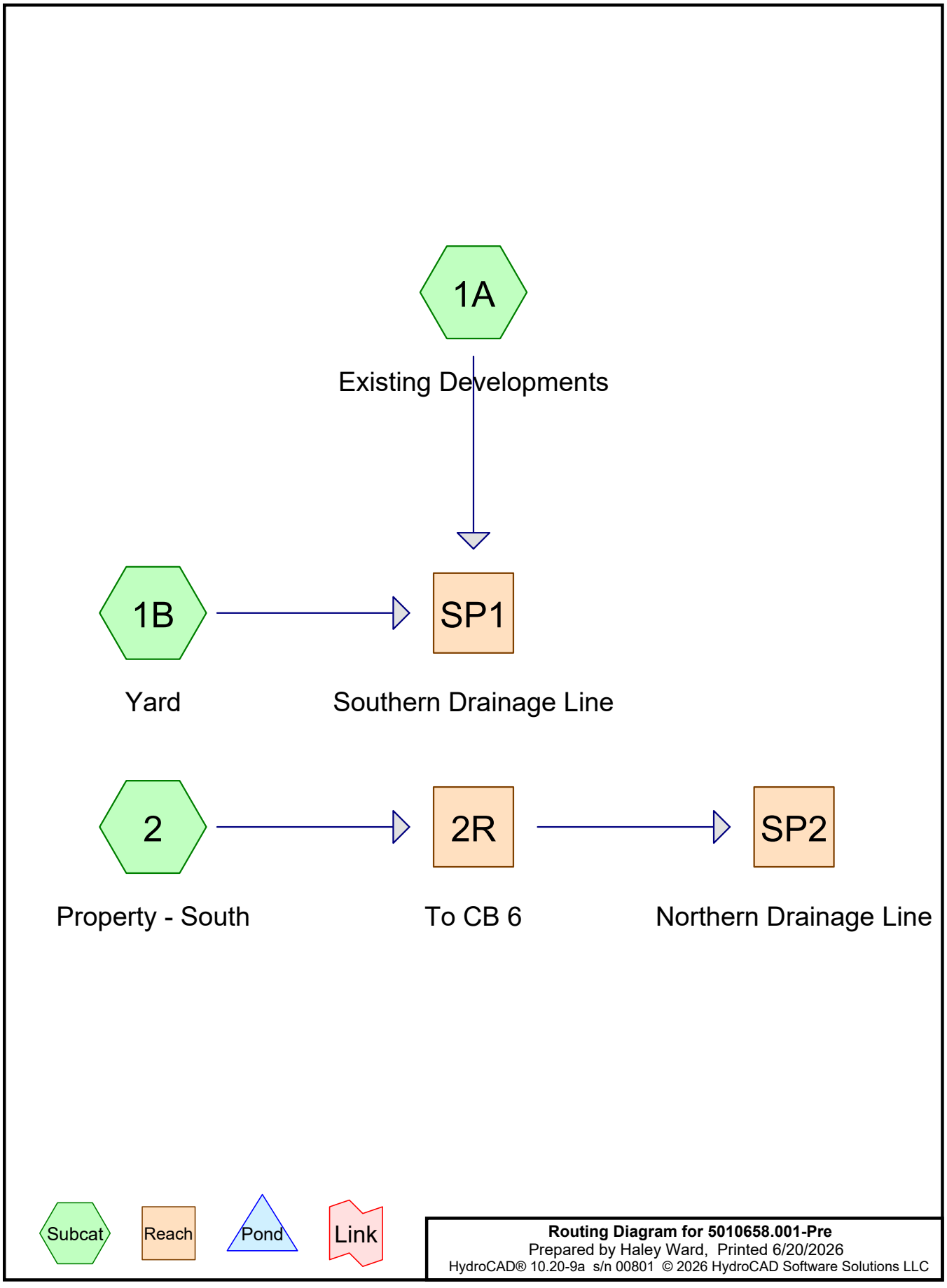
After construction, permanent stabilization will be accomplished by permanent seeding, landscaping, and surfacing the access drives and parking areas with asphalt paving and other areas with impervious walkways.

CONCLUSION

The proposed development has been designed to match the pre-development drainage patterns to the greatest extent feasible. With the design of the rain gardens connecting to the existing stormwater systems, the post- development runoff rates are effectively equivalent to the pre-development runoff rates. Erosion and sediment control practices will be implemented for both the temporary condition during construction and for final stabilization after construction. Therefore, there are no negative impacts to downstream receptors or adjacent properties anticipated as a result of this project.

REFERENCES

1. UNH Stormwater Center, Comprehensive Environmental Inc., and NH Department of Environmental Services, "NH Stormwater Manual 2025" (2025). *UNH Stormwater Center*. 126.
2. Minnick, E.L. and H.T. Marshall. *Stormwater Management and Erosion and Sediment Control Handbook for Urban and Developing Areas in New Hampshire*, prepared by Rockingham County Conservation District, prepared for New Hampshire Department of Environmental Services, in cooperation with USDA Soil Conservation Service, August 1992.
3. HydroCAD Software Solution, LLC. *HydroCAD Stormwater Modeling System Version10.20-9a* copyright 2026.



Routing Diagram for 5010658.001-Pre
Prepared by Haley Ward, Printed 6/20/2026
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Area Listing (all nodes)

Area (sq-ft)	CN	Description (subcatchment-numbers)
48,695	61	>75% Grass cover, Good, HSG B (1A, 1B, 2)
525	48	Brush, Good, HSG B (2)
475	98	Paved parking, HSG B (2)
1,560	98	Roofs, HSG B (1B, 2)
2,130	98	Unconnected pavement, HSG B (1A, 1B, 2)
53,385	**64**	**TOTAL AREA**

Soil Listing (all nodes)

Area (sq-ft)	Soil Group	Subcatchment Numbers
0	HSG A	
53,385	HSG B	1A, 1B, 2
0	HSG C	
0	HSG D	
0	Other	
53,385		**TOTAL AREA**

Time span=0.00-24.00 hrs, dt=0.05 hrs, 481 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment1A: Existing Developments Runoff Area=20,770 sf 1.64% Impervious Runoff Depth>0.65"
Tc=5.0 min UI Adjusted CN=61 Runoff=0.28 cfs 1,133 cf

Subcatchment1B: Yard Runoff Area=23,250 sf 8.39% Impervious Runoff Depth>0.75"
Tc=5.0 min UI Adjusted CN=63 Runoff=0.39 cfs 1,450 cf

Subcatchment2: Property - South Runoff Area=9,365 sf 20.02% Impervious Runoff Depth>0.95"
Tc=5.0 min UI Adjusted CN=67 Runoff=0.22 cfs 743 cf

Reach 2R: To CB 6 Avg. Flow Depth=0.01' Max Vel=1.48 fps Inflow=0.22 cfs 743 cf
n=0.013 L=25.0' S=0.1600 '/' Capacity=118.38 cfs Outflow=0.22 cfs 743 cf

Reach SP1: Southern Drainage Line Inflow=0.67 cfs 2,583 cf
Outflow=0.67 cfs 2,583 cf

Reach SP2: Northern Drainage Line Inflow=0.22 cfs 743 cf
Outflow=0.22 cfs 743 cf

Total Runoff Area = 53,385 sf Runoff Volume = 3,326 cf Average Runoff Depth = 0.75"
92.20% Pervious = 49,220 sf 7.80% Impervious = 4,165 sf

Time span=0.00-24.00 hrs, dt=0.05 hrs, 481 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment1A: Existing Developments Runoff Area=20,770 sf 1.64% Impervious Runoff Depth>1.73"
Tc=5.0 min UI Adjusted CN=61 Runoff=0.92 cfs 3,003 cf

Subcatchment1B: Yard Runoff Area=23,250 sf 8.39% Impervious Runoff Depth>1.89"
Tc=5.0 min UI Adjusted CN=63 Runoff=1.14 cfs 3,668 cf

Subcatchment2: Property - South Runoff Area=9,365 sf 20.02% Impervious Runoff Depth>2.22"
Tc=5.0 min UI Adjusted CN=67 Runoff=0.55 cfs 1,735 cf

Reach 2R: To CB 6 Avg. Flow Depth=0.01' Max Vel=2.11 fps Inflow=0.55 cfs 1,735 cf
n=0.013 L=25.0' S=0.1600 '/' Capacity=118.38 cfs Outflow=0.55 cfs 1,735 cf

Reach SP1: Southern Drainage Line Inflow=2.06 cfs 6,671 cf
Outflow=2.06 cfs 6,671 cf

Reach SP2: Northern Drainage Line Inflow=0.55 cfs 1,735 cf
Outflow=0.55 cfs 1,735 cf

Total Runoff Area = 53,385 sf Runoff Volume = 8,406 cf Average Runoff Depth = 1.89"
92.20% Pervious = 49,220 sf 7.80% Impervious = 4,165 sf

Summary for Subcatchment 1A: Existing Developments

Runoff = 0.92 cfs @ 12.09 hrs, Volume= 3,003 cf, Depth> 1.73"
Routed to Reach SP1 : Southern Drainage Line

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 10-Yr Rainfall=5.59"

Area (sf)	CN	Adj	Description
340	98		Unconnected pavement, HSG B
20,430	61		>75% Grass cover, Good, HSG B
20,770	62	61	Weighted Average, UI Adjusted
20,430			98.36% Pervious Area
340			1.64% Impervious Area
340			100.00% Unconnected

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.0					**Direct Entry,**

Summary for Subcatchment 1B: Yard

Runoff = 1.14 cfs @ 12.09 hrs, Volume= 3,668 cf, Depth> 1.89"
Routed to Reach SP1 : Southern Drainage Line

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 10-Yr Rainfall=5.59"

Area (sf)	CN	Adj	Description
21,300	61		>75% Grass cover, Good, HSG B
1,580	98		Unconnected pavement, HSG B
370	98		Roofs, HSG B
23,250	64	63	Weighted Average, UI Adjusted
21,300			91.61% Pervious Area
1,950			8.39% Impervious Area
1,580			81.03% Unconnected

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.0					**Direct Entry,**

Summary for Subcatchment 2: Property - South

Runoff = 0.55 cfs @ 12.08 hrs, Volume= 1,735 cf, Depth> 2.22"
Routed to Reach 2R : To CB 6

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 10-Yr Rainfall=5.59"

Area (sf)	CN	Adj	Description
6,965	61		>75% Grass cover, Good, HSG B
210	98		Unconnected pavement, HSG B
525	48		Brush, Good, HSG B
475	98		Paved parking, HSG B
1,190	98		Roofs, HSG B
9,365	68	67	Weighted Average, UI Adjusted
7,490			79.98% Pervious Area
1,875			20.02% Impervious Area
210			11.20% Unconnected

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.0					**Direct Entry,**

Summary for Reach 2R: To CB 6

Inflow Area = 9,365 sf, 20.02% Impervious, Inflow Depth > 2.22" for 10-Yr event
Inflow = 0.55 cfs @ 12.08 hrs, Volume= 1,735 cf
Outflow = 0.55 cfs @ 12.09 hrs, Volume= 1,735 cf, Atten= 1%, Lag= 0.4 min
Routed to Reach SP2 : Northern Drainage Line

Routing by Stor-Ind+Trans method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Max. Velocity= 2.11 fps, Min. Travel Time= 0.2 min
Avg. Velocity = 0.89 fps, Avg. Travel Time= 0.5 min

Peak Storage= 7 cf @ 12.09 hrs
Average Depth at Peak Storage= 0.01' , Surface Width= 26.04'
Bank-Full Depth= 0.25' Flow Area= 6.6 sf, Capacity= 118.38 cfs

26.00' x 0.25' deep channel, n= 0.013 Asphalt, smooth
Side Slope Z-value= 2.0 '/' Top Width= 27.00'
Length= 25.0' Slope= 0.1600 '/'
Inlet Invert= 15.15', Outlet Invert= 11.15'

Summary for Reach SP1: Southern Drainage Line

Inflow Area = 44,020 sf, 5.20% Impervious, Inflow Depth > 1.82" for 10-Yr event
Inflow = 2.06 cfs @ 12.09 hrs, Volume= 6,671 cf
Outflow = 2.06 cfs @ 12.09 hrs, Volume= 6,671 cf, Atten= 0%, Lag= 0.0 min

Routing by Stor-Ind+Trans method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs

Summary for Reach SP2: Northern Drainage Line

Inflow Area = 9,365 sf, 20.02% Impervious, Inflow Depth > 2.22" for 10-Yr event
Inflow = 0.55 cfs @ 12.09 hrs, Volume= 1,735 cf
Outflow = 0.55 cfs @ 12.09 hrs, Volume= 1,735 cf, Atten= 0%, Lag= 0.0 min

Routing by Stor-Ind+Trans method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs

Time span=0.00-24.00 hrs, dt=0.05 hrs, 481 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment1A: Existing Developments Runoff Area=20,770 sf 1.64% Impervious Runoff Depth>2.76"
Tc=5.0 min UI Adjusted CN=61 Runoff=1.51 cfs 4,773 cf

Subcatchment1B: Yard Runoff Area=23,250 sf 8.39% Impervious Runoff Depth>2.96"
Tc=5.0 min UI Adjusted CN=63 Runoff=1.83 cfs 5,732 cf

Subcatchment2: Property - South Runoff Area=9,365 sf 20.02% Impervious Runoff Depth>3.37"
Tc=5.0 min UI Adjusted CN=67 Runoff=0.85 cfs 2,629 cf

Reach 2R: To CB 6 Avg. Flow Depth=0.01' Max Vel=2.51 fps Inflow=0.85 cfs 2,629 cf
n=0.013 L=25.0' S=0.1600 '/' Capacity=118.38 cfs Outflow=0.84 cfs 2,628 cf

Reach SP1: Southern Drainage Line Inflow=3.34 cfs 10,505 cf
Outflow=3.34 cfs 10,505 cf

Reach SP2: Northern Drainage Line Inflow=0.84 cfs 2,628 cf
Outflow=0.84 cfs 2,628 cf

Total Runoff Area = 53,385 sf Runoff Volume = 13,133 cf Average Runoff Depth = 2.95"
92.20% Pervious = 49,220 sf 7.80% Impervious = 4,165 sf

Time span=0.00-24.00 hrs, dt=0.05 hrs, 481 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment1A: Existing Developments Runoff Area=20,770 sf 1.64% Impervious Runoff Depth>3.82"
Tc=5.0 min UI Adjusted CN=61 Runoff=2.12 cfs 6,611 cf

Subcatchment1B: Yard Runoff Area=23,250 sf 8.39% Impervious Runoff Depth>4.05"
Tc=5.0 min UI Adjusted CN=63 Runoff=2.53 cfs 7,856 cf

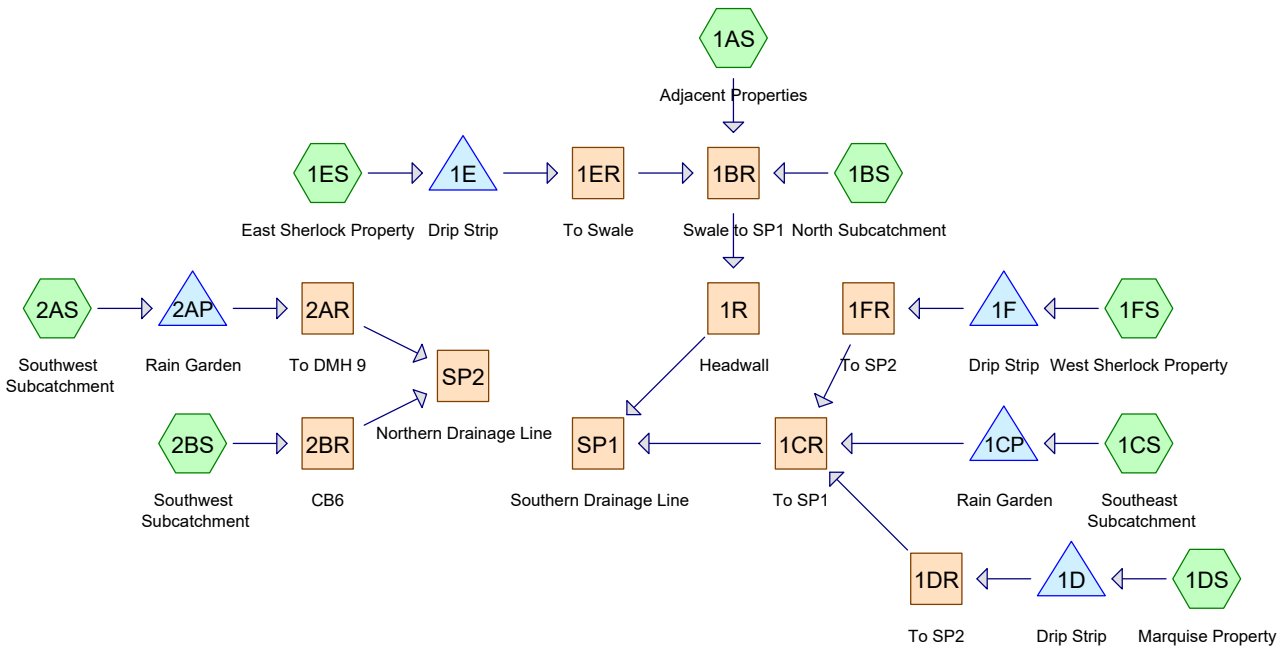
Subcatchment2: Property - South Runoff Area=9,365 sf 20.02% Impervious Runoff Depth>4.53"
Tc=5.0 min UI Adjusted CN=67 Runoff=1.14 cfs 3,534 cf

Reach 2R: To CB 6 Avg. Flow Depth=0.02' Max Vel=2.82 fps Inflow=1.14 cfs 3,534 cf
n=0.013 L=25.0' S=0.1600 '/' Capacity=118.38 cfs Outflow=1.14 cfs 3,533 cf

Reach SP1: Southern Drainage Line Inflow=4.66 cfs 14,467 cf
Outflow=4.66 cfs 14,467 cf

Reach SP2: Northern Drainage Line Inflow=1.14 cfs 3,533 cf
Outflow=1.14 cfs 3,533 cf

Total Runoff Area = 53,385 sf Runoff Volume = 18,000 cf Average Runoff Depth = 4.05"
92.20% Pervious = 49,220 sf 7.80% Impervious = 4,165 sf



Subcat Reach Pond Link

Routing Diagram for 5010658.001-Post
Prepared by Haley Ward, Printed 6/20/2026
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Area Listing (all nodes)

Area (sq-ft)	CN	Description (subcatchment-numbers)
44,525	61	>75% Grass cover, Good, HSG B (1AS, 1BS, 1CS, 2AS, 2BS)
1,865	98	Paved parking, HSG B (1AS, 1CS, 2BS)
3,200	98	Roofs, HSG B (1DS, 1ES, 1FS, 2AS)
3,795	98	Unconnected pavement, HSG B (1BS, 1CS, 2AS, 2BS)
53,385	**67**	**TOTAL AREA**

Soil Listing (all nodes)

Area (sq-ft)	Soil Group	Subcatchment Numbers
0	HSG A	
53,385	HSG B	1AS, 1BS, 1CS, 1DS, 1ES, 1FS, 2AS, 2BS
0	HSG C	
0	HSG D	
0	Other	
53,385		**TOTAL AREA**

Time span=0.00-24.00 hrs, dt=0.05 hrs, 481 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment1AS: Adjacent Properties Runoff Area=20,770 sf 1.64% Impervious Runoff Depth>0.70"
Tc=5.0 min CN=62 Runoff=0.32 cfs 1,213 cf

Subcatchment1BS: North Subcatchment Runoff Area=8,190 sf 11.36% Impervious Runoff Depth>0.75"
Tc=5.0 min UI Adjusted CN=63 Runoff=0.14 cfs 511 cf

Subcatchment1CS: Southeast Runoff Area=14,290 sf 20.19% Impervious Runoff Depth>0.90"
Tc=5.0 min UI Adjusted CN=66 Runoff=0.31 cfs 1,071 cf

Subcatchment1DS: Marquise Property Runoff Area=680 sf 100.00% Impervious Runoff Depth>3.44"
Tc=5.0 min CN=98 Runoff=0.06 cfs 195 cf

Subcatchment1ES: East Sherlock Property Runoff Area=685 sf 100.00% Impervious Runoff Depth>3.45"
Tc=0.0 min CN=98 Runoff=0.06 cfs 197 cf

Subcatchment1FS: West Sherlock Property Runoff Area=875 sf 100.00% Impervious Runoff Depth>3.44"
Tc=5.0 min CN=98 Runoff=0.07 cfs 251 cf

Subcatchment2AS: Southwest Runoff Area=5,315 sf 40.92% Impervious Runoff Depth>1.50"
Tc=5.0 min CN=76 Runoff=0.21 cfs 663 cf

Subcatchment2BS: Southwest Runoff Area=2,580 sf 11.24% Impervious Runoff Depth>0.85"
Tc=5.0 min CN=65 Runoff=0.05 cfs 182 cf

Reach 1BR: Swale to SP1 Avg. Flow Depth=0.05' Max Vel=1.31 fps Inflow=0.50 cfs 1,776 cf
n=0.030 L=227.0' S=0.0401 '/' Capacity=23.57 cfs Outflow=0.46 cfs 1,767 cf

Reach 1CR: To SP1 Avg. Flow Depth=0.02' Max Vel=0.40 fps Inflow=0.35 cfs 1,124 cf
n=0.025 L=161.0' S=0.0093 '/' Capacity=64.03 cfs Outflow=0.26 cfs 1,115 cf

Reach 1DR: To SP2 Inflow=0.06 cfs 45 cf
Outflow=0.06 cfs 45 cf

Reach 1ER: To Swale Avg. Flow Depth=0.02' Max Vel=0.49 fps Inflow=0.07 cfs 53 cf
n=0.033 L=60.0' S=0.0183 '/' Capacity=10.72 cfs Outflow=0.05 cfs 53 cf

Reach 1FR: To SP2 Avg. Flow Depth=0.00' Max Vel=0.13 fps Inflow=0.02 cfs 15 cf
n=0.030 L=660.0' S=0.0079 '/' Capacity=21.43 cfs Outflow=0.00 cfs 15 cf

Reach 1R: Headwall Avg. Flow Depth=0.23' Max Vel=3.47 fps Inflow=0.46 cfs 1,767 cf
12.0" Round Pipe n=0.025 L=58.3' S=0.0497 '/' Capacity=4.13 cfs Outflow=0.45 cfs 1,766 cf

Reach 2AR: To DMH 9 Avg. Flow Depth=0.04' Max Vel=1.06 fps Inflow=0.02 cfs 236 cf
24.0" Round Pipe n=0.012 L=158.0' S=0.0094 '/' Capacity=23.80 cfs Outflow=0.02 cfs 234 cf

Reach 2BR: CB6 Avg. Flow Depth=0.00' Max Vel=0.50 fps Inflow=0.05 cfs 182 cf
n=0.013 L=158.0' S=0.0222 '/' Capacity=136.36 cfs Outflow=0.04 cfs 182 cf

Reach SP1: Southern Drainage Line Inflow=0.61 cfs 2,881 cf
Outflow=0.61 cfs 2,881 cf

Reach SP2: Northern Drainage Line Inflow=0.04 cfs 416 cf
Outflow=0.04 cfs 416 cf

Pond 1CP: Rain Garden Peak Elev=10.51' Storage=130 cf Inflow=0.31 cfs 1,071 cf
Outflow=0.29 cfs 1,063 cf

Pond 1D: Drip Strip Peak Elev=22.25' Storage=56 cf Inflow=0.06 cfs 195 cf
Discarded=0.00 cfs 142 cf Primary=0.06 cfs 45 cf Outflow=0.06 cfs 188 cf

Pond 1E: Drip Strip Peak Elev=16.56' Storage=51 cf Inflow=0.06 cfs 197 cf
Discarded=0.00 cfs 138 cf Primary=0.07 cfs 53 cf Outflow=0.07 cfs 191 cf

Pond 1F: Drip Strip Peak Elev=18.62' Storage=99 cf Inflow=0.07 cfs 251 cf
Discarded=0.01 cfs 233 cf Primary=0.02 cfs 15 cf Outflow=0.02 cfs 248 cf

Pond 2AP: Rain Garden Peak Elev=17.51' Storage=430 cf Inflow=0.21 cfs 663 cf
Outflow=0.02 cfs 236 cf

Total Runoff Area = 53,385 sf Runoff Volume = 4,282 cf Average Runoff Depth = 0.96"
83.40% Pervious = 44,525 sf 16.60% Impervious = 8,860 sf

Time span=0.00-24.00 hrs, dt=0.05 hrs, 481 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment1AS: Adjacent Properties Runoff Area=20,770 sf 1.64% Impervious Runoff Depth>1.81"
Tc=5.0 min CN=62 Runoff=0.97 cfs 3,139 cf

Subcatchment1BS: North Subcatchment Runoff Area=8,190 sf 11.36% Impervious Runoff Depth>1.89"
Tc=5.0 min UI Adjusted CN=63 Runoff=0.40 cfs 1,292 cf

Subcatchment1CS: Southeast Runoff Area=14,290 sf 20.19% Impervious Runoff Depth>2.14"
Tc=5.0 min UI Adjusted CN=66 Runoff=0.81 cfs 2,547 cf

Subcatchment1DS: Marquise Property Runoff Area=680 sf 100.00% Impervious Runoff Depth>5.35"
Tc=5.0 min CN=98 Runoff=0.09 cfs 303 cf

Subcatchment1ES: East Sherlock Property Runoff Area=685 sf 100.00% Impervious Runoff Depth>5.35"
Tc=0.0 min CN=98 Runoff=0.10 cfs 306 cf

Subcatchment1FS: West Sherlock Property Runoff Area=875 sf 100.00% Impervious Runoff Depth>5.35"
Tc=5.0 min CN=98 Runoff=0.11 cfs 390 cf

Subcatchment2AS: Southwest Runoff Area=5,315 sf 40.92% Impervious Runoff Depth>3.03"
Tc=5.0 min CN=76 Runoff=0.43 cfs 1,341 cf

Subcatchment2BS: Southwest Runoff Area=2,580 sf 11.24% Impervious Runoff Depth>2.06"
Tc=5.0 min CN=65 Runoff=0.14 cfs 442 cf

Reach 1BR: Swale to SP1 Avg. Flow Depth=0.10' Max Vel=2.02 fps Inflow=1.45 cfs 4,561 cf
n=0.030 L=227.0' S=0.0401 '/' Capacity=23.57 cfs Outflow=1.36 cfs 4,547 cf

Reach 1CR: To SP1 Avg. Flow Depth=0.04' Max Vel=0.62 fps Inflow=0.87 cfs 2,760 cf
n=0.025 L=161.0' S=0.0093 '/' Capacity=64.03 cfs Outflow=0.75 cfs 2,746 cf

Reach 1DR: To SP2 Inflow=0.08 cfs 122 cf
Outflow=0.08 cfs 122 cf

Reach 1ER: To Swale Avg. Flow Depth=0.03' Max Vel=0.57 fps Inflow=0.09 cfs 130 cf
n=0.033 L=60.0' S=0.0183 '/' Capacity=10.72 cfs Outflow=0.08 cfs 130 cf

Reach 1FR: To SP2 Avg. Flow Depth=0.01' Max Vel=0.17 fps Inflow=0.12 cfs 103 cf
n=0.030 L=660.0' S=0.0079 '/' Capacity=21.43 cfs Outflow=0.02 cfs 103 cf

Reach 1R: Headwall Avg. Flow Depth=0.40' Max Vel=4.72 fps Inflow=1.36 cfs 4,547 cf
12.0" Round Pipe n=0.025 L=58.3' S=0.0497 '/' Capacity=4.13 cfs Outflow=1.35 cfs 4,546 cf

Reach 2AR: To DMH 9 Avg. Flow Depth=0.17' Max Vel=2.72 fps Inflow=0.35 cfs 913 cf
24.0" Round Pipe n=0.012 L=158.0' S=0.0094 '/' Capacity=23.80 cfs Outflow=0.30 cfs 912 cf

Reach 2BR: CB6 Avg. Flow Depth=0.01' Max Vel=0.68 fps Inflow=0.14 cfs 442 cf
n=0.013 L=158.0' S=0.0222 '/' Capacity=136.36 cfs Outflow=0.12 cfs 441 cf

Reach SP1: Southern Drainage Line Inflow=1.98 cfs 7,291 cf
Outflow=1.98 cfs 7,291 cf

Reach SP2: Northern Drainage Line Inflow=0.42 cfs 1,353 cf
Outflow=0.42 cfs 1,353 cf

Pond 1CP: Rain Garden Peak Elev=10.74' Storage=172 cf Inflow=0.81 cfs 2,547 cf
Outflow=0.79 cfs 2,536 cf

Pond 1D: Drip Strip Peak Elev=22.26' Storage=56 cf Inflow=0.09 cfs 303 cf
Discarded=0.00 cfs 165 cf Primary=0.08 cfs 122 cf Outflow=0.09 cfs 287 cf

Pond 1E: Drip Strip Peak Elev=16.57' Storage=51 cf Inflow=0.10 cfs 306 cf
Discarded=0.00 cfs 161 cf Primary=0.09 cfs 130 cf Outflow=0.10 cfs 291 cf

Pond 1F: Drip Strip Peak Elev=18.68' Storage=105 cf Inflow=0.11 cfs 390 cf
Discarded=0.01 cfs 271 cf Primary=0.12 cfs 103 cf Outflow=0.13 cfs 374 cf

Pond 2AP: Rain Garden Peak Elev=17.63' Storage=464 cf Inflow=0.43 cfs 1,341 cf
Outflow=0.35 cfs 913 cf

Total Runoff Area = 53,385 sf Runoff Volume = 9,760 cf Average Runoff Depth = 2.19"
83.40% Pervious = 44,525 sf 16.60% Impervious = 8,860 sf

Summary for Subcatchment 1AS: Adjacent Properties

Runoff = 0.97 cfs @ 12.09 hrs, Volume= 3,139 cf, Depth> 1.81"
Routed to Reach 1BR : Swale to SP1

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 10-Yr Rainfall=5.59"

Area (sf)	CN	Description
340	98	Paved parking, HSG B
20,430	61	>75% Grass cover, Good, HSG B
20,770	62	Weighted Average
20,430		98.36% Pervious Area
340		1.64% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.0					**Direct Entry,**

Summary for Subcatchment 1BS: North Subcatchment

Runoff = 0.40 cfs @ 12.09 hrs, Volume= 1,292 cf, Depth> 1.89"
Routed to Reach 1BR : Swale to SP1

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 10-Yr Rainfall=5.59"

Area (sf)	CN	Adj	Description
7,260	61		>75% Grass cover, Good, HSG B
930	98		Unconnected pavement, HSG B
8,190	65	63	Weighted Average, UI Adjusted
7,260			88.64% Pervious Area
930			11.36% Impervious Area
930			100.00% Unconnected

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.0					**Direct Entry,**

Summary for Subcatchment 1CS: Southeast Subcatchment

Runoff = 0.81 cfs @ 12.08 hrs, Volume= 2,547 cf, Depth> 2.14"
Routed to Pond 1CP : Rain Garden

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 10-Yr Rainfall=5.59"

Area (sf)	CN	Adj	Description
11,405	61		>75% Grass cover, Good, HSG B
1,295	98		Paved parking, HSG B
1,590	98		Unconnected pavement, HSG B
14,290	68	66	Weighted Average, UI Adjusted
11,405			79.81% Pervious Area
2,885			20.19% Impervious Area
1,590			55.11% Unconnected

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.0					**Direct Entry,**

Summary for Subcatchment 1DS: Marquise Property

Runoff = 0.09 cfs @ 12.07 hrs, Volume= 303 cf, Depth> 5.35"
Routed to Pond 1D : Drip Strip

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 10-Yr Rainfall=5.59"

Area (sf)	CN	Description
680	98	Roofs, HSG B
680		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.0					**Direct Entry,**

Summary for Subcatchment 1ES: East Sherlock Property

Runoff = 0.10 cfs @ 12.00 hrs, Volume= 306 cf, Depth> 5.35"
Routed to Pond 1E : Drip Strip

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 10-Yr Rainfall=5.59"

Area (sf)	CN	Description
685	98	Roofs, HSG B
685		100.00% Impervious Area

Summary for Subcatchment 1FS: West Sherlock Property

Runoff = 0.11 cfs @ 12.07 hrs, Volume= 390 cf, Depth> 5.35"
Routed to Pond 1F : Drip Strip

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 10-Yr Rainfall=5.59"

Area (sf)	CN	Description
875	98	Roofs, HSG B
875		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.0					**Direct Entry,**

Summary for Subcatchment 2AS: Southwest Subcatchment

Runoff = 0.43 cfs @ 12.08 hrs, Volume= 1,341 cf, Depth> 3.03"
Routed to Pond 2AP : Rain Garden

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 10-Yr Rainfall=5.59"

Area (sf)	CN	Description
1,215	98	Unconnected pavement, HSG B
960	98	Roofs, HSG B
3,140	61	>75% Grass cover, Good, HSG B
5,315	76	Weighted Average
3,140		59.08% Pervious Area
2,175		40.92% Impervious Area
1,215		55.86% Unconnected

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.0					**Direct Entry,**

Summary for Subcatchment 2BS: Southwest Subcatchment

Runoff = 0.14 cfs @ 12.08 hrs, Volume= 442 cf, Depth> 2.06"
Routed to Reach 2BR : CB6

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 10-Yr Rainfall=5.59"

Area (sf)	CN	Description
230	98	Paved parking, HSG B
60	98	Unconnected pavement, HSG B
2,290	61	>75% Grass cover, Good, HSG B
2,580	65	Weighted Average
2,290		88.76% Pervious Area
290		11.24% Impervious Area
60		20.69% Unconnected

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.0					**Direct Entry,**

Summary for Reach 1BR: Swale to SP1

Inflow Area = 29,645 sf, 6.59% Impervious, Inflow Depth > 1.85" for 10-Yr event
Inflow = 1.45 cfs @ 12.09 hrs, Volume= 4,561 cf
Outflow = 1.36 cfs @ 12.14 hrs, Volume= 4,547 cf, Atten= 6%, Lag= 3.5 min
Routed to Reach 1R : Headwall

Routing by Stor-Ind+Trans method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Max. Velocity= 2.02 fps, Min. Travel Time= 1.9 min
Avg. Velocity = 0.60 fps, Avg. Travel Time= 6.3 min

Peak Storage= 159 cf @ 12.11 hrs
Average Depth at Peak Storage= 0.10' , Surface Width= 7.58'
Bank-Full Depth= 0.50' Flow Area= 4.3 sf, Capacity= 23.57 cfs

7.00' x 0.50' deep channel, n= 0.030 Earth, grassed & winding
Side Slope Z-value= 3.0 '/' Top Width= 10.00'
Length= 227.0' Slope= 0.0401 '/'
Inlet Invert= 24.00', Outlet Invert= 14.90'

‡

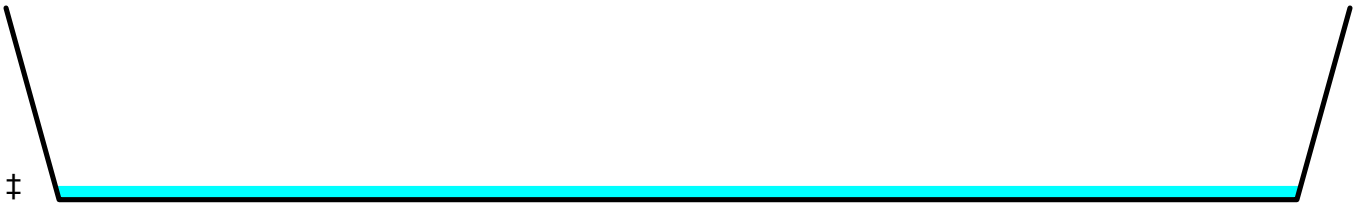
Summary for Reach 1CR: To SP1

Inflow Area = 15,845 sf, 28.02% Impervious, Inflow Depth > 2.09" for 10-Yr event
Inflow = 0.87 cfs @ 12.10 hrs, Volume= 2,760 cf
Outflow = 0.75 cfs @ 12.22 hrs, Volume= 2,746 cf, Atten= 14%, Lag= 7.1 min
Routed to Reach SP1 : Southern Drainage Line

Routing by Stor-Ind+Trans method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Max. Velocity= 0.62 fps, Min. Travel Time= 4.3 min
Avg. Velocity = 0.21 fps, Avg. Travel Time= 13.0 min

Peak Storage= 201 cf @ 12.15 hrs
Average Depth at Peak Storage= 0.04' , Surface Width= 35.21'
Bank-Full Depth= 0.50' Flow Area= 18.3 sf, Capacity= 64.03 cfs

35.00' x 0.50' deep channel, n= 0.025 Earth, clean & winding
Side Slope Z-value= 3.0 '/' Top Width= 38.00'
Length= 161.0' Slope= 0.0093 '/'
Inlet Invert= 14.50', Outlet Invert= 13.00'



Summary for Reach 1DR: To SP2

Inflow Area = 680 sf,100.00% Impervious, Inflow Depth = 2.15" for 10-Yr event
Inflow = 0.08 cfs @ 12.08 hrs, Volume= 122 cf
Outflow = 0.08 cfs @ 12.08 hrs, Volume= 122 cf, Atten= 0%, Lag= 0.0 min
Routed to Reach 1CR : To SP1

Routing by Stor-Ind+Trans method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs

Summary for Reach 1ER: To Swale

Inflow Area = 685 sf,100.00% Impervious, Inflow Depth = 2.28" for 10-Yr event
Inflow = 0.09 cfs @ 12.01 hrs, Volume= 130 cf
Outflow = 0.08 cfs @ 12.06 hrs, Volume= 130 cf, Atten= 10%, Lag= 3.1 min
Routed to Reach 1BR : Swale to SP1

Routing by Stor-Ind+Trans method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Max. Velocity= 0.57 fps, Min. Travel Time= 1.7 min
Avg. Velocity = 0.23 fps, Avg. Travel Time= 4.4 min

Peak Storage= 9 cf @ 12.03 hrs
Average Depth at Peak Storage= 0.03' , Surface Width= 5.18'
Bank-Full Depth= 0.50' Flow Area= 3.3 sf, Capacity= 10.72 cfs

5.00' x 0.50' deep channel, n= 0.033 Earth, grassed & winding
Side Slope Z-value= 3.0 '/' Top Width= 8.00'
Length= 60.0' Slope= 0.0183 '/'
Inlet Invert= 17.10', Outlet Invert= 16.00'

Summary for Reach 1FR: To SP2

Inflow Area = 875 sf,100.00% Impervious, Inflow Depth = 1.41" for 10-Yr event
Inflow = 0.12 cfs @ 12.11 hrs, Volume= 103 cf
Outflow = 0.02 cfs @ 13.63 hrs, Volume= 103 cf, Atten= 86%, Lag= 91.2 min
Routed to Reach 1CR : To SP1

Routing by Stor-Ind+Trans method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Max. Velocity= 0.17 fps, Min. Travel Time= 66.7 min
Avg. Velocity = 0.13 fps, Avg. Travel Time= 84.3 min

Peak Storage= 65 cf @ 12.52 hrs
Average Depth at Peak Storage= 0.01' , Surface Width= 15.04'
Bank-Full Depth= 0.50' Flow Area= 8.3 sf, Capacity= 21.43 cfs

15.00' x 0.50' deep channel, n= 0.030 Earth, grassed & winding
Side Slope Z-value= 3.0 '/' Top Width= 18.00'
Length= 660.0' Slope= 0.0079 '/'
Inlet Invert= 19.20', Outlet Invert= 14.00'

‡

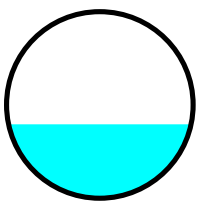
Summary for Reach 1R: Headwall

Inflow Area = 29,645 sf, 6.59% Impervious, Inflow Depth > 1.84" for 10-Yr event
Inflow = 1.36 cfs @ 12.14 hrs, Volume= 4,547 cf
Outflow = 1.35 cfs @ 12.15 hrs, Volume= 4,546 cf, Atten= 1%, Lag= 0.3 min
Routed to Reach SP1 : Southern Drainage Line

Routing by Stor-Ind+Trans method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Max. Velocity= 4.72 fps, Min. Travel Time= 0.2 min
Avg. Velocity = 1.87 fps, Avg. Travel Time= 0.5 min

Peak Storage= 17 cf @ 12.15 hrs
Average Depth at Peak Storage= 0.40' , Surface Width= 0.98'
Bank-Full Depth= 1.00' Flow Area= 0.8 sf, Capacity= 4.13 cfs

12.0" Round Pipe
n= 0.025 Earth, clean & winding
Length= 58.3' Slope= 0.0497 '/'
Inlet Invert= 14.90', Outlet Invert= 12.00'



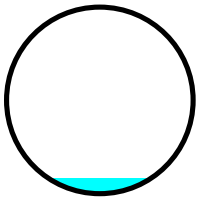
Summary for Reach 2AR: To DMH 9

Inflow Area = 5,315 sf, 40.92% Impervious, Inflow Depth > 2.06" for 10-Yr event
Inflow = 0.35 cfs @ 12.17 hrs, Volume= 913 cf
Outflow = 0.30 cfs @ 12.22 hrs, Volume= 912 cf, Atten= 14%, Lag= 2.9 min
Routed to Reach SP2 : Northern Drainage Line

Routing by Stor-Ind+Trans method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Max. Velocity= 2.72 fps, Min. Travel Time= 1.0 min
Avg. Velocity = 1.07 fps, Avg. Travel Time= 2.5 min

Peak Storage= 20 cf @ 12.20 hrs
Average Depth at Peak Storage= 0.17' , Surface Width= 1.11'
Bank-Full Depth= 2.00' Flow Area= 3.1 sf, Capacity= 23.80 cfs

24.0" Round Pipe
n= 0.012 Corrugated PP, smooth interior
Length= 158.0' Slope= 0.0094 '/'
Inlet Invert= 9.77', Outlet Invert= 8.28'



Summary for Reach 2BR: CB6

Inflow Area = 2,580 sf, 11.24% Impervious, Inflow Depth > 2.06" for 10-Yr event
Inflow = 0.14 cfs @ 12.08 hrs, Volume= 442 cf
Outflow = 0.12 cfs @ 12.20 hrs, Volume= 441 cf, Atten= 12%, Lag= 6.7 min
Routed to Reach SP2 : Northern Drainage Line

Routing by Stor-Ind+Trans method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Max. Velocity= 0.68 fps, Min. Travel Time= 3.9 min
Avg. Velocity = 0.50 fps, Avg. Travel Time= 5.3 min

Peak Storage= 29 cf @ 12.12 hrs
Average Depth at Peak Storage= 0.01' , Surface Width= 25.04'
Bank-Full Depth= 0.50' Flow Area= 13.3 sf, Capacity= 136.36 cfs

25.00' x 0.50' deep channel, n= 0.013 Asphalt, smooth
Side Slope Z-value= 3.0 '/' Top Width= 28.00'
Length= 158.0' Slope= 0.0222 '/'
Inlet Invert= 19.00', Outlet Invert= 15.50'

‡

Summary for Reach SP1: Southern Drainage Line

Inflow Area = 45,490 sf, 14.06% Impervious, Inflow Depth > 1.92" for 10-Yr event
Inflow = 1.98 cfs @ 12.17 hrs, Volume= 7,291 cf
Outflow = 1.98 cfs @ 12.17 hrs, Volume= 7,291 cf, Atten= 0%, Lag= 0.0 min

Routing by Stor-Ind+Trans method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs

Summary for Reach SP2: Northern Drainage Line

Inflow Area = 7,895 sf, 31.22% Impervious, Inflow Depth > 2.06" for 10-Yr event
Inflow = 0.42 cfs @ 12.21 hrs, Volume= 1,353 cf
Outflow = 0.42 cfs @ 12.21 hrs, Volume= 1,353 cf, Atten= 0%, Lag= 0.0 min

Routing by Stor-Ind+Trans method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs

Summary for Pond 1CP: Rain Garden

Inflow Area = 14,290 sf, 20.19% Impervious, Inflow Depth > 2.14" for 10-Yr event
Inflow = 0.81 cfs @ 12.08 hrs, Volume= 2,547 cf
Outflow = 0.79 cfs @ 12.11 hrs, Volume= 2,536 cf, Atten= 2%, Lag= 1.3 min
Primary = 0.79 cfs @ 12.11 hrs, Volume= 2,536 cf
Routed to Reach 1CR : To SP1

Routing by Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Automatic Starting Elev= 10.20' Surf.Area= 458 sf Storage= 73 cf
Peak Elev= 10.74' @ 12.11 hrs Surf.Area= 458 sf Storage= 172 cf (98 cf above start)

Plug-Flow detention time= 28.1 min calculated for 2,462 cf (97% of inflow)
Center-of-Mass det. time= 3.8 min (854.1 - 850.2)

Volume	Invert	Avail.Storage	Storage Description
#1	9.80'	1,111 cf	**Custom Stage Data (Irregular)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Perim. (feet)	Voids (%)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)	Wet.Area (sq-ft)
9.80	458	85.0	0.0	0	0	458
10.20	458	85.0	40.0	73	73	492
14.50	458	85.0	40.0	788	861	857
15.00	545	91.0	100.0	250	1,111	952

Device	Routing	Invert	Outlet Devices
#1	Primary	14.50'	**12.0" Horiz. Orifice/Grate** C= 0.600 Limited to weir flow at low heads

#2	Primary	10.20'	**12.0" Round Culvert** L= 45.8' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 10.20' / 10.00' S= 0.0044 '/' Cc= 0.900 n= 0.012 Corrugated PP, smooth interior, Flow Area= 0.79 sf

Primary OutFlow Max=0.78 cfs @ 12.11 hrs HW=10.73' (Free Discharge)
└**1=Orifice/Grate** (Controls 0.00 cfs)
└**2=Culvert** (Barrel Controls 0.78 cfs @ 2.67 fps)

Summary for Pond 1D: Drip Strip

Inflow Area = 680 sf,100.00% Impervious, Inflow Depth > 5.35" for 10-Yr event
Inflow = 0.09 cfs @ 12.07 hrs, Volume= 303 cf
Outflow = 0.09 cfs @ 12.08 hrs, Volume= 287 cf, Atten= 1%, Lag= 0.8 min
Discarded = 0.00 cfs @ 12.08 hrs, Volume= 165 cf
Primary = 0.08 cfs @ 12.08 hrs, Volume= 122 cf
Routed to Reach 1DR : To SP2

Routing by Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Peak Elev= 22.26' @ 12.08 hrs Surf.Area= 136 sf Storage= 56 cf

Plug-Flow detention time= 110.3 min calculated for 286 cf (94% of inflow)
Center-of-Mass det. time= 79.6 min (824.6 - 745.0)

Volume	Invert	Avail.Storage	Storage Description
#1	20.70'	83 cf	**2.00'W x 23.50'L x 2.00'H Prismatoid Z=1.0** 207 cf Overall x 40.0% Voids

Device	Routing	Invert	Outlet Devices
#1	Primary	22.20'	**2.0' long + 1.0 '/' SideZ x 1.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 Coef. (English) 2.69 2.72 2.75 2.85 2.98 3.08 3.20 3.28 3.31 3.30 3.31 3.32
#2	Discarded	20.70'	**1.000 in/hr Exfiltration over Surface area**

Discarded OutFlow Max=0.00 cfs @ 12.08 hrs HW=22.26' (Free Discharge)
└**2=Exfiltration** (Exfiltration Controls 0.00 cfs)

Primary OutFlow Max=0.08 cfs @ 12.08 hrs HW=22.26' (Free Discharge)
└**1=Broad-Crested Rectangular Weir** (Weir Controls 0.08 cfs @ 0.65 fps)

Summary for Pond 1E: Drip Strip

Inflow Area = 685 sf,100.00% Impervious, Inflow Depth > 5.35" for 10-Yr event
Inflow = 0.10 cfs @ 12.00 hrs, Volume= 306 cf
Outflow = 0.10 cfs @ 12.01 hrs, Volume= 291 cf, Atten= 2%, Lag= 0.4 min
Discarded = 0.00 cfs @ 12.01 hrs, Volume= 161 cf
Primary = 0.09 cfs @ 12.01 hrs, Volume= 130 cf
Routed to Reach 1ER : To Swale

Routing by Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Peak Elev= 16.57' @ 12.01 hrs Surf.Area= 130 sf Storage= 51 cf

Plug-Flow detention time= 101.3 min calculated for 291 cf (95% of inflow)
Center-of-Mass det. time= 74.0 min (814.6 - 740.7)

Volume	Invert	Avail.Storage	Storage Description
#1	15.10'	83 cf	**2.00'W x 23.50'L x 2.00'H Prismatoid Z=1.0** 207 cf Overall x 40.0% Voids

Device	Routing	Invert	Outlet Devices
#1	Primary	16.50'	**2.0' long + 1.0 '/' SideZ x 1.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 Coef. (English) 2.69 2.72 2.75 2.85 2.98 3.08 3.20 3.28 3.31 3.30 3.31 3.32
#2	Discarded	15.10'	**1.000 in/hr Exfiltration over Surface area**

Discarded OutFlow Max=0.00 cfs @ 12.01 hrs HW=16.56' (Free Discharge)
↑—**2=Exfiltration** (Exfiltration Controls 0.00 cfs)

Primary OutFlow Max=0.09 cfs @ 12.01 hrs HW=16.56' (Free Discharge)
↑—**1=Broad-Crested Rectangular Weir** (Weir Controls 0.09 cfs @ 0.68 fps)

Summary for Pond 1F: Drip Strip

Inflow Area = 875 sf,100.00% Impervious, Inflow Depth > 5.35" for 10-Yr event
Inflow = 0.11 cfs @ 12.07 hrs, Volume= 390 cf
Outflow = 0.13 cfs @ 12.11 hrs, Volume= 374 cf, Atten= 0%, Lag= 2.2 min
Discarded = 0.01 cfs @ 12.11 hrs, Volume= 271 cf
Primary = 0.12 cfs @ 12.11 hrs, Volume= 103 cf
Routed to Reach 1FR : To SP2

Routing by Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Peak Elev= 18.68' @ 12.11 hrs Surf.Area= 246 sf Storage= 105 cf

Plug-Flow detention time= 134.7 min calculated for 373 cf (96% of inflow)
Center-of-Mass det. time= 109.3 min (854.3 - 745.0)

Volume	Invert	Avail.Storage	Storage Description
#1	17.10'	150 cf	**2.00'W x 44.50'L x 2.00'H Prismatoid Z=1.0** 375 cf Overall x 40.0% Voids

Device	Routing	Invert	Outlet Devices
#1	Primary	18.60'	**2.0' long + 1.0 '/' SideZ x 1.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 Coef. (English) 2.69 2.72 2.75 2.85 2.98 3.08 3.20 3.28 3.31 3.30 3.31 3.32
#2	Discarded	17.10'	**1.000 in/hr Exfiltration over Surface area**

Discarded OutFlow Max=0.01 cfs @ 12.11 hrs HW=18.67' (Free Discharge)
↑—**2=Exfiltration** (Exfiltration Controls 0.01 cfs)

Primary OutFlow Max=0.11 cfs @ 12.11 hrs HW=18.67' (Free Discharge)
↑—**1=Broad-Crested Rectangular Weir** (Weir Controls 0.11 cfs @ 0.73 fps)

Summary for Pond 2AP: Rain Garden

Inflow Area = 5,315 sf, 40.92% Impervious, Inflow Depth > 3.03" for 10-Yr event
Inflow = 0.43 cfs @ 12.08 hrs, Volume= 1,341 cf
Outflow = 0.35 cfs @ 12.17 hrs, Volume= 913 cf, Atten= 18%, Lag= 5.4 min
Primary = 0.35 cfs @ 12.17 hrs, Volume= 913 cf
Routed to Reach 2AR : To DMH 9

Routing by Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Peak Elev= 17.63' @ 12.15 hrs Surf.Area= 297 sf Storage= 464 cf

Plug-Flow detention time= 161.6 min calculated for 913 cf (68% of inflow)
Center-of-Mass det. time= 62.7 min (888.6 - 825.8)

Volume	Invert	Avail.Storage	Storage Description
#1	12.80'	587 cf	**Custom Stage Data (Irregular)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Perim. (feet)	Voids (%)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)	Wet.Area (sq-ft)
12.80	190	76.0	0.0	0	0	190
13.20	190	76.0	40.0	30	30	220
17.50	273	89.0	40.0	396	426	614
18.00	370	110.0	100.0	160	587	950

Device	Routing	Invert	Outlet Devices
#1	Primary	17.50'	**8.0" Horiz. Orifice/Grate** C= 0.600 Limited to weir flow at low heads

Primary OutFlow Max=0.31 cfs @ 12.17 hrs HW=17.63' (Free Discharge)
↑—**1=Orifice/Grate** (Weir Controls 0.31 cfs @ 1.16 fps)

Time span=0.00-24.00 hrs, dt=0.05 hrs, 481 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment1AS: Adjacent Properties Runoff Area=20,770 sf 1.64% Impervious Runoff Depth>2.86"
Tc=5.0 min CN=62 Runoff=1.57 cfs 4,946 cf

Subcatchment1BS: North Subcatchment Runoff Area=8,190 sf 11.36% Impervious Runoff Depth>2.96"
Tc=5.0 min UI Adjusted CN=63 Runoff=0.65 cfs 2,019 cf

Subcatchment1CS: Southeast Runoff Area=14,290 sf 20.19% Impervious Runoff Depth>3.26"
Tc=5.0 min UI Adjusted CN=66 Runoff=1.25 cfs 3,888 cf

Subcatchment1DS: Marquise Property Runoff Area=680 sf 100.00% Impervious Runoff Depth>6.84"
Tc=5.0 min CN=98 Runoff=0.11 cfs 387 cf

Subcatchment1ES: East Sherlock Property Runoff Area=685 sf 100.00% Impervious Runoff Depth>6.84"
Tc=0.0 min CN=98 Runoff=0.12 cfs 390 cf

Subcatchment1FS: West Sherlock Property Runoff Area=875 sf 100.00% Impervious Runoff Depth>6.84"
Tc=5.0 min CN=98 Runoff=0.14 cfs 499 cf

Subcatchment2AS: Southwest Runoff Area=5,315 sf 40.92% Impervious Runoff Depth>4.33"
Tc=5.0 min CN=76 Runoff=0.62 cfs 1,916 cf

Subcatchment2BS: Southwest Runoff Area=2,580 sf 11.24% Impervious Runoff Depth>3.16"
Tc=5.0 min CN=65 Runoff=0.22 cfs 680 cf

Reach 1BR: Swale to SP1 Avg. Flow Depth=0.13' Max Vel=2.43 fps Inflow=2.32 cfs 7,161 cf
n=0.030 L=227.0' S=0.0401 '/' Capacity=23.57 cfs Outflow=2.17 cfs 7,143 cf

Reach 1CR: To SP1 Avg. Flow Depth=0.05' Max Vel=0.74 fps Inflow=1.34 cfs 4,240 cf
n=0.025 L=161.0' S=0.0093 '/' Capacity=64.03 cfs Outflow=1.20 cfs 4,220 cf

Reach 1DR: To SP2 Inflow=0.11 cfs 186 cf
Outflow=0.11 cfs 186 cf

Reach 1ER: To Swale Avg. Flow Depth=0.03' Max Vel=0.63 fps Inflow=0.12 cfs 196 cf
n=0.033 L=60.0' S=0.0183 '/' Capacity=10.72 cfs Outflow=0.11 cfs 196 cf

Reach 1FR: To SP2 Avg. Flow Depth=0.01' Max Vel=0.21 fps Inflow=0.13 cfs 179 cf
n=0.030 L=660.0' S=0.0079 '/' Capacity=21.43 cfs Outflow=0.03 cfs 179 cf

Reach 1R: Headwall Avg. Flow Depth=0.52' Max Vel=5.31 fps Inflow=2.17 cfs 7,143 cf
12.0" Round Pipe n=0.025 L=58.3' S=0.0497 '/' Capacity=4.13 cfs Outflow=2.16 cfs 7,141 cf

Reach 2AR: To DMH 9 Avg. Flow Depth=0.22' Max Vel=3.24 fps Inflow=0.61 cfs 1,488 cf
24.0" Round Pipe n=0.012 L=158.0' S=0.0094 '/' Capacity=23.80 cfs Outflow=0.59 cfs 1,486 cf

Reach 2BR: CB6 Avg. Flow Depth=0.01' Max Vel=0.79 fps Inflow=0.22 cfs 680 cf
n=0.013 L=158.0' S=0.0222 '/' Capacity=136.36 cfs Outflow=0.20 cfs 678 cf

Reach SP1: Southern Drainage Line Inflow=3.22 cfs 11,361 cf
Outflow=3.22 cfs 11,361 cf

Reach SP2: Northern Drainage Line Inflow=0.76 cfs 2,165 cf
Outflow=0.76 cfs 2,165 cf

Pond 1CP: Rain Garden Peak Elev=10.89' Storage=201 cf Inflow=1.25 cfs 3,888 cf
Outflow=1.24 cfs 3,874 cf

Pond 1D: Drip Strip Peak Elev=22.27' Storage=57 cf Inflow=0.11 cfs 387 cf
Discarded=0.00 cfs 179 cf Primary=0.11 cfs 186 cf Outflow=0.11 cfs 365 cf

Pond 1E: Drip Strip Peak Elev=16.58' Storage=52 cf Inflow=0.12 cfs 390 cf
Discarded=0.00 cfs 175 cf Primary=0.12 cfs 196 cf Outflow=0.12 cfs 370 cf

Pond 1F: Drip Strip Peak Elev=18.68' Storage=105 cf Inflow=0.14 cfs 499 cf
Discarded=0.01 cfs 294 cf Primary=0.13 cfs 179 cf Outflow=0.14 cfs 473 cf

Pond 2AP: Rain Garden Peak Elev=17.70' Storage=484 cf Inflow=0.62 cfs 1,916 cf
Outflow=0.61 cfs 1,488 cf

Total Runoff Area = 53,385 sf Runoff Volume = 14,726 cf Average Runoff Depth = 3.31"
83.40% Pervious = 44,525 sf 16.60% Impervious = 8,860 sf

Time span=0.00-24.00 hrs, dt=0.05 hrs, 481 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment1AS: Adjacent Properties Runoff Area=20,770 sf 1.64% Impervious Runoff Depth>3.94"
Tc=5.0 min CN=62 Runoff=2.19 cfs 6,814 cf

Subcatchment1BS: North Subcatchment Runoff Area=8,190 sf 11.36% Impervious Runoff Depth>4.05"
Tc=5.0 min UI Adjusted CN=63 Runoff=0.89 cfs 2,767 cf

Subcatchment1CS: Southeast Runoff Area=14,290 sf 20.19% Impervious Runoff Depth>4.41"
Tc=5.0 min UI Adjusted CN=66 Runoff=1.70 cfs 5,251 cf

Subcatchment1DS: Marquise Property Runoff Area=680 sf 100.00% Impervious Runoff Depth>8.25"
Tc=5.0 min CN=98 Runoff=0.13 cfs 467 cf

Subcatchment1ES: East Sherlock Property Runoff Area=685 sf 100.00% Impervious Runoff Depth>8.25"
Tc=0.0 min CN=98 Runoff=0.15 cfs 471 cf

Subcatchment1FS: West Sherlock Property Runoff Area=875 sf 100.00% Impervious Runoff Depth>8.25"
Tc=5.0 min CN=98 Runoff=0.17 cfs 601 cf

Subcatchment2AS: Southwest Runoff Area=5,315 sf 40.92% Impervious Runoff Depth>5.60"
Tc=5.0 min CN=76 Runoff=0.80 cfs 2,481 cf

Subcatchment2BS: Southwest Runoff Area=2,580 sf 11.24% Impervious Runoff Depth>4.29"
Tc=5.0 min CN=65 Runoff=0.30 cfs 923 cf

Reach 1BR: Swale to SP1 Avg. Flow Depth=0.16' Max Vel=2.75 fps Inflow=3.21 cfs 9,842 cf
n=0.030 L=227.0' S=0.0401 '/' Capacity=23.57 cfs Outflow=3.04 cfs 9,821 cf

Reach 1CR: To SP1 Avg. Flow Depth=0.06' Max Vel=0.84 fps Inflow=1.81 cfs 5,741 cf
n=0.025 L=161.0' S=0.0093 '/' Capacity=64.03 cfs Outflow=1.66 cfs 5,717 cf

Reach 1DR: To SP2 Inflow=0.13 cfs 250 cf
Outflow=0.13 cfs 250 cf

Reach 1ER: To Swale Avg. Flow Depth=0.04' Max Vel=0.68 fps Inflow=0.15 cfs 261 cf
n=0.033 L=60.0' S=0.0183 '/' Capacity=10.72 cfs Outflow=0.13 cfs 261 cf

Reach 1FR: To SP2 Avg. Flow Depth=0.01' Max Vel=0.25 fps Inflow=0.16 cfs 255 cf
n=0.030 L=660.0' S=0.0079 '/' Capacity=21.43 cfs Outflow=0.05 cfs 255 cf

Reach 1R: Headwall Avg. Flow Depth=0.64' Max Vel=5.72 fps Inflow=3.04 cfs 9,821 cf
12.0" Round Pipe n=0.025 L=58.3' S=0.0497 '/' Capacity=4.13 cfs Outflow=3.01 cfs 9,820 cf

Reach 2AR: To DMH 9 Avg. Flow Depth=0.25' Max Vel=3.48 fps Inflow=0.78 cfs 2,053 cf
24.0" Round Pipe n=0.012 L=158.0' S=0.0094 '/' Capacity=23.80 cfs Outflow=0.75 cfs 2,051 cf

Reach 2BR: CB6 Avg. Flow Depth=0.01' Max Vel=0.92 fps Inflow=0.30 cfs 923 cf
n=0.013 L=158.0' S=0.0222 '/' Capacity=136.36 cfs Outflow=0.28 cfs 921 cf

Reach SP1: Southern Drainage Line Inflow=4.49 cfs 15,536 cf
Outflow=4.49 cfs 15,536 cf

Reach SP2: Northern Drainage Line Inflow=1.01 cfs 2,972 cf
Outflow=1.01 cfs 2,972 cf

Pond 1CP: Rain Garden Peak Elev=11.04' Storage=227 cf Inflow=1.70 cfs 5,251 cf
Outflow=1.68 cfs 5,236 cf

Pond 1D: Drip Strip Peak Elev=22.28' Storage=57 cf Inflow=0.13 cfs 467 cf
Discarded=0.00 cfs 190 cf Primary=0.13 cfs 250 cf Outflow=0.13 cfs 440 cf

Pond 1E: Drip Strip Peak Elev=16.59' Storage=52 cf Inflow=0.15 cfs 471 cf
Discarded=0.00 cfs 185 cf Primary=0.15 cfs 261 cf Outflow=0.15 cfs 446 cf

Pond 1F: Drip Strip Peak Elev=18.69' Storage=106 cf Inflow=0.17 cfs 601 cf
Discarded=0.01 cfs 312 cf Primary=0.16 cfs 255 cf Outflow=0.17 cfs 567 cf

Pond 2AP: Rain Garden Peak Elev=17.74' Storage=496 cf Inflow=0.80 cfs 2,481 cf
Outflow=0.78 cfs 2,053 cf

Total Runoff Area = 53,385 sf Runoff Volume = 19,776 cf Average Runoff Depth = 4.45"
83.40% Pervious = 44,525 sf 16.60% Impervious = 8,860 sf

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	
Location	
Latitude	43.083 degrees North
Longitude	70.772 degrees West
Elevation	0 feet
Date/Time	Wed May 13 2026 13:43:21 GMT-0400 (Eastern Daylight Time)

Extreme Precipitation Estimates

	5min	10min	15min	30min	60min	120min		1hr	2hr	3hr	6hr	12hr	24hr	48hr		1day	2day	4day	7day	10day	
1yr	0.26	0.40	0.50	0.65	0.81	1.04	**1yr**	0.70	0.98	1.21	1.56	2.03	2.66	2.92	**1yr**	2.35	2.80	3.21	3.94	4.54	**1yr**
2yr	0.32	0.50	0.62	0.81	1.02	1.30	**2yr**	0.88	1.18	1.52	1.94	2.49	3.20	3.56	**2yr**	2.84	3.43	3.93	4.67	5.32	**2yr**
5yr	0.37	0.58	0.73	0.97	1.25	1.60	**5yr**	1.08	1.46	1.88	2.43	3.13	4.06	4.57	**5yr**	3.59	4.39	5.03	5.92	6.69	**5yr**
10yr	0.41	0.65	0.82	1.11	1.45	1.89	**10yr**	1.25	1.72	2.23	2.89	3.74	4.86	5.52	**10yr**	4.30	5.31	6.07	7.09	7.96	**10yr**
25yr	0.48	0.76	0.96	1.33	1.77	2.33	**25yr**	1.53	2.14	2.77	3.62	4.73	6.16	7.09	**25yr**	5.45	6.81	7.78	9.00	10.03	**25yr**
50yr	0.53	0.86	1.10	1.53	2.06	2.75	**50yr**	1.78	2.52	3.28	4.31	5.65	7.38	8.57	**50yr**	6.53	8.24	9.40	10.79	11.95	**50yr**
100yr	0.59	0.96	1.24	1.76	2.41	3.24	**100yr**	2.08	2.97	3.89	5.14	6.75	8.83	10.36	**100yr**	7.82	9.96	11.35	12.93	14.25	**100yr**
200yr	0.67	1.09	1.42	2.03	2.81	3.82	**200yr**	2.43	3.50	4.60	6.11	8.06	10.59	12.52	**200yr**	9.37	12.04	13.71	15.50	16.99	**200yr**
500yr	0.79	1.31	1.70	2.47	3.46	4.74	**500yr**	2.98	4.36	5.74	7.68	10.19	13.45	16.11	**500yr**	11.90	15.49	17.60	19.72	21.45	**500yr**

Lower Confidence Limits

	5min	10min	15min	30min	60min	120min		1hr	2hr	3hr	6hr	12hr	24hr	48hr		1day	2day	4day	7day	10day	
1yr	0.23	0.36	0.44	0.59	0.73	0.88	**1yr**	0.63	0.86	0.92	1.32	1.68	2.22	2.49	**1yr**	1.97	2.39	2.86	3.17	3.87	**1yr**
2yr	0.31	0.49	0.60	0.81	1.00	1.19	**2yr**	0.86	1.16	1.37	1.82	2.34	3.05	3.45	**2yr**	2.70	3.32	3.82	4.54	5.07	**2yr**
5yr	0.35	0.54	0.67	0.92	1.17	1.40	**5yr**	1.01	1.37	1.61	2.12	2.73	3.78	4.18	**5yr**	3.35	4.02	4.71	5.52	6.23	**5yr**
10yr	0.38	0.59	0.73	1.02	1.32	1.60	**10yr**	1.14	1.56	1.81	2.39	3.06	4.36	4.85	**10yr**	3.86	4.67	5.43	6.40	7.18	**10yr**
25yr	0.44	0.67	0.83	1.18	1.56	1.90	**25yr**	1.35	1.86	2.10	2.76	3.54	4.69	5.88	**25yr**	4.15	5.65	6.63	7.77	8.66	**25yr**
50yr	0.48	0.73	0.91	1.31	1.76	2.17	**50yr**	1.52	2.12	2.35	3.08	3.94	5.30	6.79	**50yr**	4.69	6.53	7.70	9.02	9.99	**50yr**
100yr	0.53	0.81	1.01	1.46	2.01	2.47	**100yr**	1.73	2.41	2.63	3.42	4.36	5.94	7.83	**100yr**	5.26	7.53	8.94	10.47	11.53	**100yr**
200yr	0.59	0.89	1.13	1.63	2.27	2.81	**200yr**	1.96	2.75	2.93	3.80	4.81	6.65	9.04	**200yr**	5.89	8.69	10.38	12.18	13.33	**200yr**
500yr	0.68	1.02	1.31	1.90	2.71	3.36	**500yr**	2.33	3.29	3.41	4.34	5.48	7.73	10.91	**500yr**	6.84	10.50	12.64	14.89	16.13	**500yr**

Upper Confidence Limits

	5min	10min	15min	30min	60min	120min		1hr	2hr	3hr	6hr	12hr	24hr	48hr		1day	2day	4day	7day	10day	
1yr	0.28	0.44	0.54	0.72	0.89	1.08	**1yr**	0.77	1.06	1.26	1.74	2.21	2.98	3.15	**1yr**	2.64	3.03	3.58	4.37	5.04	**1yr**
2yr	0.34	0.52	0.64	0.86	1.07	1.27	**2yr**	0.92	1.24	1.48	1.96	2.51	3.42	3.70	**2yr**	3.03	3.55	4.08	4.83	5.63	**2yr**
5yr	0.40	0.62	0.76	1.05	1.33	1.62	**5yr**	1.15	1.58	1.88	2.53	3.25	4.33	4.95	**5yr**	3.83	4.76	5.37	6.36	7.14	**5yr**
10yr	0.47	0.72	0.89	1.24	1.61	1.97	**10yr**	1.39	1.93	2.28	3.10	3.95	5.33	6.19	**10yr**	4.72	5.95	6.80	7.82	8.73	**10yr**
25yr	0.57	0.87	1.09	1.55	2.04	2.56	**25yr**	1.76	2.50	2.95	4.06	5.14	7.79	8.32	**25yr**	6.90	8.00	9.12	10.32	11.39	**25yr**
50yr	0.67	1.02	1.27	1.82	2.45	3.12	**50yr**	2.11	3.05	3.59	4.99	6.30	9.76	10.43	**50yr**	8.64	10.03	11.41	12.70	13.94	**50yr**
100yr	0.79	1.19	1.49	2.15	2.95	3.79	**100yr**	2.54	3.71	4.36	6.14	7.73	12.22	13.08	**100yr**	10.81	12.57	14.26	15.66	17.06	**100yr**
200yr	0.92	1.38	1.75	2.53	3.53	4.63	**200yr**	3.05	4.52	5.32	7.56	9.49	15.34	16.41	**200yr**	13.57	15.78	17.86	19.30	20.88	**200yr**
500yr	1.14	1.69	2.18	3.17	4.50	6.00	**500yr**	3.89	5.87	6.91	9.99	12.48	20.74	22.15	**500yr**	18.35	21.30	24.04	25.45	27.30	**500yr**

Powered by ACIS Northeast Regional Climate Center

Custom Soil Resource Report
Soil Map

Map Scale: 1:424 if printed on A landscape (11" x 8.5") sheet.

N

Meters
0 5 10 20 30

Feet
0 20 40 80 120

Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 19N WGS84

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: Rockingham County, New Hampshire
Survey Area Data: Version 28, Sep 9, 2025

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

Date(s) aerial images were photographed: Jun 19, 2020—Sep 20, 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.

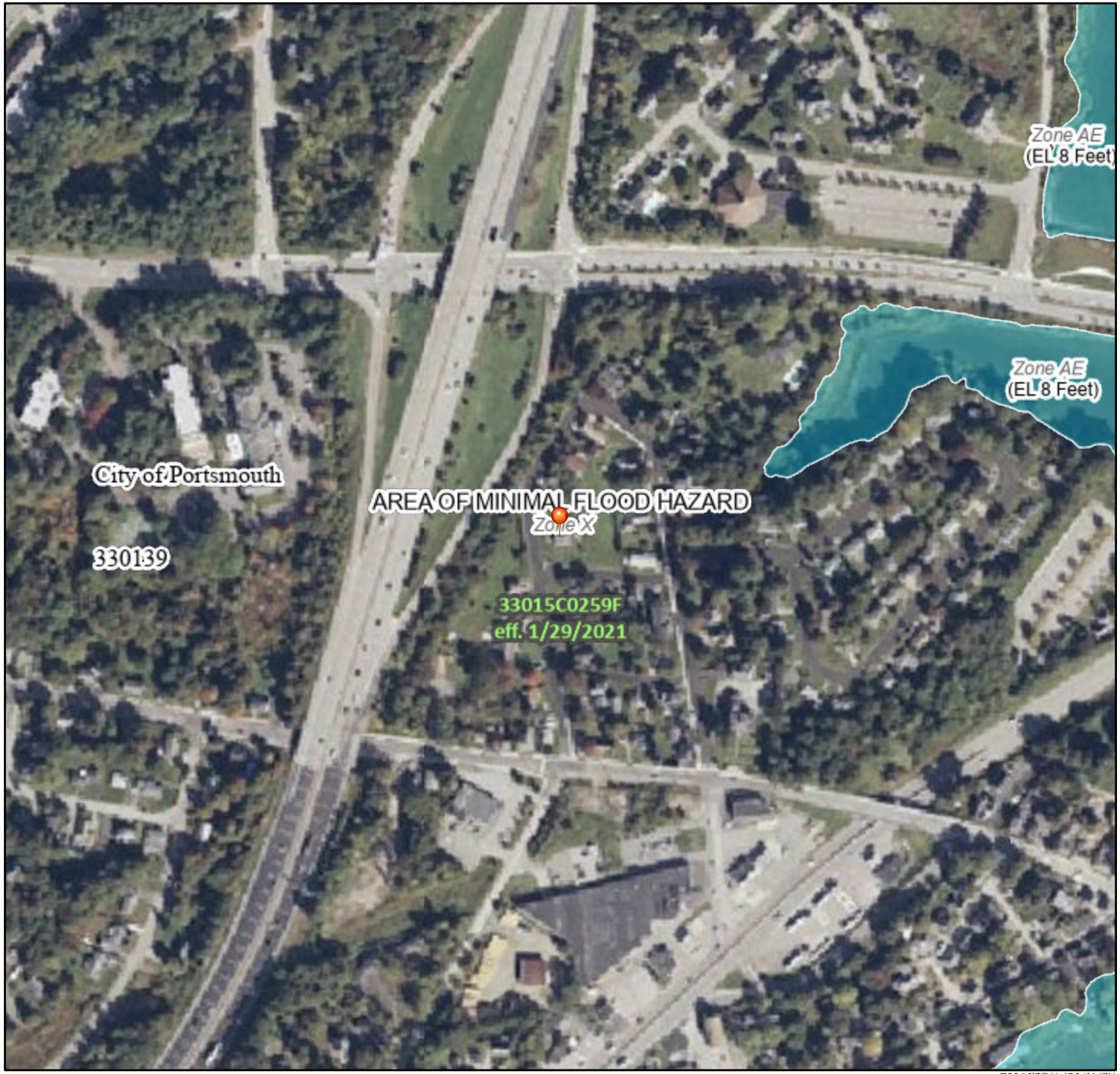
Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
799	Urban land-Canton complex, 3 to 15 percent slopes	0.7	100.0%
Totals for Area of Interest		**0.7**	**100.0%**

National Flood Hazard Layer FIRMette

FEMA

70°46'40"W 43°5'10"N



70°46'3"W 43°4'44"N

0 250 500 1,000 1,500 2,000 Feet

1:6,000

Basemap Imagery Source: USGS National Map 2023

Legend

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

SPECIAL FLOOD HAZARD AREAS
- Without Base Flood Elevation (BFE) *Zone A, V, A99*
- With BFE or Depth *Zone AE, AO, AH, VE, AR*
- Regulatory Floodway

OTHER AREAS OF FLOOD HAZARD
- 0.2% Annual Chance Flood Hazard, Areas of 1% annual chance flood with average depth less than one foot or with drainage areas of less than one square mile *Zone X*
- Future Conditions 1% Annual Chance Flood Hazard *Zone X*
- Area with Reduced Flood Risk due to Levee. See Notes. *Zone X*
- Area with Flood Risk due to Levee *Zone D*

OTHER AREAS
- NO SCREEN Area of Minimal Flood Hazard *Zone X*
- Effective LOMRs
- Area of Undetermined Flood Hazard *Zone D*

GENERAL STRUCTURES
- Channel, Culvert, or Storm Sewer
- Levee, Dike, or Floodwall

OTHER FEATURES
- 20.2 / 17.5 Cross Sections with 1% Annual Chance / Water Surface Elevation
- Coastal Transect
- Base Flood Elevation Line (BFE)
- Limit of Study
- Jurisdiction Boundary
- Coastal Transect Baseline
- Profile Baseline
- Hydrographic Feature

MAP PANELS
- Digital Data Available
- No Digital Data Available
- Unmapped

N

The pin displayed on the map is an approximate point selected by the user and does not represent an authoritative property location.

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

The flood hazard information is derived directly from the authoritative NFHL web services provided by FEMA. This map was exported on 4/16/2026 at 5:40 PM and does not reflect changes or amendments subsequent to this date and time. The NFHL and effective information may change or become superseded by new data over time.

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

HALEY WARD

INSPECTION & LONG-TERM MAINTENANCE PLAN FOR RESIDENTIAL DEVELOPMENT

20 Central Avenue
PORTSMOUTH, NH

Introduction

The intent of this plan is to provide Copley Properties (herein referred to as the "Owner") with a list of procedures that document the inspection and maintenance requirements of the stormwater management system for proposed development at 20 Central Avenue. Specifically, the proposed roof Drip Strip Filter Systems, Rain Gardens, and the stormwater Catch Basins (collectively referred to as the "Stormwater Management System"). The contact information for the owner shall be kept current, and if there is a change of ownership of the property this plan must be transferred to the new owner.

The following inspection and maintenance program is necessary to keep the stormwater management system functioning properly and will help maintain a high quality of stormwater runoff to minimize potential environmental impacts. By following the enclosed procedures, the owner will be able to maintain the functional design of the stormwater management system and maximize its ability to remove sediment and other contaminants from site generated stormwater runoff.

Construction Inspections

During the construction period, inspections shall be conducted at least once every seven (7) calendar days or once every 14 calendar days and within 24 hours of the end of a storm event of 0.5 inch or greater.

Annual Report

Following construction, the owner shall prepare an annual Inspection & Maintenance Report. The report shall include a summary of the system's maintenance and repair by transmission of the Inspection & Maintenance Log and other information as required. A copy of the report shall be delivered annually to the Portsmouth DPW, if required.

Inspection & Maintenance Checklist/Log

The following pages contain the Stormwater Management System Inspection & Maintenance Requirements and a blank copy of the Stormwater Management System Inspection & Maintenance Log. These forms are provided to the owner as a guideline for performing the inspection and maintenance of the Stormwater Management System. This is a guideline and should be periodically reviewed for conformance with current practice and standards.

Stormwater Management System Components

The Stormwater Management System is designed to mitigate the quality of site-generated stormwater runoff. As a result, the design includes the following elements:

Non-Structural BMPs

Non-Structural best management practices (BMP's) include temporary and permanent measures that typically require less labor and capital inputs and are intended to provide protection against erosion of soils. Examples of non-structural BMP's on this project may include but are not limited to:

- Dust control
- Sediment barriers
- Stabilized construction entrance
- Catch basin basket
- Dewatering control

Structural BMPs

Structural BMPs are more labor and capital-intensive structures or installations that require more specialized personnel to install. Examples on this project include but are not limited to:

- Roof Drip Strip Filter System
- Closed Drainage System

Inspection and Maintenance Requirements

The following summarizes the inspection and maintenance requirements for the various BMP's that may be found on this project.

1. **Roof Drip Strip Filter:** Inspections and maintenance of roof dripline filters shall occur annually. Inspect and remove any debris within the reservoir layer. Renew basin media if filter fails to drain within 72 hours after a 1-inch rainfall event.
2. **Storm Drains:** Monitor accumulation of debris in drainage structures monthly or after significant rain events. Remove sediments when they accumulate within the outlet pipe. During construction, maintain inlet protection until all areas have been stabilized. Prior to the end of construction, inspect the drains and basins for accumulations and remove and clean by jet- vacuuming.
3. **Rain Garden:** After installation of the rain garden, perform the following inspections on a monthly basis:

    a. Monitor for excessive or concentrated accumulations of debris, or excessive erosion below the various pipe inlets. Remove debris as required and replace or add inlet fabric strips or rip rap stones.
    b. Monitor the outflow for problems with erosion. Repair as required.
    c. After significant rainfalls, monitor rain garden surfaces for ponding of water. If water remains flooded over the surface 24 hours after a 1" rainfall, then investigate the cause, if not related to overflow blockage, then excavate and replace filter media.
    d. Monitor vegetation on rain garden and replace dead or dying vegetation as required.
    e. Monitor rain garden for rodent borrows and repair as required; remove persistent occupiers.
    f. Monitor side slopes of rain garden for damage or erosion—repair, as necessary.

Pollution Prevention

The following pollution prevention activities shall be undertaken to minimize potential impacts on stormwater runoff quality. The Contractor is responsible for all activities during construction. The Owner is responsible thereafter.

Spill Procedures

Any discharge of waste oil or other pollutant shall be reported immediately to the New Hampshire Department of Environmental Services (NHDES). The Contractor/Owner will be responsible for any incident of groundwater contamination resulting from the improper discharge of pollutants to the stormwater

system and may be required by NHDES to remediate incidents that may impact groundwater quality. If the property ownership is transferred, the new owner will be informed of the legal responsibilities associated with operation of the stormwater system, as indicated above.

Sanitary Facilities

Sanitary facilities shall be provided during all phases of construction.

Material Storage

The contractors are required to remove trash from the site. Hazardous material storage is prohibited. Salt and other de-icing materials must remain under covered storage. Salt storage areas shall be covered using permanent or semi-permanent measures and loading/offloading areas shall be located and designed to not drain directly to receiving waters and be maintained with good housekeeping measures in accordance with NHDES guidance documents. Snow will not be stored onsite – it will be removed from the site by a licensed contractor as needed. There are no wetlands, waterbodies, or other protected natural resources directly adjacent to the development area. Down-gradient stormwater structures will be protected as outlined in this document.

Material Disposal

All waste material, trash, sediment, and debris shall be removed from the site and disposed of in accordance with applicable local, state, and federal guidelines and regulations. Removed sediments shall be if necessary dewatered prior to disposal.

CATCH BASIN BASKET CONSTRUCTION MAINTENANCE SHEET

INSPECTION REQUIREMENTS		
ACTION TAKEN	**FREQUENCY**	**MAINTENANCE REQUIREMENTS**
-Check for damage to basket -Remove sediment from basket	Within 24 hours of rainfall, Daily during extended rainfall	*-Repair basket as necessary to prevent particles from reaching drainage system, or to prevent flooding.* *-Empty basket after every storm, or if clogged.*

MAINTENANCE LOG	
PROJECT NAME	
INSPECTOR NAME	**INSPECTOR CONTACT INFO**
DATE OF INSPECTION	**REASON FOR INSPECTION** ☐LARGE STORM EVENT ☐PERIODIC CHECK-IN
IS CORRECTIVE ACTION NEEDED? ☐YES ☐NO	**DESCRIBE ANY PROBLEMS, NEEDED MAINTENANCE**
DATE OF MAINTENANCE	**PERFORMED BY**
NOTES	

CLOSED DRAINAGE STRUCTURE LONG-TERM MAINTENANCE SHEET

INSPECTION REQUIREMENTS		
ACTION TAKEN	**FREQUENCY**	**MAINTENANCE REQUIREMENTS**
-Outlet Control Structures *-Drain Manholes* *-Catch Basins*	Every other Month	*Check for erosion or short-circuiting* *Check for sediment accumulation* *Check for floatable contaminants*
-Drainage Pipes	1 time per 2 years	*Check for sediment accumulation/clogging, or soiled runoff.* *Check for erosion at outlets.*

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STABILIZED CONSTRUCTION ENTRANCE CONSTRUCTION MAINTENANCE SHEET

INSPECTION REQUIREMENTS		
ACTION TAKEN	**FREQUENCY**	**MAINTENANCE REQUIREMENTS**
ENTRANCE SURFACE *-Check for sediment accumulation/clogging of stone* *-Check Vegetative filter strips*	After heavy rains, as necessary	*-Top dress pad with new stone.* *-Replace stone completely if completely clogged.* *-Maintain vigorous stand of vegetation.*
WASHING FACILITIES (if applicable) *-Monitor Sediment Accumulation*	As often as necessary	*-Remove Sediments from traps.*

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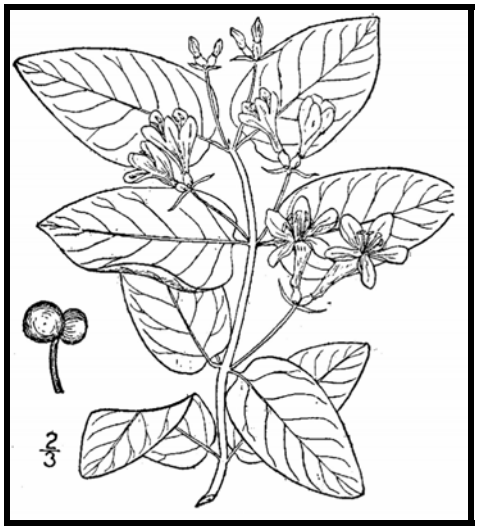
University of New Hampshire Cooperative Extension

Methods for Disposing Non-Native Invasive Plants

Prepared by the Invasives Species Outreach Group, volunteers interested in helping people control invasive plants. Assistance provided by the Piscataquog Land Conservancy and the NH Invasives Species Committee. Edited by Karen Bennett, Extension Forestry Professor and Specialist.



Tatarian honeysuckle
Lonicera tatarica
USDA-NRCS PLANTS Database / Britton, N.L., and A. Brown. 1913. *An illustrated flora of the northern United States, Canada and the British Possessions*. Vol. 3: 282.

Non-native invasive plants crowd out natives in natural and managed landscapes. They cost taxpayers billions of dollars each year from lost agricultural and forest crops, decreased biodiversity, impacts to natural resources and the environment, and the cost to control and eradicate them.

Invasive plants grow well even in less than desirable conditions such as sandy soils along roadsides, shaded wooded areas, and in wetlands. In ideal conditions, they grow and spread even faster. There are many ways to remove these non-native invasives, but once removed, care is needed to dispose the removed plant material so the plants don't grow where disposed.

Knowing how a particular plant reproduces indicates its method of spread and helps determine the appropriate disposal method. Most are spread by seed and are dispersed by wind, water, animals, or people. Some reproduce by vegetative means from pieces of stems or roots forming new plants. Others spread through both seed and vegetative means.

Because movement and disposal of viable plant parts is restricted (see NH Regulations), viable invasive parts can't be brought to most transfer stations in the state. Check with your transfer station to see if there is an approved, designated area for invasives disposal. This fact sheet gives recommendations for rendering plant parts non-viable.

Control of invasives is beyond the scope of this fact sheet. For information about control visit www.nhinvasives.org or contact your UNH Cooperative Extension office.

New Hampshire Regulations

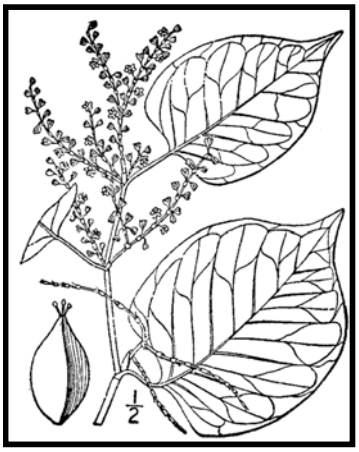
Prohibited invasive species shall only be disposed of in a manner that renders them nonliving and nonviable. (Agr. 3802.04)

No person shall collect, transport, import, export, move, buy, sell, distribute, propagate or transplant any living and viable portion of any plant species, which includes all of their cultivars and varieties, listed in Table 3800.1 of the New Hampshire prohibited invasive species list. (Agr 3802.01)

How and When to Dispose of Invasives?

To prevent seed from spreading remove invasive plants before seeds are set (produced). Some plants continue to grow, flower and set seed even after pulling or cutting. Seeds can remain viable in the ground for many years. If the plant has flowers or seeds, place the flowers and seeds in a heavy plastic bag "head first" at the weeding site and transport to the disposal site. The following are general descriptions of disposal methods. See the chart for recommendations by species.

Burning: Large woody branches and trunks can be used as firewood or burned in piles. For outside burning, a written fire permit from the local forest fire warden is required unless the ground is covered in snow. Brush larger than 5 inches in diameter can't be burned. Invasive plants with easily airborne seeds like black swallow-wort with mature seed pods (indicated by their brown color) shouldn't be burned as the seeds may disperse by the hot air created by the fire.



Japanese knotweed
Polygonum cuspidatum
USDA-NRCS PLANTS Database / Britton, N.L., and A. Brown. 1913. *An illustrated flora of the northern United States, Canada and the British Possessions*. Vol. 1: 676.

Bagging (solarization): Use this technique with softer-tissue plants. Use heavy black or clear plastic bags (contractor grade), making sure that no parts of the plants poke through. Allow the bags to sit in the sun for several weeks and on dark pavement for the best effect.

Tarping and Drying: Pile material on a sheet of plastic and cover with a tarp, fastening the tarp to the ground and monitoring it for escapes. Let the material dry for several weeks, or until it is clearly nonviable.

Chipping: Use this method for woody plants that don't reproduce vegetatively.

Burying: This is risky, but can be done with watchful diligence. Lay thick plastic in a deep pit before placing the cut up plant material in the hole. Place the material away from the edge of the plastic before covering it with more heavy plastic. Eliminate as much air as possible and toss in soil to weight down the material in the pit. Note that the top of the buried material should be at least three feet underground. Japanese knotweed should be at least 5 feet underground!

Drowning: Fill a large barrel with water and place soft-tissue plants in the water. Check after a few weeks and look for rotted plant material (roots, stems, leaves, flowers). Well-rotted plant material may be composted. A word of caution- seeds may still be viable after using this method. Do this before seeds are set. This method isn't used often. Be prepared for an awful stink!

Composting: Invasive plants can take root in compost. Don't compost any invasives unless you know there is no viable (living) plant material left. Use one of the above techniques (bagging, tarping, drying, chipping, or drowning) to render the plants nonviable before composting. Closely examine the plant before composting and avoid composting seeds.

Be diligent looking for seedlings for *years* in areas where removal and disposal took place.

Suggested Disposal Methods for Non-Native Invasive Plants

This table provides information concerning the disposal of removed invasive plant material. If the infestation is treated with herbicide and left in place, these guidelines don't apply. Don't bring invasives to a local transfer station, unless there is a designated area for their disposal, or they have been rendered non-viable. This listing includes wetland and upland plants from the New Hampshire Prohibited Invasive Species List. The disposal of aquatic plants isn't addressed.

<table>
<tr><th>Woody Plants</th><th>Method of Reproducing</th><th>Methods of Disposal</th></tr>
<tr><td rowspan="2">Norway maple
(Acer platanoides)
European barberry
(Berberis vulgaris)
Japanese barberry
(Berberis thunbergii)
autumn olive
(Elaeagnus umbellata)
burning bush
(Euonymus alatus)
Morrow's honeysuckle
(Lonicera morrowii)
Tatarian honeysuckle
(Lonicera tatarica)
showy bush honeysuckle
(Lonicera x bella)
common buckthorn
(Rhamnus cathartica)
glossy buckthorn
(Frangula alnus)</td><td rowspan="2">Fruit and Seeds
 </td><td>Prior to fruit/seed ripening
Seedlings and small plants
▪ Pull or cut and leave on site with roots exposed. No special care needed.
Larger plants
▪ Use as firewood.
▪ Make a brush pile.
▪ Chip.
▪ Burn.</td></tr>
<tr><td>After fruit/seed is ripe
Don't remove from site.
▪ Burn.
▪ Make a covered brush pile.
▪ Chip once all fruit has dropped from branches.
▪ Leave resulting chips on site and monitor.</td></tr>
<tr><td rowspan="2">oriental bittersweet
(Celastrus orbiculatus)
multiflora rose
(Rosa multiflora)</td><td rowspan="2">Fruits, Seeds, Plant Fragments
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Don't remove from site.
▪ Burn.
▪ Make a covered brush pile.
▪ Chip – only after material has fully dried (1 year) and all fruit has dropped from branches. Leave resulting chips on site and monitor.</td></tr>
</table>

Non-Woody Plants	Method of Reproducing	Methods of Disposal
garlic mustard *(Alliaria petiolata)* spotted knapweed *(Centaurea maculosa)* ▪ Sap of related knapweed can cause skin irritation and tumors. Wear gloves when handling. black swallow-wort *(Cynanchum nigrum)* ▪ May cause skin rash. Wear gloves and long sleeves when handling. pale swallow-wort *(Cynanchum rossicum)* giant hogweed *(Heracleum mantegazzianum)* ▪ Can cause major skin rash. Wear gloves and long sleeves when handling. dame's rocket *(Hesperis matronalis)* perennial pepperweed *(Lepidium latifolium)* purple loosestrife *(Lythrum salicaria)* Japanese stilt grass *(Microstegium vimineum)* mile-a-minute weed *(Polygonum perfoliatum)*	**Fruits and Seeds** 	**Prior to flowering** Depends on scale of infestation Small infestation ▪ Pull or cut plant and leave on site with roots exposed. Large infestation ▪ Pull or cut plant and pile. (You can pile onto or cover with plastic sheeting). ▪ Monitor. Remove any re-sprouting material. **During and following flowering** Do nothing until the following year or remove flowering heads and bag and let rot. Small infestation ▪ Pull or cut plant and leave on site with roots exposed. Large infestation ▪ Pull or cut plant and pile remaining material. (You can pile onto plastic or cover with plastic sheeting). ▪ Monitor. Remove any re-sprouting material.
common reed (*Phragmites australis*) Japanese knotweed *(Polygonum cuspidatum)* Bohemian knotweed *(Polygonum x bohemicum)*	**Fruits, Seeds, Plant Fragments** Primary means of spread in these species is by plant parts. Although all care should be given to preventing the dispersal of seed during control activities, the presence of seed doesn't materially influence disposal activities.	**Small infestation** ▪ Bag all plant material and let rot. ▪ Never pile and use resulting material as compost. ▪ Burn. **Large infestation** ▪ Remove material to unsuitable habitat (dry, hot and sunny or dry and shaded location) and scatter or pile. ▪ Monitor and remove any sprouting material. ▪ Pile, let dry, and burn.

January 2010

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HALEY WARD

INSPECTION & LONG-TERM MAINTENANCE PLAN FOR RESIDENTIAL DEVELOPMENT

20 Central Avenue
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Introduction

The intent of this plan is to provide Copley Properties (herein referred to as the "Owner") with a list of procedures that document the inspection and maintenance requirements of the stormwater management system for proposed development at 20 Central Avenue. Specifically, the proposed roof Drip Strip Filter Systems, Rain Gardens, and the stormwater Catch Basins (collectively referred to as the "Stormwater Management System"). The contact information for the owner shall be kept current, and if there is a change of ownership of the property this plan must be transferred to the new owner.

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1. **Roof Drip Strip Filter:** Inspections and maintenance of roof dripline filters shall occur annually. Inspect and remove any debris within the reservoir layer. Renew basin media if filter fails to drain within 72 hours after a 1-inch rainfall event.
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3. **Rain Garden:** After installation of the rain garden, perform the following inspections on a monthly basis:

    a. Monitor for excessive or concentrated accumulations of debris, or excessive erosion below the various pipe inlets. Remove debris as required and replace or add inlet fabric strips or rip rap stones.
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    c. After significant rainfalls, monitor rain garden surfaces for ponding of water. If water remains flooded over the surface 24 hours after a 1" rainfall, then investigate the cause, if not related to overflow blockage, then excavate and replace filter media.
    d. Monitor vegetation on rain garden and replace dead or dying vegetation as required.
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CATCH BASIN BASKET CONSTRUCTION MAINTENANCE SHEET

INSPECTION REQUIREMENTS		
ACTION TAKEN	**FREQUENCY**	**MAINTENANCE REQUIREMENTS**
-Check for damage to basket -Remove sediment from basket	Within 24 hours of rainfall, Daily during extended rainfall	*-Repair basket as necessary to prevent particles from reaching drainage system, or to prevent flooding.* *-Empty basket after every storm, or if clogged.*

MAINTENANCE LOG	
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CLOSED DRAINAGE STRUCTURE LONG-TERM MAINTENANCE SHEET

INSPECTION REQUIREMENTS		
ACTION TAKEN	**FREQUENCY**	**MAINTENANCE REQUIREMENTS**
-Outlet Control Structures *-Drain Manholes* *-Catch Basins*	Every other Month	*Check for erosion or short-circuiting* *Check for sediment accumulation* *Check for floatable contaminants*
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INSPECTION REQUIREMENTS		
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ENTRANCE SURFACE *-Check for sediment accumulation/clogging of stone* *-Check Vegetative filter strips*	After heavy rains, as necessary	*-Top dress pad with new stone.* *-Replace stone completely if completely clogged.* *-Maintain vigorous stand of vegetation.*
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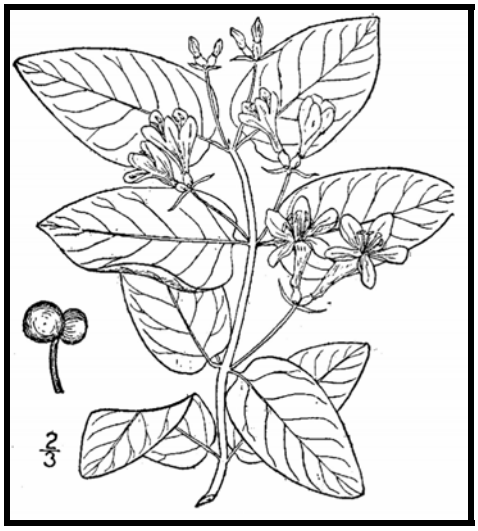

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Control of invasives is beyond the scope of this fact sheet. For information about control visit www.nhinvasives.org or contact your UNH Cooperative Extension office.

New Hampshire Regulations

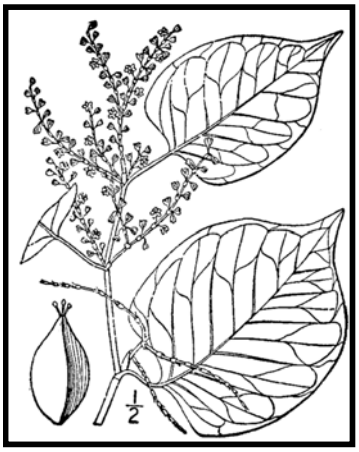
Prohibited invasive species shall only be disposed of in a manner that renders them nonliving and nonviable. (Agr. 3802.04)

No person shall collect, transport, import, export, move, buy, sell, distribute, propagate or transplant any living and viable portion of any plant species, which includes all of their cultivars and varieties, listed in Table 3800.1 of the New Hampshire prohibited invasive species list. (Agr 3802.01)

How and When to Dispose of Invasives?

To prevent seed from spreading remove invasive plants before seeds are set (produced). Some plants continue to grow, flower and set seed even after pulling or cutting. Seeds can remain viable in the ground for many years. If the plant has flowers or seeds, place the flowers and seeds in a heavy plastic bag "head first" at the weeding site and transport to the disposal site. The following are general descriptions of disposal methods. See the chart for recommendations by species.

Burning: Large woody branches and trunks can be used as firewood or burned in piles. For outside burning, a written fire permit from the local forest fire warden is required unless the ground is covered in snow. Brush larger than 5 inches in diameter can't be burned. Invasive plants with easily airborne seeds like black swallow-wort with mature seed pods (indicated by their brown color) shouldn't be burned as the seeds may disperse by the hot air created by the fire.



Japanese knotweed
Polygonum cuspidatum
USDA-NRCS PLANTS Database / Britton, N.L., and A. Brown. 1913. *An illustrated flora of the northern United States, Canada and the British Possessions*. Vol. 1: 676.

Bagging (solarization): Use this technique with softer-tissue plants. Use heavy black or clear plastic bags (contractor grade), making sure that no parts of the plants poke through. Allow the bags to sit in the sun for several weeks and on dark pavement for the best effect.

Tarping and Drying: Pile material on a sheet of plastic and cover with a tarp, fastening the tarp to the ground and monitoring it for escapes. Let the material dry for several weeks, or until it is clearly nonviable.

Chipping: Use this method for woody plants that don't reproduce vegetatively.

Burying: This is risky, but can be done with watchful diligence. Lay thick plastic in a deep pit before placing the cut up plant material in the hole. Place the material away from the edge of the plastic before covering it with more heavy plastic. Eliminate as much air as possible and toss in soil to weight down the material in the pit. Note that the top of the buried material should be at least three feet underground. Japanese knotweed should be at least 5 feet underground!

Drowning: Fill a large barrel with water and place soft-tissue plants in the water. Check after a few weeks and look for rotted plant material (roots, stems, leaves, flowers). Well-rotted plant material may be composted. A word of caution- seeds may still be viable after using this method. Do this before seeds are set. This method isn't used often. Be prepared for an awful stink!

Composting: Invasive plants can take root in compost. Don't compost any invasives unless you know there is no viable (living) plant material left. Use one of the above techniques (bagging, tarping, drying, chipping, or drowning) to render the plants nonviable before composting. Closely examine the plant before composting and avoid composting seeds.

Be diligent looking for seedlings for *years* in areas where removal and disposal took place.

Suggested Disposal Methods for Non-Native Invasive Plants

This table provides information concerning the disposal of removed invasive plant material. If the infestation is treated with herbicide and left in place, these guidelines don't apply. Don't bring invasives to a local transfer station, unless there is a designated area for their disposal, or they have been rendered non-viable. This listing includes wetland and upland plants from the New Hampshire Prohibited Invasive Species List. The disposal of aquatic plants isn't addressed.

<table>
<tr><th>Woody Plants</th><th>Method of Reproducing</th><th>Methods of Disposal</th></tr>
<tr><td rowspan="2">Norway maple
(Acer platanoides)
European barberry
(Berberis vulgaris)
Japanese barberry
(Berberis thunbergii)
autumn olive
(Elaeagnus umbellata)
burning bush
(Euonymus alatus)
Morrow's honeysuckle
(Lonicera morrowii)
Tatarian honeysuckle
(Lonicera tatarica)
showy bush honeysuckle
(Lonicera x bella)
common buckthorn
(Rhamnus cathartica)
glossy buckthorn
(Frangula alnus)</td><td rowspan="2">Fruit and Seeds
 </td><td>Prior to fruit/seed ripening
Seedlings and small plants
▪ Pull or cut and leave on site with roots exposed. No special care needed.
Larger plants
▪ Use as firewood.
▪ Make a brush pile.
▪ Chip.
▪ Burn.</td></tr>
<tr><td>After fruit/seed is ripe
Don't remove from site.
▪ Burn.
▪ Make a covered brush pile.
▪ Chip once all fruit has dropped from branches.
▪ Leave resulting chips on site and monitor.</td></tr>
<tr><td rowspan="2">oriental bittersweet
(Celastrus orbiculatus)
multiflora rose
(Rosa multiflora)</td><td rowspan="2">Fruits, Seeds, Plant Fragments
 </td><td>Prior to fruit/seed ripening
Seedlings and small plants
▪ Pull or cut and leave on site with roots exposed. No special care needed.
Larger plants
▪ Make a brush pile.
▪ Burn.</td></tr>
<tr><td>After fruit/seed is ripe
Don't remove from site.
▪ Burn.
▪ Make a covered brush pile.
▪ Chip – only after material has fully dried (1 year) and all fruit has dropped from branches. Leave resulting chips on site and monitor.</td></tr>
</table>

Non-Woody Plants	Method of Reproducing	Methods of Disposal
garlic mustard *(Alliaria petiolata)* spotted knapweed *(Centaurea maculosa)* ▪ Sap of related knapweed can cause skin irritation and tumors. Wear gloves when handling. black swallow-wort *(Cynanchum nigrum)* ▪ May cause skin rash. Wear gloves and long sleeves when handling. pale swallow-wort *(Cynanchum rossicum)* giant hogweed *(Heracleum mantegazzianum)* ▪ Can cause major skin rash. Wear gloves and long sleeves when handling. dame's rocket *(Hesperis matronalis)* perennial pepperweed *(Lepidium latifolium)* purple loosestrife *(Lythrum salicaria)* Japanese stilt grass *(Microstegium vimineum)* mile-a-minute weed *(Polygonum perfoliatum)*	**Fruits and Seeds** 	**Prior to flowering** Depends on scale of infestation Small infestation ▪ Pull or cut plant and leave on site with roots exposed. Large infestation ▪ Pull or cut plant and pile. (You can pile onto or cover with plastic sheeting). ▪ Monitor. Remove any re-sprouting material. **During and following flowering** Do nothing until the following year or remove flowering heads and bag and let rot. Small infestation ▪ Pull or cut plant and leave on site with roots exposed. Large infestation ▪ Pull or cut plant and pile remaining material. (You can pile onto plastic or cover with plastic sheeting). ▪ Monitor. Remove any re-sprouting material.
common reed (*Phragmites australis*) Japanese knotweed *(Polygonum cuspidatum)* Bohemian knotweed *(Polygonum x bohemicum)*	**Fruits, Seeds, Plant Fragments** Primary means of spread in these species is by plant parts. Although all care should be given to preventing the dispersal of seed during control activities, the presence of seed doesn't materially influence disposal activities.	**Small infestation** ▪ Bag all plant material and let rot. ▪ Never pile and use resulting material as compost. ▪ Burn. **Large infestation** ▪ Remove material to unsuitable habitat (dry, hot and sunny or dry and shaded location) and scatter or pile. ▪ Monitor and remove any sprouting material. ▪ Pile, let dry, and burn.

January 2010

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COPLEY PROPERTIES, LLC
PROPOSED 3 LOT SUBDIVISION

20 CENTRAL AVENUE, PORTSMOUTH NH

PROJECT INFORMATION

CIVIL ENGINEER
HALEY WARD, INC.
ATTN: SHAWN TOBEY, PE.
200 GRIFFIN ROAD, UNIT 14
PORTSMOUTH, NH 03801
T: 603.430.9282

SURVEYOR
HALEY WARD, INC.
ATTN: PHILLIP YETMAN, PLS
200 GRIFFIN ROAD, UNIT 14
PORTSMOUTH, NH 03801
T: 603.430.9282

ACOUSTIC STUDY
REUTER ASSOCIATES, LLC
10 VAUGHAN MALL, SUITE 201A
PORTSMOUTH, NH 03801
T: 603.430.2081

OWNER
MARISSA VALVERDE
20 CENTRAL AVENUE
PORTSMOUTH, NH 03801

APPLICANT
COPLEY PROPERTIES, LLC
94 PORTSMOUTH AVENUE
STRATHAM, NH 03885

ARCHITECT
ART FORM ARCHITECTURE, LLC
ATTN: HOLLY SPINNEY
PO BOX 535
NORTH HAMPTON, NH 03862
T: 603.431.9559

UTILITY PROVIDERS

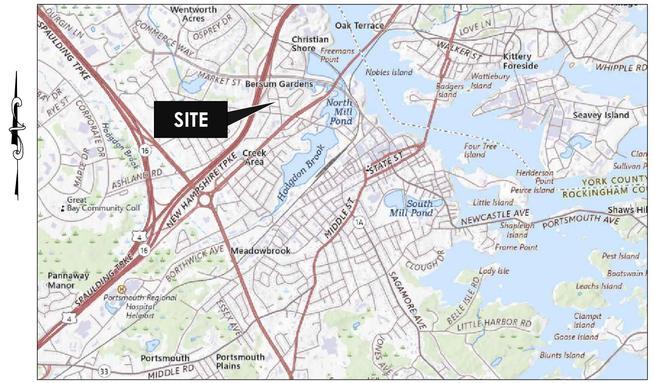
WATER & SEWER
CITY OF PORTSMOUTH DEPT. OF PUBLIC WORKS
ATTN: DOUG SPARKS
680 PEVERLY HILL ROAD
PORTSMOUTH, NH 03801
T: 603.427.1530

CABLE
XFINITY BY COMCAST
ATTN: MIKE COLLINS
180 GREENLEAF AVENUE
PORTSMOUTH, NH 03801
T: 603.266.2278

NATURAL GAS
UNITIL
ATTN: DAVE BEAULIEU
325 WEST ROAD
PORTSMOUTH, NH 03801
T: 603.294.5144

ELECTRIC
EVERSOURCE
ATTN: NICHOLAS KOSKO
1700 LAFAYETTE ROAD
PORTSMOUTH, NH 03801
T: 603.436.7708, EXT. 3327565

COMMUNICATIONS
CONSOLIDATED COMMUNICATIONS
ATTN: BENJAMIN WILLS
1575 GREENLAND ROAD
GREENLAND, NH 03840
T: 603.427.5525



LOCATION MAP

INDEX OF DRAWINGS

C000	COVER SHEET
C001	GENERAL NOTES, LEGEND & ABBREVIATIONS
-	SUBDIVISION PLAN
V101	EXISTING CONDITIONS PLAN
C101	DEMOLITION PLAN
C102	SITE LAYOUT & UTILITY PLAN
C103	GRADING & DRAINAGE PLAN
C501	SITE DETAILS
C502	SITE DETAILS
C701	PRE-DEVELOPMENT HYDROLOGY PLAN
C702	POST-DEVELOPMENT HYDROLOGY PLAN
L101	LANDSCAPE PLAN

PERMITS & APPROVALS	PERMIT #	DATE
CITY OF PORTSMOUTH TAC REVIEW	TBD	PENDING
CITY OF PORTSMOUTH SITE PLAN/SUBDIVISION	TBD	PENDING
CITY OF PORTSMOUTH CONDITIONAL USE PERMIT	TBD	PENDING

ISSUED FOR TAC REVIEW
JUNE 22, 2026

HALEY WARD
www.haleyward.com

CONSTRUCTION NOTES

CONSTRUCTION SEQUENCE

1. DO NOT BEGIN CONSTRUCTION UNTIL ALL LOCAL, STATE AND FEDERAL PERMITS HAVE BEEN APPLIED FOR AND RECEIVED.
2. INSTALL SILT SOXX TO CONTROL EROSION AND SEDIMENTATION PRIOR TO ANY EARTH MOVING ACTIVITIES.
3. REMOVE EXISTING BUILDINGS AND SITE FEATURES AS REQUIRED.
4. CONSTRUCT STABILIZED CONSTRUCTION ENTRANCE.
5. CUT AND REMOVE ALL TREES, SHRUBS, AND OTHER DEBRIS AS REQUIRED.
6. STRIP AND STOCKPILE LOAM FROM SITE. STOCKPILES SHALL BE SURROUNDED WITH SILT SOXX TO CONTROL SEDIMENT RUN OFF.
7. ROUGH GRADE SITE AND CONSTRUCT DRAINAGE STRUCTURES. INSTALL AND MAINTAIN EROSION CONTROL DEVICES AS SHOWN ON THE PLANS. ALL PERMANENT DITCHES, AND SWALES SHALL BE STABILIZED PRIOR TO DIRECTING RUNOFF TO THEM. CONSTRUCT BUILDING FOUNDATIONS.
8. LOAM AND SEED DISTURBED AREAS. CUT AND FILL SLOPES SHALL BE SEEDED IMMEDIATELY AFTER THEIR CONSTRUCTION.
9. CONSTRUCT UTILITIES, BUILDINGS AND PAVEMENT BASE COURSE.
10. PLANT LANDSCAPING.
11. CONSTRUCT PAVEMENT WEARING COURSE.
12. REMOVE TRAPPED SEDIMENTS FROM COLLECTION DEVICES AS APPROPRIATE, AND THEN REMOVE TEMPORARY EROSION CONTROL MEASURES.

PROJECT DESCRIPTION

1. THE PROJECT CONSISTS OF SUBDIVIDING A SINGLE LOT INTO THREE NEW LOTS, DEMOLISHING THE EXISTING BUILDINGS AND RELATED STRUCTURES, AND CONSTRUCTING THREE SINGLE FAMILY HOMES WITH DRIVEWAYS AND ASSOCIATED SITE IMPROVEMENTS.
2. THE TOTAL AREA TO BE DISTURBED IS APPROXIMATELY 25,500 SQUARE FEET.
3. THE STORMWATER RUNOFF FROM THE SITE WILL FOLLOW EXISTING PATTERNS AND DISCHARGE OFFSITE TO THE INTO THE CITY STORMWATER SYSTEM IN CENTRAL AVENUE AND BEECHWOOD STREET.

GENERAL CONSTRUCTION NOTES

1. THE EROSION CONTROL PROCEDURES SHALL CONFORM TO SECTION 645 OF THE "STANDARD SPECIFICATION FOR ROAD AND BRIDGE CONSTRUCTION" OF THE NHDOT, AND "STORM WATER MANAGEMENT AND EROSION AND SEDIMENT CONTROL HANDBOOK FOR URBAN AND DEVELOPING AREAS IN NEW HAMPSHIRE". 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.
2. DURING CONSTRUCTION AND THEREAFTER, EROSION CONTROL MEASURES ARE TO BE IMPLEMENTED AS NOTED. THE SMALLEST PRACTICAL AREA OF LAND SHOULD BE EXPOSED AT ANY ONE TIME DURING DEVELOPMENT. NO DISTURBED AREA SHALL BE LEFT UNSTABILIZED FOR MORE THAN 45 DAYS.
3. ANY DISTURBED AREAS WHICH ARE TO BE LEFT TEMPORARILY, AND WHICH WILL BE REGRADED LATER DURING CONSTRUCTION SHALL BE MACHINE HAY MULCHED AND SEEDED WITH RYE GRASS TO PREVENT EROSION.
4. 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.
5. DUST CONTROL MEASURES SHALL INCLUDE BUT ARE NOT LIMITED TO SPRINKLING WATER ON EXPOSED AREAS, COVERING LOADED DUMP TRUCKS LEAVING THE SITE, AND TEMPORARY MULCHING. DUST CONTROL MEASURES SHALL BE UTILIZED SO AS TO PREVENT THE MIGRATION OF DUST FROM THE SITE TO ABUTTING AREAS. IF TEMPORARY STABILIZATION PRACTICES, SUCH AS TEMPORARY VEGETATION AND MULCHING, DO NOT ADEQUATELY REDUCE DUST GENERATION, APPLICATION OF WATER OR CALCIUM CHLORIDE SHALL BE APPLIED IN ACCORDANCE WITH BEST MANAGEMENT PRACTICES.
6. SILTSOXX SHALL BE PERIODICALLY INSPECTED DURING THE LIFE OF THE PROJECT AND AFTER EACH STORM. ALL DAMAGED SILTSOXX SHALL BE REPAIRED. SEDIMENT DEPOSITS SHALL PERIODICALLY BE REMOVED AND DISPOSED IN A SECURED LOCATION.
7. ALL FILLS SHALL BE PLACED AND COMPACTED TO REDUCE EROSION, SLIPPAGE, SETTLEMENT, SUBSIDENCE OR OTHER RELATED PROBLEMS.
8. ALL NON-STRUCTURAL, SITE-FILL SHALL BE PLACED AND COMPACTED TO 90% MODIFIED PROCTOR DENSITY IN LAYERS NOT EXCEEDING 18 INCHES IN THICKNESS UNLESS OTHERWISE NOTED.
9. FROZEN MATERIAL OR SOFT, MUCKY OR HIGHLY COMPRESSIBLE MATERIAL, TRASH, WOODY DEBRIS, LEAVES, BRUSH OR ANY DELETERIOUS MATTER SHALL NOT BE INCORPORATED INTO FILLS.
10. FILL MATERIAL SHALL NOT BE PLACED ON FROZEN FOUNDATION SUBGRADE.
11. DURING CONSTRUCTION AND UNTIL ALL DEVELOPED AREAS ARE FULLY STABILIZED, ALL EROSION CONTROL MEASURES SHALL BE INSPECTED WEEKLY AND AFTER EACH ONE HALF INCH OF RAINFALL.
12. THE CONTRACTOR SHALL MODIFY OR ADD EROSION CONTROL MEASURES AS NECESSARY TO ACCOMMODATE PROJECT CONSTRUCTION.
13. ALL ROADWAYS AND PARKING AREAS SHALL BE STABILIZED WITHIN 72 HOURS OF ACHIEVING FINISHED GRADE. ALL CUT AND FILL SLOPES SHALL BE SEEDED/LOAMED WITHIN 72 HOURS OF ACHIEVING FINISHED GRADE.
14. AN AREA SHALL BE CONSIDERED STABLE IF ONE OF THE FOLLOWING HAS OCCURRED:
    - BASE COURSE GRAVELS HAVE BEEN INSTALLED ON AREAS TO BE PAVED
    - A MINIMUM OF 85% VEGETATED GROWTH HAS BEEN ESTABLISHED
    - A MINIMUM OF 3 INCHES OF NON-EROSIVE MATERIAL SUCH AS STONE OR RIPRAP HAS BEEN INSTALLED
    - EROSION CONTROL BLANKETS HAVE BEEN INSTALLED.
    - IN AREAS TO BE PAVED, "STABLE" MEANS THAT BASE COURSE GRAVELS MEETING THE REQUIREMENTS OF NHDOT STANDARD FOR ROAD AND BRIDGE CONSTRUCTION, 2016, ITEM 304.2 HAVE BEEN INSTALLED.
15. STABILIZATION SHALL BE INITIATED ON ALL LOAM STOCKPILES, AND DISTURBED AREAS, WHERE CONSTRUCTION ACTIVITY SHALL NOT OCCUR FOR MORE THAN TWENTY-ONE (21) CALENDAR DAYS BY THE FOURTEENTH (14TH) DAY AFTER CONSTRUCTION ACTIVITY HAS PERMANENTLY OR TEMPORARILY CEASED IN THAT AREA.
16. STABILIZATION MEASURES TO BE USED INCLUDE:
    - TEMPORARY SEEDING;
    - MULCHING.
17. ALL AREAS SHALL BE STABILIZED WITHIN 45 DAYS OF INITIAL DISTURBANCE.
18. WHEN CONSTRUCTION ACTIVITY PERMANENTLY OR TEMPORARILY CEASES WITHIN 100 FEET OF NEARBY SURFACE WATERS OR DELINEATED WETLANDS, THE AREA SHALL BE STABILIZED WITHIN SEVEN (7) DAYS OR PRIOR TO A RAIN EVENT. ONCE CONSTRUCTION ACTIVITY CEASES PERMANENTLY IN THESE AREAS, SILTSOXX, MULCH BERMS, HAY BALE BARRIERS AND ANY EARTH/DIKES SHALL BE REMOVED ONCE PERMANENT MEASURES ARE ESTABLISHED.
19. DURING CONSTRUCTION, RUNOFF WILL BE DIVERTED AROUND THE SITE WITH EARTH DIKES, PIPING OR STABILIZED CHANNELS WHERE POSSIBLE. SHEET RUNOFF FROM THE SITE WILL BE FILTERED THROUGH SILTSOXX, MULCH BERMS, HAY BALE BARRIERS, OR SILT SOCKS. ALL STORM DRAIN BASIN INLETS SHALL BE PROVIDED WITH FLARED END SECTIONS AND TRASH RACKS. THE SITE SHALL BE STABILIZED FOR THE WINTER BY OCTOBER 15.

MAINTENANCE AND PROTECTION

1. THE SILTSOXX BARRIER SHALL BE CHECKED AFTER EACH RAINFALL AND AT LEAST DAILY DURING PROLONGED RAINFALL.
2. SILTSOXX SHALL BE REMOVED ONCE SITE IS STABILIZED, AND DISTURBED AREAS RESULTING FROM SILTSOXX REMOVAL SHALL BE PERMANENTLY SEEDED.
3. THE CATCH BASIN INLET BASKET SHALL BE INSPECTED WITHIN 24 HOURS AFTER EACH RAINFALL OR DAILY DURING EXTENDED PERIODS OF PRECIPITATION. REPAIRS SHALL BE MADE IMMEDIATELY, AS NECESSARY, TO PREVENT PARTICLES FROM REACHING THE DRAINAGE SYSTEM AND/OR CAUSING SURFACE FLOODING. SEDIMENT DEPOSITS SHALL BE REMOVED AFTER EACH STORM EVENT, OR MORE OFTEN IF THE FABRIC BECOMES CLOGGED.

WINTER NOTES

1. ALL PROPOSED VEGETATED AREAS THAT DO NOT EXHIBIT A MINIMUM OF 85% VEGETATED GROWTH BY OCTOBER 15, OR WHICH ARE DISTURBED AFTER OCTOBER 15, SHALL BE STABILIZED BY SEEDING AND INSTALLING EROSION CONTROL BLANKETS ON SLOPES GREATER THAN 3:1, AND SEEDING AND PLACING 3 TO 4 TONS OF MULCH PER ACRE, SECURED WITH ANCHORED NETTING, ELSEWHERE. THE INSTALLATION OF EROSION CONTROL BLANKETS OR MULCH AND NETTING SHALL NOT OCCUR OVER ACCUMULATED SNOW OR ON FROZEN GROUND AND SHALL BE COMPLETED IN ADVANCE OF THAW OR SPRING MELT EVENTS.
2. ALL DITCHES OR SWALES WHICH DO NOT EXHIBIT A MINIMUM OF 85 PERCENT 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;
3. AFTER OCTOBER 15, INCOMPLETE ROAD OR PARKING SURFACES, WHERE WORK HAS STOPPED FOR THE WINTER SEASON, SHALL BE PROTECTED WITH A MINIMUM OF 3 INCHES OF CRUSHED GRAVEL PER NHDOT ITEM 304.3, OR IF CONSTRUCTION IS TO CONTINUE THROUGH THE WINTER SEASON BE CLEARED OF ANY ACCUMULATED SNOW AFTER EACH STORM EVENT;

STOCKPILES

1. LOCATE STOCKPILES A MINIMUM OF 50 FEET AWAY FROM CATCH BASINS, SWALES, AND CULVERTS.
2. ALL STOCKPILES SHOULD BE SURROUNDED WITH TEMPORARY EROSION CONTROL MEASURES PRIOR TO THE ONSET OF PRECIPITATION.
3. PERIMETER BARRIERS SHOULD BE MAINTAINED AT ALL TIMES, AND ADJUSTED AS NEEDED TO ACCOMMODATE THE DELIVERY AND REMOVAL OF MATERIALS FROM THE STOCKPILE. THE INTEGRITY OF THE BARRIER SHOULD BE INSPECTED AT THE END OF EACH WORKING DAY.
4. PROTECT ALL STOCKPILES FROM STORMWATER RUN-OFF USING TEMPORARY EROSION CONTROL MEASURES SUCH AS BERMS, SILT SOCK, OR OTHER APPROVED PRACTICE TO PREVENT MIGRATION OF MATERIAL BEYOND THE IMMEDIATE CONFINES OF THE STOCKPILES.

CONCRETE WASHOUT AREA

THE FOLLOWING ARE THE ONLY NON-STORMWATER DISCHARGES ALLOWED. ALL OTHER NON-STORMWATER DISCHARGES ARE PROHIBITED ON SITE:

1. THE CONCRETE DELIVERY TRUCKS SHALL, WHENEVER POSSIBLE, USE WASHOUT FACILITIES AT THEIR OWN PLANT OR DISPATCH FAILITY;
2. IF IT IS NECESSARY, SITE CONTRACTOR SHALL DESIGNATE SPECIFIC WASHOUT AREAS AND DESIGN FACILITIES TO HANDLE ANTICIPATED WASHOUT WATER;
3. CONTRACTOR SHALL LOCATE WASHOUT AREAS AT LEAST 150 FEET AWAY FROM STORM DRAINS, SWALES AND SURFACE WATERS OR DELINEATED WETLANDS;
4. INSPECT WASHOUT FACILITIES DAILY TO DETECT LEAKS OR TEARS AND TO IDENTIFY WHEN MATERIALS NEED TO BE REMOVED.

UTILITY NOTES

1. SEE EXISTING CONDITIONS PLAN FOR BENCHMARK INFORMATION.
2. COORDINATE ALL UTILITY WORK WITH APPROPRIATE UTILITY.
3. SEE GRADING AND DRAINAGE PLAN FOR PROPOSED GRADING AND EROSION CONTROL MEASURES.
4. ALL SEWER PIPE SHALL BE PVC SDR 35 UNLESS OTHERWISE STATED.
5. ALL WORK WITHIN CITY R.O.W. SHALL BE COORDINATED WITH CITY OF PORTSMOUTH
6. CONTRACTOR SHALL MAINTAIN UTILITY SERVICES TO ABUTTING PROPERTIES THROUGHOUT CONSTRUCTION.
7. EXISTING UTILITIES TO BE REMOVED SHALL BE CAPPED AT THE MAIN AND MEET THE DEPARTMENT OF PUBLIC WORKS STANDARDS FOR CAPPING OF WATER AND SEWER SERVICES.
8. ALL ELECTRICAL MATERIAL WORKMANSHIP SHALL CONFORM TO THE NATIONAL ELECTRIC CODE, LATEST EDITION, AND ALL APPLICABLE STATE AND LOCAL CODES.
9. THE EXACT LOCATION OF NEW UTILITY SERVICES AND CONNECTIONS SHALL BE COORDINATED WITH BUILDING DRAWINGS AND UTILITY COMPANIES.
10. ADJUST ALL MANHOLES, CATCH BASINS, CURB BOXES, ETC. WITHIN LIMITS OF WORK TO FINISH GRADE.
11. ALL UNDERGROUND CONDUITS SHALL HAVE NYLON PULL ROPES TO FACILITATE PULLING CABLES.
12. THE CONTRACTOR SHALL OBTAIN, PAY FOR, AND COMPLY WITH ALL REQUIRED PERMITS, ARRANGE FOR ALL INSPECTIONS, AND SUBMIT COPIES OF ACCEPTANCE CERTIFICATED TO THE OWNER PRIOR TO THE COMPLETION OF PROJECT.
13. THE CONTRACTOR SHALL PROVIDE AND INSTALL ALL MANHOLES, BOXES, FITTINGS, CONNECTORS, COVER PLATES AND OTHER MISCELLANEOUS ITEMS NOT NECESSARILY DETAILED IN THESE DRAWING TO RENDER INSTALLATION OF UTILITIES COMPLETE AND OPERATIONAL.
14. CONTRACTOR SHALL PROVIDE EXCAVATION, BEDDING, BACKFILL AND COMPACTION FOR NATURAL GAS SERVICES.
15. A 10-FOOT MINIMUM EDGE TO EDGE HORIZONTAL SEPARATION SHALL BE PROVIDED BETWEEN ALL WATER AND SANITARY SEWER LINES. AN 18-INCH MINIMUM OUTSIDE TO OUTSIDE VERTICAL SEPARATION SHALL BE PROVIDED AT ALL WATER/SANITARY SEWER CROSSINGS WATER ABOVE SEWER.
16. SAWCUT AND REMOVE PAVEMENT AND CONSTRUCT PAVEMENT TRENCH PATCH FOR ALL PROPOSED UTILITIES LOCATED IN EXISTING PAVED AREAS.
17. GATE VALVES, FITTINGS, ETC. SHALL MEET THE REQUIREMENTS OF THE CITY OF PORTSMOUTH.
18. COORDINATE TESTING OF SEWER CONSTRUCTION WITH THE CITY OF PORTSMOUTH.
19. ALL SEWER PIPES WITH LESS THAN 6' COVER SHALL BE INSULATED.
20. CONTRACTOR SHALL COORDINATE ALL ELECTRIC WORK INCLUDING BUT NOT LIMITED TO: CONDUIT CONSTRUCTION, MANHOLE CONSTRUCTION, UTILITY POLE CONSTRUCTION, OVERHEAD WIRE RELOCATION, AND TRANSFORMER CONSTRUCTION WITH POWER COMPANY.
21. SITE LIGHTING SPECIFICATIONS, CONDUIT LAYOUT AND CIRCUITRY FOR PROPOSED SITE LIGHTING AND SIGN ILLUMINATION SHALL BE PROVIDED BY THE PROJECT ELECTRICAL ENGINEER IN COORDINATION WITH THE SITE CIVIL ENGINEER.
22. CONTRACTOR SHALL CONSTRUCT ALL UTILITIES AND DRAINS TO WITHIN 10' OF THE FOUNDATION WALLS AND CONNECT THESE TO SERVICE STUBS FROM THE BUILDING.
23. FINAL REVIEW OF ALL UTILITIES SHALL BE MADE DURING THE REQUIRED SEWER CONNECTION PERMIT PROCESS IN COORDINATION WITH DEPARTMENT OF PUBLIC WORKS.
24. ALL WORK PERFORMED IN THE PUBLIC RIGHT-OF-WAY SHALL BE BUILT TO DEPARTMENT OF PUBLIC WORKS STANDARDS.
25. THE CONTRACTOR SHALL NOTIFY DIG SAFE AT 1-888-DIG-SAFE (1-888-344-7233) AT LEAST 72 HOURS PRIOR TO COMMENCING ANY EXCAVATION ON PUBLIC OR PRIVATE PROPERTY WITHIN 100 FEET OF UNDERGROUND UTILITIES. THE EXCAVATOR IS RESPONSIBLE TO MAINTAIN MARKS. DIG SAFE TICKETS EXPIRE IN THIRTY DAYS.
26. UNDERGROUND UTILITY LOCATIONS ARE BASED UPON BEST AVAILABLE EVIDENCE AND ARE NOT FIELD VERIFIED. LOCATING AND PROTECTING ANY ABOVEGROUND OR UNDERGROUND UTILITIES IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR AND/OR THE OWNER. UTILITY CONFLICTS SHOULD BE REPORTED AT ONCE TO THE DESIGN ENGINEER.
27. IRRIGATION, IF SUPPLIED, WILL BE PROVIDED ON A SEPARATE METERED SERVICE. DESIGNS OF IRRIGATION WILL BE PROVIDED BY THE LANDSCAPE CONTRACTOR AT THE TIME OF CONSTRUCTION.

ALLOWABLE NON-STORMWATER DISCHARGES

1. FIRE-FIGHTING ACTIVITIES;
2. FIRE HYDRANT FLUSHING;
3. WATERS USED TO WASH VEHICLES WHERE DETERGENTS ARE NOT USED;
4. WATER USED TO CONTROL DUST;
5. POTABLE WATER INCLUDING UNCONTAMINATED WATER LINE FLUSHING;
6. ROUTINE EXTERNAL BUILDING WASH DOWN WHERE DETERGENTS ARE NOT USED;
7. PAVEMENT WASH WATERS WHERE DETERGENTS ARE NOT USED;
8. UNCONTAMINATED AIR CONDITIONING/COMPRESSOR CONDENSATION;
9. UNCONTAMINATED GROUND WATER OR SPRING WATER;
10. FOUNDATION OR FOOTING DRAINS WHICH ARE UNCONTAMINATED;
11. UNCONTAMINATED EXCAVATION DEWATERING;
12. LANDSCAPE IRRIGATION.

WASTE DISPOSAL

1. WASTE MATERIAL
    - ALL WASTE MATERIALS SHALL BE COLLECTED AND STORED IN SECURELY LIDDED RECEPTACLES. ALL TRASH AND CONSTRUCTION DEBRIS FROM THE SITE SHALL BE DEPOSITED IN A DUMPSTER;
    - NO CONSTRUCTION WASTE MATERIALS SHALL BE BURIED ON SITE;
    - ALL PERSONNEL SHALL BE INSTRUCTED REGARDING THE CORRECT PROCEDURE FOR WASTE DISPOSAL BY THE SUPERINTENDENT.
2. HAZARDOUS WASTE
    - ALL HAZARDOUS WASTE MATERIALS SHALL BE DISPOSED OF IN THE MANNER SPECIFIED BY LOCAL OR STATE REGULATION OR BY THE MANUFACTURER;
    - SITE PERSONNEL SHALL BE INSTRUCTED IN THESE PRACTICES BY THE SUPERINTENDENT.
3. SANITARY WASTE
    - ALL SANITARY WASTE SHALL BE COLLECTED FROM THE PORTABLE UNITS A MINIMUM OF ONCE PER WEEK BY A LICENSED SANITARY WASTE MANAGEMENT CONTRACTOR.

BLASTING NOTES

1. CONTRACTOR SHALL CONTACT THE NHDES AND/OR LOCAL JURISDICTION PRIOR TO COMMENCING ANY BLASTING ACTIVITIES.
2. FOR ANY PROJECT FOR WHICH BLASTING OF BEDROCK IS ANTICIPATED, THE APPLICANT SHALL SUBMIT A BLASTING PLAN THAT IDENTIFIES:
    - WHERE THE BLASTING ACTIVITIES ARE ANTICIPATED TO OCCUR;
    - THE ESTIMATED QUANTITY OF BLAST ROCK IN CUBIC YARDS; AND
    - SITE-SPECIFIC BLASTING BEST MANAGEMENT PRACTICES.

ABBREVIATIONS

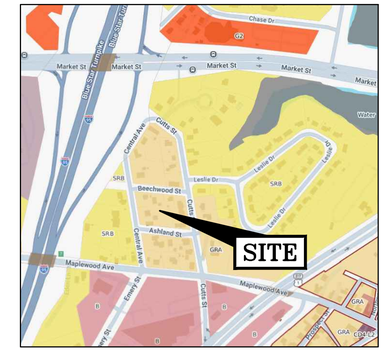
@	AT	MAX.	MAXIMUM
ANSI	AMERICAN NATIONAL STANDARDS INSTITUTE	MH	MANHOLE
APPROX.±	APPROXIMATELY	MIN	MINIMUM
BLDG	BUILDING	N	NORTHING
		NE	NORTHEAST
CL	CENTERLINE	NHDOT	NH DEPT. OF TRANSPORTATION
CB	CATCH BASIN	N.T.S.	NOT TO SCALE
CLR	CLEAR	NWT	NON WOVEN GEOTEXTILE
CMP	CORRUGATED METAL PIPE	OD	OUTSIDE DIAMETER
CO	CLEANOUT	O.C.	ON CENTER
CPE	CORRUGATED POLYETHYLENE	OH	OVERHEAD
		OZ	OUNCES
DI	DUCTILE IRON	PERF	PERFORATED
DIA.	DIAMETER		
		PSF	POUNDS PER SQUARE FOOT
		PSI	POUNDS PER SQUARE INCH
E	EASTING	PVC	POLYVINYL CHLORIDE
EL	ELEVATION	PL	PROPERTY LINE
EFM	EXISTING FORCE MAIN	POH	PROPOSED OVERHEAD ELECTRIC
EPS	EXTRUDED POLYSTYRENE	PUGE	PROPOSED UNDERGROUND ELECTRIC
FGC	FLUSH GRANITE CURB	R	RADIUS
FM	FORCEMAIN	R&D	REMOVE AND DISPOSE
		S	SLOPE
GAL	GALLON	SCL	STORMWATER COLLECTION LINE
GALV	GALVANIZED	SCS	STORMWATER COLLECTION SYSTEM
GPH	GALLONS PER HOUR	SDR	STANDARD DIMENSION RATIO
GPM	GALLONS PER MINUTE	SE	SOUTHEAST
		SHT	SHEET
HDPE	HIGH DENSITY POLYETHYLENE	SQ	SQUARE
HP	HORSEPOWER	SS	STAINLESS STEEL
		SY	SQUARE YARD
ID	INSIDE DIAMETER	TBM	TEMPORARY BENCH MARK
IN.	INCHES	TOC	TOP OF CONCRETE
INT.	INTERSECTION	TYP	TYPICAL
INV.	INVERT	VGC	VERTICAL GRANITE CURB

LEGEND:

ITEMS SHOWN MAY NOT APPEAR ON PLANS

DESCRIPTION	EXISTING	PROPOSED
PROPERTY LINE		
BENCHMARK		
SURVEY STATION		
IRON PIN		
DRILL HOLE		
BOUND		
TEST PIT	TP	TP
SEWER MANHOLE	S	S
GAS VALVE	GV	GV
UTILITY POLE		
GUY ANCHOR		
ELECTRICAL MANHOLE	E	E
TRANSFORMER	TR	TR
PULL BOX	P	P
WELL	W	W
WATER VALVE	WV	
WATER SHUTOFF		
HYDRANT		
AIR RELIEF VALVE		
DRAINAGE MANHOLE	D	D
CATCH BASIN		
CURB INLET		
PARKING LIGHT		
FLOOD LIGHT		
SITE LIGHT		
SIGN		
TRASH CAN		
FLAGPOLE		
MONITORING WELL	MW	MW
EDGE OF GRAVEL		
EDGE OF PAVEMENT		
CURBING		
MAJOR FOOT CONTOUR	100	100
MINOR FOOT CONTOUR	98	98
WATERLINE	W	W
STORM DRAIN	SD	SD
UNDER DRAIN	UD	UD
SANITARY SEWER	SS	SS
FORCE MAIN	FM	FM
OVERHEAD UTILITIES	OHU	OHU
UNDERGROUND UTILITIES	UGE	UGU
GAS LINE	GAS	GAS
CHAIN LINK FENCE	X	X
GUARDRAIL		
SILT FENCE		SF
TREE LINE		
GRAVEL SURFACE		
PAVED SURFACE		
CONCRETE SURFACE		
BUILDING FOOTPRINT		
WETLANDS		
RIPRAP		

ZONING MAP



Residential Districts

R	Rural	
SRA	Single Residence A	
SRB	Single Residence B	
GRA	General Residence A	
GRB	General Residence B	
GRC	General Residence C	
GA/MH	Garden Apartment/Mobile Home Park	

Mixed Residential Districts

MRO	Mixed Residential Office
MRB	Mixed Residential Business
G1	Gateway Corridor
G2	Gateway Center

REV.	DATE	DESCRIPTION	BY	CHK.
0	2026.06.22	ISSUED FOR TAC REVIEW	SJR	SMT

DRAWING ISSUE STATUS

ISSUED FOR PERMITTING

HALEY WARD
WWW.HALEYWARD.COM
200 Griffin Rd., Unit 14
Portsmouth, New Hampshire 03801
603.430.9282

PROJECT

PROPOSED 3 LOT SUBDIVISION
20 CENTRAL AVENUE, PORTSMOUTH NH

TITLE

GENERAL NOTES, LEGEND & ABBREVIATIONS

STATE OF NEW HAMPSHIRE - DREW JOHN OLEHOWSKI - No. 18516 - LICENSED PROFESSIONAL ENGINEER
06/22/2026

DATE	SCALE
JUNE 2026	NTS

DRAWN BY	DESIGNED BY	CHECKED BY
SJR	NMT	DJO

PROJECT No. 5010658.001

DRAWING No. **C001** REV. **0**

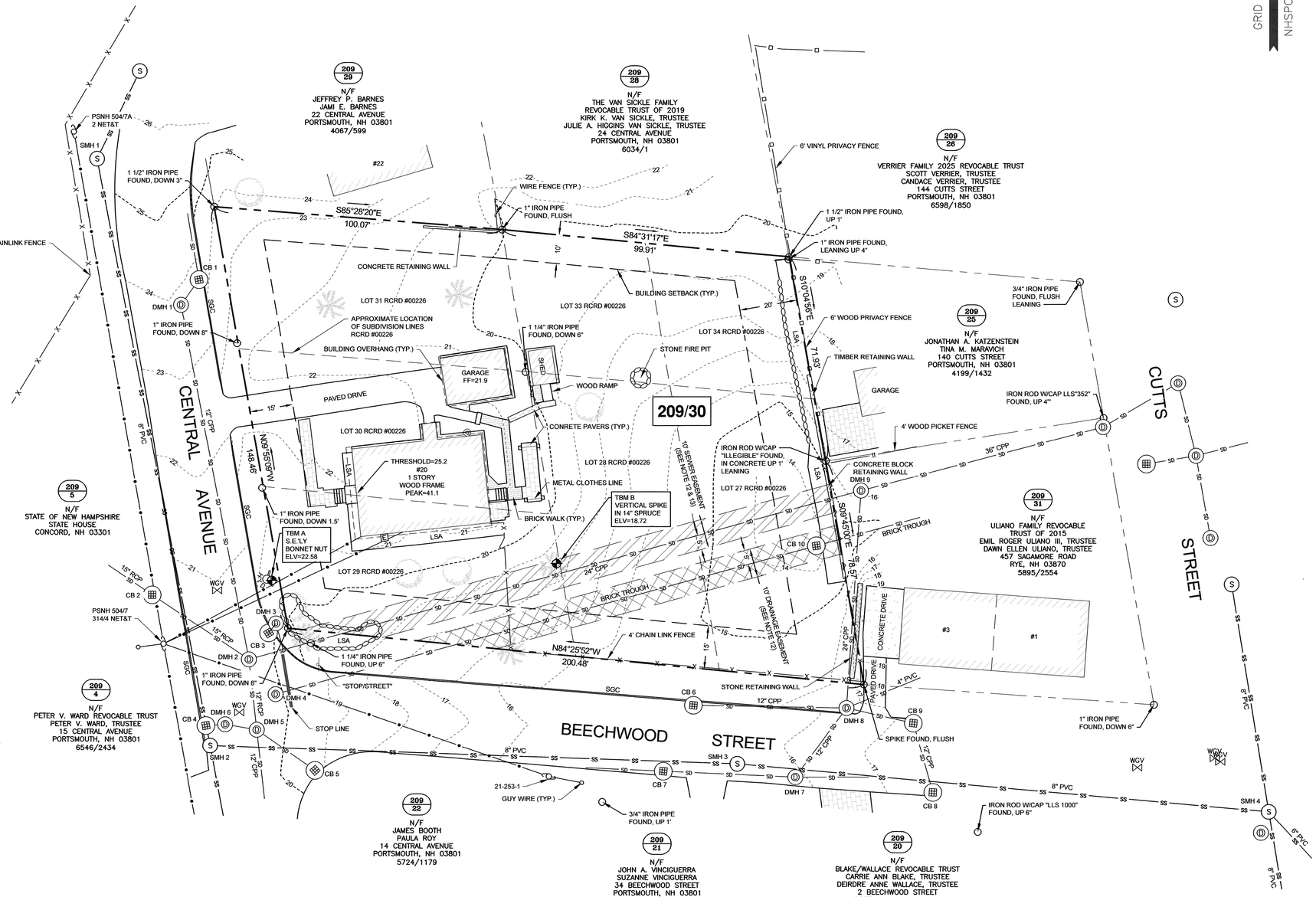
FILE LOCATION: P:\NH\5010658-COPLEY, PROPERTIES\5001-00 CENTRAL AVE., PORTSMOUTH-SMTZ\06-CAD, FILES\CIVIL\5010658.001-C-CV.DWG, 2026.06.22, 11:20 AM

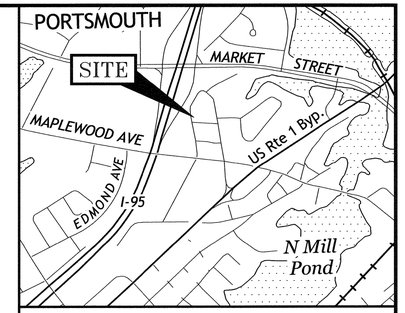
LEGEND:

DESCRIPTION	*EXISTING*
RCRD	ROCKINGHAM COUNTY REGISTRY OF DEEDS
6478/1413	DEED BOOK/PAGE
N/F	NOW OR FORMALLY
TYP.	TYPICAL
INV.	INVERT
ELV.	ELEVATION
FF	FINISHED FLOOR
LSA	LANDSCAPE AREA
SGC	SLOPED GRANITE CURB
MAP 21 LOT 8	209/30
BENCHMARK	
IRON ROD/PIPE FOUND	
SEWER MANHOLE	
DRAIN MANHOLE	
UTILITY POLE	
CATCH BASIN	
HYDRANT	
GATE VALVE	GGV WGV SGV
TREES	
GAS/ELECTRIC METER	
SIGN	
PROPERTY LINE	
APPROXIMATE EXTERIOR PROPERTY LINE	
EDGE OF PAVEMENT	
MINOR FOOT CONTOUR	98
MAJOR FOOT CONTOUR	100
WATER LINE	WL
STORM DRAIN LINE	SD
SANITARY SEWER LINE	SS
OVERHEAD UTILITY LINE	

PLAN REFERENCES:

1) PLAN OF LAND PORTSMOUTH, N.H. FOR RAYMOND E. & IDELLE E. ST, LAURENT, PREPARED BY: JOHN W. DURGIN CIVIL ENGINEERS, DATED: AUG. 1970, SCALE: 1 IN = 20 FT., DURGIN FILE NO. 501 PLAN NO. 4160, NOT RECORDED.
2) PLAN OF LAND PORTSMOUTH, N.H. FOR JOSEPH LAMB, PREPARED BY: JOHN W. DURGIN CIVIL ENGINEERS, DATED: DEC. 1968, SCALE: 1 IN = 20 FT., DURGIN FILE NO. 501 PLAN NO. 465, RCRD C-1303.
3) PLAN OF LAND PORTSMOUTH, N.H., CAVARETTA TO COTTRELL, PREPARED BY: JOHN W. DURGIN CIVIL ENGINEERS, DATED: AUG 1975, SCALE: 1 IN = 20 FT., DURGIN FILE NO. 501 PLAN NO. 4384, RCRD C-5407.
4) PROPOSED LOT LINE ADJUSTMENT BETWEEN FRANCIS X. & MICHELLE QUINN & KEITH R. & LINDA MAHLER, CUTTS ST, PORTSMUTH, NH, PREPARED BY: BARRETT ASSOCIATES, DATED: SEPT. 25, 1995, SCALE: 1"=10', RCRD C-24422.
5) PLAN OF THE SUBDIVISION OF A PART OF THE JACKSON FARM, PORTSMOUTH, NH, DATED: MARCH 1902, SCALE: 40 FEET TO AN INCH, RCRD 00226.
6) BOARD OF ASSESSORS LOT PLAN NO. 82, PORTSMOUTH, N.H.,RCRD 01101.
7) PLAN OF PROPOSED FEDERAL AID PROJECT I-95-1(19)15 CONTRACT NO.1, N.H. PROJECT NO. P-3875-E, INTERSTATE ROUTE 95, DATED: 8-5-70, SCALE: 1" =50', FILE NO. P.O.4992, ON FILE AT N.H. D.O.T..





LOCATION MAP SCALE: 1" = 1,000'

NOTES:

1) PARCEL IS SHOWN ON THE CITY OF PORTSMOUTH ASSESSOR'S MAP 209 AS LOT 30.

2) OWNER OF RECORD:
MARISSA VALVERDE
20 CENTRAL AVENUE
PORTSMOUTH, NH 03801
6478/1413

3) PARCEL IS NOT IN A SPECIAL FLOOD HAZARD AREA ZONE AS SHOWN ON FIRM PANEL 33015C0259F. EFFECTIVE JANUARY 29, 2021.

4) EXISTING LOT AREA:
28,981 S.F.
0.6653 ACRES

5) PARCEL IS LOCATED IN THE GENERAL RESIDENCE A (GRA) ZONING DISTRICT.

6) DIMENSIONAL REQUIREMENTS:

MINIMUM LOT AREA:		7,500 S.F.
MINIMUM STREET FRONTAGE:		100 FEET
MINIMUM LOT DEPTH:		70 FEET
SETBACKS:	FRONT	15 FEET
	SIDE	10 FEET
	REAR	20 FEET
MAXIMUM BUILDING COVERAGE:		25%
MAXIMUM STRUCTURE HEIGHT:		
	SLOPED ROOF	35 FEET
	FLAT ROOF	30 FEET
ROOF APPURTENANCE HEIGHT:		8 FEET
MINIMUM OPEN SPACE:		30%

7) THE PURPOSE OF THIS PLAN IS TO SHOW THE RESULTS OF AN EXISTING CONDITIONS SURVEY OF ASSESSOR'S MAP 209, LOT 30 IN THE CITY OF PORTSMOUTH.

8) VERTICAL DATUM IS NAVD88. BASIS OF VERTICAL DATUM IS REDUNDANT RTN GNSS OBSERVATIONS.

9) ABUTTER INFORMATION TAKEN FROM THE CITY OF PORTSMOUTH ASSESSORS GIS WEBSITE.

10) THIS IS AN ABOVE THE GROUND SURVEY. THE UNDERGROUND UTILITIES, IF SHOWN, ARE BASED UPON BEST AVAILABLE EVIDENCE AND SURFACE FEATURES VISIBLE AT THE TIME OF THE SURVEY. THESE LOCATIONS SHOULD BE CONSIDERED APPROXIMATE. THERE MAY BE ADDITIONAL UNDERGROUND UTILITIES NOT SHOWN ON THIS PLAN. IT IS RECOMMENDED THAT FIELD VERIFICATION OF THE TRUE LOCATION OF ANY UNDERGROUND UTILITIES IS PREFORMED PRIOR TO ANY EXCAVATION.

11) THIS PLAN IS THE RESULT OF AN ON-THE-GROUND INSTRUMENT SURVEY PERFORMED BY HALEY WARD, INC., 4/15/2026.

12) PARCEL IS SUBJECT TO A 10-FOOT WIDE SEWER EASEMENT AND A 10-FOOT WIDE DRAINAGE EASEMENT AS SHOWN ON PLANS OF PROPOSED FEDERAL AID R.O.W. PROJECT I-95-1(10)14 RECORDED IN ROCKINGHAM COUNTY REGISTRY OF DEEDS, PLAN NO. D-2498, SHEET 6. SEE ALSO, FOURTH EMENDATION TO COMMISSIONERS' RETURN OF HIGHWAY LAYOUT, PORTSMOUTH I-95(10)14-P-5875-B, DATED MARCH 27, 1969, RECORDED IN ROCKINGHAM COUNTY REGISTRY OF DEEDS, BOOK 1957, PAGE 162 SEE ALSO RCRD PLAN #01101 AND AND BOOK 991, PAGE 351.

13) THE DRAIN LINE SHOWN HEREON WITHIN THE 10' WIDE SEWER EASEMENT APPEARS TO HAVE BEEN SEPARATED AND CONVERTED TO A DRAINAGE LINE.

SEWER STRUCTURE TABLE

STRUCTURE	PROP/EX	RIM	PIPE SIZE/TYPE	INVERT IN	INVERT OUT	DIRECTION
SMH 1	EX	25.13	6" PVC	17.43		NE
			8" PVC		17.43	SE
SMH 2	EX	20.26	8" PVC	10.76		NW
			8" PVC	13.66		NW
			8" PVC	10.81		SE
			8" PVC		10.71	E
SMH 3	EX	15.52	8" PVC	10.12		NW
			8" PVC		10.02	SE
SMH 4	EX	24.18	8" PVC	9.18		W
			8" PVC	17.63		S
			8" PVC	19.48		SE
			8" PVC		9.13	NW

DRAINAGE STRUCTURE TABLE

STRUCTURE	PROP/EX	RIM	PIPE SIZE/TYPE	INVERT IN	INVERT OUT	DIRECTION
CB 1	EX	23.81	8" CPP	20.31		NW
			12" CPP		19.26	SW
DMH 1	EX	23.81	12" CPP	19.01		NE
			12" CPP		19.01	SE
CB 2	EX	18.81	15" RCP	16.11		NW
			15" RCP		16.06	SE
DMH 2	EX	20.43	12" CPP	13.58		NW
			15" CPP	13.03		NW
			12" CPP	13.08		SE
			24" CPP		13.03	E
DMH 3	EX	20.70	8" PVC	15.80		SW
			6" CLAY		15.80	SE
CB 3	EX	20.09	8" PVC		16.69	NE
DMH 4	EX	20.17	BRICK TROUGH	7.77		SW
			BRICK TROUGH		7.77	NE
DMH 5	EX	20.43	12" CPP	14.93		NW
			12" CPP	13.03		NW
			12" CPP	13.93		SE
			12" CPP		13.03	S
DMH 6	EX	20.36	12" CPP	15.61		W
			12" CPP		15.61	SE
CB 4	EX	20.17	12" CPP		16.37	E
CB 5	EX	19.32	12" CPP		14.62	NW
CB 6	EX	15.15	12" CPP		11.15	E
CB 7	EX	15.28	8" CPP	11.88		W
			12" CPP		11.58	E
DMH 7	EX	15.85	12" CPP	11.05		W
			4" PVC	11.75		NE
			12" CPP		10.85	NE
DMH 8	EX	16.73	12" CPP	11.33		W
			12" CPP	10.83		SW
			12" CPP	11.13		E
			4" PVC	13.13		NE
			24" RCP		10.23	N
CB 8	EX	17.71	12" CPP		13.11	NW
CB 9	EX	17.24	12" CPP	12.74		SE
			12" CPP		11.54	W
CB 10	EX	13.37	BRICK TROUGH	3.17		SE
			BRICK TROUGH		3.17	NW
DMH 9	EX	16.48	24" RCP	8.28		SW
			24" RCP	8.23		S
			36" RCP		8.18	NE

"I CERTIFY THAT THIS PLAN WAS PREPARED UNDER MY DIRECT SUPERVISION, THAT IT IS THE RESULT OF A FIELD SURVEY BY THIS OFFICE AND HAS AN ACCURACY OF THE CLOSED TRAVERSE THAT EXCEEDS THE PRECISION OF 1:15,000."

04-29-2026

CHARLES S. ADAMS, LLS 1622 — DATE

GRAPHIC SCALE
20 0 10 20 40 60
(IN FEET)
1 inch = 20 ft.

REV.	DATE	DESCRIPTION	BY	CHK.
0	4/21/26	ISSUED FOR COMMENT	RJB	CSA

DRAWING ISSUE STATUS
SITE SURVEY

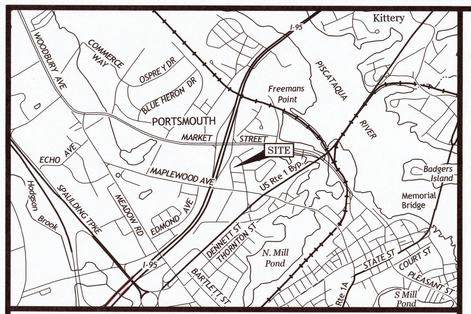
HALEY WARD
ENGINEERING | ENVIRONMENTAL | SURVEYING
200 Griffin Road, Unit 14
Portsmouth, NH 03801
603-430-9282
WWW.HALEYWARD.COM

PROJECT
COPLEY PROPERTIES
20 CENTRAL AVENUE, PORTSMOUTH, NH

TITLE
EXISTING CONDITIONS PLAN

STATE OF NEW HAMPSHIRE — No. 1622 — CHARLES S. ADAMS — LICENSED LAND SURVEYOR

DATE	SCALE
APRIL 2026	1"=20'
DRAWN BY: RJB	DESIGNED BY: ---	CHECKED BY: CSA
PROJECT No.: 5010658.001	FIELD BOOK / PAGE: FB 433 PG 37
DRAWING No.: V101	REV.: 0



LOCATION MAP SCALE: 1"=2000'

LEGEND:

DESCRIPTION	EXISTING
RCRD	ROCKINGHAM COUNTY REGISTRY OF DEEDS
1234/123	DEED BOOK/PAGE
N/F	NOW OR FORMALLY
TYP.	TYPICAL
TBR	TO BE REMOVED
TBS	TO BE SET
SWL	SINGLE WHITE LINE
DYL	DOUBLE YELLOW LINE
SGC	SLOPED GRANITE CURB
MAP 21 LOT 8	21 / 8
IRON ROD/PIPE FOUND	○
UTILITY POLE	○
ELECTRIC METER	E
PROPERTY LINE	
APPROXIMATE EXTERIOR PROPERTY LINE	
EDGE OF PAVEMENT	
OVERHEAD UTILITY LINE	

PLAN REFERENCES:

1) PLAN OF LAND PORTSMOUTH, N.H. FOR RAYMOND E. & IDELLE E. ST, LAURENT, PREPARED BY: JOHN W. DURGIN CIVIL ENGINEERS, DATED: AUG. 1970, SCALE: 1 IN = 20 FT., DURGIN FILE NO. 501 PLAN NO. 4160, NOT RECORDED.
2) PLAN OF LAND PORTSMOUTH, N.H. FOR JOSEPH LAMB, PREPARED BY: JOHN W. DURGIN CIVIL ENGINEERS, DATED: DEC. 1968, SCALE: 1 IN = 20 FT., DURGIN FILE NO. 501 PLAN NO. 465, RCRD C-1303.
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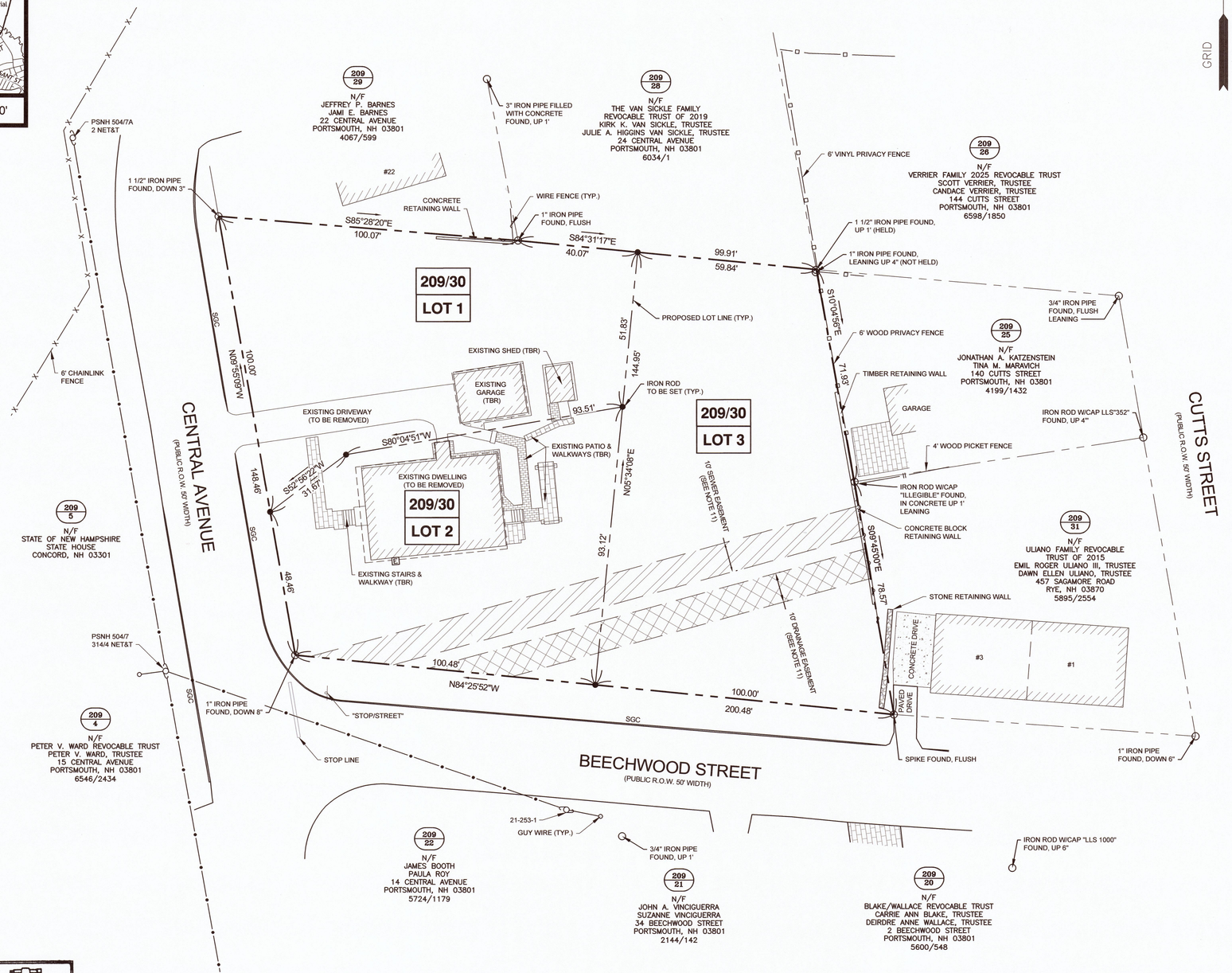
4) PROPOSED LOT LINE ADJUSTMENT BETWEEN FRANCIS X. & MICHELLE QUINN & KEITH R. & LINDA MAHLER, CUTTS ST, PORTSMUTH, NH, PREPARED BY: BARRETT ASSOCIATES, DATED: SEPT. 25, 1995, SCALE: 1"=10', RCRD C-24422.
5) PLAN OF THE SUBDIVISION OF A PART OF THE JACKSON FARM, PORTSMOUTH, NH, DATED: MARCH 1902, SCALE: 40 FEET TO AN INCH, RCRD 00226.
6) BOARD OF ASSESSORS LOT PLAN NO. 82, PORTSMOUTH, N.H.,RCRD 01101.
7) PLAN OF PROPOSED FEDERAL AID PROJECT I-95-1(19)15 CONTRACT NO.1, N.H. PROJECT NO. P-3875-E, INTERSTATE ROUTE 95, DATED: 8-5-70, SCALE: 1" =50', FILE NO. P.O.4992, ON FILE AT N.H. D.O.T..



GRAPHIC SCALE

20 0 10 20 40 60

(IN FEET)
1 inch = 20 ft.

"I CERTIFY THAT THIS PLAN WAS PREPARED UNDER MY DIRECT SUPERVISION, THAT IT IS THE RESULT OF A FIELD SURVEY BY THIS OFFICE AND HAS AN ACCURACY OF THE CLOSED TRAVERSE THAT EXCEEDS THE PRECISION OF 1:15,000."

06-19-2026
CHARLES S. ADAMS, LLS 1622 DATE

STATE OF NEW HAMPSHIRE · No 1622 · CHARLES S. ADAMS · LICENSED LAND SURVEYOR

HALEY WARD
ENGINEERING | ENVIRONMENTAL | SURVEYING
200 Griffin Rd. Unit 14
Portsmouth, New Hampshire 03801
603.430.9282
WWW.HALEYWARD.COM

NOTES:

1) PARCEL IS SHOWN ON THE CITY OF PORTSMOUTH ASSESSOR'S MAP 209 AS LOT 30.

2) OWNER OF RECORD:
MARISSA VALVERDE
20 CENTRAL AVENUE
PORTSMOUTH, NH 03801
6478/1413

3) PARCEL IS NOT IN A SPECIAL FLOOD HAZARD AREA ZONE AS SHOWN ON FIRM PANEL 33015C0259F. EFFECTIVE JANUARY 29, 2021.

4) EXISTING LOT AREA:
28,981 S.F.
0.6653 ACRES

PROPOSED LOT AREAS:

LOT 1	LOT 2	LOT 3
9,074 S.F.	8,302 S.F.	11,605 S.F.
0.2083 ACRES	0.1906 ACRES	0.2664 ACRES

5) PARCEL IS LOCATED IN THE GENERAL RESIDENCE A (GRA) ZONING DISTRICT.

6) DIMENSIONAL REQUIREMENTS:

MINIMUM LOT AREA:		7,500 S.F.
MINIMUM STREET FRONTAGE:		100 FEET
MINIMUM LOT DEPTH:		70 FEET
SETBACKS:	FRONT	15 FEET
	SIDE	10 FEET
	REAR	20 FEET
MAXIMUM BUILDING COVERAGE:		25%
MAXIMUM STRUCTURE HEIGHT:		
	SLOPED ROOF	35 FEET
	FLAT ROOF	30 FEET
ROOF APPURTENANCE HEIGHT:		8 FEET
MINIMUM OPEN SPACE:		30%

7) THE PURPOSE OF THIS PLAN IS TO SHOW A PROPOSED 3 LOT SUBDIVISION OF ASSESSOR'S MAP 209, LOT 30 IN THE CITY OF PORTSMOUTH.

8) ABUTTER INFORMATION TAKEN FROM THE CITY OF PORTSMOUTH ASSESSORS GIS WEBSITE.

9) THIS IS AN ABOVE THE GROUND SURVEY. THE UNDERGROUND UTILITIES, IF SHOWN, ARE BASED UPON BEST AVAILABLE EVIDENCE AND SURFACE FEATURES VISIBLE AT THE TIME OF THE SURVEY. THESE LOCATIONS SHOULD BE CONSIDERED APPROXIMATE. THERE MAY BE ADDITIONAL UNDERGROUND UTILITIES NOT SHOWN ON THIS PLAN. IT IS RECOMMENDED THAT FIELD VERIFICATION OF THE TRUE LOCATION OF ANY UNDERGROUND UTILITIES IS PREFORMED PRIOR TO ANY EXCAVATION.

10) THIS PLAN IS THE RESULT OF AN ON-THE-GROUND INSTRUMENT SURVEY PERFORMED BY HALEY WARD, INC., 4/15/2026.

11) PARCEL IS SUBJECT TO A 10-FOOT WIDE SEWER EASEMENT AND A 10-FOOT WIDE DRAINAGE EASEMENT AS SHOWN ON PLANS OF PROPOSED FEDERAL AID R.O.W. PROJECT I-95-1(10)14 RECORDED IN ROCKINGHAM COUNTY REGISTRY OF DEEDS, PLAN NO. D-2498, SHEET 6. SEE ALSO, FOURTH EMENDATION TO COMMISSIONERS' RETURN OF HIGHWAY LAYOUT, PORTSMOUTH I-95(10)14-P-5875-B, DATED MARCH 27, 1969, RECORDED IN ROCKINGHAM COUNTY REGISTRY OF DEEDS, BOOK 1957, PAGE 162 SEE ALSO RCRD PLAN #01101 AND AND BOOK 991, PAGE 351.

REV.	DATE	DESCRIPTION	BY	CHK.
0	5/15/26	ISSUED FOR COMMENT	CSA	RJB

DRAWING ISSUE STATUS
SITE SURVEY

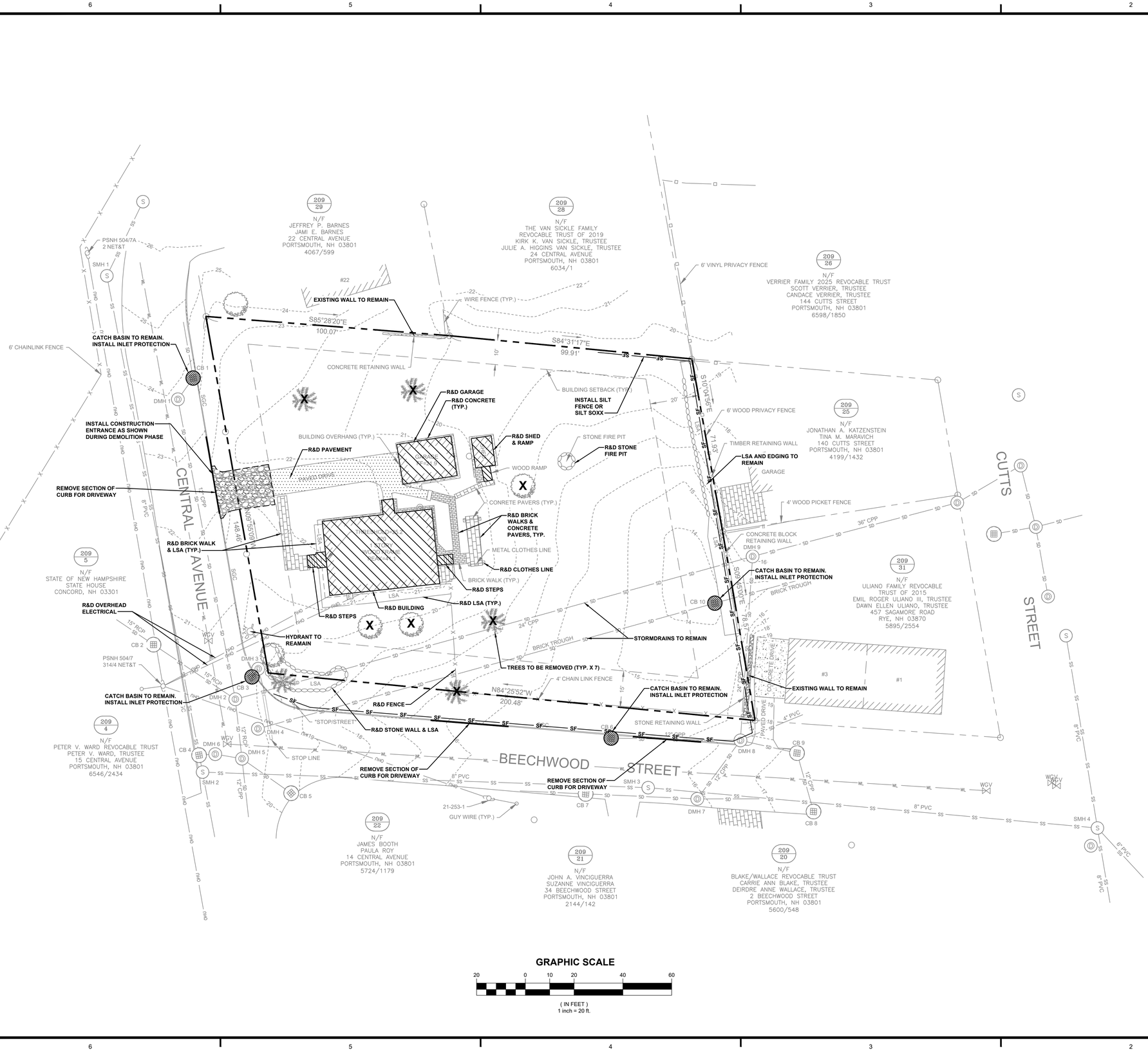
SUBDIVISION PLAN
TAX MAP 209 - LOT 30

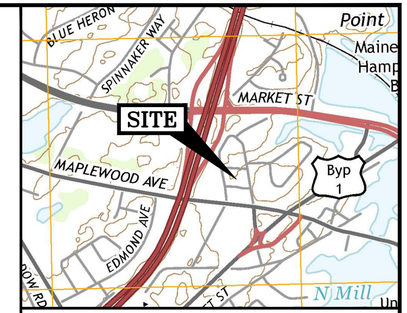
OWNER
MARISSA VALVERDE
20 CENTRAL AVENUE
CITY OF PORTSMOUTH
COUNTY OF ROCKINGHAM
STATE OF NEW HAMPSHIRE

SCALE: 1" = 20' MAY 2026

FB 433 PG 37 5010658-001

P:\HW\5010658-Cayley_Properties\007-20 Central Ave., Portsmouth-SAT\2cD-CAD_Files\Survey\5010658-1-SUBDIVISION.dwg, 22X34 ARC





DEMOLITION NOTES:

1. REFER TO DWG C001 FOR NOTES, ABBREVIATIONS AND LEGEND.
2. REFER TO DWGS C501 & C502 FOR CONSTRUCTION DETAILS.
3. INSTALL ALL EROSION CONTROL MEASURES ON THIS SHEET PRIOR TO STARTING CONSTRUCTION.
4. THE CONTRACTOR SHALL OBTAIN ANY NECESSARY DEMOLITION PERMITS AND PAY ALL RELATED FEES.
5. THE CONTRACTOR SHALL REMOVE AND DISPOSE ALL ABANDONED ONSITE UTILITIES, MAINS AND SERVICES UNCOVERED DURING CUT OPERATIONS OR WITHIN 36" OF FINISHED GRADE. CUT AND CAP ABANDONED SERVICES AT THE RIGHT OF WAY.
6. THE CONTRACTOR SHALL COORDINATE WITH PORTSMOUTH WATER AND SEWER SERVICES NOT SHOWN OR NOT SHOWN ON THIS PLAN.
7. THE CONTRACTOR SHALL REMOVE AND DISPOSE OF ALL BUILDING FOUNDATIONS AND FOOTINGS.
8. THE CONTRACTOR SHALL CLEAR AND GRUB SITE AND REMOVE ALL DEMO DEBRIS PRIOR TO COMMENCING ANY GRADING ACTIVITIES.
9. ALL MATERIALS REMOVED DURING DEMOLITION, INCLUDING ASBESTOS CONCRETE PIPE, SHALL BE PROPERTY REMOVED AND DISPOSED OF IN ACCORDANCE WITH ALL GOVERNING AGENCIES / REGULATIONS.

REV.	DATE	DESCRIPTION	BY	CHK
0	2026.06.22	ISSUED FOR TAC REVIEW	SJR	SMT

DRAWING ISSUE STATUS

ISSUED FOR PERMITTING

HALEY WARD
WWW.HALEYWARD.COM
200 Griffin Rd., Unit 14
Portsmouth, New Hampshire 03801
603.430.9282

PROJECT

PROPOSED 3 LOT SUBDIVISION
20 CENTRAL AVENUE, PORTSMOUTH, NH 03801

TITLE

DEMOLITION PLAN

STATE OF NEW HAMPSHIRE
DREW JOHN OLEHOWSKI
No. 18515
LICENSED PROFESSIONAL ENGINEER
06/22/2026

DATE	SCALE
JUNE 2026	1" = 20'

DRAWN BY	DESIGNED BY	CHECKED BY
SJR	NMT	DJO

PROJECT No. 5010658.001

DRAWING No. **C101** REV. **0**

FILE LOCATION: P:\#01\01065\8.CORLEY_PROPERTIES\501-20 CENTRAL AVE - PORTSMOUTH-SMT\2-CAD_FILES\CIVIL\501065801-C-BP.DWG, 2026.06.22, 11:21 AM

TABLE OF DIMENSIONAL STANDARDS:

REGULATION	REQUIRED	LOT 1	LOT 2	LOT 3
MIN. LOT AREA	7,500 S.F.	9,074 S.F.	8,302 S.F.	11,605 S.F.
STREET FRONTAGE	100 FEET	100 FEET	148 FEET	100 FEET
MIN. FRONT SETBACK	15 FEET	27.5 FEET	19.3 FEET	51.6 FEET
MIN. SIDE SETBACK	10 FEET	10.4 FEET	11.8 FEET	10.6 FEET
MIN. REAR SETBACK	20 FEET	58.9 FEET	20.7 FEET	45.7 FEET
MAX. HEIGHT SLOPED ROOF	35 FEET	< 35 FEET	< 35 FEET	<35 FEET
MAX. BUILDING COVERAGE	25%	19.8%	23.5%	15.5%
MIN. OPEN SPACE	30%	71.1%	63.6%	75.0%

TOTAL IMPERVIOUS SURFACE AREAS:

(TO PROPERTY LINES)

LOT 1	LOT 2	LOT 3	TOTAL
2,620 S.F.	3,018 S.F.	2,901 S.F.	8,539 S.F.

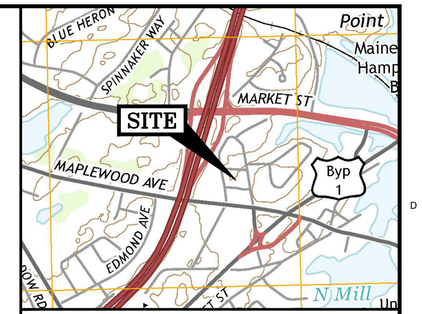
UTILITY NOTES:

1. REFER TO DWG C001 FOR GENERAL NOTES, LEGEND, & ABBREVIATIONS.
2. REFER TO DWGS C501 FOR ALL CONSTRUCTION DETAILS.
3. ALL PROPOSED SEWER LINES TO BE 6" PVC SDR 35 GASKETED.
4. THE SPACING BETWEEN ELECTRICAL AND COMMUNICATION LINES ON THIS PLAN IS EXAGGERATED FOR CLARITY AND INTENDED TO SHOW THE GENERAL LOCATION OF PROPOSED UTILITIES. THE FINAL LOCATIONS AND SPACING MAY BE ADJUSTED TO RUN WITHIN THE SAME TRENCH PER THE CONSTRUCTION DETAILS.
5. FIRE SUPPRESSION IS NOT PROPOSED FOR THIS DEVELOPMENT.
6. THE CONTRACT SHALL ENSURE ALL SEWER SERVICES HAVE A MINIMUM OF 6' OF COVER. IF THE MINIMUM COVER CANNOT BE OBTAINED, INSULATION SHALL BE INSTALLED.
7. ALL PROPOSED WATER LINES SHALL BE 1"

NORTH NAD83(2011)

N

GRID NHSPC



LOCATION MAP SCALE: 1" = 1,000'

NOTES:

1) PARCEL IS SHOWN ON THE CITY OF PORTSMOUTH ASSESSOR'S MAP 209 AS LOT 30.

2) OWNER OF RECORD (MAP 209 LOT 30):
MARISSA VALVERDE
20 CENTRAL AVENUE
PORTSMOUTH, NH 03801
6478/1413

APPLICANT:
COPLEY PROPERTIES, LLC
94 PORTSMOUTH AVENUE
STRATHAM, NH 03885

3) PARCEL IS NOT IN A SPECIAL FLOOD HAZARD AREA ZONE AS SHOWN ON FIRM PANEL 33015C0259F. EFFECTIVE JANUARY 29, 2021.

4) PARCEL IS LOCATED IN THE GENERAL RESIDENCE A (GRA) ZONING DISTRICT.

5) EXISTING LOT AREA:
28,981 S.F.
0.6653 ACRES

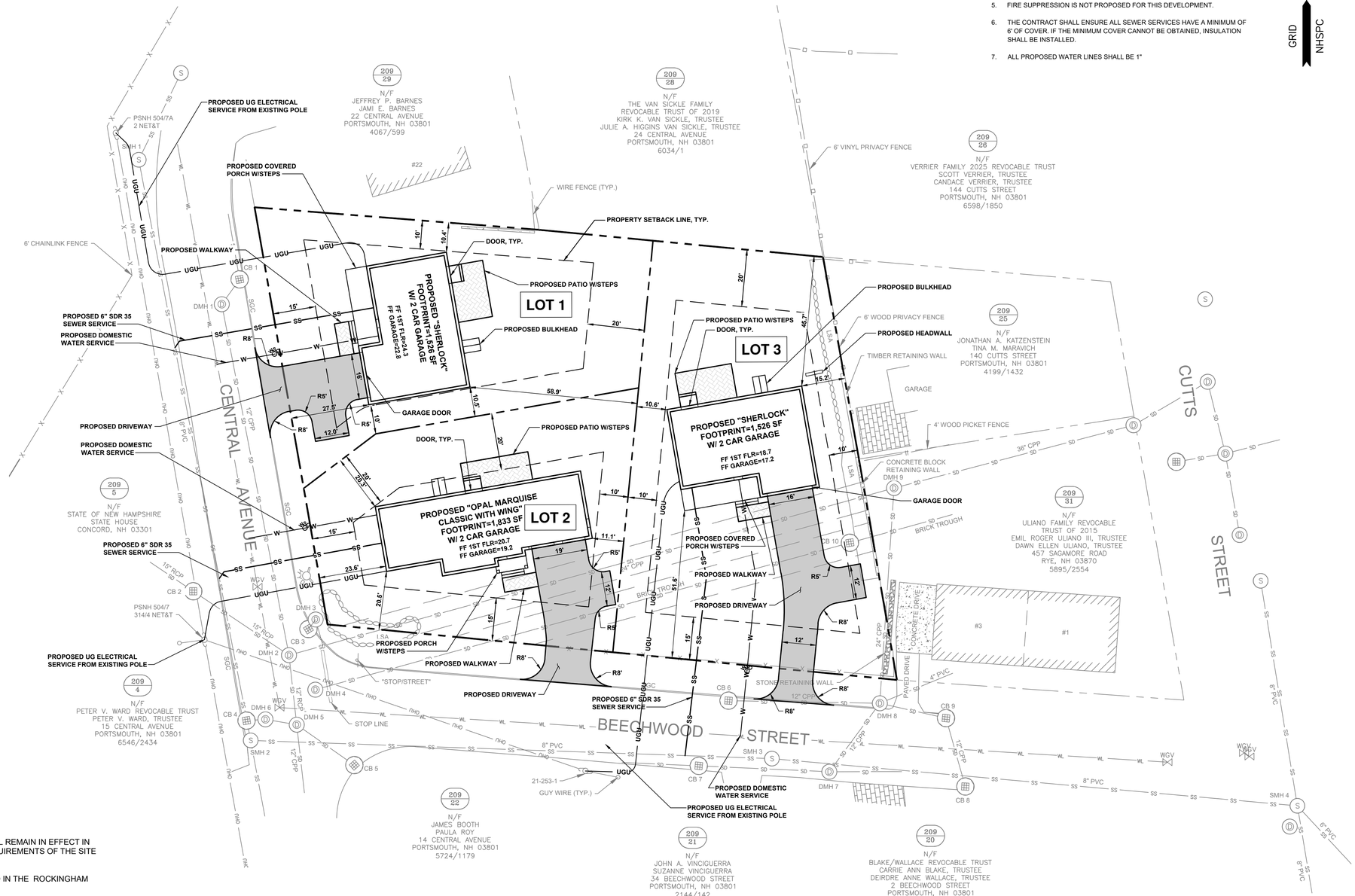
6) REFER TO THE EXISTING CONDITIONS PLAN (DWG. NO. V101) FOR ADDITIONAL SITE INFORMATION.

7) THE PURPOSE OF THIS PLAN IS PROPOSE A 3 LOT SUBDIVISION ON ASSESSOR'S MAP 209, LOT 30, IN THE CITY OF PORTSMOUTH.

8) ALL EXISTING SITE FEATURES, STRUCTURES, AND BUILDINGS ON THE SUBJECT PARCEL ARE TO BE DEMOLISHED AND REMOVED AS PART OF THIS DEVELOPMENT. SEE DEMOLITION PLAN.

9) TRASH DISPOSAL SHALL BE PORTSMOUTH CURBSIDE PICKUP.

10) LIGHTING SHALL BE STANDARD RESIDENTIAL WALL MOUNTED ONLY AND DARK SKY COMPLIANT.



CONDITIONS OF APPROVAL:

1. ALL CONDITIONS ON THIS PLAN SHALL REMAIN IN EFFECT IN PERPETUITY PURSUANT TO THE REQUIREMENTS OF THE SITE PLAN REVIEW REGULATIONS:
2. THIS SITE PLAN SHALL BE RECORDED IN THE ROCKINGHAM COUNTY REGISTRY OF DEEDS.
3. ALL IMPROVEMENTS SHOWN ON THIS SITE PLAN SHALL BE CONSTRUCTED AND MAINTAINED IN ACCORDANCE WITH THE PLAN BY THE PROPERTY OWNER AND ALL FUTURE PROPERTY OWNERS. NO CHANGES SHALL BE MADE TO THIS SITE PLAN WITHOUT THE EXPRESS APPROVAL OF THE PORTSMOUTH PLANNING DIRECTOR.

APPROVED BY THE PORTSMOUTH PLANNING BOARD

_____ _____

CHAIRMAN **DATE**

GRAPHIC SCALE

20 0 10 20 40 60

(IN FEET)
1 inch = 20 ft.

REV.	DATE	DESCRIPTION	BY	CHK.
0	2026.06.22	ISSUED FOR TAC REVIEW	SJR	SMT

DRAWING ISSUE STATUS

ISSUED FOR PERMITTING

HALEY WARD
WWW.HALEYWARD.COM
200 Griffin Rd., Unit 14
Portsmouth, New Hampshire 03801
603.430.9282

PROJECT

PROPOSED 3 LOT SUBDIVISION
20 CENTRAL AVENUE, PORTSMOUTH, NH 03801

TITLE

SITE LAYOUT & UTILITY PLAN

STATE OF NEW HAMPSHIRE
DREW JOHN OLEHOWSKI
No. 18515
LICENSED
PROFESSIONAL ENGINEER
06/22/2026

DATE	SCALE
APRIL 2026	1"=20'

DRAWN BY	DESIGNED BY	CHECKED BY
SJR	NMT	DJO

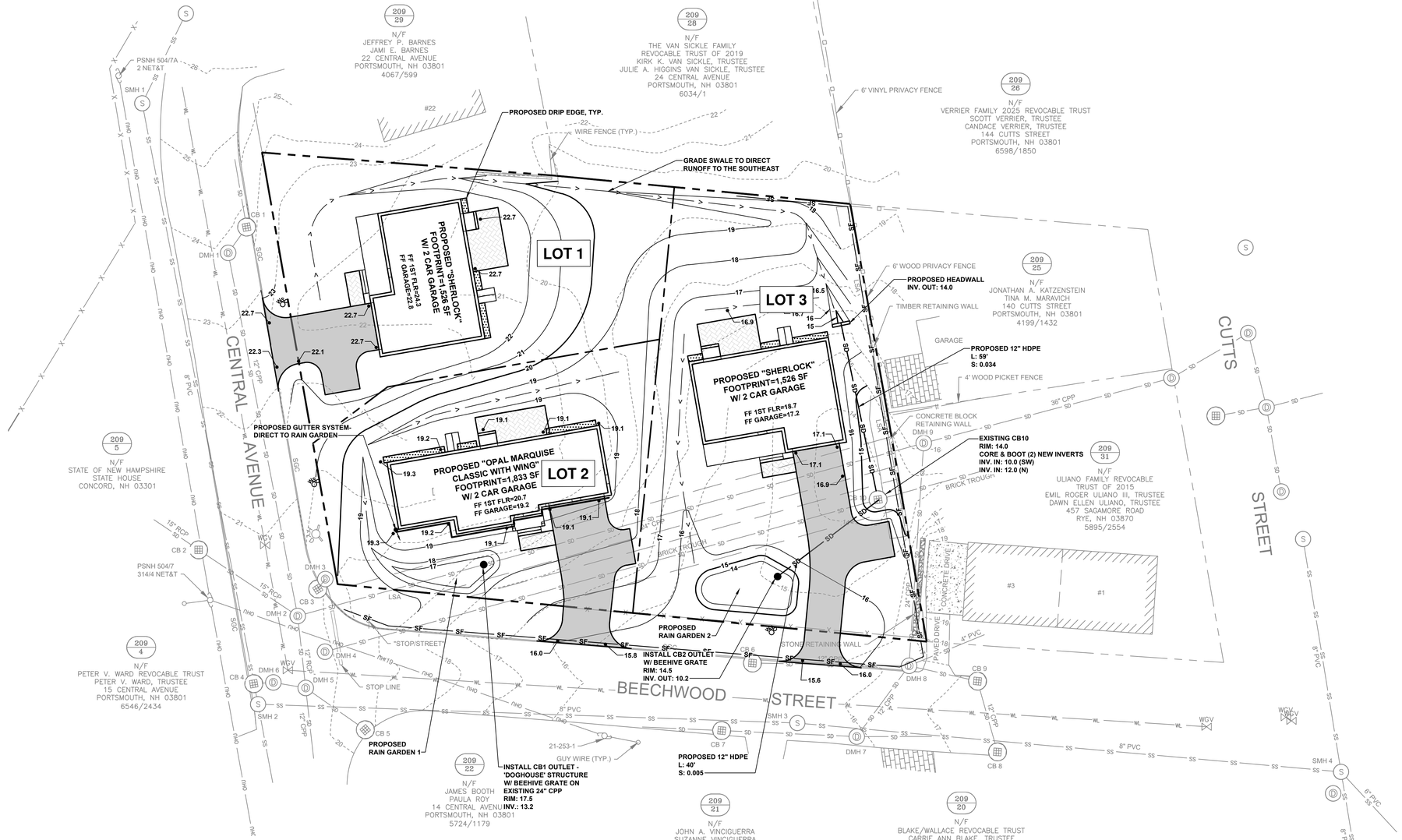
PROJECT No. 5010658.001

DRAWING No. **C102** REV. **0**

FILE LOCATION: P:\#1501\10658-COPLEY_PROPERTIES\001-20 CENTRAL AVE., PORTSMOUTH-SMT\02-CAD_FILES\CIVIL\5010658.001-C-SP.DWG, 2026.06.22, 11:21 AM

NOTES:

1. THE CONTRACTOR SHALL NOTIFY DIG SAFE AT 1-888-DIG-SAFE (1-888-344-7233) AT LEAST 72 HOURS PRIOR TO COMMENCING ANY EXCAVATION ON PUBLIC OR PRIVATE PROPERTY WITHIN 100 FEET OF UNDERGROUND UTILITIES. THE EXCAVATOR IS RESPONSIBLE TO MAINTAIN MARKS. DIG SAFE TICKETS EXPIRE IN THIRTY DAYS.
2. UNDERGROUND UTILITY LOCATIONS ARE BASED UPON BEST AVAILABLE EVIDENCE AND ARE NOT FIELD VERIFIED. LOCATING AND PROTECTING ANY ABOVEGROUND OR UNDERGROUND UTILITIES IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR AND/OR THE OWNER. UTILITY CONFLICTS SHOULD BE REPORTED AT ONCE TO THE DESIGN ENGINEER.
3. CONTRACTOR SHALL INSTALL AND MAINTAIN EROSION CONTROL MEASURES IN ACCORDANCE WITH THE "NEW HAMPSHIRE STORMWATER MANUAL, VOLUME 3, EROSION AND SEDIMENT CONTROLS DURING CONSTRUCTION. (NHDES DECEMBER 2008).

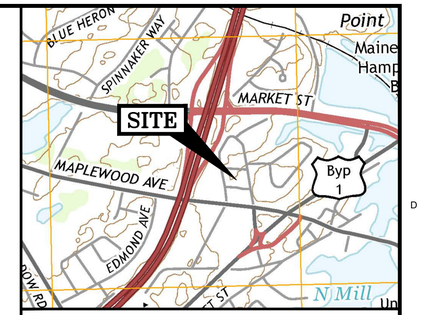


GRAPHIC SCALE

20 0 10 20 40 60

(IN FEET)
1 inch = 20 ft.

NORTH NAD83(2011)
GRID NHSPC



LOCATION MAP SCALE: 1" = 1,000'

DRAINAGE NOTES:

1. REFER TO DWG C001 FOR GENERAL NOTES, LEGEND, AND ABBREVIATIONS.
2. REFER TO DWGS C501-502 FOR ALL CONSTRUCTION DETAILS.
3. ROOF RUNOFF SHALL BE COLLECTED WITH DRIP STRIPS OR A GUTTER COLLECTION SYSTEM AND CONNECTED TO THE STORMWATER SYSTEM.
4. ALL FOOTING DRAINS SHALL BE CONNECTED TO THE STORMWATER SYSTEM WITH A PROVIDED AIR GAP.
5. VERTICAL DATUM IS NAVD88. BASIS OF VERTICAL DATUM IS REDUNDANT RTN GNSS OBSERVATIONS.
6. PORTSMOUTH STORMWATER CONNECTION PERMIT REQUIRED.

REV.	DATE	DESCRIPTION	BY	CHK.
0	2026.06.22	ISSUED FOR TAC REVIEW	SJR	SMT

DRAWING ISSUE STATUS
ISSUED FOR PERMITTING

HALEY WARD
WWW.HALEYWARD.COM
200 Griffin Rd., Unit 14
Portsmouth, New Hampshire 03801
603.430.9282

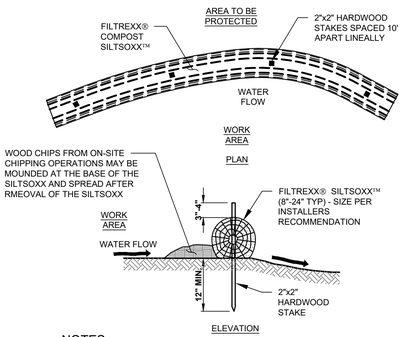
PROJECT
PROPOSED 3 LOT SUBDIVISION
20 CENTRAL AVENUE, PORTSMOUTH, NH 03801

TITLE
GRADING & DRAINAGE PLAN

STATE OF NEW HAMPSHIRE
DREW JOHN OLEHOWSKI
No. 18516
LICENSED
PROFESSIONAL ENGINEER
06/22/2026

DATE	SCALE
JUNE 2026	1"=20'
DRAWN BY: SJR	DESIGNED BY: NMT	CHECKED BY: DJO
PROJECT No. 5010658.001	
DRAWING No. C103	REV. 0

FILE LOCATION: P:\NH\5010658-COPLEY, PROPERTIES\001-20 CENTRAL AVE, PORTSMOUTH-SMT\200-CAD_FILES\CIVIL\5010658.001-C-SIP.DWG, 2026.06.22, 11:21 AM

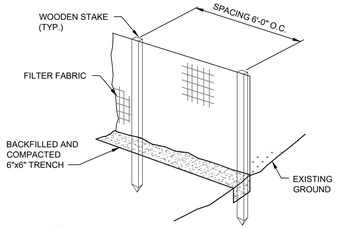


NOTES:

1. ALL MATERIAL TO MEET FILTREXX SPECIFICATIONS.
2. FILLTREXX SYSTEM SHALL BE INSTALLED BY A CERTIFIED FILTREXX INSTALLER.
3. THE CONTRACTOR SHALL MAINTAIN THE COMPOST FILTRATION SYSTEM IN A FUNCTIONAL CONDITION AT ALL TIMES. IT WILL BE ROUTINELY INSPECTED AND REPAIRED WHEN REQUIRED.
4. SILTSOXX DEPICTED IS FOR MINIMUM SLOPES, GREATER SLOPES MAY REQUIRE ADDITIONAL PLACEMENTS.
5. THE COMPOST FILTER MATERIAL WILL BE DISPERSED ON SITE WHEN NO LONGER REQUIRED, AS DETERMINED BY THE ENGINEER.

FILTREXX SILTSOXX DETAIL

N.T.S.

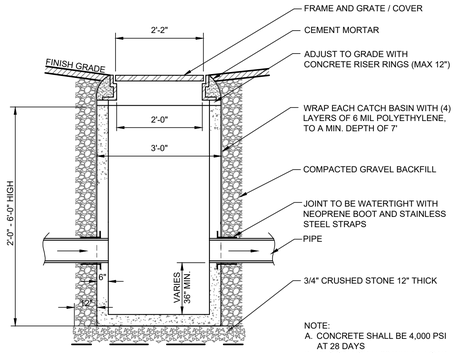


NOTES:

1. KEY FABRIC IN A 6"x6" TRENCH W/BACKFILL AND COMPACT.
2. SILT FENCE SHALL BE A 3' FENCE WITH A MINIMUM GRAB STRENGTH OF 120 LBS.

SILT FENCE DETAIL

N.T.S.

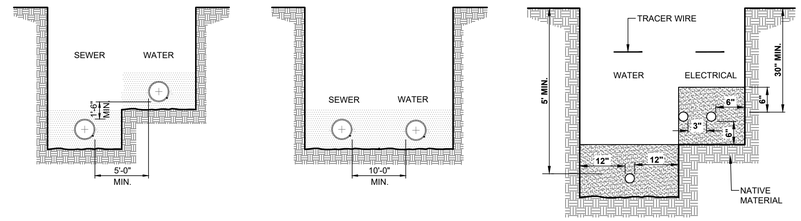


NOTE:

A. CONCRETE SHALL BE 4,000 PSI AT 28 DAYS
B. DESIGN FOR H-20 WHEEL LOAD
C. REINFORCE CONCRETE TO 0.12 IN/S.F, L.F.

TYPICAL CATCH BASIN DETAIL

N.T.S.



PARALLEL INSTALLATION OF WATER MAINS AND GRAVITY SEWER MAINS:

1. NORMAL CONDITIONS – WATER MAINS SHALL BE LAID AT LEAST 10 FEET HORIZONTALLY FROM ANY SANITARY SEWER, OR SEWER MANHOLE, WHENEVER POSSIBLE; THE DISTANCE SHALL BE MEASURED EDGE-TO-EDGE (PIPE WALL TO PIPE WALL).
2. UNUSUAL CONDITIONS – WHEN LOCAL CONDITIONS (SUCH AS LEDGE, BRIDGES, UTILITY CONGESTION, ETC.) PREVENT A HORIZONTAL SEPARATION OF 10 FEET, A WATER MAIN MAY BE LAID CLOSER TO A SANITARY SEWER PROVIDED THAT:

a. THE BOTTOM OF THE WATER MAIN IS AT LEAST 18 INCHES ABOVE THE TOP OF THE SEWER IN A SEPARATE TRENCH OR UNDISTURBED EARTH SHELF AND A MINIMUM OF 5 FEET EDGE-TO-EDGE (PIPE WALL TO PIPE WALL) HORIZONTALLY IS PROVIDED.

b. WHERE THIS VERTICAL SEPARATION CANNOT BE OBTAINED, THE SEWER SHALL BE CONSTRUCTED OF MATERIALS AND WITH JOINTS THAT ARE EQUIVALENT TO WATER MAIN STANDARDS-OF-CONSTRUCTION AND SHALL BE PRESSURE TESTED TO ASSURE WATER TIGHTNESS PRIOR TO BACKFILLING.

TYPICAL UTILITY SEPARATION DETAILS

N.T.S.

PLAN VIEW

NOTE: CONTRACTOR SHALL ADD STONE TO ENTRANCE AS MUD/SILT MATERIAL ACCUMULATES

SECTION

STABILIZED CONSTRUCTION ENTRANCE DETAIL

N.T.S.

NOTES:

1. CATCH BASIN PROTECTION TO BE "SILTSACK" BY ACF ENVIRONMENTAL OR APPROVED EQUAL.
2. INSPECT INSERT AFTER EACH RAINFALL EVENT. MAINTAIN AS REQUIRED.
3. SEDIMENT WITHIN INSERT SHALL BE EMPTIED WHEN 1/2 FULL.

SEDIMENT SACK INLET PROTECTION DETAIL

N.T.S.

NOTE:

1. MATCH EXISTING SURFACE FINISH, EXCEPT WHERE NOTED. IN LAWN AREAS INSTALL 4" OF LOAM AND SEED AND MULCH.

TYPICAL STORM DRAIN TRENCH DETAIL

N.T.S.

STORM DRAIN CLEANOUT DETAIL

N.T.S.

INSTALLATION NOTES:

1. AREA CHOSEN FOR STOCKPILING OPERATIONS SHALL BE DRY AND STABLE.
2. MAXIMUM SLOPE OF STOCKPILE SHALL BE 2:1.
3. UPON COMPLETION OF SOIL STOCKPILING, EACH PILE SHALL BE SURROUNDED W/ EITHER SILT FENCING, THEN STABILIZED WITH VEGETATION OR COVERED.
4. SEE SILT FENCE DETAIL ON THIS SHEET
5. TEMPORARILY STABILIZE AS NOTED IN SPECIFICATIONS

TEMPORARY STOCKPILE AREA

N.T.S.

NOTE:

1. MATCH EXISTING SURFACE FINISH, EXCEPT WHERE NOTED. IN LAWN AREAS INSTALL 4" OF LOAM AND SEED AND MULCH.

TYPICAL WATER MAIN TRENCH DETAIL

N.T.S.

NOTE:

1. MATCH EXISTING SURFACE FINISH, EXCEPT WHERE NOTED. IN LAWN AREAS INSTALL 4" OF LOAM AND SEED AND MULCH.

TYPICAL SEWER TRENCH DETAIL

N.T.S.

NOTES:

1. ALL CONNECTIONS IN STREET LIMITS TO BE EXTENDED TO RIGHT-OF-WAY LINES.
2. INACTIVE LOT SANITARY SEWER END TO BE CAPPED WITH PIPE CAPS, AND MARKED WITH A WITNESS STAKE FOR FUTURE CONNECTIONS.
3. CONTRACTOR SHALL BE REQUIRED TO PROVIDE SEWER SERVICE AND CONNECT TO EXISTING SANITARY SEWER SERVICES FROM EACH PROPERTY, MATCH EXISTING SIZE.

TYPICAL SANITARY SEWER SERVICE DETAIL

N.T.S.

REV.	DATE	DESCRIPTION	BY	CHK.
0	2026.06.22	ISSUED FOR TAC REVIEW	SJR	SMT

DRAWING ISSUE STATUS

ISSUED FOR PERMITTING

HALEY WARD
WWW.HALEYWARD.COM
200 Griffin Rd., Unit 14
Portsmouth, New Hampshire 03801
603.430.9282

PROJECT

PROPOSED 3 LOT SUBDIVISION
20 CENTRAL AVENUE, PORTSMOUTH NH

TITLE

SITE DETAILS

STATE OF NEW HAMPSHIRE
DREW JOHN OLEHOWSKI
No. 18515
LICENSED
PROFESSIONAL ENGINEER
06/22/2026

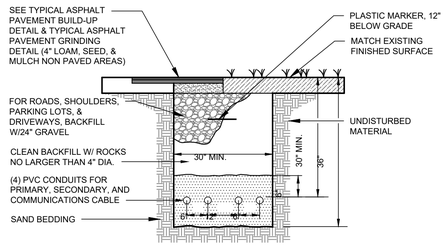
DATE	SCALE
JUNE 2026	NTS

DRAWN BY	DESIGNED BY	CHECKED BY
SJR	NMT	DJO

PROJECT No. 5010658.001

DRAWING No. **C501** REV. **0**

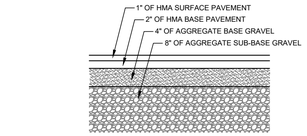
FILE LOCATION: P:\#65010658-COPLEY_PROPERTIES\01-20 CENTRAL AVE., PORTSMOUTH-SMT2\02-CAD_FILES\CIVIL\501\10658.001-C-DT.DWG, 2026.06.22, 11:20 AM



NOTES:
1. SIZE, NUMBER, MATERIAL, AND ARRANGEMENT OF CONDUIT SHALL BE COORDINATED WITH INDIVIDUAL UTILITIES.
2. ALL ELECTRICAL CONDUIT AND STRUCTURES SHALL BE WATER TIGHT.

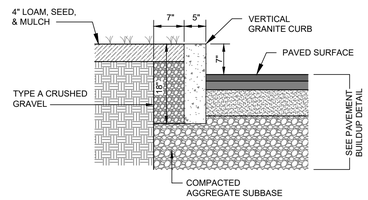
TYPICAL UNDERGROUND UTILITY TRENCH DETAIL

N.T.S.



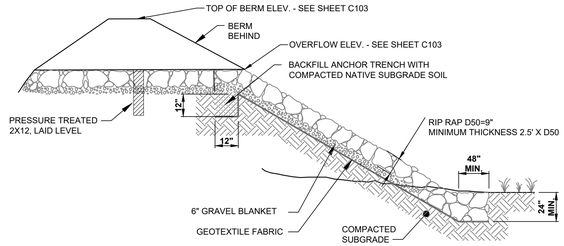
TYPICAL DRIVEWAY PAVING DETAIL

N.T.S.

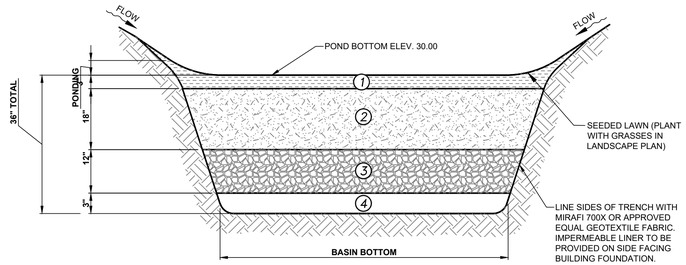


TYPICAL VERTICAL GRANITE CURB DETAIL (WHERE SHOWN)

N.T.S.



EMERGENCY SPILLWAY SECTION



RAIN GARDEN MEDIA		
①	MULCH/GROWING MEDIUM: GRASS SEED MIX A WITH LOAM	
②	SOIL FILTER LAYER: USE UNHSC BIORETENTION SOIL SPECIFICATIONS DATED FEBRUARY, 2017.20% – 30% MULCH BY VOLUME, MIXED THOROUGHLY WITH LOAMY, COARSE SAND (70% – 80% BY VOLUME) MEETING THE FOLLOWING GRADATION;	
	SIEVE NO.	% BY WEIGHT, PASSING
	4	100
	10	95
	40	10 – 25
	200	0 – 5
③	0.75"ø – 1.5"ø CRUSHED STONE, WASHED.	
④	⅜" PEA GRAVEL	

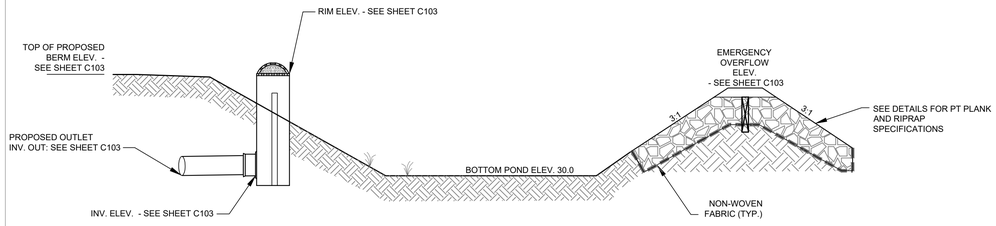
BIORETENTION MAINTENANCE

SOILS:
VISUALLY INSPECT AND REPAIR EROSION MONTHLY. USE SMALL STONES TO STABILIZE EROSION ALONG DRAINAGE PATHS. CHECK THE pH ONCE OR TWICE A YEAR. APPLY AN ALKALINE PRODUCT, SUCH AS LIMESTONE, IF NEEDED.

MULCH:
REMULCH ANY VOID AREAS BY HAND AS NEEDED. EVERY 6 MONTHS, IN THE SPRING AND FALL, ADD A FRESH MULCH LAYER. ONCE EVERY 2 TO 3 YEARS, IN THE SPRING, REMOVE OLD MULCH LATER BEFORE APPLYING NEW ONE.

PLANTS:
IMMEDIATELY AFTER THE COMPLETION OF CELL CONSTRUCTION, WATER GRASS COVERING FOR 14 CONSECUTIVE DAYS UNLESS THERE IS SUFFICIENT NATURAL RAINFALL. ONCE A MONTH (MORE FREQUENTLY IN SUMMER), VISUALLY INSPECT VEGETATION FOR DISEASE OR PEST PROBLEMS. IF TREATMENT IS WARRANTED, USE THE LEAST TOXIC APPROACH. TWICE A YEAR, FROM MARCH 15TH TO APRIL 30TH AND OCTOBER 1ST TO NOVEMBER 30TH, REMOVE AND REPLACE ALL DEAD AND DISEASED VEGETATION CONSIDERED BEYOND TREATMENT. DURING TIMES OF EXTENDED DROUGHT, LOOK FOR PHYSICAL FEATURES OF STRESS (UNREVIVED WILTING, YELLOW, SPOTTED OR BROWN PATCHES ETC.). WATER IN THE EARLY MORNING AS NEEDED. WEED REGULARLY, IF NEEDED.

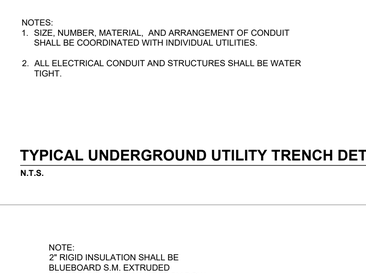
RAIN GARDEN SECTION



RAIN GARDEN PROFILE

RAIN GARDEN DETAIL

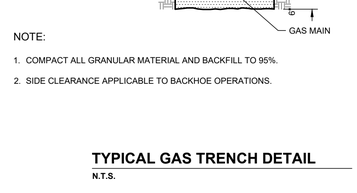
NTS



NOTES:
1. SIZE, NUMBER, MATERIAL, AND ARRANGEMENT OF CONDUIT SHALL BE COORDINATED WITH INDIVIDUAL UTILITIES.
2. ALL ELECTRICAL CONDUIT AND STRUCTURES SHALL BE WATER TIGHT.

TYPICAL UNDERGROUND UTILITY TRENCH DETAIL

N.T.S.

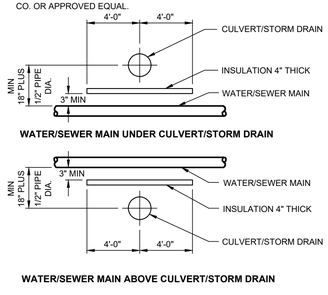


NOTE:
1. COMPACT ALL GRANULAR MATERIAL AND BACKFILL TO 95%.
2. SIDE CLEARANCE APPLICABLE TO BACKHOE OPERATIONS.

TYPICAL GAS TRENCH DETAIL

N.T.S.

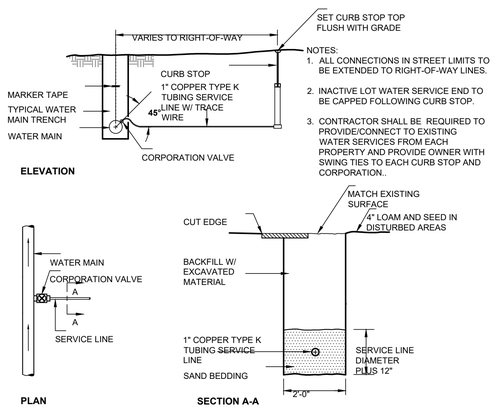
NOTE:
2" RIGID INSULATION SHALL BE BLUEBOARD S.M. EXTRUDED POLYSTYRENE, R-10 RATING BY DOW CO. OR APPROVED EQUAL



NOTES:
1. 2" RIGID INSULATION SHALL BE BLUEBOARD S.M. EXTRUDED POLYSTYRENE, R-10 RATING BY DOW CO. OR APPROVED EQUAL.
2. INSULATION TO BE 2 FEET WIDE FOR PIPES LESS THAN 6 INCHES IN DIAMETER AND 4 FEET WIDE FOR PIPES 6 INCHES IN DIAMETER AND LARGER, OR AS DIRECTED BY THE ENGINEER.

TYPICAL PIPE CROSSING INSULATION DETAIL

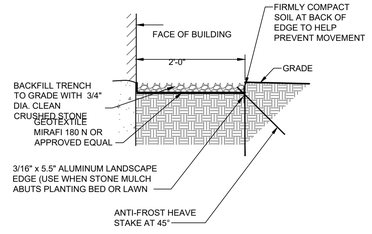
N.T.S.



NOTES:
1. ALL CONNECTIONS IN STREET LIMITS TO BE EXTENDED TO RIGHT-OF-WAY LINES.
2. INACTIVE LOT WATER SERVICE END TO BE CAPPED FOLLOWING CURB STOP.
3. CONTRACTOR SHALL BE REQUIRED TO PROVIDE/CONNECT TO EXISTING WATER SERVICES FROM EACH PROPERTY AND PROVIDE OWNER WITH SWING TIES TO EACH CURB STOP AND CORPORATION..

TYPICAL WATER SERVICE DETAIL

N.T.S.



NOTE:
EDGE TO BE BY SURE-LOC ALUMINUM EDGING CORP, OR APPROVED EQUAL.
- MILL FINISH
- 12" STAKES
- ANTI-FROST HEAVE STAKE POCKETS AT 8" O.C.

DRIP EDGE DETAIL

NTS

REV.	DATE	DESCRIPTION	BY	CHK.
0	2026.06.22	ISSUED FOR TAC REVIEW	SJR	SMT

DRAWING ISSUE STATUS

ISSUED FOR PERMITTING

HALEY WARD
WWW.HALEYWARD.COM
200 Griffin Rd., Unit 14
Portsmouth, New Hampshire 03801
603.430.9282

PROJECT

PROPOSED 3 LOT SUBDIVISION
20 CENTRAL AVENUE, PORTSMOUTH NH

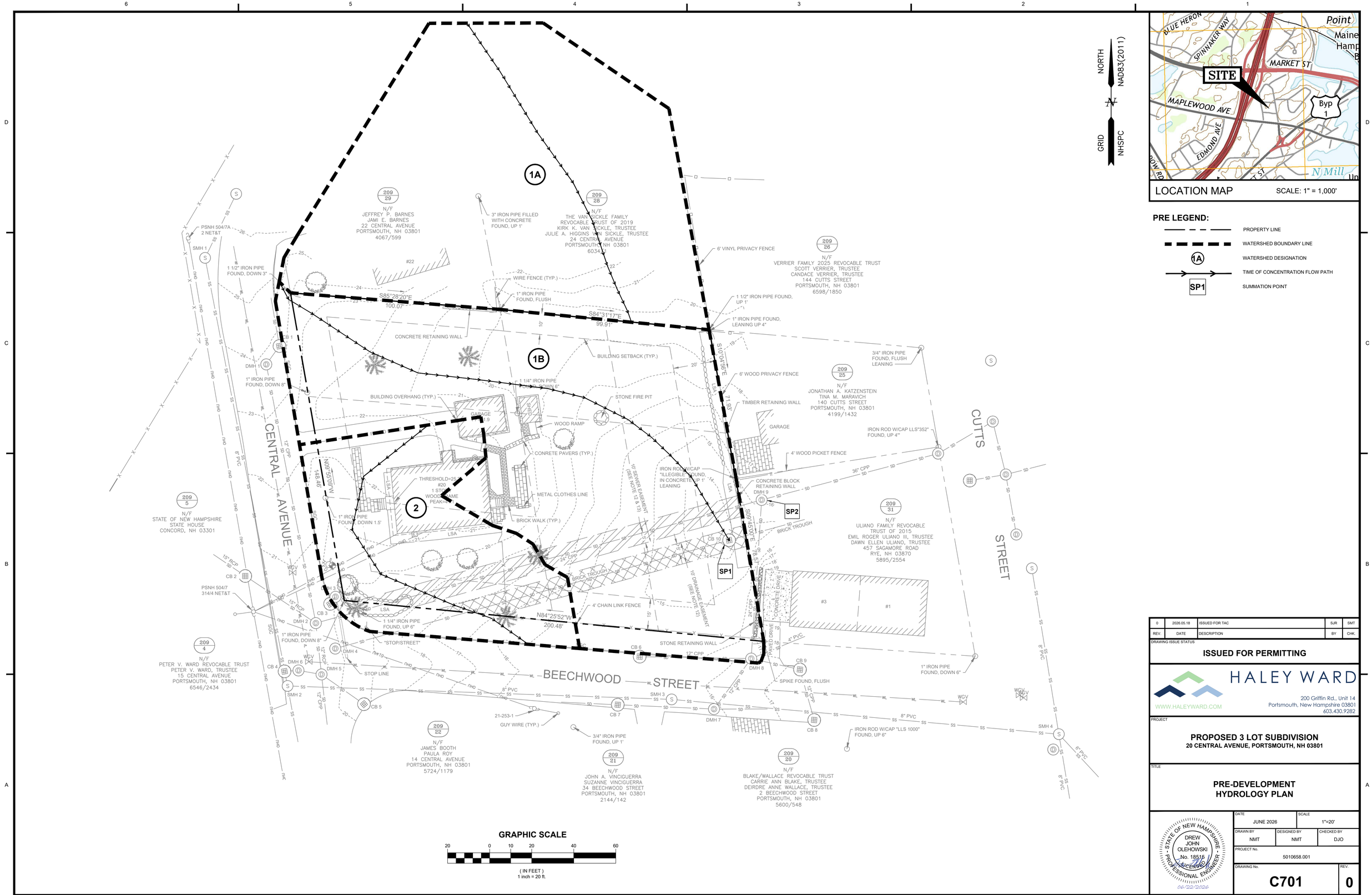
TITLE

SITE DETAILS

STATE OF NEW HAMPSHIRE · DREW JOHN OLEHOWSKI · No. 18515 · LICENSED PROFESSIONAL ENGINEER · 06/22/2026

DATE	SCALE
JUNE 2026	NTS
DRAWN BY: SJR	DESIGNED BY: NMT	CHECKED BY: DJO
PROJECT No.: 5010658.001	
DRAWING No.: C502	REV.: 0

FILE LOCATION: P:\NH\5010658-COPLEY, PROPERTIES\5001-25 CENTRAL AVE - PORTSMOUTH-SMT2\02-CAD_FILES\CIVIL\5010658.001-C-DST.DWG, 2026.06.22, 11:21 AM



REV.	DATE	DESCRIPTION	BY	CHK
0	2026.05.18	ISSUED FOR TAC	SJR	SMT

DRAWING ISSUE STATUS

ISSUED FOR PERMITTING

HALEY WARD
WWW.HALEYWARD.COM
200 Griffin Rd., Unit 14
Portsmouth, New Hampshire 03801
603.430.9282

PROJECT

PROPOSED 3 LOT SUBDIVISION
20 CENTRAL AVENUE, PORTSMOUTH, NH 03801

TITLE

PRE-DEVELOPMENT HYDROLOGY PLAN

STATE OF NEW HAMPSHIRE
DREW JOHN OLEHOWSKI
No. 18515
LICENSED
PROFESSIONAL ENGINEER
06/22/2026

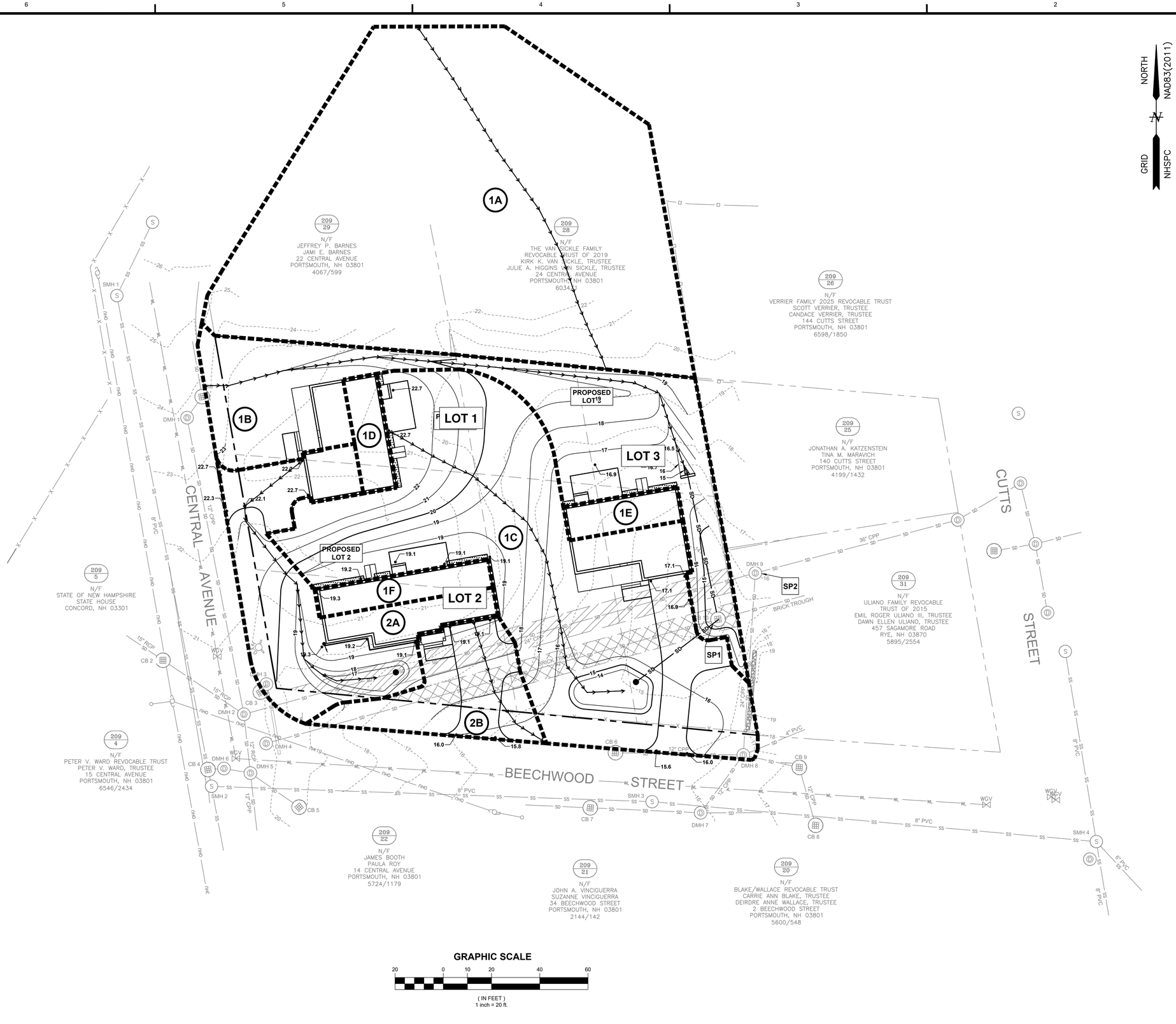
DATE	SCALE
JUNE 2026	1"=20'

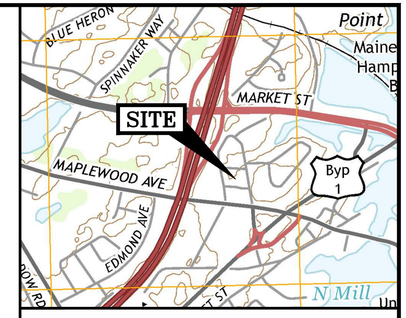
DRAWN BY	DESIGNED BY	CHECKED BY
NMT	NMT	DJO

PROJECT No. 5010658.001

DRAWING No. **C701** REV. **0**

FILE LOCATION: P:\MHS\10658-COPLEY_PROPERTIES\01-20 CENTRAL AVE, PORTSMOUTH-SMT\700-CAD_FILES\CIVIL\5010658.001-C-SP.DWG, 2026.06.22, 11:22 AM





LOCATION MAP SCALE: 1" = 1,000'

POST LEGEND:

- PROPERTY LINE
- WATERSHED BOUNDARY LINE
- 1A — WATERSHED DESIGNATION
- TIME OF CONCENTRATION FLOW PATH
- SP1 — SUMMATION POINT

GRAPHIC SCALE

20 0 10 20 40 60

(IN FEET)
1 inch = 20 ft.

REV.	DATE	DESCRIPTION	BY	CHK
0	2026.05.18	ISSUED FOR TAC	SJR	SMT

DRAWING ISSUE STATUS

ISSUED FOR PERMITTING

HALEY WARD
WWW.HALEYWARD.COM
200 Griffin Rd., Unit 14
Portsmouth, New Hampshire 03801
603.430.9282

PROJECT

PROPOSED 3 LOT SUBDIVISION
20 CENTRAL AVENUE, PORTSMOUTH, NH 03801

TITLE

PRE-DEVELOPMENT HYDROLOGY PLAN

STATE OF NEW HAMPSHIRE
DREW JOHN OLEHOWSKI
No. 18515
LICENSED PROFESSIONAL ENGINEER
06/22/2026

DATE	SCALE
APRIL 2026	1"=20'

DRAWN BY	DESIGNED BY	CHECKED BY
NMT	NMT	DJO

PROJECT No. 5010658.001

DRAWING No. **C702** REV. **0**

FILE LOCATION: P:\Hist\10658-COPLEY_PROPERTIES\01-20 CENTRAL AVE, PORTSMOUTH-SMT\2026\CAD_FILES\CIVIL\[10658.001-C-SP.DWG, 2026.06.22, 11:21 AM]

Ross Engineering, LLC
Civil / Structural Engineering
650 Islington Street, 2nd Floor **603-433-7560**
Portsmouth, NH 03801 **alexross@comcast.net**

238 Austin St
Subdivision Application
Project Description

June 22, 2026

This subdivision application is for dividing a single "S" shaped parcel with double frontage on Austin Street and Coffins Court into two separate lots, one on Austin St and one on Coffins Ct. Tax Map 135, Lot 61 is a fully developed 6,384 SF parcel that includes an existing house and shed on Austin St and a large abandoned and dilapidated barn on Coffins Ct. A new lot line is proposed at a point between Austin St and Coffins Ct where the property necks down to create two lots.

The existing house and shed on the proposed Austin St lot are proposed to be demolished and a new house with attached garage is proposed in their place. A paver driveway is proposed next to the garage to allow for 2 parking spaces. Existing overhead utility and underground sewer and water lines are connected to the existing house. These existing connections will be utilized to the extent possible for the new house. Contractor to coordinate with DPW and Utility Companies to ensure all proper connections are made.

The barn on the proposed Coffins Ct lot is proposed to be demolished and a new house with attached garage is proposed in its place. An asphalt driveway is proposed next to the garage to allow for 2 parking spaces. There is a 6" PVC sewer line in Coffins Ct that has a cleanout on the parcel. A new sewer line is proposed to connect the house to this cleanout. A new water line is proposed to connect to the 2" Copper Water Main in Coffins Ct. New overhead utilities are proposed to connect to the Utility Pole on the north side of Coffins Ct. Contractor to coordinate with DPW and Utility Companies to ensure all proper connections are made.

Variances for each lot were necessary and obtained from the Portsmouth Zoning Board of Adjustment at its meeting on February 18, 2026. Variances obtained are listed below.

Proposed Austin St Lot

A) Allow a frontage of 49.75' where 70' is required.
B) Allow an 8.5' right side yard where 10' is required.

Proposed Coffins Ct Lot

A) Allow a 2,884 SF Lot Area where 3,500 SF is required.
B) Allow a 2,884 SF Lot Area per dwelling unit where 3,500 SF is required.
C) Allow a 5.5' side yard where 10' is required.
D) Allow an 18' rear yard where 20' is required.

The existing site is fully developed, and the end result of all the improvements will be two new lots without two frontages and two new structures which offer an improvement over the existing.

Sincerely,

Alex Ross, P.E.

Partial Legend

See the cover sheet for the complete legend.

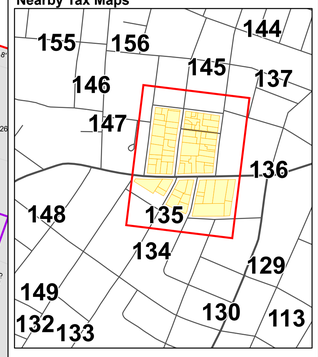
- **7-5A** Lot or lot-unit number
- *2.56 ac* Parcel area in acres (ac) or square feet (sf)
- Address number
- 233-137 Parcel number from a neighboring map
- 68' Parcel line dimension
- SIMS AVE Street name
- Parcel/Parcel boundary
- Parcel/ROW boundary
- Water boundary
- Structure (1994 data)
- Parcel covered by this map
- Parcel from a neighboring map (see other map for current status)

0 50 100 Feet

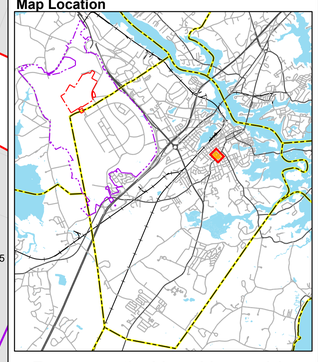
0 20 40 Meters

This map is for assessment purposes only. It is not intended for legal description or conveyance.
Parcels are mapped as of April 1.
Building footprints are 2006 data and may not represent current structures.
Streets appearing on this map may be paper (unbuilt) streets.
Lot numbers take precedence over address numbers. Address numbers shown on this map may not represent posted or legal addresses.

Nearby Tax Maps



Map Location



Portsmouth, New Hampshire
2025

Tax Map 135

Ross Engineering, LLC
Civil / Structural Engineering
650 Islington Street, 2nd Floor
Portsmouth, NH 03801
603-433-7560
alexross@comcast.net

Photo 1 – View of the front of the existing house on Austin St looking to the south. (9/3/2025)

Photo 2 – View of rear of the existing house on Austin St looking to the north. (9/18/2025)

Ross Engineering, LLC
Civil / Structural Engineering
650 Islington Street, 2nd Floor
Portsmouth, NH 03801
603-433-7560
alexross@comcast.net

Photo 3 – View of existing shed on Austin St property looking to the south (9/3/2025)

Photo 4 – View of existing barn on Coffins Ct looking to the northeast. (9/3/2025)

Ross Engineering, LLC
Civil / Structural Engineering
650 Islington Street, 2nd Floor
Portsmouth, NH 03801
603-433-7560
alexross@comcast.net

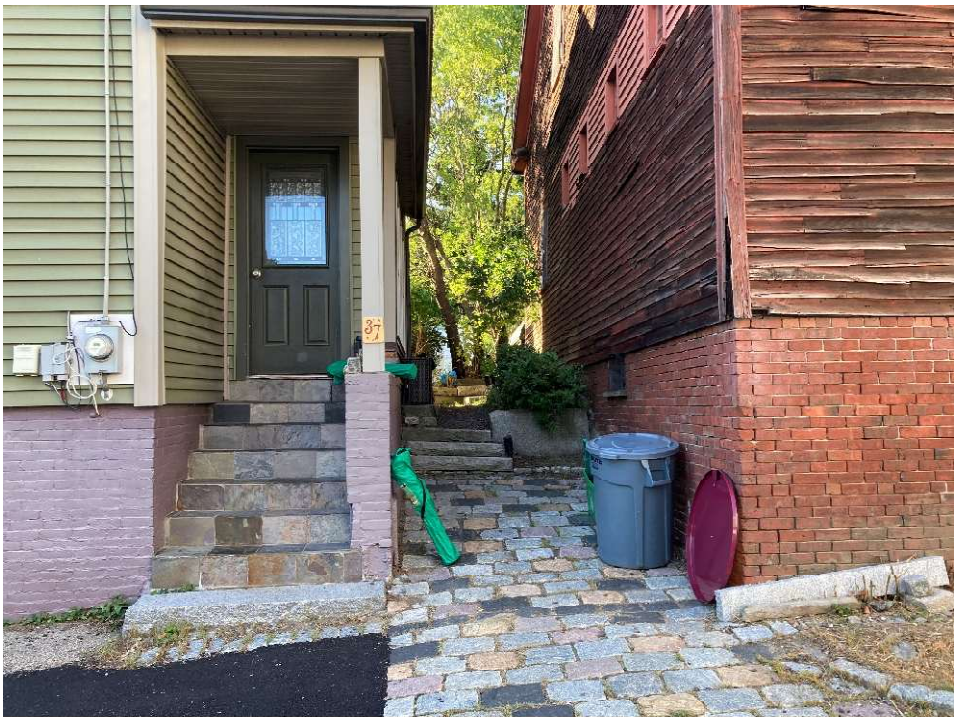


Photo 5 – View of left side of existing barn on Coffins Ct looking to the north. (9/3/2025)

Photo 6 – View of the rear of existing barn on Coffins Ct looking to the east. (9/3/2025)

City of Portsmouth, New Hampshire

Subdivision Application Checklist

This subdivision application checklist is a tool designed to assist the applicant in the planning process and for preparing the application for Planning Board review. A pre-application conference with a member of the planning department is strongly encouraged as additional project information may be required depending on the size and scope. The applicant is cautioned that this checklist is only a guide and is not intended to be a complete list of all subdivision review requirements. Please refer to the Subdivision review regulations for full details.

Applicant Responsibilities (Section III.C): Applicable fees are due upon application submittal along with required number of copies of the Preliminary or final plat and supporting documents and studies. Please consult with Planning staff for submittal requirements.

Owner: Alea LLC Date Submitted: 6/22/2026

Applicant: Ross Engineering, LLC

Phone Number: 603-433-7560 E-mail: alexross@comcast.net

Site Address 1: 238 Austin St Map: 135 Lot: 61

Site Address 2: _____ Map: _____ Lot: 61

Application Requirements			
☑	**Required Items for Submittal**	**Item Location (e.g. Page or Plan Sheet/Note #)**	**Waiver Requested**
☑	Completed Application form. **(III.C.2-3)**	LU-25-177	N/A
☑	All application documents, plans, supporting documentation and other materials provided in digital Portable Document Format (PDF) on compact disc, DVD or flash drive. **(III.C.4)**	Uploaded to Online Application in Viewpoint	N/A

Requirements for Preliminary/Final Plat				
☑	**Required Items for Submittal**	**Item Location (e.g. Page/line or Plan Sheet/Note #)**	**Required for Preliminary / Final Plat**	**Waiver Requested**
☑	Name and address of record owner, any option holders, descriptive name of subdivision, engineer and/or surveyor or name of person who prepared the plat. **(Section IV.1/V.1)**	Cover Sheet	☑ Preliminary Plat ☑ Final Plat	N/A

Requirements for Preliminary/Final Plat				
☑	**Required Items for Submittal**	**Item Location (e.g. Page/line or Plan Sheet/Note #)**	**Required for Preliminary / Final Plat**	**Waiver Requested**
☑	**Preliminary Plat** Names and addresses of all adjoining property owners. **(Section IV.2)** **Final Plat** Names and addresses of all abutting property owners, locations of buildings within one hundred (100) feet of the parcel, and any new house numbers within the subdivision. **(Section V.2)**	Drawings 1 & 2 "Existing Conditions Plan" & "Subdivision Plan"	☑ Preliminary Plat ☑ Final Plat	N/A
☑	North point, date, and bar scale. **(Section IV.3/V3)**	Required on all Plan Sheets	☑ Preliminary Plat ☑ Final Plat	N/A
☑	Zoning classification and minimum yard dimensions required. **(Section IV.4/V.4)**	Drawings 1 & 2 "Existing Conditions Plan" & "Subdivision Plan"	☑ Preliminary Plat ☑ Final Plat	N/A
☑	**Preliminary Plat** Scale (not to be smaller than one hundred (100) feet = 1 inch) and location map (at a scale of 1" = 1000'). **(Section IV.5)** **Final Plat** Scale (not to be smaller than 1"=100'), Location map (at a scale of 1"=1,000') showing the property being subdivided and its relation to the surrounding area within a radius of 2,000 feet. Said location map shall delineate all streets and other major physical features that my either affect or be affected by the proposed development. **(Section V.5)**	Drawings 1 & 2 "Existing Conditions Plan" & "Subdivision Plan"	☑ Preliminary Plat ☑ Final Plat	N/A
☑	Location and approximate dimensions of all existing and proposed property lines including the entire area proposed to be subdivided, the areas of proposed lots, and any adjacent parcels in the same ownership. **(Section IV.6)**	Drawings 1 & 2 "Existing Conditions Plan" & "Subdivision Plan"	☑ Preliminary Plat ☑ Final Plat	
☑	Dimensions and areas of all lots and any and all property to be dedicated or reserved for schools, parks, playgrounds, or other public purpose. Dimensions shall include radii and length of all arcs and calculated bearing for all straight lines. **(Section V.6/ IV.7)**	Drawings 1 & 2 "Existing Conditions Plan" & "Subdivision Plan"	☑ Preliminary Plat ☑ Final Plat	N/A
☑	Location, names, and present widths of all adjacent streets, with a designation as to whether public or private and approximate location of existing utilities to be used. Curbs and sidewalks shall be shown. **(Section IV.8/V.7)**	Drawings 1 & 2 "Existing Conditions Plan" & "Subdivision Plan"	☑ Preliminary Plat ☑ Final Plat	

Requirements for Preliminary/Final Plat				
☑	**Required Items for Submittal**	**Item Location (e.g. Page/line or Plan Sheet/Note #)**	**Required for Preliminary / Final Plat**	**Waiver Requested**
☑	Location of significant physical features, including bodies of water, watercourses, wetlands, railroads, important vegetation, stone walls and soils types that my influence the design of the subdivision. **(Section IV.9/V.8)**	No significant physical features. Site is fully developed.	☑ Preliminary Plat ☑ Final Plat	
☑	**Preliminary Plat** Proposed locations, widths and other dimensions of all new streets and utilities, including water mains, storm and sanitary sewer mains, catch basins and culverts, street lights, fire hydrants, sewerage pump stations, etc. **(Section IV.10)** **Final Plat** Proposed locations and profiles of all proposed streets and utilities, including water mains, storm and sanitary sewer mains, catchbasins and culverts, together with typical cross sections. Profiles shall be drawn to a horizontal scale of 1"=50' and a vertical scale of 1"=5', showing existing centerline grade, existing left and right sideline grades, and proposed centerline grade. **(Section V.9)**	Drawing 2 "Subdivision Plan"	☑ Preliminary Plat ☑ Final Plat	
☑	When required by the Board, the plat shall be accompanied by profiles of proposed street grades, including extensions for a reasonable distance beyond the subject land; also grades and sizes of proposed utilities. **(Section IV.10)**	No proposed streets	☑ Preliminary Plat ☑ Final Plat	
☑	Base flood elevation (BFE) for subdivisions involving greater than five (5) acres or fifty (50) lots. **(Section IV.11)**	<5 Acres, <50 Lots, Not in a FEMA SFHA	☑ Preliminary Plat ☑ Final Plat	
☑	For subdivisions of five (5) lots or more, or at the discretion of the Board otherwise, the preliminary plat shall show contours at intervals no greater than two (2) feet. Contours shall be shown in dotted lines for existing natural surface and in solid lines for proposed final grade, together with the final grade elevations shown in figures at all lot corners. If existing grades are not to be changed, then the contours in these areas shall be solid lines. **(Section IV.12/ V.12)**	<5 Lots	☑ Preliminary Plat ☑ Final Plat	

Requirements for Preliminary/Final Plat				
☑	**Required Items for Submittal**	**Item Location (e.g. Page/line or Plan Sheet/Note #)**	**Required for Preliminary / Final Plat**	**Waiver Requested**
☑	Dates and permit numbers of all necessary permits from governmental agencies from which approval is required by Federal or State law. **(Section V.10)**	No State or Federal Permits required	☐ Preliminary Plat ☑ Final Plat	
☑	For subdivisions involving greater than five (5) acres or fifty (50) lots, the final plat shall show hazard zones and shall include elevation data for flood hazard zones. **(Section V.11)**	<5 Acres & <50 Lots	☐ Preliminary Plat ☑ Final Plat	
☑	Location of all permanent monuments. **(Section V.12)**	Drawing 1 "Existing Conditions Plan"	☐ Preliminary Plat ☑ Final Plat	

General Requirements[1]			
☑	**Required Items for Submittal**	**Item Location (e.g. Page/line or Plan Sheet/Note #)**	**Waiver Requested**
✓	**1. Basic Requirements: (VI.1)**	Drawing 2 "Subdivision Plan"	
✓	a. Conformity to Official Plan or Map		
✓	b. Hazards		
✓	c. Relation to Topography		
✓	d. Planned Unit Development		
✓	**2. Lots: (VI.2)**	Drawing 2 "Subdivision Plan", Note 4 for ZBA Approvals regarding Lot Size and Frontage	
✓	a. Lot Arrangement		
✓	b. Lot sizes		
✓	c. Commercial and Industrial Lots		
✓	**3. Streets: (VI.3)**	N/A - No Proposed Streets	
✓	a. Relation to adjoining Street System		
✓	b. Street Rights-of-Way		
✓	c. Access		
✓	d. Parallel Service Roads		
✓	e. Street Intersection Angles		
✓	f. Merging Streets		
✓	g. Street Deflections and Vertical Alignment		
✓	h. Marginal Access Streets		
✓	i. Cul-de-Sacs		
✓	j. Rounding Street Corners		
✓	k. Street Name Signs		
✓	l. Street Names		
✓	m. Block Lengths		
✓	n. Block Widths		
✓	o. Grade of Streets		
✓	p. Grass Strips		
✓	**4. Curbing: (VI.4)**	N/A - No Proposed Streets	
✓	**5. Driveways: (VI.5)**	Drawing 2 "Subdivision Plan" - Note 10	
✓	**6. Drainage Improvements: (VI.6)**		Yes
✓	**7. Municipal Water Service: (VI.7)**	Drawing 2 "Subdivision Plan" - Notes 7 & 8	
✓	**8. Municipal Sewer Service: (VI.8)**	Drawing 2 "Subdivision Plan" - Notes 7 & 8	
✓	**9. Installation of Utilities: (VI.9)**	Drawing 2 "Subdivision Plan" - Note 9	
✓	a. All Districts		
✓	b. Indicator Tape		
✓	**10. On-Site Water Supply: (VI.10)**	N/A - Municipal Water	
✓	**11. On-Site Sewage Disposal Systems: (VI.11)**	N/A - Municipal Sewer	
✓	**12. Open Space: (VI.12)**	N/A - Fully Developed	
✓	a. Natural Features		
✓	b. Buffer Strips		
✓	c. Parks		
✓	d. Tree Planting		
✓	**13. Flood Hazard Areas: (VI.13)**	N/A - Not in a FEMA SFHA, See Drawing 1 "Existing Conditions Plan" - Note 4	
✓	a. Permits		
✓	b. Minimization of Flood Damage		
✓	c. Elevation and Flood-Proofing Records		
✓	d. Alteration of Watercourses		
✓	**14. Erosion and Sedimentation Control (VI.14)**	Drawing 3 "Site Plan" - Siltsack Detail	

☑	Required Items for Submittal	Item Location (e.g. Page/line or Plan Sheet/Note #)	Waiver Requested
✓ ✓ ✓	**15. Easements (VI.15)** a. Utilities b. Drainage	N/A	
✓	**16. Monuments: (VI.16)**	Drawing 2 "Subdivision Plan"	
✓	**17. Benchmarks: (VI.17)**	N/A - No proposed streets	
✓	**18. House Numbers (VI.18)**	House Numbers to be provided by City Assessing	

Design Standards			
	Required Items for Submittal	**Indicate compliance and/or provide explanation as to alternative design**	**Waiver Requested**
✓	**1. Streets have been designed according to the design standards required under Section (VII.1).** a. Clearing b. Excavation c. Rough Grade and Preparation of Sub-Grade d. Base Course e. Street Paving f. Side Slopes g. Approval Specifications h. Curbing i. Sidewalks j. Inspection and Methods	N/A - No proposed streets	
✓	**2. Storm water Sewers and Other Drainage Appurtenances have been designed according to the design standards required under Section (VII.2).** a. Design b. Standards of Construction	N/A	
✓	**3. Sanitary Sewers have been designed according to the design standards required under Section (VII.3).** a. Design b. Lift Stations c. Materials d. Construction Standards	N/A	
✓	**4. Water Mains and Fire Hydrants have been designed according to the design standards required under Section (VII.4).** a. Connections to Lots b. Design and Construction c. Materials d. Notification Prior to Construction	N/A	

Applicant's/Representative's Signature: _____ **Date:** 6/22/2026

[1] See City of Portsmouth, NH Subdivision Rules and Regulations for details.

Ross Engineering
Civil/Structural Engineering & Surveying

650 Islington Street, 2nd Floor **603-433-7560**
Portsmouth, NH 03801 **alexross@comcast.net**

June 22, 2026

City of Portsmouth Planning Department
1 Jenkins Avenue
Portsmouth, NH 03801

Waiver Request Letter

Re: 238 Austin St
Tax Map 135, Lot 61
Portsmouth, NH 03801

Planning Board Members, we are requesting waivers to the regulations listed below.

1) ***VI.6 Drainage Improvements****:*
The parcels are developed, and have been for many years. The lot coverage on site decreases resulting in less runoff.

Thank you for your consideration.

Sincerely,

Alex Ross, P.E., LLS

RIGHT SIDE ELEVATION

1/4"=1'-0"

REAR ELEVATION

1/4"=1'-0"

LEFT SIDE ELEVATION

1/4"=1'-0"

FRONT ELEVATION

1/4"=1'-0"

1. THESE PLANS ARE BUILT TO FOLLOW THE IRC 2021 BUILDING CODE AND STATE FIRE CODE AS ADMINISTERED BY THE TOWN OF PORTSMOUTH, NH.

2. ALL DIMENSIONS ARE FRAMING DIMENSIONS, CONTRACTOR SHALL VERIFY ALL DIMENSIONS PRIOR TO EXCAVATION.

3. DO NOT SCALE DRAWING, WRITTEN DIMENSIONS TAKE PRECEDENCE OVER SCALED DIMENSIONS.

AUSTIN STREET

PROJECT:
238 Austin Street (Coffins Ct.) ZBA
Portsmouth, NH 03801

E-mail: tech-ill2@comcast.net
Phone: 603-964-1300
Fax: 603-580-1414

Technical Illustrations
ARCHITECTURAL DRAFTING SERVICE
196 Bunker Hill Ave. Stratham, NH 03885

DATE: 6-17-26
REVISED:
DWG. NO. 1

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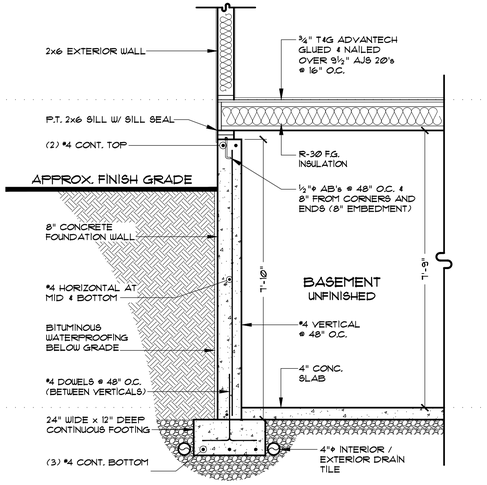
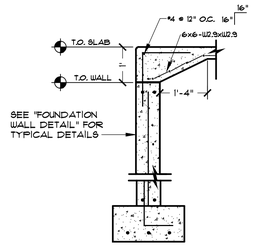


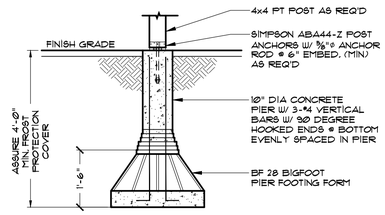
FOUNDATION WALL DETAIL

½" = 1'-Ø"



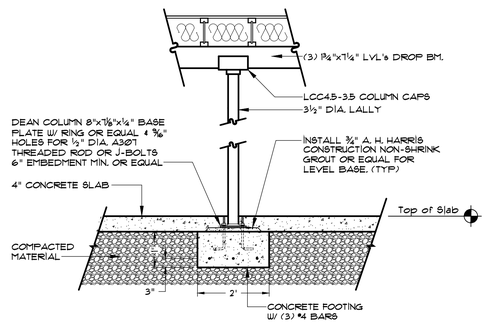
DETAIL @ GARAGE DOOR

½" = 1'-Ø"



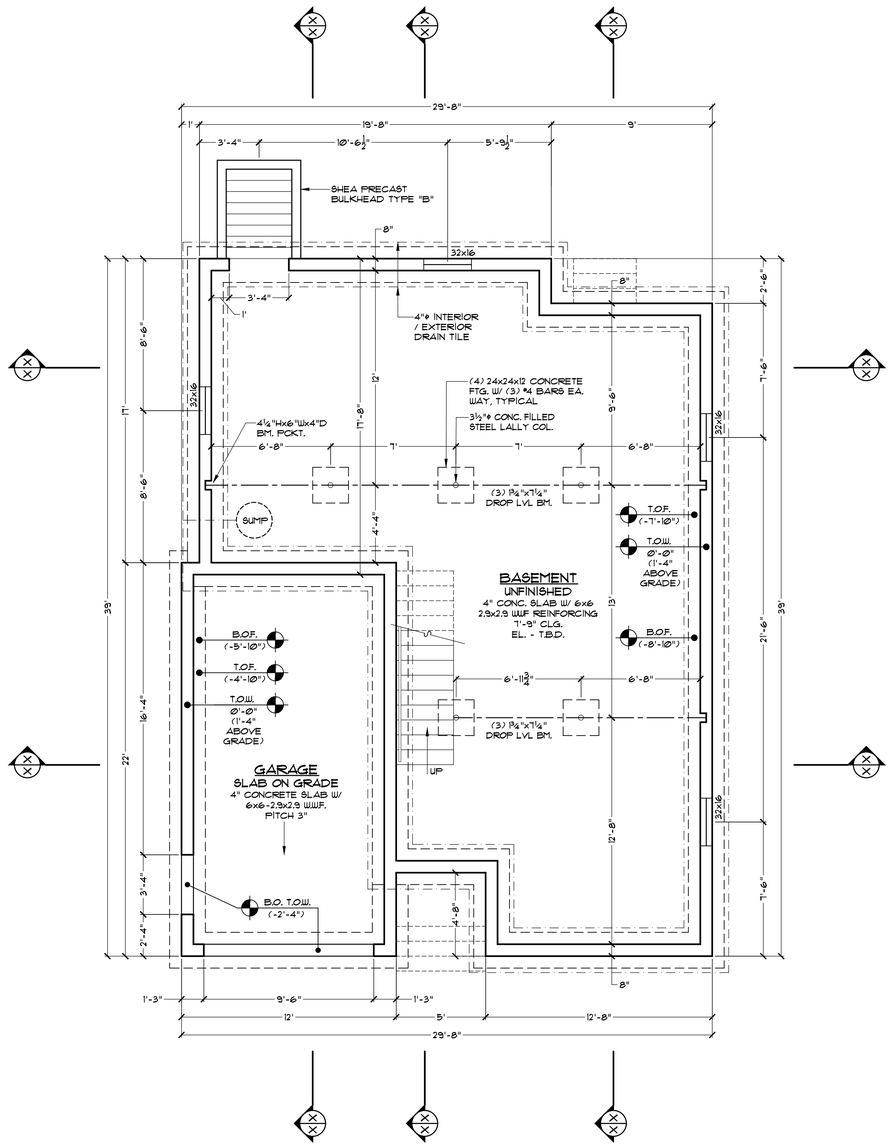
PIER DETAIL

½" = 1'-Ø"



LALLY TO FOOTING CONN. DETAIL

½" = 1'-Ø"



AUSTIN STREET

FOUNDATION PLAN

¼" = 1'-Ø"

GENERAL NOTE:

THESE PLANS ARE BUILT TO FOLLOW THE IRC 2021 BUILDING CODE AND STATE FIRE CODE AS ADMINISTERED BY THE TOWN OF RYE, NH.

FIRE PREVENTION PLAN

- (S) SMOKE DETECTOR
- (S/CO) SMOKE / CARBON MONOXIDE DETECTOR
- (H) HEAT DETECTOR

FOUNDATION NOTES:

1. FOOTINGS: 24"x12"xCONTINUOUS W/ 3-#4 REBAR HORIZONTAL & 1-#4 (24") REBAR VERT. W/ 6" EMBEDMENT @ 24" O.C.

2. INSTALL REBAR TO FOOTING AND WALLS IN ACCORDANCE WITH ALL CURRENT & PREVAILING CODES

3. WALLS:
8" CONCRETE WALL: #4 VERTICALS 4'-Ø" O.C., (2) #4 CONT. HOR. AT TOP, W/ (1) #4 HOR. @ ⅓ POINTS

4. CONCRETE MIX - 3000 PSI

5. ANCHOR BOLTS ½" x 12" @ 4'-Ø" O.C., 8" FROM CORNERS & ENDS W/ 2x6 P.T. SILLS W/ SILL SEAL

6. WHEN FORMING THE CONC. WALL OFF OF LEDGE, WALL MUST BE PINNED TO LEDGE W/ #5 REBAR, 24" O.C.

7. PERIMETER DRAINS TO BE 4" PERFORATED WITH CRUSHED STONE AND FILTER FABRIC. INTERIOR DRAINS TO BE 4" PERFORATED PIPE CONNECTED TO PERIMETER DRAIN TILE CONNECTED TO SUMP PUMP AND DISCHARGED TO POSITIVE OUTFALL.

PROJECT:
238 Austin Street (Coffins Ct.) ZBA
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196 Bunker Hill Ave.
Stratham, NH 03885

DATE: 6-17-26
REVISED:
DWG. NO. 2

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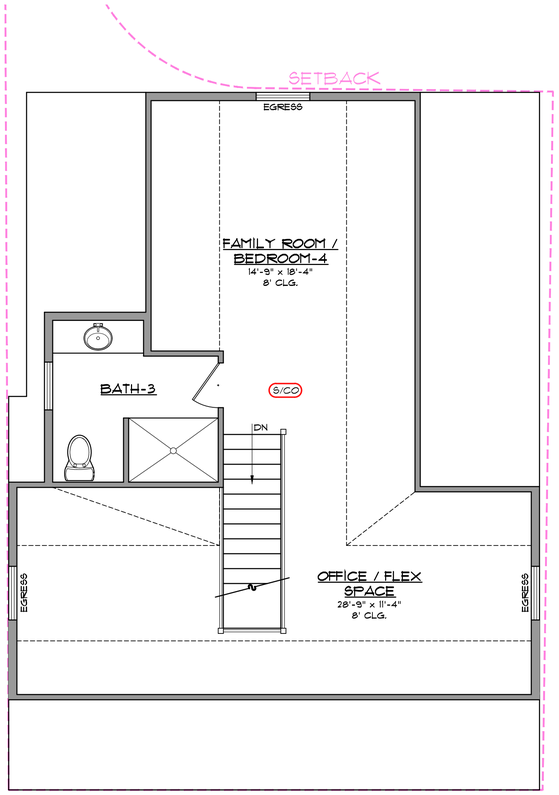
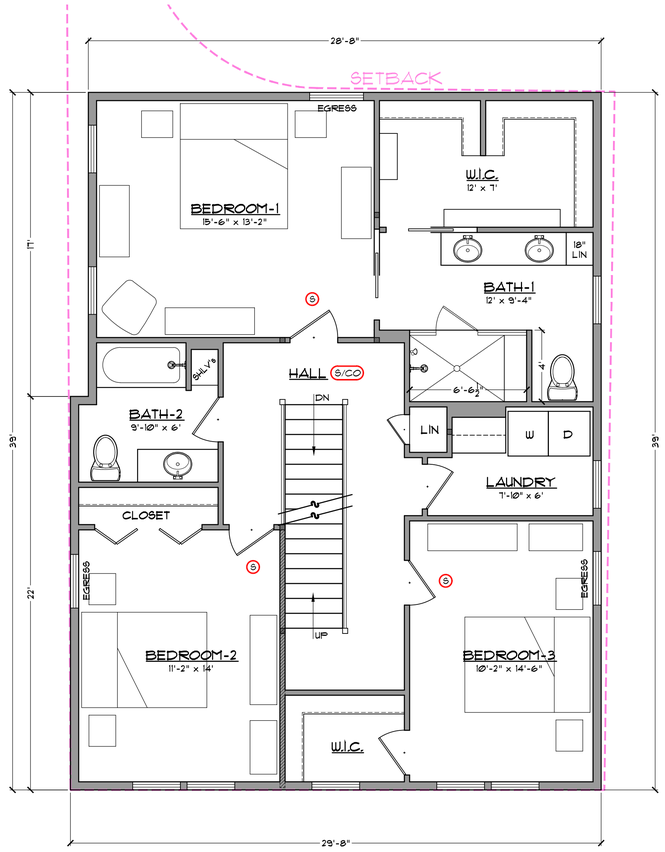


THIRD FLOOR PLAN

1/4"=1'-0"

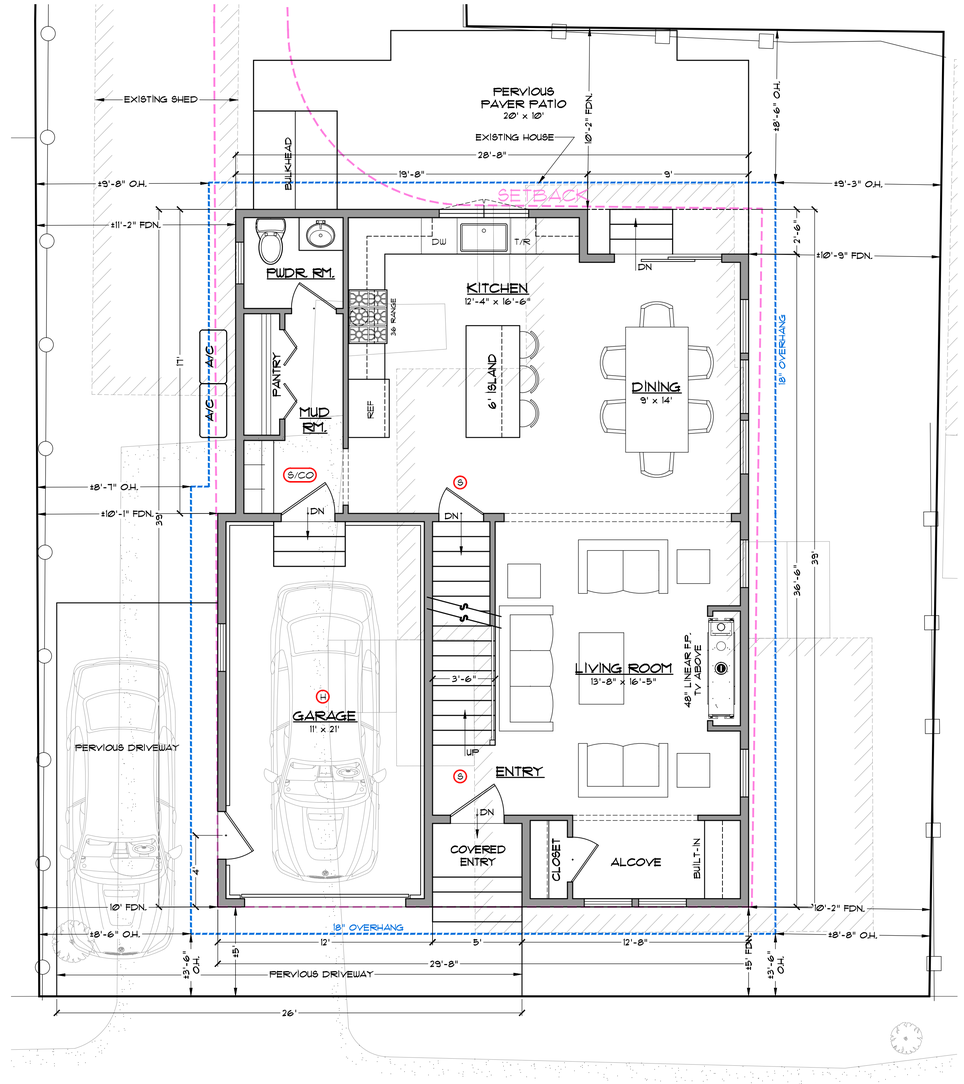
HEATED = 712 S.F.



SECOND FLOOR PLAN

1/4"=1'-0"

HEATED = 1,100 S.F.



FIRST FLOOR PLAN

1/4"=1'-0"

HEATED = 843 S.F.
GARAGE = 250 S.F.

S.F. TOTALS	
FIRST FLOOR	= 843 S.F.
SECOND FLOOR	= 1,100 S.F.
THIRD FLOOR	= 712 S.F.
TOTAL	= 2,655 S.F.

EXISTING IMPERVIOUS COVERAGE = 1,432 S.F.
PROPOSED IMPERVIOUS COVERAGE 1,374 S.F.

FIRE PREVENTION PLAN

- (S) SMOKE DETECTOR
- (S/CO) SMOKE / CARBON MONOXIDE DETECTOR
- (H) HEAT DETECTOR

1. THESE PLANS ARE BUILT TO FOLLOW THE IRC 2021 BUILDING CODE AND STATE FIRE CODE AS ADMINISTERED BY THE TOWN OF PORTSMOUTH, NH.

2. ALL DIMENSIONS ARE FRAMING DIMENSIONS, CONTRACTOR SHALL VERIFY ALL DIMENSIONS PRIOR TO EXCAVATION.

3. DO NOT SCALE DRAWING, WRITTEN DIMENSIONS TAKE PRECEDENCE OVER SCALED DIMENSIONS.

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C:\TI-INC\2025\Austin Street\80

RIGHT SIDE ELEVATION

1/4"=1'-0"

REAR ELEVATION

1/4"=1'-0"

LEFT SIDE ELEVATION

1/4"=1'-0"

FRONT ELEVATION

1/4"=1'-0"

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2. ALL DIMENSIONS ARE FRAMING DIMENSIONS, CONTRACTOR SHALL VERIFY ALL DIMENSIONS PRIOR TO EXCAVATION.

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COFFINS COURT

PROJECT:
238 Austin Street (Coffins Ct.) ZBA
Portsmouth, NH 03801

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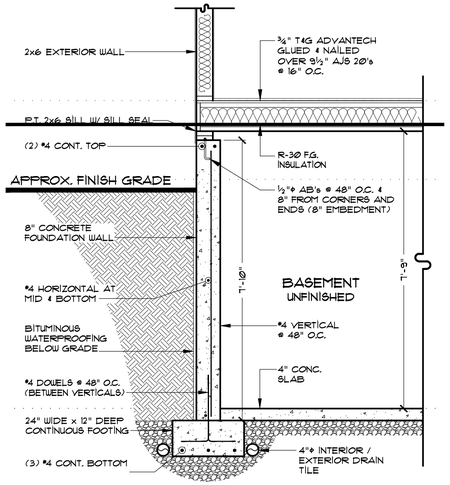
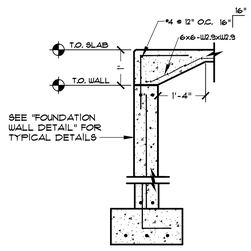


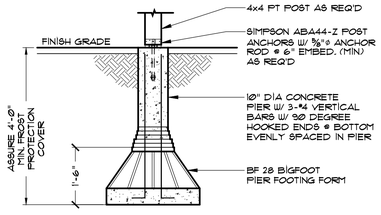
FOUNDATION WALL DETAIL

1/2" = 1'-0"



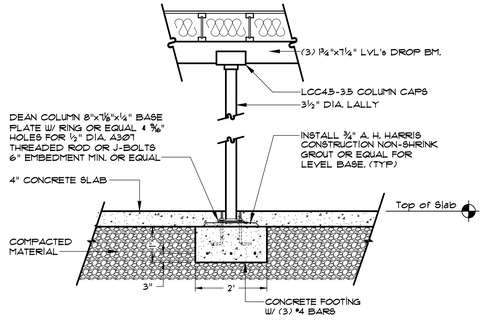
DETAIL @ GARAGE DOOR

1/2" = 1'-0"



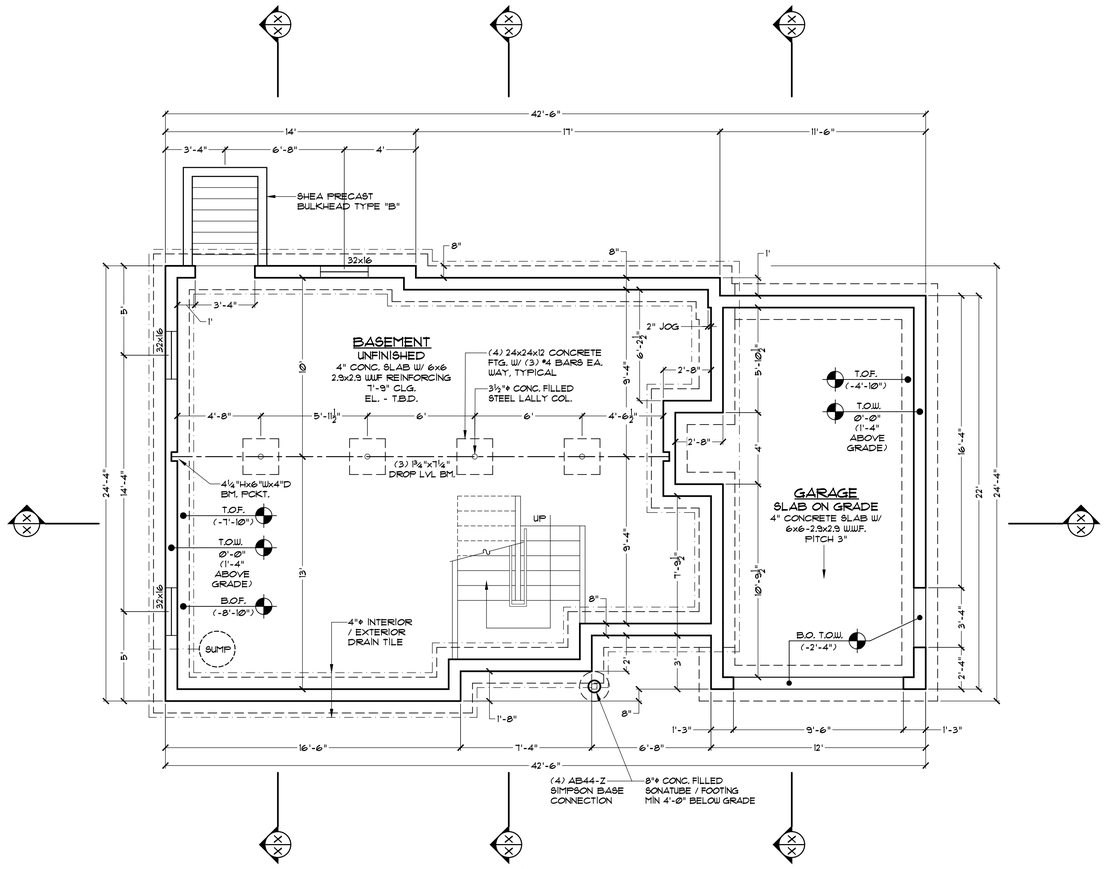
PIER DETAIL

1/2" = 1'-0"



LALLY TO FOOTING CONN. DETAIL

1/2" = 1'-0"



COFFINS COURT

FOUNDATION PLAN

1/4" = 1'-0"

GENERAL NOTE:

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FIRE PREVENTION PLAN

- (S) SMOKE DETECTOR
- (S/CO) SMOKE / CARBON MONOXIDE DETECTOR
- (H) HEAT DETECTOR

FOUNDATION NOTES:

1. FOOTINGS: 24"x12"xCONTINUOUS W/ 3-#4 REBAR HORIZONTAL & 1-#4 (24") REBAR VERT. W/ 6" EMBEDMENT @ 24" O.C.

2. INSTALL REBAR TO FOOTING AND WALLS IN ACCORDANCE WITH ALL CURRENT & PREVAILING CODES

3. WALLS: 8" CONCRETE WALL: #4 VERTICALS 4'-0" O.C., (2) #4 CONT. HOR. AT TOP, W/ (1) #4 HOR. @ ⅓ POINTS

4. CONCRETE MIX - 3000 PSI

5. ANCHOR BOLTS ½" x 12" @ 4'-0" O.C., 8" FROM CORNERS & ENDS W/ 2x6 P.T. SILLS W/ SILL SEAL

6. WHEN FORMING THE CONC. WALL OFF OF LEDGE, WALL MUST BE PINNED TO LEDGE W/ #5 REBAR, 24" O.C.

7. PERIMETER DRAINS TO BE 4" PERFORATED WITH CRUSHED STONE AND FILTER FABRIC. INTERIOR DRAINS TO BE 4" PERFORATED PIPE CONNECTED TO PERIMETER DRAIN TILE CONNECTED TO SUMP PUMP AND DISCHARGED TO POSITIVE OUTFALL.

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196 Bunker Hill Ave.
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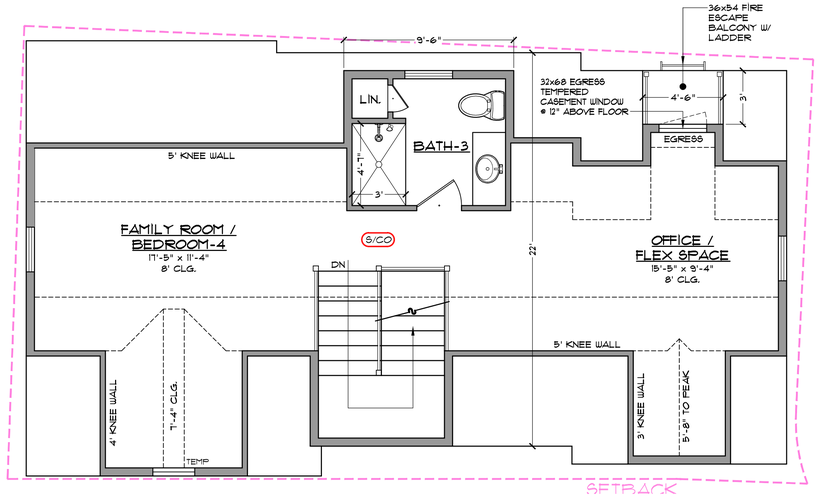
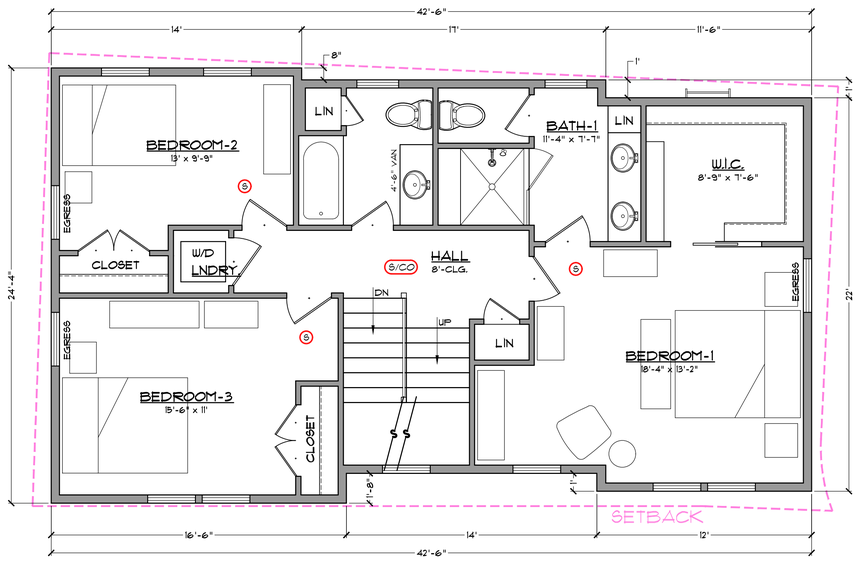


THIRD FLOOR PLAN

1/4"=1'-0"

HEATED = 600 S.F.

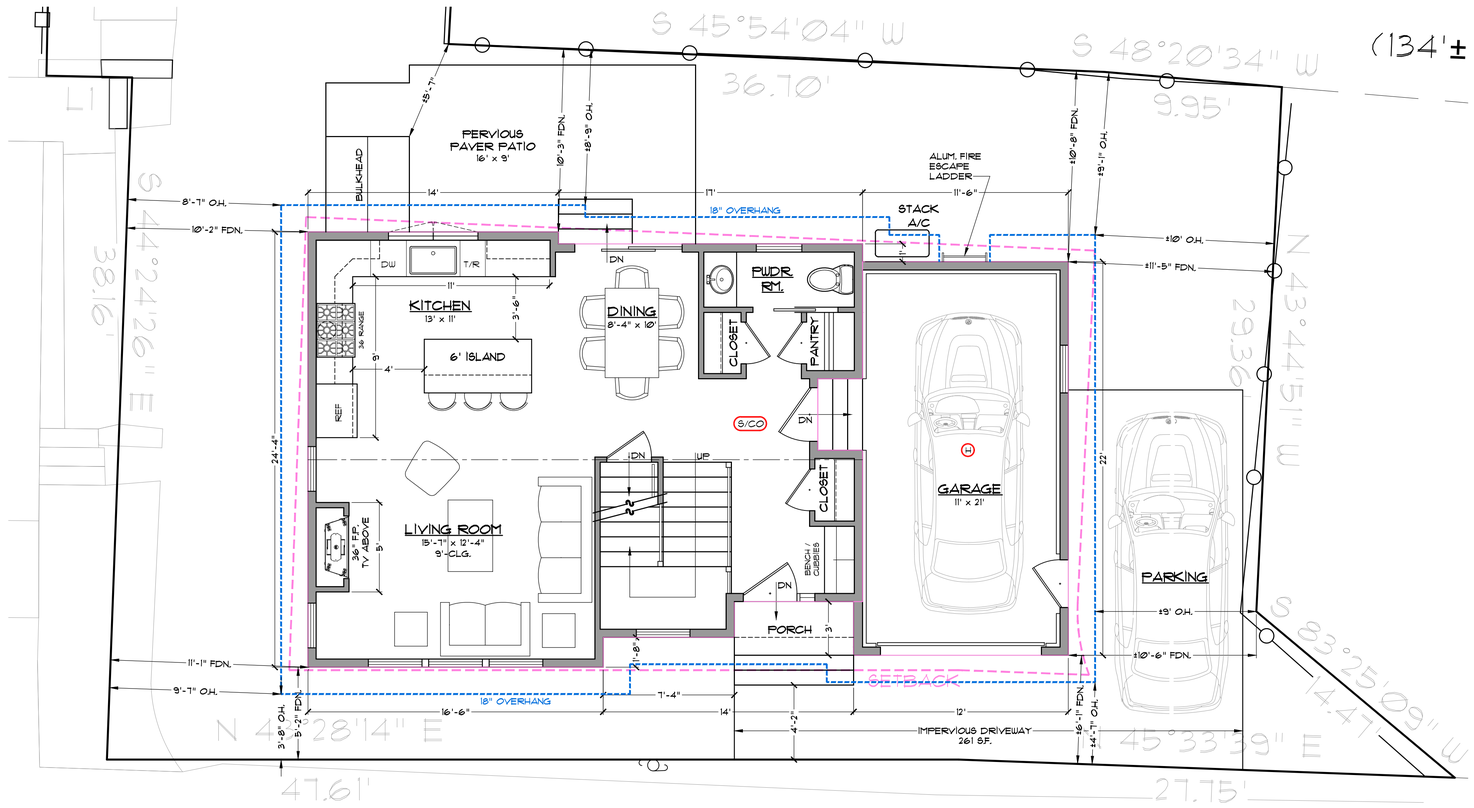


SECOND FLOOR PLAN

1/4"=1'-0"

HEATED = 912 S.F.

60 S.F. DEDUCT FOR STAIRS



FIRST FLOOR PLAN

1/4"=1'-0"

HEATED = 695 S.F.
GARAGE = 265 S.F.
TOTAL = 960 S.F.

S.F. TOTALS	
FIRST FLOOR	= 695 S.F.
SECOND FLOOR	= 912 S.F.
THIRD FLOOR	= 600 S.F.
TOTAL	= 2,207 S.F.

EXISTING IMPERVIOUS COVERAGE = 1,554 S.F.
PROPOSED IMPERVIOUS COVERAGE = 1,469 S.F.
STRUCTURE = 1,208 S.F.
DRIVEWAY = 261 S.F.

FIRE PREVENTION PLAN

(S) SMOKE DETECTOR
(S/CO) SMOKE / CARBON MONOXIDE DETECTOR
(H) HEAT DETECTOR

1. THESE PLANS ARE BUILT TO FOLLOW THE IRC 2021 BUILDING CODE AND STATE FIRE CODE AS ADMINISTERED BY THE TOWN OF PORTSMOUTH, NH.

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3. DO NOT SCALE DRAWING. WRITTEN DIMENSIONS TAKE PRECEDENCE OVER SCALED DIMENSIONS.

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238 Austin Street (Coffins Ct.) ZBA
Portsmouth, NH 03801

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196 Bunker Hill Ave.
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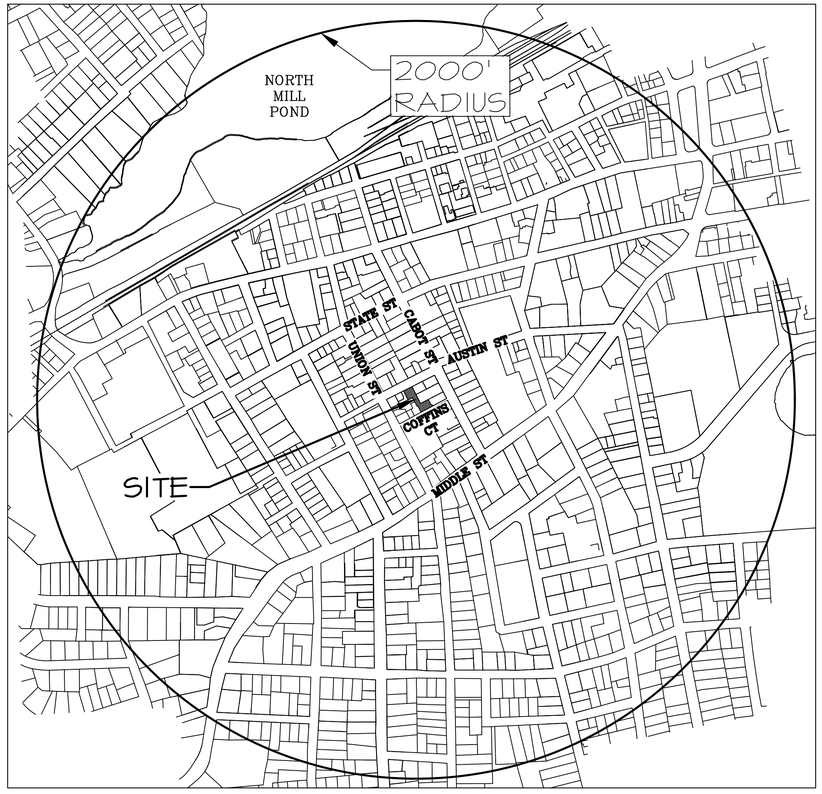
SITE PLAN REVIEW
238 AUSTIN ST
Portsmouth, NH 03801



LIST OF PROJECT PLANS AND DOCUMENTS:

CIVIL SET

1 - Existing Conditions
2 - Subdivision
3 - Site Plan - Austin St
4 - Site Plan - Coffins Ct
5 - Elevations
6 - TAC Street Plan
7 - Details

PREPARED BY:

ROSS ENGINEERING, LLC

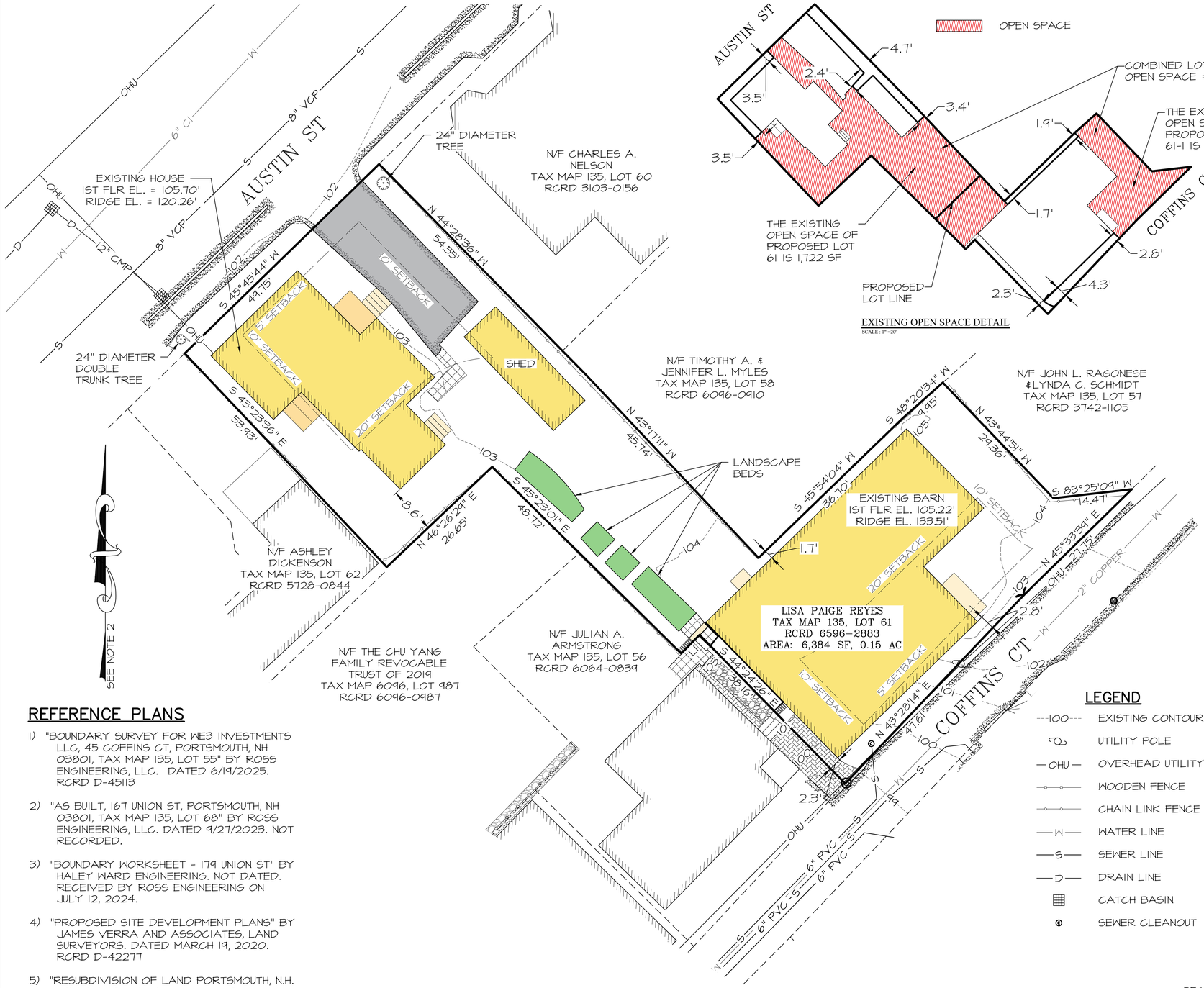
Civil/Structural Engineering
& Surveying
650 Islington St, 2nd Floor
Portsmouth, NH 03801
(603) 433-7560

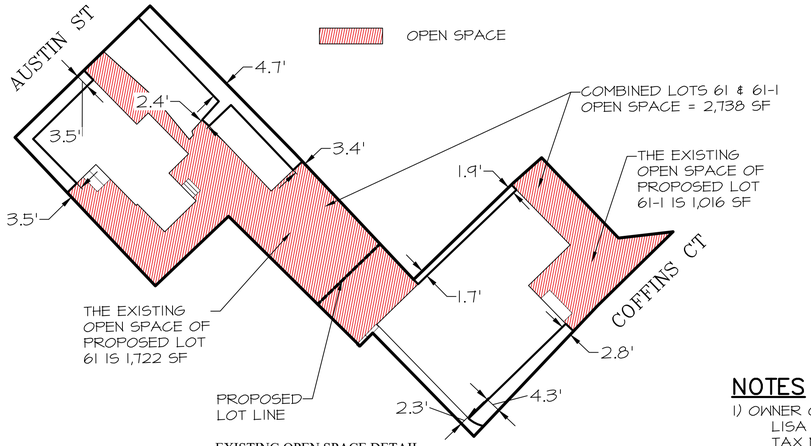
PREPARED FOR:
ALEA LLC
238 AUSTIN ST
PORTSMOUTH, NH 03801

June 22, 2026

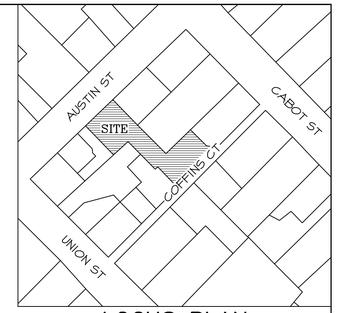
ARCHITECTURAL PLANS

Technical Illustrations
196 Bunker Hill Ave
Stratham, NH 03885





EXISTING OPEN SPACE DETAIL
SCALE: 1" =20'



LOCUS PLAN
SCALE: 1" = 1000'

NOTES

1) OWNER OF RECORD:
LISA PAIGE REYES
TAX MAP 135, LOT 61
236 AUSTIN ST
PORTSMOUTH, NH 03801
RCRD: 6596-2883
AREA: 6,384 SF, 0.15 ACRES

2) BASIS OF BEARING HELD FROM PLAN REFERENCE #1.

3) PARCEL IS IN THE GENERAL RESIDENCE C (GRC) ZONE:

MINIMUM LOT AREA	3,500 SF
MIN. LOT AREA PER DWELLING UNIT	3,500 SF
MINIMUM FRONTAGE	70 FT
MINIMUM DEPTH	50 FT
SETBACKS:	
FRONT	5 FT
SIDE	10 FT
REAR	20 FT
MAXIMUM BUILDING HEIGHT:	
SLOPED ROOF	35 FT
FLAT ROOF	30 FT
MAXIMUM BUILDING COVERAGE	35%
MINIMUM OPEN SPACE	20%

4) THE PARCEL IS NOT WITHIN A FEMA SPECIAL FLOOD HAZARD ZONE, AS PER FLOOD INSURANCE RATE MAP #33015C0259F, PANEL 259 OF 681, DATED JANUARY 29, 2021. VERTICAL DATUM IS NAVD 1988.

5) BUILDING COVERAGE

HOUSE	778 SF
BARN	1554 SF
SHED	190 SF
DECK > 18"	31 SF
STAIRS > 18"	12 SF
BULKHEAD	26 SF
TOTAL	2591 SF

COVERAGE = 2591 / 6384 = 40.6%

6) OPEN SPACE
SEE EXISTING OPEN SPACE DETAIL. AREA OF OPEN SPACE IS 2,738 SF.

OPEN SPACE = 2,738 / 6,384 = 42.9%

REFERENCE PLANS

1) "BOUNDARY SURVEY FOR NE3 INVESTMENTS LLC, 45 COFFINS CT, PORTSMOUTH, NH 03801, TAX MAP 135, LOT 55" BY ROSS ENGINEERING, LLC. DATED 6/19/2025. RCRD D-45113

2) "AS BUILT, 167 UNION ST, PORTSMOUTH, NH 03801, TAX MAP 135, LOT 68" BY ROSS ENGINEERING, LLC. DATED 9/27/2023. NOT RECORDED.

3) "BOUNDARY WORKSHEET - 179 UNION ST" BY HALEY WARD ENGINEERING. NOT DATED. RECEIVED BY ROSS ENGINEERING ON JULY 12, 2024.

4) "PROPOSED SITE DEVELOPMENT PLANS" BY JAMES VERRA AND ASSOCIATES, LAND SURVEYORS. DATED MARCH 19, 2020. RCRD D-42277

5) "RESUBDIVISION OF LAND PORTSMOUTH, N.H. FOR CONSTANCE S. & WILLIAM T. WARREN & HAROLD C. SWEETSER" BY JOHN W. DURGIN ASSOCIATES, INC. DATED AUGUST 24, 1986. RCRD D-14875

6) "PLAN OF ANNIE OLIVER ESTATE" DATED AUGUST 19, 1941. RCRD 048

LEGEND

100	EXISTING CONTOUR
	UTILITY POLE
OHU	OVERHEAD UTILITY
	WOODEN FENCE
	CHAIN LINK FENCE
W	WATER LINE
S	SEWER LINE
D	DRAIN LINE
	CATCH BASIN
	SEWER CLEANOUT

LENGTH TABLE

	BEARING	DISTANCE
L1	N 44°36'59" E	4.80'

GRAPHIC SCALE
10 0 10 20 40
(IN FEET)
SCALE: 1" = 10'

R. ALEX ROSS No. 9409 LICENSED PROFESSIONAL ENGINEER - STATE OF NEW HAMPSHIRE

ISS.	DATE	DESCRIPTION OF ISSUE
3	6/22/2026	TAC SUBMITTAL
2	1/6/2026	TAC SUBMITTAL
1	12/17/2025	ZBA SUBMITTAL

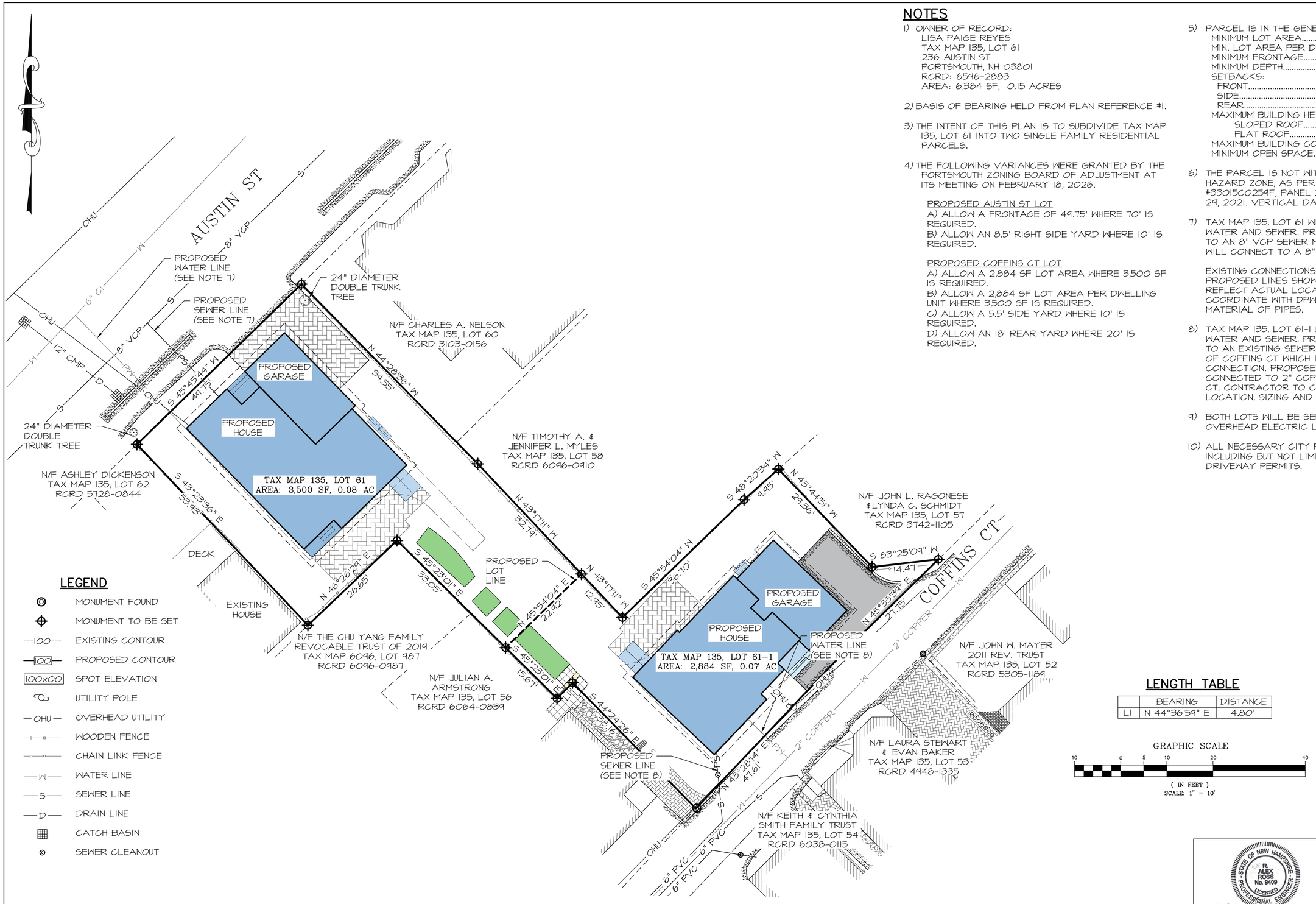
SCALE 1" = 10'
CHECKED A.ROSS
DRAWN D.D.D.

ROSS ENGINEERING, LLC
Civil/Structural Engineering & Surveying
650 Islington St, 2nd Floor
Portsmouth, NH 03801
(603) 433-7560

CLIENT
ALEA LLC
238 AUSTIN ST
PORTSMOUTH, NH 03801

TITLE
EXISTING CONDITIONS PLAN
238 AUSTIN ST
PORTSMOUTH, NH 03801
TAX MAP 135, LOT 61

JOB NUMBER	DWG. NO.	ISSUE
25-089	1 OF 7	3



NOTES

1) OWNER OF RECORD:
LISA PAIGE REYES
TAX MAP 135, LOT 61
236 AUSTIN ST
PORTSMOUTH, NH 03801
RCRD: 6546-2883
AREA: 6,384 SF, 0.15 ACRES

2) BASIS OF BEARING HELD FROM PLAN REFERENCE #1.

3) THE INTENT OF THIS PLAN IS TO SUBDIVIDE TAX MAP 135, LOT 61 INTO TWO SINGLE FAMILY RESIDENTIAL PARCELS.

4) THE FOLLOWING VARIANCES WERE GRANTED BY THE PORTSMOUTH ZONING BOARD OF ADJUSTMENT AT ITS MEETING ON FEBRUARY 18, 2026.

PROPOSED AUSTIN ST LOT
A) ALLOW A FRONTAGE OF 49.75' WHERE 70' IS REQUIRED.
B) ALLOW AN 8.5' RIGHT SIDE YARD WHERE 10' IS REQUIRED.

PROPOSED COFFINS CT LOT
A) ALLOW A 2,884 SF LOT AREA WHERE 3,500 SF IS REQUIRED.
B) ALLOW A 2,884 SF LOT AREA PER DWELLING UNIT WHERE 3,500 SF IS REQUIRED.
C) ALLOW A 5.5' SIDE YARD WHERE 10' IS REQUIRED.
D) ALLOW AN 18' REAR YARD WHERE 20' IS REQUIRED.

5) PARCEL IS IN THE GENERAL RESIDENCE C (GRC) ZONE:
MINIMUM LOT AREA.....3,500 SF
MIN. LOT AREA PER DWELLING UNIT.....3,500 SF
MINIMUM FRONTAGE.....70 FT
MINIMUM DEPTH.....50 FT
SETBACKS:
FRONT.....5 FT
SIDE.....10 FT
REAR.....20 FT
MAXIMUM BUILDING HEIGHT:
SLOPED ROOF.....35 FT
FLAT ROOF.....30 FT
MAXIMUM BUILDING COVERAGE.....35%
MINIMUM OPEN SPACE.....20%

6) THE PARCEL IS NOT WITHIN A FEMA SPECIAL FLOOD HAZARD ZONE, AS PER FLOOD INSURANCE RATE MAP #33015C0259F, PANEL 259 OF 681, DATED JANUARY 29, 2021. VERTICAL DATUM IS NAVD 1988.

7) TAX MAP 135, LOT 61 WILL BE SERVICED BY CITY WATER AND SEWER. PROPOSED SEWER WILL CONNECT TO AN 8" VCP SEWER MAIN IN AUSTIN ST. WATER LINE WILL CONNECT TO A 8" CAST IRON MAIN IN AUSTIN ST.

EXISTING CONNECTIONS POSSIBLY EXIST AND THE PROPOSED LINES SHOWN ON THE PLAN DO NOT REFLECT ACTUAL LOCATIONS. CONTRACTOR TO COORDINATE WITH DPW FOR LOCATION, SIZING AND MATERIAL OF PIPES.

8) TAX MAP 135, LOT 61-1 WILL BE SERVICED BY CITY WATER AND SEWER. PROPOSED SEWER WILL CONNECT TO AN EXISTING SEWER CLEANOUT ON THE NORTH SIDE OF COFFINS CT WHICH IS OFF OF A 6" PVC SEWER CONNECTION. PROPOSED WATER LINE WILL BE CONNECTED TO 2" COPPER WATER MAIN IN COFFINS CT. CONTRACTOR TO COORDINATE WITH DPW FOR LOCATION, SIZING AND MATERIAL OF PIPES.

9) BOTH LOTS WILL BE SERVICED BY EXISTING OVERHEAD ELECTRIC LINES.

10) ALL NECESSARY CITY PERMITS MUST BE OBTAINED INCLUDING BUT NOT LIMITED TO BUILDING PERMITS AND DRIVEWAY PERMITS.

LEGEND

- MONUMENT FOUND
- MONUMENT TO BE SET
- 100 EXISTING CONTOUR
- 100 PROPOSED CONTOUR
- 100x00 SPOT ELEVATION
- UTILITY POLE
- OHU OVERHEAD UTILITY
- WOODEN FENCE
- CHAIN LINK FENCE
- W WATER LINE
- S SEWER LINE
- D DRAIN LINE
- CATCH BASIN
- SEWER CLEANOUT

LENGTH TABLE

	BEARING	DISTANCE
L1	N 44°36'59" E	4.80'

ISS.	DATE	DESCRIPTION OF ISSUE
3	6/22/2026	TAC SUBMITTAL
2	1/6/2026	TAC SUBMITTAL
1	12/17/2025	ZBA SUBMITTAL

SCALE 1" = 10'
CHECKED A.ROSS
DRAWN D.D.D.

ROSS ENGINEERING, LLC
Civil/Structural Engineering & Surveying
650 Islington St, 2nd Floor
Portsmouth, NH 03801
(603) 433-7560

CLIENT
ALEA LLC
238 AUSTIN ST
PORTSMOUTH, NH 03801

TITLE

SUBDIVISION PLAN

238 AUSTIN ST
PORTSMOUTH, NH 03801
TAX MAP 135, LOT 61

STATE OF NEW HAMPSHIRE - ALEX ROSS No. 9409 LICENSED PROFESSIONAL ENGINEER

JOB NUMBER	DWG. NO.	ISSUE
25-089	2 OF 7	3

AUSTIN ST

8" VCP

6" CI

W

S

PROPOSED WATERLINE (SEE NOTE 5)

PROPOSED SEWER LINE (SEE NOTE 5)

8" VCP

12" CMP

PS

PW

S

D

OHU

INSTALL SILTSACK (SEE DETAIL)

24" DIAMETER DOUBLE TRUNK TREE

24" DIAMETER DOUBLE TRUNK TREE

PERVIOUS PAVER DRIVEWAY

10.0'

5.0'

10.0'

102

102.34

102.23

PROPOSED GARAGE SLAB EL. 102.34'

10' SETBACK

5' SETBACK

S 45°45'44" W

49.75'

PROPOSED HOUSE
1ST FLR EL. 104.55'
EAVES EL. 122.07'
RIDGE EL. 135.18'

ROOF OVERHANG (TYP.)

4.1'

N 44°28'36" W

N/F CHARLES A. NELSON
TAX MAP 135, LOT 60
RCRD 3103-0156

TAX MAP 135, LOT 61
AREA: 3,500 SF, 0.08 AC

BULKHEAD

10' SETBACK

S 43°23'36" E

53.93'

N/F ASHLEY DICKENSON
TAX MAP 135, LOT 62
RCRD 5728-0844

PROPOSED PERVIOUS PAVER PATIO EL. 102.75'

103

8.7'

103

10' SETBACK

10' SETBACK

20' SETBACK

10.1'

N 46°26'29" E

26.65'

DECK

EXISTING HOUSE

N/F THE CHU YANG FAMILY
REVOCABLE TRUST OF 2019
TAX MAP 6096, LOT 987
RCRD 6096-0987

S 45°23'01" E

33.05'

N 43°17'11" W

32.74'

N/F TIMOTHY A. & JENNIFER L. MYLES
TAX MAP 135, LOT 58
RCRD 6096-0910

PROPOSED LOT LINE

N 45°54'04" E

22.92'

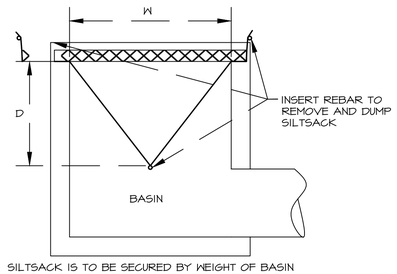
104

N/F JULIAN A. ARMSTRONG
TAX MAP 135, LOT 56
RCRD 6064-0839

GRAPHIC SCALE

5 0 2.5 5 10 20

(IN FEET)
SCALE: 1" = 5'



SILTSACK IS TO BE SECURED BY WEIGHT OF BASIN GRATE TO PREVENT SEDIMENT FROM ENTERING THE DRAIN LINE

INSTALL SILTSACK TO CATCH BASIN PRIOR TO CONSTRUCTION. DO NOT REMOVE SILTSACK UNTIL CONSTRUCTION IS COMPLETE.

Siltsack
N.T.S.

NOTES

1) PROPOSED LOT 61 AREA IS 3,500 SF

2) PARCEL IS IN THE GENERAL RESIDENCE C (GRC) ZONE:
- MINIMUM LOT AREA....3,500 SF
- MIN. LOT AREA PER DWELLING UNIT....3,500 SF
- MINIMUM FRONTAGE....70 FT
- MINIMUM DEPTH....50 FT
- SETBACKS:
  - FRONT....5 FT
  - SIDE....10 FT
  - REAR....20 FT
- MAXIMUM BUILDING HEIGHT:
  - SLOPED ROOF....35 FT
  - FLAT ROOF....30 FT
- MAXIMUM BUILDING COVERAGE....35%
- MINIMUM OPEN SPACE....20%

3) LOT 61 BUILDING COVERAGE
EXISTING
- HOUSE....778 SF
- SHED....190 SF
- DECK > 18"....31 SF
- STAIRS > 18"....12 SF
- BULKHEAD....26 SF
- TOTAL....1037 SF
- COVERAGE = 1037 / 3500 = 29.6%

PROPOSED
- HOUSE & ATTACHED GARAGE....1140 SF
- BULKHEAD....25 SF
- TOTAL....1165 SF
- COVERAGE = 1165 / 3500 = 33.3%

4) LOT 61 OPEN SPACE
EXISTING
SEE EXISTING OPEN SPACE DETAIL. AREA OF OPEN SPACE = 1,722 SF

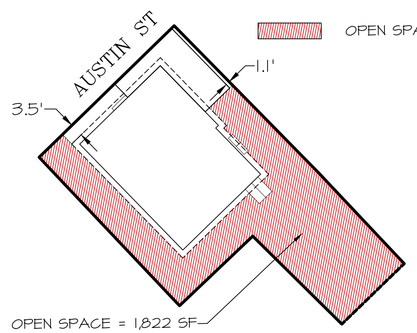
OPEN SPACE = 1,722 / 3500 = 49.2%

PROPOSED
SEE PROPOSED LOT 61 OPEN SPACE DETAIL. AREA OF OPEN SPACE = 1,822 SF

OPEN SPACE = 1822 / 3500 = 52.1%

5) TAX MAP 135, LOT 61 WILL BE SERVICED BY CITY WATER AND SEWER. PROPOSED SEWER WILL CONNECT TO AN 8" VCP SEWER MAIN IN AUSTIN ST. WATER LINE WILL CONNECT TO A 8" CAST IRON MAIN IN AUSTIN ST.

EXISTING CONNECTIONS POSSIBLY EXIST AND THE PROPOSED LINES SHOWN ON THE PLAN DO NOT REFLECT ACTUAL LOCATIONS. CONTRACTOR TO COORDINATE WITH DPW FOR LOCATION, SIZING AND MATERIAL OF PIPES.



PROPOSED LOT 61
OPEN SPACE DETAIL
SCALE : 1" =20'

LEGEND

- MONUMENT FOUND
- MONUMENT TO BE SET
- 100 — EXISTING CONTOUR
- 100 — PROPOSED CONTOUR
- 100x00 — SPOT ELEVATION
- UTILITY POLE
- OHU — OVERHEAD UTILITY
- WOODEN FENCE
- CHAIN LINK FENCE
- W — WATER LINE
- S — SEWER LINE
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CLIENT
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238 AUSTIN ST
PORTSMOUTH, NH 03801

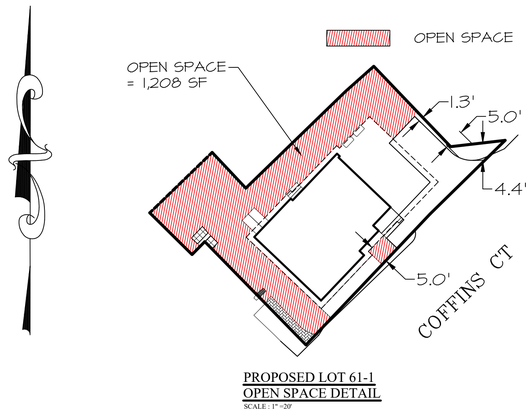
STATE OF NEW HAMPSHIRE
R. ALEX ROSS
No. 9409
LICENSED
PROFESSIONAL ENGINEER

TITLE

SITE PLAN

238 AUSTIN ST
PORTSMOUTH, NH 03801
TAX MAP 135, LOT 61

JOB NUMBER 25-089
DWG. NO. 3 OF 7
ISSUE 3



PROPOSED LOT 61-1
OPEN SPACE DETAIL
SCALE: 1"=20'

NOTES

1) PROPOSED LOT 61-1 AREA IS 2,884 SF

2) PARCEL IS IN THE GENERAL RESIDENCE C (GRC) ZONE:

MINIMUM LOT AREA	3,500 SF
MIN. LOT AREA PER DWELLING UNIT	3,500 SF
MINIMUM FRONTAGE	70 FT
MINIMUM DEPTH	50 FT
SETBACKS:	
FRONT	5 FT
SIDE	10 FT
REAR	20 FT
MAXIMUM BUILDING HEIGHT:	
SLOPED ROOF	35 FT
FLAT ROOF	30 FT
MAXIMUM BUILDING COVERAGE	35%
MINIMUM OPEN SPACE	20%

3) LOT 61-1 BUILDING COVERAGE

EXISTING

BARN	1554 SF
TOTAL	1554 SF

COVERAGE = 1554 / 2884 = 53.9%

PROPOSED

HOUSE & ATTACHED GARAGE	959 SF
PORCH	20 SF
STAIRS >18"	3 SF
BULKHEAD	25 SF
TOTAL	1007 SF

COVERAGE = 1007 / 2884 = 34.9%

4) LOT 61-1 OPEN SPACE

EXISTING

SEE EXISTING OPEN SPACE DETAIL. AREA OF OPEN SPACE = 1,016 SF

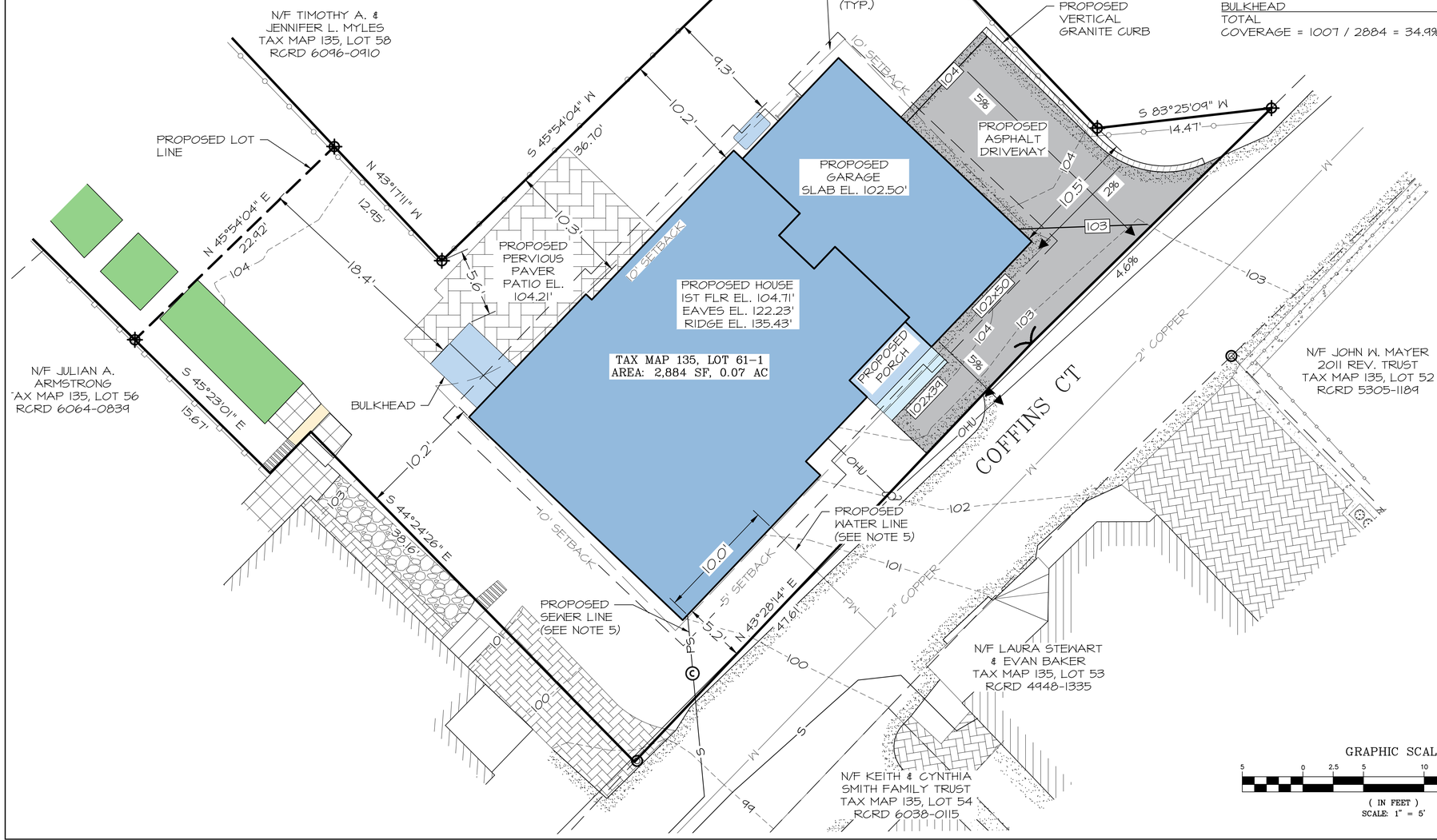
OPEN SPACE = 1,016 / 2884 = 35.2%

PROPOSED

SEE PROPOSED LOT 61 OPEN SPACE DETAIL. AREA OF OPEN SPACE = 1208 SF

OPEN SPACE = 1208 / 2884 = 41.9%

5) TAX MAP 135, LOT 61-1 WILL BE SERVICED BY CITY WATER AND SEWER. PROPOSED SEWER WILL CONNECT TO AN EXISTING SEWER CLEANOUT ON THE NORTH SIDE OF COFFINS CT WHICH IS OFF OF A 6" PVC SEWER CONNECTION. PROPOSED WATER LINE WILL BE CONNECTED TO 2" COPPER WATER MAIN IN COFFINS CT. CONTRACTOR TO COORDINATE WITH DPW FOR LOCATION, SIZING AND MATERIAL OF PIPES.



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- D — DRAIN LINE
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- SEWER CLEANOUT

GRAPHIC SCALE

5 0 2.5 5 10 20

(IN FEET)
SCALE: 1" = 5'

LENGTH TABLE

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L1	N 44°36'59" E	4.80'

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SCALE 1" = 5'
CHECKED A.ROSS
DRAWN D.D.D.

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CLIENT
ALEA LLC
238 AUSTIN ST
PORTSMOUTH, NH 03801

TITLE

SITE PLAN

238 AUSTIN ST
PORTSMOUTH, NH 03801
TAX MAP 135, LOT 61

R. ALEX ROSS No. 9400 LICENSED PROFESSIONAL ENGINEER - STATE OF NEW HAMPSHIRE

JOB NUMBER	DWG. NO.	ISSUE
25-089	4 OF 7	3

FRONT ELEVATION - AUSTIN ST

SCALE : 1" =5'

NOTES – AUSTIN ST

1) AVERAGE FINISHED GRADE:
AS PER PORTSMOUTH ZONING ORDINANCE THE AVERAGE EXISTING GRADE SHALL BE THE AVERAGE GROUND LEVELS ADJOINING THE BUILDING AT ALL EXTERIOR WALLS MEASURED EVERY FIVE FEET AROUND THE PERIMETER OF THE BUILDING.

THE AVERAGE FINISHED GRADE WAS CALCULATED AS 102.63'.

2) BUILDING HEIGHT:
AS PER PORTSMOUTH ZONING ORDINANCE THE BUILDING HEIGHT SHALL BE THE GREATEST VERTICAL MEASUREMENT BETWEEN THE LOWER AND UPPER REFERENCE POINTS. THE LOWER REFERENCE POINT SHALL BE THE AVERAGE EXISTING GRADE OR AVERAGE FINISHED GRADE, WHICHEVER IS LOWER. THE UPPER REFERENCE POINT FOR GAMBREL, HIP, HIP-TOPPED MANSARD ROOF, OR PENTHOUSE SHALL BE THE ELEVATION MIDWAY BETWEEN THE LEVEL OF EAVES AND THE HIGHEST POINT OF THE ROOF.

AVERAGE FINISHED GRADE = 102.63'
EAVES EL. = 122.07'
RIDGE EL. = 135.18'
MIDPOINT EL. = 122.07 + 135.18 / 2 = 128.63'

BUILDING HEIGHT = 128.63' - 102.63' = 26.00'

FRONT ELEVATION - COFFINS CT

SCALE : 1" =5'

NOTES – COFFINS CT

1) AVERAGE FINISHED GRADE:
AS PER PORTSMOUTH ZONING ORDINANCE THE AVERAGE EXISTING GRADE SHALL BE THE AVERAGE GROUND LEVELS ADJOINING THE BUILDING AT ALL EXTERIOR WALLS MEASURED EVERY FIVE FEET AROUND THE PERIMETER OF THE BUILDING.

THE AVERAGE FINISHED GRADE WAS CALCULATED AS 103.02'.

2) BUILDING HEIGHT:
AS PER PORTSMOUTH ZONING ORDINANCE THE BUILDING HEIGHT SHALL BE THE GREATEST VERTICAL MEASUREMENT BETWEEN THE LOWER AND UPPER REFERENCE POINTS. THE LOWER REFERENCE POINT SHALL BE THE AVERAGE EXISTING GRADE OR AVERAGE FINISHED GRADE, WHICHEVER IS LOWER. THE UPPER REFERENCE POINT FOR GAMBREL, HIP, HIP-TOPPED MANSARD ROOF, OR PENTHOUSE SHALL BE THE ELEVATION MIDWAY BETWEEN THE LEVEL OF EAVES AND THE HIGHEST POINT OF THE ROOF.

AVERAGE FINISHED GRADE = 103.02'
EAVES EL. = 122.23'
RIDGE EL. = 135.43'
MIDPOINT EL. = 122.23 + 135.43 / 2 = 128.83'

BUILDING HEIGHT = 128.83' - 103.02' = 25.81'

GRAPHIC SCALE

5 0 2.5 5 10 20

(IN FEET)
SCALE: 1" = 5'

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3	6/22/2026	TAC SUBMITTAL
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SCALE 1" = 5'
CHECKED A.ROSS
DRAWN D.D.D.

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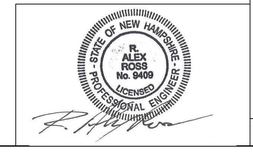
CLIENT
ALEA LLC
238 AUSTIN ST
PORTSMOUTH, NH 03801

TITLE

ELEVATIONS

238 AUSTIN ST
PORTSMOUTH, NH 03801
TAX MAP 135, LOT 61



JOB NUMBER	DWG. NO.	ISSUE
25-089	5 OF 7	3

ISS.	DATE	DESCRIPTION OF ISSUE	
3	6/22/2026	TAC SUBMITTAL	
2	1/6/2026	TAC SUBMITTAL	
1	12/17/2025	ZBA SUBMITTAL	
SCALE	NTS		
CHECKED	A.ROSS		
DRAWN	D.D.D.		

ROSS ENGINEERING, LLC
Civil/Structural Engineering
& Surveying
650 Islington St, 2nd Floor
Portsmouth, NH 03801
(603) 433-7560

CLIENT
ALEA LLC
238 AUSTIN ST
PORTSMOUTH, NH 03801

TITLE

STREET PLAN

238 AUSTIN ST
PORTSMOUTH, NH 03801
TAX MAP 135, LOT 61

STATE OF NEW HAMPSHIRE
R. ALEX ROSS
No. 9409
LICENSED
PROFESSIONAL ENGINEER

JOB NUMBER	DWG. NO.	ISSUE
25-089	6 OF 7	3

DATA COLLECTION

1. DETERMINE THE SIZE, SHAPE AND INTENDED USE OF FINISHED AREAS.
2. CLASSIFY SUB-GRADE SOILS.
3. DOCUMENT ALL EXISTING CONDITIONS. (FIXED POINTS, EXISTING GRADES, SITE CONTOURS, ETC)
4. DOCUMENT SOIL TYPE, LOCATION, AND ELEVATION OF BELOW GRADE AND OVERHEAD UTILITIES BOTH PUBLIC AND PRIVATE.
5. ENSURE PUBLIC UTILITIES ARE MARKED THROUGH THE USE OF LOCATING SERVICE.
6. DETERMINE THE CROSS SECTION DESIGN OF THE SYSTEM BASED ON SOIL TYPE AND APPLICATION, SHOWING PROPOSED SUB-GRADE AND FINISHED GRADE ELEVATIONS AND ALL GEOTEXTILES AND DRAINAGE DRAINAGE PIPES NEEDED FOR CONSTRUCTION.
7. ESTABLISH THE TYPE, LOCATION, AND ELEVATION OF RELIEF STRUCTURES IF REQUIRED (OVERFLOW PIPE DISCHARGING TO RAIN GARDEN, ETC).
8. DETERMINE CURB OR EDGE RESTRAINT TYPE, ELEVATION, AND LOCATION.
9. CHOOSE PATTERN APPROPRIATE TO THE APPLICATION (TRAFFIC TYPE AND LOAD).

EXCAVATION

1. BEFORE EXCAVATING, CALL ALL LOCAL UTILITY COMPANIES (E.G., PHONE, GAS, ELECTRICAL) TO ENSURE THAT THE AREA IN WHICH YOU PLAN TO DIG IS CLEAR OF UNDERGROUND CABLES OR WIRES. IF ANY ARE FOUND, PLEASE NOTIFY THE APPROPRIATE COMPANIES BEFORE YOU BEGIN.
2. EXCAVATION DEPTH IS DETERMINE FROM THE FOUNDATION THICKNESS ACCORDING TO THE PROJECT SPECIFICATIONS (FOUNDATION THICKNESS IS DETERMINED BY QUALIFIED ENGINEER BASED ON STRUCTURAL AND HYDROLOGIC ANALYSIS.)
3. THE SLOPE OF THE SUB-GRADE WILL DEPEND ON DRAINAGE DESIGN AND INFILTRATION TYPE, A MINIMUM SLOPE OF .5% (1/16" PER FOOT) IS REQUIRED.
4. THE DISTANCE THAT THE EXCAVATED AREA SHOULD EXTEND BEYOND THE AREA TO BE PAVED SHALL BE ONE TO 1.5 TIMES THE THICKNESS OF THE FOUNDATION. EXTRA SPACE ENSURE STABILITY OF PAVERS NEAR EDGE AND EDGE RESTRAINTS.
5. LEVEL THE BOTTOM OF THE EXCAVATED AREA WITH A RAKE.
6. COMPACTION WILL REDUCE THE PERMEABILITY OF THE SUB-GRADE. CARE SHOULD BE TAKEN TO MAINTAIN UNDISTURBED SOIL INFILTRATION DURING EXCAVATION AND CONSTRUCTION. STABILIZATION OF SUB-GRADE MAY BE REQUIRED WITH WEAK, OR CONTINUOUSLY SATURATED SOILS. REDUCED INFILTRATION MAY REQUIRE DRAINAGE PIPES WITHIN THE SUB-BASE TO CONFORM TO STORMWATER DRAINAGE REQUIREMENTS.

GEOTEXTILES, IMPERMEABLE LINERS, AND DRAIN PIPES.

1. USE A WOVEN GEOTEXTILE WITH HIGH BI-AXEL STRENGTH.
2. PLACE THE GEOTEXTILE ON THE BOTTOM AND SIDES OF THE SOIL SUB-GRADE. ELIMINATE WRINKLES IN THE GEOTEXTILE AND ENSURE IT IS NOT DAMAGED DURING CONSTRUCTION.
3. OVERLAP OF GEOTEXTILE SHALL BE A MINIMUM 2'-0" IN THE DIRECTION OF DRAINAGE. OVERLAPPING SHOULD BE "SHINGLE" STYLE WITH RESPECT TO ANY SLOPE DIRECTION AND BASE STONE DISTRIBUTION DIRECTION. KEEP PROPERLY TENSIONED, ELIMINATE WRINKLES, AND AVOID DAMAGING FABRIC (NO SPIKES).

SUB-BASE

1. USE SUB-BASE ASTM NO. 2 OR NO. 3 MEETING THE FOLLOWING REQUIREMENTS:
   A. 90% FRACTURED SYMMETRICAL PARTICALS
   B. LESS THAN 5% PASSING 200 SIEVE
   C. INDUSTRY HARDNESS TESTED
2. MOISTEN SPREAD AND COMPACT ASTM NO. 2 AGGREGATE SUB-BASE IN MINIMUM 6" LIFTS (WITHOUT DAMAGING OR DISTORTING THE GEOTEXTILE).
3. MAKE AT LEAST TWO PASSES IN VIBRATORY MODE FOLLOWED BY AT LEAST TWO PASSES IN STATIC MODE WITH A MINIMUM 10 TON VIBRATORY ROLLER, UNTIL THERE IS NOT VISIBLE MOVEMENT OF THE AGGREGATE.
4. DO NOT ALLOW COMPACTOR TO CRUSH AGGREGATE.
5. SURFACE TOLERANCE OF THE ASTM NO. 2 SUB-BASE SHOULD BE ±2½" OVER 10'.

EDGE RESTRAINT

1. INSTALL AVIGNON, BELGIK, PIETRA, TUNDRA, OR UNIVERSAL EDGE CUT UNITS. CAST-IN-PLACE CONCRETE OR PRECAST CONCRETE CURBS SHALL BE UTILIZED IN VEHICULAR APPLICATIONS.
2. EDGE RESTRAINT MAY REST ON AN OPEN-GRADED OR DENSE-GRADED AGGREGATE BASE.

BASE

1. MOISTEN, SPREAD AND COMPACT THE ASTM NO. 57 AGGREGATE BASE LAYER IN ONE 4" THICK LIFT.
2. MAKE A MINIMUM OF TWO PASSES IN VIBRATORY MODE FOLLOWED BY AT LEAST TWO STATIC MODE WITH A MINIMUM 10 TON ROLLER, UNTIL NO VISIBLE MOVEMENT OF THE AGGREGATE. ALTERNATIVELY, A 13,500 LB PLATE COMPACTOR CAN BE USED TO COMPACTER ASTM NO. 57 AGGREGATE BASE.
3. DO NOT ALLOW COMPACTOR TO CRUSH AGGREGATE.
4. SURFACE TOLERANCE OF THE ASTM NO. 57 BASE SHOULD BE ±1" OVER 10'.

BEDDING COURSE

1. MOISTEN, SPREAD AND SCREED ASTM NO 8. AGGREGATE BEDDING LAYER IN ONE 2" THICK LIFT
2. SURFACE TOLERANCE OF THE ASTM NO 8. BEDDING COURSE ±⅜" OVER 10'
3. CONSTRUCTION EQUIPMENT AND PEDESTRIAN TRAVEL ON SCREEDED BEDDING COARSE IS PROHIBITED.

PAVER

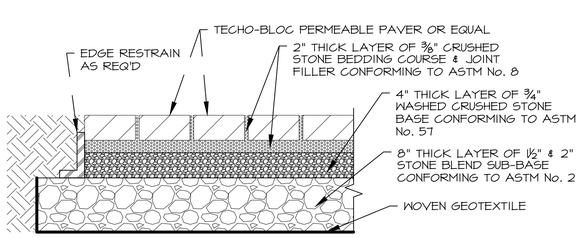
1. PAVERS SHOULD BE PLACED IN PATTERN SHOWN ON DRAWINGS. LAY UNITS TIGHT TO DESIGNATED LAYING PATTERNS. UNITS HAVE LUGS TO MAINTAIN CONSISTENT JOINT WIDTH.
2. IN SLOPED CONDITIONS START LAYING FROM THE BOTTOM IN AN UPHILL DIRECTION.
3. THE MINIMUM SLOPE FOR PERMEABLE PAVEMENT SURFACE IS 1%.
4. INFLO PAVERS CAN BE INSTALLED WITH TB100SI (TECHO-BLOC MECHANICAL TOOL) TO EXPEDITE INSTALLATION.
5. WHEN SUBJECT IT VEHICULAR TRAFFIC, CUT UNITS SHOULD NOT BE SMALLER THEN ⅓ THE WHOLE PAVER. WHEN USING CUT PAVERS MAINTAIN JOINT.
6. IN VEHICULAR APPLICATION LAY PATTERN PERPENDICULAR TO TRAFFIC FLOW.

JOINT FILL

1. FILL PAVER JOINT OPENINGS WITH ASTM NO. 8 AGGREGATE. SWEEP STONE TO FILL JOINTS. SURFACE MUST BE SWEPT CLEAN PRIOR TO COMPACTION
2. COMPACT WITH 5,000 LB PLATE COMPACTOR (TWO PASSES MINIMUM). INSTALL OF NEOPRENE PAD TO PROTECT THE TEXTURE OF THE PAVING UNITS.
3. DO NOT COMPACT WITHIN 6' OF UNRESTRAINED EDGES OF PAVERS.
4. APPLY ADDITIONAL AGGREGATE TO FILL THE JOINT OPENINGS IF NEEDED AND COMPACT.
5. SURFACE TOLERANCE OF COMPACTED PAVERS SHOULD BE ±⅜" OVER 10'.

POST INSTALLATION PROTECTION

1. MAINTAIN EROSION AND SEDIMENT MEASURES AT PERIMETER TO PREVENT CONTAMINATION OF POROUS PAVEMENT SYSTEM.



PERVIOUS PAVERS DETAIL

N.T.S.

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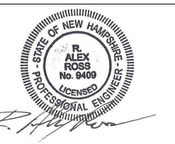
TITLE

DETAILS

238 AUSTIN ST
PORTSMOUTH, NH 03801
TAX MAP 135, LOT 61



JOB NUMBER	DWG. NO.	ISSUE
25-089	7 OF 7	3

K0076-0066

June 22, 2026

Mr. Peter Britz, Director of Planning & Sustainability
City of Portsmouth Planning & Sustainability Department
1 Junkins Avenue
Portsmouth, New Hampshire 03801

Re: Request for Site Plan Review & Wetland Conditional Use Permit
Map 284 Lot 8 – Proposed Garden & Site Improvements

Dear Peter:

On behalf of 124 Group Inc (Owner) we are pleased to submit the following information to support a request for a Site Review Permit and a Wetland Conditional Use Permit for the above referenced project.

Documents for the attention of the Technical Advisory Committee:

- One (1) 22x34 & one (1) 11x17 copy of the Site Plan Set, last revised June 22, 2026;
- Wetland Buffer Exhibit, dated June 22, 2026;
- Project Resource Area Delineation Memo, dated June 22, 2026;
- Site Review Checklist, dated June 22, 2026;
- Wetland Conditional Use Permit Checklist, dated June 22, 2026;
- Lighting Cut Sheets;
- Application Fee Calculation Form;
- Authorization Form

The proposed project is located at 124 Heritage Avenue which is identified as Map 284 Lot 8 on the City of Portsmouth Tax Maps. The property is a 5.8-acre parcel of land that is located in the Industrial (I) zone. The property is bound to the west by Heritage Avenue, 280-282 Heritage Avenue Industrial property to the north, and undeveloped City owned parcels to the to the south and east. The site currently operates as a multi-tenant industrial/commercial building.

The proposed project consists of the construction of a garden for the use of one of the buildings tenants, Gather. The garden will be located in the front of the existing building in what is currently a maintained lawn area. An ADA accessible ramp is also proposed to provide access to the garden from the existing parking lot. The project will include additional site improvements including parking lot re-striping, stormwater conveyance modifications, lighting, and landscaping.

Wetland Buffers

The proposed project will result in alterations to the 100-foot wetland buffer which is coincident with the state-regulated, municipally designated and duly established, 100-foot Prime Wetland buffer. As such, we anticipate that a Wetland Conditional Use Permit will be required for the project.

A Tighe & Bond New Hampshire Certified Wetland Scientist (CWS) conducted a wetland delineation on October 21, 2025. Wetland 1A is located to the east and south of the subject parcel. Wetland 2A is located to the southwest of the subject parcel, across Heritage Avenue (Map 284 Lot 6). Wetland 2A is a municipally-

designated Prime Wetland, and thus includes a duly-established 100-foot Prime Wetlands buffer. An intermittent stream defined by Flag Series 1B and 2B drains both wetlands. The 100-foot buffers associated with these wetlands consist of a paved parked lot and roadway, maintained lawn area, and portions of the existing building. Delineated wetlands are further described in the Wetland Delineation Technical Memorandum provided in Attachment C.

Existing impervious areas within the buffer include the paved roadway, parking lot, and driveway entrances from Heritage Avenue, as well as a portion of the existing building. Proposed changes to impervious surfaces consist of adding an ADA-compliant ramp to enable access to the proposed community garden as well as the removal of bituminous concrete within the buffer to Wetland 1A during the parking lot restriping.

A comparison of the existing and proposed impervious areas within the buffer are summarized in Table 1.

Table 1: 124 Heritage Ave, Wetland Buffer Impervious Surfaces

Buffer Segment	Existing Impervious (SF)	Final Impervious (SF)
0-25 feet	521	521
25-50 feet	3,356	3,356
50-100 feet	20,593	21,011
Total	24,470	24,889
Net Change in Impervious Surface Area (SF)	**+419**	

As the proposed project will result in impacts to the duly-established 100-foot Prime Wetland Buffer, Tighe & Bond will coordinate will the New Hampshire Department of Environmental Services (NHDES) Wetlands Bureau to determine the applicable mitigation requirements. As part of the proposed mitigation strategy, we are proposing a buffer enhancement including native shrub plantings and reseeding areas adjacent to the community garden with suitable native seed mixes.

LAND USE PERMIT APPLICATIONS

Local Permitting Timeline

The proposed project will require the following site-related approvals from the Planning Board:

- Site Plan Review Permit
- Wetland Conditional Use Permit

To date the applicant has attended the following meetings with the local land-use boards related to the Site Plan:

- May 6th, 2026 – Conservation Commission Site Walk
- May 13th, 2026 – Conservation Commission Work Session

The project will also require the following approvals from the New Hampshire Department of Environmental Services (NHDES):

- NHDES Standard Dredge and Fill Wetlands Permit (Major Impact)

Site Plan Review Permit

The project will require a Site Plan Review Permit for the site improvements described above in the project summary. The project has previously met with the Conservation Commission (CC) for work sessions.

Zoning Compliance

The enclosed plans have been designed to comply with the City of Portsmouth Zoning Ordinance and the applicable requirements for the project, located within the Industrial (I) Zone.

CONDITIONAL USE PERMITS

Wetland Conditional Use Permit

As the proposed work will result in alterations to the wetland buffer and is not identified as a Permitted Use under Section 10.1016 of the City of Portsmouth Zoning Ordinance, we anticipate that the proposed work will require a Conditional Use Permit for impacts within the 100-foot wetlands buffer.

Wetland Conditional Use Permit Criteria

Based on the above described and enclosed materials, the following addresses how the proposed project warrants the granting of a Wetland Conditional Use Permit by satisfying the following six (6) criteria for approval in Section 10.1017.50 of the Zoning Ordinance:

(1) The land is reasonably suited to the use, activity or alteration.

As the existing land consists of relatively flat, exposed, maintained lawn, it is reasonably suited to being converted into a community garden. Siting the community garden at this location will provide Gather with direct access to the garden, which will help facilitate their mission of improving the food security of those in need on the Seacoast. Gather also intends to use the site as a classroom, to teach people how to garden and grown their own food. The proposed community garden represents a low-impact use of the site that can be accommodated without expanding the developed or impervious footprint within the 100-foot wetland buffer.

(2) There is no alternative location outside the wetland buffer that is feasible and reasonable for the proposed use, activity or alteration.

No feasible and reasonable alternative location exists outside the wetland buffer. The majority of the subject parcel has already been developed, leaving limited undeveloped area available to accommodate the proposed community garden. The proposed location consists of previously maintained lawn adjacent to Gather's existing facility, allowing the garden to be readily accessed and incorporated into its operations while avoiding impacts to other portions of the site.

(3) There will be no adverse impact on the wetland functional values of the site or surrounding properties;

No adverse impacts to the functional values of the site or surrounding wetlands are anticipated. The addition of native shrubs and native seed mixes is expected to provide a net benefit to the functional value of the surrounding wetlands. The existing maintained lawn provides limited habitat and ecological value, whereas the proposed native shrubs, groundcovers, and pollinator-friendly plantings will enhance forage and refuge for wildlife. The proposed plantings will support pollinators and other beneficial insects. The community garden will also provide educational and community engagement opportunities that promote environmental stewardship and local food production. The proposed parking lot realignment will reduce impervious surface area within the 100-foot buffer, and the proposed grass-lined swale will improve infiltration and stormwater

management. As such, no increase in stormwater runoff to the adjacent wetlands will result as part of this project.

(4) Alteration of the natural vegetative state or managed woodland will occur only to the extent necessary to achieve construction goals; and

No alterations to naturally vegetated areas are proposed as part of this project. Rather, this project is focused on converting previously developed areas (i.e., maintained lawn and paved parking lot). The proposed community garden will increase the amount and diversity of vegetation within the wetland buffer through the introduction of cultivated plantings, including native and pollinator-friendly species where appropriate.

(5) The proposal is the alternative with the least adverse impact to areas and environments under the jurisdiction of this Section.

The proposed project is focused on the reuse and enhancement of previously developed and maintained areas, and represents the alternative with the least adverse impact to the wetland buffer and adjacent wetland resources. Rather, the proposed parking lot reconfiguration will reduce impervious surface area and native plantings are expected to improve wildlife habitat, ecological value, and educational opportunities. Appropriate erosion and sediment control measures will be implemented during construction to minimize erosion, sedimentation, and turbidity.

(6) Any area within the vegetated buffer strip will be returned to a natural state to the extent feasible.

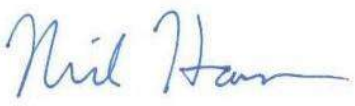
No work is proposed within the 25-foot vegetated buffer strip as part of this project.

CONCLUSION

As shown in the enclosed information, the proposed project is expected to create distinctive and appealing site improvements which are connected to the community while respecting abutting properties, surrounding natural resources, and development goals within the City. The project is consistent with the intent of the City's wetland buffer regulations and satisfies the Conditional Use Permit criteria through the enhancement of existing conditions. Further, Gather intends to coordinate with the Conservation Commission to obtain the Commission's support for the proposed project and the associated Prime Wetland buffer waiver request, consistent with the requirements of New Hampshire Administrative Rule Chapter Env-Wt 700.

The applicant respectfully requests to meet with the Technical Advisory Committee at their next scheduled meeting on July 7, 2026. If you have any questions or require any additional information, please feel free to contact us by phone at (603) 294-9213 or by email at NAHansen@tighebond.com.

Sincerely,
Tighe & Bond, Inc.



Neil A. Hansen, PE
PROJECT MANAGER

Patrick M. Crimmins, PE
VICE PRESIDENT

J:\K\K0076 The Kane Company - General Proposals\0076-0066 124 Heritage Ave\Reports\Applications\City of Portsmouth\20260622 TAC Submission\K0076-0066 TAC Cover Letter.docx

PROPOSED GARDEN AND SITE IMPROVEMENTS

124 HERITAGE AVENUE
PORTSMOUTH, NEW HAMPSHIRE

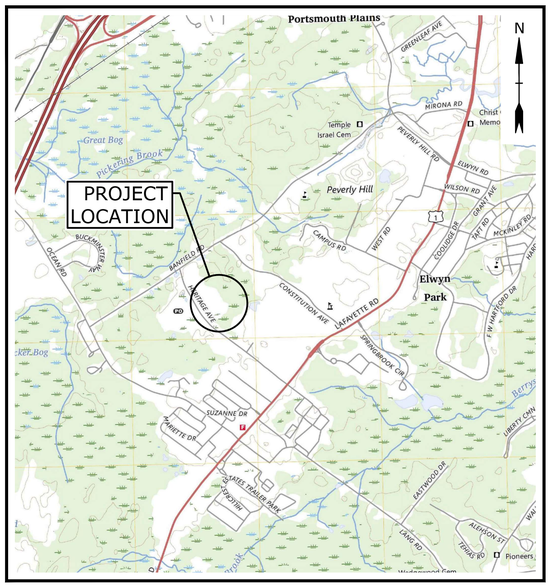
DATE: APRIL 29, 2026
LAST REVISED: JUNE 22, 2026

SHEET INDEX		
DRAWING NO.	DRAWING TITLE	DATE
-	COVER SHEET	6/22/2026
1 OF 1	EXISTING CONDITIONS PLAN	6/22/2026
G-001	GENERAL NOTES AND LEGEND	6/22/2026
C-101	DEMOLITION PLAN	6/22/2026
C-201	SITE PLAN	6/22/2026
C-301	GRADING, DRAINAGE, EROSION CONTROL, AND UTILITIES PLAN	6/22/2026
C-501	EROSION CONTROL NOTES AND LEGEND	6/22/2026
C-502	DETAILS SHEET	6/22/2026
LT-101	PHOTOMETRIC PLAN	6/22/2026
L-101	PLANTING PLAN	6/22/2026

LIST OF PERMITS		
LOCAL	STATUS	DATE
SITE PLAN REVIEW PERMIT	PENDING	
CONDITIONAL USE PERMIT - WETLAND BUFFER	PENDING	
STATE		
NHDES - STANDARD DREDGE AND FILL WETLANDS	NOT SUBMITTED	
FEDERAL		
NPDES - CONSTRUCTION GENERAL PERMIT	NOT SUBMITTED	

CONSTRUCTION NOTES:

1. THE CONTRACTOR SHALL NOT RELY ON SCALED DIMENSIONS AND SHALL CONTACT THE ENGINEER FOR CLARIFICATION IF A REQUIRED DIMENSION IS NOT PROVIDED ON THE PLANS.
2. THE CONTRACTOR SHALL BE RESPONSIBLE FOR CONSTRUCTION MEANS AND METHODS, AND FOR SITE CONDITIONS THROUGHOUT CONSTRUCTION. NEITHER THE PLANS NOR THE SEAL OF THE ENGINEER AFFIXED HEREON EXTEND TO OR INCLUDE SYSTEMS REQUIRED FOR THE SAFETY OF THE CONTRACTOR, THEIR EMPLOYEES, AGENTS OR REPRESENTATIVES IN THE PERFORMANCE OF THE WORK. THE CONTRACTOR SHALL BE RESPONSIBLE FOR DETERMINING AND IMPLEMENTING SAFETY PROCEDURES AND SYSTEMS AS REQUIRED BY THE UNITED STATES OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (OSHA), AND ANY STATE OR LOCAL SAFETY REGULATIONS.
3. TIGHE & BOND ASSUMES NO RESPONSIBILITY FOR ANY ISSUES LEGAL OR OTHERWISE, RESULTING FROM CHANGES MADE TO THESE DRAWINGS WITHOUT WRITTEN AUTHORIZATION OF TIGHE & BOND.



SITE LOCATION MAP
SCALE: 1" = 2,000'

PREPARED BY:

Tighe & Bond

177 Corporate Drive
Portsmouth, NH 03801
T 603.433.8818

NEIL A. HANSEN No. 15227 LICENSED PROFESSIONAL ENGINEER — STATE OF NEW HAMPSHIRE — 6/22/26

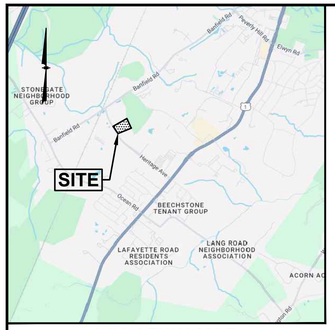
PATRICK CRIMMINS No. 12378 LICENSED PROFESSIONAL ENGINEER — STATE OF NEW HAMPSHIRE — 6/22/26

OWNER/APPLICANT:
ONE TWENTY FOUR GROUP, INC.
210 COMMERCE WAY, SUITE 300
PORTSMOUTH, NH 03801

SURVEYOR:
GREENMAN-PEDERSEN, INC.
21 DANIEL ST., SECOND FLOOR
PORTSMOUTH, NH 03801

TAC SUBMISSION
COMPLETE SET 10 SHEETS

Last Saved: 6/17/2026
Plotted: Jun 17, 2026 - 8:50am By: BCurcio
Tighe & Bond: J:\KK\K0076 The Kane Company - General Proposals\0076-0066 124 Heritage Ave\Drawings\AutoCAD\Sheet\K0076-0066_C-COVR.dwg



NOTES:

1) OWNER OF RECORD OF MAP 284 LOT 8:
ONE TWENTY FOUR GROUP INC
210 COMMERCE WAY SUITE 300
PORTSMOUTH, NH 03801
DEED REFERENCE: BOOK 3037 PAGE 2641
ROCKINGHAM COUNTY REGISTRY OF DEEDS

2) ZONE: INDUSTRIAL DISTRICT (I)

REFER TO THE CITY OF PORTSMOUTH ZONING ORDINANCE FOR VERIFICATION, ADDITIONAL RESTRICTIONS AND PERMITTED USES.

3) THIS PLAN IS THE RESULT OF AN ON-THE-GROUND FIELD SURVEY PERFORMED BY THIS OFFICE BETWEEN NOVEMBER 3 AND NOVEMBER 21, 2025.

4) BEARINGS SHOWN HEREON ARE BASED ON NAD83 PER GPS OBSERVATIONS PERFORMED BY THIS OFFICE ON NOVEMBER 3, 2025.

5) ELEVATIONS SHOWN HEREON ARE BASED ON NAVD88 PER GPS OBSERVATIONS PERFORMED BY THIS OFFICE ON NOVEMBER 3, 2025.

NOTES CONTINUED:

6) LOCATIONS OF UNDERGROUND UTILITIES ARE APPROXIMATE ONLY AND ARE SHOWN BASED ON SURFACE UTILITIES OBSERVED DURING THE FIELD SURVEY AND RECORD UTILITY INFORMATION. ADDITIONAL UNDERGROUND UTILITIES OTHER THAN THOSE SHOWN MAY BE ENCOUNTERED. INVERTS ARE LISTED IN A CLOCKWISE DIRECTION ENDING WITH THE INVERT OUT (UNLESS OTHERWISE NOTED).

7) THE SURVEY TRACT IS IS NOT LOCATED IN A SPECIAL FLOOD HAZARD AREA (100 YEAR FLOOD) PER FLOOD INSURANCE RATE MAP NUMBER 33015C0270F, WITH AN EFFECTIVE DATE OF JANUARY 29, 2021.

8) A TOTAL OF 181 (177 STANDARD, 4 MARKED AS ACCESSIBLE) CLEARLY IDENTIFIABLE PARKING SPACES WERE OBSERVED IN CONDUCTING THIS SURVEY.

UTILITY NOTES:

WATER SERVICE - PUBLIC WATER - MUNICIPAL

SEWER SERVICE - PUBLIC SEWER - MUNICIPAL

GAS SERVICE - GAS - UNITIL

ELECTRICAL SERVICE - EVERSOURCE

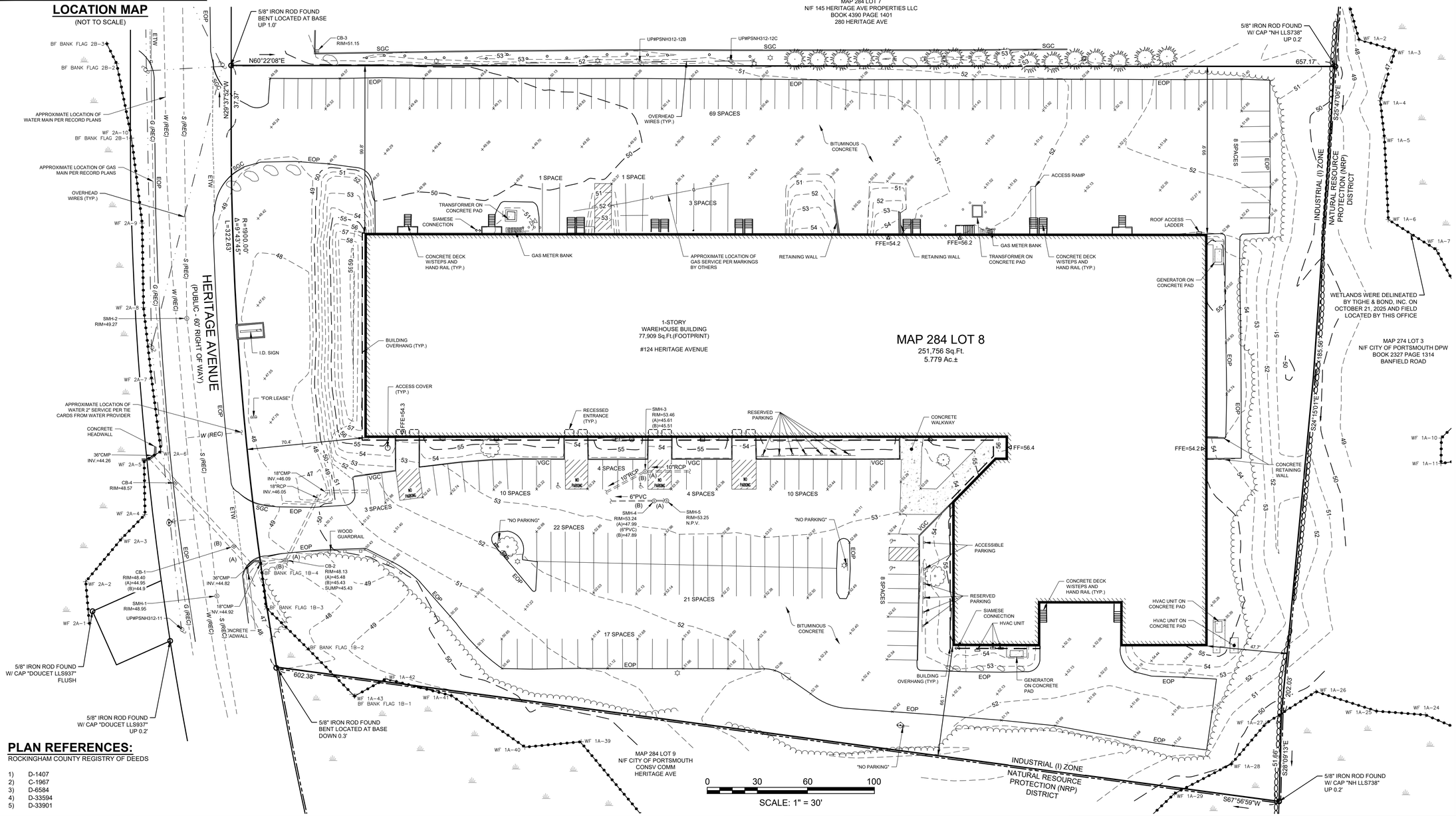
LEGEND

SGC	SLOPED GRANITE CURB	+36.89	SPOT ELEVATION
VGC	VERTICAL GRANITE CURB		CATCH BASIN
E	ELECTRIC UTILITY	V	VENT
G	GAS UTILITY	S	SEWER MANHOLE
OH	OVERHEAD UTILITY		GAS VALVE
W	WATER UTILITY		FIRE HYDRANT
	WOOD GUARDRAIL		BOLLARD
X	HAND RAIL	GM	GAS METER
90	CONTOUR ELEVATION		LIGHT POLE
	TREE		WETLAND LINE
	UTILITY POLE		PROPERTY LINE
	GUY WIRE		ZONE LINE
	PULL BOX/HAND HOLE		ABUTTER PROPERTY LINE
	SIGN		TREELINE

N

NAD 83

LOCATION MAP
(NOT TO SCALE)



PLAN REFERENCES:
ROCKINGHAM COUNTY REGISTRY OF DEEDS

1) D-1407
2) C-1967
3) D-6584
4) D-33594
5) D-33901

GPI
Engineering
Design
Planning
Construction Inspection
603.893.0720 GPINET.COM
Greenman-Pedersen, Inc.
44 Stiles Road, Suite One
Salem, NH 03079

PREPARED FOR
TIGHE & BOND, INC.
177 CORPORATE DRIVE
PORTSMOUTH, NH

ASSESSOR MAP 284 LOT 8
124 HERITAGE AVENUE
PORTSMOUTH, NH

STATE OF NEW HAMPSHIRE
No. 1019
SCOTT M. L'ITALIEN
LICENSED LAND SURVEYOR
6/19/2026

NO.	REVISION	DATE
1	WETLAND NOTE	6/19/26

JUNE 16, 2026

DRAWN/DESIGN BY	CHECKED BY
CSS	AKC/SML

EXISTING CONDITIONS PLAN

SCALE: 1"=30'

NEX-2200150.60

1 OF 1

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EXISTING CONDITIONS PLAN NOTES:

1. EXISTING CONDITIONS ARE BASED ON A FIELD SURVEY BY GREENMAN-PEDERSON INC., DATED DECEMBER 2025.
2. WETLANDS AND AREAS UNDER THE JURISDICTION OF THE NEW HAMPSHIRE DEPARTMENT OF ENVIRONMENTAL SERVICES, PURSUANT TO NH ADMINISTRATIVE RULES CHAPTER ENV-WT 100-900, WERE DELINEATED BY TIGHE & BOND ON OCTOBER 21, 2025 USING THE FOLLOWING METHODOLOGY AND STANDARDS:
   - 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.
   - NEW ENGLAND HYDRIC SOILS TECHNICAL COMMITTEE. 2019 VERSION 4, FIELD INDICATORS FOR IDENTIFYING HYDRIC SOILS IN NEW ENGLAND. NEW ENGLAND INTERSTATE WATER POLLUTION CONTROL COMMISSION, LOWELL, MA.
   - U.S. ARMY CORPS OF ENGINEERS. (2023). 2022 NATIONAL WETLAND PLANT LIST, VERSION 3.6. U.S. ARMY ENGINEER RESEARCH AND DEVELOPMENT CENTER, VICKSBURG, MS. HTTP://WETLAND-PLANTS.USACE.ARMY.MIL/
   - NEW HAMPSHIRE ADMINISTRATIVE RULE CHAPTER ENV-WT 406, DELINEATION AND CLASSIFICATION OF JURISDICTIONAL AREAS, EFFECTIVE DECEMBER 15, 2019.

GENERAL NOTES:

1. IT IS THE CONTRACTOR'S RESPONSIBILITY TO FAMILIARIZE THEMSELVES WITH THE CONDITIONS OF ALL OF THE PERMIT APPROVALS.
2. THE LOCATIONS OF EXISTING UNDERGROUND UTILITIES ARE APPROXIMATE AND THE LOCATIONS ARE NOT GUARANTEED BY THE OWNER OR ENGINEER. IT IS THE CONTRACTOR'S RESPONSIBILITY TO LOCATE ALL UTILITIES, ANTICIPATE CONFLICTS, REPAIR EXISTING UTILITIES, AND RELOCATE EXISTING UTILITIES REQUIRED TO COMPLETE THE WORK AT NO ADDITIONAL COST TO THE OWNER.
3. THE CONTRACTOR SHALL VERIFY LOCATION OF ALL EXISTING UTILITIES. CALL DIG SAFE AT LEAST 72 HOURS PRIOR TO THE COMMENCEMENT OF ANY DEMOLITION/CONSTRUCTION ACTIVITIES.
4. THE ACCURACY AND COMPLETENESS OF SUBSURFACE INFORMATION (E.G., EXISTING UTILITIES) SHOWN ON THESE DRAWINGS IS NOT GUARANTEED AND SOME SUBSURFACE INFORMATION MAY NOT BE SHOWN. DETERMINE THE LOCATIONS AND ELEVATIONS OF ALL SUBSURFACE FEATURES WHICH MAY AFFECT CONSTRUCTION OPERATIONS BY TEST PIT OR OTHER METHODS, AS NECESSARY TO PREVENT DAMAGE TO UTILITIES AND OTHER SUBSURFACE FEATURES, AND/OR INTERRUPTIONS IN UTILITY SERVICE. PROVIDE DATA COLLECTED THROUGH THESE INVESTIGATIONS TO THE ENGINEER PRIOR TO CONSTRUCTING THE PROPOSED IMPROVEMENTS.
5. THE CONTRACTOR SHALL NOTIFY THE ENGINEER OF ANY UTILITIES IDENTIFIED DURING CONSTRUCTION THAT ARE NOT SHOWN ON THE DRAWINGS OR THAT DIFFER IN SIZE OR MATERIAL
6. THE CONTRACTOR IS RESPONSIBLE FOR SITE SAFETY; COORDINATION WITH THE OWNER, ALL SUBCONTRACTORS, AND WITH OTHER CONTRACTORS WORKING WITHIN THE LIMITS OF WORK, THE MEANS AND METHODS OF CONSTRUCTING THE PROPOSED WORK.
7. THE CONTRACTOR SHALL OBTAIN AND PAY FOR AND COMPLY WITH ADDITIONAL PERMITS, NOTICES AND FEES NECESSARY TO COMPLETE THE WORK AND ARRANGE FOR AND PAY FOR NECESSARY INSPECTIONS AND APPROVALS FROM THE AUTHORITIES HAVING JURISDICTION.
8. ALL MATERIALS AND CONSTRUCTION SHALL CONFORM WITH APPLICABLE FEDERAL, STATE, AND LOCAL CODES & SPECIFICATIONS.
9. THE CONTRACTOR SHALL COORDINATE ALL WORK WITHIN PUBLIC RIGHT OF WAY WITH THE CITY OF PORTSMOUTH.
10. ALL WORK SHALL CONFORM TO THE CITY OF PORTSMOUTH DEPARTMENT OF PUBLIC WORKS, STANDARD SPECIFICATIONS AND WITH THE STATE OF NEW HAMPSHIRE DEPARTMENT OF TRANSPORTATION, "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION", CURRENT EDITION.
11. THE CONTRACTOR SHALL SUBMIT AS-BUILT PLANS IN DIGITAL FORMAT (.DWG AND .PDF FILES) TO THE OWNER AND ENGINEER UPON COMPLETION OF THE PROJECT. AS-BUILTS SHALL BE PREPARED AND CERTIFIED BY A NEW HAMPSHIRE LICENSED LAND SURVEYOR AND SHALL INCLUDE A FULL TOPOGRAPHY SURVEY WITHIN THE LIMITS OF WORK INCLUDING BUT NOT LIMITED TO SITE TOPOGRAPHY, SITE FEATURES, (BUILDINGS, ROADS, CURBS, SIDEWALK, ETC.), STORM DRAINAGE, AND SURFACE & SUBSURFACE UTILITIES.
12. BEFORE ANY DEWATERING IS PERFORMED A TEMPORARY DISCHARGE PERMIT FROM THE NHDES IS REQUIRED.
13. THE CONTRACTOR IS RESPONSIBLE FOR ALL NECESSARY TRAFFIC CONTROL/SAFETY DEVICES TO ENSURE SAFE VEHICULAR AND PEDESTRIAN ACCESS THROUGH THE WORK AREA, OR FOR SAFELY IMPLEMENTING DETOURS AROUND THE WORK AREA. PERFORM TRAFFIC CONTROL IN ACCORDANCE WITH THE CONTRACTOR'S APPROVED TRAFFIC CONTROL PLAN.
14. WHEN WORKING IN THE RIGHT OF WAY, THE CONTRACTOR SHALL PROVIDE THE OWNER AND LOCAL FIRE/POLICE/SCHOOL AUTHORITIES A DETAILED PLAN OF APPROACH INDICATING METHODS OF PROPOSED TRAFFIC ROUTING ON A DAILY BASIS, AND COORDINATION TO ENSURE COMMUNICATION AND COORDINATION BETWEEN THE OWNER, THE CONTRACTOR AND LOCAL FIRE/POLICE/SCHOOL AUTHORITIES THROUGHOUT THE CONSTRUCTION PERIOD.
15. THE CONTRACTOR SHALL MAINTAIN EMERGENCY ACCESS TO ALL PROPERTIES WITHIN THE PROJECT AREA AT ALL TIMES DURING CONSTRUCTION.
16. NOTIFY THE ENGINEER IN WRITING OF ANY CONFLICT, ERROR, AMBIGUITY, OR DISCREPANCY WITH THE PLANS OR BETWEEN THE PLANS AND ANY APPLICABLE LAW, REGULATION, CODE, STANDARD SPECIFICATION, OR MANUFACTURER'S INSTRUCTIONS.
17. TIGHE & BOND ASSUMES NO RESPONSIBILITY FOR ANY ISSUES, LEGAL OR OTHERWISE, RESULTING FROM CHANGES MADE TO THESE DRAWINGS WITHOUT WRITTEN AUTHORIZATION FROM TIGHE & BOND.
18. REMOVAL OR CUTTING OF VEGETATION WITHIN WETLAND BUFFER AREAS SHALL ONLY BE COMPLETED UNDER THE REQUIREMENTS AND RESTRICTIONS SET FORTH BY THE CITY OF PORTSMOUTH ZONING ORDINANCE SECTION 10.1018.23.
19. THE USE OF FERTILIZERS, PESTICIDES, AND HERBICIDES WITHIN WETLAND BUFFER AREAS SHALL BE LIMITED BY THE RESTRICTIONS SET FORTH BY THE CITY OF PORTSMOUTH ZONING ORDINANCE SECTIONS 10.1018.24 AND 10.1018.25.

DEMOLITION NOTES:

1. EROSION CONTROL MEASURES SHALL BE INSTALLED PRIOR TO THE START OF ANY CLEARING OR DEMOLITION ACTIVITIES.
2. THE CONTRACTOR IS RESPONSIBLE FOR SUPPORT OF EXISTING UTILITIES AND REPAIR OR REPLACEMENT COSTS OF UTILITIES DAMAGED DURING CONSTRUCTION, WHETHER ABOVE OR BELOW GRADE. REPLACE DAMAGED UTILITIES IMMEDIATELY AT NO ADDITIONAL COST TO THE OWNER AND AT NO COST TO THE PROPERTY OWNER.
3. ANY EXISTING WORK OR PROPERTY DAMAGED OR DISRUPTED BY CONSTRUCTION/ DEMOLITION ACTIVITIES SHALL BE REPLACED OR REPAIRED TO MATCH ORIGINAL EXISTING CONDITIONS BY THE CONTRACTOR AT NO ADDITIONAL COST TO THE OWNER.
4. CONTRACTOR SHALL VERIFY ORIGIN OF ALL DRAINS AND UTILITIES PRIOR TO REMOVAL/TERMINATION TO DETERMINE IF DRAINS OR UTILITY ARE ACTIVE, AND SERVICES ANY ON OR OFF-SITE STRUCTURE TO REMAIN. THE CONTRACTOR SHALL NOTIFY ENGINEER IMMEDIATELY OF ANY SUCH UTILITY FOUND AND SHALL MAINTAIN THESE UTILITIES UNTIL PERMANENT SOLUTION IS IN PLACE.
5. ALL MATERIALS SCHEDULED TO BE REMOVED SHALL BECOME THE PROPERTY OF THE CONTRACTOR UNLESS OTHERWISE SPECIFIED. THE CONTRACTOR SHALL DISPOSE OF ALL MATERIALS OFF-SITE IN ACCORDANCE WITH ALL FEDERAL, STATE, AND LOCAL REGULATIONS, ORDINANCES AND CODES.
6. THE CONTRACTOR SHALL REMOVE AND DISPOSE OF ITEMS ONLY AS SPECIFICALLY IDENTIFIED ON THE DRAWINGS. IF IF IS UNCLEAR TO THE CONTRACTOR WHETHER AN ITEM SHOULD BE REMOVED, THEY SHALL COORDINATE WITH THE OWNER AND/OR ENGINEER PRIOR TO REMOVAL.
7. REMOVE TREES AND BRUSH AS REQUIRED FOR COMPLETION OF WORK. CONTRACTOR SHALL GRUB AND REMOVE ALL STUMPS WITHIN LIMITS OF WORK AND DISPOSE OF OFF-SITE IN ACCORDANCE WITH FEDERAL, STATE, AND LOCAL LAWS AND REGULATIONS.
8. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL DEMOLITION AND OFF-SITE DISPOSAL OF MATERIALS REQUIRED TO COMPLETE THE WORK, EXCEPT FOR WORK NOTED TO BE COMPLETED BY OTHERS.
9. THE CONTRACTOR SHALL COORDINATE; REMOVAL, RELOCATION, DISPOSAL, ABANDONMENT, OR SALVAGE OF UTILITIES WITH THE OWNER AND APPROPRIATE UTILITY COMPANY.
10. UTILITIES SHALL BE TERMINATED AT THE MAIN LINE PER UTILITY COMPANY STANDARDS. THE CONTRACTOR SHALL REMOVE ALL ABANDONED UTILITIES LOCATED WITHIN THE LIMITS OF WORK, UNLESS SPECIFICALLY IDENTIFIED OTHERWISE.
11. SAW CUT AND REMOVE PAVEMENT ONE (1) FOOT OFF PROPOSED EDGE OF PAVEMENT OR EXISTING CURB LINE IN ALL AREAS WHERE PAVEMENT TO BE REMOVED ABUTS EXISTING PAVEMENT OR CONCRETE TO REMAIN.
12. PAVEMENT REMOVAL LIMITS ARE SHOWN FOR CONTRACTOR'S CONVENIENCE. ADDITIONAL PAVEMENT REMOVAL MAY BE REQUIRED DEPENDING ON THE CONTRACTOR'S OPERATION. CONTRACTOR TO VERIFY FULL LIMITS OF PAVEMENT REMOVAL PRIOR TO BID.
13. SAW CUT AND REMOVE PAVEMENT AND CONSTRUCT PAVEMENT TRENCH PATCH FOR ALL UTILITIES TO BE REMOVED AND PROPOSED UTILITIES LOCATED IN EXISTING PAVEMENT AREAS TO REMAIN.
14. THE CONTRACTOR SHALL REMOVE AND SALVAGE EXISTING GRANITE CURB FOR REUSE.
15. THE CONTRACTOR SHALL PHASE DEMOLITION AND CONSTRUCTION AS REQUIRED TO PROVIDE CONTINUOUS SERVICE TO EXISTING BUSINESSES AND HOMES THROUGHOUT THE CONSTRUCTION PERIOD. EXISTING BUSINESS AND HOME SERVICES INCLUDE, BUT ARE NOT LIMITED TO ELECTRICAL, COMMUNICATION, FIRE PROTECTION, DOMESTIC WATER AND SEWER SERVICES. TEMPORARY SERVICES, IF REQUIRED, SHALL COMPLY WITH ALL FEDERAL, STATE, LOCAL AND UTILITY COMPANY STANDARDS. CONTRACTOR SHALL PROVIDE DETAILED CONSTRUCTION SCHEDULE TO OWNER PRIOR TO ANY DEMOLITION/CONSTRUCTION ACTIVITIES AND SHALL COORDINATE TEMPORARY SERVICES TO ABUTTERS WITH THE UTILITY COMPANY AND AFFECTED ABUTTER.
16. THE CONTRACTOR SHALL PROTECT ALL PROPERTY MONUMENTATION THROUGHOUT DEMOLITION AND CONSTRUCTION OPERATIONS. SHOULD ANY MONUMENTATION BE DISTURBED BY THE CONTRACTOR, THE CONTRACTOR SHALL EMPLOY A NEW HAMPSHIRE LICENSED SURVEYOR TO REPLACE DISTURBED MONUMENTS.
17. THE CONTRACTOR SHALL PAY ALL COSTS NECESSARY FOR TEMPORARY PARTITIONING, BARRICADING, FENCING, SECURITY AND SAFETY DEVICES REQUIRED FOR THE MAINTENANCE OF A CLEAN AND SAFE CONSTRUCTION SITE.
18. BOLD LINETYPES AND FEATURES SHOWN WITHIN THE LIMITS OF WORK INDICATE SITE FEATURES TO BE REMOVED, WHILE FADED LINETYPES AND FEATURES ARE TO REMAIN, UNLESS SPECIFICALLY IDENTIFIED OTHERWISE.

SITE NOTES:

1. PAVEMENT MARKINGS, INCLUDING BUT NOT LIMITED TO; PARKING SPACES, STOP BARS, ADA SYMBOLS, PAINTED ISLANDS, CROSS WALKS, ARROWS, LEGENDS, AND CENTERLINES, SHALL BE CONSTRUCTED AS SHOWN ON THE DRAWINGS AND DETAILS, AND SHALL MEET THE FOLLOWING REQUIREMENTS:
   - ALL ON-SITE PAVEMENT MARKINGS SHALL BE CONSTRUCTED USING WHITE TRAFFIC PAINT, MEETING THE REQUIREMENTS OF AASHTO M248 TYPE "F".
   - ALL PAVEMENT MARKINGS WITHIN PUBLIC RIGHT OF WAY SHALL CONFORM TO THE CITY OF PORTSMOUTH DEPARTMENT OF PUBLIC WORKS, AND APPLICABLE DEPARTMENT OF TRANSPORTATION (DOT), STANDARD SPECIFICATIONS.
2. ALL PAVEMENT MARKINGS AND SIGNS SHALL CONFORM TO THE "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES" CURRENT EDITION, "STANDARD ALPHABETS FOR HIGHWAY SIGNS AND PAVEMENT MARKINGS" CURRENT EDITION, AND THE REQUIREMENTS OF THE AMERICANS WITH DISABILITIES ACT (ADA), AND THE ARCHITECTURAL BARRIERS ACT (ABA).
3. THE CONTRACTOR SHALL EMPLOY A NEW HAMPSHIRE LICENSED LAND SURVEYOR TO DETERMINE ALL LINES AND GRADES.
4. CLEAN AND COAT VERTICAL FACE OF EXISTING PAVEMENT AT SAW CUT LINE WITH RS-1 EMULSION IMMEDIATELY PRIOR TO PLACING NEW BITUMINOUS CONCRETE.
5. THE CONTRACTOR TO PROVIDE BACKFILL AND COMPACTION AT CURB LINE AFTER CONCRETE FORMS FOR SIDEWALKS AND PADS HAVE BEEN STRIPPED.
6. ALL LIGHT POLE BASES NOT PROTECTED BY A RAISED CURB SHALL BE PAINTED YELLOW.
7. ALL DIMENSIONS ARE TO THE FACE OF CURB UNLESS OTHERWISE NOTED.
8. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING RETAINING WALL DESIGN FROM STRUCTURAL ENGINEER AND/OR WALL MANUFACTURER. CONTRACTOR SHALL FURNISH ALL LABOR, MATERIALS AND EQUIPMENT REQUIRED TO CONSTRUCT WALL IN ACCORDANCE WITH DESIGN APPROVED BY THE ENGINEER. RETAINING WALL SHALL BE SEGMENTAL BLOCK WALL SYSTEM AS OUTLINED IN THE DETAILS
9. PROPERTY MANAGER WILL BE RESPONSIBLE FOR TIMELY SNOW REMOVAL FROM ALL PUBLIC WALKS, DRIVES, AND PARKING AREAS ON-SITE. SNOW SHALL BE HAULED OFF-SITE AND LEGALLY DISPOSED OF, WHEN NECESSARY, WHEN SNOW STORAGE AREAS HAVE REACHED CAPACITY.

GRADING AND DRAINAGE NOTES:

1. GENERAL COMPACTION REQUIREMENTS:
   - BELOW PAVED OR CONCRETE AREAS: 95%
   - TRENCH BEDDING MATERIAL AND SAND BLANKET BACKFILL: 95%
   - BELOW LOAM AND SEED AREAS: 90%
   - * ALL PERCENTAGES OF COMPACTION SHALL BE OF THE MAXIMUM DRY DENSITY AT THE OPTIMUM MOISTURE CONTENT AS DETERMINED AND CONTROLLED IN ACCORDANCE WITH ASTM D-1557, METHOD C FIELD DENSITY TESTS SHALL BE MADE IN ACCORDANCE WITH ASTM D-1556 OR ASTM-2922.
2. ALL STORM DRAINAGE PIPES SHALL BE HIGH DENSITY POLYETHYLENE (HANCOR HI-Q, ADS N-12 OR EQUAL) OR RCP CLASS IV, UNLESS OTHERWISE SPECIFIED.
3. SEE UTILITY PLAN FOR ALL SITE UTILITY INFORMATION.
4. ADJUST ALL MANHOLES, CATCH BASINS, CURB BOXES, ETC. WITHIN LIMITS OF WORK TO FINISH GRADE.
5. THE CONTRACTOR SHALL PROVIDE A FINISH PAVEMENT SURFACE AND LAWN AREAS FREE OF LOW SPOTS AND PONDING AREAS. CRITICAL AREAS INCLUDE BUILDING ENTRANCES, EXITS, RAMPS AND LOADING DOCK AREAS ADJACENT TO THE BUILDING.
6. PROVIDE SITE GRADING AT ACCESSIBLE SIDEWALK RAMPS, SIDEWALKS, AND BUILDING ENTRANCES THAT IS CONSISTENT WITH THE RELEVANT ACCESS REQUIREMENTS OF THE ARCHITECTURAL BARRIERS ACT (ABA), THE AMERICANS WITH DISABILITIES ACT (ADA). SMALL CHANGES IN GRADE OVER RELATIVELY SHORT DISTANCES (E.G. AT PARKING SPACES, ACCESSIBLE ROUTES, AND RAMPS) MIGHT NOT BE CLEARLY DEPICTED WITHIN THE CONTOUR INTERVAL SHOWN. COMPLY WITH THE CRITERIA IN THESE STANDARDS. SELECT MAXIMUM SLOPE CRITERIA ARE REPRODUCED BELOW:
   - ACCESSIBLE PARKING STALLS AND PASSENGER LOADING ZONES (IN ANY DIRECTION) SHALL BE < 2.0%
   - LONGITUDINAL SLOPE ALONG ACCESSIBLE ROUTES SHALL BE < 5.0%
   - CROSS SLOPE ALONG ACCESSIBLE ROUTES SHALL BE < 2.0%
7. THE CONTRACTOR SHALL THOROUGHLY CLEAN ALL CATCH BASINS AND DRAIN LINES, WITHIN THE LIMIT OF WORK, OF SEDIMENT IMMEDIATELY UPON COMPLETION OF CONSTRUCTION.
8. ALL MATERIALS AND CONSTRUCTION SHALL CONFORM WITH APPLICABLE FEDERAL, STATE AND LOCAL CODES.
9. ALL DISTURBED AREAS NOT TO BE PAVED OR OTHERWISE TREATED SHALL RECEIVE 6" LOAM, SEED FERTILIZER AND MULCH.
10. ALL PROPOSED CATCH BASINS SHALL BE EQUIPPED WITH OIL/GAS SEPARATOR HOODS AND 4' SUMPS.
11. THE CONTRACTOR SHALL VERIFY INVERTS OF EXISTING DRAIN LINES AND STRUCTURES AT PROPOSED DRAINAGE CONNECTION LOCATIONS PRIOR TO CONSTRUCTION AND IMMEDIATELY NOTIFY ENGINEER OF ANY DISCREPANCIES.

UTILITY NOTES:

1. COORDINATE ALL UTILITY WORK WITH APPROPRIATE UTILITY COMPANY.
   - NATURAL GAS - UNITIL
   - WATER - CITY OF PORTSMOUTH
   - SEWER - CITY OF PORTSMOUTH
   - ELECTRIC - EVERSOURCE
   - COMMUNICATIONS - CONSOLIDATED COMM/FAIRPOINT/COMCAST
2. SEE GRADING, DRAINAGE & EROSION CONTROL PLAN FOR PROPOSED GRADING AND EROSION CONTROL MEASURES.
3. THE CONTRACTOR SHALL MAINTAIN UTILITY SERVICES TO ABUTTING PROPERTIES THROUGHOUT CONSTRUCTION.
4. ALL ELECTRICAL MATERIAL WORKMANSHIP SHALL CONFORM TO THE NATIONAL ELECTRIC CODE, CURRENT EDITION, AND ALL APPLICABLE STATE AND LOCAL CODES.
5. THE EXACT LOCATION OF NEW UTILITY SERVICES AND CONNECTIONS SHALL BE COORDINATED WITH THE BUILDING DRAWINGS AND THE APPLICABLE UTILITY COMPANIES.
6. ADJUST ALL MANHOLES, CATCH BASINS, CURB BOXES, ETC. WITHIN LIMITS OF WORK TO FINISH GRADE.
7. ALL UNDERGROUND CONDUITS SHALL HAVE NYLON PULL ROPES TO FACILITATE PULLING CABLES.
8. THE CONTRACTOR SHALL OBTAIN, PAY FOR, AND COMPLY WITH ALL REQUIRED PERMITS, ARRANGE FOR ALL INSPECTIONS, AND SUBMIT COPIES OF ACCEPTANCE CERTIFICATES TO THE OWNER PRIOR TO THE COMPLETION OF THIS PROJECT.
9. THE CONTRACTOR SHALL PROVIDE AND INSTALL ALL MANHOLES, BOXES, FITTINGS, CONNECTORS, COVER PLATES, AND OTHER MISCELLANEOUS ITEMS NOT NECESSARILY DETAILED ON THESE DRAWINGS TO RENDER INSTALLATION OF UTILITIES COMPLETE AND OPERATIONAL.
10. SAW CUT AND REMOVE PAVEMENT AND CONSTRUCT PAVEMENT TRENCH PATCH FOR ALL PROPOSED UTILITIES LOCATED IN EXISTING PAVEMENT AREAS TO REMAIN.
11. CONTRACTOR SHALL COORDINATE ALL ELECTRIC WORK INCLUDING BUT NOT LIMITED TO: CONDUIT CONSTRUCTION, MANHOLE CONSTRUCTION, UTILITY POLE CONSTRUCTION, OVERHEAD WIRE RELOCATION, AND TRANSFORMER CONSTRUCTION WITH POWER COMPANY.
12. THE CONTRACTOR SHALL PHASE UTILITY CONSTRUCTION, PARTICULARLY WATER MAIN AND GAS MAIN CONSTRUCTION AS TO MAINTAIN CONTINUOUS SERVICE TO ABUTTING PROPERTIES. CONTRACTOR SHALL COORDINATE TEMPORARY SERVICES TO ABUTTERS WITH THE UTILITY COMPANY AND AFFECTED ABUTTER.
13. SITE LIGHTING SPECIFICATIONS, CONDUIT LAYOUT AND CIRCUITRY FOR PROPOSED SITE LIGHTING AND SIGN ILLUMINATION SHALL BE PROVIDED BY THE PROJECT ELECTRICAL ENGINEER.

ABBREVIATIONS

ABDN('D)	ABANDON(ED)	FF	FINISH FLOOR	PRC	POINT OF REVERSE CURVATURE
AC	ASBESTOS CEMENT PIPE	FM	FORCE MAIN	PROT	PROTECT
APPROX	APPROXIMATE	G	GAS	PSF	POUNDS PER SQUARE FOOT
BC	BITUMINOUS CURB	GG	GAS GATE	PSI	POUNDS PER SQUARE INCH
BFP	BACK FLOW PREVENTOR	GRAN	GRANITE	PT	POINT OF TANGENCY
BIT	BITUMINOUS	HC	HANDICAP	PVC	POLYVINYLCHLORIDE
BL	BASELINE	HDPE	HIGH DENSITY POLYETHYLENE	PVMT	PAVEMENT
BLDG	BUILDING			R	RADIUS
BND	BOUND	HMA	HOT MIX ASPHALT	RCP	REINFORCED CONCRETE PIPE
BOC	BOTTOM OF CURB	HYD	HYDRANT	RD	ROOF DRAIN
BOT	BOTTOM	IN	INCHES	REV	REVISION
BS	BOTTOM OF STEP	INV	INVERT	ROW	RIGHT OF WAY
BW	BOTTOM OF WALL	IP	IRON PIN	RT	RIGHT
CATV	CABLE TELEVISION	L	LENGTH OF CURB	R&D	REMOVE AND DISPOSE
CB	CATCH BASIN	LP	LIGHT POLE	R&R	REMOVE AND RESET
CCW	CEMENT CONCRETE WALK	LT	LEFT	R&S	REMOVE AND STACK
CEM	CEMENT	MAX	MAXIMUM	S	SOUTH
CI	CAST IRON PIPE	MH	MANHOLE	SAN	SANITARY
CL	CENTERLINE	MIN	MINIMUM	SCH	SCHEDULE
CLF	CHAIN LINK FENCE	MISC	MISCELLANEOUS	SF	SQUARE FOOT
CO	CLEAN OUT	MON	MONUMENT	SMH	SEWER MANHOLE
CONC	CONCRETE	MJ	MECHANICAL JOINT	SS	STAINLESS STEEL
CPP	CORRUGATED POLYETHYLENE PIPE	N	NORTH	STA	STATION
		NTC	NOT IN THIS CONTRACT	STEL	STEEL
CY	CUBIC YARD	NTS	NOT TO SCALE	STRM	STORM
DH	DRILL HOLE	N/A	NOT APPLICABLE	T	TANGENT LENGTH
DI	DUCTILE IRON PIPE	N/F	NOW OR FORMERLY	TC	TOP OF CURB
DIA	DIAMETER	OC	ON CENTER	TEL	TEL-DATA
DMH	DRAIN MANHOLE	OCS	OUTLET CONTROL STRUCTURE	TP	TEST PIT
E	EAST			TS	TOP OF STEP
EF	EACH FACE	OH	OVERHEAD	TW	TOP OF WALL
EG	EXISTING GRADE	PB	PLANT BED	TYP	TYPICAL
EL/ELEV	ELEVATION	PC	POINT OF CURVATURE	UP	UTILITY POLE
ELEC	ELECTRIC	PCC	POINT OF COMPOUND CURVATURE	W	WATER
EMH	ELECTRIC MANHOLE			WG	WATER GATE
EOP	EDGE OF PAVEMENT	PCPP	PERFORATED CORRUGATED POLYETHYLENE PIPE	WV	WATER VALVE
EW	EACH WAY			XFMR	TRANSFORMER
EXIST	EXISTING	PERF	PERFORATED		
FES	FLARED END SECTION	PI	POINT OF INTERSECTION		

LEGEND

EXISTING	PROPOSED	DESCRIPTION
		PROPERTY LINE
		ADJACENT PROPERTY LINE
		RIGHT OF WAY (ROW) LINE
		EASEMENT LINE
		ZONING DISTRICT BOUNDARY LINE (APPROX)
		BUILDING SETBACK LINE
- 8 -	8	INTERMEDIATE CONTOURS
— 10 —	10	INDEX CONTOURS
× 44.45	× 44.45	SPOT / APPROX SPOT GRADE
	2%	MAGNITUDE & DIRECTION OF SLOPE
		LIMIT OF WETLANDS WATER COURSE
		LIMIT OF VEGETATED WETLAND
PEM1F		WETLAND CLASSIFICATION TYPE
		LIMIT OF LOCAL WETLAND BUFFER (ZONE - 25 FEET)
		LIMIT OF LOCAL WETLAND BUFFER (ZONE - 50 FEET)
		LIMIT OF LOCAL WETLAND BUFFER (ZONE - 100 FEET)
		LIMIT OF WORK (APPROX)
		LIMIT OF SAWCUT (APPROX)
		LIMIT OF EROSION CONTROL (APPROX)
		INLET PROTECTION
		PAVEMENT / CONCRETE SECTION TO BE REMOVED (APPROX)
		EDGE OF PAVEMENT
VGC	VGC	VERTICAL GRANITE CURB
SGC	SGC	SLOPED GRANITE CURB
	15"R	CURB RADIUS
		PAVEMENT SECTION
		CONCRETE SIDEWALK & TIP DOWN RAMP
		FENCE
		GUARDRAIL
		LIGHT POLE / BASE
		SIGN
		BOLLARD
		SNOW STORAGE (APPROX)
	STOP	PAVEMENT STRIPING
		TREE LINE (APPROX)
		STONE WALL
		RETAINING WALL
		STORM DRAIN
		STORM UNDERDRAIN
D		STORM DRAIN MANHOLE
		STORM DRAIN INLETS
SS SS		FLARED END SECTION & RIP RAP APRON
XS XS		GRAVITY SANITARY SEWER
		GRAVITY SANITARY SEWER (APPROX)
S		SANITARY SEWER STRUCTURES
		WATER SERVICE
XW XW		WATER SERVICE (APPROX)
W	THRUST BLOCK	WATER SERVICE STRUCTURES
		UNDERGROUND ELECTRIC
XE XE		UNDERGROUND ELECTRIC (APPROX)
OHW		OVERHEAD UTILITY (UNSPECIFIED)
COM		UNDERGROUND COMMUNICATIONS SERVICE
E T		UNDERGROUND ELECTRIC / COMMUNICATIONS SERVICE STRUCTURES
		UTILITY POLE
		GAS SERVICE
XG XG		GAS SERVICE (APPROX)
G		GAS SERVICE STRUCTURES
		DECIDUOUS TREE
		EVERGREEN TREE
		ORNAMENTAL TREE
		SHRUBS / GROUND COVERS

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STATE OF NEW HAMPSHIRE — NEIL A. HANSEN — No. 15227 — LICENSED PROFESSIONAL ENGINEER
6/22/26

STATE OF NEW HAMPSHIRE — PATRICK CRIMMINS — No. 12378 — LICENSED PROFESSIONAL ENGINEER
6/22/26

TAC SUBMISSION

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124 Heritage Ave.

One Twenty Four Group, Inc.

Portsmouth, New Hampshire

MARK	DATE	DESCRIPTION
B	6/22/2026	TAC SUBMISSION
A	4/29/2026	CC WORK SESSION

PROJECT NO:	K0076-0066
DATE:	4/29/2026
FILE:	K0076-0066_C-DSGN.dwg
DRAWN BY:	M.CURLEY
DESIGNED BY:	B.CURCIO
CHECKED BY:	N.HANSEN
APPROVED BY:	P.CRIMMINS

GENERAL NOTES AND LEGEND

SCALE:

G-001

Last Saved: 6/19/2026
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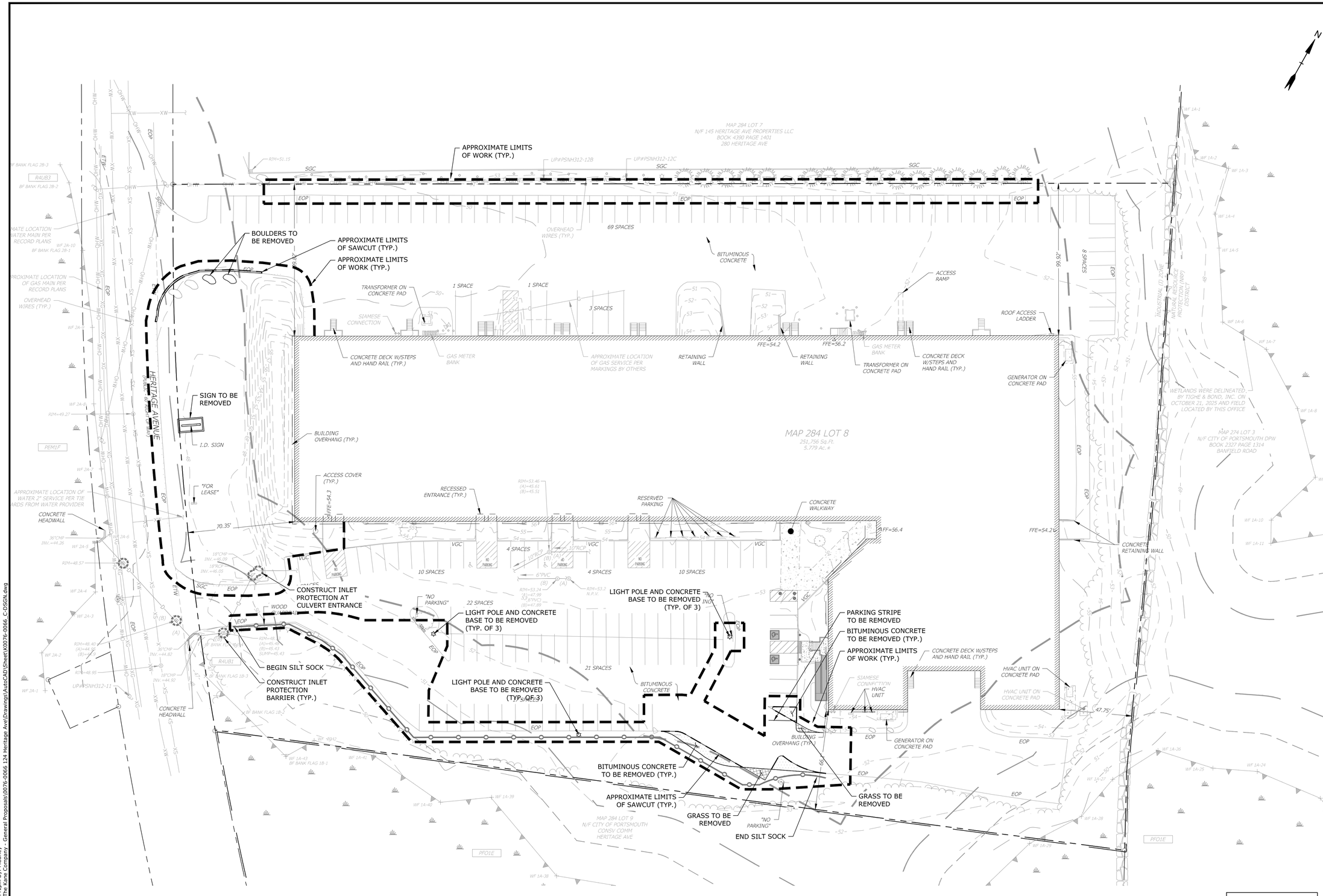

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STATE OF NEW HAMPSHIRE
STEFANIE M. TETREAULT
No. 315
CERTIFIED WETLAND SCIENTIST
Stefanie M. Tetreault
06/22/2026

STATE OF NEW HAMPSHIRE
NEIL A. HANSEN
No. 15227
LICENSED PROFESSIONAL ENGINEER
6/22/26

TAC SUBMISSION

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One Twenty Four Group, Inc.

Portsmouth, New Hampshire

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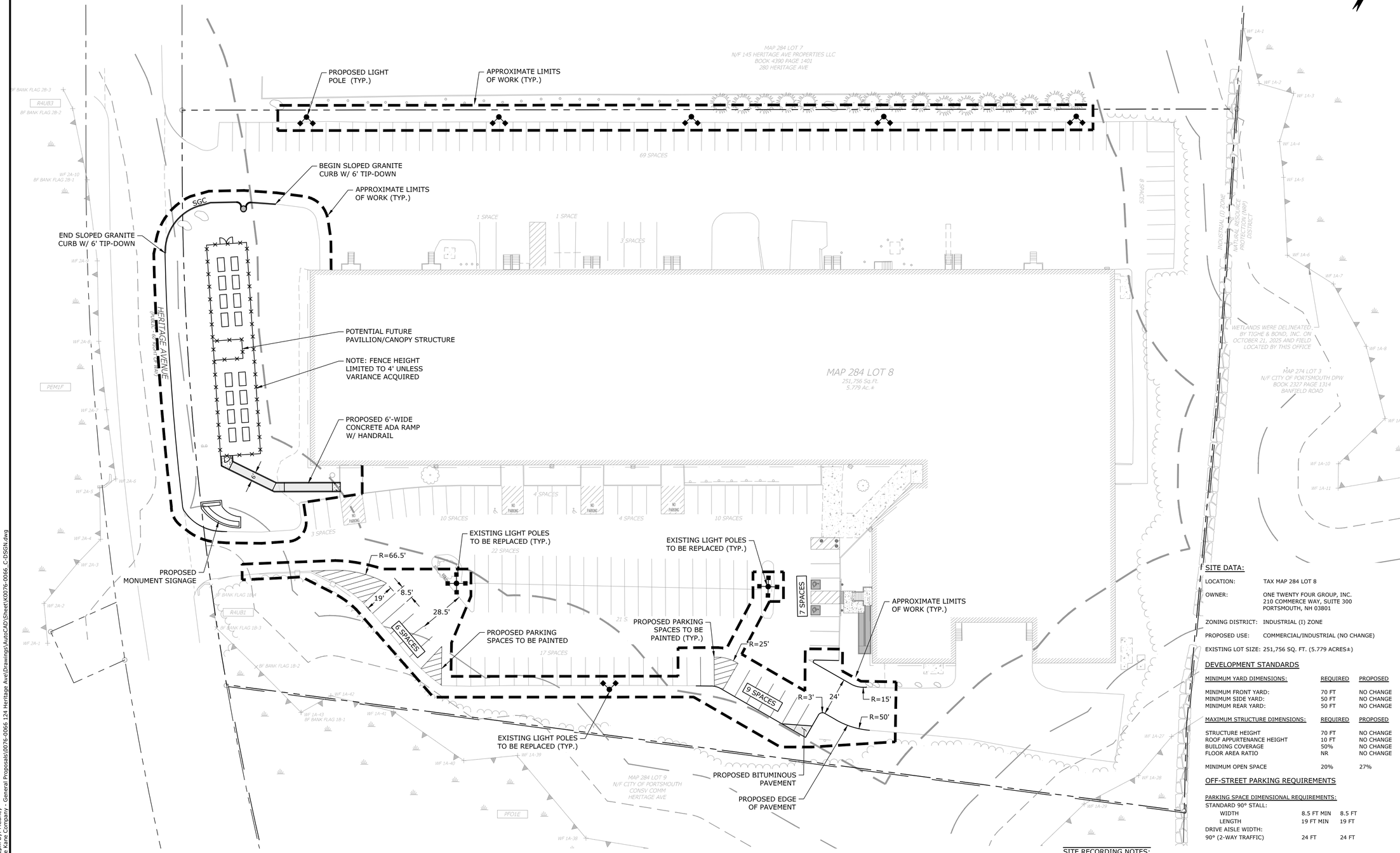
DEMOLITION PLAN

SCALE:

C-101



SITE DATA:

LOCATION:	TAX MAP 284 LOT 8
OWNER:	ONE TWENTY FOUR GROUP, INC. 210 COMMERCE WAY, SUITE 300 PORTSMOUTH, NH 03801
ZONING DISTRICT:	INDUSTRIAL (I) ZONE
PROPOSED USE:	COMMERCIAL/INDUSTRIAL (NO CHANGE)
EXISTING LOT SIZE:	251,756 SQ. FT. (5.779 ACRES±)

DEVELOPMENT STANDARDS

MINIMUM YARD DIMENSIONS:	REQUIRED	PROPOSED
MINIMUM FRONT YARD:	70 FT	NO CHANGE
MINIMUM SIDE YARD:	50 FT	NO CHANGE
MINIMUM REAR YARD:	50 FT	NO CHANGE
MAXIMUM STRUCTURE DIMENSIONS:	**REQUIRED**	**PROPOSED**
STRUCTURE HEIGHT	70 FT	NO CHANGE
ROOF APPURTENANCE HEIGHT	10 FT	NO CHANGE
BUILDING COVERAGE	50%	NO CHANGE
FLOOR AREA RATIO	NR	NO CHANGE
MINIMUM OPEN SPACE	20%	27%

OFF-STREET PARKING REQUIREMENTS

PARKING SPACE DIMENSIONAL REQUIREMENTS:		
STANDARD 90° STALL:		
WIDTH	8.5 FT MIN	8.5 FT
LENGTH	19 FT MIN	19 FT
DRIVE AISLE WIDTH:		
90° (2-WAY TRAFFIC)	24 FT	24 FT

SITE RECORDING NOTES:

1. THIS SITE PLAN SHALL BE RECORDED IN THE ROCKINGHAM COUNTY REGISTRY OF DEEDS.
2. ALL IMPROVEMENTS SHOWN ON THIS SITE PLAN SHALL BE CONSTRUCTED AND MAINTAINED IN ACCORDANCE WITH THE PLAN BY THE PROPERTY OWNER AND ALL FUTURE PROPERTY OWNERS. NO CHANGES SHALL BE MADE TO THIS SITE PLAN WITHOUT THE EXPRESS APPROVAL OF THE PORTSMOUTH PLANNING DIRECTOR.
3. ALL CONDITIONS ON THIS PLAN SHALL REMAIN IN EFFECT IN PERPETUITY PURSUANT TO THE REQUIREMENTS OF THE SITE PLAN REVIEW REGULATIONS.
4. THIS IS NOT A BOUNDARY SURVEY AND SHALL NOT BE USED AS SUCH.

SEE SHEET C-101 FOR PLAN NOTES & LEGEND

0 30' 60'

SCALE: 1" = 30'

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One Twenty Four Group, Inc.

Portsmouth, New Hampshire

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SITE PLAN

SCALE:

C-201

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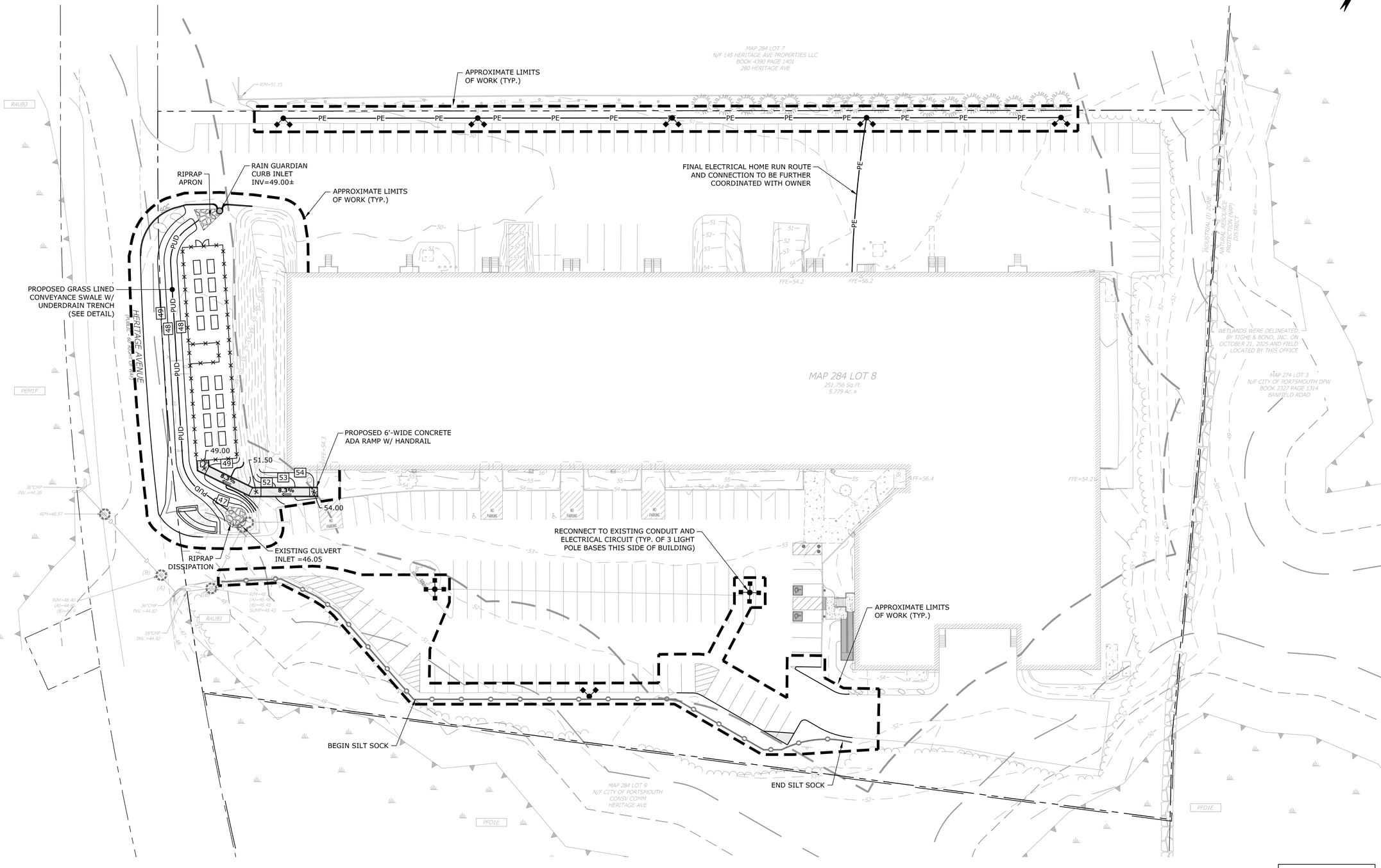

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APPROVED BY:	P.CRIMMINS

GRADING, DRAINAGE, EROSION CONTROL, AND UTILITIES PLAN

SCALE:

C-301

Last Saved: 6/19/2026
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GENERAL PROJECT INFORMATION

PROJECT OWNER:	ONE TWENTY FOUR GROUP, INC. 210 COMMERCE WAY, SUITE 300 PORTSMOUTH, NH 03801
PROJECT NAME:	PROPOSED PARKING LOT IMPROVEMENTS
PROJECT ADDRESS:	124 HERITAGE AVENUE PORTSMOUTH, NH 03801
PROJECT MAP / LOT:	MAP 284 / LOT 8
PROJECT LATITUDE:	43°-2'-6.21"N
PROJECT LONGITUDE:	70°-47'-46.66"W

PROJECT DESCRIPTION

THE PROPOSED PROJECT INCLUDES STRIPING ADDITIONAL PARKING SPACES, A PROPOSED ADA RAMP AND STAIRS, AND A PROPOSED GARDEN AREA. THE PROJECT WILL ALSO CONSIST OF ASSOCIATED SITE IMPROVEMENTS SUCH AS STORMWATER MANAGEMENT, UTILITIES AND LIGHTING.

DISTURBED AREA

THE TOTAL AREA TO BE DISTURBED IS APPROXIMATELY 0.25 ACRES.

SOIL CHARACTERISTICS

BASED ON THE NRCS WEB SOIL SURVEY FOR ROCKINGHAM COUNTY - NEW HAMPSHIRE, THE SOILS ON SITE CONSIST OF MAYBID SILT SOILS WHICH ARE POORLY DRAINED SOILS WITH HYDROLOGIC SOIL GROUP RATING OF C/D, AND HOOSIC GRAVELLY FINE SANDY LOAM SOILS WHICH ARE SOMEWHAT EXCESSIVELY DRAINED SOILS WITH HYDROLOGIC SOIL GROUP RATING OF A.

NAME OF RECEIVING WATERS

THE STORMWATER RUNOFF FROM THE SITE WILL BE DISCHARGED VIA OVERLAND FLOW TO AN UNNAMED WETLAND.

CONSTRUCTION SEQUENCE PLAN OF MAJOR ACTIVITIES:

1. CONSTRUCT TEMPORARY AND PERMANENT PERIMETER EROSION CONTROLS, SEDIMENT CONTROLS AND DETENTION MEASURES, PRIOR TO ANY EARTH MOVING OPERATIONS THAT MAY AFFECT STORMWATER RUNOFF SUCH AS:
   - DISPOSAL OF SEDIMENT SPOIL, STUMPS, DEMOLITION DEBRIS, AND OTHER SOLID WASTE
   - CONTROL OF DUST
   - CONSTRUCTION OF DRIVES, PARKING AREAS, AND OTHER IMPERVIOUS SURFACES
   - INSTALLATION OF UTILITIES AND BUILDINGS & BLEACHERS CONSTRUCTION
   - CONSTRUCTION DURING LATE WINTER AND EARLY SPRING
1. DEMOLISH ALL SITE FEATURES AS DIRECTED ON THE DRAWINGS. CLEAR AND DISPOSE OF DEBRIS IN ACCORDANCE WITH ALL STATE AND LOCAL REGULATIONS.
2. CUT AND CLEAR TREES ACROSS SITE. (GRUBBING SHALL NOT OCCUR UNTIL AFTER THE INSTALLATION OF PERIMETER CONTROLS.)
3. INSPECT AND MAINTAIN ALL EROSION AND SEDIMENT CONTROL MEASURES THROUGHOUT THE ENTIRETY OF CONSTRUCTION. REMOVE TRAPPED SEDIMENTS FROM COLLECTOR DEVICES AS NEEDED IN ACCORDANCE WITH THE PROJECT STORMWATER POLLUTION PREVENTION PLAN (SWPPP) AND DIRECTION OF THE ENVIRONMENTAL MONITOR.
4. NOTE THAT ALL PERMANENT DITCHES, SWALES, DETENTION, RETENTION AND SEDIMENTATION BASINS SHALL BE STABILIZED USING THE VEGETATIVE AND NON-STRUCTURAL BMPS PRIOR TO DIRECTING RUNOFF TO THEM.
5. CONSTRUCT TEMPORARY CULVERTS, DIVERSION CHANNELS, AND/OR BASINS AS REQUIRED. SEDIMENT TRAPS AND/OR BASINS SHALL BE USED AS NECESSARY TO CONTAIN RUNOFF UNTIL SOILS ARE STABILIZED.
6. COMPLETE MASS GRADING AND EARTHWORK IN ORDER TO ESTABLISH SITE SUBGRADE ELEVATIONS, AS WELL AS EXCAVATION NECESSARY TO CONSTRUCT FOUNDATIONS FOR PROPOSED STRUCTURES.
7. CONSTRUCT UNDERGROUND DRAINAGE, UTILITY AND LIGHTING INFRASTRUCTURE NECESSARY TO SUPPORT TEMPORARY AND PERMANENT CONDITIONS. ALL TRENCHES TO BE BACKFILLED IN ACCORDANCE WITH PROJECT DRAWINGS AND SPECIFICATIONS.
8. ALL AREAS OF UNSTABILIZED SOIL SHALL BE TEMPORARILY STABILIZED AS SOON AS PRACTICABLE, BUT IN ALL CASES WITHIN 45 DAYS OF INITIAL DISTURBANCE, UNLESS A SHORTER TIME IS SPECIFIED BY LOCAL AUTHORITIES, THE CONSTRUCTION SEQUENCE APPROVED AS PART OF THE ISSUED PERMIT, OR AN INDEPENDENT MONITOR. ALL AREAS OF TEMPORARILY STABILIZED SOIL SHALL PERMANENTLY STABILIZED AS SOON AS PRACTICABLE BUT IN ALL CASES WITHIN 3 DAYS OF FINAL GRADING.
9. CONSTRUCT BASE COURSE GRAVELS FOR ALL DRIVES AND PARKING AREAS. ALL DRIVES AND PARKING AREAS SHALL BE STABILIZED WITHIN 72 HOURS OF ACHIEVING FINISHED GRADE.
10. BEGIN PERMANENT AND TEMPORARY SEEDING AND MULCHING. ALL CUT AND FILL SLOPES THAT HAVE NOT BEEN OTHERWISE STABILIZED BY GRAVELS SHALL BE SEEDED AND MULCHED WITHIN 72 HOURS OF ACHIEVING FINISHED GRADE.
11. DAILY, OR AS REQUIRED, CONSTRUCT TEMPORARY BERMS, DRAINS, DITCHES, PERIMETER EROSION CONTROL MEASURES, SEDIMENT TRAPS, ETC., MULCH AND SEED AS REQUIRED.
12. FINISH PAVING ALL DRIVES, AND PARKING AREAS. CONSTRUCT ALL HARDSCAPE, FIELD SURFACES AND SITE AMENITIES/FEATURES.
13. COMPLETE PERMANENT SEEDING AND LANDSCAPING.
14. REMOVE TRAPPED SEDIMENTS FROM ALL EROSION CONTROL MEASURES AND THEN REMOVE TEMPORARY EROSION CONTROL MEASURES.

SPECIAL CONSTRUCTION NOTES:

1. THE CONSTRUCTION SEQUENCE MUST LIMIT THE DURATION AND AREA OF DISTURBANCE. THE AREA OF DISTURBANCE SHALL ONLY EXCEED FIVE (5) ACRES AT ANY ONE TIME BEFORE DISTURBED AREAS ARE STABILIZED IF AN ENVIRONMENTAL MONITOR IS EMPLOYED DURING CONSTRUCTION IN ACCORDANCE WITH Env-Wq 1505.03.
2. THE PROJECT IS TO BE MANAGED IN A MANNER THAT MEETS THE REQUIREMENTS AND INTENT OF RSA 430:51-57 AND CHAPTER AGR 3800 RELATIVE TO INVASIVE SPECIES. ANY INVASIVE OR NOXIOUS PLANT SPECIES ENCOUNTERED DURING CONSTRUCTION SHALL BE CONTROLLED IN ACCORDANCE WITH THE STATE OF NEW HAMPSHIRE DEPARTMENT OF TRANSPORTATION, "ENV 1, MANUAL 1 – BEST MANAGEMENT PRACTICES FOR CONTROL OF INVASIVE AND NOXIOUS PLANT SPECIES", CURRENT EDITION.

EROSION CONTROL NOTES:

1. ALL EROSION CONTROL MEASURES AND PRACTICES SHALL CONFORM TO THE "NEW HAMPSHIRE STORMWATER MANUAL, LATEST EDITION.
2. CONTRACTOR SHALL SUBMIT SHOP DRAWINGS FOR ALL EROSION AND SEDIMENT CONTROL MEASURES FOR APPROVAL.
3. AS THE FIRST ORDER OF WORK, PRIOR TO ANY EARTH DISTURBANCE, THE CONTRACTOR SHALL INSTALL ALL TEMPORARY EROSION AND SEDIMENT CONTROL MEASURES INCLUDING BUT NOT LIMITED TO; INLET PROTECTION BARRIERS, SILT SOCKS, SILT FENCES, MULCH BERMS, AND STABILIZED CONSTRUCTION EXITS AS SHOWN ON THE DRAWINGS, AND AS REQUIRED BY ALL STATE AND LOCAL PERMITS AND APPROVALS.
4. INLET PROTECTION BARRIERS SHALL BE INSTALLED AT ALL EXISTING AND PROPOSED CATCH BASINS/CURB INLETS AND YARD DRAINS WITHIN THE LIMITS OF WORK AS WELL AS ANY CATCH BASINS/CURB INLETS AND YARD DRAINS THAT RECEIVE RUNOFF FROM ANY CONSTRUCTION ACTIVITIES. THESE MEASURES SHALL BE FULLY MAINTAINED FOR THE DURATION OF THE PROJECT.
5. PERIMETER CONTROLS INCLUDING SILT FENCES, MULCH BERM, SILT SOCK, AND/OR HAY BALE BARRIERS SHALL BE MAINTAINED FOR THE DURATION OF THE PROJECT UNTIL ALL NON-PAVED AREAS HAVE BEEN STABILIZED.
6. CONTRACTOR SHALL INSTALL EROSION CONTROL BLANKETS ON ALL STEEP SLOPE AREA (3:1 OR GREATER).
7. DURING CONSTRUCTION THE CONTRACTOR SHALL BE RESPONSIBLE FOR CONTROLLING DUST AND WIND EROSION THROUGHOUT THE CONSTRUCTION PERIOD. DUST CONTROL MEASURES INCLUDE, BUT NOT LIMITED TO; MOISTEN EXPOSED SOIL SURFACES PERIODICALLY WITH ADEQUATE WATER TO CONTROL DUST, MECHANICAL SWEEPERS ON PAVED SURFACES, AND COVERING SURFACES WITH CRUSHED STONE OR COARSE GRAVEL.
8. THE CONTRACTOR SHALL HAVE ALL EROSION AND SEDIMENT CONTROL MEASURES INCLUDING, BUT NOT LIMITED TO, INLET PROTECTION BARRIERS, PERIMETER SEDIMENT CONTROLS, AND STEEP SLOPE EROSION CONTROL BLANKETS INSPECTED BY A QUALIFIED PERSON AT LEAST ONCE A WEEK AND WITHIN 24 HOURS AFTER A RAIN EVENT OF 0.25 INCHES OR GREATER. EROSION AND SEDIMENT CONTROL MEASURES SHALL BE ADJUSTED, REPAIRED, MODIFIED, OR ADDITIONAL MEASURES INSTALLED AS NECESSARY TO ADDRESS EVOLVING CONDITIONS DURING CONSTRUCTION.
9. SEDIMENT CONTROL FILTER MEASURES SHALL BE REPLACED WHEN SEDIMENT REACHES 1/3 THE HEIGHT OF THE FILTER.
10. THE CONTRACTOR SHALL REMOVE AND PROPERLY DISPOSE OF ALL TEMPORARY EROSION CONTROL DEVICES UPON COMPLETION OF CONSTRUCTION.
11. ALL DISTURBED AREAS NOT OTHERWISE BEING TREATED SHALL RECEIVE 6" LOAM, SEED AND FERTILIZER.

STABILIZATION:

1. AN AREA SHALL BE CONSIDERED STABLE WHEN ONE OF THE FOLLOWING HAS OCCURRED:
   - A. BASE COURSE GRAVELS HAVE BEEN INSTALLED IN AREAS TO BE PAVED;
     - a. IN AREAS TO BE PAVED, "STABLE" MEANS THAT BASE COURSE GRAVELS MEETING THE REQUIREMENTS OF NHDOT STANDARD FOR ROAD AND BRIDGE CONSTRUCTION, LATEST EDITION, 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 RIPRAP HAS BEEN INSTALLED;
   - D. EROSION CONTROL BLANKETS HAVE BEEN PROPERLY INSTALLED.
2. ALL CUT AND FILL SLOPES SHALL BE SEEDED AND LOAMED WITHIN 72 HOURS OF ACHIEVING FINISHED GRADE.
3. ALL ROADS, DRIVES AND PARKING AREA SHALL BE STABILIZED WITHIN 72 HOURS OF ACHIEVING FINISHED GRADE.
4. WINTER STABILIZATION PRACTICES:
   - A. ALL PROPOSED VEGETATED AREAS THAT DO NOT EXHIBIT A MINIMUM OF 85% VEGETATIVE GROWTH BY OCTOBER 15, OR WHICH ARE DISTURBED AFTER OCTOBER 15, SHALL BE STABILIZED BY SEEDING AND INSTALLING EROSION CONTROL BLANKETS ON SLOPES GREATER THAN 3:1, AND SEEDING AND PLACING 3 TO 4 TONS OF MULCH PER ACRE, SECURED WITH ANCHORED NETTING, ELSEWHERE. THE INSTALLATION OF EROSION CONTROL BLANKETS OR MULCH AND NETTING SHALL NOT OCCUR OVER ACCUMULATED SNOW OR ON FROZEN GROUND AND SHALL BE COMPLETED IN ADVANCE OF THAW OR SPRING MELT EVENTS;
   - B. ALL DITCHES OR SWALES WHICH DO NOT EXHIBIT A MINIMUM OF 85 PERCENT 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;
   - C. AFTER OCTOBER 15, INCOMPLETE ROAD, DRIVES, OR PARKING SURFACES, WHERE WORK HAS STOPPED FOR THE WINTER SEASON, SHALL BE PROTECTED WITH A MINIMUM OF 3 INCHES OF CRUSHED GRAVEL PER NHDOT ITEM 304.3, OR IF CONSTRUCTION IS TO CONTINUE THROUGH THE WINTER SEASON BE CLEARED OF ANY ACCUMULATED SNOW AFTER EACH STORM EVENT;
   - D. FOR OVER-WINTER PROTECTION, A DOUBLE ROW OF SEDIMENT BARRIERS (SILT FENCE BACKED WITH HAY BALES OR EROSION CONTROL MIX, ETC.) SHALL BE PLACED WITHIN 75 FEET OF A PROTECTED NATURAL RESOURCE AREA.
3. STABILIZATION SHALL BE INITIATED ON ALL LOAM STOCKPILES, AND DISTURBED AREAS, WHERE CONSTRUCTION ACTIVITY SHALL NOT OCCUR FOR MORE THAN TWENTY-ONE (21) CALENDAR DAYS BY THE FOURTEENTH (14TH) DAY AFTER CONSTRUCTION ACTIVITY HAS PERMANENTLY OR TEMPORARILY CEASED IN THAT AREA. STABILIZATION MEASURES TO BE USED INCLUDE:
   - A. TEMPORARY SEEDING;
   - B. MULCHING.
4. ALL AREAS SHALL BE STABILIZED WITHIN 45 DAYS OF INITIAL DISTURBANCE.
5. WHEN CONSTRUCTION ACTIVITY PERMANENTLY OR TEMPORARILY CEASES WITHIN 100 FEET OF NEARBY SURFACE WATERS OR DELINEATED WETLANDS, THE AREA SHALL BE STABILIZED WITHIN SEVEN (7) DAYS OR PRIOR TO A RAIN EVENT. ONCE CONSTRUCTION ACTIVITY CEASES PERMANENTLY IN AN THESE AREAS, SILT FENCES, MULCH BERMS, HAY BALE BARRIERS AND ANY EARTH/DIKES SHALL BE REMOVED ONCE PERMANENT MEASURES ARE ESTABLISHED.
6. DURING CONSTRUCTION, RUNOFF WILL BE DIVERTED AROUND THE SITE WITH EARTH DIKES, PIPING OR STABILIZED CHANNELS WHERE POSSIBLE. SHEET RUNOFF FROM THE SITE WILL BE FILTERED THROUGH SILT FENCES, MULCH BERMS, HAY BALE BARRIERS, OR SILT SOCKS. ALL STORM DRAIN BASIN INLETS SHALL BE PROVIDED WITH FLARED END SECTIONS AND TRASH RACKS. THE SITE SHALL BE STABILIZED FOR THE WINTER BY OCTOBER 15.

DUST CONTROL:

1. THE CONTRACTOR SHALL BE RESPONSIBLE TO CONTROL DUST THROUGHOUT THE CONSTRUCTION PERIOD.
2. DUST CONTROL METHODS SHALL INCLUDE, BUT BE NOT LIMITED TO SPRINKLING WATER ON EXPOSED AREAS, COVERING LOADED DUMP TRUCKS LEAVING THE SITE, AND TEMPORARY MULCHING.
3. DUST CONTROL MEASURES SHALL BE UTILIZED SO AS TO PREVENT THE MIGRATION OF DUST FROM THE SITE TO ABUTTING AREAS.

STOCKPILES:

1. LOCATE STOCKPILES A MINIMUM OF 50 FEET AWAY FROM CATCH BASINS, SWALES, AND CULVERTS.
2. ALL STOCKPILES SHOULD BE SURROUNDED WITH TEMPORARY EROSION CONTROL MEASURES PRIOR TO THE ONSET OF PRECIPITATION.
3. PERIMETER BARRIERS SHOULD BE MAINTAINED AT ALL TIMES, AND ADJUSTED AS NEEDED TO ACCOMMODATE THE DELIVERY AND REMOVAL OF MATERIALS FROM THE STOCKPILE. THE INTEGRITY OF THE BARRIER SHOULD BE INSPECTED AT THE END OF EACH WORKING DAY.
4. PROTECT ALL STOCKPILES FROM STORMWATER RUN-OFF USING TEMPORARY EROSION CONTROL MEASURES SUCH AS BERMS, SILT SOCK, OR OTHER APPROVED PRACTICE TO PREVENT MIGRATION OF MATERIAL BEYOND THE IMMEDIATE CONFINES OF THE STOCKPILES.

OFF SITE VEHICLE TRACKING:

1. THE CONTRACTOR SHALL CONSTRUCT STABILIZED CONSTRUCTION EXIT(S) PRIOR TO ANY EXCAVATION ACTIVITIES.

VEGETATION:

1. TEMPORARY GRASS COVER:
   - A. SEEDBED PREPARATION:
     - a. APPLY FERTILIZER AT THE RATE OF 600 POUNDS PER ACRE OF 10-10-10. APPLY LIMESTONE (EQUIVALENT TO 50 PERCENT CALCIUM PLUS MAGNESIUM OXIDE) AT A RATE OF THREE (3) TONS PER ACRE;
   - B. SEEDING:
     - a. UTILIZE ANNUAL RYE GRASS AT A RATE OF 40 LBS/ACRE;
     - b. WHERE THE SOIL HAS BEEN COMPACTED BY CONSTRUCTION OPERATIONS, LOOSEN SOIL TO A DEPTH OF TWO (2) INCHES BEFORE APPLYING FERTILIZER, LIME AND SEED;
     - c. APPLY SEED UNIFORMLY BY HAND, CYCLONE SEEDER, OR HYDROSEEDER (SLURRY INCLUDING SEED AND FERTILIZER). HYDROSEEDINGS, WHICH INCLUDE MULCH, MAY BE LEFT ON SOIL SURFACE. SEEDING RATES MUST BE INCREASED 10% WHEN HYDROSEEDING;
   - C. MAINTENANCE:
     - a. TEMPORARY SEEDING SHALL BE PERIODICALLY INSPECTED. AT A MINIMUM, 95% OF THE SOIL SURFACE SHOULD BE COVERED BY VEGETATION. IF ANY EVIDENCE OF EROSION OR SEDIMENTATION IS APPARENT, REPAIRS SHALL BE MADE AND OTHER TEMPORARY MEASURES USED IN THE INTERIM (MULCH, FILTER BARRIERS, CHECK DAMS, ETC.).
2. PERMANENT MEASURES AND PLANTINGS:
   - A. LIMESTONE SHALL BE THOROUGHLY INCORPORATED INTO THE LOAM LAYER AT A RATE OF THREE (3) TONS PER ACRE IN ORDER TO PROVIDE A PH VALUE OF 5.5 TO 6.5;
   - B. FERTILIZER SHALL BE SPREAD ON THE TOP LAYER OF LOAM AND WORKED INTO THE SURFACE. FERTILIZER APPLICATION RATE SHALL BE 800 POUNDS PER ACRE OF 10-20-20 FERTILIZER;
   - C. SOIL CONDITIONERS AND FERTILIZER SHALL BE APPLIED AT THE RECOMMENDED RATES AND SHALL BE THOROUGHLY WORKED INTO THE LOAM. LOAM SHALL BE RAKED UNTIL THE SURFACE IS FINELY PULVERIZED, SMOOTH AND EVEN, AND THEN COMPACTED TO AN EVEN SURFACE CONFORMING TO THE REQUIRED LINES AND GRADES WITH APPROVED ROLLERS WEIGHING BETWEEN 4-1/2 POUNDS AND 5-1/2 POUNDS PER INCH OF WIDTH;
   - D. SEED SHALL BE SOWN AT THE RATE SHOWN BELOW. SOWING SHALL BE DONE ON A CALM, DRY DAY, PREFERABLY BY MACHINE, BUT IF BY HAND, ONLY BY EXPERIENCED WORKMEN. IMMEDIATELY BEFORE SEEDING, THE SOIL SHALL BE LIGHTLY RAKED. ONE HALF THE SEED SHALL BE SOWN IN ONE DIRECTION AND THE OTHER HALF AT RIGHT ANGLES TO THE ORIGINAL DIRECTION. IT SHALL BE LIGHTLY RAKED INTO THE SOIL TO A DEPTH NOT OVER 1/4 INCH AND ROLLED WITH A HAND ROLLER WEIGHING NOT OVER 100 POUNDS PER LINEAR FOOT OF WIDTH;
   - E. HAY MULCH SHALL BE APPLIED IMMEDIATELY AFTER SEEDING AS INDICATED ABOVE;
   - F. THE SURFACE SHALL BE WATERED AND KEPT MOIST WITH A FINE SPRAY AS REQUIRED, WITHOUT WASHING AWAY THE SOIL, UNTIL THE GRASS IS WELL ESTABLISHED. ANY AREAS WHICH ARE NOT SATISFACTORILY COVERED WITH GRASS SHALL BE RESEEDED, AND ALL NOXIOUS WEEDS REMOVED;
   - G. THE CONTRACTOR SHALL PROTECT AND MAINTAIN THE SEEDED AREAS UNTIL ACCEPTED;
   - H. A GRASS SEED MIXTURE CONTAINING THE FOLLOWING SEED REQUIREMENTS SHALL BE APPLIED AT THE INDICATED RATE:

SEED MIX	APPLICATION RATE
CREEPING RED FESCUE	20 LBS/ACRE
TALL FESCUE	20 LBS/ACRE
REDTOP	2 LBS/ACRE

   IN NO CASE SHALL THE WEED CONTENT EXCEED ONE (1) PERCENT BY WEIGHT. ALL SEED SHALL COMPLY WITH STATE AND FEDERAL SEED LAWS. SEEDING SHALL BE DONE NO LATER THAN SEPTEMBER 15. IN NO CASE SHALL SEEDING TAKE PLACE OVER SNOW.
3. DORMANT SEEDING (SEPTEMBER 15 TO FIRST SNOWFALL):
   - A. FOLLOW PERMANENT MEASURES SLOPE, LIME, FERTILIZER AND GRADING REQUIREMENTS. APPLY SEED MIXTURE AT TWICE THE INDICATED RATE. APPLY MULCH AS INDICATED FOR PERMANENT MEASURES.

CONCRETE WASHOUT AREA:

1. THE CONCRETE DELIVERY TRUCKS SHALL, WHENEVER POSSIBLE, USE WASHOUT FACILITIES AT THEIR OWN PLANT OR DISPATCH FACILITY;
2. IF IT IS NECESSARY, SITE CONTRACTOR SHALL DESIGNATE SPECIFIC WASHOUT AREAS AND DESIGN FACILITIES TO HANDLE ANTICIPATED WASHOUT WATER;
3. CONTRACTOR SHALL LOCATE WASHOUT AREAS AT LEAST 150 FEET AWAY FROM STORM DRAINS, SWALES AND SURFACE WATERS OR DELINEATED WETLANDS;
4. INSPECT WASHOUT FACILITIES DAILY TO DETECT LEAKS OR TEARS AND TO IDENTIFY WHEN MATERIALS NEED TO BE REMOVED.

ALLOWABLE NON-STORMWATER DISCHARGES:

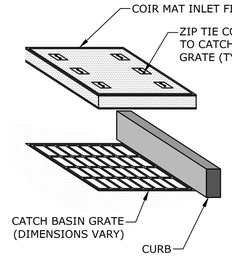
1. THE FOLLOWING ARE THE ONLY STORMWATER DISCHARGES ALLOWED. ALL OTHER NON-STORMWATER DISCHARGES ARE PROHIBITED ON SITE:
   - A. FIRE-FIGHTING ACTIVITIES;
   - B. FIRE HYDRANT FLUSHING;
   - C. WATERS USED TO WASH VEHICLES WHERE DETERGENTS ARE NOT USED;
   - D. WATER USED TO CONTROL DUST;
   - E. POTABLE WATER INCLUDING UNCONTAMINATED WATER LINE FLUSHING;
   - F. ROUTINE EXTERNAL BUILDING WASH DOWN WHERE DETERGENTS ARE NOT USED;
   - G. PAVEMENT WASH WATERS WHERE DETERGENTS ARE NOT USED;
   - H. UNCONTAMINATED AIR CONDITIONING/COMPRESSOR CONDENSATION;
   - I. UNCONTAMINATED GROUND WATER OR SPRING WATER;
   - J. FOUNDATION OR FOOTING DRAINS WHICH ARE UNCONTAMINATED;
   - K. UNCONTAMINATED EXCAVATION DEWATERING;
   - L. LANDSCAPE IRRIGATION.

WASTE DISPOSAL:

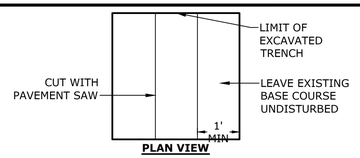
1. WASTE MATERIAL:
   - A. ALL WASTE MATERIALS SHALL BE COLLECTED AND STORED IN SECURELY LIDDED RECEPTACLES. ALL TRASH AND CONSTRUCTION DEBRIS FROM THE SITE SHALL BE DEPOSITED IN A DUMPSTER;
   - B. NO CONSTRUCTION WASTE MATERIALS SHALL BE BURIED ON SITE;
   - C. ALL PERSONNEL SHALL BE INSTRUCTED REGARDING THE CORRECT PROCEDURE FOR WASTE DISPOSAL BY THE SUPERINTENDENT.
2. HAZARDOUS WASTE:
   - A. ALL HAZARDOUS WASTE MATERIALS SHALL BE DISPOSED OF IN THE MANNER SPECIFIED BY LOCAL OR STATE REGULATION OR BY THE MANUFACTURER;
   - B. SITE PERSONNEL SHALL BE INSTRUCTED IN THESE PRACTICES BY THE SUPERINTENDENT.
3. SANITARY WASTE:
   - A. ALL SANITARY WASTE SHALL BE COLLECTED FROM THE PORTABLE UNITS A MINIMUM OF ONCE PER WEEK BY A LICENSED SANITARY WASTE MANAGEMENT CONTRACTOR.

SPILL PREVENTION:

1. CONTRACTOR SHALL BE FAMILIAR WITH SPILL PREVENTION MEASURES REQUIRED BY ALL LOCAL, STATE AND FEDERAL REGULATIONS. AT A MINIMUM, CONTRACTOR SHALL FOLLOW THE BEST MANAGEMENT SPILL PREVENTION PRACTICES OUTLINED BELOW.
2. THE FOLLOWING ARE THE MATERIAL MANAGEMENT PRACTICES THAT SHALL BE USED TO REDUCE THE RISK OF SPILLS OR OTHER ACCIDENTAL EXPOSURE OF MATERIALS AND SUBSTANCES DURING CONSTRUCTION TO STORMWATER RUNOFF:
   - A. GOOD HOUSEKEEPING - THE FOLLOWING GOOD HOUSEKEEPING PRACTICE SHALL BE FOLLOWED ON SITE DURING CONSTRUCTION:
     - a. ONLY SUFFICIENT AMOUNTS OF PRODUCTS TO DO THE JOB SHALL BE STORED ON SITE;
     - b. ALL REGULATED MATERIALS STORED ON SITE SHALL BE STORED IN A NEAT, ORDERLY MANNER IN THEIR PROPER (ORIGINAL IF POSSIBLE) CONTAINERS AND, IF POSSIBLE, UNDER A ROOF OR OTHER ENCLOSURE, ON AN IMPERVIOUS SURFACE;
     - c. MANUFACTURER'S RECOMMENDATIONS FOR PROPER USE AND DISPOSAL SHALL BE FOLLOWED;
     - d. THE SITE SUPERINTENDENT SHALL INSPECT DAILY TO ENSURE PROPER USE AND DISPOSAL OF MATERIALS;
     - e. SUBSTANCES SHALL NOT BE MIXED WITH ONE ANOTHER UNLESS RECOMMENDED BY THE MANUFACTURER;
     - f. WHENEVER POSSIBLE ALL OF A PRODUCT SHALL BE USED UP BEFORE DISPOSING OF THE CONTAINER.
     - g. THE TRAINING OF ON-SITE EMPLOYEES AND THE ON-SITE POSTING OF RELEASE RESPONSE INFORMATION DESCRIBING WHAT TO DO IN THE EVENT OF A SPILL OF REGULATED SUBSTANCES.
   - B. HAZARDOUS PRODUCTS - THE FOLLOWING PRACTICES SHALL BE USED TO REDUCE THE RISKS ASSOCIATED WITH HAZARDOUS MATERIALS:
     - a. PRODUCTS SHALL BE KEPT IN THEIR ORIGINAL CONTAINERS UNLESS THEY ARE NOT RESEALABLE;
     - b. ORIGINAL LABELS AND MATERIAL SAFETY DATA SHALL BE RETAINED FOR IMPORTANT PRODUCT INFORMATION;
     - c. SURPLUS PRODUCT THAT MUST BE DISPOSED OF SHALL BE DISCARDED ACCORDING TO THE MANUFACTURER'S RECOMMENDED METHODS OF DISPOSAL.
   - C. PRODUCT SPECIFIC PRACTICES - THE FOLLOWING PRODUCT SPECIFIC PRACTICES SHALL BE FOLLOWED ON SITE:
     - a. PETROLEUM PRODUCTS:
       - ALL ON SITE VEHICLES SHALL BE MONITORED FOR LEAKS AND RECEIVE REGULAR PREVENTIVE MAINTENANCE TO REDUCE LEAKAGE;
       - PETROLEUM PRODUCTS SHALL BE STORED IN TIGHTLY SEALED CONTAINERS WHICH ARE CLEARLY LABELED. ANY ASPHALT BASED SUBSTANCES USED ON SITE SHALL BE APPLIED ACCORDING TO THE MANUFACTURER'S RECOMMENDATIONS.
       - SECURE FUEL STORAGE AREAS AGAINST UNAUTHORIZED ENTRY;
       - INSPECT FUEL STORAGE AREAS WEEKLY;
       - WHEREVER POSSIBLE, KEEP REGULATED CONTAINERS THAT ARE STORED OUTSIDE MORE THAN 50 FEET FROM SURFACE WATER AND STORM DRAINS, 75 FEET FROM PRIVATE WELLS, AND 400 FEET FROM PUBLIC WELLS;
       - COVER REGULATED CONTAINERS IN OUTSIDE STORAGE AREAS;
       - SECONDARY CONTAINMENT IS REQUIRED FOR CONTAINERS CONTAINING REGULATED SUBSTANCES STORED OUTSIDE, EXCEPT FOR ON PREMISE USE HEATING FUEL TANKS, OR ABOVEGROUND OR UNDERGROUND STORAGE TANKS OTHERWISE REGULATED.
       - THE FUEL HANDLING REQUIREMENTS SHALL INCLUDE:
         (1) EXCEPT WHEN IN USE, KEEP CONTAINERS CONTAINING REGULATED SUBSTANCES CLOSED AND SEALED;
         (2) PLACE DRIP PANS UNDER SPIGOTS, VALVES, AND PUMPS;
         (3) HAVE SPILL CONTROL AND CONTAINMENT EQUIPMENT READILY AVAILABLE IN ALL WORK AREAS;
         (4) USE FUNNELS AND DRIP PANS WHEN TRANSFERRING REGULATED SUBSTANCES;
         (5) PERFORM TRANSFERS OF REGULATED SUBSTANCES OVER AN IMPERVIOUS SURFACE.
       - FUELING AND MAINTENANCE OF EXCAVATION, EARTHMOVING AND OTHER CONSTRUCTION RELATED EQUIPMENT SHALL COMPLY WITH THE REGULATIONS OF THE NEW HAMPSHIRE DEPARTMENT OF ENVIRONMENTAL SERVICES THESE REQUIREMENTS ARE SUMMARIZED IN WD-DWGB-22-6 BEST MANAGEMENT PRACTICES FOR FUELING AND MAINTENANCE OF EXCAVATION AND EARTHMOVING EQUIPMENT, OR ITS SUCCESSOR DOCUMENT. https://www.des.nh.gov/sites/g/files/ehbemt341/files/documents/2020-01/dwgb-22-6.pdf
     - b. FERTILIZERS:
       - FERTILIZERS USED SHALL BE APPLIED ONLY IN THE MINIMUM AMOUNTS DIRECTED BY THE SPECIFICATIONS;
       - ONCE APPLIED FERTILIZER SHALL BE WORKED INTO THE SOIL TO LIMIT EXPOSURE TO STORMWATER;
       - STORAGE SHALL BE IN A COVERED SHED OR ENCLOSED TRAILERS. THE CONTENTS OF ANY PARTIALLY USED BAGS OF FERTILIZER SHALL BE TRANSFERRED TO A SEALABLE PLASTIC BIN TO AVOID SPILLS.
       - PAINTS:
       - ALL CONTAINERS SHALL BE TIGHTLY SEALED AND STORED WHEN NOT REQUIRED FOR USE;
       - EXCESS PAINT SHALL NOT BE DISCHARGED TO THE STORM SEWER SYSTEM;
       - EXCESS PAINT SHALL BE DISPOSED OF PROPERLY ACCORDING TO MANUFACTURER'S INSTRUCTIONS OR STATE AND LOCAL REGULATIONS.
   - D. SPILL CONTROL PRACTICES - IN ADDITION TO GOOD HOUSEKEEPING AND MATERIAL MANAGEMENT PRACTICES DISCUSSED IN THE PREVIOUS SECTION, THE FOLLOWING PRACTICES SHALL BE FOLLOWED FOR SPILL PREVENTION AND CLEANUP:
     - a. MANUFACTURER'S RECOMMENDED METHODS FOR SPILL CLEANUP SHALL BE CLEARLY POSTED AND SITE PERSONNEL SHALL BE MADE AWARE OF THE PROCEDURES AND THE LOCATION OF THE INFORMATION AND CLEANUP SUPPLIES;
     - b. MATERIALS AND EQUIPMENT NECESSARY FOR SPILL CLEANUP SHALL BE KEPT IN THE MATERIAL STORAGE AREA ON SITE. EQUIPMENT AND MATERIALS SHALL INCLUDE BUT NOT BE LIMITED TO BROOMS, DUSTPANS, MOPS, RAGS, GLOVES, GOGGLES, KITTY LITTER, SAND, SAWDUST AND PLASTIC OR METAL TRASH CONTAINERS SPECIFICALLY FOR THIS PURPOSE;
     - c. ALL SPILLS SHALL BE CLEANED UP IMMEDIATELY AFTER DISCOVERY;
     - d. THE SPILL AREA SHALL BE KEPT WELL VENTILATED AND PERSONNEL SHALL WEAR APPROPRIATE PROTECTIVE CLOTHING TO PREVENT INJURY FROM CONTACT WITH A HAZARDOUS SUBSTANCE;
     - e. SPILLS OF TOXIC OR HAZARDOUS MATERIAL SHALL BE REPORTED TO THE APPROPRIATE LOCAL, STATE OR FEDERAL AGENCIES AS REQUIRED;
     - f. THE SITE SUPERINTENDENT RESPONSIBLE FOR DAY-TO-DAY SITE OPERATIONS SHALL BE THE SPILL PREVENTION AND CLEANUP COORDINATOR.
   - E. VEHICLE FUELING AND MAINTENANCE PRACTICE:
     - a. CONTRACTOR SHALL MAKE AN EFFORT TO PERFORM EQUIPMENT/VEHICLE FUELING AND MAINTENANCE AT AN OFF-SITE FACILITY;
     - b. CONTRACTOR SHALL PROVIDE AN ON-SITE FUELING AND MAINTENANCE AREA THAT IS CLEAN AND DRY;
     - c. IF POSSIBLE THE CONTRACTOR SHALL KEEP AREA COVERED;
     - d. CONTRACTOR SHALL KEEP A SPILL KIT AT THE FUELING AND MAINTENANCE AREA;
     - e. CONTRACTOR SHALL REGULARLY INSPECT VEHICLES FOR LEAKS AND DAMAGE;
     - f. CONTRACTOR SHALL USE DRIP PANS, DRIP CLOTHS, OR ABSORBENT PADS WHEN REPLACING SPENT FLUID.

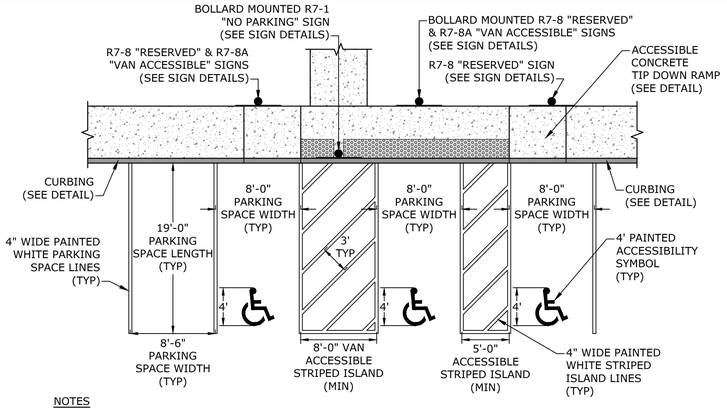


NOTES:
1. COIR MAT INLET FILTER SHALL BE STORM WATER IN



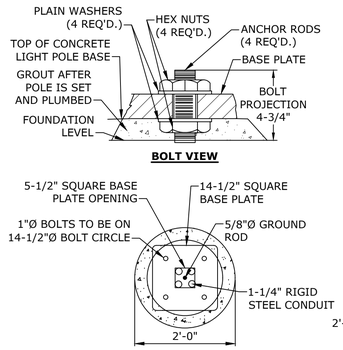
NOTES
1. CONTRACTOR SHALL COORDINATE AND OBTAIN APPROVAL FOR ALL TRENCHING AND PATCHING WITHIN CITY RIGHT OF WAY WITH CITY OF PORTSMOUTH DPW PRIOR TO COMMENCING WORK.

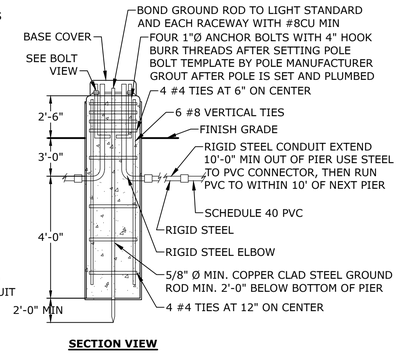
ROADWAY TRENCH PATCH
NO SCALE



NOTES
1. ALL PAINT SHALL BE FAST DRYING TRAFFIC PAINT, MEETING THE REQUIREMENTS OF AASHTO M248-TYPE F. PAINT SHALL BE APPLIED PER MANUFACTURER RECOMMENDATIONS.
2. SYMBOLS & PARKING STALLS SHALL BE INSTALLED IN ACCORDANCE WITH THE AMERICANS WITH DISABILITIES ACT, 2010 ADA STANDARDS FOR ACCESSIBLE DESIGN, AND ALL STATE AND LOCAL REQUIREMENTS.
3. FINISH PAVEMENT GRADES AT ALL HANDICAP ACCESSIBLE STALLS AND PAINTED ACCESS AISLES SHALL NOT EXCEED 2% IN ANY DIRECTION.

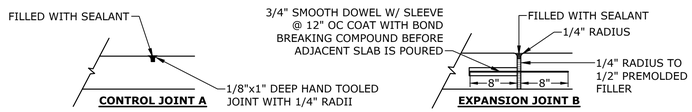
TYPICAL PARKING SPACE STRIPING AND ACCESSIBLE ACCESS LAYOUT
NO SCALE

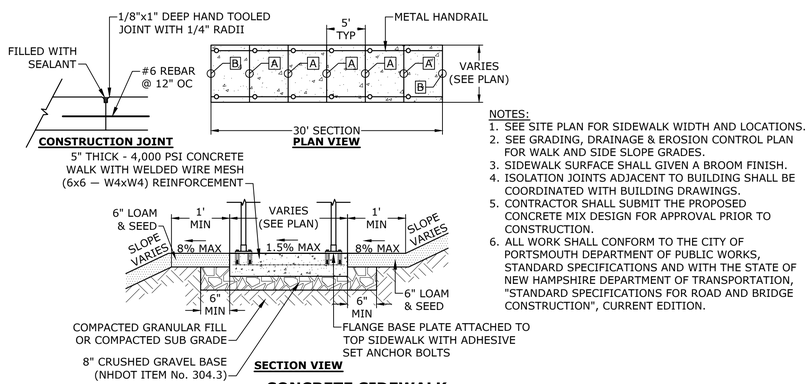




NOTES
1. PAINT BASE SAFETY YELLOW (UNLESS PROTECTED BY CURBED ISLAND).
2. CONCRETE TO BE CLASS A, 4,000 PSI, AIR ENTRAINED STEEL TO BE 60 KSI
3. REFER TO ELECTRICAL PLANS FOR WIRING DETAILS.
4. LIGHT POLE BASE DETAIL FOR BIDDING PURPOSES ONLY. CONTRACTOR SHALL SUBMIT SHOP DRAWINGS FOR APPROVAL, TO INCLUDE PERFORMANCE SPECIFICATIONS, CALCULATIONS AND NH LICENSED STRUCTURAL ENGINEER'S STAMP FOR LIGHT POLE FOUNDATION.
5. BASE PLATE DETAILS SHOWN AS REFERENCE ONLY. COORDINATE FINAL BASE PLATE DETAIL AND ANCHORING REQUIREMENTS WITH INDIVIDUAL LIGHT POLE BASE AND MANUFACTURER REQUIREMENTS.

TYPICAL LIGHT POLE BASE
NO SCALE

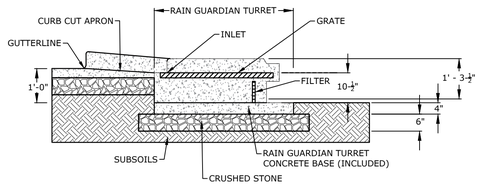




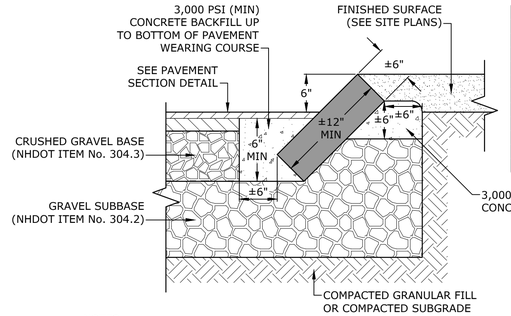
NOTES:
1. SEE SITE PLAN FOR SIDEWALK WIDTH AND LOCATIONS.
2. SEE GRADING, DRAINAGE & EROSION CONTROL PLAN FOR WALK AND SIDE SLOPE GRADES.
3. SIDEWALK SURFACE SHALL GIVEN A BROOM FINISH.
4. ISOLATION JOINTS ADJACENT TO BUILDING SHALL BE COORDINATED WITH BUILDING DRAWINGS.
5. CONTRACTOR SHALL SUBMIT THE PROPOSED CONCRETE MIX DESIGN FOR APPROVAL PRIOR TO CONSTRUCTION.
6. ALL WORK SHALL CONFORM TO THE CITY OF PORTSMOUTH DEPARTMENT OF PUBLIC WORKS, STANDARD SPECIFICATIONS AND WITH THE STATE OF NEW HAMPSHIRE DEPARTMENT OF TRANSPORTATION, "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION", CURRENT EDITION.

CONCRETE SIDEWALK
NO SCALE

NOTES:
1. RAIN GUARDIAN OR APPROVED EQUAL.
2. CURB INLET SHALL BE INSTALLED IN ACCORDANCE WITH MANUFACTURE RECOMMENDATION.



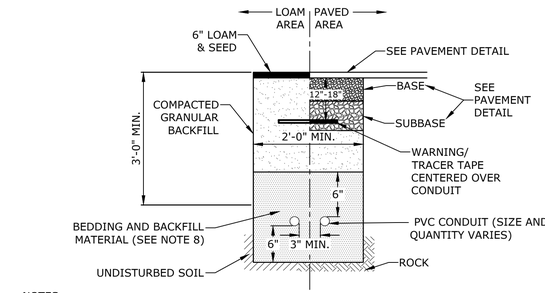
RAIN GUARDIAN TURRET
NO SCALE



CURB RADIUS TABLE	
RADIUS	MAX LENGTH
<2'	USE CURVED CURB
2'-15'	USE RADIAL JOINTS
16'-28'	1'-6"
29'-41	2'
42'-55'	3'
56'-68'	4'
69'-82'	5'
83'-96'	6'
97'-110'	7'
>110'	8'

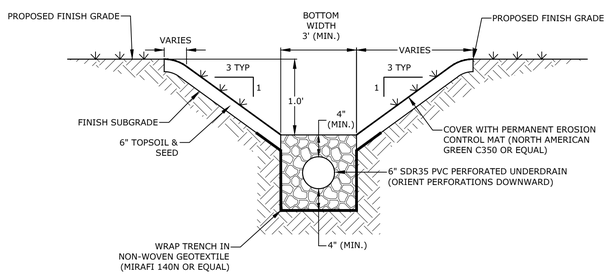
NOTES
1. SEE SITE PLANS FOR LIMITS OF SLOPED GRANITE CURB (SGC).
2. ADJOINING STONES SHALL HAVE THE SAME OR APPROXIMATELY THE SAME LENGTH.
3. MINIMUM LENGTH OF STRAIGHT CURB STONES = 3'
4. MAXIMUM LENGTH OF STRAIGHT CURB STONES = 10'
5. MAXIMUM LENGTH OF STRAIGHT CURB STONES LAID ON CURVES (SEE TABLE).
6. JOINTS BETWEEN STONES SHALL HAVE A MAXIMUM SPACING OF 1/2" AND SHALL BE MORTARED.
8. SLOPED GRANITE CURB WITHIN THE CITY ROW SHALL BE NHDOT SPEC 609.21.

SLOPED GRANITE CURB (SGC)
NO SCALE



NOTES:
1. NUMBER, MATERIAL, AND SIZE OF UTILITY CONDUITS TO BE DETERMINED AS SHOWN ON ELECTRICAL DRAWINGS. CONTRACTOR TO PROVIDE ONE SPARE CONDUIT FOR EACH UTILITY TO BUILDING.
2. DIMENSIONS SHOWN REPRESENT MINIMUM REQUIREMENTS. ACTUAL DIMENSIONS MAY BE GREATER BASED ON UTILITY COMPANY STANDARDS, BUT SHALL NOT BE LESS THAN THOSE SHOWN.
3. NO CONDUIT RUN SHALL EXCEED 360 DEGREES IN TOTAL BENDS.
4. A SUITABLE PULLING STRING, CAPABLE OF 200 POUNDS OF PULL, MUST BE INSTALLED IN THE CONDUIT BEFORE UTILITY COMPANY IS NOTIFIED TO INSTALL CABLE. THE STRING SHOULD BE BLOWN INTO THE CONDUIT AFTER THE RUN IS ASSEMBLED TO AVOID BONDING THE STRING TO THE CONDUIT.
5. UTILITY COMPANY MUST BE GIVEN THE OPPORTUNITY TO INSPECT THE CONDUIT PRIOR TO BACKFILL. THE CONTRACTOR IS RESPONSIBLE FOR ALL REPAIRS SHOULD THE UTILITY COMPANY BE UNABLE TO INSTALL ITS CABLE IN A SUITABLE MANNER.
6. ALL CONDUIT INSTALLATIONS MUST CONFORM TO THE CURRENT EDITION OF THE NATIONAL ELECTRIC SAFETY CODE, STATE AND LOCAL CODES AND ORDINANCES, AND, WHERE APPLICABLE, THE NATIONAL ELECTRIC CODE.
7. ALL 90° SWEEPS WILL BE MADE USING RIGID GALVANIZED STEEL. SWEEPS WITH A 36 TO 48 INCH RADIUS.
8. SAND BEDDING TO BE REPLACED WITH CONCRETE ENCASEMENT WHERE COVER IS LESS THAN 3 FEET, OR WHERE SHOWN ON THE UTILITIES PLAN.
9. SAND BEDDING AND BACKFILL FOR FULL WIDTH OF THE TRENCH FROM 6" BELOW CONDUIT UP TO 6" ABOVE TOP OF CONDUIT.

LIGHTING CONDUIT TRENCH
NO SCALE



CONVEYANCE SWALE & UNDERDRAIN DETAIL
NO SCALE

Tighe&Bond
177 Corporate Drive
Portsmouth, NH 03801
T 603.433.8818

STATE OF NEW HAMPSHIRE — NEIL A. HANSEN No. 15227 LICENSED PROFESSIONAL ENGINEER — 6/22/26

STATE OF NEW HAMPSHIRE — PATRICK CRIMMINS No. 12378 LICENSED PROFESSIONAL ENGINEER — 6/22/26

TAC SUBMISSION

THIS DOCUMENT IS RELEASED TEMPORARILY FOR PROGRESS REVIEW ONLY. IT IS NOT INTENDED FOR BIDDING OR CONSTRUCTION PURPOSES.

124 Heritage Ave.

One Twenty Four Group, Inc.

Portsmouth, New Hampshire

MARK	DATE	DESCRIPTION
B	6/22/2026	TAC SUBMISSION
A	4/29/2026	CC WORK SESSION

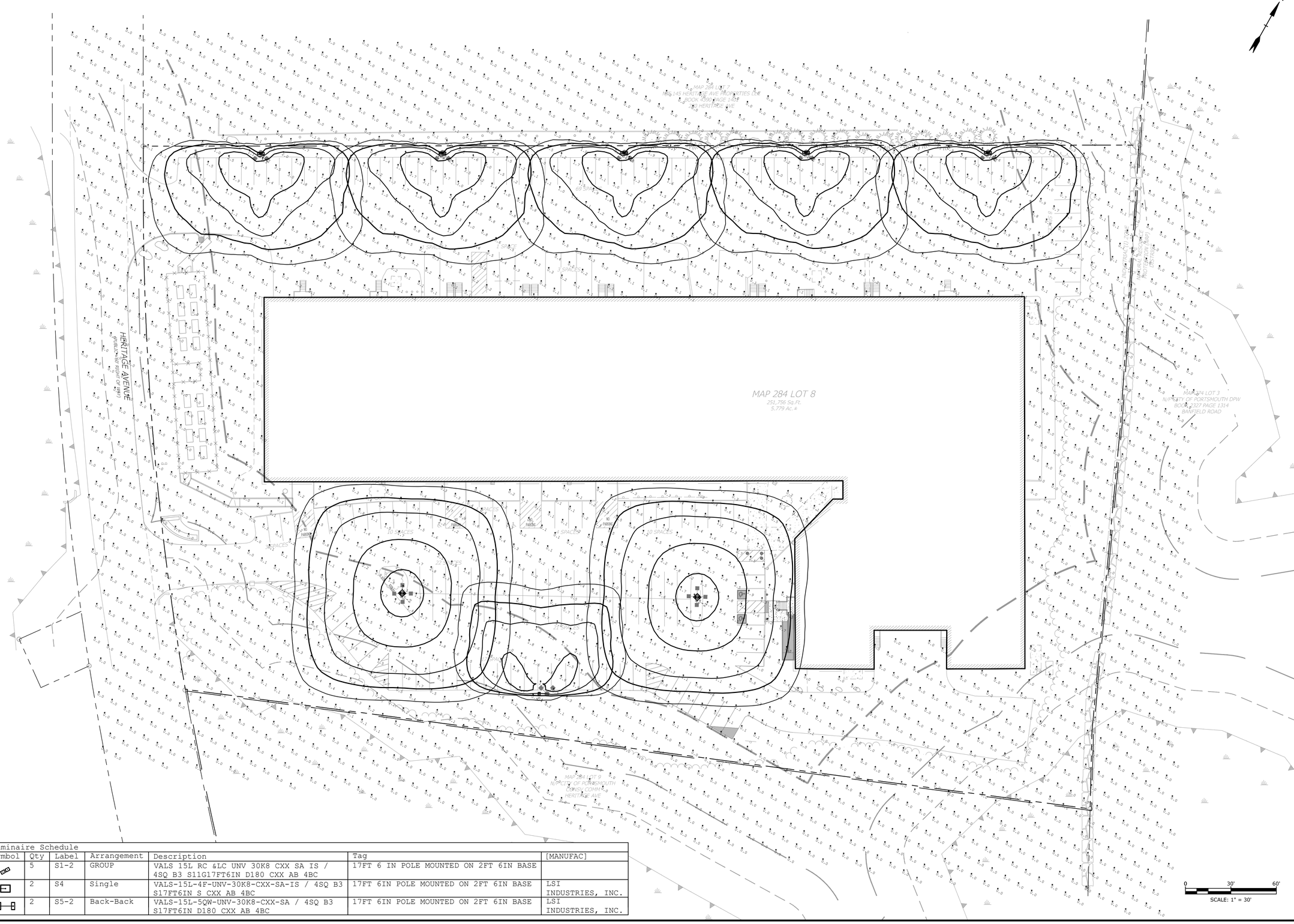
PROJECT NO:	K0076-0066
DATE:	4/29/2026
FILE:	K0076-0066_C-DTLS.dwg
DRAWN BY:	M.CURLEY
DESIGNED BY:	B.CURCIO
CHECKED BY:	N.HANSEN
APPROVED BY:	P.CRIMMINS

DETAILS SHEET

SCALE:

C-502

Last Saved: 6/19/2026
Plotted: Jun 22, 2026-3:38pm By: MCurley
Tighe & Bond:J:\K\K0076 The Kane Company - General Proposals\0076-0066 124 Heritage Ave\Drawings\AutoCAD\Sheet\K0076-0066_C-DTLS.dwg



Luminaire Schedule						
Symbol	Qty	Label	Arrangement	Description	Tag	[MANUFAC]
	5	S1-2	GROUP	VALS 15L RC &LC UNV 30K8 CXX SA IS / 4SQ B3 S11G17FT6IN D180 CXX AB 4BC	17FT 6 IN POLE MOUNTED ON 2FT 6IN BASE	
	2	S4	Single	VALS-15L-4F-UNV-30K8-CXX-SA-IS / 4SQ B3 S17FT6IN_S CXX AB 4BC	17FT 6IN POLE MOUNTED ON 2FT 6IN BASE	LSI INDUSTRIES, INC.
	2	S5-2	Back-Back	VALS-15L-5QW-UNV-30K8-CXX-SA / 4SQ B3 S17FT6IN D180 CXX AB 4BC	17FT 6IN POLE MOUNTED ON 2FT 6IN BASE	LSI INDUSTRIES, INC.

Tighe&Bond
177 Corporate Drive
Portsmouth, NH 03801
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6/22/26

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124 Heritage Ave.

One Twenty Four Group, Inc.

Portsmouth, New Hampshire

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A	4/29/2026	CC WORK SESSION

PROJECT NO:	K0076-0066
DATE:	4/29/2026
FILE:	K0076-0066_C-DSGN.dwg
DRAWN BY:	M.CURLEY
DESIGNED BY:	B.CURCIO
CHECKED BY:	N.HANSEN
APPROVED BY:	P.CRIMMINS

PHOTOMETRIC PLAN

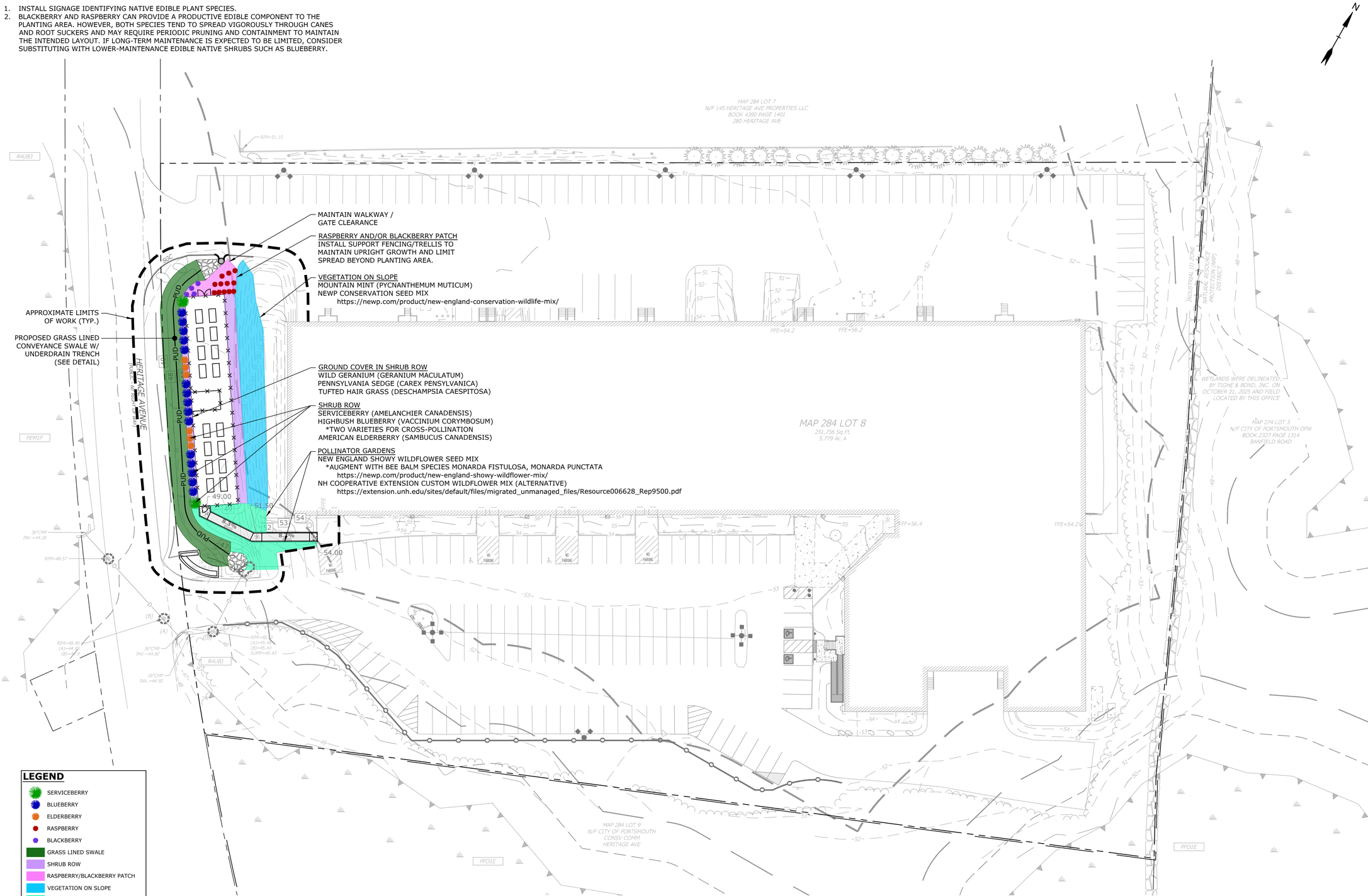
SCALE:

LT-101

Last Saved: 6/19/2026
Plotted: Jun 22, 2026 - 11:30am By: MCurley
Tighe & Bond:J:\K\K0076 The Kane Company - General Proposals\0076-0066 124 Heritage Ave\Drawings\AutoCAD\Sheet\K0076-0066_C-DSGN.dwg

GENERAL NOTES:

1. INSTALL SIGNAGE IDENTIFYING NATIVE EDIBLE PLANT SPECIES.
2. BLACKBERRY AND RASPBERRY CAN PROVIDE A PRODUCTIVE EDIBLE COMPONENT TO THE PLANTING AREA. HOWEVER, BOTH SPECIES TEND TO SPREAD VIGOROUSLY THROUGH CANES AND ROOT SUCKERS AND MAY REQUIRE PERIODIC PRUNING AND CONTAINMENT TO MAINTAIN THE INTENDED LAYOUT. IF LONG-TERM MAINTENANCE IS EXPECTED TO BE LIMITED, CONSIDER SUBSTITUTING WITH LOWER-MAINTENANCE EDIBLE NATIVE SHRUBS SUCH AS BLUEBERRY.



LEGEND

- SERVICEBERRY
- BLUEBERRY
- ELDERBERRY
- RASPBERRY
- BLACKBERRY
- GRASS LINED SWALE
- SHRUB ROW
- RASPBERRY/BLACKBERRY PATCH
- VEGETATION ON SLOPE
- POLLINATOR GARDENS

0 30' 60'
SCALE: 1" = 30'

Tighe&Bond
177 Corporate Drive
Portsmouth, NH 03801
T 603.433.8818

STATE OF NEW HAMPSHIRE – NEIL A. HANSEN No. 15227 LICENSED PROFESSIONAL ENGINEER
6/22/26

STATE OF NEW HAMPSHIRE – PATRICK CRIMMINS No. 12378 LICENSED PROFESSIONAL ENGINEER
6/22/26

TAC SUBMISSION

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124 Heritage Ave.

One Twenty Four Group, Inc.

Portsmouth, New Hampshire

MARK	DATE	DESCRIPTION
B	6/22/2026	TAC SUBMISSION
A	4/29/2026	CC WORK SESSION

PROJECT NO:	K0076-0066
DATE:	4/29/2026
FILE:	K0076-0066_C-DSGN.dwg
DRAWN BY:	M.CURLEY
DESIGNED BY:	B.CURCIO
CHECKED BY:	N.HANSEN
APPROVED BY:	P.CRIMMINS

PLANTING PLAN

SCALE:

L-101

Last Saved: 6/19/2026
Plotted: Jun 19, 2026 - 4:48pm By: MCurley
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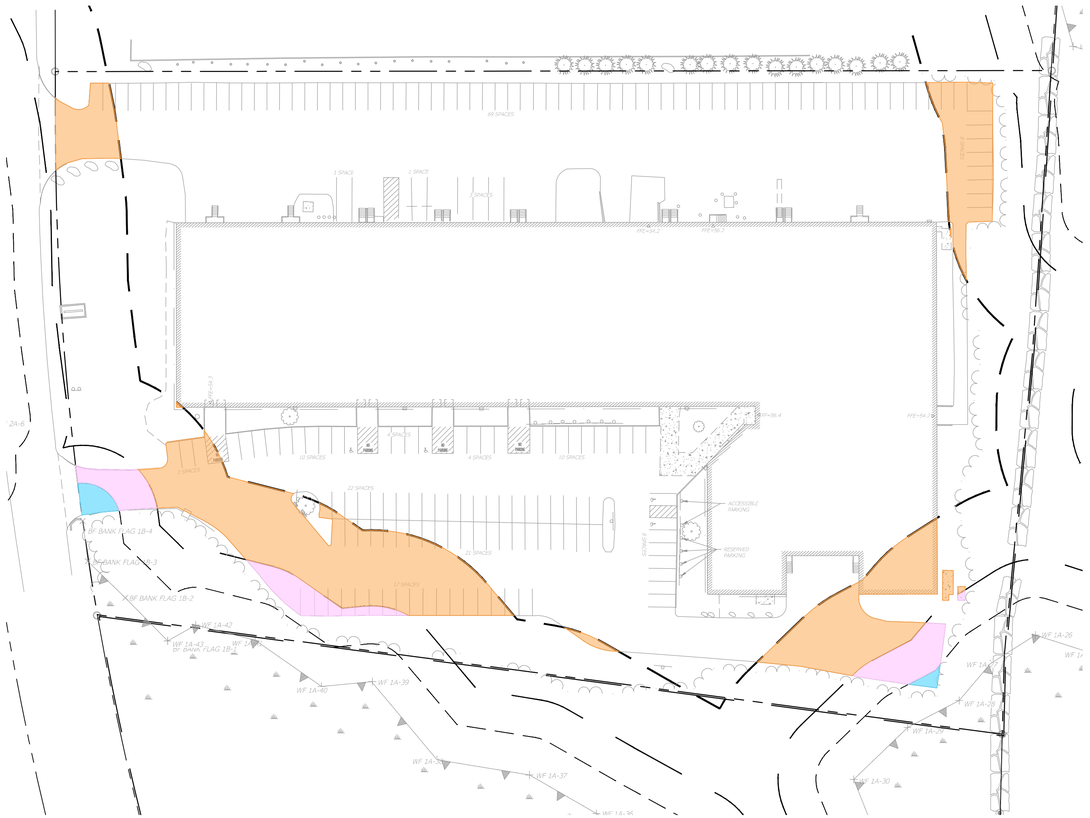
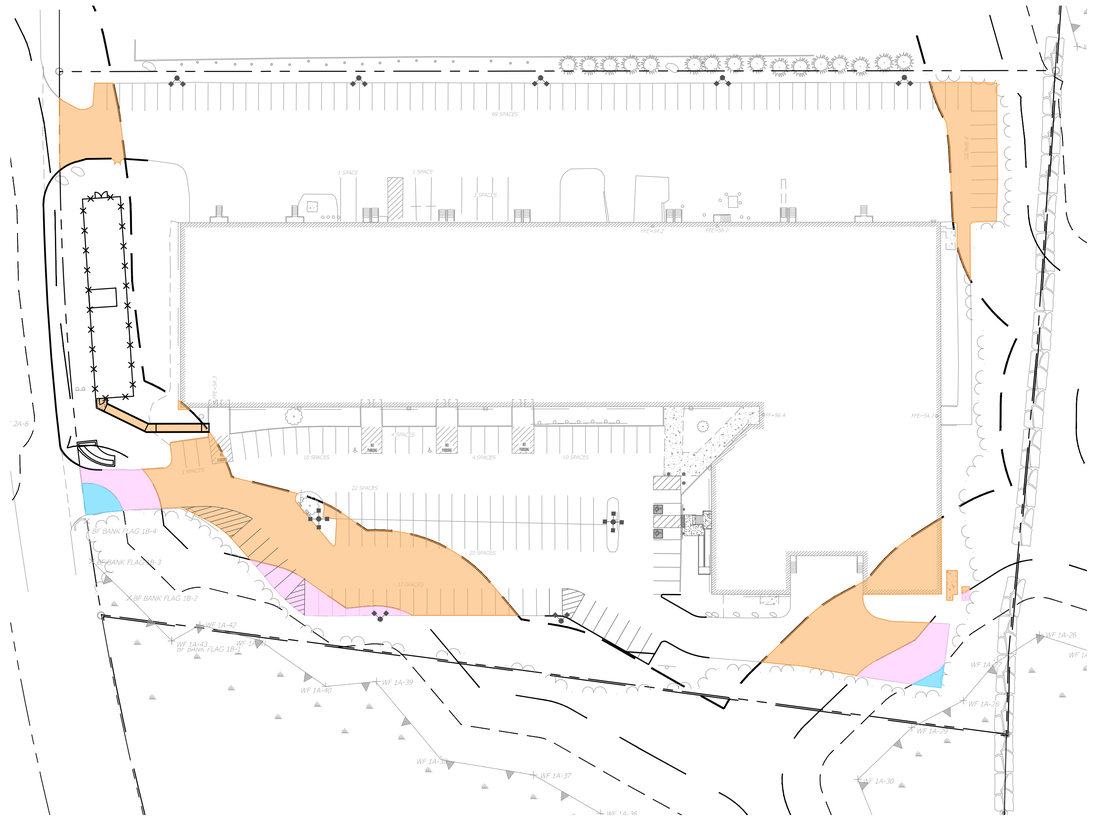


EXISTING IMPERVIOUS SURFACES
SCALE 1" = 50'



PROPOSED IMPERVIOUS SURFACES
SCALE 1" = 50'

IMPERVIOUS SURFACES WITHIN WETLAND BUFFERS		
LOCAL WETLAND BUFFER SETBACK	WITHIN DEVELOPMENT PARCEL	
	EXISTING (SF)	PROPOSED (SF)
0 - 25 FT	521	521
25 - 50 FT	3,356	3,356
50 - 100 FT	20,593	21,011
TOTAL IMPERVIOUS SURFACE	24,470	24,889
NET IMPERVIOUS SURFACE	419	

0 50' 100'

SCALE: 1" = 50'

124 HERITAGE AVENUE
PORTSMOUTH, NH

WETLAND BUFFER
IMPERVIOUS SURFACE EXHIBIT

DATE: 4/29/2026
SCALE: AS SHOWN
FIGURE: 1 OF 1

Tighe&Bond

Plotted On:Apr 28, 2026-11:17am By: MCurley
Tighe & Bond:J:\K\K0076 The Kane Company - General Proposals\0076-0066 124 Heritage Ave\Drawings\AutoCAD\Sheet\K0076-0066_C-DSGN.dwg

Technical Memorandum

124 Heritage Avenue Resource Area Delineation

To: Kelsey Kraus, Chief Operating Officer, The Kane Company

From: Stefanie Tetreault, CWS, PWS, Project Manager, Tighe & Bond
Lucas Fromm, Environmental Scientist, Tighe & Bond

Copy: Patrick Crimmins, PE, Vice President, Tighe & Bond
Neil Hansen, PE, Project Manager, Tighe & Bond

Date: June 22, 2026

The following technical memorandum describes the wetland delineation conducted by Tighe & Bond on October 21, 2025 to support the development of an existing conditions plan at 124 Heritage Avenue in Portsmouth, NH. A Site Location Map (Figure 1), Aerial Map (Figure 2) showing the wetland delineation flag locations, and Federal Emergency Management Agency (FEMA) Flood Insurance Rate Map (FIRMette) are in provided in Attachment A. Representative site photographs are provided in Attachment B.

Site Location

The subject property is located at 124 Heritage Avenue in Portsmouth, New Hampshire (City of Portsmouth Tax Map 284, Lot 8). The property is bound to the north by a commercial facility, undeveloped forests to the east and west, and Heritage Avenue to the southwest. A municipally-designated Prime Wetland is present southwest of Heritage Avenue. The subject property consists of a multi-use commercial building with associated parking lots northwest and southeast of the building.

Wetland Delineation

On October 21, 2025, a Tighe & Bond New Hampshire Certified Wetland Scientist (CWS) delineated wetland resource areas within the vicinity of the site and evaluated each relative to the applicable local, state, and federal criteria. Wetland resource areas in the vicinity of the proposed work were delineated in accordance with the United States Army Corps of Engineers' (USACE) *Wetlands Delineation Manual and Regional Supplement* (2012), *Field Indicators for Identifying Hydric Soils in New England* (Version 4, 2017), the *New Hampshire Code of Administrative Rules: Delineation and Classification of Jurisdictional Areas* (Chapter Env-Wt 400), and Chapter 10 of the Portsmouth Zoning Ordinance. The evaluation also included a review of publicly available data such as LiDAR elevation data and historic aerial imagery.

Wetland boundaries were marked in the field with alphanumerically labeled survey flagging tape. Flags were located by GPS and by a licensed land surveyor. Local weather yielded approximately 1.51-inches of rain in the week prior to the field delineation, including 0.60 inches in the 24-hour period immediately preceding the delineation. According to the U.S. Drought Monitor, Rockingham County was also experiencing Moderate to Severe Drought at the time of the delineation.[1]

[1] U.S. Drought Monitor. 2025. National Drought Mitigation Center, USDA, and NOAA. Available at: https://droughtmonitor.unl.edu

Summary of Delineated Natural Resource Areas

Two freshwater wetlands, demarcated by Flag Series 1A and 2A, and one intermittent stream, demarcated by Flag Series 1B and 2B were identified within the vicinity of the project site. Wetland 2A is a municipally-designated Prime Wetland with a duly-established 100-foot Prime Wetland buffer. As per Chapter 10 of the Portsmouth Zoning Ordinance, wetlands present on site are afforded a 100-foot wetland buffer. A summary of delineated wetlands by flagging series is presented in Table 1. USACE Wetland Delineation Data Forms are included in Attachment C.

TABLE 1 Summary of Delineated Wetland Resource Areas by Flag Series

Wetland ID	Flag Series	Flag Numbers	Resource Area Type	Classification*	PRA†
1	1A	1 – 43	Freshwater Wetland	PFO1E	No
	1B	1 – 4	Intermittent Stream	R4UB1	No
2	2A	1 – 9	Freshwater Wetland	PSS1E/PEM1F	Yes
	2B	1 - 3	Intermittent Stream	R4UB3	Yes

*Classification of Wetlands and Deepwater Habitats of the United States by Cowardin, L. M., V. Carter, F. C. Golet, E. T. LaRoe. 1979.

†Priority Resource Area, as defined by New Hampshire Department of Environmental Services (NHDES) Administrative Rule Env-Wt 103.68.

Freshwater Wetlands

Freshwater (non-tidal) wetlands are defined at RSA 482-A:2, X as "…*an area that is inundated or saturated by surface water or groundwater at a frequency and duration sufficient to support, and that under normal conditions does support, a prevalence of vegetation typically adapted for life in saturated soil conditions.*"

SERIES 1A

Series 1A defines the limits of a freshwater wetland present to the north, east and south of the site. This wetland is classified as a palustrine, forested, broad-leaved deciduous, seasonally flood/saturated (PFO1E) wetland. Dominant wetland vegetation observed on-site included red maple (*Acer rubrum,* FAC), musclewood (*Carpinus caroliniana,* FAC), American elm (*Ulmus americana,* FACW), winterberry (*Ilex verticillata,* FACW), spicebush (*Lindera benzoin,* FACW), glossy buckthorn (*Frangula alnus,* FAC), cinnamon fern (*Osmundastrum cinnamomeum*, FACW), creeping buttercup (*Ranunculus repens,* FAC), sensitive fern (*Onoclea sensibilis,* FACW), and poison ivy (*Toxicodendron radicans,* FAC). Hydric soils consisted of 8 inches of mucky sandy (10YR 2/1) underlain by sand (2.5YR 5/2) with prominent redox concentrations (7.5 YR 4/6) observed in the matrix. Soils met hydric indicators S1 (Sandy Mucky Mineral) and S7 (Dark Surface). Indicators of hydrology include water-stained leaves, geomorphic position, microtopographic relief, and the FAC-Neutral Test.

Dominant vegetation in adjacent uplands consisted of red oak (*Quercus rubra,* FACU), American beech (*Fagus grandifolia,* FACU), American elm, witch hazel (*Hamamelis virginiana,* FACU), winterberry, glossy buckthorn, sensitive fern, rough goldenrod, and poison ivy. Upland soils consisted of loam with dominant soil matrix color 2.5YR 4/3. Prominent redox concentrations (7.5YR 4/6) were observed within the soil profile starting at nine inches below the surface.

SERIES 2A

Series 2A defines the limits of a freshwater wetland located southwest of Heritage Avenue. The portion of this wetland closest to the roadway is classified as palustrine scrub-shrub, broad-leaved deciduous, seasonally flooded-saturated (PSS1E). The interior of this wetland is dominated by herbaceous vegetation and exhibits a persistent inundation regime, and is classified as palustrine emergent, persistent, semi-permanently flooded (PEM1F). Dominant wetland vegetation observed within Wetland 2A included red maple, speckled alder (*Alnus serrulata,* OBL), common reed (*Phragmites australis*), narrowleaf cattail (*Typha angustifolia,* OBL), highbush blueberry (*Vaccinium corymbosum,* FACW), glossy buckthorn, and rough goldenrod. Soil consisted of six inches of muck (10YR 2/1) underlain by ten inches of mucky loam (10YR 2/1), and met hydric soil indicator A4 (Hydrogen Sulfide). Indicators of hydrology included surface water, high water table (0 inches), hydrogen sulfide odor, geomorphic position, shallow aquitard, and the FAC-neutral test.

Uplands adjacent to the delineated portion of Wetland 2A consisted of the road embankment to Heritage Avenue. Observed upland vegetation predominately consisted of maintained lawn with red maple, glossy buckthorn and multiflora rose also present. The road embankment consisted of compacted fill. Observed vegetation within undisturbed uplands adjacent to Wetland 2A included white oak (*Quercus alba,* FACU), eastern hemlock (*Tsuga canadensis,* FACU), and American beech. Soil consisted of loam with matrix colors 10YR 2/1 in the upper two inches, followed by four inches of 10YR 3/2 underlain by loam with matrix color 7.5YR 3/4 to a depth of ten inches, at which point a restrictive layer was encountered.

Intermittent Stream

Flag Series 1B and 2B define two sections of an unnamed intermittent stream that flow northwesterly from Wetland 1A to Wetland 2A and is conveyed beneath Heritage Avenue via a culvert. The upper reach of this stream (Flag Series 1B) is classified as a riverine, intermittent, unconsolidated cobble-gravel bottom system (R4UB1), while the downstream reach associated with Flag Series 2B is classified as a riverine, intermittent, unconsolidated mud bottom system (R4UB3). Observed vegetation within the stream bed and associated stream banks included narrowleaf cattail, sensitive fern, American burnweed (*Erechtites hieraciifolius,* FACU), and climbing nightshade (*Solanum dulcamara,* FAC).

100-foot Wetland Buffer

The 100-foot buffer to Wetlands 1A and 2A consists primarily of pine-oak forested uplands. Portions of the parking lot and the commercial building associated with the site also fall within the 100-foot buffer zone. Road frontage of Heritage Avenue associated with the site lies entirely within the 100-foot buffer to Wetland 2A. Dominant vegetation observed within the pine-oak forested uplands included white pine, red oak, American elm, American beech, witch hazel, winterberry, and glossy buckthorn.

Priority Resource Areas

In accordance with New Hampshire Department of Environmental Services (NHDES) Administrative Rule Env-Wt 103.66 the site was evaluated for the potential presence of Priority Resource Areas (PRA).

Documented Occurrences of Protected Species or Habitat

A data check with the New Hampshire Department of Environmental Services Ecological Review Section was completed on May 28, 2026 (DCT26-1245). Based on this initial screening, the project is not expected to impact state-listed protected species, exemplary natural communities, or critical habitat.

Bogs

Bogs are a type of peatland, distinguished by stunted evergreen trees and shrubs, peat deposits, poor drainage, and highly acidic conditions. The NHDES Land Resources Management Permit Planning Tool indicated the potential presence of peatlands within Wetland 1A. During the October 2025 delineation, Tighe & Bond documented vegetation and soils present within a portion of Wetland 1A mapped as potential peatland. Soil observed within Wetland 1A displayed a marked gradient along the northern edge of the project site with mineral soil present along the upland boundary that transitioned to organic soil toward the northeast (i.e., toward the wetland interior). Observed organic soil within Wetland 1A consisted of nine inches of sapric material (i.e., muck) underlain by mucky modified soils.

Observed vegetation within portions of Wetland 1A mapped as potential peatland included, but was not limited to, red maple, cinnamon fern, winterberry, highbush blueberry, spice bush, balsam fir (*Abies balsamea,* FAC), sweetgale (*Myrica gale,* OBL), and several unidentified species of sedges (*Carex spp.*). Sphagnum moss was also observed along the forest floor. The potential peatlands were observed to have a red-maple dominated overstory, whereas bogs are typically more open and are dominated by shrubs and herbaceous plants. As such, identified peatlands were more characteristic of a Red Maple – Sphagnum Basin Swamp[2] than a bog. The Red Maple – Sphagnum Basin Swamp ecological community has a State Conservation Status Rank of S4 (Apparently Secure) and is not classified as a PRA.

Designated Prime Wetland and 100-foot Prime Wetland Buffer

Wetland 2A is a municipally-designated Prime Wetland with a duly-established 100-foot Prime Wetland buffer. The Prime Wetland designation was established by the City of Portsmouth pursuant to RSA 482-A:15 and subsequently accepted by the NHDES. The Prime Wetland and 100-foot buffer are regulated as Priority Resource Areas (PRAs) pursuant to Env-Wt 103.68(d) and (e), respectively. This 100-foot buffer is concurrent with the 100-foot buffer regulated by Section 10.1017.22(3) of the City of Portsmouth Zoning Ordinance.

Wetland 2A was designated as a Prime Wetland by the City of Portsmouth due to its ecological significance, including the presence of open water habitat, a diverse wetland complex, and its potential to support rare species and wildlife habitat.[3] Consistent with RSA 482-A:15, Prime Wetlands are significant based on factors such as their size, unspoiled character, fragile condition, ecological functions, and habitat value.

Functions and Values Assessment

Tighe & Bond conducted a functions and values assessment of Wetlands 1A and 2A based on field observations, site photographs, and publicly available GIS data. Assessment criteria were adapted from RSA 482-A and the U.S. Army Corps of Engineers, New England District, Highway Methodology Workbook Supplement – Wetland Functions and Values: A Descriptive Approach (NAEEP-360-1-30a; September 1999). Wetlands 1A and 2A were evaluated for Ecological Integrity, Wetland-Dependent Wildlife Habitat, Fish and Aquatic Life Habitat, Scenic Quality, Educational Potential, Recreation, Flood Storage, Groundwater Recharge, Nutrient Trapping/Retention/Transformation, Sediment Trapping, Shoreline Anchoring, and Noteworthiness. USACE Wetland Function-Value Evaluation Forms are provided in Attachment D.

[2] Sperduto, D.D. and William F. Nichols. 2004. Natural Communities of New Hampshire. NH Natural Heritage Bureau, Concord, NH. Pub. UNH Cooperative Extension, Durham, NH.

[3] City of Portsmouth Prime Wetlands Analysis Report, prepared by West Environmental, Inc. for the Portsmouth Conservation Commission and Planning Department (October 2006). https://files.cityofportsmouth.com/files/planning/prime_rpt.PDF.pdf

Ecological Integrity

Ecological Integrity refers to the overall health and stability of a wetland ecosystem. Limited invasive species were observed within Wetlands 1A and 2A, and both wetlands are connected to surrounding undeveloped upland forest and wetland habitats. Wetland 1A contains Red Maple–Sphagnum Basin Swamp habitat and is part of an approximately 54-acre unfragmented mosaic of wetlands and upland forests. Wetland 1A also maintains a hydrologic connection to Wetland 2A through a culvert beneath Heritage Avenue.

Wetland 2A is designated as a Prime Wetland by the City of Portsmouth due to its unique open water habitat, diverse wetland complex, and potential to support rare species. An approximately 70-acre unfragmented mosaic of wetlands and upland forests surrounds Wetland 2A.

Due to the size, connectivity, and quality of natural habitat associated with these wetlands within an otherwise developed landscape, both wetlands provide Ecological Integrity as a principal function.

Wetland-Dependent Wildlife, Fish, and Aquatic Life Habitat

Wetland-Dependent Wildlife, Fish, and Aquatic Life Habitat considers the suitability of a wetland to provide habitat for wildlife species, fish, and other aquatic organisms. Wetlands 1A and 2A are associated with relatively large areas of undeveloped land and provide a diversity of wetland and upland habitats. The presence of jurisdictional wetlands, combined with their connectivity to surrounding natural areas, indicates that both wetlands provide habitat for wetland-dependent wildlife species. Although an intermittent stream is associated with both wetlands, permanent aquatic habitat was not observed. As such, the wetlands are more likely to support wetland-dependent wildlife than fish or other aquatic organisms. Accordingly, Wetland-Dependent Wildlife Habitat is considered a principal function of both wetlands. Fish and Aquatic Life Habitat is not considered a principal function of either wetland.

Scenic Quality/Recreation/Education Potential

Scenic Quality evaluates a wetland's visual and aesthetic qualities, Recreation considers its ability to support recreational activities, and Educational Potential evaluates its suitability for education and research. Wetlands 1A and 2A are located within a commercially zoned area with limited public access and visibility. As a result, neither wetland is likely to provide significant scenic, recreational, or educational value.

Flood Storage

According to the FEMA FIRMette for the site (Map No. 33015C0270F; effective January 29, 2021), neither Wetland 1A nor Wetland 2A is located within the 100-year floodplain. However, both wetlands likely provide temporary storage of stormwater runoff from Heritage Avenue and the surrounding developed landscape during precipitation events. Given their size and position within the local watershed, both wetlands are likely to provide important flood storage capacity. Accordingly, Flood Storage is considered a principal function of Wetlands 1A and 2A.

Groundwater Recharge

Groundwater Recharge refers to the ability of a wetland to recharge and/or discharge groundwater and its interaction with underlying aquifers. Soils observed within both wetlands consist of organic muck overlying sandy substrates, indicating favorable conditions for groundwater exchange. Wetlands 1A and 2A are located within the Lower Merrimack aquifer transmissivity zone, which is mapped as having a transmissivity of less than 1,000 ft^2/day. Based on observed soil conditions and their location within a mapped aquifer, Groundwater Recharge is considered a principal function of both wetlands.

Sediment Trapping

Sediment Trapping refers to a wetland's ability to capture and retain sediment transported in runoff from surrounding uplands. This function is influenced by vegetation density and surface roughness, with more densely vegetated wetlands generally providing greater sediment trapping potential. Wetland 1A is a relatively open forested wetland and is therefore likely to provide limited sediment trapping. In contrast, Wetland 2A is a densely vegetated shrub-scrub wetland and is likely to provide substantial sediment trapping capacity for runoff entering the wetland from adjacent developed areas. Accordingly, Sediment Trapping is considered a principal function of Wetland 2A but not Wetland 1A.

Nutrient Trapping/Retention/Transformation

Nutrient Trapping, Retention, and Transformation refers to a wetland's ability to retain, process, and cycle nutrients, thereby reducing the transport of excess nutrients to downstream waters. Both wetlands contain organic soils overlying sandy substrates. The presence of organic soils indicates that both wetlands have the capacity to retain and transform nutrients. Accordingly, Nutrient Trapping, Retention, and Transformation is considered a function of both wetlands.

Shoreline Anchoring

Shoreline Anchoring refers to a wetland's ability to stabilize shorelines and reduce erosion caused by wave action or flowing water. Both delineated wetlands are palustrine wetlands located in low-energy settings with no significant shoreline erosion processes observed. As a result, Shoreline Anchoring is not considered a suitable function of either wetland.

Noteworthiness

Noteworthiness is a qualitative assessment of whether a wetland possesses one or more outstanding ecological characteristics, such as rare species habitat, unique natural communities, critical wildlife habitat, or other high-value resources.

Wetland 2A has been designated as a Prime Wetland by the City of Portsmouth due to its unique open water habitat, diverse wetland complex, and potential to support rare species. Accordingly, Noteworthiness is considered a principal function of Wetland 2A.

Wetland 1A contains Red Maple–Sphagnum Basin Swamp habitat, which has a State Conservation Status Rank of S4 (Apparently Secure). Based on available information, Noteworthiness is not considered a principal function of Wetland 1A.

Invasive Species

Invasive species observed on-site at the time of the delineation included glossy buckthorn, common reed, climbing nightshade, purple loosestrife (*Lythrum salicaria*; OBL), multiflora rose, and creeping buttercup (*Ranunculus repens*; FAC). These species may provide refuge and food sources for small mammals and birds; however, their abundance in an area disturbed by human activity threatens the integrity of the native community. Invasive plant species generally prefer disturbed habitats and possess high dispersal abilities, enabling them to out-compete native vegetation.

Preventative measures should be taken during the project design and development to limit the potential for introduction or spread of invasive species during the project, such as:

- Limiting the areas of disturbance to avoid unnecessary disturbance of existing colonies of invasive species.
- Not importing materials such as fill, loam, mulch, haybales or gravel from sites where invasive species are known to occur.
- Immediately stabilizing exposed soils where work is complete or has temporarily ceased to prevent spread or further invasion of non-native species.
- Cleaning equipment of soil and plant material prior to mobilization and demobilization to and from the project site to limit spread of invasive species.

Summary

Two palustrine freshwater wetlands and one intermittent stream were delineated within the vicinity of 124 Heritage Avenue. Although portions of Wetland 1A are mapped as potential peatlands in the New Hampshire Wildlife Action Plan, field observations indicate that this wetland is more appropriately characterized as a Red Maple–Sphagnum Basin Swamp and does not meet the criteria for classification as a bog.

Wetland 2A is a municipally designated Prime Wetland with a duly established 100-foot Prime Wetland buffer. The Prime Wetland designation was established by the City of Portsmouth pursuant to RSA 482-A:15 and accepted by NHDES, resulting in both the wetland and its associated buffer being regulated as Priority Resource Areas under Env-Wt 103.68.

Based on field observations and available GIS data, Wetlands 1A and 2A provide several important wetland functions, including Ecological Integrity, Wildlife and Aquatic Life Habitat, Flood Storage, and Groundwater Recharge. Wetland 2A also provides significant Sediment Trapping and Noteworthiness functions due to its dense vegetation, unique open water habitat, diverse wetland complex, and Prime Wetland designation.

The City of Portsmouth regulates a 100-foot buffer to all wetlands pursuant to Chapter 10 of the Portsmouth Zoning Ordinance. In the vicinity of the project site, the wetland buffer consists of pine-oak forest, Heritage Avenue, and portions of the existing parking lot and commercial development associated with 124 Heritage Avenue.

Attachments

A Site Figures

- Figure 1 – Site Location
- Figure 2 – Aerial Site Map
- Figure 3 - FEMA FIRMette

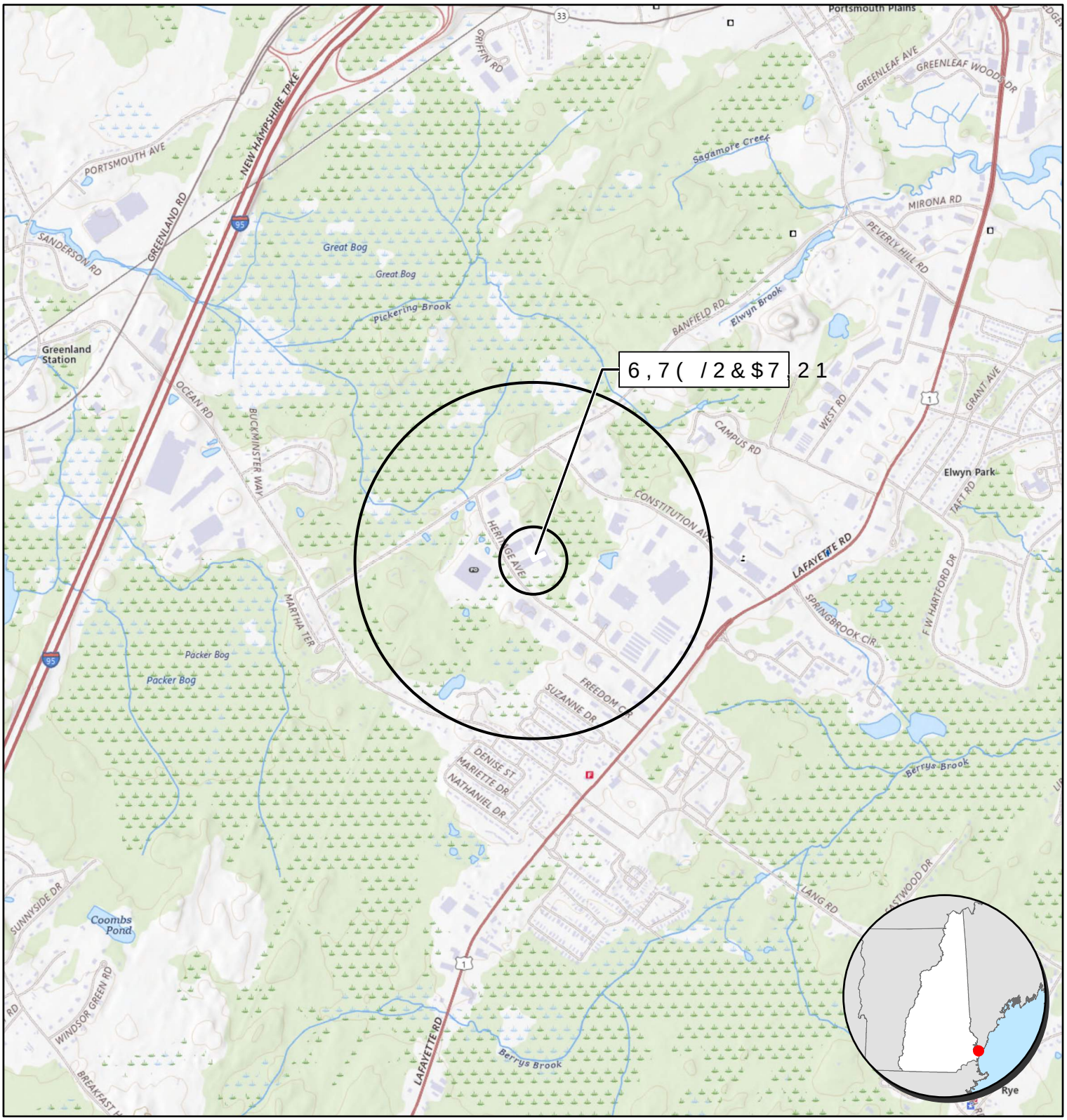
B Photographic Log

C ACOE Wetland Delineation Data Forms

D ACOE Wetland Function-Value Evaluation Forms

Tighe & Bond

Site Figures



Tighe&Bond

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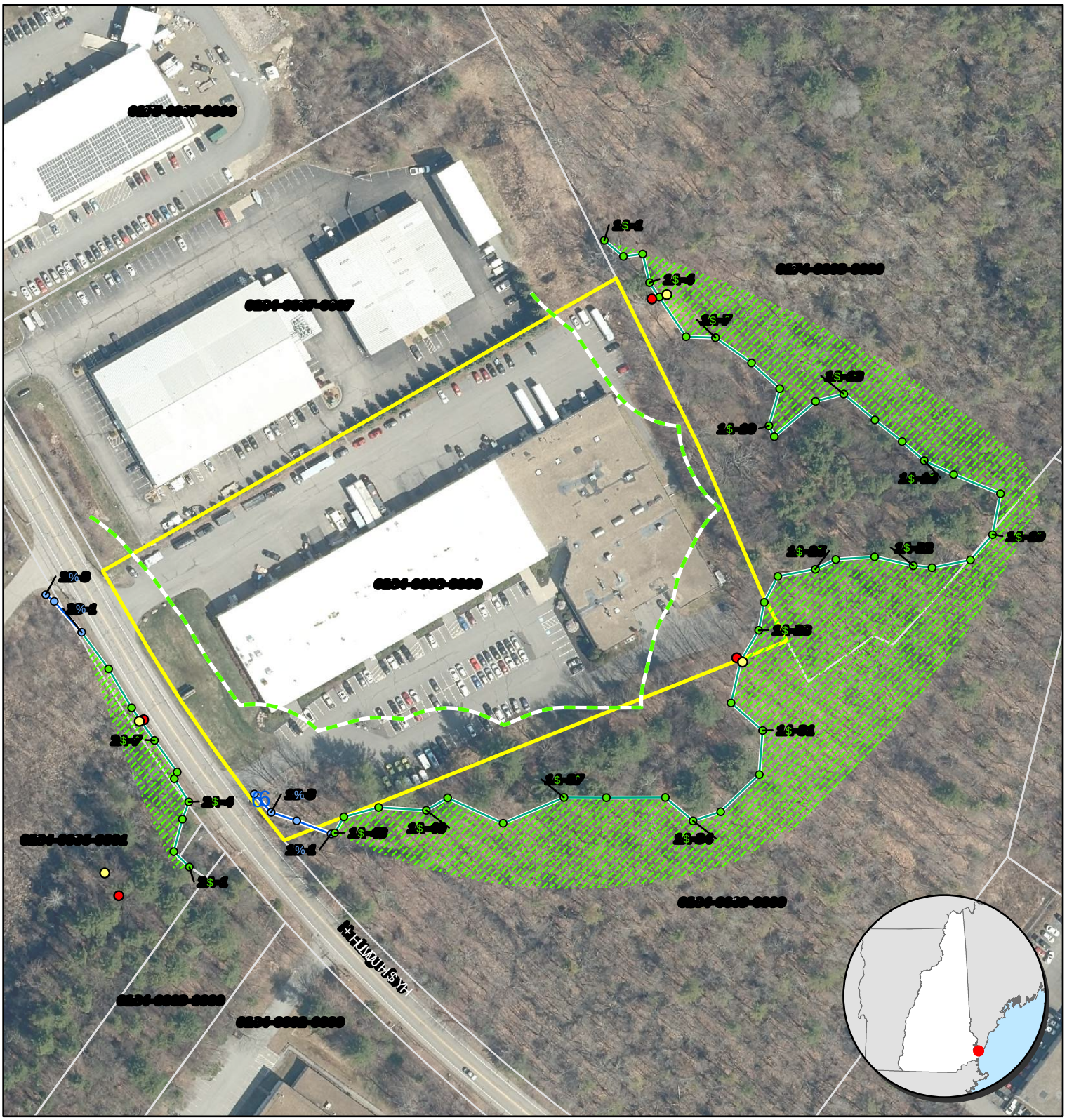

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Figure 3: National Flood Hazard Layer FIRMette

Tighe & Bond

Photographic Log

Photographic Log

Client: Kane Company **Job Number:** K-0076-0066

Site: 124 Heritage Ave Portsmouth, New Hampshire

Photograph No.: 1	**Date:** 10/21/2025	**Direction Taken:** Southeast
Description: Typical view of Wetland 1A.		

Photograph No.: 2	**Date:** 10/21/2025	**Direction Taken:** Southwest
Description: Typical view of uplands adjacent to Wetland 1A.		

Photographic Log

Client: Kane Company **Job Number:** K-0076-0066

Site: 124 Heritage Ave Portsmouth, New Hampshire

Photograph No.: 3	**Date:** 10/21/2025	**Direction Taken:** Northeast
Description: Typical view of state-mapped peatlands associated with Wetland 1A. This community was identified as a Red Maple – Sphagnum Basin Swamp .		

Photograph No.: 4	**Date:** 10/21/2025	**Direction Taken:** North
Description: Alternate view of state-mapped peatlands associated with Wetland 1A. This community was identified as a Red Maple – Sphagnum Basin Swamp .		

Photographic Log

Client: Kane Company **Job Number:** K-0076-0066

Site: 124 Heritage Ave Portsmouth, New Hampshire

Photograph No.: 5	**Date:** 10/21/2025	**Direction Taken:** Northwest

Description: Typical view of the 100-foot buffer to Wetland 1A.

Photograph No.: 6	**Date:** 10/21/2025	**Direction Taken:** Southeast

Description: Typical view of the unnamed intermittent stream defined by Flag Series 1B.

Photographic Log

Client: Kane Company **Job Number:** K-0076-0066

Site: 124 Heritage Ave Portsmouth, New Hampshire

Photograph No.: 7	**Date:** 10/21/2025	**Direction Taken:** Northwest

Description: Typical view of Wetland 2A.

Photograph No.: 8	**Date:** 09/12/2025	**Direction Taken:** Northwest

Description: Typical view of uplands adjacent to Wetland 2A.

Photographic Log

Client: Kane Company **Job Number:** K-0076-0066

Site: 124 Heritage Ave Portsmouth, New Hampshire

Photograph No.: 9	**Date:** 10/21/2025	**Direction Taken:** Southwest
Description: Typical view of the unnamed intermittent stream defined by Flag Series 1B.		

Photograph No.: 10	**Date:** 10/24/2025	**Direction Taken:** Southwest
Description: Typical view of undisturbed uplands adjacent to Wetland 2A.		

Tighe & Bond

ACOE Wetland Delineation Data Forms

U.S. Army Corps of Engineers
WETLAND DETERMINATION DATA SHEET – Northcentral and Northeast Region
See ERDC/EL TR-12-1; the proponent agency is CECW-CO-R

OMB Control #: 0710-0024, Exp: 9/30/2027
Requirement Control Symbol EXEMPT:
(Authority: AR 335-15, paragraph 5-2a)

Project/Site: 124 Heritage Ave City/County: Portsmouth/Rockingham Sampling Date: 10-21-2025

Applicant/Owner: The Kane Company State: NH Sampling Point: 1A-5 Wet

Investigator(s): Lucas Fromm, Stefanie Tetreault Section, Township, Range: N/A

Landform (hillside, terrace, etc.): Swamp Local relief (concave, convex, none): none Slope %: 5

Subregion (LRR or MLRA): LRR R, MLRA 144A Lat: 43.03589 Long: -70.79553 Datum: WGS84

Soil Map Unit Name: Squamscott fine sandy loam, 0 to 5 percent slopes NWI classification: PF04/1C

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes ____ No X

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes X	No ____	**Is the Sampled Area within a Wetland?** **Yes** X **No** ____
Hydric Soil Present?	Yes X	No ____	If yes, optional Wetland Site ID: Wetland 1A
Wetland Hydrology Present?	Yes X	No ____	

Remarks: (Explain alternative procedures here or in a separate report.)
The site received 0.60" of rain within the 24 hours preceding the delineation.
According to the U.S. Drought Monitor, Rockingham County was experiencing a moderate-severe drough at the time of the delineation.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ____ Surface Water (A1)
- ____ High Water Table (A2)
- ____ Saturation (A3)
- ____ Water Marks (B1)
- ____ Sediment Deposits (B2)
- ____ Drift Deposits (B3)
- ____ Algal Mat or Crust (B4)
- ____ Iron Deposits (B5)
- ____ Inundation Visible on Aerial Imagery (B7)
- ____ Sparsely Vegetated Concave Surface (B8)
- X Water-Stained Leaves (B9)
- ____ Aquatic Fauna (B13)
- ____ Marl Deposits (B15)
- ____ Hydrogen Sulfide Odor (C1)
- ____ Oxidized Rhizospheres on Living Roots (C3)
- ____ Presence of Reduced Iron (C4)
- ____ Recent Iron Reduction in Tilled Soils (C6)
- ____ Thin Muck Surface (C7)
- ____ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ____ Surface Soil Cracks (B6)
- ____ Drainage Patterns (B10)
- ____ Moss Trim Lines (B16)
- ____ Dry-Season Water Table (C2)
- ____ Crayfish Burrows (C8)
- ____ Saturation Visible on Aerial Imagery (C9)
- ____ Stunted or Stressed Plants (D1)
- X Geomorphic Position (D2)
- ____ Shallow Aquitard (D3)
- ____ Microtopographic Relief (D4)
- X FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes ____	No X	Depth (inches): ____
Water Table Present?	Yes ____	No X	Depth (inches): ____
Saturation Present? (includes capillary fringe)	Yes X	No ____	Depth (inches): 0

Wetland Hydrology Present? **Yes** X **No** ____

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

VEGETATION – Use scientific names of plants.

Sampling Point: 1A-5 Wet

Tree Stratum (Plot size: 30)	Absolute % Cover	Dominant Species?	Indicator Status
1. *Ulmus americana*	50	Yes	FACW
2. *Acer saccharinum*	5	No	FACW
3. *Quercus rubra*	50	Yes	FACU
4.			
5.			
6.			
7.			
	105	=Total Cover	
Sapling/Shrub Stratum (Plot size: 15)			
1. *Lindera benzoin*	40	Yes	FACW
2. *Ilex verticillata*	15	No	FACW
3. *Frangula alnus*	30	Yes	FAC
4. *Cornus amomum*	15	No	FACW
5.			
6.			
7.			
	100	=Total Cover	
Herb Stratum (Plot size: 5)			
1. *Ranunculus repens*	25	Yes	FAC
2. *Athyrium angustum*	20	No	FAC
3. *Onoclea sensibilis*	50	Yes	FACW
4. *Solidago rugosa*	10	No	FAC
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
	105	=Total Cover	
Woody Vine Stratum (Plot size: 15)			
1. *Toxicodendron radicans*	30	Yes	
2.			
3.			
4.			
	30	=Total Cover	

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 5 (A)

Total Number of Dominant Species Across All Strata: 7 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 71.4% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	175	x 2 =	350
FAC species	85	x 3 =	255
FACU species	50	x 4 =	200
UPL species	0	x 5 =	0
Column Totals:	310 (A)		805 (B)

Prevalence Index = B/A = 2.60

Hydrophytic Vegetation Indicators:

___ 1 - Rapid Test for Hydrophytic Vegetation

X 2 - Dominance Test is >50%

X 3 - Prevalence Index is ≤3.0[1]

___ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Vegetation Strata:

Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.

Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vines – All woody vines greater than 3.28 ft in height.

Hydrophytic Vegetation Present? **Yes** X **No** ___

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: 1A-5 Wet

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Redox Features Type[1]	Redox Features Loc[2]	Texture	Remarks
0-12	10YR 2/1	100					Loamy/Clayey	
12-18	10YR 5/1	90	7.5YR 4/6	5	D		Sandy	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

[2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- X Depleted Below Dark Surface (A11)
- X Thick Dark Surface (A12)
- ___ Mesic Spodic (A17) **(MLRA 144A, 145, 149B)**
- ___ Iron Monosulfide (A18)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Polyvalue Below Surface (S8) (**LRR R, MLRA 149B**)
- ___ Thin Dark Surface (S9) (**LRR R, MLRA 149B**)
- ___ High Chroma Sands (S11) (**LRR K, L)**
- ___ Loamy Mucky Mineral (F1) (**LRR K, L**)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)
- ___ Marl (F10) (**LRR K, L**)
- ___ Red Parent Material (F21) **(MLRA 145)**

Indicators for Problematic Hydric Soils[3]:

- ___ 2 cm Muck (A10) (**LRR K, L, MLRA 149B**)
- ___ 5 cm Mucky Peat or Peat (S3) (**LRR K, L, R**)
- ___ Polyvalue Below Surface (S8) (**LRR K, L**)
- ___ Thin Dark Surface (S9) (**LRR K, L**)
- ___ Iron-Manganese Masses (F12) (**LRR K, L, R**)
- ___ Piedmont Floodplain Soils (F19) (**MLRA 149B**)
- ___ Red Parent Material (F21) **(outside MLRA 145)**
- ___ Very Shallow Dark Surface (F22)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** X **No** ___

Remarks:

U.S. Army Corps of Engineers
WETLAND DETERMINATION DATA SHEET – Northcentral and Northeast Region
See ERDC/EL TR-12-1; the proponent agency is CECW-CO-R

OMB Control #: 0710-0024, Exp: 9/30/2027
Requirement Control Symbol EXEMPT:
(Authority: AR 335-15, paragraph 5-2a)

Project/Site: 124 Heritage Ave City/County: Portsmouth/Rockingham Sampling Date: 10-21-2025

Applicant/Owner: The Kane Company State: NH Sampling Point: 1A-5 Upl

Investigator(s): Lucas Fromm, Stefnie Tetreault Section, Township, Range: N/A

Landform (hillside, terrace, etc.): Hillside Local relief (concave, convex, none): convex Slope %: 5

Subregion (LRR or MLRA): LRR R, MLRA 144A Lat: 43.03577366 Long: -70.79559404 Datum: WGS84

Soil Map Unit Name: Hoosic gravelly fine sandy loam, 3 to 8 percent slopes NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ____ No ____ (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes ____ No X

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes X	No ____	**Is the Sampled Area**
Hydric Soil Present?	Yes ____	No X	**within a Wetland?** **Yes** ____ **No** X
Wetland Hydrology Present?	Yes ____	No X	If yes, optional Wetland Site ID: ____

Remarks: (Explain alternative procedures here or in a separate report.)
The site received 0.60" of rain within the 24 hours preceding the delineation.
According to the U.S. Drought Monitor, Rockingham County was experiencing a moderate-severe drough at the time of the delineation.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ Marl Deposits (B15)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Moss Trim Lines (B16)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ Microtopographic Relief (D4)
- X FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes ____	No X	Depth (inches): ____
Water Table Present?	Yes ____	No X	Depth (inches): ____
Saturation Present? (includes capillary fringe)	Yes ____	No X	Depth (inches): ____

Wetland Hydrology Present? **Yes** ____ **No** X

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

VEGETATION – Use scientific names of plants.

Sampling Point: 1A-5 Upl

Tree Stratum (Plot size: 30)	Absolute % Cover	Dominant Species?	Indicator Status
1. *Pinus strobus*	10	No	FACU
2. *Quercus rubra*	60	Yes	FACU
3. *Ulmus americana*	20	Yes	FACW
4.			
5.			
6.			
7.			
	90	=Total Cover	
Sapling/Shrub Stratum (Plot size: 15)			
1. *Viburnum dentatum*	10	No	FAC
2. *Ilex verticillata*	25	Yes	FACW
3. *Frangula alnus*	15	Yes	FAC
4. *Pinus strobus*	10	No	FACU
5.			
6.			
7.			
	60	=Total Cover	
Herb Stratum (Plot size: 5)			
1. *Onoclea sensibilis*	60	Yes	FACW
2. *Solidago rugosa*	20	Yes	FAC
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
	80	=Total Cover	
Woody Vine Stratum (Plot size: 15)			
1. *Toxicodendron radicans*	60	Yes	FAC
2. *Vitis labrusca*	10	No	FACU
3.			
4.			
	70	=Total Cover	

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 6 (A)

Total Number of Dominant Species Across All Strata: 7 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 85.7% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	105	x 2 =	210
FAC species	105	x 3 =	315
FACU species	90	x 4 =	360
UPL species	0	x 5 =	0
Column Totals:	300 (A)		885 (B)

Prevalence Index = B/A = 2.95

Hydrophytic Vegetation Indicators:

___ 1 - Rapid Test for Hydrophytic Vegetation

X 2 - Dominance Test is >50%

___ 3 - Prevalence Index is ≤3.0[1]

___ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Vegetation Strata:

Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.

Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vines – All woody vines greater than 3.28 ft in height.

Hydrophytic Vegetation Present? **Yes** X **No** ___

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: 1A-5 Upl

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Redox Features Type[1]	Redox Features Loc[2]	Texture	Remarks
0-13	10YR 3/3	100					Loamy/Clayey	
13-26	10YR 5/1	90	7.5R 5/8	10	C	M	Loamy/Clayey	Prominent redox concentrations

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

[2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Mesic Spodic (A17) **(MLRA 144A, 145, 149B)**
- ___ Iron Monosulfide (A18)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Polyvalue Below Surface (S8) (**LRR R, MLRA 149B**)
- ___ Thin Dark Surface (S9) (**LRR R, MLRA 149B**)
- ___ High Chroma Sands (S11) (**LRR K, L)**
- ___ Loamy Mucky Mineral (F1) (**LRR K, L**)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)
- ___ Marl (F10) (**LRR K, L**)
- ___ Red Parent Material (F21) **(MLRA 145)**

Indicators for Problematic Hydric Soils[3]:

- ___ 2 cm Muck (A10) (**LRR K, L, MLRA 149B**)
- ___ 5 cm Mucky Peat or Peat (S3) (**LRR K, L, R**)
- ___ Polyvalue Below Surface (S8) (**LRR K, L**)
- ___ Thin Dark Surface (S9) (**LRR K, L**)
- ___ Iron-Manganese Masses (F12) (**LRR K, L, R**)
- ___ Piedmont Floodplain Soils (F19) (**MLRA 149B**)
- ___ Red Parent Material (F21) **(outside MLRA 145)**
- ___ Very Shallow Dark Surface (F22)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** ___ **No** X

Remarks:

U.S. Army Corps of Engineers
WETLAND DETERMINATION DATA SHEET – Northcentral and Northeast Region
See ERDC/EL TR-12-1; the proponent agency is CECW-CO-R

OMB Control #: 0710-0024, Exp: 9/30/2027
Requirement Control Symbol EXEMPT:
(Authority: AR 335-15, paragraph 5-2a)

Project/Site: 124 Heritage Ave City/County: Portsmouth/Rockingham Sampling Date: 10-21-2025

Applicant/Owner: The Kane Company State: NH Sampling Point: 1A-29 Wet

Investigator(s): Lucas Fromm Section, Township, Range: N/A

Landform (hillside, terrace, etc.): Swamp Local relief (concave, convex, none): Concave Slope %: 10

Subregion (LRR or MLRA): LRR R, MLRA 144A Lat: 43.03467 Long: -70.79523 Datum: WGS84

Soil Map Unit Name: Squamscott fine sandy loam, 0 to 5 percent slopes NWI classification: PFO4/1C

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes ____ No X

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes X	No ____	**Is the Sampled Area within a Wetland?** **Yes** X **No** ____
Hydric Soil Present?	Yes X	No ____	If yes, optional Wetland Site ID: Wetland 1A
Wetland Hydrology Present?	Yes X	No ____	

Remarks: (Explain alternative procedures here or in a separate report.)
Wetland Data Plot for Wetland 1A. The site received 0.60" of rain within the 24 hour period preceding the delineation.
According to the U.S. Drought Monitor, Rockingham County was experiencing a moderate-severe drough at the time of the delineation.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ____ Surface Water (A1)
- ____ High Water Table (A2)
- ____ Saturation (A3)
- ____ Water Marks (B1)
- ____ Sediment Deposits (B2)
- ____ Drift Deposits (B3)
- ____ Algal Mat or Crust (B4)
- ____ Iron Deposits (B5)
- ____ Inundation Visible on Aerial Imagery (B7)
- ____ Sparsely Vegetated Concave Surface (B8)
- X Water-Stained Leaves (B9)
- ____ Aquatic Fauna (B13)
- ____ Marl Deposits (B15)
- ____ Hydrogen Sulfide Odor (C1)
- ____ Oxidized Rhizospheres on Living Roots (C3)
- ____ Presence of Reduced Iron (C4)
- ____ Recent Iron Reduction in Tilled Soils (C6)
- ____ Thin Muck Surface (C7)
- ____ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ____ Surface Soil Cracks (B6)
- ____ Drainage Patterns (B10)
- ____ Moss Trim Lines (B16)
- ____ Dry-Season Water Table (C2)
- ____ Crayfish Burrows (C8)
- ____ Saturation Visible on Aerial Imagery (C9)
- ____ Stunted or Stressed Plants (D1)
- X Geomorphic Position (D2)
- ____ Shallow Aquitard (D3)
- X Microtopographic Relief (D4)
- X FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes ____	No X	Depth (inches): ____
Water Table Present?	Yes ____	No X	Depth (inches): ____
Saturation Present? (includes capillary fringe)	Yes X	No ____	Depth (inches): 0

Wetland Hydrology Present? **Yes** X **No** ____

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

VEGETATION – Use scientific names of plants.

Sampling Point: 1A-29 Wet

Tree Stratum (Plot size: 30)	Absolute % Cover	Dominant Species?	Indicator Status
1. *Acer rubrum*	25	Yes	FAC
2. *Betula alleghaniensis*	15	No	FAC
3. *Pinus strobus*	5	No	FACU
4. *Carpinus caroliniana*	25	Yes	FAC
5. *Ulmus americana*	5	No	FACW
6. *Fraxinus pennsylvanica*	5	No	FACW
7. *Tsuga canadensis*	5	No	FACU
	85	=Total Cover	
Sapling/Shrub Stratum (Plot size: 15)			
1. *Ilex verticillata*	25	Yes	FACW
2. *Vaccinium corymbosum*	5	No	FACW
3. *Lindera benzoin*	10	Yes	FACW
4.			
5.			
6.			
7.			
	40	=Total Cover	
Herb Stratum (Plot size: 5)			
1. *Osmundastrum cinnamomeum*	20	Yes	FACW
2. *Dryopteris carthusiana*	2	No	FACW
3. *Lindera benzoin*	5	No	FACW
4. *Solidago rugosa*	5	No	FAC
5. *Onoclea sensibilis*	2	No	FACW
6.			
7.			
8.			
9.			
10.			
11.			
12.			
	34	=Total Cover	
Woody Vine Stratum (Plot size: 15)			
1.			
2.			
3.			
4.			
		=Total Cover	

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 5 (A)

Total Number of Dominant Species Across All Strata: 5 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	79	x 2 =	158
FAC species	70	x 3 =	210
FACU species	10	x 4 =	40
UPL species	0	x 5 =	0
Column Totals:	159 (A)		408 (B)

Prevalence Index = B/A = 2.57

Hydrophytic Vegetation Indicators:

___ 1 - Rapid Test for Hydrophytic Vegetation

X 2 - Dominance Test is >50%

X 3 - Prevalence Index is ≤3.0[1]

___ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Vegetation Strata:

Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.

Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vines – All woody vines greater than 3.28 ft in height.

Hydrophytic Vegetation Present? **Yes** X **No** ___

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point 1A-29 Wet

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-8	10YR 2/1	100					Mucky Sand	
8-16	2.5YR 2.5/2	65	7.5YR 4/6	5	C	M	Sandy	Prominent redox concentrations

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

[2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Mesic Spodic (A17) **(MLRA 144A, 145, 149B)**
- ___ Iron Monosulfide (A18)
- X Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- X Dark Surface (S7)
- ___ Polyvalue Below Surface (S8) (**LRR R, MLRA 149B**)
- ___ Thin Dark Surface (S9) (**LRR R, MLRA 149B**)
- ___ High Chroma Sands (S11) (**LRR K, L)**
- ___ Loamy Mucky Mineral (F1) (**LRR K, L**)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)
- ___ Marl (F10) (**LRR K, L**)
- ___ Red Parent Material (F21) **(MLRA 145)**

Indicators for Problematic Hydric Soils[3]:

- ___ 2 cm Muck (A10) (**LRR K, L, MLRA 149B**)
- ___ 5 cm Mucky Peat or Peat (S3) (**LRR K, L, R**)
- ___ Polyvalue Below Surface (S8) (**LRR K, L**)
- ___ Thin Dark Surface (S9) (**LRR K, L**)
- ___ Iron-Manganese Masses (F12) (**LRR K, L, R**)
- ___ Piedmont Floodplain Soils (F19) (**MLRA 149B**)
- ___ Red Parent Material (F21) **(outside MLRA 145)**
- ___ Very Shallow Dark Surface (F22)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** X **No** ___

Remarks:

Mucky Soils met Pete Fletcher Soil Tests 1, 4, and 5

U.S. Army Corps of Engineers
WETLAND DETERMINATION DATA SHEET – Northcentral and Northeast Region
See ERDC/EL TR-12-1; the proponent agency is CECW-CO-R

OMB Control #: 0710-0024, Exp: 9/30/2027
Requirement Control Symbol EXEMPT:
(Authority: AR 335-15, paragraph 5-2a)

Project/Site: 124 Heritage Ave City/County: Portsmouth/Rockingham Sampling Date: 10-21-2025

Applicant/Owner: The Kane Company State: NH Sampling Point: 1A-29 Upl

Investigator(s): Lucas Fromm Section, Township, Range: N/A

Landform (hillside, terrace, etc.): Hillside Local relief (concave, convex, none): convex Slope %: 10

Subregion (LRR or MLRA): LRR R, MLRA 144A Lat: 43.03467 Long: -70.79526 Datum: WGS84

Soil Map Unit Name: Hoosic gravelly fine sandy loam, 3 to 8 percent slopes NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ____ No X (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes ____ No X

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ____	No X	**Is the Sampled Area**
Hydric Soil Present?	Yes ____	No X	**within a Wetland?** **Yes** ____ **No** X
Wetland Hydrology Present?	Yes ____	No X	If yes, optional Wetland Site ID:

Remarks: (Explain alternative procedures here or in a separate report.)
Upland Data Plot for Wetland 1A. The site received 0.60" of rain within the 24 hours preceding the delineation.
According to the U.S. Drought Monitor, Rockingham County was experiencing a moderate-severe drough at the time of the delineation.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ Marl Deposits (B15)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Moss Trim Lines (B16)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ Microtopographic Relief (D4)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes ____	No X	Depth (inches): ____
Water Table Present?	Yes ____	No X	Depth (inches): ____
Saturation Present? (includes capillary fringe)	Yes X	No ____	Depth (inches): 0

Wetland Hydrology Present? **Yes** ____ **No** X

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

VEGETATION – Use scientific names of plants.

Sampling Point: 1A-29 Upl

Tree Stratum (Plot size: 30)	Absolute % Cover	Dominant Species?	Indicator Status
1. *Pinus strobus*	20	No	FACU
2. *Quercus rubra*	50	Yes	FACU
3. *Fagus grandifolia*	25	Yes	FACU
4. *Populus grandidentata*	5	No	FACU
5. *Betula nigra*	5	No	FACW
6. *Acer rubrum*	2	No	FAC
7. *Tsuga canadensis*	5	No	FACU
	112	=Total Cover	
Sapling/Shrub Stratum (Plot size: 15)			
1. *Fagus grandifolia*	35	Yes	FACU
2. *Hamamelis virginiana*	20	Yes	FACU
3. *Vaccinium corymbosum*	5	No	FACW
4. *Pinus strobus*	2	No	FACU
5.			
6.			
7.			
	62	=Total Cover	
Herb Stratum (Plot size: 5)			
1. *Quercus rubra*	1	No	FACU
2. *Pinus strobus*	1	No	FACU
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
	2	=Total Cover	
Woody Vine Stratum (Plot size: 15)			
1.			
2.			
3.			
4.			
		=Total Cover	

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A)

Total Number of Dominant Species Across All Strata: 4 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 0.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	10	x 2 =	20
FAC species	2	x 3 =	6
FACU species	164	x 4 =	656
UPL species	0	x 5 =	0
Column Totals:	176 (A)		682 (B)

Prevalence Index = B/A = 3.88

Hydrophytic Vegetation Indicators:

___ 1 - Rapid Test for Hydrophytic Vegetation

___ 2 - Dominance Test is >50%

___ 3 - Prevalence Index is ≤3.0[1]

___ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Vegetation Strata:

Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.

Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vines – All woody vines greater than 3.28 ft in height.

Hydrophytic Vegetation Present? **Yes** ___ **No** X

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: 1A-29 Upl

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-1	10YR 2/1	100					Loamy/Clayey	
1-9	2.5Y 4/3	100					Loamy/Clayey	
9-24	2.5Y 4/3	95	7.5YR 4/6	5	C	M	Loamy/Clayey	Prominent redox concentrations

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

[2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Mesic Spodic (A17) **(MLRA 144A, 145, 149B)**
- ___ Iron Monosulfide (A18)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Polyvalue Below Surface (S8) (**LRR R, MLRA 149B**)
- ___ Thin Dark Surface (S9) (**LRR R, MLRA 149B**)
- ___ High Chroma Sands (S11) (**LRR K, L)**
- ___ Loamy Mucky Mineral (F1) (**LRR K, L**)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)
- ___ Marl (F10) (**LRR K, L**)
- ___ Red Parent Material (F21) **(MLRA 145)**

Indicators for Problematic Hydric Soils[3]:

- ___ 2 cm Muck (A10) (**LRR K, L, MLRA 149B**)
- ___ 5 cm Mucky Peat or Peat (S3) (**LRR K, L, R**)
- ___ Polyvalue Below Surface (S8) (**LRR K, L**)
- ___ Thin Dark Surface (S9) (**LRR K, L**)
- ___ Iron-Manganese Masses (F12) (**LRR K, L, R**)
- ___ Piedmont Floodplain Soils (F19) (**MLRA 149B**)
- ___ Red Parent Material (F21) **(outside MLRA 145)**
- ___ Very Shallow Dark Surface (F22)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** ___ **No** X

Remarks:

U.S. Army Corps of Engineers
WETLAND DETERMINATION DATA SHEET – Northcentral and Northeast Region
See ERDC/EL TR-12-1; the proponent agency is CECW-CO-R

OMB Control #: 0710-0024, Exp: 9/30/2027
Requirement Control Symbol EXEMPT:
(Authority: AR 335-15, paragraph 5-2a)

Project/Site: 124 Heritage Ave City/County: Portsmouth/Rockingham Sampling Date: 10-21-2025

Applicant/Owner: The Kane Company State: NH Sampling Point: 2A-2 Upl

Investigator(s): Lucas Fromm Section, Township, Range: N/A

Landform (hillside, terrace, etc.): Hllside Local relief (concave, convex, none): Convex Slope %: 15

Subregion (LRR or MLRA): LRR R, MLRA 144A Lat: 43.0340 Long: -70.79784 Datum: WGS84

Soil Map Unit Name: Chatfield-Hollis-Canton complex, 0 to 8 percent slopes, rocky NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes ____ No X

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ____	No X	**Is the Sampled Area**
Hydric Soil Present?	Yes ____	No X	**within a Wetland?** **Yes** ____ **No** X
Wetland Hydrology Present?	Yes ____	No X	If yes, optional Wetland Site ID:

Remarks: (Explain alternative procedures here or in a separate report.)
The site received 0.60" of rain within the 24 hours preceding the delineation.
According to the U.S. Drought Monitor, Rockingham County was experiencing a moderate-severe drough at the time of the delineation.

Second upland data plot for Wetland 2A. As wetland flagging was along a road embankment, this plot was conducted to document more natural upland conditions adjacent to Wetland 2A.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ Marl Deposits (B15)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Moss Trim Lines (B16)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- X Shallow Aquitard (D3)
- ___ Microtopographic Relief (D4)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes ____	No X	Depth (inches): ____
Water Table Present?	Yes ____	No X	Depth (inches): ____
Saturation Present? (includes capillary fringe)	Yes ____	No X	Depth (inches): ____

Wetland Hydrology Present? **Yes** ____ **No** X

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

VEGETATION – Use scientific names of plants.

Sampling Point: 2A-2 Upl

Tree Stratum (Plot size: 30)	Absolute % Cover	Dominant Species?	Indicator Status
1. *Acer rubrum*	10	No	FAC
2. *Quercus alba*	40	Yes	FACU
3. *Tsuga canadensis*	30	Yes	FACU
4. *Quercus rubra*	10	No	FACU
5. *Fagus grandifolia*	5	No	FACU
6.			
7.			
	95	=Total Cover	
Sapling/Shrub Stratum (Plot size: 15)			
1. *Fagus grandifolia*	5	Yes	FACU
2.			
3.			
4.			
5.			
6.			
7.			
	5	=Total Cover	
Herb Stratum (Plot size: 5)			
1. *Quercus rubra*	1	No	FACU
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
	1	=Total Cover	
Woody Vine Stratum (Plot size: 15)			
1.			
2.			
3.			
4.			
		=Total Cover	

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A)

Total Number of Dominant Species Across All Strata: 3 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 0.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	0	x 2 =	0
FAC species	10	x 3 =	30
FACU species	91	x 4 =	364
UPL species	0	x 5 =	0
Column Totals:	101 (A)		394 (B)

Prevalence Index = B/A = 3.90

Hydrophytic Vegetation Indicators:

___ 1 - Rapid Test for Hydrophytic Vegetation

___ 2 - Dominance Test is >50%

___ 3 - Prevalence Index is ≤3.0[1]

___ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Vegetation Strata:

Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.

Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vines – All woody vines greater than 3.28 ft in height.

Hydrophytic Vegetation Present? **Yes** ___ **No** X

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point 2A-2 Upl

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-2	10YR 2/1	100					Loamy/Clayey	
2-6	10YR 3/2	100					Loamy/Clayey	
6-10	7.5R 3/4	100					Loamy/Clayey	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

[2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Mesic Spodic (A17) **(MLRA 144A, 145, 149B)**
- ___ Iron Monosulfide (A18)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Polyvalue Below Surface (S8) (**LRR R, MLRA 149B**)
- ___ Thin Dark Surface (S9) (**LRR R, MLRA 149B**)
- ___ High Chroma Sands (S11) (**LRR K, L)**
- ___ Loamy Mucky Mineral (F1) (**LRR K, L**)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)
- ___ Marl (F10) (**LRR K, L**)
- ___ Red Parent Material (F21) **(MLRA 145)**

Indicators for Problematic Hydric Soils[3]:

- ___ 2 cm Muck (A10) (**LRR K, L, MLRA 149B**)
- ___ 5 cm Mucky Peat or Peat (S3) (**LRR K, L, R**)
- ___ Polyvalue Below Surface (S8) (**LRR K, L**)
- ___ Thin Dark Surface (S9) (**LRR K, L**)
- ___ Iron-Manganese Masses (F12) (**LRR K, L, R**)
- ___ Piedmont Floodplain Soils (F19) (**MLRA 149B**)
- ___ Red Parent Material (F21) **(outside MLRA 145)**
- ___ Very Shallow Dark Surface (F22)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: Soft Resistance

Depth (inches): 10

Hydric Soil Present? **Yes** ___ **No** X

Remarks:

U.S. Army Corps of Engineers
WETLAND DETERMINATION DATA SHEET – Northcentral and Northeast Region
See ERDC/EL TR-12-1; the proponent agency is CECW-CO-R

OMB Control #: 0710-0024, Exp: 9/30/2027
Requirement Control Symbol EXEMPT:
(Authority: AR 335-15, paragraph 5-2a)

Project/Site: 124 Heritage Ave City/County: Portsmouth/Rockingham Sampling Date: 10-24-2025

Applicant/Owner: The Kane Company State: NH Sampling Point: 2A-8 Wet

Investigator(s): Lucas Fromm Section, Township, Range: N/A

Landform (hillside, terrace, etc.): Stream Local relief (concave, convex, none): Concave Slope %: 0

Subregion (LRR or MLRA): LRR R, MLRA 144A Lat: 43.03450 Long: -70.79775 Datum: WGS84

Soil Map Unit Name: Maybid Silt Loam NWI classification: PFO1E

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes ____ No X

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes X	No ____	**Is the Sampled Area within a Wetland?** **Yes** X **No** ____
Hydric Soil Present?	Yes X	No ____	If yes, optional Wetland Site ID: Wetland 2A
Wetland Hydrology Present?	Yes X	No ____	

Remarks: (Explain alternative procedures here or in a separate report.)
Wetland Data Plot for Wetland 2A.
According to the U.S. Drought Monitor, Rockingham County was experiencing a moderate-severe drough at the time of the delineation.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- X Surface Water (A1)
- X High Water Table (A2)
- ____ Saturation (A3)
- ____ Water Marks (B1)
- ____ Sediment Deposits (B2)
- ____ Drift Deposits (B3)
- ____ Algal Mat or Crust (B4)
- ____ Iron Deposits (B5)
- ____ Inundation Visible on Aerial Imagery (B7)
- ____ Sparsely Vegetated Concave Surface (B8)
- ____ Water-Stained Leaves (B9)
- ____ Aquatic Fauna (B13)
- ____ Marl Deposits (B15)
- X Hydrogen Sulfide Odor (C1)
- ____ Oxidized Rhizospheres on Living Roots (C3)
- ____ Presence of Reduced Iron (C4)
- ____ Recent Iron Reduction in Tilled Soils (C6)
- ____ Thin Muck Surface (C7)
- ____ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ____ Surface Soil Cracks (B6)
- ____ Drainage Patterns (B10)
- ____ Moss Trim Lines (B16)
- ____ Dry-Season Water Table (C2)
- ____ Crayfish Burrows (C8)
- ____ Saturation Visible on Aerial Imagery (C9)
- ____ Stunted or Stressed Plants (D1)
- X Geomorphic Position (D2)
- X Shallow Aquitard (D3)
- ____ Microtopographic Relief (D4)
- X FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes X	No ____	Depth (inches): 0
Water Table Present?	Yes X	No ____	Depth (inches): 0
Saturation Present? (includes capillary fringe)	Yes X	No ____	Depth (inches): 0

Wetland Hydrology Present? **Yes** X **No** ____

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

VEGETATION – Use scientific names of plants.

Sampling Point: 2A-8 Wet

Tree Stratum (Plot size: 30)	Absolute % Cover	Dominant Species?	Indicator Status
1. *Acer rubrum*	15	Yes	FAC
2.			
3.			
4.			
5.			
6.			
7.			
	15	=Total Cover	
Sapling/Shrub Stratum (Plot size: 15)			
1. *Alnus serrulata*	45	Yes	OBL
2. *Viburnum dentatum*	5	No	FAC
3. *Rosa multiflora*	15	No	FACU
4. *Ilex verticillata*	10	No	FACW
5. *Spiraea tomentosa*	5	No	FACW
6.			
7.			
	80	=Total Cover	
Herb Stratum (Plot size: 5)			
1. *Phragmites australis*	25	Yes	FACW
2. *Lythrum salicaria*	5	No	OBL
3. *Typha angustifolia*	35	Yes	OBL
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
	65	=Total Cover	
Woody Vine Stratum (Plot size: 15)			
1.			
2.			
3.			
4.			
		=Total Cover	

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 4 (A)

Total Number of Dominant Species Across All Strata: 4 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	85	x 1 =	85
FACW species	40	x 2 =	80
FAC species	20	x 3 =	60
FACU species	15	x 4 =	60
UPL species	0	x 5 =	0
Column Totals:	160 (A)		285 (B)

Prevalence Index = B/A = 1.78

Hydrophytic Vegetation Indicators:

___ 1 - Rapid Test for Hydrophytic Vegetation

X 2 - Dominance Test is >50%

X 3 - Prevalence Index is ≤3.0[1]

___ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Vegetation Strata:

Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.

Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vines – All woody vines greater than 3.28 ft in height.

Hydrophytic Vegetation Present? **Yes** X **No** ___

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: 2A-8 Wet

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-6	10YR 2/1	100					Muck	
6-16	10YR 2/1	100					Mucky Loam/Clay	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

[2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- X Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Mesic Spodic (A17) **(MLRA 144A, 145, 149B)**
- ___ Iron Monosulfide (A18)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Polyvalue Below Surface (S8) (**LRR R, MLRA 149B**)
- ___ Thin Dark Surface (S9) (**LRR R, MLRA 149B**)
- ___ High Chroma Sands (S11) (**LRR K, L**)
- ___ Loamy Mucky Mineral (F1) (**LRR K, L**)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)
- ___ Marl (F10) (**LRR K, L**)
- ___ Red Parent Material (F21) **(MLRA 145)**

Indicators for Problematic Hydric Soils[3]:

- ___ 2 cm Muck (A10) (**LRR K, L, MLRA 149B**)
- ___ 5 cm Mucky Peat or Peat (S3) (**LRR K, L, R**)
- ___ Polyvalue Below Surface (S8) (**LRR K, L**)
- ___ Thin Dark Surface (S9) (**LRR K, L**)
- ___ Iron-Manganese Masses (F12) (**LRR K, L, R**)
- ___ Piedmont Floodplain Soils (F19) (**MLRA 149B**)
- ___ Red Parent Material (F21) **(outside MLRA 145)**
- ___ Very Shallow Dark Surface (F22)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: Soft Resistance

Depth (inches): 16

Hydric Soil Present? **Yes** X **No** ___

Remarks:

U.S. Army Corps of Engineers
WETLAND DETERMINATION DATA SHEET – Northcentral and Northeast Region
See ERDC/EL TR-12-1; the proponent agency is CECW-CO-R

OMB Control #: 0710-0024, Exp: 9/30/2027
Requirement Control Symbol EXEMPT:
(Authority: AR 335-15, paragraph 5-2a)

Project/Site: 124 Heritage Ave City/County: Portsmouth/Rockingham Sampling Date: 10-24-2025

Applicant/Owner: The Kane Company State: NH Sampling Point: 2A-8 Upl

Investigator(s): Lucas Fromm Section, Township, Range: N/A

Landform (hillside, terrace, etc.): Road Embankment Local relief (concave, convex, none): Convex Slope %: 30

Subregion (LRR or MLRA): LRR R, MLRA 144A Lat: 43.03450 Long: -70.79773 Datum: WGS84

Soil Map Unit Name: Maybid silt loam NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation X, Soil X, or Hydrology X significantly disturbed? Are "Normal Circumstances" present? Yes ____ No X

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes X	No ____	**Is the Sampled Area within a Wetland?** **Yes** ____ **No** X
Hydric Soil Present?	Yes ____	No ____	If yes, optional Wetland Site ID: ____
Wetland Hydrology Present?	Yes ____	No ____	

Remarks: (Explain alternative procedures here or in a separate report.)
Sample plot consisted of the road embankment to Heritage Ave. As the embankment consisted of placed fill and maintained low, natural conditions could not be accurately assessed at this location. A second paired set of data plots was conducted to the south of Wetland 2A to document upland soils and vegetation under natural conditions.

According to the U.S. Drought Monitor, Rockingham County was experiencing a moderate-severe drough at the time of the delineation.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ Marl Deposits (B15)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Moss Trim Lines (B16)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ Microtopographic Relief (D4)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes ____	No X	Depth (inches): ____
Water Table Present?	Yes ____	No X	Depth (inches): ____
Saturation Present? (includes capillary fringe)	Yes ____	No X	Depth (inches): ____

Wetland Hydrology Present? **Yes** ____ **No** ____

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

VEGETATION – Use scientific names of plants.

Sampling Point: 2A-8 Upl

Tree Stratum (Plot size: 30)	Absolute % Cover	Dominant Species?	Indicator Status
1. *Acer rubrum*	5	Yes	FAC
2.			
3.			
4.			
5.			
6.			
7.			
	5	=Total Cover	
Sapling/Shrub Stratum (Plot size: 15)			
1. *Frangula alnus*	10	Yes	FAC
2.			
3.			
4.			
5.			
6.			
7.			
	10	=Total Cover	
Herb Stratum (Plot size: 10)			
1. *Rosa multiflora*	5	Yes	FACU
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
	5	=Total Cover	
Woody Vine Stratum (Plot size: 5)			
1.			
2.			
3.			
4.			
		=Total Cover	

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 2 (A)

Total Number of Dominant Species Across All Strata: 3 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 66.7% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	0	x 2 =	0
FAC species	15	x 3 =	45
FACU species	5	x 4 =	20
UPL species	0	x 5 =	0
Column Totals:	20 (A)		65 (B)

Prevalence Index = B/A = 3.25

Hydrophytic Vegetation Indicators:

___ 1 - Rapid Test for Hydrophytic Vegetation

X 2 - Dominance Test is >50%

___ 3 - Prevalence Index is ≤3.0[1]

___ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Vegetation Strata:

Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.

Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vines – All woody vines greater than 3.28 ft in height.

Hydrophytic Vegetation Present? **Yes** X **No** ___

Remarks: (Include photo numbers here or on a separate sheet.)
Upland vegetation at this location predominatley consisted of unidentifed maintained grass (90%)

SOIL

Sampling Point 2A-8 Upl

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

[2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Mesic Spodic (A17) **(MLRA 144A, 145, 149B)**
- ___ Iron Monosulfide (A18)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Polyvalue Below Surface (S8) (**LRR R, MLRA 149B**)
- ___ Thin Dark Surface (S9) (**LRR R, MLRA 149B**)
- ___ High Chroma Sands (S11) (**LRR K, L)**
- ___ Loamy Mucky Mineral (F1) (**LRR K, L**)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)
- ___ Marl (F10) (**LRR K, L**)
- ___ Red Parent Material (F21) **(MLRA 145)**

Indicators for Problematic Hydric Soils[3]:

- ___ 2 cm Muck (A10) (**LRR K, L, MLRA 149B**)
- ___ 5 cm Mucky Peat or Peat (S3) (**LRR K, L, R**)
- ___ Polyvalue Below Surface (S8) (**LRR K, L**)
- ___ Thin Dark Surface (S9) (**LRR K, L**)
- ___ Iron-Manganese Masses (F12) (**LRR K, L, R**)
- ___ Piedmont Floodplain Soils (F19) (**MLRA 149B**)
- ___ Red Parent Material (F21) **(outside MLRA 145)**
- ___ Very Shallow Dark Surface (F22)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** ____ **No** ____

Remarks:

Soils consisted of compacted fill and could not be successfully sampled at this location.

U.S. Army Corps of Engineers
WETLAND DETERMINATION DATA SHEET – Northcentral and Northeast Region
See ERDC/EL TR-12-1; the proponent agency is CECW-CO-R

OMB Control #: 0710-0024, Exp: 9/30/2027
Requirement Control Symbol EXEMPT:
(Authority: AR 335-15, paragraph 5-2a)

Project/Site: 124 Heritage Ave City/County: Portsmouth/Rockingham Sampling Date: 10/21/2025

Applicant/Owner: The Kane Company State: NH Sampling Point: 2A-2 Wet

Investigator(s): Lucas Fromm Section, Township, Range: N/A

Landform (hillside, terrace, etc.): Swamp Local relief (concave, convex, none): Concave Slope %: 2

Subregion (LRR or MLRA): LRR R, MLRA 144A Lat: 43.03404 Long: -70.79790 Datum: WQGS64

Soil Map Unit Name: Maybid silt loam NWI classification: PFO1E

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes ____ No X

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes X	No ____	**Is the Sampled Area within a Wetland?** **Yes** X **No** ____
Hydric Soil Present?	Yes X	No ____	If yes, optional Wetland Site ID: Wetland 2A
Wetland Hydrology Present?	Yes X	No ____	

Remarks: (Explain alternative procedures here or in a separate report.)
The site received 0.60" of rain in the 24 hours preceding the delineation.
According to the U.S. Drought Monitor, Rockingham County was experiencing a moderate-severe drough at the time of the delineation.

Alternate wetland sample plot for Wetland 2A as delineated line is located adjacent to filled road embankment, which limited characterization potential of upland community.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ Marl Deposits (B15)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Moss Trim Lines (B16)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- X Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- X Microtopographic Relief (D4)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes ____	No X	Depth (inches): ____
Water Table Present?	Yes ____	No X	Depth (inches): ____
Saturation Present? (includes capillary fringe)	Yes X	No ____	Depth (inches): 0

Wetland Hydrology Present? **Yes** X **No** ____

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

VEGETATION – Use scientific names of plants.

Sampling Point: 2A-2 Wet

Tree Stratum (Plot size: 30)	Absolute % Cover	Dominant Species?	Indicator Status
1. *Quercus rubra*	10	Yes	FACU
2. *Pinus strobus*	10	Yes	FACU
3. *Acer rubrum*	15	Yes	FAC
4.			
5.			
6.			
7.			
	35	=Total Cover	
Sapling/Shrub Stratum (Plot size: 15)			
1. *Ilex verticillata*	60	Yes	FACW
2. *Frangula alnus*	20	No	FAC
3. *Vaccinium corymbosum*	25	Yes	FACW
4.			
5.			
6.			
7.			
	105	=Total Cover	
Herb Stratum (Plot size: 5)			
1. *Frangula alnus*	15	Yes	FAC
2. *Pinus strobus*	2	No	FACU
3. *Vaccinium angustifolium*	2	No	FACU
4. *Rosa multiflora*	1	No	FACU
5. *Solidago rugosa*	5	Yes	FAC
6.			
7.			
8.			
9.			
10.			
11.			
12.			
	25	=Total Cover	
Woody Vine Stratum (Plot size: 15)			
1.			
2.			
3.			
4.			
		=Total Cover	

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 5 (A)

Total Number of Dominant Species Across All Strata: 7 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 71.4% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	85	x 2 =	170
FAC species	55	x 3 =	165
FACU species	25	x 4 =	100
UPL species	0	x 5 =	0
Column Totals:	165 (A)		435 (B)

Prevalence Index = B/A = 2.64

Hydrophytic Vegetation Indicators:

___ 1 - Rapid Test for Hydrophytic Vegetation

X 2 - Dominance Test is >50%

X 3 - Prevalence Index is ≤3.0[1]

___ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Vegetation Strata:

Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.

Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vines – All woody vines greater than 3.28 ft in height.

Hydrophytic Vegetation Present? **Yes** X **No** ___

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: 2A-2 Wet

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-12	10YR 2/1	100					Mucky Sand	
12-16	10YR 3/1	100					Sandy	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

[2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Mesic Spodic (A17) **(MLRA 144A, 145, 149B)**
- ___ Iron Monosulfide (A18)
- X Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- X Dark Surface (S7)
- ___ Polyvalue Below Surface (S8) (**LRR R, MLRA 149B**)
- X Thin Dark Surface (S9) (**LRR R, MLRA 149B**)
- ___ High Chroma Sands (S11) (**LRR K, L)**
- ___ Loamy Mucky Mineral (F1) (**LRR K, L**)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)
- ___ Marl (F10) (**LRR K, L**)
- ___ Red Parent Material (F21) **(MLRA 145)**

Indicators for Problematic Hydric Soils[3]:

- ___ 2 cm Muck (A10) (**LRR K, L, MLRA 149B**)
- ___ 5 cm Mucky Peat or Peat (S3) (**LRR K, L, R**)
- ___ Polyvalue Below Surface (S8) (**LRR K, L**)
- ___ Thin Dark Surface (S9) (**LRR K, L**)
- ___ Iron-Manganese Masses (F12) (**LRR K, L, R**)
- ___ Piedmont Floodplain Soils (F19) (**MLRA 149B**)
- ___ Red Parent Material (F21) **(outside MLRA 145)**
- ___ Very Shallow Dark Surface (F22)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** X **No** ___

Remarks:

Soil met Pete Fletcher soil tests 1, 3, 4, and 5 for Mucky Modified Soil

Tighe & Bond

ACOE Wetland Function-Value Evaluation Forms

Wetland Function-Value Evaluation Form

Total area of wetland 24.67 acres Human made? No Is wetland part of a wildlife corridor? No or a "habitat island"? No

Adjacent land use Industrial/Residential Distance to nearest roadway or other development Abutting

Dominant wetland systems present PFO Contiguous undeveloped buffer zone present No

Is the wetland a separate hydraulic system? No If not, where does the wetland lie in the drainage basin? Upper

How many tributaries contribute to the wetland? Unknown Wildlife & vegetation diversity/abundance (see attached list)

Wetland I.D. Wetland 1A

Latitude 43.03404 Longitude -70.79790

Prepared by: LTF Date 6/11/2026

Wetland Impact:
Type N/A Area N/A

Evaluation based on:
Office ____ Field X

Corps manual wetland delineation completed? Y X N ____

Function/Value	Suitability Y / N	Rationale (Reference #)*	Principal Function(s)/Value(s)	Comments
Groundwater Recharge/Discharge	Y	3,7,10,15	Y	
Floodflow Alteration	Y	1,2, 5, 6, 7, 8, 9, 15	Y	
Fish and Shellfish Habitat	N		N	No permanent waterbodies observed within or adjacent to Wetland 1A.
Sediment/Toxicant Retention	Y	2,4,7,8,9	Y	
Nutrient Removal	Y	1,4,5,7,8,9,10,11	Y	
Production Export	Y	1,2,4,8		
Sediment/Shoreline Stabilization	N	2,3		
Wildlife Habitat	Y	3,6,7,8,11,14,15,19	Y	
Recreation	N	12	N	
Educational/Scientific Value	N	2,4	N	
Uniqueness/Heritage	Y	1,5,10,15	N	Wetland 1A is classified as Red Maple - Sphagnum Basin Swamp - State Habitat Rank (S4).
Visual Quality/Aesthetics	N	4,7,11	N	
ES Endangered Species Habitat	N		N	
Other				

Notes:

* Refer to backup list of numbered considerations.

Wetland Function-Value Evaluation Form

Total area of wetland 18.78 acres Human made? No Is wetland part of a wildlife corridor? No or a "habitat island"? No

Adjacent land use Industrial/Residential /Undeveloped Forests Distance to nearest roadway or other development Abutting

Dominant wetland systems present PSS1E Contiguous undeveloped buffer zone present Yes

Is the wetland a separate hydraulic system? No If not, where does the wetland lie in the drainage basin? Upper

How many tributaries contribute to the wetland? Unknown Wildlife & vegetation diversity/abundance (see attached list)

Wetland I.D. Wetland 2A

Latitude 43.03450 Longitude -70.79775

Prepared by: LTF Date 6/11/2026

Wetland Impact:
Type N/A Area N/A

Evaluation based on:
Office ____ Field X

Corps manual wetland delineation completed? Y X N ____

Function/Value	Suitability Y / N	Rationale (Reference #)*	Principal Function(s)/Value(s)	Comments
Groundwater Recharge/Discharge	Y	3,7,10,15	Y	
Floodflow Alteration	Y	1,2,5,6,7,8,9,17,18	Y	
Fish and Shellfish Habitat	N		N	No permanent waterbodies observed within or adjacent to Wetland 1A.
Sediment/Toxicant Retention	Y	2,3,4,7,8,9	Y	
Nutrient Removal	Y	1,2,3,4,5,6,7,8,9,10,11,12,13,14	Y	
Production Export	Y	1,2,4,7,8,10,12		
Sediment/Shoreline Stabilization	N	2,3		
Wildlife Habitat	Y	3,5,6,7,8,11,14,15,19,21	Y	
Recreation	N	1,12	N	
Educational/Scientific Value	N	1,2	N	
Uniqueness/Heritage	Y	4,5,10,13,15, 27	Y	Wetland 2A is designated as a Prime Wetland by the City of Portsmouth
Visual Quality/Aesthetics	N	4,7,11	N	
ES Endangered Species Habitat	Y	1	N	
Other				

Notes:

* Refer to backup list of numbered considerations.

City of Portsmouth, New Hampshire

Site Plan Application Checklist

This site plan application checklist is a tool designed to assist the applicant in the planning process and for preparing the application for Planning Board review. The checklist is required to be completed and uploaded to the Site Plan application in the City's online permitting system. A pre-application conference with a member of the planning department is strongly encouraged as additional project information may be required depending on the size and scope. The applicant is cautioned that this checklist is only a guide and is not intended to be a complete list of all site plan review requirements. Please refer to the Site Plan review regulations for full details.

Applicant Responsibilities (Section 2.5.2): Applicable fees are due upon application submittal along with required attachments. The application shall be complete as submitted and provide adequate information for evaluation of the proposed site development. Waiver requests must be submitted in writing with appropriate justification.

Name of Applicant: 124 Group, Inc Date Submitted: 6/22/2025

Application # (in City's online permitting): LU 26-61

Site Address: 124 Heritage Ave Map: 284 Lot: 8

Application Requirements			
☑	**Required Items for Submittal**	**Item Location (e.g. Page or Plan Sheet/Note #)**	**Waiver Requested**
☑	Complete application form submitted via the City's web-based permitting program (2.5.2.1**(2.5.2.3A)**	Enclosed	N/A
☑	All application documents, plans, supporting documentation and other materials uploaded to the application form in viewpoint in digital Portable Document Format (PDF). One hard copy of all plans and materials shall be submitted to the Planning Department by the published deadline. **(2.5.2.8)**	Enclosed	N/A

Site Plan Review Application Required Information			
☑	**Required Items for Submittal**	**Item Location (e.g. Page/line or Plan Sheet/Note #)**	**Waiver Requested**
☑	Statement that lists and describes "green" building components and systems. **(2.5.3.1B)**	N/A	Yes
☑	Existing and proposed gross floor area and dimensions of all buildings and statement of uses and floor area for each floor. **(2.5.3.1C)**	No Change	N/A
☑	Tax map and lot number, and current zoning of all parcels under Site Plan Review. **(2.5.3.1D)**	Existing Conditions Plan, Site Plan C-201	N/A

Site Plan Review Application Required Information			
☑	**Required Items for Submittal**	**Item Location (e.g. Page/line or Plan Sheet/Note #)**	**Waiver Requested**
☑	Owner's name, address, telephone number, and signature. Name, address, and telephone number of applicant if different from owner. **(2.5.3.1E)**	Enclosed	N/A
☑	Names and addresses (including Tax Map and Lot number and zoning districts) of all direct abutting property owners (including properties located across abutting streets) and holders of existing conservation, preservation or agricultural preservation restrictions affecting the subject property. **(2.5.3.1F)**	Existing Conditions Plan	N/A
☑	Names, addresses and telephone numbers of all professionals involved in the site plan design. **(2.5.3.1G)**	Cover Sheet	N/A
☑	List of reference plans. **(2.5.3.1H)**	General Notes Sheet C-101	N/A
☑	List of names and contact information of all public or private utilities servicing the site. **(2.5.3.1I)**	General Notes Sheet C-101	N/A

Site Plan Specifications			
☑	**Required Items for Submittal**	**Item Location (e.g. Page/line or Plan Sheet/Note #)**	**Waiver Requested**
☑	Full size plans shall not be larger than 22 inches by 34 inches with match lines as required, unless approved by the Planning Director.. **(2.5.4.1A)**	Required on all plan sheets	N/A
☑	Scale: Not less than 1 inch = 60 feet and a graphic bar scale shall be included on all plans. **(2.5.4.1B)**	Required on all plan sheets	N/A
☑	GIS data should be referenced to the coordinate system New Hampshire State Plane, NAD83 (1996), with units in feet. **(2.5.4.1C)**	Existing Conditions Plans	N/A
☑	Plans shall be drawn to scale and stamped by a NH licensed civil engineer. **(2.5.4.1D)**	Required on all plan sheets	N/A
☑	Wetlands shall be delineated by a NH certified wetlands scientist and so stamped. **(2.5.4.1E)**	Existing Conditions Plan	N/A
☑	Title (name of development project), north point, scale, legend. **(2.5.4.2A)**	All plan sheets	N/A
☑	Date plans first submitted, date and explanation of revisions. **(2.5.4.2B)**	All plan sheets	N/A
☑	Individual plan sheet title that clearly describes the information that is displayed. **(2.5.4.2C)**	Required on all plan sheets	N/A
☑	Source and date of data displayed on the plan. **(2.5.4.2D)**	General Notes Sheet C-101	N/A

Site Plan Specifications – Required Exhibits and Data			
☑	**Required Items for Submittal**	**Item Location (e.g. Page/line or Plan Sheet/Note #)**	**Waiver Requested**
☑	**1. Existing Conditions: (2.5.4.3A)** • Surveyed plan of site showing existing natural and built features; • Existing building footprints and gross floor area; • Existing parking areas and number of parking spaces provided; • Zoning district boundaries; • Existing, required, and proposed dimensional zoning requirements including building and open space coverage, yards and/or setbacks, and dwelling units per acre; • Existing impervious and disturbed areas; • Limits and type of existing vegetation; • Wetland delineation, wetland function and value assessment (including vernal pools); • SFHA, 100-year flood elevation line and BFE data, as required.	Existing Conditions Plan Sheets	
☑	**2. Buildings and Structures: (2.5.4.3B)** • Plan view: Use, size, dimensions, footings, overhangs, 1st fl. elevation; • Elevations: Height, massing, placement, materials, lighting, façade treatments; • Total Floor Area; • Number of Usable Floors; • Gross floor area by floor and use.	Site Plan C-301	
☑	**3. Access and Circulation: (2.5.4.3C)** • Location/width of access ways within site; • Location of curbing, right of ways, edge of pavement and sidewalks; • Location, type, size and design of traffic signing (pavement markings); • Names/layout of existing abutting streets; • Driveway curb cuts for abutting prop. and public roads; • If subdivision; Names of all roads, right of way lines and easements noted; • AASHTO truck turning templates, description of minimum vehicle allowed being a WB-50 (unless otherwise approved by TAC).	Site Plan C-301	
☑	**4. Parking and Loading: (2.5.4.3D)** • Location of off street parking/loading areas, landscaped areas/buffers; • Parking Calculations (# required and the # provided).	Site Plan C-301 Landscape Plan L-101	
☑	**5. Water Infrastructure: (2.5.4.3E)** • Size, type and location of water mains, shut-offs, hydrants & Engineering data; • Location of wells and monitoring wells (include protective radii).	Existing Conditions Plan Sheets	
☑	**6. Sewer Infrastructure: (2.5.4.3F)** • Size, type and location of sanitary sewage facilities & Engineering data, including any onsite temporary facilities during construction period.	Existing Conditions Plan Sheets	

☑	**7. Utilities: (2.5.4.3G)** • The size, type and location of all above & below ground utilities; • Size type and location of generator pads, transformers and other fixtures.	Existing Conditions Plan Sheets	
☑	**8. Solid Waste Facilities: (2.5.4.3H)**	Existing Conditions Plan Sheets	
	• The size, type and location of solid waste facilities.		
☑	**9. Storm water Management: (2.5.4.3I)** • The location, elevation and layout of all storm-water drainage. • The location of onsite snow storage areas and/or proposed off-site snow removal provisions. • Location and containment measures for any salt storage facilities • Location of proposed temporary and permanent material storage locations and distance from wetlands, water bodies, and stormwater structures.	Grading, Drainage, and Erosion Control Plans C-401	
☑	**10. Outdoor Lighting: (2.5.4.3J)** • Type and placement of all lighting (exterior of building, parking lot and any other areas of the site) and photometric plan.	Photometrics Plans	
☑	**11.** Indicate where dark sky friendly lighting measures have been implemented. **(10.1)**	Lighting Cut Sheets	
☑	**12. Landscaping: (2.5.4.3K)** • Identify all undisturbed area, existing vegetation and that which is to be retained; • Location of any irrigation system and water source.	Landscape Plan L-101	
☑	**13. Contours and Elevation: (2.5.4.3L)** • Existing/Proposed contours (2 foot minimum) and finished grade elevations.	Grading, Drainage, and Erosion Control Plans C-401	
☑	**14. Open Space: (2.5.4.3M)** • Type, extent and location of all existing/proposed open space.	Site Plan C-301 Landscape Plan L-101	
☑	**15. All easements, deed restrictions and non-public rights of ways. (2.5.4.3N)**	Existing Conditions Plan Sheets	
☑	**16. Character/Civic District (All following information shall be included): (2.5.4.3P)** • Applicable Building Height (10.5A21.20 & 10.5A43.30); • Applicable Special Requirements (10.5A21.30); • Proposed building form/type (10.5A43); • Proposed community space (10.5A46).	N/A	
☑	**17. Special Flood Hazard Areas (2.5.4.3Q)** • The proposed development is consistent with the need to minimize flood damage; • All public utilities and facilities are located and construction to minimize or eliminate flood damage; • Adequate drainage is provided so as to reduce exposure to flood hazards.	N/A	

Other Required Information			
☑	**Required Items for Submittal**	**Item Location (e.g. Page/line or Plan Sheet/Note #)**	**Waiver Requested**
☑	Traffic Impact Study or Trip Generation Report, as required. **(3.2.1-2)**	N/A	Yes
☑	Indicate where Low Impact Development Design practices have been incorporated. **(7.1)**	Grading and Drainage Plan Sheet C-401	
☑	Indicate whether the proposed development is located in a wellhead protection or aquifer protection area. Such determination shall be approved by the Director of the Dept. of Public Works. **(7.3.1)**	N/A	
☑	Stormwater Management and Erosion Control Plan. **(7.4)**	N/A	Yes
☑	Inspection and Maintenance Plan **(7.6.5)**	N/A	Yes

Final Site Plan Approval Required Information			
☑	**Required Items for Submittal**	**Item Location (e.g. Page/line or Plan Sheet/Note #)**	**Waiver Requested**
☑	All local approvals, permits, easements and licenses required, including but not limited to: • Waivers; • Driveway permits; • Special exceptions; • Variances granted; • Easements; • Licenses. **(2.5.3.2A)**	Cover Sheet	
☑	Exhibits, data, reports or studies that may have been required as part of the approval process, including but not limited to: • Calculations relating to stormwater runoff; • Information on composition and quantity of water demand and wastewater generated; • Information on air, water or land pollutants to be discharged, including standards, quantity, treatment and/or controls; • Estimates of traffic generation and counts pre- and post-construction; • Estimates of noise generation; • A Stormwater Management and Erosion Control Plan; • Endangered species and archaeological / historical studies; • Wetland and water body (coastal and inland) delineations; • Environmental impact studies. **(2.5.3.2B)**	Enclosed	
☑	A document from each of the required private utility service providers indicating approval of the proposed site plan and indicating an ability to provide all required private utilities to the site. **(2.5.3.2D)**	N/A	

Final Site Plan Approval Required Information			
☑	**Required Items for Submittal**	**Item Location (e.g. Page/line or Plan Sheet/Note #)**	**Waiver Requested**
☑	A list of any required state and federal permit applications required for the project and the status of same. **(2.5.3.2E)**	Cover Sheet	
☑	A note shall be provided on the Site Plan stating: "All conditions on this Plan shall remain in effect in perpetuity pursuant to the requirements of the Site Plan Review Regulations." **(2.5.4.2E)**	Site Plan Sheet C-301	N/A
☑	For site plans that involve land designated as "Special Flood Hazard Areas" (SFHA) by the National Flood Insurance Program (NFIP) confirmation that all necessary permits have been received from those governmental agencies from which approval is required by Federal or State law, including Section 404 of the Federal Water Pollution Control Act Amendments of 1972, 33 U.S.C. 1334. **(2.5.4.2F)**	N/A	
☑	Plan sheets submitted for recording shall include the following notes: a. "This Site Plan shall be recorded in the Rockingham County Registry of Deeds." b. "All improvements shown on this Site Plan shall be constructed and maintained in accordance with the Plan by the property owner and all future property owners. No changes shall be made to this Site Plan without the express approval of the Portsmouth Planning Director." **(2.13.3)**	Site Plan Sheet C-301	N/A

Applicant's Signature: _____ **Date:** 6/22/2025

City of Portsmouth, New Hampshire

Wetland Conditional Use Permit Application Checklist

This wetland conditional use permit application checklist is a tool designed to assist the applicant in the planning process and for preparing the application for Conservation Commission and Planning Board review. The checklist is required to be uploaded as part of your wetland conditional use permit application to ensure a full and complete application is submitted to the Planning and Sustainability Department and to the online portal. A pre-application conference with a member of the Planning and Sustainability Department is encouraged as additional project information may be required depending on the size and scope of the project. The applicant is cautioned that this checklist is only a guide and is not intended to be a complete list of all wetland conditional use permit requirements. Please refer to Article 10 of the City of Portsmouth Zoning Ordinance for full details.

Applicant Responsibilities: Applicable fees are due upon application submittal to the Planning Board (no fees are required for Conservation Commission submission). The application will be reviewed by Planning and Sustainability Department staff to determine completeness. Incomplete applications which do not provide required information for the evaluation of the proposed site development shall not be provided review by the Conservation Commission or Planning Board.

Name of Applicant: 124 Group, Inc Date Submitted: 6/22/2026

Application # (in City's online permitting): LU 26-61

Site Address: 124 Heritage Ave Map: 284 Lot: 30

☑	Required Items for Submittal	Item Location (e.g. Page or Plan Sheet/Note #)
✔	Complete application form submitted via the City's web-based permitting program	Enclosed
✔	All application documents, plans, supporting documentation, this checklist and other materials uploaded to the application form in OpenGov in digital **Portable Document Format (PDF)**. One hard copy of all plans and materials shall be submitted to the Planning and Sustainability Department by the published deadline.	Enclosed

☑	Required Items for Submittal	Item Location (e.g. Page/line or Plan Sheet/Note #)
✔	Basic property and wetland resource information. **(10.1017.21)**	Existing Conditions Plan, Wetland Memo
✔	Additional information required for projects proposing greater than 250 square feet of permanent or temporary impacts. **(10.1017.22)**	Cover Letter, Wetland Memo
✔	Demonstrate impacts as they relate to the criteria for approval set forth in Section 10.1017.50 (or Section 10.1017.60 in the case of utility installation in a right-of-way). **(10.1017.23)**	Cover Letter
✔	Balance impervious surface impacts with removal and/or wetland buffer enhancement plan. **(10.1017.24)**	Cover Letter, Wetland Buffer Impervious Surface Exhibit

☑	Required Items for Submittal	Item Location (e.g. Page/line or Plan Sheet/Note #)
✔	Wetland buffer enhancement plan. **(10.1017.25)**	Landscape Plan L-101
☐	Living shoreline strategy provided for tidal wetland and/or tidal buffer impacts. **(10.1017.26)**	N/A
✔	Stormwater management must be in accordance with Best Management Practices including but not limited to: *1. New Hampshire Stormwater Manual, NHDES, current version.* *2. Best Management Practices to Control Non-point Source Pollution: A Guide for Citizens and City Officials, NHDES, January 2004.* **(10.1018.10)**	Drainage Report Grading, Drainage, and Erosion Control Plan C-401
☐	Vegetated Buffer Strip slope of greater than or equal to 10%. **(10.1018.22)**	N/A
✔	Removal or cutting of vegetation, use of fertilizers, pesticides and herbicides. **(10.1018.23/10.1018.24/10.1018.25)**	General Notes C-101 #18 and #19
☐	All new pavement within a wetland buffer shall be porous pavement. **(10.1018.31)**	N/A
☐	An application that proposes porous pavement in a wetland buffer shall include a pavement maintenance plan. **(10.1018.32)**	N/A
☐	Permanent wetland boundary markers shall be shown on the plan submitted with an application for a conditional use permit and shall be installed during project construction. **(10.1018.40)**	TBD
☑	**Requested Items for Submittal**	**Item Location (e.g. Page or Plan Sheet/Note #)**
✔	A narrative/letter addressed to the Conservation Commission Chair (if recommended to Planning Board then an additional narrative addressed to the Planning Board Chair at that time) describing the project and any proposed wetland and/or wetland buffer impacts. Please visit the WCUP instruction page for further application instructions.	Cover Letter
☐	If New Hampshire Department of Environmental Services (NHDES) Standard Dredge and Fill Permit is required for this work, please provide this permit application at the same time as your submission for a Wetland Conditional Use Permit.	N/A

Applicant's Signature: _____ **Date:** 06/22/2026

Catalog # : _____ Project : _____ Type : _____

Prepared By : _____ Date : _____

V-Locity Small (VALS)

Outdoor LED Area Light

OVERVIEW	
Lumen Package	6,000 - 27,000
Wattage Range	36 - 178
Efficacy Range (LPW)	142 - 171
Weight lbs(kg)	20 (9.1)
Control Options	IMSBT, ALB, ALS, 7-Pin, PCI

QUICK LINKS

Ordering Guide | Performance | Photometrics | Dimensions

FEATURES & SPECIFICATIONS

Construction

- Rugged die-cast aluminum housing contains factory prewired driver and optical units. Cast aluminum wiring access door located underneath.
- Self-contained optic, board and heat sink assembly can be rotated or replaced in the field.
- Fixtures are finished with LSI's DuraGrip® polyester powder coat finishing process. The DuraGrip finish withstands extreme weather changes without cracking or peeling. Other standard LSI finishes available. Consult factory.
- Shipping weight: TBD lbs in carton.

Optical System

- State-of-the-Art acrylic optics delivers industry leading optical control with an integrated gasket to provide IP66 rated seal.
- Proprietary refractor optics provide exceptional coverage and uniformity in distribution types 2, 3M, 3W, 4M, 4W, 4F, FTM, 5QN, 5QM, 5Q, 5QW, AM, WF and LC/RC.
- Available in 5000K, 4000K, 3500K, 3000K and 2700K color temperatures per ANSI C78.377 as well as phosphor converted amber.
- Minimum CRI of 80 (optional 70 CRI for 5000K and 4000K).
- Factory or field installable integral shielding available for enhanced spill light control.
- Zero Uplight (excludes adjustable arms).

Electrical

- High-performance driver features over-voltage, under voltage, short-circuit and over temperature protection.
- 0-10 volt dimming (10% - 100%) standard, must specify EXT option for dimming leads to be extended to fixture exterior.
- Standard Universal Voltage (120-277 VAC) Input 50/60 Hz or optional High Voltage (347-480 VAC).
- L70 Calculated Life: >60k Hours
- Total harmonic distortion: <20%
- Operating temperature: -40°C to +50°C (-40°F to +122°F).
- Power factor: >.90
- Input power stays constant over life.
- Field replaceable 10kV surge protection device meets a minimum Category C Low operation (per ANSI/IEEE C62.41.2).
- High-efficacy LEDs mounted to metal-core circuit board to maximize heat dissipation
- Driver is fully encased in potting material for moisture resistance and complies with FCC standards. Driver and key electronic components can easily be accessed.

Controls

- Optional integral passive infrared Bluetooth™ motion and photocell sensor. Fixtures operate independently and can be commissioned via iOS or Android configuration app.
- LSI's AirLink™ wireless control system options reduce energy and maintenance costs while optimizing light quality 24/7.

Installation

- REDiMount pole mount arm allows for a true one person installation.
- Side arm pole mount designed to mount to square or round poles.
- Pole mount arms can accommodate pole drill patterns from 2.4 to 5" on center and utilize LSI's reduced B3 or traditional B5 drill patterns.
- Additional mounting options are available including a mast arm or adjustable slip fitter that allow for luminaire attachment to a 2 3/8" tenon or mast arm.
- Adjustable arms allow for 65° of tilt (-5°below horizontal to +60° above horizontal) in 5° increments.

Warranty

- LSI luminaires carry a 5-year limited warranty. Refer to https://www.lsicorp.com/resources/terms-conditions-warranty/ for more information.

Listings

- Listed to UL 1598 and UL 8750.
- Meets Buy American Act requirements.
- DarkSky approved with 3000K or warmer color temperature selection (side arm pole and mast arm mounting only).
- Title 24 Compliant; see local ordinance for qualification information.
- Suitable for wet locations.
- IP66 rated Luminaire per IEC 60598-1.
- 3G rated for ANSI C136.31 high vibration applications are qualified.

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V-Locity Small (VALS) Outdoor LED Area Light

Type : _____

Have questions? Call us at (800) 436-7800

ORDERING GUIDE

Back to Quick Links

TYPICAL ORDER EXAMPLE: VALS 18L 4W UNV 40K8 BLK SA ALBMR2LR IS

Prefix	Lumen Package	Distribution	Orientation[2]	Voltage	Color Temp /Rendering	Finish
VALS - V-Locity Area Light Small	**6L** - 6,000 lms, 36W **9L** - 9,000 lms, 54W **12L** - 12,000 lms, 74W **15L** - 15,000 lms, 91W **18L** - 18,000 lms, 111W **21L** - 21,000 lms, 130W **24L** - 24,000 lms, 155W **27L** - 27,000 lms, 178W Custom Lumen Packages[1]	**2** - Type 2 **3M** - Type 3 Medium **3W** - Type 3 Wide **4M**- Type 4 Medium **4F** - Type 4 Forward **4W** - Type 4 Wide **FTM** - Forward Throw Medium **5QN** - Type 5 Square Narrow **5QM** - Type 5 Square Medium **5Q** - Type 5 Square **5QW** - Type 5 Square Wide **AM**- Automotive Merchandise **WF** - 6x6 Wide Flood **LC** - Left Corner **RC** - Right Corner	**(Blank)** - Standard **L**- Optics rotated left 90° **R** - Optics rotated right 90°	**UNV** - Universal Voltage (120-277V) **HV** - High Voltage (347-480V)	**50K7**- 5000 CCT - 70 CRI **50K8**- 5000 CCT - 80 CRI **40K7** - 4000 CCT - 70 CRI **40K8**- 4000 CCT - 80 CRI **35K8**- 3500 CCT - 80 CRI **30K8** - 3000 CCT - 80 CRI **27K8** - 2700 CCT - 80 CRI **AMB** - Phosphor Converted Amber	**BLK -** Black **BRZ -** Dark Bronze **GMG -** Gun Metal Gray **GPT -** Graphite **MSV -** Metallic Silver **PLP -** Platinum Plus **SVG -** Satin Verde Green **WHT -** White

Mounting	Controls (Choose One)		Options
SA - Universal Side Arm Pole Mount **SF** - Adjustable Slip Fitter **UA**- Universal Adjustable Pole Mount Arm **MA** - Mast Arm	**(Blank)** - None **Wireless Controls System** **ALSC** - AirLink Synapse Control System **ALSCS2** - AirLink Synapse Control System with 12-20' MH Motion Sensor **ALSCS4 -** AirLink Synapse Control System with 20-40' MH Motion Sensor **ALBMR1LR** - AirLink Blue Long Range Wireless Multi-Range Sensor Controller (8-15' MH)[4] **ALBMR2LR** - AirLink Blue Long Range Wireless Multi-Range Sensor Controller (16-40' MH)[4]	**Stand-Alone Controls** **EXT** - 0-10v Dimming leads extended to housing exterior **CR7P** - 7 Pin Control Receptacle ANSI C136.41[3] **IMSBTL1** - Integral Bluetooth™ Motion and Photocell Sensor (8-24' MH)[4] **IMSBTL2** - Integral Bluetooth™ Motion and Photocell Sensor (25-40' MH)[4] **PCIU** - 120-277 Button Photocell **PCI347** - 347V Button Photocell	**IS -** Integral Shield[2] **TE** - Tooless Entry (Mast Arm Only)

Need more information?
Click here for our glossary

Have additional questions?
Call us at (800) 436-7800

Accessory Ordering Information[5]

CONTROLS ACCESSORIES	
Description	**Order Number**
Twist Lock Photocell (120V) for use with CR7P	**122514**
Twist Lock Photocell (208-277) for use with CR7P	**122515**
Twist Lock Photocell (347V) for use with CR7P	**122516**
Twist Lock Photocell (480V) for use with CR7P	**1225180**
AirLink 5 Pin Twist Lock Controller	**661409**
AirLink 7 Pin Twist Lock Controller	**661410**
Shorting Cap for use with CR7P	**149328**

FUSING OPTIONS[7]	
Description	**Order Number**
Single Fusing (120V)	See Fusing Accessory Guide
Single Fusing (277V)	
Double Fusing (208V, 240V)	
Double Fusing (480V)	
Double Fusing (347V)	

EXTERNAL SHIELDING OPTIONS	
Description	**Order Number**
1.5" External Shield	See Shielding Guide
3" External Shield	

1. Custom lumen and wattage packages available, consult factory. Values are within industry standard tolerances but not DLC listed.
2. Not available on Type 5 or wide flood distributions.
3. Control device or shorting cap must be ordered separately. See Accessory Ordering Information.
4. Motion sensors are field configurable via the LSI app that can be downloaded from your smartphone's native app store.
5. Accessories are shipped separately and field installed.
6. "CLR" denotes finish. See Finish options.
7. Fusing must be located in hand hole of pole. See Fusing Accessory Guide for compatability.

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V-Locity Small (VALS) Outdoor LED Area Light

Type : _____

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ACCESSORIES

MOUNTING ACCESSORIES

Side Arm

Bullhorn Bracket
Mounts onto a 2" (51mm) IP, 2.375" (60mm) O.D. tenon and allows for mounting up to 4 adjustable slip fitter mount luminaires
Part Number: BKS PTB 2 CLR / BKS PTB 12 CLR (2 Luminaires)
Part Number: BKS PTB 3-30 CLR / BKS PTB 13-30 CLR (3 Luminaires)
Part Number: BKS PTB 4 CLR / BKS PTB 14 CLR (4 Luminaires)

Flood Wall Mount Bracket
Mounts onto vertical wall surface (hardware/anchors not included)
Part Number: BKS FMW 5 CLR (5" Straight Version)
Part Number: BKS FMW 18 CLR (18" Curved Version)

Bolt on Side Tenon Mount
Bolt on Side Tenon Mount
Part Number: BKSFBO 5 CLR (5" Straight Version)
Part Number: BKSFBO 18 CLR (18" Curved Version)
Part Number: BKSFBO 30 CLR (30" Dual Tenon Version)

Tenon / Slipfitter

Square Tenon Top
Allows to seamlessly integrate LSI luminaires to open top 4", 5" or 6" square poles with 11 ga. Or 7 ga. wall thickness
Part Number: BKA ISF10 _SQ CLR

Square Tenon Top
Mounts onto a 2" (51mm) IP, 2.375" (60mm) O.D. tenon and allows for mounting up to 4 luminaires
Part Number: BKA XNM *

Square Internal Slipfitter
Mounts inside 4" or 5" square pole and allows for mounting up to 4 lumianires
Part Number: BKA X_ISF * CLR

Wall Mount/ Wood Pole

Wall Mount Bracket
Mounts onto vertical wall surface (hardware/anchors not included)
Part Number: BKS XBO WM CLR

Wood Pole Bracket
Mounts onto wooden poles (6" minimum OD, hardware/anchors not inlcuded)
Part Number: BKS XBO WP CLR

SHIELDING, POLES & MISC. ACCESSORIES

Shielding

Integral Shield for Asymmetric Distributions
Field Install Integral shield provides maximum backlight control by shiedling each individual row of LEDS with minimal impact on Streett/front side distribution
Part Number: TBD

Integral Shield for Left and Right Corner Distributions
Field install integral shield provides cutoff from two sides for maximum spill light control when utilizing LC or RC corner distributions
Part Number: TBD

External Shield
External shield blocks view of light source from anyside of luminaire, additional shielding configurations available
Part Number: TBD (1.5") / TBD (3")

Poles

Square Poles
14 - 39' steel and aluminum poles in 4", 5" and 6" sizes for retrofit and new construction
Part Number: 4SQ/5SQ/6SQ

Round Poles
10 - 30' steel and aluminum poles in 4" and 5" sizes for retrofit and new construction
Part Number: 4RP/5RP

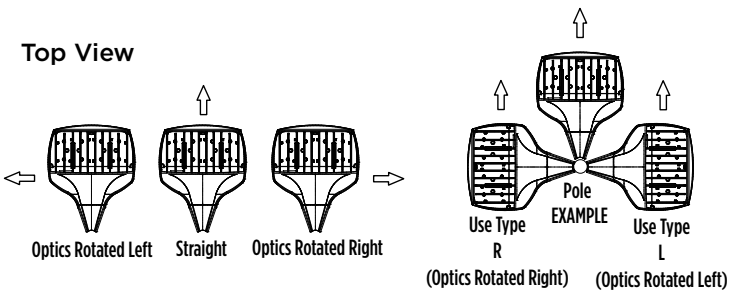
Tapered Poles
20' - 39' steel and aluminum poles for retrofit and new construction
Part Number: RTP

Misc.

Bird Spikes
10' linear bird spike (3' recommended per luminaire) silcone adhesive (covers approximately 25' linear fee of bird spike) and application tool
Spike Part Number: 751631
Adhesive Part Number: 751632
Caulk Gun Part Number: 751636

1 Replace CLR with paint finish description
2 Repleace XX with SQ for square pole or RD for round pole (≥3" OD)
3 Replace * with S (Single), D180 (Double @180°), D90 (Double @90°), T90 (Triple), Q90 (Quad)
4 Replace _ with 4 (4" square pole) or 5 (5" square pole)

OPTICS ROTATION

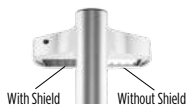


ACCESSORIES/OPTIONS

Integral Shield (IS)

Integral Shield (IS) available for improved backlight control without sacrificing Streett side performance. LSI's Integral Shield (IS) option delivers backlight control that significantly reduces spill light behind the pole for applications with pole locations close to adjacent properties. The design maximizes forward reflected light while reducing glare, maintaining the optical distribution selected, and most importantly eliminating light trespass. Shields rotate with the optical distribution.

Integral Shield (IS)



Luminaire Shown with AirLink Blue Sensor Option

7 Pin Photoelectric Control

7-pin ANSI C136.41-2013 control receptacle option available for twist lock photocontrols or wireless control modules. Control accessories sold separately. Dimming leads from the receptacle will be connected to the driver dimming leads (Consult factory for alternate wiring).

Luminaire Shown with CR7P

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V-Locity Small (VALS) Outdoor LED Area Light

Type : _____

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PHOTOMETRICS

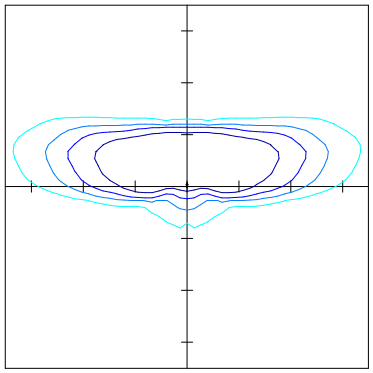
Back to Quick Links

Luminaire photometry has been conducted by a NVLAP accredited testing laboratory in accordance with IESNA LM-79-08. As specified by IESNA LM-79-08 the entire luminaire is tested as the source resulting in a luminaire efficiency of 100%.

See the individual product page on https://www.lsicorp.com/ for detailed photometric data.

VALS 18L 2 40K8

V-LOCITY Area Small, 18,000lm, Type 2 Distribution



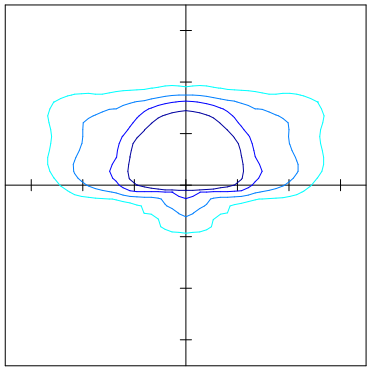
20' Mounting Height / 30' Grid Spacing

2 FC 1 FC 0.5 FC 0.2 FC

IES Type	II Medium
BUG Rating	B2-U0-G4
Street Side Lumen %	88.9%
House Side Lumen %	11.1%
Uplight %	0.0%

VALS 18L 3M 40K8

V-LOCITY Area Small, 18,000lm, Type 3 Medium Distribution



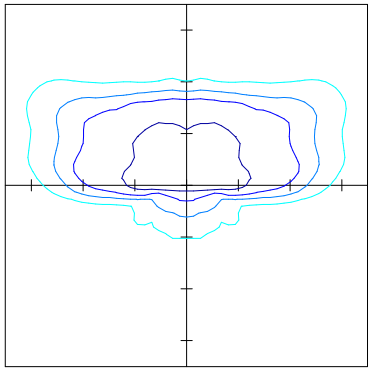
20' Mounting Height / 30' Grid Spacing

2 FC 1 FC 0.5 FC 0.2 FC

IES Type	III Very Short
BUG Rating	B2-U0-G3
Street Side Lumen %	90.1%
House Side Lumen %	9.9%
Uplight %	0.0%

VALS 18L 3W 40K8

V-LOCITY Area Small, 18,000lm, Type 3 Wide Distribution



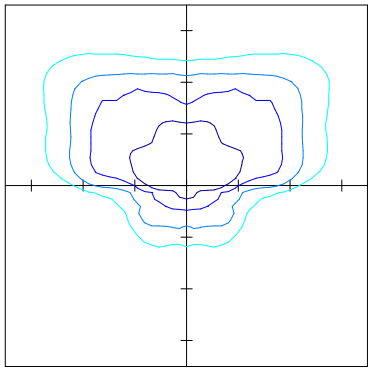
20' Mounting Height / 30' Grid Spacing

2 FC 1 FC 0.5 FC 0.2 FC

IES Type	IV Medium
BUG Rating	B2-U0-G4
Street Side Lumen %	86.1%
House Side Lumen %	13.9%
Uplight %	0.0%

VALS 18L 4W 40K8

V-LOCITY Area Small, 18,000lm, Type 4 Wide Distribution



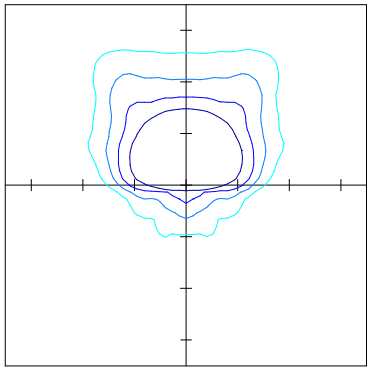
20' Mounting Height / 30' Grid Spacing

2 FC 1 FC 0.5 FC 0.2 FC

IES Type	IV Medium
BUG Rating	B2-U0-G5
Street Side Lumen %	86.3%
House Side Lumen %	13.7%
Uplight %	0.0%

VALS 18L 4M 40K8

V-LOCITY Area Small, 18,000lm, Type 4 Medium Distribution



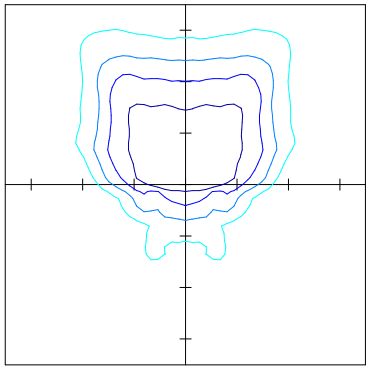
20' Mounting Height / 30' Grid Spacing

2 FC 1 FC 0.5 FC 0.2 FC

IES Type	IV Very Short
BUG Rating	B1-U0-G3
Street Side Lumen %	91.0%
House Side Lumen %	9.0%
Uplight %	0.0%

VALS 18L 4F 40K8

V-LOCITY Area Small, 18,000lm, Type 4 Forward Distribution



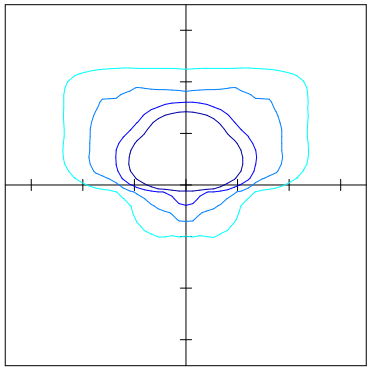
20' Mounting Height / 30' Grid Spacing

2 FC 1 FC 0.5 FC 0.2 FC

IES Type	IV Short
BUG Rating	B2-U0-G4
Street Side Lumen %	87.9%
House Side Lumen %	12.1%
Uplight %	0.0%

VALS 18L FTM 40K8

V-LOCITY Area Small, 18,000lm, Forward Throw Medium Distribution



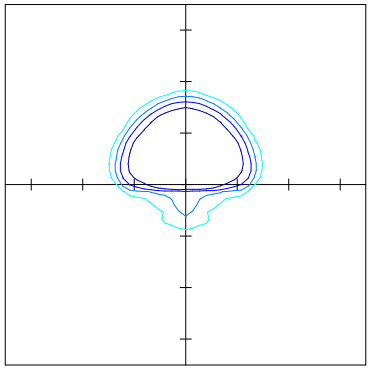
20' Mounting Height / 30' Grid Spacing

2 FC 1 FC 0.5 FC 0.2 FC

IES Type	III Very Short
BUG Rating	B1-U0-G2
Street Side Lumen %	90.2%
House Side Lumen %	9.8%
Uplight %	0.0%

VALS 18L AM 40K8

V-LOCITY Area Small, 18,000lm, Automotive Merchandise Distribution



20' Mounting Height / 30' Grid Spacing

2 FC 1 FC 0.5 FC 0.2 FC

IES Type	III Very Short
BUG Rating	B1-U0-G2
Street Side Lumen %	94.1%
House Side Lumen %	5.9%
Uplight %	0.0%

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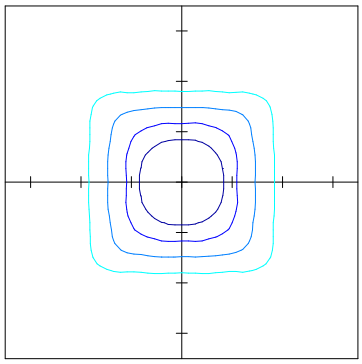
PHOTOMETRICS (CONTINUED)

Luminaire photometry has been conducted by a NVLAP accredited testing laboratory in accordance with IESNA LM-79-08. As specified by IESNA LM-79-08 the entire luminaire is tested as the source resulting in a luminaire efficiency of 100%.

See the individual product page on https://www.lsicorp.com/ for detailed photometric data.

VALS 18L 5QN 40K8

V-LOCITY Area Small, 18,000lm, Type 5 Square Narrow Distribution



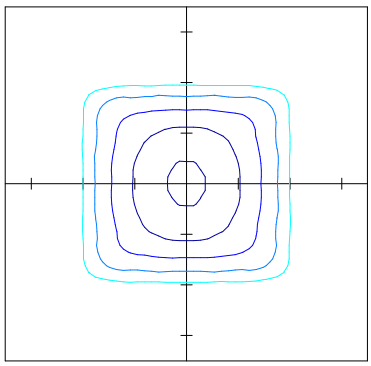
20' Mounting Height / 30' Grid Spacing

2 FC 1 FC 0.5 FC 0.2 FC

IES Type	VS Very Short
BUG Rating	B3-U0-G2
0 - 60° Zonal Lumens	73.8%
60 - 90° Zonal Lumens	26.2%
Uplight %	0.0%

VALS 18L 5QM 40K8

V-LOCITY Area Small, 18,000lm, Type 5 Square Medium Distribution



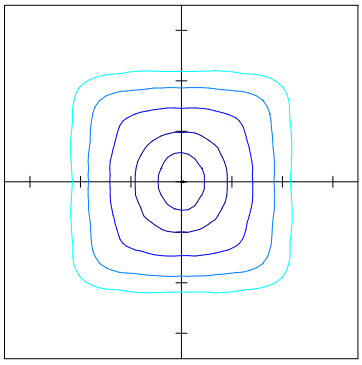
20' Mounting Height / 30' Grid Spacing

2 FC 1 FC 0.5 FC 0.2 FC

IES Type	VS Short
BUG Rating	B4-U0-G2
0 - 60° Zonal Lumens	51.0%
60 - 90° Zonal Lumens	49.0%
Uplight %	0.0%

VALS 18L 5Q 40K8

V-LOCITY Area Small, 18,000lm, Type 5 Square Distribution



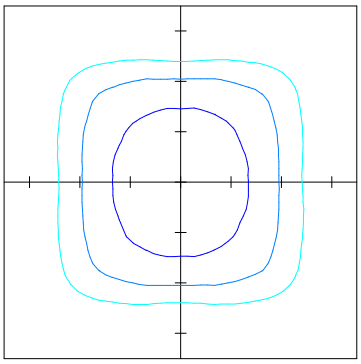
20' Mounting Height / 30' Grid Spacing

2 FC 1 FC 0.5 FC 0.2 FC

IES Type	VS Medium
BUG Rating	B5-U0-G3
0 - 60° Zonal Lumens	41.8%
60 - 90° Zonal Lumens	58.2%
Uplight %	0.0%

VALS 18L 5QW 40K8

V-LOCITY Area Small, 18,000lm, Type 5 Square Wide Distribution



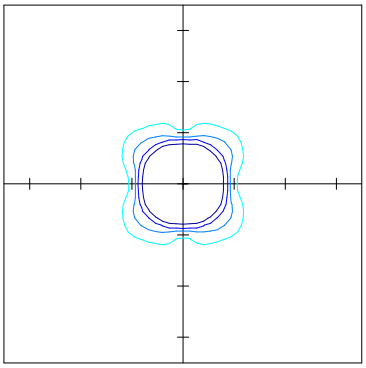
20' Mounting Height / 30' Grid Spacing

2 FC 1 FC 0.5 FC 0.2 FC

IES Type	VS Medium
BUG Rating	B5-U0-G3
0 - 60° Zonal Lumens	33.7%
60 - 90° Zonal Lumens	66.3%
Uplight %	0.0%

VALS 18L WF 40K8

V-LOCITY Area Small, 18,000lm, Wide Flood Distribution



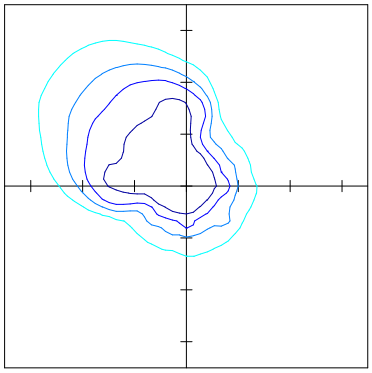
20' Mounting Height / 30' Grid Spacing

2 FC 1 FC 0.5 FC 0.2 FC

NEMA Type	6x6
Max Candela	9,352
Max Candela Angle	-19.5H x -29V
Beam Angle	80.7 x 90.0°
Field Angle	109.9 x 117.7°

VALS 18L LC 40K8

V-LOCITY Area Small, 18,000lm, Left Corner Distribution



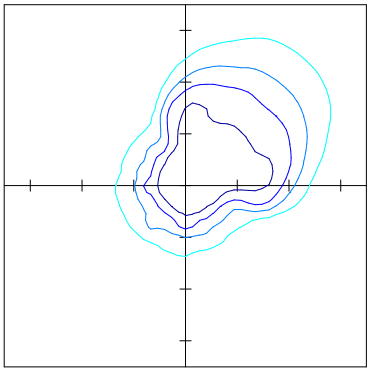
20' Mounting Height / 30' Grid Spacing

2 FC 1 FC 0.5 FC 0.2 FC

IES Type	N/A
BUG Rating	B3-U0-G4
Street Side Lumen %	74.3%
House Side Lumen %	25.7%
Uplight %	0.0%

VALS 18L RC 40K8

V-LOCITY Area Small, 18,000lm, Right Corner Distribution



20' Mounting Height / 30' Grid Spacing

2 FC 1 FC 0.5 FC 0.2 FC

IES Type	N/A
BUG Rating	B3-U0-G4
Street Side Lumen %	74.3%
House Side Lumen %	25.7%
Uplight %	0.0%

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PRODUCT DIMENSIONS

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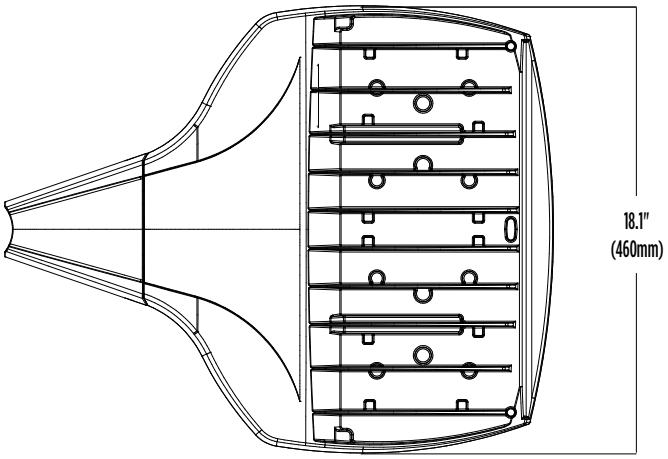


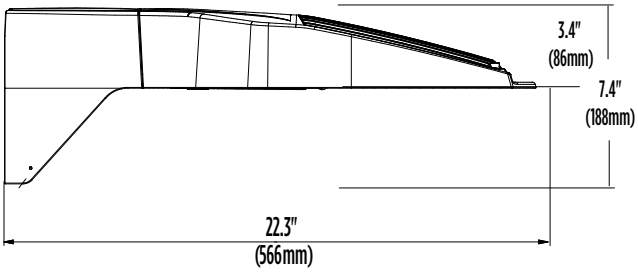
Luminaire EPA Chart - SA Side Arm		
Tilt Degree		0°
	Single	0.7
	D180°	1.3
	D90°	1.0
	T90°	1.4
	TN120°	1.5
	Q90°	1.4

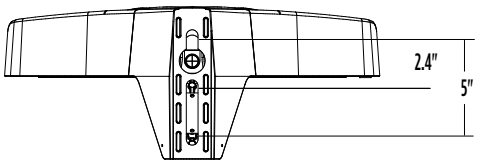
Luminaire EPA Chart - UA Universal Adjustable Arm						
Tilt Degree		0°	15°	30°	45°	60°
	Single	0.8	0.8	1.3	1.8	2.1
	D180°	1.5	1.9	2.5	3.2	3.8
	D90°	1.5	1.9	2.5	3.2	3.8
	T90°	1.8	2.1	2.7	3.2	3.8
	TN120°	1.8	2.3	3.4	4.3	5.0
	Q90°	1.8	2.1	2.7	3.2	3.8

Luminaire EPA Chart - MA Mast Arm		
Tilt Degree		0°
	Single	0.5

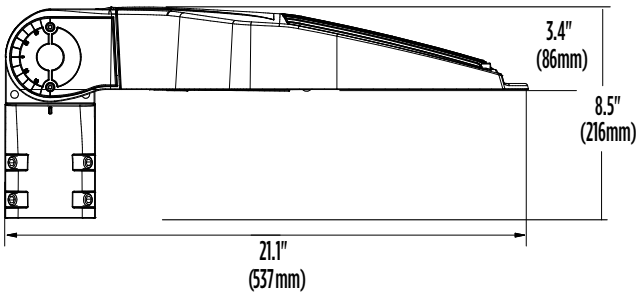
Luminaire EPA Chart - SF Adjustable Slip Fitter						
Tilt Degree		0°	15°	30°	45°	60°
	Single	0.7	1.3	1.4	1.8	2.2

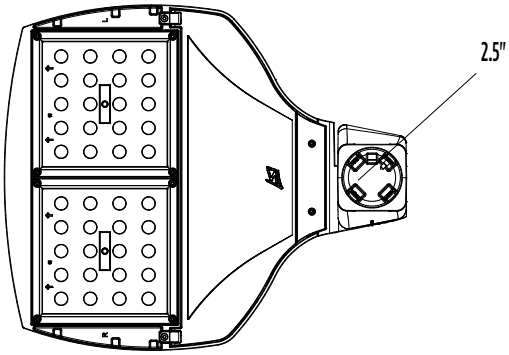
SA Universal Side Arm Mount



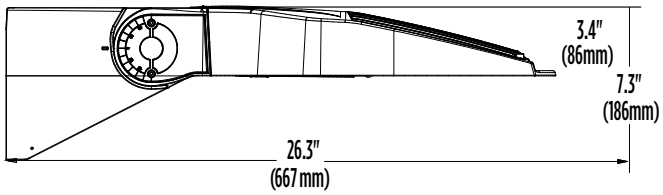


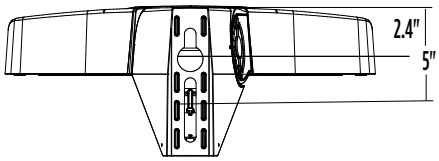
SF Adjustable Slipfitter



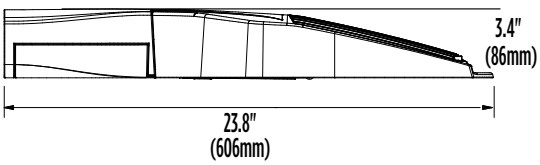


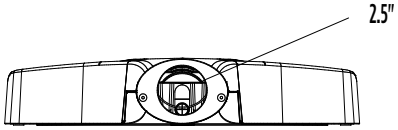
UA Universal Adjustable Arm





MA Mast Arm





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CONTROLS

Back to Quick Links

Integral Bluetooth™ Motion and Photocell Sensor (IMSBTxL)

Slim low profile sensor provides multi-level control based on motion and/or daylight. Sensor controls 0-10 VDC LED drivers and is IP66 rated for cold and wet locations (-40°F to 167°F). Two unique PIR lenses are available and used based on fixture mounting height. All control parameters are adjustable via an iOS or Android App capable of storing and transmitting sensor profiles.

Click here to learn more details about IMSBT

LEVITON App | Apple | Android

AirLink Blue (ALBMRxLR, ALBCSx)

Wireless Bluetooth Mesh Outdoor Lighting Control System that provides energy savings, code compliance and enhanced safety/security for parking lots and parking garages. Three key components; Bluetooth wireless radio/sensor controller, Time Keeper and an iOS App. Capable of grouping multiple fixtures and sensors as well as scheduling time-based events by zone. Radio/Sensor Controller is factory integrated into Area/Site, Wall Mounted, Parking Garage and Canopy luminaires.

Click here to learn more details about AirLink Blue

AirLink Blue App | Apple

Sensor Sequence of Operations

Standard Programming	On Event	Off Event	On Light Level	Dim Light Level	Daylight Harvesting	Delay To Off	Sensitivity
OMSBTxL/IMSBTxL	Motion	No Motion	100%	N/A	On; Auto Calibration	20 minutes	High
OMS	Motion	No Motion	N/A	N/A	N/A	30 seconds	Auto

Operation	Description
On Event	Trigger that activates lights to turn on; either automatic via motion detected or manually activated via push of button.
Off Event	Trigger that activates lights to turn off; either automatic via no motion detected or manually activated via push of button.
On Light Level	The light level that the fixtures will turn on to when ON EVENT occurs.
Dim Light Level	The light level that the fixtures will dim down to when no motion is detected.
Delay to Dim	The amount of time after which no motion is detected that the fixtures will be triggered to dim down. This sequence is optional, and sensor can be programmed to only trigger the fixture to turn off by entering 100% in this field.
Delay to Off	The amount of time after which no motion is detected that the fixtures will be triggered to turn off. If delay to dim is part of the programmed functionality, this is the amount of time after which no motion is detected after the fixture have already dimmed down.
Sensitivity	The sensitivity can be set to high, medium, low, or auto where applicable. High will detect smaller, simple motions. Low will only detect larger more complex motions. Auto temperature calibration adjusts the PIR sensitivity as ambient temperature rises to increase detection of heat movement through the field of view.

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Catalog # : _____ Project : _____ Type : _____

Prepared By : _____ Date : _____

Steel Poles

Square Straight

QUICK LINKS

Ordering Guide | Configurations | Dimensions | EPA

FEATURES & SPECIFICATIONS

Pole Shaft

- Straight poles are 4”, 5”, or 6” square.
- Pole shaft is electro-welded ASTM-A500 Grade C steel tubing with a minimum yield strength of 50,000 psi.
- On Tenon Mount steel poles, tenon is 2-3/8” O.D. high-strength pipe. Tenon is 4-3/4” in length.

Hand-Hole

- Standard hand-hole location is 12” above pole base.
- Poles 22’ and above have a 3x6 reinforced hand hole.

Base

- Pole base is ASTM-A36 hot-rolled steel plate with a minimum yield strength of 36,000 psi.
- Two-piece square base cover is optional.

Anchor Bolts

- Anchor bolts are not provided as standard on pole orders. Anchor bolts must be ordered as an accessory, anchor bolts feature zinc-plated double nuts and washers. Galvanized anchor bolts are optional.
- Anchor Bolts conform to ASTM F 1554-07a Grade 55 with a minimum yield strength of 55,000 PSI.

Ground Lug

- Ground lug is standard.

Duplex Receptacle

- Weatherproof duplex receptacle is optional.

Ground Fault Circuit Interrupter

- Self-testing Ground fault circuit interrupter is optional.

Finishes

- Every pole is provided with the DuraGrip Protection System and a 5-year limited warranty. NOTE: Warranty only applies to the finish.
- When the top-of-the line DuraGrip Plus Protection System is selected, in addition to the DuraGrip Protection System, a non-porous, automotive-grade corrosion coating is applied to the lower portion of the pole interior sealing and further protecting it from corrosion. This option extends the limited warranty to 7 years. NOTE: Warranty only applies to the finish.

Determining The Luminaire/Pole Combination For Your Application:

- Select luminaire from luminaire ordering information.
- Select bracket configuration if required
- Determine EPA value from luminaire/bracket EPA chart
- Select Pole Height
- Select MPH to match wind speed in the application area (See windspeed maps).
- Confirm pole EPA equal to or exceeding value of luminaire/bracket EPA
- Consult factory for special wind load requirements and banner brackets.

Pole Vibration Damper

- A pole vibration damper is recommended in open terrain areas of the country where low steady state winds are common.
- Non-tapered poles and lightly loaded poles are more susceptible to destructive vibration if a damper is not installed.

Warranty

- LSI poles come standard with a 1 year materials and workmanship warranty. Refer to https://www.lsicorp.com/resources/terms-conditions-warranty/ for more information.

Listings

- UL Listed
- BAA/TAA Compliant
- BABAA Compliant *If Specified

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Steel Poles Square Straight

Type : _____

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ORDERING GUIDE

Back to Quick Links

TYPICAL ORDER EXAMPLE: 4SQ B3 S11G 24 S PLP DGP

Pole Series	Mounting Method	Material	Height [2]	Mounting Configuration	Pole Finish	Options
4SQ - 4" x 4" Square Straight Pole (New Build) **5SQ** - 5" x 5" Square Straight Pole (New Build) **6SQ** - 6" x 6" Square Straight Pole (New Build) **5SQU** - 5" x 5" Square Straight Pole (Retrofit) **6SQU** - 6" x 6" Square Straight Pole (Retrofit)	**Bolt-On Mount**[1] - See pole selection guide for patterns and fixture matches **B5** - 5" Traditional Drilling Pattern **B3** - 3" Reduced Pattern **B2** - 2" Low Profile Drilling Pattern **B2R** - Raised 2" Low Profile Drilling Pattern **(LAL4 ONLY)** **T** - Tenon Mount - See pole selection guide for tenon and fixture/bracket matches **I** - No Mounting Holes[1]	**S11G** – 11 Ga. Steel (4SQ/4SQU and 5SQ/5SQU Only) **S07G** – 07 Ga. Steel	**8'** **10'** **12'** **13'** **14'** **15'** **16'** **17'** **17'6"** **18'** **20'** **22'** **22'6"** **23'** **24'** **25'** **26'** **27'** **28'** **30'** **32'** **35'** **39'**	**S** – Single/Parallel **D180** – Double **D90** – Double **DN90** – Double **T90** – Triple **TN120** – Triple **Q90** – Quad **QN90** – Quad **N** – Tenon Mount (Standard Tenon size is 2-3/8" O.D.)[8] **(Blank)** - Use with I for Mounting Method	**BRZ** – Bronze **BLK** – Black **PLP** – Platinum Plus **WHT** – White **SVG** – Satin Verde Green **GPT** – Graphite **MSV** – Metallic Silver **BZA** – Alternate Bronze **GMG** - Gun Metal Gray	**GA** – Galvanized Anchor Bolts **SF** – Single Flood[3] **DF** – Double Flood [3] **DGP** – DuraGrip® Plus **LAB** – Less Anchor Bolts **CRXX** - Conduit Raceway[4] **USA** - BABAA Compliant[5]

Need more information?
Click here for our glossary

Have additional questions?
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ACCESSORY ORDERING INFORMATION

Part Number	Description
122559CLR	4BC – 4" Square Base Cover
122561CLR	5BC – 5" Square Base Cover
122563CLR	6BC – 6" Square Base Cover
132488CLR	5BC - 5' Square Universal Base Cover
131252CLR	6BC - 6' Square Universal Base Cover
122566CLR	ER2 – Weatherproof Duplex Receptacle
122567CLR	GFI – Ground Fault Circuit Interrupter
132336	MH5 - mounting Hole Plugs for use with 5" traditional drill pattern (3 set of 3 plugs)
681126	MH3 - mounting Hole Plugs for use with 3" reduced drill pattern (3 set of 3 plugs)
725841	MH2 - Mounting Hole Plugs for use with 2" reduced drill pattern (3 sets of 3 plugs)
172539	Vibration Damper - 4" Square Pole (bolt-on mount only)
172538	Vibration Damper - 5" Square Pole (bolt-on mount only)
178361	Vibration Damper - 6" Square Pole (bolt-on mount only)

ANCHOR BOLT KIT ORDERING INFORMATION

Part Number	Description
AB KIT 122584	4SQ S11G/S07G Anchor Bolts (Steel Plated)
AB KIT 122609	4SQ S11G/S07G Anchor Bolts (Galvanized)
AB KIT 1225850	5SQ S11G Anchor Bolts (Steel Plated)
AB KIT 122610	5SQ S11G Anchor Bolts (Galvanized)
AB KIT 122586	5SQ S07G Anchor Bolts (Steel Plated)
AB KIT 122611	5SQ S07G Anchor Bolts (Galvanized)
AB KIT 122612	6SQ S07G Anchor Bolts (Galvanized)

1 - See Area Light Brackets - 3" Reduced Drill Pattern and Area Light Brackets - 5" Traditional Drill Pattern Spec Sheets.
2 - Pole heights will have +/- 1/2" tolerance.
3 - See Flood Lighting Brackets section for choice of FBO brackets.
4 - CR selection must indicate required height and side of pole mounting location. Mounting template required at time of order.
5 - USA only applies to 4SQ poles up to 26' and 5SQ/5SQU poles up to 30'.

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Steel Poles Square Straight

Type : _____

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DRILLING LOCATIONS

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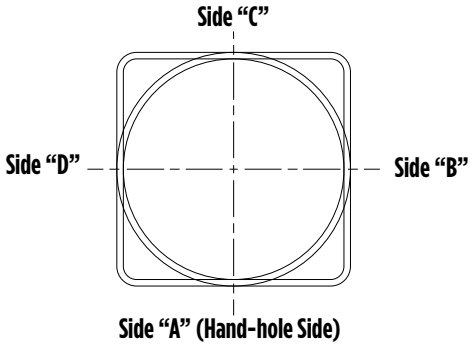
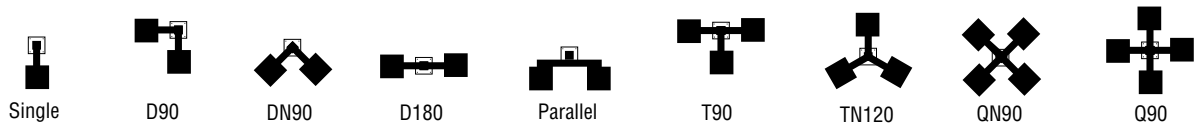
Sides	A	B	C	D
Hand-hole	X			
Single	X			
D180		X		X
D90	X			X
DN90[1]				
T90	X	X		X
TN120[2]				
Q90	X	X	X	X
QN90[3]				
Single FBO	X			
Double FBO		X		X



1 - Two locations will be 45° to the left and right of Side A.
2 - Other two locations will be 120° to the left and right of Side A.
3 - Two locations will be 45° to the left and right of Side A and two locations will be 135° to the left and right of Side A.

Consult factory for custom variations. Standard SF and DF pole preparations are located 3/4 of the height of the pole from the base, except on 20' poles. Maximum height for SF and DF pole preparations on 20' poles is 13' from the base.

FIXTURE CONFIGURATIONS



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BOLT CIRCLE

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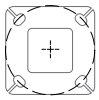
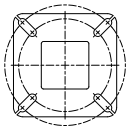
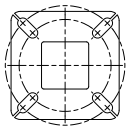
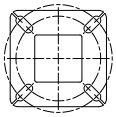
STANDARD BASEPLATE

	4" (102mm) square 10-1/8" (257mm) sq.	5" (127mm) square 10-1/8" (257mm) sq.	5" (127mm) square 10-1/8" (257mm) sq.	6" (152mm) square 12" (305mm) sq.
				
	11" (279mm) Dia. Bolt Circle	11" (279mm) Dia. Bolt Circle	11" (279mm) Dia. Bolt Circle	12" (305mm) Dia. Bolt Circle
Bolt Circle Designator	**B**	**C**	**D**	**J**
Bolt Circle	Slotted 8"-11" (203mm-279mm)	Slotted 9"-11" (229mm-279mm)	Slotted 9"-11" (229mm-279mm)	Slotted 12" (305mm)
Anchor Bolt Size	3/4" x 24" (19mm x 609mm)	3/4" x 24" (19mm x 609mm)	1"x30" (25mm x 762mm)	1"x30" (25mm x 762mm)
Anchor Bolt Projection	3-1/4" (83mm)	3-1/4" (83mm)	4" (102mm)	4" (102mm)
Base Plate Opening for Wireway Entry	3-5/8" (92mm)	4-3/4" (121mm)	4-5/8" (117mm)	5-5/8" (143mm)
Base Plate Dimensions	10-1/8" sq. x 3/4" thk. (257mm x 19mm)	10-1/8" sq. x 3/4" thk. (257mm x 19mm)	10-1/8" sq. x 1" thk. (257mm x 25mm)	12" sq. x 1-1/8" thk. (305mm x 29mm)
Pole Gauge	11	11	7	7

Note: Base plate illustrations may change without notice. Do not use for setting anchor bolts. Consult factory for the appropriate anchor bolt template.

UNIVERSAL BASEPLATE

	5" (127mm) square 11.125" (283mm) sq.	5" (127mm) square 11.75" (298mm) sq.	6" (152mm) square 12-1/2" (318mm) sq.
			
	5SQ	5SQ	14" (356mm) Dia. Bolt Circle
Bolt Circle Designator	**F**	**G**	**H**
Bolt Circle	Slotted 10-13"	Slotted 10-13"	Slotted 11"-14" (279mm-356mm)
Anchor Bolt Size	3/4x 24" (19mm x 609 mm)	1"x30" (25mm x 762mm)	1"x30" (25mm x 762mm)
Anchor Bolt Projection	3-1/4" (83 mm)	4" (102 mm)	4" (102mm)
Base Plate Opening for Wireway Entry	4-3/4" (121mm)	5-1/8" (130 mm)	5-5/8" (143mm)
Base Plate Dimensions	11-1/8 sq. x 3/4" thk. (283 mm x 19 mm)	11-3/4" sq. x 1" thk. (298 mm x 25 mm)	12 1/2" sq. x 1 1/8" thk. (318mm x 29mm)
Pole Gauge	11	7	7

Note: Base plate illustrations may change without notice. Do not use for setting anchor bolts. Consult factory for the appropriate anchor bolt template.

1 - Full Galvanized option is 1" x 30" straight headed anchor bolt. Contact factory for questions

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Steel Poles Square Straight

Type : _____

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PRODUCT DIMENSIONS

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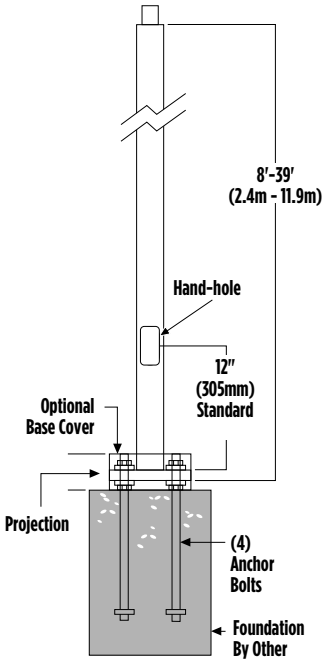
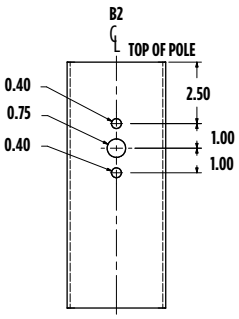
SQT –
N= 2-3/8" (60mm) O.D. x 4-3/4" (121mm) Tenon

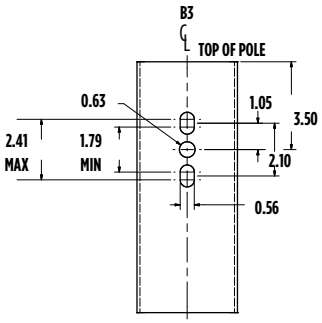


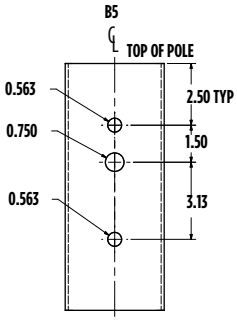
SF –
Single Flood
Pole Preparation

SHIPPING WEIGHTS	
4"(102mm) sq. 11 Ga. is approximately	7.50 lbs./ft.
4"(102mm) sq. 07 Ga. is approximately	10.00 lbs./ft.
5"(127mm) sq. 11 Ga. is approximately	9.00 lbs./ft.
5"(127mm) sq. 07 Ga. is approximately	12.50 lbs./ft.
6"(152mm) sq. 07 Ga. is approximately	15.40 lbs./ft.
Anchor Bolts (3/4" x 24")(19mm x 609mm)	15 lbs. (7kg)/set
Anchor Bolts (1" x 30") (25mm x 762mm)	30 lbs. (14kg)/set

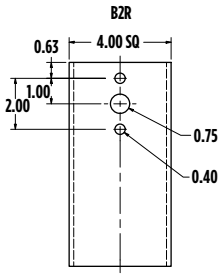
Bolt-On Mount 2-Bolt Pattern

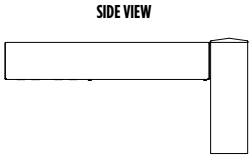






ONLY FOR USE WITH LAL4 PRODUCT
B2R- Raised 2" low profile drilling pattern





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Steel Poles Square Straight

Type : _____

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WIND SPEED

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EPA Information

All LSI Industries' poles are guaranteed to meet the EPA requirements listed. LSI Industries is not responsible if a pole order has a lower EPA rating than the indicated wind-loading zone where the pole will be located.

CAUTION: This guarantee does not apply if the pole/bracket/fixture combination is used to support any other items such as flags, pennants, or signs, which would add stress to the pole. LSI Industries cannot accept responsibility for harm or damage caused in these situations.

NOTE: Pole calculations include a 1.3 gust factor over steady wind velocity. Example: poles designed to withstand 80 MPH steady wind will withstand gusts to 104 MPH. EPAs are for locations 100 miles away from hurricane ocean lines. Consult LSI for other areas. Note: Hurricane ocean lines are the Atlantic and Gulf of Mexico coastal areas. For applications in Florida or Canada, consult factory.

POLE[1]	Mtg. Height Length (ft)	Wall Thick (ga)	BOLT CIRCLE			EPA								
			Designator	Dia. (in)	Anchor bolt Dia {in}	110 MPH	115 MPH	120 MPH	130 MPH	140 MPH	150 MPH	160 MPH	170 MPH	180 MPH
4" x 11-ga x 12'	12	11	B	8" - 11"	0.75	13.9	12.5	11.3	9.2	7.6	6.3	5.2	4.3	3.6
4" x 11-ga x 14'	14	11	B	8" - 11"	0.75	10.7	9.5	8.5	6.8	5.4	4.4	3.5	2.7	2.1
4" x 11-ga x 16'	16	11	B	8" - 11"	0.75	8.2	7.2	6.4	4.9	3.8	2.9	2.1	1.5	1.0
4" x 11-ga x 18'	18	11	B	8" - 11"	0.75	6.3	5.4	4.7	3.4	2.4	1.6	1.0	0.4	n/a
4" x 11-ga x 20'	20	11	B	8" - 11"	0.75	4.6	3.9	3.2	2.1	1.2	0.6	n/a	n/a	n/a
4" x 11-ga x 22'	22	11	B	8" - 11"	0.75	7.6	6.6	5.7	4.2	3.0	2.0	1.2	0.5	n/a
4" x 11-ga x 24'	24	11	B	8" - 11"	0.75	6.0	5.1	4.3	2.9	1.8	0.9	n/a	n/a	n/a
4" x 11-ga x 26'	26	11	B	8" - 11"	0.75	4.6	3.7	3.0	1.7	0.7	n/a	n/a	n/a	n/a
4" x 7-ga x 14'	14	7	B	8" - 11"	0.75	18.3	16.4	14.9	12.2	10.2	8.5	7.1	5.9	5.0
4" x 7-ga x 16'	16	7	B	8" - 11"	0.75	14.7	13.2	11.8	9.6	7.8	6.3	5.2	4.2	3.4
4" x 7-ga x 18'	18	7	B	8" - 11"	0.75	11.9	10.5	9.3	7.4	5.9	4.6	3.6	2.8	2.1
4" x 7-ga x 20'	20	7	B	8" - 11"	0.75	9.6	8.4	7.4	5.7	4.3	3.2	2.3	1.6	0.9
4" x 7-ga x 22'	22	7	B	8" - 11"	0.75	7.7	6.6	5.7	4.2	3.0	2.0	1.2	0.5	n/a
4" x 7-ga x 24'	24	7	B	8" - 11"	0.75	6.0	5.1	4.3	2.9	1.8	0.9	n/a	n/a	n/a
4" x 7-ga x 26'	26	7	B	8" - 11"	0.75	4.6	3.7	3.0	1.7	0.7	n/a	n/a	n/a	n/a
4" x 7-ga x 28"[2]	28	7	B	8" - 11"	0.75	3.3	2.5	1.8	0.7	n/a	n/a	n/a	n/a	n/a
4" x 7-ga x 30"[2]	30	7	B	8" - 11"	0.75	2.2	1.4	0.8	n/a	n/a	n/a	n/a	n/a	n/a
5" x 11-ga x 14'	14	11	C	9" - 11"	0.75	17.4	15.7	14.1	11.5	9.3	7.7	6.3	5.2	4.2
5" x 11-ga x 16'	16	11	C	9" - 11"	0.75	13.8	12.3	10.9	8.7	6.9	5.5	4.3	3.3	2.5
5" x 11-ga x 18'	18	11	C	9" - 11"	0.75	10.8	9.6	8.4	6.5	4.9	3.7	2.6	1.8	1.1
5" x 11-ga x 20'	20	11	C	9" - 11"	0.75	8.5	7.3	6.3	4.6	3.2	2.1	1.2	0.5	n/a
5" x 11-ga x 22'	22	11	C	9" - 11"	0.75	10.9	9.5	8.3	6.2	4.5	3.2	2.1	1.2	0.5
5" x 11-ga x 24'	24	11	C	9" - 11"	0.75	8.8	7.5	6.4	4.5	3.0	1.8	0.8	n/a	n/a
5" x 11-ga x 26'	26	11	C	9" - 11"	0.75	6.8	5.7	4.6	3.0	1.6	0.6	n/a	n/a	n/a
5" x 11-ga x 28'	28	11	C	9" - 11"	0.75	5.2	4.1	3.2	1.6	0.4	n/a	n/a	n/a	n/a
5" x 11-ga x 30'	30	11	C	9" - 11"	0.75	3.6	2.7	1.8	0.4	n/a	n/a	n/a	n/a	n/a
5" x 7-ga x 20'	20	7	D	9" - 11"	1.00	21.6	19.3	17.3	14.0	11.3	9.2	7.4	6.0	4.8
5" x 7-ga x 22'	22	7	D	9" - 11"	1.00	20.7	18.6	16.6	13.3	10.7	8.5	6.8	5.4	4.2
5" x 7-ga x 24'	24	7	D	9" - 11"	1.00	17.7	15.6	13.8	10.8	8.5	6.6	5.0	3.7	2.6
5" x 7-ga x 26'	26	7	D	9" - 11"	1.00	14.9	13.1	11.4	8.8	6.6	4.9	3.5	2.3	1.3
5" x 7-ga x 28'	28	7	D	9" - 11"	1.00	12.5	10.9	9.4	6.9	4.9	3.4	2.1	1.0	n/a
5" x 7-ga x 30'	30	7	D	9" - 11"	1.00	10.3	8.9	7.5	5.2	3.4	2.0	0.8	n/a	n/a
5" x 7-ga x 35'	35	7	D	9" - 11"	1.00	6.0	4.8	3.6	1.8	n/a	n/a	n/a	n/a	n/a
6" x 7-ga x 24'	24	7	J	12"	1.00	18.6	16.4	14.3	11.2	8.6	6.5	4.8	3.4	2.2
6" x 7-ga x 26'	26	7	J	12"	1.00	15.6	13.4	11.7	8.8	6.5	4.6	3.0	1.8	0.7
6" x 7-ga x 28'	28	7	J	12"	1.00	12.9	10.9	9.3	6.7	4.6	2.8	1.5	n/a	n/a
6" x 7-ga x 30'	30	7	J	12"	1.00	10.4	8.8	7.3	4.8	2.9	1.3	n/a	n/a	n/a
6" x 7-ga x 32'	32	7	J	12"	1.00	8.3	6.8	5.5	3.1	1.3	n/a	n/a	n/a	n/a
6" x 7-ga x 34'	34	7	J	12"	1.00	6.5	5.0	3.7	1.6	n/a	n/a	n/a	n/a	n/a
6" x 7-ga x 35'	35	7	J	12"	1.00	5.5	4.2	2.9	0.9	n/a	n/a	n/a	n/a	n/a
6" x 7-ga x 39'	39	7	J	12"	1.00	2.3	1.0	n/a	n/a	n/a	n/a	n/a	n/a	n/a

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Steel Poles Square Straight

Type : _____

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WIND SPEED

POLE[1]	Mtg. Height Length (ft)	Wall Thick (ga)	BOLT CIRCLE			EPA								
			Designator	Dia. (in)	Anchor Bolt Dia (in)	110 MPH	115 MPH	120 MPH	130 MPH	140 MPH	150 MPH	160 MPH	170 MPH	180 MPH
5" x 11-ga x 14'	14	11	F	11"	0.75	17.6	15.8	14.2	11.5	9.4	7.7	6.3	5.2	4.3
5" x 11-ga x 14'	14	11	F	13"	0.75	17.6	15.8	14.2	11.5	9.4	7.7	6.3	5.2	4.3
5" x 11-ga x 16'	16	11	F	11"	0.75	13.9	12.2	11.0	8.8	7.0	5.5	4.3	3.4	2.5
5" x 11-ga x 16'	16	11	F	13"	0.75	13.9	12.2	11.0	8.8	7.0	5.5	4.3	3.4	2.5
5" x 11-ga x 18'	18	11	F	11"	0.75	11.0	9.6	8.4	6.5	5.0	3.7	2.7	1.8	1.1
5" x 11-ga x 18'	18	11	F	13"	0.75	11.0	9.6	8.4	6.5	5.0	3.7	2.7	1.8	1.1
5" x 11-ga x 20'	20	11	F	11"	0.75	8.6	7.4	6.4	4.6	3.3	2.2	1.3	0.5	-
5" x 11-ga x 20'	20	11	F	13"	0.75	8.6	7.4	6.4	4.6	3.3	2.2	1.3	0.5	-
5" x 11-ga x 22'	22	11	F	11"	0.75	12.7	11.1	9.6	7.4	5.6	4.1	3.0	2.0	1.1
5" x 11-ga x 22'	22	11	F	12"	0.75	10.3	8.9	7.7	5.7	4.1	2.8	1.8	0.9	-
5" x 11-ga x 22'	22	11	F	13"	0.75	8.6	7.4	6.4	4.6	3.1	2.0	1.1	-	-
5" x 11-ga x 24'	24	11	F	11"	0.75	10.2	8.9	7.6	5.6	4.0	2.6	1.6	0.7	-
5" x 11-ga x 24'	24	11	F	12"	0.75	8.0	6.9	5.8	4.0	2.6	1.5	0.5	-	-
5" x 11-ga x 24'	24	11	F	13"	0.75	6.7	5.5	4.6	3.0	1.7	0.7	-	-	-
5" x 11-ga x 26'	26	11	F	11"	0.75	8.1	6.9	5.8	4.0	2.5	1.3	-	-	-
5" x 11-ga x 26'	26	11	F	12"	0.75	6.2	5.1	4.1	2.6	1.3	-	-	-	-
5" x 11-ga x 26'	26	11	F	13"	0.75	5.0	4.0	3.1	1.6	0.5	-	-	-	-
5" x 11-ga x 28'	28	11	F	11"	0.75	6.3	5.2	4.3	2.5	1.1	-	-	-	-
5" x 11-ga x 28'	28	11	F	12"	0.75	4.6	3.6	2.7	1.2	-	-	-	-	-
5" x 11-ga x 28'	28	11	F	13"	0.75	3.4	2.5	1.7	-	-	-	-	-	-
5" x 11-ga x 30'	30	11	F	11"	0.75	4.7	3.7	2.8	1.2	-	-	-	-	-
5" x 11-ga x 30'	30	11	F	12"	0.75	3.1	2.2	1.4	-	-	-	-	-	-
5" x 11-ga x 30'	30	11	F	13"	0.75	2.0	1.2	0.5	-	-	-	-	-	-
5" x 7-ga x 20'	20	7	G	11"	0.75	19.0	17.0	15.0	12.2	9.7	7.8	6.2	5.0	3.8
5" x 7-ga x 20'	20	7	G	12"	0.75	21.4	19.1	17.1	13.8	11.2	9.1	7.3	5.9	4.7
5" x 7-ga x 20'	20	7	G	13"	0.75	21.4	19.2	17.2	13.9	11.3	9.2	7.4	6.0	4.8
5" x 7-ga x 20'	20	7	G	11"	1	21.7	19.4	17.4	14.0	11.4	9.3	7.5	6.0	4.8
5" x 7-ga x 20'	20	7	G	13"	1	21.7	19.4	17.4	14.0	11.4	9.3	7.5	6.0	4.8
5" x 7-ga x 22'	22	7	G	11"	0.75	16.0	14.1	12.5	9.8	7.6	5.9	4.4	3.3	2.3
5" x 7-ga x 22'	22	7	G	12"	0.75	17.7	15.9	14.2	11.2	8.7	7.0	5.4	4.1	3.0
5" x 7-ga x 22'	22	7	G	13"	0.75	19.9	17.3	15.6	12.6	10.0	8.0	6.3	5.0	3.8
5" x 7-ga x 22'	22	7	G	11"	1	21.0	18.7	16.7	13.4	10.6	8.5	6.8	5.4	4.2
5" x 7-ga x 22'	22	7	G	12"	1	23.4	20.6	18.4	15.0	12.2	9.9	8.0	6.4	5.1
5" x 7-ga x 22'	22	7	G	13"	1	21.3	18.8	17.0	13.7	11.0	8.8	7.0	5.6	4.3
5" x 7-ga x 24'	24	7	G	11"	0.75	13.3	11.6	10.0	7.7	5.7	4.2	2.9	1.9	1.0
5" x 7-ga x 24'	24	7	G	12"	0.75	15.0	13.0	11.6	8.9	6.8	5.1	3.8	2.6	1.7
5" x 7-ga x 24'	24	7	G	13"	0.75	16.6	14.6	12.9	10.2	8.0	6.1	4.6	3.3	2.3
5" x 7-ga x 24'	24	7	G	11"	1	17.5	15.7	13.9	10.9	8.6	6.7	5.0	3.7	2.7
5" x 7-ga x 24'	24	7	G	12"	1	20.0	17.4	15.4	12.3	9.9	7.8	6.0	4.7	3.5
5" x 7-ga x 24'	24	7	G	13"	1	18.1	16.0	14.2	11.0	8.7	6.7	5.3	3.9	2.8
5" x 7-ga x 26'	26	7	G	11"	0.75	10.9	9.3	8.0	5.9	4.1	2.7	1.6	0.6	-
5" x 7-ga x 26'	26	7	G	12"	0.75	12.4	10.9	9.5	7.0	5.1	3.6	2.3	1.3	-
5" x 7-ga x 26'	26	7	G	13"	0.75	14.0	12.3	10.7	8.1	6.0	4.4	3.1	2.0	1.0
5" x 7-ga x 26'	26	7	G	11"	1	15.0	13.2	11.5	8.8	6.7	4.9	3.5	2.3	1.3

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Steel Poles Square Straight

Type : _____

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WIND SPEED

POLE[1]	Mtg. Height Length (ft)	Wall Thick (ga)	BOLT CIRCLE			EPA								
			Designator	Dia. (in)	Anchor Bolt Dia (in)	110 MPH	115 MPH	120 MPH	130 MPH	140 MPH	150 MPH	160 MPH	170 MPH	180 MPH
5" x 7-ga x 26'	26	7	G	12"	1	17.0	14.8	13.0	10.2	7.9	6.0	4.4	3.1	2.1
5" x 7-ga x 26'	26	7	G	13"	1	15.3	13.5	11.8	9.0	6.8	5.0	3.6	2.5	1.4
5" x 7-ga x 28'	28	7	G	11"	0.75	8.9	7.4	6.3	4.3	2.7	1.4	-	-	-
5" x 7-ga x 28'	28	7	G	12"	0.75	10.2	8.8	7.5	5.3	3.5	2.1	1.0	-	-
5" x 7-ga x 28'	28	7	G	13"	0.75	11.8	10.2	8.8	6.4	4.5	3.0	1.7	0.7	-
5" x 7-ga x 28'	28	7	G	11"	1	12.5	10.9	9.5	7.0	5.0	3.3	2.1	1.0	-
5" x 7-ga x 28'	28	7	G	12"	1	14.2	12.4	11.0	8.2	6.0	4.3	3.0	1.7	0.8
5" x 7-ga x 28'	28	7	G	13"	1	12.9	11.0	9.7	7.2	5.2	3.6	2.2	1.1	-
5" x 7-ga x 30'	30	7	G	11"	0.75	7.0	5.8	4.7	2.8	1.3	-	-	-	-
5" x 7-ga x 30'	30	7	G	12"	0.75	8.4	7.0	5.8	3.8	2.2	0.9	-	-	-
5" x 7-ga x 30'	30	7	G	13"	0.75	9.7	8.2	7.0	4.8	3.0	1.6	0.5	-	-
5" x 7-ga x 30'	30	7	G	11"	1	10.4	8.8	7.6	5.3	3.4	2.0	0.8	-	-
5" x 7-ga x 30'	30	7	G	12"	1	12.0	10.3	9.0	6.4	4.4	2.9	1.6	0.5	-
5" x 7-ga x 30'	30	7	G	13"	1	10.6	9.1	7.7	5.5	3.6	2.1	1.0	-	-
5" x 7-ga x 35'	35	7	G	11"	0.75	3.2	2.2	1.2	-	-	-	-	-	-
5" x 7-ga x 35'	35	7	G	12"	0.75	4.4	3.2	2.2	0.5	-	-	-	-	-
5" x 7-ga x 35'	35	7	G	13"	0.75	5.5	4.2	3.1	1.3	-	-	-	-	-
5" x 7-ga x 35'	35	7	G	11"	1	6.0	4.8	3.6	1.8	-	-	-	-	-
5" x 7-ga x 35'	35	7	G	12"	1	7.3	6.0	4.8	2.7	1.1	-	-	-	-
5" x 7-ga x 35'	35	7	G	13"	1	6.3	5.0	3.8	1.9	-	-	-	-	-
6" x 7-ga x 24'	24	7	H	11"	1	16.5	14.4	12.6	9.6	7.2	5.3	3.8	2.5	1.4
6" x 7-ga x 24'	24	7	H	12-1/2"	1	19.8	17.5	15.4	12.0	9.2	7.0	5.3	3.8	2.7
6" x 7-ga x 24'	24	7	H	14"	1	23.0	20.5	18.0	14.3	11.2	8.9	6.9	5.3	3.8
6" x 7-ga x 26'	26	7	H	11"	1	13.7	11.8	10.2	7.5	5.3	3.6	2.1	1.0	-
6" x 7-ga x 26'	26	7	H	12-1/2"	1	16.5	14.6	12.6	9.6	7.0	5.2	3.6	2.2	1.1
6" x 7-ga x 26'	26	7	H	14"	1	19.6	17.3	15.2	11.7	8.9	6.7	5.0	3.5	2.2
6" x 7-ga x 28'	28	7	H	11"	1	11.0	9.3	7.8	5.5	3.5	1.9	0.6	-	-
6" x 7-ga x 28'	28	7	H	12-1/2"	1	13.8	12.0	10.2	7.5	5.2	3.4	1.9	0.7	-
6" x 7-ga x 28'	28	7	H	14"	1	16.4	14.5	12.5	9.4	6.9	4.7	3.2	1.8	0.7
6" x 7-ga x 30'	30	7	H	11"	1	9.0	7.3	6.0	3.6	1.9	0.5	-	-	-
6" x 7-ga x 30'	30	7	H	12-1/2"	1	11.4	9.6	8.0	5.5	3.4	1.7	-	-	-
6" x 7-ga x 30'	30	7	H	14"	1	14.0	12.0	10.0	7.2	5.0	3.2	1.6	-	-
6" x 7-ga x 32'	32	7	H	11"	1	7.0	5.5	4.2	2.0	-	-	-	-	-
6" x 7-ga x 32'	32	7	H	12-1/2"	1	9.2	7.6	6.0	3.8	1.8	-	-	-	-
6" x 7-ga x 32'	32	7	H	14"	1	11.4	9.7	8.0	5.4	3.2	1.6	-	-	-
6" x 7-ga x 34'	34	7	H	11"	1	5.1	3.7	2.5	0.6	-	-	-	-	-
6" x 7-ga x 34'	34	7	H	12-1/2"	1	7.2	5.6	4.4	2.2	-	-	-	-	-
6" x 7-ga x 34'	34	7	H	14"	1	9.3	7.6	6.2	3.6	1.7	-	-	-	-
6" x 7-ga x 35'	35	7	H	11"	1	4.2	3.0	1.8	-	-	-	-	-	-
6" x 7-ga x 35'	35	7	H	12-1/2"	1	6.2	4.8	3.6	1.4	-	-	-	-	-
6" x 7-ga x 35'	35	7	H	14"	1	8.2	6.6	5.2	2.9	1.0	-	-	-	-
6" x 7-ga x 39'	39	7	H	11"	1	1.0	-	-	-	-	-	-	-	-
6" x 7-ga x 39'	39	7	H	12-1/2"	1	3.0	1.6	0.5	-	-	-	-	-	-
6" x 7-ga x 39'	39	7	H	14"	1	4.6	3.3	2.0	-	-	-	-	-	-

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City of Portsmouth Planning Department

Site Plan Review Application Fee

Project: 124 Heritage Ave - Garden **Map/Lot:** Map 284 Lot 8

Applicant: 124 Group, Inc

All development

Base fee $600 $600.00

Plus $5.00 per $1,000 of site costs

Site costs $50,000 +*** **+** $250.00

Plus $10.00 per 1,000 S.F. of site development area

Site development area 35,000 S.F. **+** $350.00

Fee **$1,200.00**

Maximum fee: $20,000.00

Conditonal Use Permit Application Fee

Wetlands Conditonal Use Permit Greater than 1,000 SF **Fee** **$1,300.00**

Fee received by: _____ Date: _____

Note: Initial application fee may be based on the applicant's estimates of site costs and site development area. Following site plan approval, the application fee will be recalculated based on the approved site plan and site engineer's corresponding site cost estimate as approved by the Department of Public Works, and any additional fee shall be paid prior to the issuance of a building permit.

Docusign Envelope ID: 727D001E-4777-8CBA-8242-3161BB422D6A

Owner Letter of Authorization

This letter is to authorize Tighe & Bond, Inc. (Civil Engineer), to represent and submit on behalf of 124 Group LLC (Owner), applications and materials in all site design and permitting matters for the proposed Gather garden and parking improvements project at 124 Heritage Avenue in Portsmouth, New Hampshire. This authorization shall relate to those activities that are required for local, state and federal permitting for the above project and include any required signatures for those applications.

Signature	Print Name	Date
Signed by: 392AA5B729C34AD...	Kelsey Kraus	4/29/2026

177 Corporate Drive
Portsmouth, NH 03801

T 603.433.8818

TIGHEBOND.COM

OPEN CONCEPTS REALTY & CO.

369 Islington Street
Portsmouth, NH 03801

Narrative For CUP

The subject property 833 Islington Street, consists of an existing one-story retail/office building totaling 3,790 SF. Under the current zoning requirements, the existing use requires thirteen (13) parking spaces. Under the proposed mixed commercial, restaurant, and office use, the site would be required to provide twenty (20) parking spaces.

Currently, there are seven (7) striped parking spaces utilized on-site; however, a portion of these spaces extends into “Frenchmans Lane,” which is owned by the State of New Hampshire. The property owner is actively coordinating with the State to acquire “Frenchman's Lane” in order to formalize the existing parking configuration and increase the number of compliant on-site parking spaces available to the property. It is understood that the State’s land disposition process may take approximately three to twelve months to complete. Historically, these seven (7) spaces have consistently been used by both the public and prior property owners without issue. The existing parking arrangement has functioned as the practical parking layout for the property for many years.

At this time, we are respectfully requesting that the City recognize nine (9) parking spaces for the property. The site has the capacity to accommodate five (5) additional striped parking spaces along the rear of the building. We are proposing a revised parking layout that relocates four (4) of the existing spaces entirely onto the subject property as compliant parallel parking spaces.

The City of Portsmouth Zoning Ordinance requires one (1) parking space per 100 SF of gross floor area for restaurant uses. Based on the proposed restaurant area of 1,128 SF, a total of 11.28 parking spaces are required.

For office use, the ordinance requires one (1) parking space per 350 SF of gross floor area. With 1,975 SF of office space proposed, 5.64 parking spaces are required.

For retail use, the ordinance requires one (1) parking space per 300 SF of gross floor area. Based on 687 SF of retail space, 2.29 parking spaces are required.

Along Islington Street, several established restaurant uses operate successfully with parking provisions comparable to or less than those proposed for the subject property. The Getty, located at 361 Islington Street, contains approximately 3,348 SF and accommodates 43 indoor seats and 31 outdoor seats. The restaurant provides 12 vehicle parking spaces and 5 moped/motorcycle spaces, despite a zoning requirement of approximately 33 parking spaces. The Getty supplies approximately 36% of its required

parking demand. By comparison, the proposed will provide approximately 45% of its calculated parking requirement.

Similarly, The Kitchen Restaurant, located at 171 Islington Street, contains 39 indoor seats and 22 outdoor seats and operates without any dedicated on-site customer parking. The continued success of these nearby establishments demonstrates that restaurant uses along Islington Street rely on a combination of walkability, shared parking resources, and on site parking.

Proposed Use:

The proposed mixed-use development includes office space, a retail showroom, and a restaurant component. The retail space will function primarily as a showroom displaying products and materials related to residential construction and home improvement. The restaurant is designed primarily as a grab-and-go establishment offering items such as coffee, sandwiches, and other quick-service food options.

Given the operational characteristics of the restaurant, parking demand is anticipated to be substantially lower than that of a traditional full-service, sit-down restaurant. Customer visits are expected to be short in duration, through takeout, walk-in, and quick-turnover. As a result, the proposed use is expected to generate a lower parking demand than would typically be associated with restaurant uses of a similar size.

Additionally, office-related parking demand is expected to remain relatively low and consistent throughout the day and is not anticipated to generate the peak parking demands typically associated with higher-intensity commercial uses. The office component employs fewer than ten staff members, including several part-time and remote employees, which further reduces on-site parking demand. Moreover, the office space is generally not occupied during the restaurant's peak operating hours, resulting in minimal overlap between office and restaurant parking demand.

Despite the reduction in formally recognized on-site parking, several factors support the requested Conditional Use Permit for reduced parking including:

- A Hannaford parking plaza is located directly across the street, providing substantial surrounding overflow parking availability if needed and within immediate walking distance of the restaurant.
- The proposed use is expected to have short-duration visits and a significant percentage of customers utilizing takeout services rather than extended occupancy.
- Office users generally experience staggered parking demand throughout the day, reducing peak overlap with the proposed operations.
- The building has historically operated with fewer spots that meet the current conforming requirements without significant parking impacts to surrounding properties or traffic circulation.

Based on the nature and scale of the proposed uses, the surrounding parking resources, and the operational characteristics of the site, the requested parking reduction is reasonable and appropriate for the property. The proposal is not expected to create adverse impacts on neighboring properties, traffic circulation, or public safety.

CIVILWORKS NEW ENGLAND
181 WATSON ROAD
P.O. BOX 1166
DOVER, NH 03821-1166
PHONE: 603.749.0443

PARKING ANALYSIS May 22, 2026

OVERVIEW/PURPOSE:

Civilworks New England (CNE) has prepared this parking analysis regarding the redevelopment project proposed within the building existing at 833 Islington Street in Portsmouth, NH.

The redevelopment involves the conversion of the building housing a television, computer and phone service and sales business and a furniture restoration and sales business, both classified as "retail" according to City assessor information, to a mixed use development containing a restaurant, office space and a small retail space.

Portsmouth Assessor information indicates that the building gross floor area (GFA) = 3,790 SF. City records also classify the building as "Retail". An unfinished basement space of equal size also exists according to City records. For purposes of this analysis, it is presumed that this unfinished space does not count towards required parking space numbers for either the existing uses or the proposed uses.

EXISTING PARKING:

Uses:

- Experimax Computer & Phones – Buy, Sell, Repair (former use = Tony's Television & Video)
- Salvage Modern – Vintage Furniture Restoration & Sales
- Total GFA = 3,790 SF

Parking Requirements:

- Portsmouth Assessor information describes the existing building as "Retail"
- Per Portsmouth Zoning Article 11: Retail parking requirement = 1 space / 300 SF GFA
- 3,790 SF X 1 space / 300 SF GFA = 12.63 spaces = 13 spaces
  (one of which = van accessible per ADA)

PROPOSED PARKING:

Uses:

- Restaurant = 1,128 SF GFA
- Office = 1,975 SF GFA (including
- Retail = 687 SF
- Total GFA = 3,790 SF

Parking Requirements:

- Per Portsmouth Zoning Article 11:
  - Restaurant parking requirement = 1 space / 100 SF
  - Office parking req. = 1 space / 350 SF (professional, business or financial service)
  - Retail parking requirement = 1 space / 300 SF

(Continued Next Page)

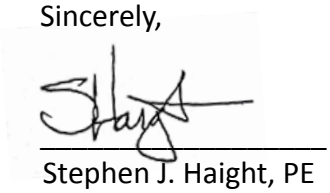
CIVILWORKS NEW ENGLAND
181 WATSON ROAD
P.O. BOX 1166
DOVER, NH 03821-1166
PHONE: 603.749.0443

Proposed Parking Cont.:

- Parking By Use:
  - Restaurant = 1,128 SF X 1 space / 100 SF = 11.28 spaces
  - Office = 1,975 SF X 1 space / 350 SF = 5.64 spaces
  - Retail = 687 SF X 1 space / 300 SF = 2.29 spaces
- Total = 11.28 + 5.64 + 2.29 = 19.21 spaces = 20 spaces
  (one of which = van accessible per ADA)

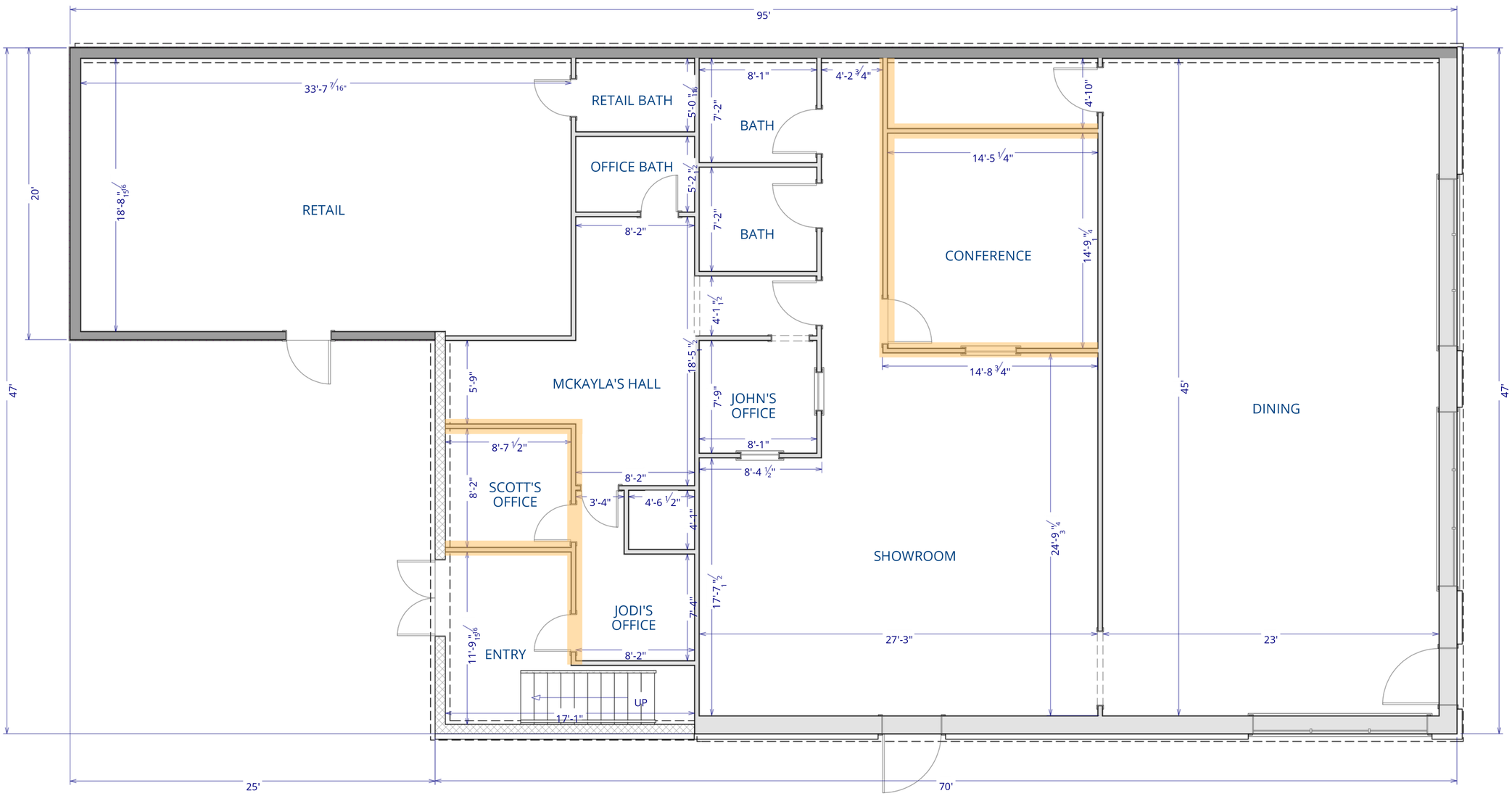
CONCLUSION:
The proposed re-use of the building is projected to require an additional seven (7) parking spaces than the existing use.

CIVILWORKS NEW ENGLAND
Sincerely,



Stephen J. Haight, PE

Cc: Open Concepts Realty & Co. | Rafferty Investment Group



MAIN FLOOR Walls being added in orange

KB

NO.	DESCRIPTION	BY
00	PROPOSAL DRAFT	JDA
		05-20-2026

SHEET TITLE: PLAN VIEW

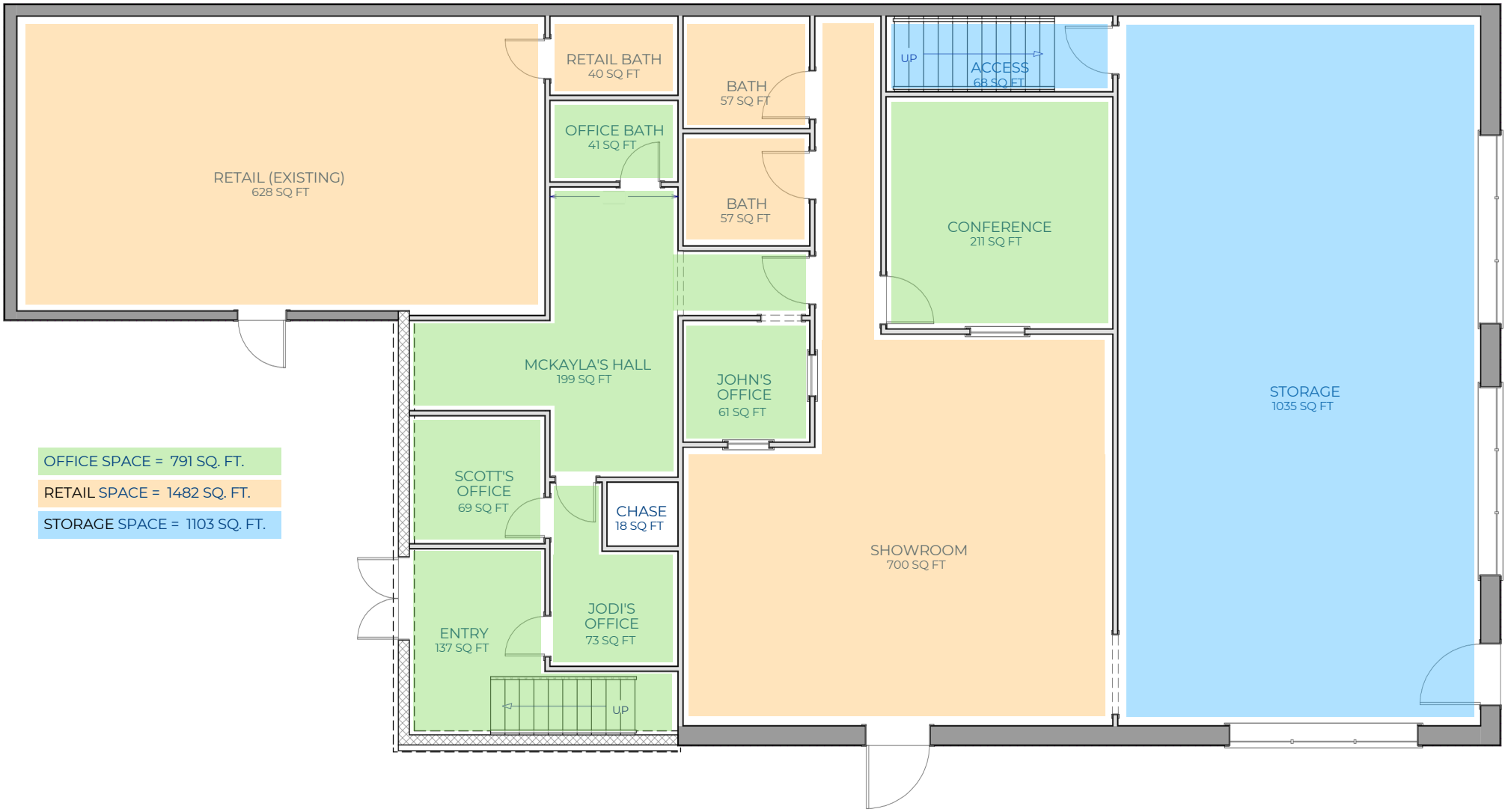
PROJECT DESCRIPTION: NEW OFFICE OPEN CONCEPTS

DRAWINGS PROVIDED BY: JOHN ADAMS

DATE: 05/20/2026

SCALE: 3/16" = 1'

SHEET: A-1


RETAIL (EXISTING)
628 SQ FT
RETAIL BATH
40 SQ FT
OFFICE BATH
41 SQ FT
BATH
57 SQ FT
BATH
57 SQ FT
UP
ACCESS
68 SQ FT
CONFERENCE
211 SQ FT
MCKAYLA'S HALL
199 SQ FT
JOHN'S
OFFICE
61 SQ FT
STORAGE
1035 SQ FT
SCOTT'S
OFFICE
69 SQ FT
CHASE
18 SQ FT
SHOWROOM
700 SQ FT
ENTRY
137 SQ FT
JODI'S
OFFICE
73 SQ FT
UP
OFFICE SPACE = 791 SQ. FT.
RETAIL SPACE = 1482 SQ. FT.
STORAGE SPACE = 1103 SQ. FT.

Current Parking
at 833 Islington

Proposed Parking
at 833 Islington